

**Transcript of Federal Reserve Board *Fed Listens* Event:  
Perspectives on Maximum Employment and Price Stability**

**October 4, 2019**

CHAIR POWELL. Welcome to the room where members of the Board of Governors and the presidents of the 12 Reserve Banks meet eight times a year—most recently, just a couple of weeks ago—to decide the stance of monetary policy. It's, as you can see, a magnificent, rather formal—perhaps even imposing—room, with 26-foot ceilings, a monumental marble fireplace, and a 1,000-pound brass and glass chandelier. And it's seen a lot of history since Franklin Roosevelt dedicated this building in 1937. British and American military leaders conferred here during World War II. And, through the decades, our Federal Reserve predecessors grappled with financial turmoil and the economy's ups and downs. So when my colleagues and I take our assigned places around this polished mahogany and granite table, the setting and its history lends a certain formality—perhaps, even stuffiness—to the proceedings.

As we kick off this, the 12th of 14 *Fed Listens* events, Governor Brainard, Governor Bowman, and I hope that today's meeting is anything but stuffy. Candid and serious, yes, but not stuffy. The Federal Reserve Banks and the Board have been holding *Fed Listens* events around the country as part of a comprehensive public review of our monetary policy strategy, tools, and communications practices. Almost all of the *Fed Listens* events, like this one, have been open to the press and live-streamed on the internet. Both the breadth and transparency of the review are unprecedented for us.

One reason we are conducting this review is that it is always a good practice for any organization to occasionally take a step back and ask if it could be doing its job more effectively. But we must pose that question not just to ourselves. Because Congress has granted the Federal

Reserve significant protections from short-term political pressures, we have an obligation to clearly explain what we are doing and why. And we have an obligation to actively engage the people we serve so that they and their elected representatives can hold us accountable.

We've invited you here because we want to better understand how monetary policy affects the lives of the people your organizations represent: union members, small business owners, residents of low- and moderate-income communities, retirees, and others. We want to hear your perspectives and those of the people you represent on maximum employment and price stability—the monetary policy goals that Congress has assigned us.

Now is a good time to conduct this review. Unemployment is at a half-century low, and inflation is running close to, but a bit below, our 2 percent objective. While not everyone fully shares economic opportunities, and the economy does face some risks, overall, the economy is—as I like to say—in a good place. Our job is to keep it there as long as possible. While we believe our strategy and tools have been and remain effective, the U.S. economy, like other advanced economies around the world, is facing longer-term challenges—from low growth, low inflation, and low interest rates. While slow growth is obviously not good, you may be asking, “What’s wrong with low inflation and low interest rates?” Low can be good, but when inflation—and, consequently, interest rates—are too low, the Fed and other central banks have less room to cut rates to support the economy during downturns.

So, in this review, we are examining strategies that might better allow us to symmetrically and sustainably achieve 2 percent inflation. Doing so would help prevent inflation expectations among consumers, businesses, and investors from slipping too low, as they appear to have done in several advanced economies around the world. More-firmly anchored expectations, in a virtuous circle, would help keep actual inflation around our target, thus

preserving our ability to change interest rates as appropriate to meet our mandate. We are also looking at whether our existing monetary policy tools will be adequate when the next downturn comes. Finally, we are asking whether our communications practices can be improved to better support the effectiveness of our policy.

After today, we have two *Fed Listens* sessions remaining, both later this month: one in Kansas City and another in Chicago. At the July meeting of the Federal Open Market Committee, my colleagues and I began discussing what we've learned so far in these sessions. We continued that discussion at our September meeting and have a lot of work left to do. We plan to publicly report our conclusions during the first half of next year.

One clear takeaway of the sessions so far is the importance of sustaining our historically strong job market. People from low- and moderate-income communities tell us this long recovery, now into its 11th year, is benefiting them and their neighbors to a degree that has not been felt for many years. Employers are partnering with community colleges and nonprofit organizations to offer training. And people who have struggled to stay in the workforce in the past are getting new opportunities.

So, once again, welcome. Now it is your turn to speak, and we'll be listening.  
Thank you.

GOVERNOR BRAINARD. All right. Well, I am excited to join the Chair in welcoming you all here today. One of the most valuable things that I have found in assessing monetary policy is how critical it is to travel around the country and just hear directly from Americans about how they're experiencing the economy in their communities. And that's why it was so important to us, as we embarked on this monetary policy review, to go around the country and

host panels in *Fed Listens*. I went to two different *Fed Listens* events. I learned a huge amount. And that's why we're here today—is to get views about the communities that you're working with and hear a bit about how they are experiencing the economy.

We're very fortunate, I think, in the U.S. that Congress put maximum employment right at the heart of our mandate along with price stability, given how central wage income is for the large majority of American households. Our full employment mandate has served the country very well during this extended recovery. One thing that we've learned over the course of this recovery—I think the Chair was referring to that—is, there is no single number we can put on maximum employment that lets us know we're there. And that's why we need to hear from people, how they're experiencing the labor market.

So, with that, I want to turn to each of our panelists. We're going to start with that focus on maximum employment, and then I'm going to turn over to Governor Bowman to talk about the second leg of our dual mandate. But let me start by asking each of you to introduce yourselves and your organization, and then we'll just jump into a conversation. So, Denise, shall I start with you? And then we'll just work our way up.

MS. SCOTT. Sure. Thank you. I'm really pleased to be here. I'm Denise Scott. I'm the executive vice president at LISC [Local Initiatives Support Corporation]. I manage all of LISC programs across the country. We are—annually, we invest about a billion dollars a year in community revitalization efforts, partnering with government and the private sector, communities, banks, philanthropic community, and the like. We're in about 45 cities, including urban and rural—in about 2,000 rural communities.

And the work that we do—really, our lens is comprehensive. So we believe that it's—there's no one remedy that really is going to solve a problem. And so we're looking at strategies

everywhere, everything from conserving affordable housing, working with small businesses and entrepreneurs, helping residents to gain skills and the education and training that they need to secure living-wage jobs. We're also investing in health-care programs and schools and rec centers and the like. Our work impacts millions of people across the country.

I just wanted to take a moment to share a few stats with you, acknowledging ahead of time that, for all that we do, the scale of the problem is so immense that it really still isn't enough, but we still take pride in what we are able to accomplish. So, with that, one of our signature strategies, which was actually innovated by the Social Innovation Fund a while back, is what we call Financial Opportunity Centers. And here is where we are really serving hundreds of thousands of people to do financial coaching and education, helping them with financial stability types of training to help build credit, develop savings, and maybe even grow assets. This has been immensely successful, because what we're finding is that the training is not just enough, and so when you combine the other aspects of financial-feasibility focus for families, that you end up with folks who are really more—stay more attached to the workforce. We're also financing schools and daycare centers, over 400 affordable housing homes and apartments over the years, lots of community space that's really supporting some small businesses, arts and culture programs, recreation, and the like.

On the policy front, what's becoming more and more interesting for us is, how do we forge more multisector partnerships? And, especially, I'll call out a growing partnership between ourselves and the health systems sector. And just yesterday, as a matter of fact, we announced the partnership with Sentara Health System and Optima Health in Hampton Roads, \$100 million investment under the banner of social determinants of health, the health-care center, recognizing that perhaps the issues that impact health might have a lot to do with things like

housing and jobs, educational levels, and neighborhood conditions. And so, more and more, that's become a focus.

I'll just end my introduction by just focusing just a little bit on the small business sector. Just to say that we've been investing in business-type ventures with not-for-profits over the years, are really forging more of an effort to focus on small businesses. Later on, I could talk more about what's in our way. But, at the end of the day, the question for us around full employment, attachment to the labor market—the impact that this has on our families. We are beginning to call our work on the economic development and employment front a focus on the social determinants of employment. And so I'd like to be able to share more about that as we talk. Thank you.

MR. MOUTRAY. Thank you, Denise. So I'm Chad Moutray. I'm the chief economist at the National Association of Manufacturers. Today is Manufacturing Day, so Happy Manufacturing Day. We are having about 2,800 events plus around the country to celebrate manufacturing, to celebrate its importance in the overall economy, and hopefully to change people's minds about it being a great career to go into.

It's also—next year is our 125th anniversary. So the NAM was founded in 1895 in Cincinnati. And so you'll be seeing a lot from us—just think of "Got milk" but for manufacturing. Over the next year, lots of activities planned under our "Creators Wanted" banner, with an event kind of culminating next year in September—think, again, "South by Southwest" except for manufacturing—in Cincinnati in September. So that's all kind of exciting.

So I'm chief economist at the NAM. I'm the chief and only economist. But I also straddle over into the Manufacturing Institute, which is our 501(c)(3), which really, really

dedicates itself quite a bit to the issue of the skills gap and finding training. So we know, for instance, that the inability to find talent is the number one issue for our members. It's trade as well, but, certainly, we hear an awful lot about just the fact that there's just not enough talent out there, and we'll be talking about that, I'm sure. And the institute is doing a number of things in that space, including working to create more veterans and—to attract more veterans to go into manufacturing, to attract more women to go into manufacturing. We just acquired the Fame Program from Toyota, so that's helping to expand apprenticeships in the manufacturing space. And so there's a number of things that we are doing besides Manufacturing Day, which is hopefully helping to highlight that as a sector and as a career.

