UNITED STATES DEPARTMENT OF COMMERCE

+ + + + +

U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

+ + + + +

NATIONAL ADVISORY COUNCIL ON INNOVATION
AND ENTREPRENEURSHIP (NACIE)

+ + + + +

MEETING

+ + + + +

THURSDAY FEBRUARY 2, 2017

+ + + + +

The Council met in the Department of Commerce Library, 1401 Constitution Avenue, N.W., Washington, D.C., at 1:15 p.m., Melissa Bradley and Stephen Tang, Co-Chairs, presiding.

PRESENT

MELISSA BRADLEY, AU Center for Innovation in the Capital, Co-Chair

STEPHEN TANG, University City Science Center, Co-Chair

REBECCA BAGLEY, University of Pittsburgh ESTHER BALDWIN, Intel

BRIAN BARTHOLOMEUSZ, TomKat Center for Sustainable Energy at Stanford University HEATHER BOESCH, IDEO

TREY BOWLES, III, The Dallas Innovation
Alliance; The Dallas Entrepreneur Center
SCOTT FREDERICK, New Enterprise Associates

KARA GOLDIN, Hint Inc.

ORIN HERSKOWITZ, Columbia Technology Ventures, Columbia University

SCOTT FREDERICK, New Enterprise Associates
RICHARD JOHNSON, Kentucky Science and Technology
Corporation

JOSEPH KAPP, Eastern WV Community & Technical College; Behavioral Business, LLC

DAVID KENNEY, Oregon BEST

MARIE LYNCH, Skills for Chicagoland's Future

MIKE NEMETH, S3 Planning

MARIBEL PEREZ WADSWORTH, Gannett Company Inc.

ANDREW REAMER, George Washington University

EMILY REICHERT, Greentown Labs

SUE GRIFFITH SMITH, Ivy Tech Community College

WHITNEY SMITH, JPMorgan Chase

TIFFANY STEVENSON, Sephora USA, Inc.

ERIC TOONE, Duke University

TIFFANY WILSON, Global Center for Medical Innovation

CHAD WOMACK, UNCF

ALSO PRESENT

THOMAS GUEVARA, Deputy Assistant Secretary for Regional Affairs, Economic Development Administration

CRAIG BUERSTATTE, Office of Innovation and Entrepreneurship; Designated Federal Official

RON JARMIN, U.S. Census Bureau

DAVID LANGDON, Economics and Statistics Administrations

EMILY LINER, Third Way

SHANNON RHOTEN, Small Business Administration

ERIC SMITH, Office of Innovation and

Entrepreneurship

JOHN WILLIAMS, Small Business Administration

C-O-N-T-E-N-T-S

Welcome and Introduction Craig Buerstatte, Designated Federal Official, Co-Chairs Melissa Bradley and Stephen Tang
Federal Agency and Bureau Presentations: Skills/Apprenticeships/Q&A: David Langdon, Office of the Secretary, Economics and Statistics Administration (ESA)
Innovation/Q&A: John Williams, Director of Innovation and Technology at the Office of Investment and Innovation, Small Business Administration (SBA)
Entrepreneurship/Q&A: Ron Jarmin, U.S. Census Bureau
Council Discussion
Recommendation Process to Secretary of Commerce Presentation/Q&A: Eric Smith, Office of Innovation and Entrepreneurship 107
Introduction, Shannon Rhoten 132
Public Comments/Q&A Emily Liner, Senior Policy Advisor, Third Way
Tom Guevara, Deputy Assistant Secretary for Regional Affairs, Economic Development Administration
Melissa Bradley, Co-Chair, AU Center for Innovation in the Capital
Closing Remarks

P-R-O-C-E-E-D-I-N-G-S

2 (1:17 p.m.)

MR. BUERSTATTE: Thank you, Robin.

And thank you NACIE Members. Welcome to our

second official quarterly meeting here in D.C.

As you know, this is a public meeting so also welcome a few members of the public.

Thanks for joining. For those of you that are dialing in on the line, members of the public, we will have a public comment period at the end.

Approximately 3:15, depending on the pace of conversation.

But, and on that note, we do have a transcription service here so if you are making a comment or engaging, please try your best to speak into the microphone. That way we can capture all the words.

MR. SMITH: Sorry, one thing about that. If your mic is off there's a little delay, so give it a couple seconds before you start talking.

MR. BUERSTATTE: Thanks, Eric.

And I noticed we have a packed afternoon. So if you do need to stand up, take a break, grab some coffee, hit the restroom, please do so at your own will. And I think I've covered all the logistics.

But you can take a look at the agenda.

And I'd just like to highlight one thing really
before I pass it over to the Co-Chairs. And very
shortly we'll hear from some Agency and Program
leads. And that's because we heard you.

Many of you were really thirsty to hear more about what the federal government is doing in innovation and entrepreneurship. So we have some great leaders here to talk about what they're doing in various roles to support those activities.

And we want to focus on that in two ways. One, think about ways that we can leverage that insight from them to better inform our current work, and maybe future work.

But two, take a step above the facts that you hear. And think about the levers that

they are using to fund, convene, support, you name it, regulate and deploy policies to support our innovators and entrepreneurs.

Because maybe that specific program might not be as relevant to us directly, or nearterm, but the strategy or methodology could be implemented in one of our conversations nearterm.

So with that said, again, welcome.

Excited to have you here. We've got a great 24 hours planned for you all. Steve and Melissa.

CO-CHAIR BRADLEY: Great. So, welcome. It's good to see all you, particularly those who have probably made almost the furthest trip, unless you're coming from some fabulous country elsewhere. So it's great to see everyone around the table.

As Craig mentioned, we do have an action packed today. Today is really focusing in a continuing of work group activities. And to really begin to refine those. So that tomorrow becomes a day to move from what can we do on the

ground, to what can we do to really advance a 1 2 much larger strategy? So I'm excited to have some friends 3 4 literally and figuratively from other agencies. 5 So that we can think about synergies, but also partnerships. And certainly to think about what 6 does the near-term and the long-term look like? 7 8 And importantly, what is our role in doing that? 9 I want to acknowledge Brian and his work in helping us develop some frameworks, and 10 Andrew and his work in doing some frameworks. 11 12 we -- Craig is holding up one right there. MR. BUERSTATTE: And each of you have 13 14 one, you'll see it at your desks. CO-CHAIR BRADLEY: A multi-colored 15 16 document. 17 So we appreciate the work that people 18 have been doing in the interim. It has not gone 19 unnoticed. And so that's really odd. It's great 20 to see everyone on the floor, to working to with Pass it to Steve. 21 you. 22 CO-CHAIR TANG: Thank you, Melissa.

And welcome everyone. It has been a busy winter since we last convened. A lot has gotten done.

I also want to acknowledge the historic nature of NACIE 3.0 moving between administrations. That has not happened before in the two other incarnations of NACIE.

So, I acknowledge that there is the sort of normal transition of staff, and transition of policy, transition of politics that goes on. I would also acknowledge that it's a bit heightened over the last couple of weeks in this administration.

So, we'll have some time to I think talk a little bit later about career milestones, personal milestones, and we welcome and want to learn more about what everybody is doing around the table?

I also want to acknowledge that three of our colleagues, since October, have elected to step down for a variety of reasons. And we'll talk about that as well. But other than that I think we are exactly where we need to be in terms

of developing initiatives, ideas. Crystallizing thoughts for getting ready to advise the new administration and new Secretary of Commerce.

So I am, as Melissa is, very interested and excited in getting started. So welcome back everyone.

MR. BUERSTATTE: So I do want to highlight real quickly before we dive into the interagency presentations. That framework Melissa mentioned, thank you, Brian for taking an initial stab at it.

As we start the conversations today, and dive deeper into our specific ideas and those initiatives. And Melissa said, we'll be building towards that broader strategy tomorrow.

Just take a look at this framework.

Think about how it might resonate with what

discussions you're involved in? And how we can

set the table for tomorrow? This is not a

prescription. There's nothing finite about it,

but rather I just want to be strategic about the

way we move forward.

1 I just CO-CHAIR BRADLEY: I'm sorry. 2 also want to take a moment to thank the OIE staff. 3 4 We have, Steve and I have the 5 privilege of speaking to them on a relatively 6 regular basis. And I can always hear Craig, despite his great service trajectory that he's 7 8 sometimes out of breath. Because I know he's 9 running all over the building. So I want to especially thank Craig 10 11 and Eric for their work, and the rest of the 12 Because they played working hard, both to 13 support us, but also support a very significant 14 transition. So thank you. 15 Thank you, Melissa. MR. BUERSTATTE: 16 First up we have David Langdon, from the 17 Economics and Statistics Administration. David, 18 you ready to roll? 19 MR. LANGDON: Good afternoon. 20 CO-CHAIR BRADLEY: Good afternoon. 21 (Off the record comment.) 22 MR. BUERSTATTE: Yes, do you have the

clicker over there? 1 2 MR. LANGDON: Oh, yes. 3 MR. BUERSTATTE: Great. Oh yes, 4 you've got to do slides, sorry. 5 (Off the record comment.) I'm David Langdon, I'm 6 MR. LANGDON: the Senior Policy Advisor here, in the Office of 7 8 the Secretary, and in Economics and Statistics 9 Administration. 10 I'm going to speak some about our Workforce Development Initiatives that we have 11 12 going on in the department. And dwell a little 13 bit more on a study that we released a few months 14 ago around apprenticeships. As you know, the department in recent 15 16 years has become much more strategically coordinated around a series of initiatives to 17 18 support, strengthen in American's workforce. 19 to ensure that training programs are better tied to business needs. 20 21 I'm just going to provide a preview on

some of the following speakers will delve into

for example, the Manufacturing Ascension

Partnership. And some work at the Census Bureau

around, particularly around entrepreneurship.

But also just general workforce data.

And you know, the end of the administration, brought a good point. I want you to sort of think about our successes, and where, look ahead to what our priorities would be?

Some priority areas would include better coordination with our Manufacturing USA centers, formally called the NNMI centers. The difficulty of pronouncing them alone was a good reason to change the name.

now, have workforce development as a key part of their mission. And there's a need and an opportunity to coordinate across them more. Both in, you know, tying technological development to workforce training models.

And thinking more just broadly around workforce needs, the fear is out. And the connection between automation and workforce

needs, because the compliment to conversations around trade and workforce needs.

So stay tuned to that. The recently released Deloitte report on the Manufacturing USA centers if you haven't seen it. We can certainly share it. It's a very good preview.

I would argue that the workforce development piece is actually one of the thinner parts of the study, and alone calls for some new thinking about what we should be doing? And we're in coordination of course with the department of Energy and DoD on these discussions.

In the last year or so, we've focused more on the leadership role in EDA -- of course, it's onus to be the experts in the room around integration across economic development -- and brought on a series of staff called Economic Development Integrators.

Who both at the National Office and the Regional Offices are looking to help EDOs and other entities to better understand the full

range of federal workforce dollars and 1 2 opportunities available to them. And I think that's also, just the 3 4 existence of this is a huge success, along with 5 EDA's broader grant, more specific focus around workforce training and its grant giving. 6 7 One piece of this is around helping 8 communities become ready for FDI investment. 9 There's a long, there's an ongoing activity called, under the Job-Creating Investment, Cross-10 11 Agency Goal which basically is an effort to 12 provide greater technical assistance to 13 communities and understanding when they are ready 14 to receive FDI Investments. And something that I think is actually another success for EDA. 15 16 (Off the record comment.) 17 MR. LANGDON: Oh, I'm sorry, Foreign 18 Direct Investment, Foreign Direct Investment, 19 I just had to prove I'm a federal employee yes. 20 by throwing --21 (Laughter.) 22 MR. LANGDON: -- throwing out some

acronyms right away. But I think the main reason I came today was to share the fact that we, in late last year, published a, or basically the first ever U.S. study on apprenticeships. It was a joint effort between our department and Case Western Reserve University. Specifically with our prior Chief Economist, Sue Helper, who I think some of you know.

It was to -- sort of a sweet spot for our department -- in that you know, overall the Department of Commerce regardless of administrations is the voice of business. It's a two way street, right?

Providing the voice of business to policy making, and helping business understand key, you know, government priorities and maybe, key, you know, actions that they could take they may not be aware of.

A key priority of the last

administration and it's a priority for many

countries is promoting apprenticeship as a proven

training model. And we found right away as our

Secretary then. I'm sure future Secretaries talk about these kinds of activities that there wasn't much known about why, what's in it for businesses to do apprenticeships? Or even what apprenticeships are?

And through our conversations around it, and through the generous support of organizations like JP Morgan Chase, and the Joyce Foundation, Annie E. Casey Foundation. We conducted the first ever U.S. study on this.

So it was through a series of case studies of 13 companies and intermediaries that have a great experience and prior experience in apprenticeship. And were a part of a program at the U.S. Department of Labor, called LEADERS.

It's modeled on a U.K. program basically. Has companies, they volunteer basically to promote the growth of apprenticeship in their countries.

So these are people that have, have done apprenticeships. Believe in it, and were willing to work with us and share information about how their programs operate? And what the

specific costs they were facing were? And what the types of benefits and perhaps the evaluation of these benefits might be?

We went into it hoping to get a lot of quantitative data. We got some from two of the companies, which was sort of the stars of our study. But all the case studies, I think, provided a good illustration of what apprenticeship looks like in the United States today. And helps, I think, overcome a lot of sort of misperceptions about apprenticeships.

Our key findings -- and this will be really brief -- is that the apprenticeship models are extremely flexible, both in time and in cost. So that a program could be a short -- and just the definition here -- an apprenticeship refers to a specific type of training program that's registered with either U.S. Department of Labor, or with the state apprenticeship agencies.

It involves both classroom training, on-the-job training, and mentorship, and wage progression. And it ends in an apprentice having

a certification in a specific occupation.

The certification at least will come from the Department of Labor. But in many cases also includes maybe a community college degree, or at least community college credits, or an industry certification as well. So an apprenticeship, the word is thrown around a lot, but in the case of this study, it means something very specific.

But within this very specific definition is great flexibility. Programs are as short as one year, as long as four years. The per apprentice cost could be as low or even less than \$25,000, or as much as a quarter of a million.

And the differences really depend largely on just sort of the wage cost and program cost. The biggest cost of apprenticeship is just the wages themselves.

And however, most of the successful programs we looked at had partnerships, which both helped programs be more successful, get

1	started quicker, and also be cheaper. But
2	regardless of the cost
3	MR. BUERSTATTE: David, quick
4	question.
5	MR. LANGDON: Yes, I'm sorry.
6	MEMBER BOESCH: Partnerships with
7	whom?
8	MR. LANGDON: Oh, good. So the
9	apprentices here refers to, you know, could
LO	basically be in many cases young people or older
L1	workers who are, you know, learning a specific
L2	occupation. And they're with, as part of it,
L3	they have a contract with a company. So they are
L 4	so did I, does that answer your question?
L5	MEMBER BOWLES: No, like partnerships
L6	with the university?
L 7	MR. LANGDON: Oh, partnerships, I
L8	said apprenticeships.
L9	(Simultaneous speaking.)
20	PARTICIPANT: Yes, you said programs
21	that are most successful when they had
22	partnerships.

MR. LANGDON: My mistake. Yes, no it's a great question. It's something we delve into in the reports. It could be community colleges, labor unions, intermediaries, or even other companies. So like consortiums are who we sort of consider our partnership model.

MEMBER BOESCH: Can we get a copy of the report? Kind of distribute it afterwards?

I'd love to read it.

MR. LANGDON: Yes, definitely.

MR. BUERSTATTE: And David will be with us, so for later today, and we'll go to dive deeper. But certainly have an opportunity to ask more questions shortly. I know you've got a few more things to get through, right?

MR. LANGDON: Yes.

MR. BUERSTATTE: Great.

MR. LANGDON: So I think just a couple things around this. So we, you know, we were very happy with the results of the study. Our goal right now is to get this information into industry's hands. And we'd love, you know, your

thoughts around, you know, both the amplification of the results. But also what questions remain that, you know, we haven't really looked into yet?

We'll talk a lot, yes, about this at length later. But one thing that really popped out to me was that among all these companies, and we're talking companies like Siemens, like a Ford, Dartmouth-Hitchcock medical centers, which probably many of you may have heard of in the apprenticeship space. These companies believe in apprenticeship, have apprenticeships, but it's still a niche program.

They don't do a lot of it. They'll do it in certain occupations. And understanding the decision point that companies face that would help, you know, make them decide to make this type of investment in their workers is something I think is very critical.

So when we talk about growth of apprenticeships, it's not just new companies.

It's going to these ones who already believe in

And helping them understand that they should 1 it. 2 be doing more of this. And I'll leave it there. 3 Yes, and we have a 4 MR. BUERSTATTE: 5 few minutes for questions as well, so any initial feedback or thoughts from the Council? 6 7 Yes, so. 8 MEMBER REICHERT: I was curious about 9 you mentioned just very briefly, state level involvement. What is the role for state 10 governments in this? 11 12 MR. LANGDON: So there's a couple 13 roles. So one is just the structure of the 14 apprenticeship system in the United States is a 15 little bit convoluted. But half of the states 16 have federal offices that oversee apprenticeship 17 and the regulatory side. Half of the states do 18 that at the state level. So that's one piece. 19 The other piece it around --20 MEMBER BOESCH: Meaning the Departments of Labor at the state and federal --21 22 MR. LANGDON: Yes, so the state

Department of Labor, yes. So South Carolina I believe would be an example of that. And Massachusetts I'm not sure off the top of my head, but I can find out. Wisconsin?

(Off the record comment.)

MR. LANGDON: Wisconsin, yes.

And then but a second piece is just around the financial incentives. So there are, and DOL tracks this very well. But there are a number of states that are placed into like tax credits to help incentivize companies to do programs and to register them.

MEMBER S. SMITH: So we've put that legislation, in Indiana, we're putting that forward this time to give it tax incentives for apprenticeships and different things. But my question is around helping companies understand the value of apprenticeship. And really the hardest nut as you and I have talked just a few minutes ago, for us to crack is the Japanese owned companies.

I mean the Japanese owned companies

are just adamantly opposed to any kind of 1 2 registration, and any apprentices because they feel there's a union connotation there that 3 4 they're not willing to risk. 5 MR. LANGDON: Yes. So, I think if we 6 MEMBER S. SMITH: 7 could come up with, you know, some thoughts 8 around that I think we would be able to expand 9 Expand apprenticeships a great deal. it. 10 MEMBER KAPP: I have a --11 MEMBER S. SMITH: Joe. 12 MEMBER KAPP: Did you want to respond? 13 MR. LANGDON: No, not yet. Ι 14 completely agree. I will say very few of our 15 companies had, some did, but very few had union 16 involvement. 17 MEMBER S. SMITH: Yes. 18 MR. LANGDON: And the classic example 19 is Ford, Ford UAW, or in the building trades. But in the case of a company like Siemens, or 20 21 Dartmouth-Hitchcock, yes just the companies, and

the educational institutions on their own.

think, yes, but we'd be glad to work with you and the Department of Health to share these stories.

MEMBER S. SMITH: Great, thanks.

MEMBER KAPP: So do you know if any portion of the studies really looked at sort of rural communities? And the impact of apprenticeships within rural communities?

MR. LANGDON: Yes, great question. So we did have, actually we had some rural communities in our study. And this apparently is -- I'd say one, we had both companies working in urban settings, suburban and rural settings. And the one common factor in all of them was that they resorted to apprenticeships because of labor shortages at their local level for specific types of occupations.

And I think there's more that can be done. But certainly I think the one great company in that study would be Dr. Schneider's Automotive Systems. It's in Russell Springs, Kentucky, rural Kentucky. It's a German company that setup shop there. It's actually one of its

few non-German operations.

And because of the strength of a preapprenticeship program in Kentucky at the high
school level, they were actually able to
relatively quickly setup a pretty successful,
small actually, but a successful apprenticeship
program.

MEMBER BOESCH: Were there any
learnings on more of the supply side by companies
that were seeking to have apprenticeships, but
the kind students, or people that entered them,
and barriers there?

MR. LANGDON: So a little bit. One thing we found was that as a rule apprenticeships allow companies to broaden their hiring pool a lot. And in some cases that's explicitly tied to companies' goals around having either a more diverse workforce, or maybe one that sort of looks like the market that they're in.

So classic example is CVS, which is one of the companies we looked at. So CVS has corporate social responsibility goals around

diversity hiring. And because of their apprenticeship programs, they're able to move forward pretty well in that space. And or an example of companies actually looking to add more occupations to their apprenticeship programs.

MEMBER BOESCH: And do like a lot of people apply, like professionally, or do they have issues in that area?

MR. LANGDON: It varied by company, but it's surprisingly selective. And companies are quite deliberative about, you know, how they select apprentices?

MEMBER BARTHOLOMEUSZ: Did you do a prioritization of skill sets in job areas that would need this, or this would be most suited for?

MR. LANGDON: So we didn't explicitly.

And there's a reason for this. I think one of
the goals around both doubling and diversifying
apprenticeships, which the labor department had
laid out, was to not inadvertently -- I think the
idea is to open people's eyes to the fact that

many jobs are apprenticeable in a sense. They could, you could have apprenticeships.

And so because of that we didn't do that necessarily. But I will say we tried to highlight the fact that say jobs in the IT sector, which we had a few examples of, or in manufacturing, or in retail, could be very well suited to apprenticeships.

And I know for example, with respect to our department, we have a strong policy interest in cyber security, and cyber security jobs. And apprenticeships is very much one of the training models we're exploring.

I know something that was called out in a recent Cyber Security Commission Report, like a layout of the, a numerical around the number of apprenticeships we should have for cyber security jobs. Something that we're working to achieve.

MEMBER BAGLEY: You mentioned, I'm sorry. You mentioned trying to get the word out a little more broadly. So have you started that

process? And thought through some of the partners that might be able to do that yet? Or is it really a clean state as far as --

MR. LANGDON: So yes, and we're at an inflection point. So we're at an inflection point in the transition. And but we're all riding through the transition together here and for our department's sake, thumbs up, we're in good shape. We'll talk a little bit more about that later if you wanted.

But there are some mechanisms in place that will, I think are continuing forward well.

And one was not our effort, but National

Apprenticeship Week, which was an effort laid out by the Department of Labor modeled on our National Manufacturing Day.

MEMBER BAGLEY: Right.

MR. LANGDON: And noted similar efforts in apprenticeship. Those efforts have legs, and we're moving forward around that.

There's going to be in May, yes in May, the first ever National Conference on Apprenticeships here

1 in D.C. Sponsored by JPMorgan Chase. 2 (Off the record comment.) MR. LANGDON: And four other, yes. 3 Hope to see you all there. 4 (Off the record comment.) 5 So there's, I think at 6 MR. LANGDON: 7 the company level, the foundation level, and the 8 government level, there's a lot that's going on. 9 And I think just, as an, I'm an economist. From the economics point of view we 10 have a very tight labor market, very long 11 12 employment rate. But also very low labor, in my 13 mind, low labor force participation. And it 14 points towards the needs to broaden our supply chain through programs like apprenticeship. 15 16 MEMBER BAGLEY: Thank you. 17 MEMBER STEVENSON: Are there any 18 statistics around or stats around retention? So 19 and which industries tend to have the higher 20 retention from sourcing through apprenticeship? 21 MR. LANGDON: Great question. looked at, we looked at both -- I would say first 22

of all we don't have global stats on this. We would love to, but we do have some information on it.

And one of the things that we laid out were the variety of benefits that are associated with apprenticeship, both short-term and long-term. The most short-term benefit is just filling a job that otherwise wasn't being filled in many cases.

But companies did cite retention. In some cases provided statistics on the retention being much better with apprenticeship programs.

And also on workers actually progressing, reaching, getting promotions more quickly because of it.

So we can talk about that more in detail later.

MR. BUERSTATTE: Yes, this is great.

I think what you've done is provided a great
teaser. And clearly identified that there's a
lot interest and questions. And Dave will be
with us through the rest of today. I think we're

1	going to take a quick break, but we'll do a
2	deeper dive through the skills team later today
3	on this.
4	And I want to transition from skills
5	to our next presenter real quick.
6	MEMBER REAMER: Craig, can I just ask
7	a quick question?
8	MR. BUERSTATTE: Real quick.
9	MEMBER REAMER: On a separate topic.
10	David, part of the Economics Statistics
11	Administration is oversight of the Bureau of
12	Economic Analysis which got some money from
13	Congress for a small business data initiative.
14	Can you give us a four sentence summary of the
15	status of that?
16	MR. LANGDON: So this is like the
17	small satellite accounts?
18	MEMBER REAMER: Yes.
19	MR. LANGDON: Yes, it is going
20	forward. And that's the extent I have off the
21	top of my head.
22	MEMBER REAMER: Okay.

1	MR. LANGDON: But I can find out
2	Andrew, and let you
3	MEMBER REAMER: If you could do that
4	and if you're able to get that to us before we
5	adjourn tomorrow.
6	MR. LANGDON: No, I think right about
7	now.
8	MEMBER REAMER: Great.
9	MEMBER JOHNSON: Craig, can I point
10	out one thing?
11	MR. BUERSTATTE: Yes.
12	MEMBER JOHNSON: The Defense
13	Department has a program they just started, I
14	believe it's during the last six months of
15	somebody's time and service. They can be trained
16	by an employer and the U.S. government will pay
17	their salary. So it's similar to an
18	apprenticeship program.
19	All the training has to, the cost of
20	all that has to be borne by the company, but the
21	largest expense is the salary. And I believe the
22	maximum length of time was six months.

And is this in their 1 MR. BUERSTATTE: 2 final six months of transition work? MEMBER JOHNSON: 3 Yes. 4 MR. BUERSTATTE: Yes, so part, it's a 5 transition aid program. And it's experimental at 6 this time but that's a great point. I'm glad you 7 highlighted it because we've been collaborating 8 as recently with some of the VA folks. Talking 9 about innovative ways for pathways. 10 MEMBER JOHNSON: We're aggressively 11 looking for employers because at Fort Knox they 12 have all kinds of illness and that's HRC --13 MR. BUERSTATTE: Yes, thanks. 14 again, not to cut off a great momentum, but if you notice -- so we just talked about skills. 15 16 And now we have one of our great friends from SBA 17 with us to talk about some innovation. 18 So John Williams is the Director of 19 Innovation and Technology at the Office of 20 Investment and Innovation at SBA. John, thanks 21 for joining us.

And again, he's going to give us some

innovation perspective, what they are up to there. And we'll close out with an entrepreneurship presentation. So again, skills, innovation and entrepreneurship, I think it's a great suite. John.

MR. WILLIAMS: Thanks a lot. I've got to leave at hard 2:30 because we're briefing our transition team members. So it's very exciting times at SBA and all these agencies right now.