MS. MACK. Hi, how are you? My name's Melinda Mack. I'm the executive director of New York State's Workforce Development Association, also known as the New York Association of Training and Employment Professionals. It's that name because it was founded in 1978, so we probably could have a much snazzier name if we renamed it now.

So similar to some of the other groups that are up here, our organization is focused primarily on education, job training, and employment services. So I represent around 200 members who serve over a million and a half New Yorkers each year around education, job training, and employment. It includes our community college systems, our local workforce development boards, career centers, many community-based organizations and providers, and labor unions.

I think, for us—the conversation for me is, I'm thrilled to be here and also excited that you're seeing this dual mandate as a critical role and aspect of the work that you do, primarily because it's not just about maximum employment, it's about meaningful employment. And so, I think, I'm excited to talk to you a little bit about today what we're seeing on the ground when it

comes to the quality and the types of jobs that many of our members are seeing—folks who typically aren't entering into the labor market, what they're accessing, and their ability to move up as well as the wages associated with that work.

Our job in our state has been to be sort of the primary advocates for the job training component, but also this concept of really thinking thoughtfully about the connection between economic and workforce development. Similar to Denise, this movement towards capital-driven workforce development—meaning human capital–driven workforce development and economic development—is critical. I think for too long the piece of the pie has been just around the built space, not recognizing the impact on the people who live in those communities, right? And so I think we're sort of seeing a movement towards that in New York State but, more broadly, this thoughtfulness around, what does it mean to live and work and grow in a community along with the built environment? So, again, I'm happy to be here, and thank you very much.

MS. HOROWITZ. Thank you so much. My name is Sara Horowitz, and I'm the CEO of Trupo, which is a start-up in New York, and we are providing the next civic infrastructure for this new workforce. I'll tell you a little bit about my history and how we got there, because I think that would be helpful. I started the Freelancers Union about 20 years ago, with the realization that the workforce that was not the traditional employee workforce, where people go to one job for 40 hours a week, are able to access training programs and other kinds of services, are really left to figure this all out for themselves.

Where are we now? It's about a third of the workforce and growing. And what is so important is that we're starting to understand it. I think the first bite that we've taken is to think about it as the gig economy, but the gig economy is really about 6 percent of the economy. It's

really the people who are working on the platforms, and it's very litigated right now as to whether these workers are independent contractors or employees.

But if we start to move from this little bite size and go across, we see that, actually, we're talking about a very robust part of the economy that crosses class and economic lines. It crosses skill lines. It crosses regional lines, race, gender. And so really what we're talking about is the future. And so, when I was at the Freelancers Union and started the work—as Lisa and I, who you'll hear from next time, and others were talking about: What is going to be the next safety net? And that really was the thread to start to build the first portable benefits systems that built on the great work of the building trades unions and the entertainment unions that really built the first portable benefits systems.

And so we built a \$100 million insurance company. And after the ACA, we had to sort of move and figure out what's going to be next. And so I then realized that we needed to start a start-up, because, just like every part of American history, the people who are affected, I believe, have to come together to start to build the solutions for themselves, to start to come together mutualistically to build the first kinds of benefits structures—so, to provide some for health insurance, dental, accident, any kind of benefit. And what we found is that the whole risk profile in America has changed from very long-term risk to extremely short-term risk, which—the great Fed statistic of the average American doesn't have \$400 saved.

And so, what I would say is the—of the main things I would really like to focus on is that this workforce is beyond the gig economy. It is just so much broader, number one. Number two, we really don't have a safety net for them. And as we get to some of these questions, we'll particularly see that that's important with regard to unemployment insurance and training. And the third is that we're just going to have to open our minds and open our politics up, because the

two dimensionality that we're going to find ourselves in is not going to lead us to these solutions. And, again, it's going to be, make the path by walking and starting to show. We will start to build these models, and the role of government will be to support the models, not to take over them. So thank you.

GOVERNOR BRAINARD. Greg.

MR. HAILE. Thank you very much. First, thank you very much, Mr. Chair and Governors, for having us here today and for even opening up the doors to the Federal Reserve so many folks can be heard. And you can—there is nothing like hearing folks who are feeling some of the challenges of today, the economy, notwithstanding the experiences that others are having as well.

So I serve as the president of Broward College out of Fort Lauderdale in Broward County, Florida. My name is Greg Haile. I've been serving in that role for about 16 or so months now and was general counsel and VP for government affairs about eight years before that, before assuming this position. And when I was talking to our board about pursuing this role, one of the most important things that we talked about was how was it we were going to make a difference in the communities that otherwise don't feel that different through postsecondary education. We are essentially a community college that started offering baccalaureate degrees in 2007; we have 10 baccalaureate degrees now. We are an open access institution. About 70 percent of our students receive Pell Grants, which essentially means they're coming from the lower-income levels. And we have about 63,000 students at Broward College, making us one of the largest institutions in America of postsecondary education, and we have about 5,000 incredible faculty, staff, as well as students that make us a great institution.

In fact, the Aspen Institute has ranked us in the top 10 of all community or state colleges in the country, out of well over a thousand, as one in the top 10 on three occasions. And so we've been very excited about the work that we've been doing. But notwithstanding the success that we've had historically, it becomes incumbent upon us to think about what differences we can make for those who are not necessarily benefiting from this economy, and we know that postsecondary attainment is critical to economic success. Every economist will tell you that. But notwithstanding, we know there are people who are not getting that exposure.

One of the data points that we really focus on at Broward College is a reality that at about 50 years ago, the bottom quartile of income earners had about 6 percent of their kids graduating from college, and the top quartile of income earners had about 40 percent of their kids graduating from college—with baccalaureate degrees, that is. You fast forward to close to today, and we're looking at the top quartile going from 40 percent of their kids going to graduating from college to 77 percent or thereabout, and the bottom quartile going from 6 percent of their kids graduating from college to a mere 9 percent. And so what we have been aggressively working on is, how do we change that pattern of postsecondary access, opportunity, and attainment?

And I'll even tell you a quick story—that I grew up in South Jamaica, Queens, New York, at a very difficult time during the '80s and '90s, and my mother decided that she would send me to school in a better neighborhood about an hour away. I was in third grade, I started that. And then, in the sixth grade—it was 1989, and I was graduating from elementary school, and I was excited about it. And I actually told a classmate, "Isn't this amazing? We're going to be the last class of the decade!" And he immediately responds to me, "No, we're going to be the last class of the millennium, because we're going to graduate college in 1999." And that's the first time I'd ever heard the word "college." I got lucky. And it was a fickle experience.

And so the goal of us as an institution is to ensure, how do we eliminate the component of luck, but make it a matter of clear opportunity that is available to all those who need it? So thank you very much. I look forward to continuing the discussion.

GOVERNOR BRAINARD. Well, thank you. So this morning we heard unemployment: 3.5 percent. I mean, if you thought 10 years ago—right?—3.5 percent would have been quite a jaw-dropping number—lowest unemployment rate we've seen in 50 years. Does it feel like full employment in your community or the people that you're helping to connect to jobs or the people that you're helping to provide security for? Does it feel like full employment? And how does that differ from, perhaps, how it might've felt 10 years ago? And, you know—Denise, do you want to jump in? And then we can move around.

MS. SCOTT. In many markets, it does not feel like full employment, and it doesn't for a number of reasons—in part, back to the concept of social determinants of—of employment, there are so many variables that really impact the ability of people to get a job, to stay attached to the workforce, to skill up in the workforce, and all of this.

And then, the barriers are anything from the quality of the housing you live in—is it making you sick? Are you missing work because of it? Do you have to move so often that you can't maintain enough time to get tenure in a job so that you can advance? Or are you in a situation where even though employers—and in this market, employers tend to reach down, they are looking for more diversity in the workforce. They're looking for—they're willing to make concessions, which is all a good thing. And so, people maybe with not the right amount of skills, but the right basic skill sets are employable in this market. But you're not employable if you're in a rural community and you can't get to work because you need a car or some way to use—some form of access in order to get there. So those are some of the barriers.

We talk to employers who tell us that they really do want to see that workforce at the entry level move up, but it's so unstable. Their attachment to that workforce is so sporadic that what ends up happening is that the movement of people really in search of housing is causing this nonattachment. Or that there are training programs that might be available, but the length of time of the training program becomes a barrier, in the sense that people would prefer to take a low wage—not necessarily a job where you can advance, because it's immediately available, whereas a training program will take a lot longer for you to prepare for.

In Denver, the city decided, along with the number of employers, to enlist the housing authority—that maybe a good option might be to offer a rental subsidy. And so it started there for us. A subsidy that provides some years of stability for a family in housing in hopes that they can stay attached to the workforce long enough that from there they'll be able to propel. Right now it's a three-year program, probably not nearly enough years in a way, considering what we're trying to overcome, but better than the circumstances that they were in before. This is one strategy that seems to be taking up a lot of steam.

In some places—we just opened an office in Charlotte, and there the city and the health-care sector—again, the health-care sector—there's entry-level people who they—people who want to work, that's not the question, and jobs that are available. And so that's another place where we're in partnership with government and the private sector, the health-care sector—we're likely to build housing, workforce housing. So more and more of our efforts were—we're racking our brains and trying to figure out how to make opportunity zones work for workforce housing.

So housing sort of really stands up as a big factor. But in places like Chicago and Detroit and a whole bunch of our neighborhoods where the regional economy [unemployment rate] may

be at 4 or 5 percent—in our neighborhoods, it's at 20 percent or 25 percent, and all of that because of some of the things that we're talking about. So I could maybe stop there and let some of my colleagues jump in.