So real high level, what Office of OII does at SBA? So most of SBA is seven day loan programs and things like that. So we're a different program. We do kind of the, so we have the SBIC program, which is a \$4 billion loan program. So we're the largest fund-to-fund managers.

We provide matching dollars to fund managers. Most of that is debt financing. So there's a few of those, and I'll talk about those.

And then the SBIR program, and I'm more on the SBIR side. We have oversight

authority over that. But we basically help small businesses on the R&D side. And we also help on the investment side.

So SBIC, as I said, is a \$4 billion authorization. We're doing about \$2.5 billion a year. But actually we have non-leverage debt so we actually invest about \$6 billion a year through that program into small businesses under 500.

Again, a lot of manufacturing. I've got folks that are debt financing moving in, less high growth type things. And we're trying to work, actually in developing an early stage and impact. We have those programs, we're really trying to bring those on a little stronger. So that program has 313 active SBICs.

And then the next program is SBIR that I'm more involved with, and that is a \$2.5 billion program. The money is not managed at SBA, it's managed at the 11 agencies. We have the oversight authority, the ones that monitor the agencies for Congress. And then report

things back up, push out policy, all those kinds of things to work that program.

And just to kind of give you a highlight of our websites. To get more information we do an awful lot on the training side. So what we try to do is things that are beneficial to all the agencies, like these road tour events, training events, and then like I say, work with the Hill on legislation.

I know NACIE worked a lot on legislation last go around. I've had some papers that really focused on increasing the ability to use R&D, SBR dollars on the commercialization side, the patent side, things like that. Some of that was put in the bill. I'm going to talk at the end, which I don't have slides on, on kind of where some of that is going? And how we can work together?

And then last, our programs, is a growth-accelerator program. So this is a program where we provide \$50,000 to accelerators. So we fund about 85 a year. We've done this for three

This is a fun one because it's 1 2 appropriated, not authorized. So we'll see what happens this year. 3 We have a million dollars in an 4 5 appropriation line, although we're under CR, as 6 you all know. So we're kind of watching that. Last year we had a million also, but I was able 7 8 to raise another \$3.5 million from friends and 9 family, not really, but government friends and family. And so we got to about the level we had 10 last year. So we funded another 85 of those 11 12 guys. 13 MR. BUERSTATTE: John, real quick, 14 that's a big deal. That's not a light lift for 15 government agencies to do ad hoc program sharing 16 like that, funding like that. So just wanted to 17 highlight that. 18 MR. WILLIAMS: Appreciate that. 19 MR. BUERSTATTE: That's good stuff. 20 (Off the record comment.) 21 MR. WILLIAMS: It means every time you 22 go up to the Hill, they say why are you doing

this? So it puts us in a difficult position because actually we think a lot of the Hill supports the program. We've done a lot on making sure, and I should have brought a map of it. But if you look at our website, you'll see that we're in, I think the last one we did 85 awards in 42 different districts and things like that. So we really spread these things around.

You think that the maps up there?

(Off the record comment.)

MR. WILLIAMS: No, well you sent the slides over. So anyway, if you saw the map, it's a beautiful map. You know, it's every, I mean a lot of states, 42 of them.

So it's I think we're working, but what we're really trying to work is -- and the problem is once you're not authorized they kind of beat you up on that. And they don't want to authorize it.

So I think we're getting, so we're working on it, but again I have to figure out where the new administration stands on this. And

once we balance that out, it is a great job growth program. We have amazing numbers on job growth with the program. We fund some great people around the table here.

So a lot of awards to a lot of -- you know, and part of it is we fund some entities that are well established accelerators. The ones that they really don't need our money but they do things that they wouldn't normally do with our money.

So really we're focused at SBA on hitting underrepresented groups, which means underrepresented states, women, and minorities.

And that's what we'll ask our more well-known accelerators to do. But then also we have a lot of accelerators in the middle of the country that our \$50,000 is maybe half, a third of what they're getting. And it makes a big difference to them.

So that's been a really strong program. That's been funded, like in '14 we had \$2.5 million. We had \$4 million in '15. And

then we had about \$3.75 million in '16. Again, appropriation for a million. I'm hoping to, you know, again raise money. But again, I've got to get the green light that that's okay to work that side.

So I want to just bounce on a couple things that might be of interest to you guys. So legislation on SBIR was re-authorized. The people will say, well the SBR was re-authorized. It was and it wasn't.

It was in the sense that they extended it for five years, which was a big hurdle for a lot of folks. In that we wanted to that, or they wanted to take that off the table.

But the things that were in the bill, which was almost, on the Senate side a 60 page bill, of increasing, to set aside, of doing commercialization assistance, allowing patent costs, a bunch of pilot programs and all that.

None of that was passed. So those all expire on September 30th, 2017.

The program though doesn't expire

until '22. So, there will be activity. In order to use the activity, so like Directive Phase II, there's a Phase Zero program with NIH that was about \$5 million from STTR that went to universities, the Civilian Commercialization Pilot Program.

The three percent which was a big one. So this admin program which agencies funded, I-Corp out of, Commercialization Assistance Program training outreach, you know -- actually the accelerator money I did get. \$1.5 of it, \$1.6 of it came from this fund because it was used to get accelerators to train on SBIR.

So not having some of those tools will certainly hurt us, again that happens in '18.

Yes.

MEMBER HERSKOWITZ: I'm sorry, in that list you mentioned the I-Corp program and the -
MR. WILLIAMS: Not the I-Corp program, but we fund projects through I-Corp. So not the, so kind of, I mean NSF is a Corp funding of I-

22 Corp.

1	MEMBER HERSKOWITZ: Yes.
2	MR. WILLIAMS: And then what we would
3	do is we would help companies go into that
4	program.
5	MEMBER HERSKOWITZ: So did that get
6	re-approved or did that not get approved?
7	MR. WILLIAMS: No, it did not.
8	MEMBER HERSKOWITZ: That did not.
9	MR. WILLIAMS: Right. Again, I mean
10	it has nothing to do with I-Corp getting
11	approved.
12	(Simultaneous speaking.)
13	MR. WILLIAMS: But it allowed more
14	companies to get
15	MEMBER HERSKOWITZ: the funding for
16	the companies to go into it.
17	MR. WILLIAMS: Right, so NIH used to
18	run like, I think they ran 50 companies through
19	it last year?
20	MEMBER HERSKOWITZ: Yes.
21	MR. WILLIAMS: That goes away in '18.
22	MEMBER HERSKOWITZ: They can still

1 offer the program, but the companies have to 2 self-fund their way in? MR. WILLIAMS: 3 Yes. 4 MEMBER HERSKOWITZ: Which is not going 5 to happen? Right, exactly. 6 MR. WILLIAMS: 7 possible, yes. 8 So, and then the stuff, you know, 9 that you guys work, patent costs, marketing costs, dollars toward commercialization, those 10 are things -- and you've got to remember like the 11 12 first one is Directive Phase II, you know, the 13 three percent money. That stuff the agencies 14 care about and they're going to fight for it. 15 Things like patent costs, more for 16 marketing and stuff, they don't care about. 17 That's something that if you're interested, and 18 still that is something that you would have to 19 fight for. And now is the time. I mean they are drafting these bills now. 20 21 They are probably using, you know, the bases of the two bills. I think the increase is 22

going to be a lot harder this year. There was a lot of push back from the Science Committee on the university side on the increase.

The signs, I think the Senate went a little too far maybe. They went from 3.5 or 3.2 percent to six percent, where the House went up to 4.5. So they were very close to a deal last year. It was kind of unfortunate, there was a bunch of things that kind of happened, to make it not happen.

But, we will continue to work and I think something will happen this year on getting something implemented, and probably through the NDA, and get it at the end of the year.

Things that SBA is working along those lines though is we -- so I've got a new employee from, Jennifer Shieh, who is over there from NIH, ran SBIR program. And has more university background and many more degrees than I do from better schools.

And so she's, and one of my reasons for bringing her over is I really want to work

this concept where we get universities to develop, some say I shouldn't use the word, but I want to see universities develop SBR mills within the university system.

And it focused on women. We have a lot of post docs that are running through that program. I mean that are there for five years and things like that, that would be perfect candidates to help start companies, and then get SBR dollars to do that.

It's a win for the university because they would obviously use their facilities. They would probably subcontract, or they would subcontract most likely some of the fat. And I'm trying to get universities to develop an ecosystem where a lot of the irritating government bureaucracy things that one has to do to write a proposal can be done by a party that understands it. And have the post doc focus on the technology.

We're getting somewhere with that. We had a great event at MIT. And we got a lot of

interest, but universities are harder than I thought to deal with. I'm not sure, there's a few of you here.

(Laughter.)

MR. WILLIAMS: And especially MIT, it was a lot harder than I thought.

(No audible response.)

MR. WILLIAMS: Yes, I might have.

So we're learning on that. We're reaching out to more universities. And again that's going to be Jen's main focus is how we do that? And we're working with some of you, you see when we go these outreach tours, we're going to hit a lot of universities. We've got some connections at the UC side.

But others that are doing it, we're very interested in that model. What I'd love to see is a university to stand up, a full-time SBIR person that would kind of provide that assistance. And so people could come in and you have -- and then we have training.

So I have money to pay for training,

train-the-trainer training. We're even doing programs when an entity is brand new that will provide some of the assistance on that training that, free services. DOE has a great program that way. So I think there's a lot we can bring to the table.

I'm even interested in the Phase Zero program that NIH has. And whether that can be tweaked more towards helping proposal development, as maybe doing research. And it's a little bit of both right now. So learning more about that and what we can leverage with what we have?

So that's kind of, I think -- oh, and then growth accelerators real quick. Again, authorized, so that's something that we have to figure out whether we want to do that. And how we push forward that? But if we get money we'll probably have a program. It may not be as big.

And then we've got a Library of

Congress study going on with accelerators right

now that we started like three months ago, which

we might have a report in four or five months.

And then we'll have a couple reports coming out that.

And what we're trying to find is -- we know that, you know, the ecosystem accelerators are out there. A lot of our challenge on that is we have SBDCs and other things at SBA, and other places. It's like, well, why couldn't they do it? With, why do you need multiple programs? There's always that question about duplicity.

We see this as a real value-added to SBA because it's not always the coolest place to go, SBDCs if you've been there and you go to an accelerator, it has a kind of hipper, cooler place to be. So how do we actually get those people to work together?

So there's things that SBA and SBDCs can do that accelerators don't want to do. Or, and so sharing clientele so office hours, and trying to get those networks. So what we're seeing is a magnifying of the ability of SBA folks to get into places and meet clients that

they normally would not have in the past. 1 2 And so we see that as our strength and we want to build that up. And so though 3 4 hopefully the Library of Congress will just kind 5 of figure out, in this ecosystem if you've got, 6 usually accelerators have local state, state or 7 local money, outside money, and where's the fed 8 play in that? And how can we kind of, you know, 9 figure the best place for the federal investment that gives the biggest bang for the buck? 10 11 So with that question. 12 MR. BUERSTATTE: Thanks, John. All 13 right, yes, we've got a few minutes for questions for John while we have him here. 14 15 MEMBER BOWLES: Where does SCORE 16 reside? 17 MR. WILLIAMS: What's that? 18 MEMBER BOWLES: SCORE. 19 What about it? MR. WILLIAMS: 20 MEMBER BOWLES: Where does that 21 reside? Is that under your --22 MR. WILLIAMS: No, that's an OED,

Office of Economic Development. It's right 1 2 around the corner from me, and I just actually hired another person from that group, who's going 3 4 to be working with me. So that's kind of the 5 SBDC's SCORE, Women's Business Centers. all fall under that group. 6 7 MEMBER BOWLES: So there's opportunity 8 for collaboration, because --9 MR. WILLIAMS: Yes. 10 MEMBER BOWLES: -- I see huge value in SCORE, but from an innovation and maybe 11 12 application perspective. 13 MR. WILLIAMS: Right. 14 MEMBER BOWLES: I don't think that's it's, we're leveraging those people like their 15 16 experience and mentor capabilities --17 MR. WILLIAMS: I agree. Yes, and 18 that's why, one of the main reason why I hired 19 this other person. Because, and she's going to 20 work on the accelerator team of kind of how we 21 bring all these parties together? 22 And, you know, I mean one of the big

problems we have is a lot of the times we're, you 1 2 know -- this building is kind of hard to get into but we have ones that are harder. So how do you 3 4 get people like SCORE and all that to get into 5 places and be aware? So yes, we'll be working on that. 6 7 MEMBER HERSKOWITZ: If, you have a 8 number of universities in the room here --9 MR. WILLIAMS: Yes. 10 MEMBER HERSKOWITZ: -- that do a lot 11 of SBIR, a lot of SBIR spinouts. If we wanted to 12 collaborate, we would talk to Jennifer? 13 MR. WILLIAMS: Yes, send, well her, 14 Send, Jennifer you don't have cards yet. yes. (Off the record comment.) 15 16 MR. WILLIAMS: And my, certainly send 17 emails to me. I mean because, and we'll pass 18 them on. But she's going to be coordinating, 19 she's going to be here at dinner, yes. 20 MEMBER BOWLES: Great. 21 MR. WILLIAMS: And we're very, very 22 interested in trying to work that because what

I'd really like to do is get a model of some people that are doing this well. Get best practice from that. And then figure out how we can maybe leverage some of the resources we have towards the upgrade?

MEMBER KAPP: To what extent have you looked at Eastern West Virginia Community

Technical College? One of the things, we colocated one of the SBDC coaches at the community colleges to the extent that, how much are you looking at community colleges across the United States in addition to the four year universities?

MR. WILLIAMS: So I haven't gone to that level because I've barely looked at universities. I mean, so we're looking at it as a whole. So we're not really concerned whether they're a university or a two year college. I think what we're trying to do is leverage our resources.

And again, so my ability, I can fund accelerators right now. And I have money for that. And so my goal is to take those

accelerators and make those resources available 1 2 to any of these other communities, especially our SBDCs where they are already at. To pull 3 4 those two communities together. 5 So I should say, thank you. We won in West Virginia, one of the accelerator grants. 6 And it's a rural community, so that \$50,000 goes 7 8 a long way. 9 MEMBER BOWLES: Good. 10 MR. WILLIAMS: So we appreciate that. 11 The other thing, I just wanted to say is that, not that there is competition, but community 12 13 colleges are easy to work with. 14 MEMBER BOWLES: Yes. 15 (Laughter.) 16 MEMBER BOWLES: Good point. 17 MR. BUERSTATTE: Any final questions 18 for John? Emily. 19 (Off the record comment.) 20 MR. WILLIAMS: Right. That's what 21 we're trying to do with the SBDCs and so we're 22 probably, so SBDCs are a little weird because

1 they don't quite fit under, I mean they're not 2 But they, we fund them. But also they get a lot of state funding. 3 The District Offices are SBA funded. 4 5 So we're kind of starting with the District Offices but really I think that we want to jump 6 7 as quickly as possible to the SBDCs. 8 Yes. 9 (Off the record comment.) 10 MR. WILLIAMS: That's great, yes. that will be, so Brittany Sickler will be my lead 11 12 on that side, but also Jen will be helping with 13 accelerators for you, yes. 14 MR. BUERSTATTE: Thanks, John. That's 15 again, another great teaser on innovation. 16 understand your team is going to be able to stick 17 with us for the rest of the day? 18 MR. WILLIAMS: Yes, they are. Thank 19 you very much. 20 MR. BUERSTATTE: Thank you. So Nagesh 21 as well in the corner. We'll be doing deeper

dives later.

MR. WILLIAMS: And we have a detail over in your shop too, so we have a spot.

MR. BUERSTATTE: We do.

MR. WILLIAMS: We are looking to collaborate more and more. Because I really do want to, we have a lot of things that complement each other, and we haven't worked as well together, just because I haven't had the time, because I've been here two years. But I really do want to focus on building that relationship.

MR. BUERSTATTE: Yes, it's funny how it's hard to get some of the best things done without the personnel. So, it's exciting to be able to collaborate like that. And hopefully NACIE can help us figure some of those strategies out. I know that one of the groups is working on that in fact, strategy.

So, thanks, John. And maybe one of best examples of governments thinking creatively is the Census Bureau. One might be surprised that the Census Bureau is thinking around, or thinking about entrepreneurship. So to close

1 this out is Ron Jarmin from the Census Bureau. 2 He's the Associate Director for Economic 3 Programs. 4 Ron, thanks so much for joining us. 5 He's going to talk about the Annual Survey for 6 Entrepreneurs that we've been doing for a few 7 years. 8 Right, so thank you. MR. JARMIN: 9 Glad to be here to talk to you guys about, I'm not going to call it the Annual Survey of 10 11 Entrepreneurs anymore. I'm going to call it the 12 ASE. 13 MR. BUERSTATTE: ASE, another acronym 14 for you. 15 So if you have other MR. JARMIN: 16 meanings for ASE, temporarily suspend them for a 17 few minutes while I talk about it in this 18 context. 19 So just a little bit of background. I've been associated with this enterprise for 20 21 quite some time before it became the survey, so I'm sort of the entrepreneurship guy at the 22

Census Bureau. We've been building data to address the data needs around studying entrepreneurship for many years.

And, you know, probably the best example of that would be some data we've built from administrative data from the tax, from IRS, and from some of our own collections, called the Longitudinal Business Database, which has every establishment in the U.S. linked together since 1976 until now. So it's a valuable source of information on job creation, job destruction, firms, startups, exits, all that sort of stuff.

So the ASE is an attempt to sort of take some of the insights that we got from that data, and bring it together with what a five year collection that we've been doing for a number of years, called the Survey of Business Owners. It had different names in the past.

But lots of people, you know, that was collected only five years. And it had rich information on the demographic characteristics of business owners.

And one of the biggest complaints about that was that it was only available every five years. And people got a taste of having annual data on entrepreneurship, so obviously they wanted these data.

So again, so this is part of a broader effort that we've been doing, including the LBD.

And it's sort of the data prize we've built off it, the BDS. We also have longitudinal information on jobs from the Longitudinal Employer Household Dynamics Program.

So we kind of have an interlocking suite of data programs that I think provide a pretty rich description of what's going on in the business sector, and with entrepreneurship in general.

So the ASE was started as a partnership with the Kauffman Foundation and BBA here at Commerce. And again, it was meant to sort of build onto the SBO, and to provide annual data on entrepreneurship, on business dynamics, the impacts of young businesses on the economy.

So basically unlike, you know, the SBO has a really large sampling rate and includes both employer businesses, and non-employer businesses. The ASE has an employer business only focus, much smaller sample, but again, it's annual. So that's, you know, we can't, we don't have the resources to sample at the SBO rates on an annual basis. And even if we did, OMB would never clear a PRA package to do it.

Importantly, and this is sort of unique for Census Bureau surveys, we over-sampled young businesses. And that's, you know, something some of us have been trying for years. And I guess, you know, now that I'm the boss, they're going to, have to do that.

But I think that much of the research that we've done is that the dynamics of young businesses is much more interesting than the dynamics of older businesses. And that, you know, usually within the first ten years of a firms life, you can kind of tell whether they're going to be a major source of job creation and

growth in the economy, or they're not, okay.

Okay, so again, the content for the collection is very similar to the SBO. Has all the demographic information about business owners. But again, some of the new stuff is, you know, looking at the businesses by the age of the firm. By looking, a little better drill down into their access to capital. And then looking at sort of shocks to their business.

So, and another innovative feature we hope is that, you know, instead of asking the same questions year after year, there will be sort of a core of questions that we do ask year after year, but then we'll use modules to ask more specialized content.

And so you can see here in 2014, R&D and Innovation, sponsored by the National Science Foundation, that was the focus. And then in 2015 we did sort of Management Practices and Data Driven Decision Making, which came out from another survey that we did in collaboration with academics, called the Management and

Organizational Practices Survey. But that was only from manufacturing sector.

And 2016, which, you know, we'll be out in the field shortly. Asking about regulations and sort of business advice,

Kauffman and SBA are helping us with.

So just, you know, kind of giving you a sense of things. And sort of focusing on the importance of firm age. You can see here how like, access to capital, how it differs by firm age.

So the importance of, you know, for these small businesses, personal savings and family resources are always going to be an important source of funding. But for the younger businesses, they're even more important than they are for older businesses. Bank loans very rare amongst young businesses.

So, these are the sorts of insights that the SBO itself didn't really provide before. SBO linked to some other data that could do that, but now we have an annual source of data on this.

And again, it's, you know, the survey is now informed by what we've learned from these other administrative data source things.

So, you know, the 2015 ASE, we just finished collection on that. Hopefully, the data will be out this summer. And then the 2016 ASE we still need to get on the approval, but, you know, we should be in collection until either December and then really seeing it next summer.

So here's contact information on the survey. Again, this is something that we hope will be a model of some the ways we're trying to sort of streamline some of our business surveys to provide users with better, more granular data. But actually doing it at a reduced burden on the business community.

So with that, I'll just open it up to questions. And I'm not going to go through all the --

CO-CHAIR BRADLEY: So in the module content, two questions. One, what is the relationship of those folks in parentheses? Is

that contact with capital, or both? And then once the module is done, do they stay? So that there's an ability to collect longitudinal data, or is it just for that time period?

MR. JARMIN: So it could be just for that period, but what we're hoping is that some of the, at least some of modules will be rotating. So there's a lot of things that we ask businesses that are not, don't vary with high frequency. And especially some of the questions on this survey. They don't vary that much by high frequency.

So you can ask them every other year, or every three years, or every five years and still be able to obtain a pretty good statistical picture of how that looks.

So things that do vary, importantly from year to year, you know, like employment, and receipts, and that sort of stuff. We're going to ask them every year.

But some of the things that are more like related to their strategy, you know, those

change more slowly. You know, whether you use data in decision making, you know, that's not going to change from year to year.

It's usually going to change once from no to yes. And, you know, so we just want to observe that. And when the variation in that question goes away, when everybody is using data in their decision making, we'll stop asking it, right.

CO-CHAIR BRADLEY: And then the people in parentheses, so like Kauffman, MOPS, are they content input or capital?

MR. JARMIN: So both. So Kauffman helped us develop the questions, but also provided funding. Okay, the MOPS was a survey that we got actually, National Science Foundation funding to help support -- Census, you know, these are all jointly funded by some external organizations and by the Census Bureau.

So it's, and again, you know, I'm not going to shell for funding here, but the funding of these modules and ASE is not a clear thing

right now. We're trying to build a business model. And that's really going to be dependent on people coming to the table with interesting content questions that we can put onto these modules.

So this, you know, we're kind of putting up the, you know, the tent here. And saying, you know, come on in and let's collaborate, and so.

MEMBER REAMER: So you have one year's worth of data out. What's been the response among users and analysts to that data? There's two questions, so that's one. And the second is, could you give people a -- ASE is not the only data source at Census that talks about entrepreneurs.

There's also non-employer statistics, business dynamics statistics, just for the group's edification, can you give a, you know, a thumbnail sketch of the four things that --

MR. JARMIN: So I think the response has been very positive so far. I mean obviously

we only have one year out. You know, so we don't have for instance a cadre of researchers in the research data centers using the micro-data just yet.

But I think in terms, you know, we got pretty, you know, that was a Wall Street Journal posting that the graphic was from. So it's gotten some good press. I think that, you know, certainly the community of entrepreneurship scholars and stuff that I think was sort of a lot of the driving force behind getting done, have been very happy with it.

So, you know, I did try to mention a little bit how this is part of a broader set of, you know -- so, you know, the business community is very heterogeneous.

So we have, you know, most businesses, you know, millions of them have no employees.

Some of them you might call legitimate business.

Some of them are just, you know, somebody doing a little consulting on the side. But those are what we call non-employer businesses.

We observe those in the tax records. That's where we get most of the information that we know about them. But we do include a mailing of non-employer businesses on some of our surveys. So on the annual capital expenditure survey, on the five year SBO, there are subsamples of those surveys that look at the non-employer businesses.

Non-employer businesses are very hard to do in a survey, context. Surveying is becoming a harder business to do generally. But the non-employer business universally is one of the harder groups to get good response from.

But then, you know, we also do, you know, so again, some of the, almost all of our surveys could be used as some source data for studying young businesses and entrepreneurship.

But the non-employer data, the business dynamics statistics which is explicitly meant to look at business performance by firm age, that's sourced from the longitudinal business database. That's a critical one.

And then the LEHD data, which is basically, you know, most Census Bureau surveys and activities are either household base, or firm, or establishment base. They're based on, you know, whether you're a business or an individual, or a household.

And so the LEHD data takes that and uses administrative data from state unemployment insurance systems. And the unit is actually a job. So we observe every UI covered job in the economy. And then we throw in data on federal workforce from OPM and stuff.

So we observe everybody. We observe the employee, and we observe their employer. And so that's a job. And those data can then be linked, you know, back to the ASE, you know, so you can see the workers who work at these businesses.

So there's a number of, you know, we've done a lot of work on trying to build new products and research outputs using these. But there's still lots of things that people can

learn. The surface is really only been scratched.

MEMBER STEVENSON: Is there an example of a survey that evaluates almost exit data. So it's, the group is closed. Some, to identify like what are some of the key themes that we can learn from?

MR. JARMIN: So we have not done anything like that. And I'm not sure. I know, I think Kauffman had thought about doing it. The problem is observing them when they -- so we have very good information on when they close.

MEMBER STEVENSON: Yes.

MR. JARMIN: Because we see them stop paying payroll taxes for instance. And, but then that usually, you know, from a government surveying perspective, that means they are no longer in scope for our survey activities.

So, I think if that's something that enough folks were interested in and we could see if we could try to figure out. In some cases we do know information about the owners.

Not all business, I mean many businesses we don't know much. You know, most you know, C-Corps and stuff like that we don't know. You know, publicly traded companies if they close, you know, we're not going to go in and ask them.

But the, you know, I think it's an interesting question to ask that sort of follow-up about, you know, why did they shut down?

MEMBER STEVENSON: It's funding, or their strategy or, yes?

MR. JARMIN: Right, right. I mean we do, we can in the data, separate businesses that really closed, from businesses that were purchased by another business, not always, but for the most -- we try really hard to make sure that if we see a business cease operation and it's coded as a death in the BDS statistics for instance, that it really is a death. That it's not something that's been part of some M&A activity and is now part of a new, or a, you know, an older firm that purchased it, so.

MEMBER KENNEY: I had a question. A lot of programs are trying to work to support small businesses and entrepreneurs, often differentiate between traditional main street kind of businesses and those that are poised for high growth.

MR. JARMIN: Right.

MEMBER KENNEY: And it's often hard to identify just from kind of publicly available data. I was curious to what extent does the surveys try and to differentiate either by self-selection or some other means?

MR. JARMIN: So I, the survey isn't necessarily trying to detect that. And we never, you know, we haven't found the formula yet for predicting this ex ante.