GOVERNOR BRAINARD. Demand is there, and opportunities—

MS. SCOTT. Opportunities and jobs are there.

GOVERNOR BRAINARD. —may be there, but it's—there are structural barriers to connecting with those opportunities, including rising expenses.

MS. SCOTT. Including expenses. I mean, rural is a whole another story, but I'll just call out the transportation component there. But it's not the only barrier, but it's a big one. Whether or not people have been attached to the criminal justice system. And even though it's less of a barrier now, it is still a barrier, because not all employers have reached the point of comfort about how to engage and employ folks coming out of criminal justice.

So many of the strategies that we're deploying are really trying to break down those barriers and trying to find ways to help people to become more permanently attached. The goal, at the end of the day, is to try to put people in living-wage jobs. So whether—in some cases, we're attempting to create those jobs, and then we have a better—maybe a better opportunity to attach people that we're—that we want to serve. But in many instances, we're working in the—in the market, and the goal is to figure out how to make a person attractive to an employer.

Another sector that's really starving for workers is the construction industry—lots of skilled jobs that are going unfilled. In some cases—like, for welders, for example—not a very long training program that's involved. But still, it's a barrier to people who, for all the other reasons, need to have that job that might pay less, but it's available right now, and they don't have to go through the training.

So, on the employer side, there are probably way too many jobs. And I think that that's a reason for us to put a lot more time and attention on how to bring those—break down the barriers and attach people to work. The opportunities exist while this market is strong. It'll be a different—as you said, it'll be a different ballgame when the market changes. And so we're losing a lot of time, in a way, that we don't have stronger strategies to remove these barriers.

GOVERNOR BRAINARD. Greg.

MR. HAILE. Yes, please. I completely appreciate what Denise is saying around—particularly the opportunities and the barriers that exist, particularly when you talk about postsecondary attainment. Some of the barriers are a little amorphous, right? You're talking about communities that—they don't have family members who've gone to college, they don't have neighborhoods, they don't have friends that they could rely on and don't necessarily perceive college or postsecondary attainment as an obvious next step for them in life. And in the worst case scenarios, like many of the students who are with us, they may have been told that they're not capable. All right?

So we're trying to address some of those more amorphous challenges, but then there's just the reality of, I can't get from one place to the next. And perhaps it's because our students are average age 27 years old, they're working, they're part time, they have children, they have a lot of other obligations. And so one of the things that we think about doing is, how do we make sure that we are actually penetrating communities and making sure we're doing the best that we can to ensure that opportunity is available to us? Most of us in this room probably have college degrees. If we have children, we've probably talked to our children at a very young age about the potential for them to achieve postsecondary education. And so we're not necessarily going to

be in everyone's homes, but as a postsecondary institution, we talk about how we can own some of this challenge.

And so when I became president last year, one of the things that I asked our team to do immediately was—notwithstanding the 3.3 percent unemployment rates—to take a look at what are the college-going rates and postsecondary attainment rates, as well as the unemployment rates, in every city and every zip code in Broward County. And, as Denise mentioned, notwithstanding that broad-based, very healthy unemployment rate, we saw a number of zip codes with 10-plus percent unemployment. And, of course the corollary was that they had very low postsecondary attainment rates. And if you talk to our students, you'll hear the voice of the students who say, "I walk four miles every day to get to class." Well, I love the will that that student has, but there is a reality that many folks cannot overcome that distance.

And so what we've actually started to do is actually bring postsecondary education into the communities that need them most. Oftentimes we sit and wait and say, "If the students can get to us, then we'll take care of those. And if you can't, well, I hope you can figure it out." And one of the things that we're hoping for on a broader scale but certainly we're doing at Broward College is saying, what of these challenges can we own? One, if we go into your community, the heart of a community where perhaps it's \$24,000 a year is the average income for the family, if we can place ourselves in the center of those communities and live there and provide postsecondary attainment—not bounce in and out, but to live in those communities so that when a student or a mother or a father is walking between their home and the bus station, they know that postsecondary opportunity is available right in their community.

And so, in the last year so, we've been able to do this, and we've been able to grow some of this work as well. Now, many would think, are you going to have a new building there,

particularly at a time when per capita funding for state colleges is down? No, we're not going to be able to do that. But there is the opportunity to partner. And so we've been partnering with organizations like the Boys and Girls Club and the Jack and Jill Children's Center and library systems where we can actually live in those organizations, providing classes that can be available to the parents of the kids that are typically served in those organizations. Or you look at the library system, which is typically underutilized. They have space for classrooms, they have technology, the infrastructure is there. And so we've partnered with classrooms and organizations like the Urban League, which have great—been great partners.

And not only that, we're watching municipalities really engage. They know their constituency. They know what their numbers are. They know the pain that their citizens are going through. But, most importantly, they know that if postsecondary opportunities were available, they could change the face of their communities. And so now we're partnering with municipalities, providing classes and coursework living in those communities that are embracing us.

And so, in the last year alone, we've been able to serve nearly 700 students by way of going through these programs. We're now getting the stories coming in where students are going through the programs. In fact, some of them have lost jobs. They've been able to get a certificate—just a certificate—in supply chain management or IT or aviation, and be able to now translate that certificate into jobs making \$50,000—opportunities that otherwise would not be there.

So I think about how we can be more creative about getting into those communities where we know those attainment rates are very low. And then, even from a policy perspective, how do we own that? What are we trying to do for attainment rates in those most challenged

communities? How are colleges trying to enroll—increase the enrollment of students from those most challenged communities? And then, of course, as we look at social mobility and economic mobility, how well are colleges playing in that space? The program we've designed is called "Broward Up," designed for students who are coming from these communities. "U-P," standing for "unlimited potential," with the recognition that everyone has the ability, but the limitations on opportunity are what we need to be embracing on behalf of our students and working with them to ensure that the opportunity is there.

GOVERNOR BRAINARD. Sara, I'm going to just ask you to reflect a little bit on the kinds of workforce attachments, the folks that you're focused on—does that vary over the course of the cycle? Are there more people that might be freelancing or, you know, sort of self-employed now or perhaps at the depths of the recession? Or is this just a structural trend?

MS. HOROWITZ. Yes. You know, if I could just go back for one—one thing. I think one thing that's interesting is, as we are, as a panel, sort of seeing the 360 as the whole, I would say that freelancers really are—there is a lot more work than there was, certainly, after, you know, the recession. The real story, I think, is the hollowing out of the middle class, that they're really not making the same amount of money in real dollars, which I think is shocking. So I speak with so many freelancers, and what they will say is, "I'm a graphic designer," "I'm a content provider," "I literally am making less money than I did before." And because they're independent contractors, they don't have the right to unionize. And so it's very difficult for them to engage in any kind of collective relationship, which would have the effect of bringing up those wages.

Now, what I think is interesting is that you could almost see the rate at which freelancing has gone up nationally, if you look sector by sector. So if you looked at it, maybe, in the 1970s,

you'd be seeing it in media and publishing. But now what you see is that almost every single sector has a freelance component to it. So, I think, that's one thing. The second is, I think that we're just seeing the rise of just an incredible number of work platforms that are coming out so that there's a way, if you don't have the network that you can enter into, and that's a whole other conversation. But I think that that's a change, and that's how people are coming in. And then moonlighting—people are having a side hustle trying to figure out, is there an option, an opportunity for that.

So I think the real answer, in a sentence, is "yes"—it really is structural, it really is changing, but you're seeing the nuance within. I think the really hard question is, how are we measuring it, and what—how much is enough? And, you know, when I was trying to think about that in coming over here, I wondered if we could channel the people who came up with the consumer price index. You know, let's just take that cart and go around the supermarket and figure it out. And I think that that's the kind of exercise that we're going to have to ask ourselves as a country, which is, how much is enough? And I would say that what is enough—that I have affordable health care, that I have an affordable place to live, that I'm not in debt, that I have enough that gives me some sense of security and optimism. What that is, is what it's going to be the defining question of this next era, I think.

CHAIR POWELL. In that spirit, Sara, what in your thinking or experience accounts for the decline in wages at a time when, you know, the rest of the labor market's getting tighter and tighter, and wages are moving up, but in—among freelancers?

MS. HOROWITZ. Yes. So as I see my friends at—from the AFL-CIO, I would have to say that number one is really a lack of organization, and that typically one of the major pathways to the middle class—meaning, how we increase wages—is through unions. And I just don't see

how you read history any other way. So I think that's one. And then I think there really is this—so many people, it's so easy. I'll give you, actually, a good example. When I've been talking to freelancers and talking to people who are voice-over artists, what they'll tell you is, it's a skill and if you're great, you're great. But the technology is so simple to get into the market that anybody can buy the technology, you know, put it in a quiet room, and you're a video artist, and you can undercut the other people who have been doing it a much longer time. I think that's an example of technology.

CHAIR POWELL. So a little better understanding of technology, yes.

MS. HOROWITZ. Completely.

CHAIR POWELL. Interesting.

MS. SCOTT. One other, just—the middle class, I think—many people left the status they had when the market changed, and they never got it back. They never got back the job that they had before the market went down. And that, I think, is contributing to the growth in the industry where people have become entrepreneurs, because that became a better alternative to the job that they once had that just never came back.