Scott Stern and a group up at MIT think that they have some insight into that, by you know, if you name your place, Bob's Pizza, you know, it's probably not going be a high growth firm.

You know, if it has Xs and Zs in it,

and it's incorporated in Delaware, you at least have some thinking that it's going to be high growth.

(Simultaneous speaking.)

MEMBER KENNEY: We actually got that presentation from them last year. It was actually interesting.

MR. JARMIN: Yes, so we have not yet tried to do that, now we have the data to look at the ones that were high growth, as opposed to those that weren't in a cohort. And be able to look at what was different about the ones that were high growth versus not.

But we've not, and we haven't really attempted to. But we would like to actually use that same registration data that Scott and his team were using to make those predictions. We would just like to use those as part of the input data for all the products that we produce. I think we had one down here --

MR. BUERSTATTE: Last question, sorry we've got to wrap it up. Sorry, Brian.

Ron, can you explain aside from the 1 2 data and the program itself, can you talk a little bit about the public private partnership 3 4 that you have with Kauffman? MR. JARMIN: I mean we, this 5 Sure. has been a long-term relationship that originally 6 started just as a way to do some research 7 projects. And then it sort of, you know, the 8 9 research was to build the original LBD. And then 10 11 MR. BUERSTATTE: LBD? 12 The Longitudinal Business MR. JARMIN: 13 Database. 14 So they, you know, they funded some, we collaborated with some academics. They funded 15 16 basically the academic graduate students that 17 came in and assisted us with these projects. 18 And then we, you know, as we started 19 producing research outputs, people started 20 saying, well, you should actually produce public 21 use data files from those research projects. And that's how this has kind of grown 22

and matured over time to where now there's almost like a two-way relationship between us and Kauffman in trying to build, you know, data that informs folks about entrepreneurship, so.

MR. BUERSTATTE: Last one.

MEMBER REAMER: Okay, I'll be -- you have used the LBD to evaluate federal programs that support small business, the Manufacturing Extension Partnership in particular. Can you again, just give a thumbnail sketch of, and you've worked out a methodology for doing it, how?

MR. JARMIN: Right, so I think we've evaluated, you know, the MEP. We've evaluated some SBA financing projects.

Basically, if, you know, the government agency has information about the treatments that it does out in the business community. And they have the name and address of the businesses that they work with. And maybe hopefully something about they did with them.

We can link that to our data and then

have a control group type analysis to look at 1 2 whether the program had any beneficial impacts. Or whether it was sort of a wash, so. 3 4 MR. BUERSTATTE: All right. Thanks so much, Ron. 5 All right, and thank you. 6 MR. JARMIN: 7 MR. BUERSTATTE: And thank you to our 8 other federal friends. It's great to hear from 9 And again, many of them are going to be hanging around with us for the rest of today, so. 10 11 So, on behalf of the CO-CHAIR TANG: 12 Council, we want to thank David, John and Ron for 13 their presentations. And now we have a discussion session from what I hear. And so let 14 me just tee-off by asking Council, what 15 16 opportunities does this bring to light, that we 17 might want to work on? 18 MEMBER REAMER: I had a conversation 19 with Craig and Melissa off-line, a couple days 20 ago about the potential, given the role of the 21 federal government in collecting statistics on

entrepreneurship and innovation, given that even

within the Census Bureau it's either a number of 1 2 distinct programs -- but like Census collects very little in its own right on innovation. 3 That's primarily funded by NSF --4 5 there's an opportunity I think to look at the breadth of federal data collection on innovation 6 7 and entrepreneurship and provided by some 8 feedback. 9 For instance, I raised with David Langdon about the BEA, Small Business data 10 initiative and building small business account 11 12 satellites. It's something the BEA does. 13 So it's, there is a diverse set of 14 statistics and I think NACIE could say some 15 interesting things about what is useful to the 16 business community? What is useful for federal data using agencies, like the SBA? 17 18 So I see this as a potential 19 opportunity. 20 MEMBER JOHNSON: I think that Trey, 21 and Joe, and myself should talk about how we can

22

maybe help the SBA?

When you talk about immigrating the SBDCs and accelerators, that's, you know, that's a self-cancelling phrase. But if you had -- I think we could come up with an idea of how through the networks, the kinds of footprints that we have between the three of us, and how, you know -- we all heard a few ideas that were thrown out. I think we could really help the SBA in that area.

MEMBER BOESCH: I know that one of the proposals is around some of those, some of the changes to the SBIR program, and the STTR. And I was wondering how those intersect with the needs that were brought up in the talk here? Are we already covering some of those in the current initiatives? Or are there gaps that we could look at taking up?

CO-CHAIR TANG: Yes, I'll start and then maybe David, or Tiffany can chime in here.

They were very much aligned with where we left in NACIE 2.0. And so now it's a matter of reviving, I think, those issues so that they're not

expiring by the end of September of this year.

MEMBER BOESCH: And also just in terms of the kind of manufacturing support project that Emily and I have been working on, I think there's a lot of opportunity to help promote the apprenticeship program. And also, you know, think about how we can, you know, scale that, popularize that, get that in the hands of industry?

CO-CHAIR TANG: Okay, thank you.
Other thoughts or ideas?

MR. BUERSTATTE: One thought with respect to data, and thanks, Andrew, for bringing that up. We had some interesting conversations over the last few months. And so, we are one of roughly 60 advisory councils, believe it or not, here at Commerce. Many times, it's partially because many times when there is a unique specific policy issue, we will recruit federal advisors on specific challenges.

This one, on innovation and entrepreneurship is much more broadly focused.

And we cover a variety of universes here at Commerce. With that being said, we have a Data Advisory Council, we have a Digital Economy Advisory Council, and there's a number of other bodies that are looking at data with respect to their own unique industry, or silo, might be the wrong term.

But what I'm interested in on this piece, is there an opportunity where NACIE could really compile a broad spectra of data analysis, surveys, you name it, to elevate the study of entrepreneurship and innovation, and certain economic development impacts, and trends, and things that we should know?

Versus just one particular challenge like this survey. I think this is one of many opportunities that we could consider. And what I'm getting at is, think big.

You guys are direct advisors to the Secretary of Commerce. We want to make sure that we're spending time on things that are going to be really valuable for all 50 states and

territories, right?

So, I just wanted to plant that seed.

It's my initial response to the data discussion.

MEMBER REAMER: If I can respond to that? As you know, when we do a breakout, there will be conversation around the recommendation to the Secretary, to ask OIE to prepare a strategic plan. And then to have NACIE advise in that process.

So, if that goes forward, the
Secretary approves that, I would imagine a
starting point would be some assessment of the
state of innovation and entrepreneurship in the
U.S. And you do that on the basis of data.

so in that process, we will have an understanding of what the value, and the quality, and any gaps that there are in data systems. I can also imagine if the strategic planning process goes forward, that an element of that could be that OIE promote reliable, useful data on innovation and entrepreneurship through the federal government.

And if that were chosen, as an 1 2 objective, then that would then lead to doing an inventory of what exits. And an assessment of 3 4 quality and gaps, and or at least putting that on 5 the strategic plan. It would be a, it's a longterm process clearly. 6 But it's, I think it would be useful 7 8 for the Secretary's Office, and for OIE, and for 9 NACIE to have a broad understanding of the pockets of data on innovation and 10 11 entrepreneurship that reside in several places in 12 Commerce, and several places outside of Commerce. 13 That while OIE reports to the 14 Secretary, its scope mandated by Congress is 15 government wide. And so, I think this is an 16 important lift. And it's not a huge lift. 17 I mean it's going to take work. And 18 it'll take some years, but it's all doable. 19 MR. BUERSTATTE: Thank you, Andrew. 20 Sign me up. 21 MEMBER KAPP: So kind of dovetailing off of what Richard said, I think that looking at 22

how we can review the array of resources that exist across the Department of Commerce? And how we can have them align to help potentially serve as economic development/ecosystem developers in rural communities?

I think when you look at urban communities there's quite a bit more capacity.

And so there's not insignificant amount of capacity building that needs to take place.

If you have SBDC coaches, and you have sort of them, folks scattered across the region, as opposed to potentially creating epicenters.

It creates disparate resources across a very large area. And so potentially looking at how the array of programs can be better assembled to create epicenters of entrepreneurship and innovation within rural communities?

MEMBER BAGLEY: Can I comment on the rural, urban thing for a second? Because I have a little bit of a different view on that.

I think that, so having worked at a state level in Pennsylvania, you know, both with

rural and urban communities is where some of this understanding came from. As well as Nortec, you know, covered 21 counties.

And so I think it's just a different kind of capacity building. There's areas in which, you know, for instance in the urban communities like I now work in, you know, we have significant inclusion and opportunity challenges, right?

So the opportunities are not so, the capacity building may be in a slightly different area. Or when you're not in a place like Boston, or Silicone Valley, you know, your capacity to garner venture capital for instance.

So I'm not sure that it's rural versus urban capacity building, versus not. It depends on where you start. I think there's always opportunity to sort of build those things out.

So I think we need to think about how do we match the right type of capacity building to the region or the area that's sort of works?

So I think when you talk about

underserved, you can sort of bring that across either urban underserved, rural underserved. So there's one sort of thing that ties together.

Just obviously very different strategies.

MEMBER REAMER: No, that's a good point. Thank you for the clarification.

MEMBER BALDWIN: So I'm interested in us defining measurable objectives. So we heard that there's data. How are we going to use that data? Or are we going to try and influence and move something on that data? So that the next survey we can see that we've had a direct result.

So as part of that strategic discussion, you know, what are the measurable objectives that we are trying to achieve?

And I think that as we go into the breakout sessions, it would be excellent if we could define how are going to measure our success? What are our indicators? You know, should we be reviewing that data to define what's the top thing that we want to go after?

And come up with examples, you know,

that, you know, ten thousand unique hits on a certain website, or ten thousand underrepresented communities now have access. I'd really like to see us focus on the end vision.

MR. BUERSTATTE: I think that's a great question that we can tackle tomorrow during the Council framework discussion.

And as we move through today's conversations, and I think Eric's got a great relevant presentation coming up soon that will help communicate some of our near-term objectives. Or near-term action items and what this process looks like. And then we'll build to that tomorrow, I think.

MEMBER BALDWIN: Sure

MEMBER BOESCH: I have one more. I'm particularly interested in how we have, almost like better market, and helped people go through the SBIR and SRRT programs? Both in universities and outside of those epicenters.

You know, I see all the time actually, you know, students or young entrepreneurs that

have things that I think would be very eligible for it. And things like having professional help on it at the university, or some simplification of those processes, I really think would help.

Because I think it's an under-utilized resource and kind of outside of even, this area.

MEMBER NEMETH: So my thoughts on the SBIR. Sort of training and support, I think more aligned with Joe. And the concern that kind of centering in on some of the big universities turns off a lot of other entrepreneurs, and I'd say small businesses.

Like for instance in Ohio, are a bit envious of the resources that a big university already has. And so I'd be interested in us kind of exploring ways that if we're going to build a resource to help people go after SBIRs, that it's more accessible.

And then I'm not a data guy. I'm fascinated by it, but I would just throw out the other idea, that we're looking for a quick win.

I'd love for there to some sort of investigation

or evaluation into the ever repeated statistic that 90 percent of startups fail.

I think for someone on the outside, or even for an entrepreneurship who's like, telling his family member. Hey, I'm starting a new business. And you have this like, bombardment of you're going to fail. I don't know if that's actually true.

And I, maybe it's even worse, who knows. But I guess I would love to see some greater support and consistency about what the actual data is.

MEMBER BOWLES: I've got a couple of thoughts. One, specifically around this process of cataloging or bringing together the different data sources that are existing across Commerce.

And first maybe looking at, has there been any other governmental department that's had to do something like this before? And maybe get some learnings from them on how that was done?

How that was sort of aggregated?

And then second of all, I would say,

I think that we need to really recognize the different parties that have to be included to effectively grab this type of information, at both a macro- and micro-level.

There's an organization that exists, called the, Startup Champions Network, which is sort of a continuation of Steve Cases' Startup America Partnership. And those are, and they're combined.

They're doing data analysis now and combining macro levels information that we're getting. Or something that a Kauffman could get with actual ecosystem innovators that are operating those specific locations.

And so they're getting truly micro data from the ground level, having sit with these companies, they can turn around and say that company doesn't exist anymore, that company does.

And builds a trust amongst that community to able to pull out that kind of information. But I think that public, private partnership model is something that's going to be

exceptionally important in identifying who those stakeholders need to be, to effectively pull out a cross stitch of that data to create the most robust and accurate source of data for the purposes of what we're trying to do.

MEMBER BAGLEY: I think just one other, a quick addition to that is RIAN, the Regional Innovation Acceleration Network too, I think would have, you know, be able to collect some of that data or has it. I'm not sure, Craig, but --

MR. BUERSTATTE: Yes, there's some work there. What I hear though is making data actionable. And Trey, to you point, what's been done before as far as cataloging? And let's not reinvent the wheel.

This is somewhat new for government.

Its open data initiative, and building better

data resources internally to share and inform our

constituents. This has been a big undertaking

for the last four, five, six years. So I don't

know if we'll have a ton of resources to look at

and compare that are going to be apples to apples.

But clearly there's something more for us to discuss here.

MEMBER BOWLES: And just thinking specifically about the questions that a federal organization or agency would ask versus the questions an entrepreneur would ask another entrepreneur. It has to be the relevancy of the data.

I mean sure there's some data that an entrepreneur is not really going to care about that may be really important to the different areas inside of Commerce. And I think that made sense.

But really being able to empathize with the plight of an entrepreneur to ask the right questions to be able to determine the best way to support, and respond to that moving forward is a really important piece that we need to consider.

Because entrepreneurs speak a

different language that they all understand. And so I think making sure that those sorts of people are at the table helping design, you know, the data that's being collected. And also helping to interpret the data that's being brought in will be important for I think, the efficacy of the project, if we were to do that.

MEMBER REAMER: Trey raises a point about the, kind of the new frontier of data collection in the federal government. Because of advances in information technology the ability to grab data collected by the private sector and add it to, integrate it with the federal data to produce data that are enhanced.

So, and that's something we can look at. So just, I'll give a couple examples.

Federal government for decades has done a monthly retail trade survey. Every month it surveys retail establishments.

They're beginning to, they've developed a relationship I think with Visa to start grabbing some of the charge card data. And

reducing the burden on businesses. And so 1 2 enhancing the quality expending the sample. There is a private, at the University 3 4 of Michigan has developed a consortium of 5 universities to measure the impact of federally funded R&D on the economy. Right now there is a 6 7 consortium of maybe 40 universities. They all, 8 they pool their data. 9 And they have an arrangement with the 10 Census Bureau. So they're pooling their data, 11 and it includes names of the people, the 12 principle investigators and the graduate students 13 who worked on projects. And Michigan is hiring 14 Census to track what happens to those people using that LEHD database that Ron mentioned. 15 16 So you can say, so people involved in 17 these federally funded --18 (Off the record comment.) 19 MR. BUERSTATTE: Robin, can you say 20 again, please? 21 Robin, this is Craig, are we coming in 22 clear? We'll continue driving on at this point.

Anyway, the point is 1 MEMBER REAMER: 2 that there's some things, there's a new frontier around using existing records from outside the 3 4 government, integrating them to produce better 5 statistics. MEMBER FREDERICK: For what it's 6 7 worth, I think that's opening up a lot of 8 opportunity. I think I've mentioned this in the 9 And we're willing to work closely with 10 companies, like CareerBuilder, Headhunter. 11 I mean there's so many new data 12 I think there will be a willingness sources. 13 from industry to aggregate and share some of this 14 data, which can be, it gives you a, I think it's 15 the strength of signals is so much better. 16 it's so much wider. 17 MEMBER W. SMITH: At JP Morgan Chase 18 we started a new research emphasis last year 19 that's aggregating transactions of our --20 (Off the record comment.) 21 MEMBER W. SMITH: Should I go ahead?

MR. BUERSTATTE: We're down.

MEMBER W. SMITH: -- of our client's. 1 2 Looking at particularly small businesses and doing local commerce profiles. And we've had 3 4 lots of inquiries from the federal government. 5 So it's just another, yes. (Off the record comment.) 6 7 MEMBER BAGLEY: I was going to say, I 8 do think the main point though is the one that 9 Esther brought up earlier. And we've been sort of commiserating over here, which is data for 10 11 data sake. 12 It's like what's the purpose of the 13 data? And then that starts to drive like, you 14 know, the outcomes that you were talking about, 15 Esther was talking about. So I think, you know, 16 we need to decide what are we trying to 17 accomplish? And then what data can actually 18 enable us to push towards those accomplishments? 19 And then there's tons of data sets and 20 opportunity. (Off the record comment.) 21 22 MR. BUERSTATTE: Real quickly, we

spent a lot of time on entrepreneurship, and some innovation, and SBIR, and grants and whatnot. I don't want to overlook the skills and apprenticeship. There's a lot of questions, seemed like a lot of energy earlier in that presentation.

Any thoughts on that from anyone?

MEMBER S. SMITH: Well, we're going to have to figure that out for industry, how to engage industry? I think is the biggest challenge. And really when I talk to companies, and I talk to them every day, and we talk about apprenticeship. It's, you know, what's in it for me? How is this going to benefit me?

And you have to answer that question very well. Yesterday, I talked to a company,
Cummins, who said, that for every \$10,000 they
invest, they get \$200,000 back in return. And
they've done the numbers, and figured that out.

So, I think if we can show those kinds of examples, you know, we'll have a better opportunity to engage industry. But I do think

that incentivizing that, has got to be something that we discuss at length and have a proposal to put forward.

MR. BUERSTATTE: On the engaging industry piece, Sue, one thing that is amplified around here, Commerce is, Commerce is America's voice for business. So I think that's a role that might be an opportunity for us as far as messaging and amplifying.

If we're to be their voice, where are the opportunities there? And how can we better communicate that?

MEMBER S. SMITH: Yes, I think as you know, again, we have to be able to show return on investment. So we have to be that voice.

The other thing that, you know, there's also this supply and demand side. We've got to be able to recruit folks into these careers. And that's a big challenge for industry too. So if we can not only figure out how to incentivize the apprenticeship programs, and get industry to value those? Then we have to figure

out how to get potential employees to value those?

So how do we do we recruit folks into those apprenticeship programs and show them as -you know, in Europe they're just as important as any sort of doctoral position there. You know, any sort of medical position and if we can sell that same importance here, then I think that we'll be successful. But that's I think how Commerce could help.

ask in the vain of partnerships and data, if to the extent possible, you could share the conference information? Is there something that we should be thinking about in terms of learning more? Or having a role in sharing a voice?

MEMBER W. SMITH: Yes, I can't remember the dates off-hand. But I'll send them so you can distribute them. But this rose up out of lots of activity happening in states and communities to try to diversify the sectors, and the businesses in those sectors that were using

apprenticeship models.

So as was talked about, when you get the reaction from the Japanese companies it's, you know, in the U.S. it's been traditionally labor sponsored programs in the building trades. And that's really starting to change, partly because the Department of Labor has pushed out a lot of money, but states have gotten on board, et cetera.

So, this is going to be the first

National Conference that we're aware of that many
funders came around the table. And it's going to
have a policy dimension. There are a number of
policy groups involved but it's mostly
practitioner focused.

So there will be industry there, and community colleges, and other intermediaries that are stepping in where labor traditionally has played the role of putting these apprenticeship programs together. There are now chambers and others doing that. And they'll be there too, so I will share more information.

I will say, as long as I have the mic, and that's okay. One of my observations in looking the materials beforehand, and then hearing the separate conversations, is this continual kind of silo between the skills and the small business and innovation world.

And now that I'm in a space where I am investing in both ecosystems, I'm thinking a lot about how to bring them together? So there are experiments around the country of trying to bring the publicly funded workforce development system closer to the small business centers and technical assistance.

There are the CDFIs in the community that are trying to think about how do you promote not just job creation, but job quality? And how do you do that? And how do you create advancement opportunities?

I would love, maybe it's in the Skills

Committee, which I'm going to later, but to think

about more integration of the conversation we're

having here.

So I just wanted to 1 MEMBER BALDWIN: 2 poke on what one of the presenters gave to us, and that was the cost of patents. If you look at 3 innovators and entrepreneurs they typically 4 5 provide a unique value proposition. And in the absence of barriers, are able to grow. 6 And one 7 of those barriers is the cost of patents. 8 I mean I know that even large 9 companies, incredibly innovative employees submit many, many invention disclosure forms that are 10 11 then reviewed by committees. And a very small 12 portion of those are taken through the process 13 because of the high cost. And so if we have small median 14 enterprises, small businesses, that are facing 15 16 that barrier, what can we do to reduce the 17 barrier? Because that really does impact America 18 COMPETES, because he who owns the intellectual 19 property, owns the rights to grow that business,

(Off the record comment.)

MR. BUERSTATTE: Go ahead, Orin.

so.

20

21

MEMBER HERSKOWITZ: Just I don't, if
we're touching on patents. Yes, I mean
unfortunately a lot of the cost of patents, the
most significant cost of getting to a patent is
not the fees in the Patent Office, but rather the
attorneys you have to pay to get the patents.

So I'm not sure the government has, at least on the expense side, I'm not sure that the government has the tools to be able to reduce those costs.

But if at some point, the discussion of intellectual property would be interesting.

Like the IPR process I would argue is actually more the sort of, the IPR provisions, the postgrant review provisions in the AIA, do more fundamental damage to undermining the interest and the ability to get strong patents that are useful for small businesses, than the costs. But

MEMBER NEMETH: Wasn't the context though that you can use SBIR funds to cover your patent costs?

1	MEMBER HERSKOWITZ: Oh, if
2	MEMBER NEMETH: I think that's where
3	that came from.
4	MEMBER HERSKOWITZ: Yes, I see what
5	you mean. So not on general, but specifically,
6	about whether you could use government funding to
7	offset those costs?
8	MEMBER NEMETH: Specifically SBIR
9	funds.
10	MEMBER HERSKOWITZ: Didn't he say that
11	those were not renewed?
12	MEMBER NEMETH: No, I think what he
13	said was, currently, and expiring in September of
14	this year, there is an allowance. But it expires
15	if we don't renew it.
16	MEMBER HERSKOWITZ: Patent is an
17	opportunity to still
18	MEMBER NEMETH: Correct.
19	MEMBER HERSKOWITZ: I see.
20	CO-CHAIR TANG: This is part of the
21	work that NACIE 2.0 did on that exact issue.
22	But it solves part of the issue, but

Esther is right. It's not the bigger issue. 1 2 do you create ways that small companies can actually pursue and prosecute their patents? 3 And maybe, we had a session in 2.0 4 5 with USPTO. Maybe that's something we can tee up a little later? 6 7 MR. BUERSTATTE: Yes, I hope there's 8 been some good seeds planted today. But we also 9 are realistic about, remember our December meeting where I think we discussed 13 different 10 opportunities. And I know my NACIE 2.0 alum know 11 12 all too well that focus is the key to success. 13 So hopefully some of this, if it's 14 new, it can better inform us on some of the current ongoing discussions. And, or if we need 15 16 to park something or re-orient as well, and focus 17 in a new direction. That's great as well. 18 I will highlight Whitney's comments on 19 the best opportunities come from merging all of 20 these efforts. If, I don't know if Marie or 21 Tiff, or Steve want to comment on that.

I'll offer up one quick example for

the team, which might setup Eric's presentation on how this process works. And one of them that really hit on all three cylinders, I thought, was when the Council engaged with Secretary Pritzker on the TechHire Initiative.

So we know that there is a demand for high tech skills right now. And real quick, by a show of hands, how many people are familiar with the TechHire Program?

Okay, a decent majority. So this was the Obama Administration's effort to elevate the importance of training, or in some cases, retraining, some of our citizens in the tech industry. Especially in communities that are growing their tech clusters.

so they're not having to pull expensive talent from other regions and recruit them in, but rather let's build that internally. So we're building those skills, building that talent pipeline. Infusing into the innovation ecosystems, into these tech firms, so these tech firms can remain competitive locally.

Secretary Pritzker engaged in a round table with NACIE Members in San Francisco. We took those learnings back here to D.C. And initiated a number of discussions with Department of Labor, Education and the White House to better inform our next steps with that program.

So again, I think that was a great example of an initiative driven by the Council, that hit on all cylinders. It was powerful for those communities and I think TechHires now maybe roughly in 70 or 80 communities. So really penetrated the U.S. and moving forward with getting new skills to new populations that are going to be relevant for tomorrow, while helping our firms.

Any other thoughts, Marie, or anyone?

Okay, actually so with that said, so
that was a recommendation. It started right here
around the round table. There's an opportunity
to do something here and recommend a solution, or
an idea to the Secretary of Commerce.

How that happens? Eric Smith is going

to walk us through some thoughts and strategies. 1 2 Mainly because this is something that we've heard from many of you over the last few months. 3 Received a lot of individual questions about 4 5 expectations and goals. Eric, take it away. Thanks. 6 MR. SMITH: MEMBER REICHERT: 7 Eric, can I ask a 8 question? While you're going through what you're 9 going to go through, can you talk about that in context of the proposals that we've already put 10 11 together? 12 And what the expectations around the 13 groups that we were all sent in, and had an 14 initial call? What, how does that fit into the 15 process? 16 MR. SMITH: Yes, I think that will become clear but if it doesn't let me know and 17 18 I'll address it separately. 19 So, I was going to call this a short detour into a fractally complex federal 20 21 bureaucracy, but that seemed sort of, you know,

not very appetizing.

So life cycle recommendation, so but as you all develop these recommendations, you know, why are doing it? And I wanted to sort of just go back to first principles on that.

So, you know, this is straight from the statute. Recovering lawyer, so I like to quote from the statute. But, you know, innovation and the commercialization of new technologies, that's what you all are here to do. That's the recommendations that we're looking for.

And there's actually only one thing

NACIE can do, and that's provide advice. It's

its one power. And so I think one thing to keep

that, just keep that in the forefront of your

mind.

There is a lot of power in that advice. And the fact that you are providing that advice directly to the Secretary of Commerce.

But that's really what you do is you're providing advice.

And that can take a lot of different

forms. You've seen some of this in the Workgroup calls that you've setup so far. You know, it can be broad policy recommendations. It can be recommendations to change specific programs. You can recommend research and reports. Or you can actually conduct some research and reports.

One example of that was when David, and Tiff, and Steve, and some of the other

Members last time were working on the SBIR, STTR recommendations.

David, you had done the call for information from some of the SBIR participants, some of the applicants and grantees, or awardees I guess. And also some of the state programs managers I think to get an idea of, you know, what the community was looking for? What the gaps were? And what they thought about some of the recommendations that we had?

And tangential to that, the outreach and socialization, part of the reason that we selected all of you is not just for your expertise, but also for the people that you know.