GOVERNOR BRAINARD. Maybe some structural forces, and then accelerated by that really sharp downturn. Let me turn to Chad and ask you to reflect on the flip side of it, from the employers'—so is there evidence that, you know, the tightening of labor availability—is that giving greater bargaining power to some of the workers? Are you seeing actual wage and employment benefits demands going up in a noticeable way? So are there pockets in the economy where you can see those kinds of pressures?

MR. MOUTRAY. So, you noted earlier, Governor Brainard, that we got job numbers today. So, obviously, they were negative for manufacturing. And we've seen a softening overall

in manufacturing growth this year, about 4,500 this year, on average, per month—relative to last year, was 22,000. So the best, really, since 1997. And I also noted earlier that, really, for eight straight quarters, we've seen our manufacturers say that this is the top issue right—right?—the inability to attract and retain labor. I hear it also from construction workers and from housing, truck drivers, et cetera. So you continue to hear this, especially in that tight labor market.

One of the numbers from JOLTS that I think is interesting to kind of get to your point is that last month, I think it was July, which is the JOLTS data, the most recent, you had an all-time high level of quits, right? So this is the “take your job and shove it” measure. That's how I describe it to a lot of our audiences. And so that to me suggests that there's a lot of churn out there in the overall labor market. I was hearing it as much—especially last year—a lot about poaching people, going on LinkedIn and finding who your competitors have, and you see that kind of moving from place to place. And I think manufacturers are really sensing that in a real way. And those same JOLTS data—522,000 job openings last month. That's an all-time high.

So you do have kind of this strange juxtaposition between slowing growing—slowing hiring in general with the fact that there's job openings, which are at an all-time high. And that's the large part of why we're doing Manufacturing Day. What I think the other part of it—there are some structural issues here at play as well. I was talking to Nancy earlier about the fact that we have about 35 percent of our members who say that they want people who are almost eligible for retirement to stick around a little longer, right? Because there's not necessarily a next generation of worker waiting in the wings to take those jobs, and so you don't want to lose that institutional knowledge. You don't want to be able to lose that talent. And we actually did a study, funded by the Sloan Foundation, really to look at what members are—members, manufacturing members—were doing really with that aging workforce to try to get them to stick

around a little longer. But, also, some of them were doing phased retirement, some of them were doing mentoring of younger workers—so I think all of those things are kind of at play.

And then the other structural thing that I'll say is that there are perceptual issues about manufacturing. People still think it's dark, dirty, and dangerous. I think that's partly the truck driver issue as well—not to pick on them. But I think changing those perceptions is huge, and convincing folks that—no offense Greg, but—you don't need to have, necessarily, a college degree. There are many people—I have a Ph.D., so it certainly is good for some folks, but not everyone has to go and get an actual college degree. There are certifications out there, there are apprenticeships that you can get, there's other forms of trade schools—trades that you can get that I think are also helpful. And so changing those perceptions, I think, goes a long way.

I was meeting with a group of manufacturing employees—I think it was last week or so. None of them, obviously, were on the shop floor. They were all doing accounting and government relations and other stuff. And I said—I won't say who the company was, but I said, "Do you think of yourself as being a manufacturing employee?" And, of course, they don't, right? They're doing accounting or whatever else. And I said, "But you are. You are in the NAICS code of 31–33." So I think changing those perceptions, I think, is another kind of structural hurdle that I think we're trying to overcome.

GOVERNOR BRAINARD. I'm going to ask Melinda just to speak a little bit—are employers working harder to partner and find workers, upscale them, pay them more? Are you finding that—really, a change in the intensity with which people are trying to find skilled workers and invest in skilled workers?

MS. MACK. So I think the answer is "sometimes," because I think it depends on the sector or the industry. I want to take a giant step back just to be really clear on what we're

talking about. In our state, 41 percent of New Yorkers have a high school diploma or less. That's not uncommon across the nation, right? And so when we're talking about even being able to access something like community college, it's a very large leap to get from low basic skills into meaningful employment.

The other piece, just to juxtapose, is that the top growing jobs in our state pay less than \$27,000 a year. And so when you add on the transportation costs, the childcare costs, the additional skill-based training costs, it is not fathomable or possible in many ways for folks to find this pathway. And so I think one of the things that we're finding as we talk with folks—this idea of a good or better job is meaningful. Many folks who are working are not working in great jobs or they're working in multiple part-time jobs. And so, in our state, about a quarter-million folks are in part-time jobs. I imagine that many or more are piecing together full-time work, using sort of many sort of part-time job opportunities. When you think about that and think about, when would you have the chance to go to Greg's college, right? It doesn't work. It just doesn't work.

I was just with someone earlier today talking about, in particular, some of the most difficult occupations, the caregiving occupations: home health-care and childcare providers, drug support professionals. The wages are dictated by Medicaid, right? And so the ability for you to even be able to raise wages associated with those really critical positions in our economy are very limited. So, to say, are people engaged? Yes, for the most part. But I still think we're struggling with this concept after the recession where folks had "credential creep," where folks sort of crept up and said, "What you need to do this job is an associate's degree or a four-year degree or some sort of credential," where, ultimately, you're working as a cashier—you probably don't need an associate's degree.

On top of that, I think the other issue we're finding—and I'd be interested to hear your take on this—as we move from advanced manufacturing into lean manufacturing, people are really tight on their lines, and so meaning that they're running production 24 hours a day. The ability to pull someone off the line to go into training is really limited. But in addition to that, they've actually dramatically decreased their availability of training resources internally to be able to support worker retraining.

I don't know if part of that's because they anticipate the fact that the turnover is going to be high, so the reinvestment and the poaching is something they don't want to invest in. However, what it means is that the worker is having to bear the full cost of the retraining effort. And so this balance of, sort of, how you engage employers around this is good for their bottom line is something I think we're still struggling with across the country. You look at countries like Germany or to Switzerland where they really think differently about how the employers invest in worker retraining. We're not at a point yet in our country where I think workers share the responsibility with the business community around the investment in job training.

GOVERNOR BRAINARD. I'm going to switch focus and start to provide a bridge to the next panel. But I also didn't want to completely monopolize if Governor Bowman or the Chair have a question. Otherwise I'll just keep going.

CHAIR POWELL. Keep going.

GOVERNOR BRAINARD. All right.

CHAIR POWELL. We'll jump in.

GOVERNOR BRAINARD. So the other side of our dual mandate, which we're going to have an entire panel on, is price stability. And I think when you say that to most people, they probably don't resonate with that. But you've talked about price stability a great deal already in

the panel, and it's this question of, are living expenses high, low, growing faster than incomes, growing in line with incomes? What would you say your communities are experiencing? And if they are seeing some kinds of expenses growing faster and some slower, you know, can you give us a sense of how that divides up for, you know, an average household in the kinds of communities you're interacting with? So—

MR. HAILE. Yes, I think that's a great question. So there's a report that the United Way produces called the ALICE Report—asset limited, income constrained, but employed. And of the 35—3.5 million households in Florida, about 46 percent of those households are ALICE population. These are essentially those who don't have the income to support what it costs to live in a home, what it costs to pay their utilities, what it costs to do all the things that we know are going to be important to a sustainable life. And that's an important number. And, to be honest, when you think about Broward County, in particular, it's a data point that it's unfortunate to have to share, but we are the worst in the nation when it comes to congruity between your income and the cost of living. It's incredibly expensive, and it's a challenge for all of us to work on fixing.

And, of course, postsecondary institutions have to think about, what role do we play in doing that? So when we think about the jobs that we're getting for our students, we want to make sure that those are jobs that have put them at a level—and, by the way, let's not forget the benefits cliff that the Federal Reserve has been working on and addressing that issue as well. That's a key component of the discussion.

And so when we think about how we get there in light of the challenges that we know exist, you know, one of the data points that I—we need to be conscious of when we talk about what level of attainment is required, first, 65 percent of all jobs in this country require some form

of postsecondary attainment—not necessarily a degree, but it could be a certificate. For every job that requires a master's degree, there are two jobs that require a baccalaureate degree and seven that require a certificate or an associate's degree. And so where's the opportunity?

And so when I talk to employers who may be keeping their wages flat but they're offering bonuses to get people in the door—of course it's hard to keep someone after that two years when the bonus—contract expires, but notwithstanding, they're doing what they can, particularly in aviation and nursing, et cetera. And so they say, "Well, how do we find the right kinds of employees?" And I say, "Well, where are you looking?" because there are these pockets of communities that have 10-plus percent unemployment.

The other barrier, as we've discussed it earlier, is sometimes, folks don't even know the opportunities exist, right? So you talk about aviation, and they think it means becoming a pilot—right?—as opposed to avionics or aviation maintenance or all the jobs in that space. I remember when we were in one of our most challenged neighborhoods and knocking on doors, talking to the people in those neighborhoods, letting them know, in fact, I had just become president. And I said, "I'm the new president of Broward College. I want to make sure you know we're here, and we want you to come to the college."

And one of the things they said was—one gentleman says to me, "I can't go to college, because all I know how to do is fix motors." And I said, "Oh, we have this amazing automotive program, and there's a certificate that you can get. In a year, you can be making \$50,000 a year. And, by the way, that certificate ladders into an associate's degree. If you want to go there and get an associate of science, you'll be making \$40[,000] to \$50[,000] or more beyond that as well." But they don't know the opportunities exist.

I talked to another person in the same neighborhood—"I can't go to college because I've been arrested" or "I've been to jail." They don't know the opportunities, right?. And so part of it is, if we're not living with them, it's very hard for them to see beyond what they've heard and the myths that they currently exist with. But we have to tie that to the employer opportunities and make sure—to the point, again, that was raised earlier—employers have the understanding. And this is the great opportunity for the economy that we're in—right?—for employers to be saying, "Well, I can't find anyone," and us saying, "Well, here's where they are. They have the will, ability, and, by the way, they know how to fix motors too."

MS. HOROWITZ. I'd say the two really huge pain points for people right now is health care and housing. And so the thing that I'm hearing more and more probably in the last two, three years, versus five-to-seven years, is—and, remember, this is a group that's just above subsidy level, so they're not way above subsidy level, but just there—and they're going without health insurance now, and it's just because they can't afford it. And, I would say, the second sub is, they don't feel valued. But I think that—those statistics will bear that out.

I'd say housing is another obvious one, both for rental and for homeownership. And I think one of the other things is, you know, when I started with Freelancers Union 20 years ago, you'd say, well, where are the freelancers? You know, Brooklyn, San Francisco. Now you really see that freelancers are really moving to every tertiary city in every state because the housing costs are available, which I actually think is going to be a great trend in a funny way, but it's not going to be out of a position of strength. It's really because they're struggling with that.

MS. MACK. So I would add sort of on top of housing and transportation, childcare is an incredible, undervalued challenge in terms of really reaching full employment. I think, in our state, obviously, women are probably most impacted still in terms of being able to access and

have available childcare. As a parent of three small children, the only reason I'm able to be here today is because I have regular, stable, affordable childcare in the fact that my husband stays home with our kids, right? And so I think one of the challenges we're finding is, in particular, if the childcare subsidies that are available don't allow you to access available and affordable childcare and you have to make the choice between going to a bad job or putting your kid in unsafe childcare, you're going to stay home with your child. And so I think the availability of affordable childcare is incredibly important.

But it goes back to this caregiving conundrum. We have increased the quality standards for childcare, as we should, but it also means you often need to have an associate's degree or baccalaureate degree to provide childcare in our state, yet you're still only making minimum wage. And so, again, there's this conundrum around, it's a limitation on the availability and ability of folks to work, yet we can't quite subsidize our way out of it in order to be able to make the issue go away.

MR. MOUTRAY. The only thing that I would add, not really from a manufacturing perspective, but I think just from a national perspective is—and I'm sorry Greg, you might have a different opinion, but—student loan indebtedness has gone up pretty substantially. And I know, even in my old days when I was at the SBA [Small Business Administration], it's holding back entrepreneurship, it's holding back a lot of other things that I think, you know—and people are coming out of college with enormous amount of debt. It takes them years for them to pay it off, and I think it takes away some other opportunities that are out there that, in terms of starting households, et cetera, that, I think, are some pretty profound challenges.

GOVERNOR BRAINARD. Let's go to Denise, and then I'll let you come in on student indebtedness too.

MS. SCOTT. I would reference the ALICE Report as well to say that 51 million households are struggling to pay for housing and health care and food and transportation and childcare. Nowhere in the country, not in urban or rural places, are people working with moderate wages able to afford a two-bedroom apartment. Not a single place. And so that just begins to tell you.

I think the other thing that contributes to the value of the wage that you bring home is, what else do you have to go with it? And as federal, especially, benefits begin to diminish, that is having an impact on a lot of households: immigrant households, people at the lower wage level where there may have been some form of benefit that they were qualified for. As the value of that begins to diminish, or even just access at all to it, then that wage no longer goes as far as it—as it once did.

MR. HAILE. So, you know, one of the things—that's such an important issue when we talk about debt related to postsecondary attainment. And one of the things that I always get concerned about when—particularly when students decide before they've ever looked at whether they want to obtain a college degree, they've decided—particularly from our lowest-income communities—that they cannot afford it. And they don't necessarily know that at a school like Broward College, it costs about \$82 per credit to get a degree or a certificate—or a degree, primarily. When you include tuition and fees, you're talking about \$117 per credit. When you're talking about an associate's degree, you're talking a total of \$7,000. And we're one of the unique institutions that offers baccalaureate degrees. When you do add that on, you're talking about an additional \$7,800. So you're talking about a baccalaureate degree for \$15,000. And, probably most importantly—and this is a statutory obligation of ours, but it's something we own anyway, regardless of the statute—is that these jobs are designed to meet these degrees. Our

bachelors in science or associate in science is designed to meet workforce needs. So that means, at max, you've incurred \$15,000 to get a job making \$45[,000] to \$50[,000].

Now, I say "at max" because, as I mentioned earlier, 70 percent of our students, particularly—and this is not atypical for community colleges—they come in, and they're Pell recipients primarily, which means all, most, or maybe just a little, but at least some of their debt is covered by federal Pell. And so by the time you're done—we've looked at our data at Broward College. We know that when our students who graduate with an associate's degree or baccalaureate degree, very few of them, a small percentage of them actually have debt upon graduation. And so you're looking at—but the \$1.6 trillion story is an important story, but postsecondary debt as well as cost is very dynamic. And as we think about the opportunities to provide certificates to students that ladder into degrees, the most important thing is to make sure they're not—that's not disguised by a fear of what's possible or the cost of attainment, particularly needs—institutions like ours that are doing so much to ensure that those costs either are nil or don't exist by the time they've graduated.

GOVERNOR BRAINARD. So I'm going to—I'm going to ask two more questions, and then I think we do have time to invite the audience to ask a few questions. So I'll just give you that heads-up in case there are one or two people that want to ask a question.

So we have heard, I think, so far that the economy is a heck of a lot better than it was. You know, there's a lot more employment opportunities, although it doesn't really feel like maximum employment for some of the people who are more marginal. But there are opportunities to upskill. Wages are growing, but they're not growing as much as housing costs and health-care costs. So, mixed picture. Flip side—how much do you worry about your communities if the economy were to weaken from here, and what would you be watching for as

a potential sign? And how do you think that would affect the progress that you've been making? And I'm going to start with Denise on this one.

MS. SCOTT. I guess, in some ways, the communities that we work in—I'm not sure there's a big difference, from their perspective, anyway, I would say, between where we are today where there are so many opportunities—because of the barriers, they're not really benefiting. So, the change, I think, at the level of community perception may not be—they're not, they don't see a difference. What we see as an industry is that because we know that the job market is, let's call it “plentiful” now, that we want to figure out ways as early—as quickly as we can to take advantage of the opportunities to try to get more people attached in ways that are sustainable. So it's an interesting dynamic if you're living in many of the communities that we're living in, that when we talk about all that is available, that folks are just not—so it's not very different for them. We would probably do a lot more if we could. And one way that we think we can is to create more opportunities for small businesses in some way, because we think that we can perhaps—if we could help better sustain that sector of the economy, we could possibly keep more of the folks that we want to get employment for employed.

What's the barrier for us lending to small businesses? Credit enhancement. I mean, at the end of the day, we can't make the credit analysis work for our credit committees, basically. But so—and we, we are an SBA lenders, so we do that, but this margin of lending between maybe \$5,000 and \$50,000 that could start up a business or even maybe convert a business that might have an impact if we could get it to scale. So it's something that we're looking into.

GOVERNOR BRAINARD. Chad.

MR. MOUTRAY. So, obviously, manufacturing is pretty cyclical, right? So, I mean, hopefully we don't see the 2.3 million workers we lost in the Great Recession. So I don't see

that coming up anytime soon, hopefully. But I think manufacturers in general are preparing for some sort of a slowdown or—hopefully, not a downturn, but, hopefully, something next year, and I think they are preparing for that in very meaningful ways.

I kind of go back a little bit to what we experienced in 2015 and 2016, right? So a little bit of a—much of a slower period, obviously, a lot of global headwinds and the energy pullback. Keep in mind that 90 percent of manufacturers are small- and medium-sized manufacturers, and so you have to kind of separate them out a little bit by firm size. Many of those smaller manufacturers operate more like family, so what they tend to do in those types of time frames—I’m sure the same is true for, when we hear from Holly about small businesses—they might cut back hours—right?—rather than let people go, or they’ll do some other types of flexibility rather than—you don’t want to see that person leave, right? Manufacturers are operating much more leanly than they were before, so it’s not like they can necessarily afford to lose that talent, right? So you’d often see them operate a little bit more family-like in that way.

The other thing that I think will be interesting to watch as we move forward is, so many manufacturers are investing in new technologies—the disruptive technologies of robotics and AI and all of these things. That, obviously, is going to have long-term implications, in terms of our overall productivity, et cetera, but I think that also perhaps we’ll have a little bit of a cushion, I think, as we move forward, more of a longer term—not just during the downturn, but, like, later as well.

MS. MACK. So I will sort of challenge Chad a little bit. And I am not an economist, as you probably have noticed, but when it comes down to it, I think that automation is going to dramatically impact the communities we serve in the next, sort of, decade or so and, in particular,

around economic downturns and, sort of, the value that an employer sees of the gains that they save by investing in automation. Your robots don't call in sick, right?

And so I think that we are going to see, when the market contracts again, is that this challenge around balancing between automating or keeping and retaining your workforce. I mean, one of the things that we are looking at internally is the number of folks who are moving to part-time work and the reduction in hours. Again, the reduction in hours tackle—tangled with benefits, right? When do you make the decision to go on public assistance or keep working are real questions that, I think, many of our folks have to ask.