The networks that you have, and your ability to get the message out. And to also bring information in.

Sort of as David Langdon was talking about earlier, Commerce is the voice of business.

And that channel goes both ways. So, something to keep in mind.

Another thing that, you know, you all can do is get other people to agree with you, and in writing. You know, one of the things that the first NACIE did was put together a recommendation on innovative and entrepreneurial university.

And I think they ended up with something like 130 or 140 universities that signed a letter, signing on to this report and a set of proposals that were in the report.

So there are a lot of different forms of that advice that you give, can take. But, you know, I think ultimately what it boils down to is you're providing advice.

Once you give the advice, there's a lot that we have to do on the backend, before

that gets implemented. So we had sent out a memo on this. And I thought, you know, just a sort of slide design would be to put all of the text of the memo on this page.

(Laughter.)

MR. SMITH: And read it to you directly. Maybe not. So instead, we got a diagram. Maybe not super easy to see. But essentially this is the path that a recommendation takes. And ultimately, I think the thing to focus on right now, because this is approximately where we're going to be, is the NACIE vote.

I think there are one or two recommendations tomorrow that you may all vote on, depending on how the Workgroup sessions go this evening. And that's sort of the first real decision point as to where we are now. You've already decided to pursue these. The Workgroups have been working on them.

And so, you might vote, no. I think that's probably unlikely, given the fact that

you've all worked on this for a while. But you might vote no. You might vote, yes. And if you vote, yes, that's sort of where our work as OIE starts. Well, not starts but continues on, without you for a little while.

So we package that recommendation, which is usually a letter signed by the Co-Chairs and maybe some supplementary material into a briefing document for the Secretary. And then we present that to the Secretary. And the Secretary then approves or disapproves that.

And that's sort of depicted here as a simple yes, no. But often times will involve something much more than that. So perhaps we've identified three Commerce Bureaus, or you all have identified three different Commerce Bureaus that would be involved in the implementation of this recommendation.

Probably going to consult with those bureaus, and with the bureau heads, and some of their programmatic staff to think about feasibility and, you know, whether or not there's

legislative authority to do this? And what would actually go into implementing these recommendations?

And then once that feedback has gotten back to the Secretary, that's going to enable her or him to make a decision on whether or not to approve the recommendation. And that will come along with some sort of action.

And so a simple example, or I guess one that's in front of you could be the Capital convenings effort, where the recommendation says, you know, EDA should, under this authority that already exists, implement a grant program that brings folks together in the Capital communities and certain regions across the U.S.

So that might just be EDA, implement this grant program using the authority that you have. And that would be the implementation of that recommendation. And so, you know, we would be given that direction.

Another thing that, you know, might happen is with respect to, I think going back to

the SBIR example, you know, maybe providing that advice to other agencies. So some of those recommendations were legislative in nature.

Others of them, were recommendations that could have been implemented by the SBIR agencies, under the authority that existed with respect to, you know, streamlining some of their processes.

And that could take the form of the Commerce Secretary not only telling its own SBIR programs, hey, you should implement these. But also a ten other SBIR awarding agencies, you should consider these recommendations to improve commercialization outcomes from your program.

So there are a lot of different ways that these things get implemented on the backend. But I think it's worth keeping in mind. And kind of the point of all this is to say that, you're going to give advice. And it may take quite a while before it gets implemented.

And we're going to give you updates on how those things are progressing. We're going to let you know what's happening on the backend at

each of these quarterly meetings. And on Workgroup calls in the interim. But it's good just to keep in mind that this life cycle is pretty long, and reasonably complex from a bureaucratic standpoint.

And we just want to let you all know that. That this is how it works. And this is a timing expectation setting.

So here are some examples and I don't want to read through this, but here are some examples of what the operating units can do, and what the action may take.

These are things that are going to depend on each specific recommendation. It might be that, you know, you should increase the budget for a certain program. And if so, there's a process through which Commerce and all the other agencies submit budget information up to the Office of Management and Budget, and the President, and that gets sent to Congress.

So that's, you know, one avenue you might have to make policy. Or to make policy

recommendations. Some of the others we've 1 2 already discussed. But this is just something to keep in mind as the universe of tools that are 3 4 available to us to implement your policy. 5 And you can, you know, recommend specific implementation tactics or not, as you 6 7 see fit. And as you think makes the most sense given whatever your recommendation happens to be. 8 9 So with all that being said, have fun. 10 But hopefully quick enough detour into that bureaucracy. Questions? Andrew. 11 12 MEMBER REAMER: What's the Secretary's 13 accept-reject ratio of recommendations? 14 I think I will say having MR. SMITH: only operated one round of this our self, and not 15 16 having been around for the first iteration of 17 this. And it having operated in a very different 18 way, I don't think that that's, it's not good 19 data. So I wouldn't want to say at this point. 20 CO-CHAIR BRADLEY: So recognizing the 21 life cycle could take a while, and we're at an interesting point. Maybe not just for you being 22

from 2.0. We give advice, but we're not excluded 1 2 from activities. And so what is that balance of us advancing some of these ideas? 3 Particularly if we're able to find 4 5 third party commitment or is that discouraged? And are there examples in 2.0 where while you 6 7 might have been waiting, there was something else 8 you could be doing? 9 MR. SMITH: I mean I think, I think 10 maybe the best example or the best way to frame 11 it from my perspective is that, you know, going 12 back to your outreach and your networks. 13 Building consensus, getting ideas, refining the 14 recommendations through those channels, I think is really valuable and helps to build the 15 16 momentum behind those recommendations. And it acts as a validator. 17 18 know, as it's going through the internal vetting process I think that's really powerful. 19 20 MEMBER WILSON: Yes, and I think, 21 don't underestimate the role that we can play in 22 our communities. That not everything has to

happen on a federal level.

And so what's been a great experience for me in 2.0 is every time I left this meeting I was, you know, energized, brainstorming, and kind of took that back to Atlanta to see what are things I can do and influence my own community?

That kind of feeds into the outreach, but that exercise of doing that isn't kind of talking about NACIE, it's just talking about the community. So really balancing, keeping NACIE here, but then doing stuff in your own community just within the context of what you do.

MR. BUERSTATTE: On going back to your community, Tiff, I know you, David and many others took deliberate action on behalf of NACIE as an official member in your community for the SBIR effort. And this might help answer your question, Melissa.

And how they did that was, their first step in that process was voting that as a body we would take official action to survey stakeholders on behalf of the Department of Commerce to better

inform us on tactics, to improve the SBIR program.

So, which technically as an Advisory Council, you can't do that because that's not advising -- well, you're getting advice, but you're taking action. You're in the field, you're representing Commerce, so that was a proposal made to the Secretary of Commerce that NACIE proposes as a body they would do x, y, and z, to survey, engage, et cetera.

So that's a type of activity that could absolutely be done, but there's still a process and a submission for it. So to your point, Melissa, how can we rally third parties? How can we generate partnerships? I think absolutely informally, but also formally we can do it. And I think sometimes it's helpful to do it formally because we then get the advantage of the podium.

MEMBER WILSON: Okay, historical answer and then a question. One thing I was going to mention is that I think one of the

things that we learned along too was, sometimes we had ideas where we had individual interests. And there were things we could attach to here, you know, in D.C. that we would then find out more information, which would then change what our recommendation maybe started.

So I think some patience with actually utilizing our own relationships and involvement with things to see. That's something we thought as a recommendation actually wasn't that same type of recommendation. So I think being engaged in just our work was helpful. So that's one piece.

The other thing I just had as a question, your comment about this being one of 60 councils. And I apologize if this was mentioned before I came in, but did you share, or could you share at all about, you know, have there been any briefings to the new Secretary of Commerce about the 60 councils and our existence. And can you give any perspective on that?

MR. BUERSTATTE: Yes, absolutely. So

we participated in the transition briefings, like so many other agencies. And we did send up a lot of information about the work that Marie, you did on 2.0 and what we've done thus far with the new Council.

so, the new team is well aware. There was a formal transition process. The transition team that worked for, between the period of the election and the inauguration is now no longer here. And we are now, Commerce is now receiving new political appointees, which will be the leaders. So there's a separation between the transition team and the inbound new, political appointees.

But they are absolutely aware, and to the second part of the question, where we might compare with the other 60, I'd say that we've actually been on the radar because of this meeting. So I think we did a good thing with being aggressive and continuing forward, and getting this on the calendar.

I'm not sure if we had any visitors

today, but I am expecting participation, at some point during our, during the next 24 hours from some of the new senior policy team. So right now, I think we're about internally in Commerce, there's roughly 30 to 35 appointees here. And that's a 47,000 person agency. So we're just getting it started.

As we know, the Secretary nominee, Mr. Ross, I'm not sure if he's been confirmed yet, as of today. I'm seeing shaking heads, so confirmation has not happened. But once that milestone happens, I'm expecting an increase of politicals onboarding.

It's about as detailed as I can be right now.

MEMBER STEVENSON: It is possible to see any of the recommendations coming out of the Councils, to see where there might be opportunities for alignment of interest?

MR. BUERSTATTE: Yes, absolutely. We do our best. I'll say that we are, again, we are unique in the fact we're one, very few that

bridge to the administration. So most councils are vacant right now.

But as those develop, there are particular ones that we've collaborated with before. I mentioned the Digital Economy Advisory Board, the Data Advisory Board, there's a manufacturing one that we want keep a strong pulse on. And there's probably a few more in that list I'm forgetting.

But ultimately what we like to do, is collaborate and elevate. So we're certainly looking for opportunities to bring in consultations with the manufacturing team, with the digital economy team, and so on and so forth.

So I think that the more we can bring the community together, the better.

MEMBER REAMER: From the perspective of the 2.0 veterans and the staff, can you enlighten us newbies regarding the wins that you saw coming out of 2.0? Looking at Eric's list of possible actions, recommendations, outreach and so forth, just the veteran's, the two or three

things he's -- like this worked, we're happy, this worked well, in terms of outcomes?

MEMBER KENNEY: I'll respond to it, totally on SBIR recommendations because most of the recommendations we made were not things that Commerce could implement on its own. Or even really at all. It has two small SBIR programs of the 11 agencies. NOAA and NIST have the smallest SBIR programs, but the overwhelming majority of SBIR activity happens from a funny perspective at nine other agencies. And SBA controls a lot of the central coordination activities.

And so the recommendations we made were sort of, you know, have a way of publicly declaring, you know, hey, this group thinks these would be good things for the federal government to do. Some of which require Congressional action, some of which we need to be implemented, you know, independently at Department of Defense, or Energy, or elsewhere.

And but what I've seen, since we made those recommendations, there was a document that

came out in the last couple months that was ITIF, one of the other former NACIE Council Member's recommendations to the Trump Administration.

Here's what you all should do to promote ideas for innovation and entrepreneurship.

Right in the middle, you know, was much broader set of recommendations, but right in there where, you know, almost word for word, in some cases, word for word, what we wrote. The recommendations that got picked up and were a part of, and that wasn't done as a NACIE activity but they took our material and used it.

Similarly, SSTI, Innovation Advocacy
Council had a Hill day yesterday, and we were
sharing a policy document which includes some
recommendations. And I'm part of that separate
from my NACIE role, and it includes some of the
same SBIR recommendations as well that were
lifted basically straight out of the NACIE
recommendations.

And, you know, that's been carried on into some of the work that both NACIE Members

individually, in other capacities, and other organizations have used.

And it's not like our recommendations were like original ideas, and we're the first ones to think of these. A lot of time these were things that others had already been saying, or and we were kind of just amplifying recommendations that others had been making as well.

That's just an example.

MEMBER REAMER: Are there other examples?

MEMBER WILSON: Hey, I was just going to give a practical, slightly different type of example. You heard about at the first meeting, which was, we'd come up with the idea of community exchanges where we were going to different cities to be able to see the best practices in different locations.

And that was something that happened kind of organically. At one of our meetings, where we'd done that national, and then we were

able to -- there was energy, what, you know, Craig and I have talked about this a lot.

When there's energy, when you have few people who really found value in it. There's a group of us just ran with it and started to create it. And Craig's energy kept bringing it back here, which ultimately ended up, you know, leading to the conclusion.

But we did two or three of those that we just kind of organically did on our own and then they became part of report out to NACIE. So I think that's more of a pragmatic versus a policy area where, you know, if we have something else that we're finding that's of value that we can do on our own, you certainly, we have the energy of the group to do that.

CO-CHAIR TANG: I would just add a couple things. Andrew, so other examples. The Secretary took our recommendation on Measures of Innovation and I think commissioned within Commerce further exploration there.

There was an early issue about the use

of foreign profits to be repatriated to the U.S.

To be devoted towards innovation. This is part

of the -- you've heard this before because it's

being discussed with this administration in terms

of infrastructure -- and I think she ordered some

work to be done to look at the economic stats,

because that's really a treasury issue and not a

Commerce issue. So they were directed in the

right direction I think for further study.

One additional point to what David said, just to be clear is, is you saw on Eric's chart that there is no allowance for a NACIE recommendations and official NACIE business to be discussed on Capitol Hill, right? However, I think the pivot point that David is talking about is that we took the NACIE recommendations and then as individuals, meaning -- and this is what Tiff means by community -- going back to our community and then were able to actually craft the legislation which has ultimately went as far as committee approval.