I would also sort of say that I think, as we look across our state and across New York, we do often see an increase in folks moving into a job-training-like program when the economic downturn hits. The key is making sure employers continue to stay committed to investing in those programs and investing in providing the core competencies that are necessary, above and beyond what we typically hear as soft skills, right? It's—soft skills is often code for something else. What we really need is, what are the technical skills and abilities that translate into meaningful employment for folks who go through many of the training programs? And so, again, I sort of share that, because I think, during a downturn, employers sort of step back from those engagements and say, "It's not necessary. We are sort of worrying about our own shop and less about the train—employment and training pipeline."

One last thing I will mention is, I think it's really important for folks in this room to recognize, the federal money for workforce development funded through WIOA [Workforce Innovation and Opportunity Act] and others—that falls way after an economic downturn hits. So having lived through the recession in New York City, working in the workforce system there, we were seeing folks coming through our doors in droves and had very limited resources to serve

folks meaningfully until ARRA [American Recovery and Reinvestment Act of 2009] hit, which is many years after the downturn hit. And so I share that because, often, folks on the ground will see this start first, but the federal resources follow very, very late.

MS. HOROWITZ. I think that the next downturn is going to really expose the lack of a safety net. So if a third of the workforce is independent now, it's literally ineligible for unemployment insurance. And so I think that that is going to make us say, "We should revisit, maybe, the 1940s strategy of how we structure that." And we don't really have the actuarial models, so perhaps setting up some pilots where we could actuarially test—because what is "unemployment" if you have six gigs and projects and freelance projects?

CHAIR POWELL. Could you say what you mean by "the 1940s strategy"?

MS. HOROWITZ. Yes, so—

CHAIR POWELL. I wasn't, you know, around then [laughter], so—

MS. HOROWITZ. Well, I did read that plaque behind you, and so the walls here probably remember a lot of this, but in 1940 was how we started with unemployment insurance, and it was very much like an on-off switch: Are you unemployed—because we needed to know that we needed to get money to you so you would start spending, as I am lecturing you. Is that crazy or what? But— [Laughter]

CHAIR POWELL. It happens every day.

MS. HOROWITZ. I might not be such a bad lecturer, compared. But, so, the unemployment—the idea was obviously that we were going to get that money back into the economy. What has happened is, we didn't anticipate that the rise of the independent contractor would be something more than the ones that we saw back then. So what I know happened in the recession is at the Freelancers Union, 12 percent of the members went on food stamps because it

was the only thing they were eligible for. So I think that we are going to start to see a real heavy use of different things that we aren't anticipating, and I think that's going to be difficult.

So what are their coping skills? You know, one of the great things about being a freelancer is that you have this portfolio of work. And so we saw in the last recession that the employees really had a tougher time, in many ways, because they had nothing, whereas freelancers could kind of mitigate and deal. And because they are not eligible for these programs, they have to be a really scrappy lot. And so it's not fair to ask people to be so scrappy, but they are. And so I do think that that's what we are going to start to see. And there will be struggle, but they're—they're very entrepreneurial.

MR. HAILE. Obviously, a downturn would hurt a lot of folks that we intend to serve and that we are serving. I think about, how do we try to get ahead of it? And so whether you're talking about automation or downsizing, you know, one of the things I think that not only us, but a lot of institutions of higher ed—community colleges, universities, and the like—could be thinking about: How do we partner with those companies that we know? Well, if not because of pure downsizing, but because of automation, we'll likely be losing a number of employees. And so I'm sure in this building, and certainly at my institution, we have a lot of folks who could tell you what jobs are unlikely to exist over the next several years. The question becomes, where is the opportunity for intervention as an institution of higher education, one that is designed to retool folks at the technical level as well as to the degree level, to work with those organizations and say, where is the opportunity for us to retool either within your organization—because notwithstanding the fact you may be losing someone here, you surely have needs over here—and then if it's not retooling within the organization, then it's retooling potentially outside of the organization and looking at where those opportunities are?

The other side of it, if you will, is to think about, as we educate our students, are we making sure that our students are educated in a way that teaches them to be entrepreneurial? And I don't mean it in the most typical fashion of starting a new business—that may be part of it. But to be thinking about, whatever industry that you work in, to be conscious around what's happening in that industry, not just at your desk. And where—where are the opportunities around the bend where you need to be retooling your skills? Because at this point, because of the dramatic change that we see, we know a lot of jobs that won't exist that are here today, and we have no idea what the jobs are that will be here tomorrow. We have to have folks who are thinking about the potential for changes in their industries and continuing to get retooled. The times of getting a degree or any attainment and stopping there, I think, are long behind us. For the most part, people will need to continue to get retooled and reskilled to adapt to the market that exists in any given time.

GOVERNOR BRAINARD. So I am going to just ask you to switch focus a little bit. So we've been going around and listening, but, of course, we also communicate a great deal. And we don't traditionally orient our communications to the kinds of communities you interact with the most, but if you can just reflect a little bit and give us any thoughts you might have on how we can communicate better: What it is that we do to the communities that you are serving in ways that actually touch them? So I don't know how we want to start.

MR. HAILE. I'm happy to start.

GOVERNOR BRAINARD. Would you like to jump in?

MR. HAILE. Sure.

GOVERNOR BRAINARD. Thank you.

MR. HAILE. So, I think—we work with the Atlanta branch. I think they do a fantastic job of reaching out to local organizations. I would be thinking around the potential for enlisting—enlisting local ambassadors to the work that you are doing. Obviously, the transparency that you are providing here is incredible. But to be thinking about, who are the local ambassadors in the community that you're working with, and who can help spread your work. And also, just be conduits of information, whether it be from the community to the [Federal] Reserve or vice versa. And, surely, you wouldn't have any problems doing that.

But I think that also, if you think about touching those communities, part of it is just reality. Chairman Powell, this is a candid conversation, right? Part of our local communities have no clue of what the [Federal] Reserve does, oftentimes. And so—and oftentimes, they don't necessarily trust information from folks they don't know. And so, the best that you can do, I think, in many ways is to enlist folks in those communities who you know are trusted ambassadors in those communities to help deliver some of the information that you have and, again, be conduits of information from the ground up as well.

GOVERNOR BRAINARD. Thank you. Sara.

MS. HOROWITZ. Yes. You know, I think, similarly when—with these kinds of convenings, I think every regional Bank seems like it's starting to and probably has a long tradition of having these conversations. I think the strategy that would be really helpful would be to identify the institutions that people trust in their communities, and to not think of this as just that we have to reach isolated individuals, because, I think, isolated individuals are overrated. And I think that, like, if you said to me, what makes for a successful freelancer, I would say, it's someone who is very connected to their network and to other human beings, and they just tend to have happier lives, as we all do. So I think that it really is institutions, and that

that really matters not just for message, but for the listening. And then I think paying real effort to find the groups that have a sophisticated analysis that we don't necessarily always think about, like the cooperative movement, the union movement, the social impact communities who are really structurally thinking and are connected to individuals.

GOVERNOR BRAINARD. Thank you. Melinda.

MS. MACK. So I would say—so having now sort of done a tour of “the Feds” over the last couple of months, there is such variability around what each individual Federal Reserve Bank produces and, sort of, their connection to their local community. And so I think there is also a huge opportunity for cross-sharing, so what happens in San Francisco can be really valuable in New York and likewise. And I think it happens among Feds staff, but less so in terms of how it's communicated out to the broader public.

I would also just say, using terminology like “perspectives on maximum employment and price stability” feels very unattainable. I will even tell you, talking to my board and my community about this work, they said, “I don't know what that means. Why—why are you going to talk to these people?” Right? And so I think part of this has to do with, how are you able to break down and describe what you do and why it's valuable? But, also, the impact on the everyday person.

Because I think, ultimately, when the inverted yield curve came up, everyone suddenly knew what that was, right? There is a lot of these terminologies that are coming out in the rhetoric these days that I think folks are unclear how it connects directly to their work. And to Denise's point, they don't feel it in their day-to-day work. What they'll feel is when their orange juice costs an extra five bucks because of the tariffs, right? So I think those are the types of things that will be really valuable for us.

MR. MOUTRAY. I agree with all of those things. And I think, for the most part, the manufacturing C-suite gets it, right? When I talk to them, they follow the news pretty closely. They know whether you are going to make a 25 basis point cut or not, or make that debate, right? So they follow it very closely. I think where there is less interest—less, not interest—less understanding is, really, I think on the shop floor, right? They don't really get how all of these moves are going to change, I guess, the price of orange juice or how that really impacts their overall employment or any of those things, I think. So I think part of that, I would say as an economist, is people don't understand personal finance. They don't teach personal finance skills much anymore; they don't really get economics as much as they used to. But I think the other part of it is just understanding this as an institution and, really, how it affects their overall daily lives, I think, is something that's lacking.

MS. SCOTT. I agree with my colleagues. I'll just add that I see a growing partnership across the country between the Fed and the community development industry, and I think that's really a good thing. It's where—a really, kind of, stepping closer to what's happening on the ground. The business survey that the Fed does is a really great tool, and I think that while you have the community advisory boards and forums in that venue, that maybe a community survey of some sort might be worth considering to reach a broader cross section of people.

And then, lastly—this may seem very simple, but the New York Fed has a comic book. I guess they hand it out to everybody, but it also goes out to the school kids. The financial learning—to your point—that starts—that should start early in life. And maybe an understanding at the school level of what this institution means to the world economy is something that there should be more of a focus on, I think, in the education system early—from elementary school and up. Because, you know, just for myself, I remember being in school—we

actually had a savings plan. It probably helped shape some of what I think about and what my curiosity about the markets were, came early in life. So that's just something that the Fed could consider as a partnership with communities.

But I think the community survey might get at some of what you are asking us to talk about here. We are pulling it up from the various places we are, but you might also be able to get at it in some more systematic way, regularly. Yes.

GOVERNOR BRAINARD. I think these are all good suggestions, thank you. So now what I'm going to do is invite—if there are some questions from the audience. And I think we have a microphone. And I would just ask you to identify yourself and your organization.

MR. SMITH. Karl Smith, Bloomberg. Denise, in particular, but I guess also Gregory and some others—you talked a lot about quickly trying to reduce some of the structural barriers that people face in the communities before the next downturn. If you knew or were confident that you had, like, two more years of plentiful jobs or three more years of plentiful jobs, how would that change the structural barriers that you are able to break down or what you are able to do to get people to employment?

MS. SCOTT. Yes. I mean, you know, right now, I think, one of the things that we are really anxious about is that we can't lend enough to capitalize small businesses, because we believe that there is a real opportunity to employ more people and to stabilize that sector of the economy, so that's one consideration. I think another consideration really is finding more of a relationship between the private sector that's willing to pay for—like, some employers that are willing to pay for the kinds of barrier-reduction things, like rental subsidies or transportation pathways. But those kinds of partnerships with the employer sector could be a way, the idea

being that the more people you can get more stable in the workplace, the better their shot at surviving a downturn. Those are just some of the things that we have been thinking about.

MR. HAILE. And I'll just add one piece to that, and that is, if we have the continued economy that we have been seeing, we know that employers are looking at creative ways. And we want to continue not only to encourage that look into creative ways, but to start to build it into infrastructure. And so when you think about that, think about the potential for—as we look at the pockets of the communities that need employment the most and saying, what if we built into our infrastructure—not only do we have the postsecondary programming in those communities, but on the back end are guaranteed roles, positions provided by employers? And maybe we don't look at the jobs that we know, you know, are so subject to the economic downturn, but maybe we look at areas, such as aviation, where we know there is a shortage for the next 10 years? Or we look at information technology, where we know there is an infinite shortage? Or health care, where we know there—health sciences, those areas—and think about, how do we start to build frameworks for infrastructure that can not only withstand the next two to three years, but can exist for at least as long as economists are telling us these opportunities will continue to exist?

MS. MACK. I'll sort of add, I think the biggest opportunity is to expand earn-and-learn opportunities, where you are working and gaining credentials at the same time. So it's not just about access and exposure, but it's about the skill building that's associated with what keeps you sticky in the labor market. And so if you are not gaining the skills, the odds of you being able to weather the storm, as Denise described, are really limited. And so I think employers are more willing to do that now. They also are more willing to put some skin in the game. It's about how

you create those structural relationships that allow for that to continue when the downturn occurs.

GOVERNOR BRAINARD. So I think we had a question over there.

MR. AUGUSTE. Hello, I am Byron Auguste. I'm CEO of Opportunity@Work. I think this is a great discussion and, actually, this last question in particular. And my question is very much about some of the structural issues in the labor market. And we haven't talked as much about degree requirements, pedigree, credential requirements—and not as a matter of skill, but as a matter of signaling. And I think, in a world in which, you know, over 60 percent of adult Americans don't have a bachelor's degree—and there has been a tremendous increase in the bachelor's degree requirement for jobs, well in excess of the skill requirement. So, now, three-quarters of secretarial positions require a bachelor's degree when only a third of secretaries, existing ones, have a bachelor's degree. And so, as you think about the turnover—this is a problem.

And at a regional level, at a community level, what you start to see—and even in a city like Washington, D.C., when highly educated people move into a city, it's not just real estate that becomes unaffordable. You'll notice that the job postings all start to shift very quickly to require bachelor's degrees. So the people who were living here before actually are pushed out of the job market, not just the housing market. And I think, in some institutional fixes, like Broward, you can do some things locally, but I really would love to hear more about what you would do structurally.

And I would like to say that I think the Federal Reserve could play a very valuable role, both from your community development and from your business-convening side, because there are a lot of new jobs being created that, from a skill perspective, wouldn't actually require a

bachelor's degree, but they are all being listed that way. So the growth, the new jobs—robotics process automation, sales force administration, you name it—it's being done that way, in an exclusionary way. Opportunity—the Federal Reserve has done this opportunity occupations work—it's tremendous, terrific work, by MSA. I think there is a lot that could be done, but I'd really love to hear more on that, because I think it's much easier to have a job guarantee, effectively, at a statistical level, at a regional level, than a company-by-company level. So if there was some way to take that aggregation power with the—I think it could be powerful.

GOVERNOR BRAINARD. Greg.

MR. HAILE. So it may sound like I'm being evasive, but I promise you, I am not, okay? One of the things that—because if you look at how, from a structural perspective, we try to address this at the highest levels and think about, what are some of the things that would lead to some of the outcomes that we are looking for? So one of the ways that I like to think about this is from a social mobility lens, right? When we talk about our most challenged communities, we are essentially talking about, how do we ensure that, notwithstanding the fact that they in the bottom quintile of income earners, that we get to move them up, right? From up—at least two quintiles is how we are thinking about it, right? If we are doing our jobs really well, we're moving them up at least two quintiles, regardless of where they started. And so we have seen, I would call it, some “percolation” around postsecondary attainment being included in certain measuring sticks.

So *U.S. News and World Report* has started to look at—not in a grand way, although they are talking about it publicly, but—social mobility and the roles that colleges play in social mobility. And, of course, I know many folks in this room are familiar with the professor of economics at Harvard, Raj Chetty, focusing on social mobility. And we've been working very

closely with his office on looking at, frankly, how do we—and, hopefully, others embrace this as well—become the best when it comes to social mobility.

And when you look at it at the state level—although we haven't started to see that in performance funding, which has really started to become the new way of funding of state institutions—is there an opportunity for states to say, "We are going to start to hold folks accountable or incentivize social mobility as a component of their funding"? And now you've built in, at least to some extent, an infrastructure that says, the state's leaning toward—we're, in Florida, we are looking at 60 percent attainment, at least—but not the social mobility component yet, but looking at where you can build that into regulatory frameworks that can allow institutions of postsecondary education, as well as organizations, nonprofits, and otherwise, to start to coalesce around that. And then, maybe, you can start to fill some of those other holes that come with the social mobility that you're aiming for.

MS. MACK. I'll sort of add, too, I think—and I'd love to get Chad's point of view on this—that the NAICS codes don't represent, and the SOC codes that we have, the occupations of today. They just don't. And so I think that one of the biggest challenges is being able to run the data and the research to understand: What are the occupations and skills and abilities that are attached to those occupations? So what we have now, especially with new occupational codes, the Wild West of skills and abilities that are being said are necessary, when, in reality—I mean, I'm sure if we took a show of hands, if your job description described your job, you would not raise your hand, right? And so I think there is this ultimate challenge, though, around how you align that to the education sector. So how do you make sure that the folks who are having the responsibility of making sure folks are educated and trained for these opportunities are closely

enough aligned with the employers to be able to articulate those micro shifts in skills and abilities? It may be a new version of a PLC that needs to be instituted.

That's not something that folks typically can catch up with quickly, in an occupational sense, at an institution, because a PLC costs money to be able to lay out for a training. And so I think that there are some real challenges around that. I think the other piece I will just mention is, in terms of credential creep, it's real. It's real, and it is a challenge to economic mobility, but also around, sort of, race, class. And I think we often forget about the stratification of the way that we've structured race and class, in terms of certain occupations or income and mobility, and that eliminating things like "ban the box"—making sure that we are removing any artificial barriers for economic mobility are critical just in the hiring process alone. In particular, online job applications are eliminating huge swaths of potential candidates, because it forces you to check a certain number of boxes that may or may not actually consider your attributes as the ability to do the skill on the job. And so I think one of the things we've talked about: Is there a way to start to really limit how you hire through online jobs, recognizing that it eliminates huge swaths of candidates?

MR. MOUTRAY. I agree with all that. So, I would say, the other aspect to it—I don't think we've done ourselves a favor—I am a former academic—I am not sure we've done ourselves a favor by selling everyone that they have to get a bachelor's degree. I said that earlier. There is a lot of other skills out there that do not require a bachelor's degree, and maybe it's an associate's degree, and maybe it's some other type or sort of certification that I think often will pay five, six figures—right?—in terms of starting salary that you can do a really great job with.

The other comment that I would make is that manufacturing is changing so rapidly that the sector is completely different than it was 10, 15, 20 years ago—that continuous learning is kind of the norm now, right? We—you have to constantly be retrained, in terms of being able to work with that new technology. When you tour a shop floor today, you see a very clean environment where people are looking at a computer screen and actually monitoring what's going on. It requires a level of skill there that we sometimes undersell when we might call it blue-collar work or whatever.

And so I do think companies are pretty aggressive to going out and training. And oftentimes, what they will say is, "Bring them in here. Maybe they have some minimal level of certification or some minimal level of skill. We'll train them, we'll do what we need—just bring in"—I don't want to say "warm bodies," because that doesn't sound right, but—"bring in people, and we'll make sure we train them up to do what they need to do." And I think that that's a very helpful thing for us.

GOVERNOR BRAINARD. I think we had—Bill, didn't you have one question? So let's get Bill Spriggs's question, and then, I think, unfortunately, we will have to end this panel.

MR. SPRIGGS. Thank you, and thank you for having this session. Today we get to celebrate that the unemployment rate for Hispanic men and white men is equal. Many of us three or four years ago who said the Feds should pay attention to letting the unemployment rate fall argued that one of the structural barriers is actually racism, not what many people think. And if we let the labor market get tight enough, sooner or later we'd get to celebrate this day. And several months ago, the historic relationship that black women have a higher employment-to-population ratio than white women returned, so that black women returned to their pre-2008 peak. But if we have a downturn, some of these gaps, unfortunately, probably will come back.

So, Ms. Mack and President Haile, both of you were talking about certain elements of this. President Haile, you mentioned employers seemingly missing whole neighborhoods if there's a downturn and they're not looking anymore for anybody, regardless of race. How would that exacerbate them ever finding these neighborhoods? And, Ms. Mack, when you were talking about the jobs that are really in demand in New York and the sectors that were growing, a lot of those job categories you mentioned are predominantly jobs held by women of color. What would happen in a downturn for those important jobs?

MR. HAILE. Sure. So one of the things that I would be looking at—and I mentioned this a little bit earlier—is to be thinking about, what are those jobs that we know have a very long-term, long-range scope of opportunity? And so, these are also some of our more high-paying jobs as we think about in the health sciences space or aviation or manufacturing as well. And a lot of it is around changing the mindset of what a job in manufacturing is.

And these are communities that—in many communities, not just minority communities or low-income communities, but have a different perception of what that is. So we know that those jobs will continue to persist, and I think it's really incumbent upon us to be able to say, in those most challenged communities, minority communities, how are we engaging them in what opportunity actually looks like? So if we can engage them on what opportunity actually looks like, that manufacturing is really this, and this is how much you can get paid, and this is how quickly—and this is important, too—how quickly you can get a certification that's going to lead to a job in that space. That has to be something that we are being very aggressive about, whether we are in an overall downturn or continue to be in the economic climate that we have right now.

MS. MACK. So I really struggle with this for a bunch of reasons, mainly because I certainly understand that when we say that you may not need a path to college, that often we're

talking about a certain class or race or gender of individuals, right? You don't want to eliminate a college pathway. I think that there's a huge amount of value in talking about the occupation and the good job at the end of that.

So take computer coding, right? There's many different ways you can be a very successful computer coder, but we have stigmatized the pathways to get there—that the best and brightest pathway is to be a computer science engineer from MIT, not recognizing that going to a state school will probably yield you the exact same result, right? As a product of state schools who basically went up against peers from Ivy Leagues for most of my life, I had the exact same opportunities and availability of access because of the network I was able to build. And so I sort of also want to articulate here, I think one of the challenges, along with education and training—we've talked about this—is how you build the right networks around potential candidates so they're able to access opportunity above and beyond where they would be able to, just on their name or resume alone.

The last thing I will sort of mention, to your point—again, many of the caregiving occupations. The challenges to those will still exist. The upward mobility within those, if they are not attached to a labor union, is incredibly limited. And it's because, again, in home health care, you work a variable schedule, you often have to pay for your own transportation, the ability to get ahead, to get additional access to training and education are really limited. And so, for us, it's around, how do you think about how you holistically look at an occupation and a job seeker and a career seeker to make sure they have the right supports to be able to move out of poverty? But also, more importantly, how do you work with the employer to make sure that employer is an acceptable place to work for people different than them? And, you know, I will say, in having worked in this space for a long time, if you are the first person of color or first woman to go

work in an institution, your experience is very different than folks who come 5, 10, 15 years later. So there is work on the employer side around creating places to work that are amenable, good places to work for all potential employees.

GOVERNOR BRAINARD. I wanted to just—since we're wrapping up now—I want Denise and Sara to come in on this question of, you know, we do know that—we see the statistics, they're very clear—impacts of the employment cycle are very differentiated by race and ethnicity. And if you could just speak a little bit about, within the communities that you're working with, some of those are very different experiences and different vulnerabilities. Denise, and then Sara.

MS. SCOTT. Our—I mean, I didn't bring up race, I guess I—we should all bring it up. That's probably the point that's to the question, because it is an underlying, probably, issue, in a lot of ways—who gets called back for a job? Who is able to survive in the workplace? Even if you get the job, do you fit in? I think that there has to be more of a widespread intentionality around racial equity with something that even LISC is grappling with, that there isn't a specific policy yet. We say that this is what we are about, but we don't have a specific intentionality about it.

So, to many of the employers that we are beginning to talk to, I think, and maybe because the market is—is actually good, people seem to be more interested in diversity, more interested in finding ways to, in a more stable way, provide more stability for people in the workplace. But I think that it requires both a partnership between government and the private sector aligned around some agreement that—I am trying to, I am struggling for the word—that racial equity is an important consideration. Without that, it—we're going to go right back. I mean, I said earlier that a lot of people in the communities I work in are not—they don't see the difference at all yet,

and—but yet many people do. But I think that, more and more, as we—if we care about this, about racial equity, then we’ll make it more of a formal consideration when we consider workplace opportunities, even financing that we can attach certain rules around racial equity to the financing that we provide. Those kinds of things could make a difference.

GOVERNOR BRAINARD. Sara.

MS. HOROWITZ. Sure. I think people would be very surprised to know that independent contractors are actually not covered by race, age, gender, and any kind of protection at all—period, full stop. It’s a wonderful thing that in New York City, with the great work of the Freelancers Union and the mayor of New York and others, that we have the first city council that voted and was passed that any independent contractor, any freelancer is actually covered by all human rights laws. So it’s sort of shocking that that’s not—that doesn’t exist throughout the country.

But I can’t say this without being a third-generation labor person myself: I don’t really see any progress for people who try to solve things on their own, and that—what I think is really encouraging is that this new workforce, particularly millennials and younger workers are very well networked and organized and have found communities of affinity. And I think that that, to me, is where the conversations are going to happen. But beyond conversation, the activity, and the concerted activity—and that, I think, is where we should be thinking about how are we going to support that activity of people organizing, because that is the way we have a path to success in this country.

GOVERNOR BRAINARD. So I’m going to let Greg have the last word. But, Chad, I didn’t want to deprive you of an opportunity to jump in if you wanted to, but I know you are going to speak on the next panel, so—

MR. MOUTRAY. So I wanted to—I was actually going to say something very similar to Sara there. I think that every manufacturer—

MS. HOROWITZ. The National Association of Manufacturers and unions—isn't that exciting?

MR. MOUTRAY. Well, I don't know about that part. [Laughter] But I was going to say, about the millennials—the millennials, I do think that—every manufacturer I talked to says that they're working on culture, that they're trying to embrace the spirit of culture that embraces diversity and inclusiveness. And I think millennials, in particular, are the ones pushing for it. And I think, even at the NAM, we're having this conversation. And I—the part of it, I think, is the tight labor market and then the ability to continue to attract the best labor. But I think there's also a social goodness to it as well, that people are wanting to embrace the differences that we all have. And I think that's a good, positive thing, that you can get that fit, that stickiness, I think, of personalities in that way—that as we continue to embrace each other's differences, we actually can be successful. So that's where I was going.

GOVERNOR BRAINARD. Greg, the last word.

MR. HAILE. So, about a year ago, Broward College launched a program—a dual-enrollment program with Miramar High School. And dual enrollment, for those who don't know, is when a student in high school can contemporaneously proceed towards their high school diploma as well as get a certificate or associate's degree. And this was in aviation, what we call a workforce dual-enrollment program, and you had to have at least a 2.5 to get into it. It was the first of its kind that we were launching in Miramar High School, a very diverse institution. We looked for applicants—we had 39 applicants, and we let them all in. These were all minority students, and a third of those students were women—young women looking for this

opportunity in aviation maintenance, an opportunity that they otherwise would have never known of, would have never been exposed to.

And in Florida, dual-enrollment programs are free to the student. And for many of the students we're talking about, these are students who don't have family members who have gone to college. Maybe they would have thought it's too expensive to do it and didn't know the opportunity, nor did they know the opportunity to pursue something in aviation. And those students took their first college classes. All of them did incredibly well, B's and above, and without any exposure from anyone outside, other than the partnership that occurred between Broward College and that high school. And that's the kind of exposure—and we're looking at penetrating folks as young as we possibly can, certainly in high school, and if we're really good, even younger, to give them the opportunity to do something they would have never thought of, and we're seeing them succeed.

So if we can perpetuate those opportunities—and we're doing it again now as well in marine engineering, and we are seeing the same kind of success. So we'll continue to push that as well as partnerships to create diversity and opportunity that we know has the opportunity to grow in our community. Thank you very much for having us here.

GOVERNOR BRAINARD. Thank you.

MR. HAILE. Thank you.

GOVERNOR BRAINARD. So we are going to take a half an hour coffee break. We're going to reconvene at four o'clock sharp in this room. And before we do that, I just wanted to thank our panel for some really thoughtful and thought-provoking intervention. Thank you.

[Applause]