So, there are some official and there

are some stealth ways that NACIE works. 1 2 lot of it had to do with the alignment of I mean, David had done some excellent 3 interests. 4 Tiff had done some excellent work, Michael 5 Burham, Rohit Shukla, and then my team all came together on this issue. 6 7 So I think it can work is some really 8 interesting ways outside of the official chart I 9 think that Eric showed. MEMBER REAMER: It sounds like a 10 conclusion is that NACIE can get into a community 11 12 organizer in a certain kind of way. 13 CO-CHAIR TANG: I would say, I don't 14 think I would say it that way. I would say those around the table can get involved in community 15 16 activities. 17 MEMBER REAMER: That's what I mean 18 before. 19 MEMBER BOESCH: I think, one thing I 20 might want to talk about, not now, but later is 21 like what are the specific processes by which,

you know, what you do in your community then kind

of makes its way more into these legislative recommendations?

I had a really practical question on in terms of the, outside of the official recommendations, you know, two things that I'm, you know, certainly interested in doing. One of them is, you know, promoting things locally that I see and hear about here.

Another is that a lot of the proposal recommendations that we've been making do require some up front research and outreach to people, you know, some need finding. And so, you know, do we need to do that officially, or unofficially? Like where does that border line go between what I'm doing as an individual, either to work on researching a recommendation, or on kind of promoting something, and what I should do officially?

MR. SMITH: Yes, I mean, those activities are fine. I think where you start to get into a gray area is where you start to, where you're representing yourself as acting on behalf

of NACIE.

You know, if you're going to do research for a recommendation that's fine. If you're going to distribute this information, or the recommendations that are made here, that's fine.

But if you go start to act on behalf of NACIE, but without having gone through the process and gotten the approval of NACIE, then that's where you get into the problem area.

MR. BUERSTATTE: So, maybe this is too brash of me to say, but as the entrepreneur in the eyes of the, there's no better way to learn, than do, right? So we can belabor the process discussion for as long we want here.

Government is huge, we're trying to move the Titanic, quite literally, so that's why I thank you, Eric, for the great points on the expectations. There's going to be some lead time to develop these efforts in a meaningful manner.

But let's learn by doing. You've got some amazingly talented staff. We've worked

through some really complex issues the last few years with this Council. And we'll be with you all the way.

So, on that note, before we transition into public comment, I did want to introduce a new Member of our staff, Ms. Shannon Rhoten.

John Williams, from SBA mentioned her.

Shannon is with us. She is a

Presidential Management Fellow, and what's neat
about Shannon is she is the embodiment of

everything that we're trying to do here with

NACIE, and OIE, and better integrating

entrepreneurship innovation across governments.

So, Shannon, no pressure but can you just give us a quick run-down of all the rotations that you've done thus far? It's pretty neat.

MS. RHOTEN: Sure, so, thank you. So
I started SDA about 17 months ago as a
Presidential Manager Fellow. So I started it off
in John and Agnes' shop, at the Office of
Investment and Innovation. And then I moved on

to work on some grant programs in our Office of Veterans Business Development. So trying to increase capital with the veterans who are starting up businesses.

And then I moved on to our Office of Entrepreneurial Development where I worked with our Strategic Initiatives Team, so trying to put together ScaleUp America, Lean for Main Street, things of this sort.

I also worked with our Office of
Women's Business Ownership on trying to get out
this year's iteration of the InnovateHER
competition. And then I moved on to work with
our Chief Operating Officer. So I've been a
little bit of everywhere.

And now I'm here with the OIE team.

And I'll be here until the end of May, at which

point I will go back to OII, over at SBA.

MR. BUERSTATTE: Excuse me, I wanted to highlight that because just welcoming Shannon to the team for the next few months. And she's going to be leading a few of our policy efforts.

But two birds, one stone, Shannon's really talented and we're lucky to have her on the team. But also like I said, she just ran down four or five offices that we probably should be collaborating with, and learn more about. And we will throughout the next few years.

so again, this is a process. We'll get there. There's a lot of opportunity, so please be patient and ask questions along the way. We've got a bunch of time together over the next two days.

I'll transition to the public comment at this point. And I know we have a guest speaker. Do we have, oh, Emily Liner is up there. She's a Senior Policy Advisor with Third Way. Emily was kind enough to distribute some research that she's done on access to capital.

We did include that in the pre-reading if you got through it. This is Emily's report.

Emily could you give us few insights of your own?

MS. LINER: Sure. Thank you so much.

My name is Emily Liner. As Craig mentioned, I'm a

Senior Policy Advisor in the Economic Program at Third Way, which is a think tank here in Washington D.C.

Thanks for the opportunity to speak here today. I'd like to also thank Andrew Reamer for bringing this to my attention today. It's actually serendipitous timing to be giving some of, this presentation because I use the Annual Survey of Entrepreneurs in some of the research that I conducted, that you have in front of you.

So like NACIE, Third Way is interested in supporting innovation and entrepreneurship.

We regularly engage with policy makers on these issues. And we are actively working on policy and research related to 21st century jobs in the face of economic change caused by automation and globalization.

We are also concerned by some signs that indicate that it is getting harder for Americans to start new businesses. As you may know, the share of new businesses in the U.S. economy has fallen from 13 percent in 1980, to

eight percent in 2014.

In previous Third Way research, we noted that bank lending to small businesses has not returned to pre-crisis levels.

Today I'm here to talk to you about our latest research, about the state of access to venture capital, or VC. To be published in our fourth coming report titled, America's Got Talent, Venture Capital Needs to Find it.

And as Craig mentioned, you should all have printed copies. I'm also happy to distribute electronic copies later on.

So on the surface, venture capital looks robust. In 2015, VC firms invested \$59.1 billion into American startups. The highest level since 2000. Below the surface however, we find that three groups of entrepreneurs are underserved by the VC industry.

One, entrepreneurs outside of the four largest VC hub cities. Two, women, African American, and Hispanic entrepreneurs. And three, entrepreneurs in non-tech industries.

First, the geographic distribution of VC has become extremely concentrated over the last two decades. In 1995, about half of VC funding went to the four metro areas of Silicone Valley, New York, Boston, and Los Angeles.

In 2015, it was 78 percent, leaving just 22 percent for the rest of America. Five states received no venture capital funding at all, including West Virginia, of which I know there's a Member here today. And my home state of Mississippi.

The urban centers skew the appearance of the overall proportion of venture capital investment to output. While the average ratio of VC-to-GDP in the United States in 2015 was about one third of one percent, only four states actually had an above average ratio of VC investment to state output. Meaning that 46 states and D.C. had a below average ratio.

Second, we use recently released data from the 2014 Annual Survey of Entrepreneurs to look at gender and racial gaps in access to

venture capital.

Our analysis of firms under two years old that receive venture capital, finds that only two percent were black owned. Six percent were solely Hispanic owned. And 13 percent were solely female owned.

Another way to look at this is the likelihood that an individual who is part of a group of startup founders, receive VC funding.

And we found that the likelihood of white entrepreneurs, white entrepreneurs were 18 percent more likely than black entrepreneurs to receive venture capital.

Non-Hispanic entrepreneurs were 29
percent more likely than Hispanic entrepreneurs.

And male entrepreneurs were 119 percent more
likely than female entrepreneurs. So more than
twice as likely to receive venture capital
funding.

Finally, tech receives a disproportionate share of venture capital.

According to the ASE, 15 percent of U.S.

businesses would be considered either information or professional, scientific, and technical services. But 27 percent of the firms that reported VC funding belong to these two categories.

In sum, we believe that these underserved groups demonstrate that venture capital isn't being allocated as widely and efficiently as it could be. I look forward to hearing your comments about our findings. And your policy ideas that can help all of America's entrepreneurs access this important source of funding. Thank you.

MR. BUERSTATTE: Emily, I think that validates what the Community Convening Group is doing. Tiff, and leading on how to rally capital resources to underserved markets. This is an effort that NACIE 2.0, so the last Council was working on. And is now transitioning. I think we're excited to have soft commits.

A quick update to the full Council there, we do have soft commits from SBA and

Treasury to do a joint funding opportunity with EDA, which would bring together key capital resource stakeholders at the local level.

So again, these are focused on communities that aren't urban hubs, as you said, Emily. And make the networks and connections relevant, or necessary to get that capital to more entrepreneurs. Or in some cases, get the training and mentorship to those entrepreneurs so that they're ready and able for real venture funding.

So that's often the case as we've learned where in those markets where it's not about the capital resources, but it's about the quality of business. And the entrepreneurs' readiness for real venture. So, Tiff, anything to add there?

(Off the record comment.)

MEMBER REAMER: Emily, thank you for that. Where does Third Way want to go with its study? What's your vision for how to address this issue?

MS. LINER: Thank you for asking. So first, we wanted to just bring attention to these trends to policy makers. And make them aware of the difficulties that these three underserved groups face.

We do highlight a few policy proposals in this report. One, is Equity Crowd Funding which was recently enacted by the Securities and Exchange Commission. Another is the SSBCI program that's run through the Treasury Department. That unfortunately may be ending this year.

And then we also talk about private sector initiatives that can work as well. But I think that, you know, there is no silver bullet to addressing these entrepreneurship gaps. And the wider variety of initiatives that government and private sector can undertake, the better we'll be able to increase entrepreneurship.

MR. BUERSTATTE: Thanks, Emily. And to keep things moving, we just have a short time for public comments. As of this time I do not

have the records of other public members wishing 1 2 to make a comment, but I will open the line. Robin, is there anyone on the line 3 4 that has signaled they want to make a comment? 5 (Off the record comment.) 6 MR. BUERSTATTE: Great, thanks so 7 much, Robin. 8 So we will wrap up very shortly with 9 the Co-Chair remarks, but I do see that my brave boss has come in to get beat up my NACIE Members. 10 11 Mr. Tom Guevara, Tom did you want to make any 12 comments? 13 Tom is the Deputy Assist Secretary for 14 Regional Affairs and currently performing duties as the Assistance Secretary for the Economic 15 16 Development Administration. I try to say that 17 five times as fast, and I failed. 18 But Tom's got a lot of stuff on his 19 plate. Thanks for coming, Tom. 20 MR. GUEVARA: Thanks, Craig. First of 21 all that's actually a person you can say that about and --22

(Off the record comment.)

MR. GUEVARA: No, I don't want to take much of your time. I know you're ending your meeting. Then you're going to do some breakout sessions. I just wanted to say, welcome and thank you for continuing to do the great work.

I mean, now more than ever we need your ideas, your thoughts, your inputs. And really direction for us. This is something that's an incredibly important time for us as we all know. And what you do pervades through every aspect of our economy.

It isn't just about manufacturing. It isn't just about services. It's about everything. And a lot of the ideas that you have and the experiences you have really will make us a lot stronger.

And so we're certainly looking forward to your continued great work. And I just wanted to say thank you very much for being here today.

And you all have valuable time, and I very much appreciate it.

1 MR. BUERSTATTE: Thanks, Tom. Melissa 2 or Steve? CO-CHAIR BRADLEY: 3 So again, I just want to echo the appreciation for the work that 4 various Members have put in to make this 5 informative, and specifically the staff. 6 I think as we go into the workgroups 7 -- maybe I sit in a slightly unique position 8 9 because I actually live here in D.C. -- but I 10 would encourage us as we take these next steps to 11 really refine and in some ways learn how to 12 advocate for, promote our ideas. That we really 13 focus on the collective possibility. 14 I will call out, or at least look at 15 one of my partners. I think that having served in government, we often times focus on what we 16 17 accomplished. We missed the unintended 18 consequences. 19 And so I would challenge us to be 20 mindful of unintended consequences. i.e., only 21 focusing on rural, but recognize the demographic similarities that exist for historically 22

marginalized populations, namely black and brown people.

And because we don't want to be in the business of separating. And there are many unintended consequences across sectors, across universities, across university types. So I would just call our attention to continue the great work, but now put a final lens on it.

As we think about this, is something we'll all be working on. And what do we need to do to align with other higher priorities that may exist? Not just for the Secretary, but for our partners, within Commerce and other agencies.

How do we make this the most collective and collaborative process while we still advance ideas and strategies that are important to us?

MR. BUERSTATTE: All right. At this time, Robin, this concludes our official public portion. You can close the line. Thank you.

And for NACIE Members here, this does conclude as well. We are going to transition

1 into our small groups. And we will take a break 2 on site. So we'd like to get you there first, 3 and stretch your legs and whatnot, and then at 4 5 the room's themselves, we'll give you a few minutes as we settle in to take that break. 6 7 So grab what you've got. We will not 8 be back here. So if you brought luggage, phones, 9 laptops, chargers, you name it. Eric, do you 10 have something? 11 MR. SMITH: Yes, just, we'll divide 12 you up into groups so you have someone to follow. 13 Because this building as many of you know is a bit of a maze. 14 15 (Whereupon, the above-entitled matter 16 went off the record at 3:10 p.m.) 17 18 19 20 21 22

A
ability 37:12 49:21
53:20 64:3 92:11
102:17 110:1
able 24:8 26:4 27:2 29:2
33:4 38:7 55:16 56:14 64:15 73:11 89:20
90:9 91:16,18 97:14
97:18 101:6 102:9
117:4 126:18 127:1
128:19 140:10 141:19
above-entitled 146:15
absence 101:6
absolutely 119:12,16
120:22 121:15 122:20
academic 74:16 academics 61:22 74:15
Acceleration 90:8
accelerator 42:11 49:14
51:20 54:6
accelerators 37:21 40:7
40:15,16 42:13 48:15
48:21 49:5,18 50:6
53:21 54:1 55:13 78:2
accept-reject 116:13
access 61:8 62:10 86:3 134:17 136:6 137:22
139:12
accessible 87:18
accomplish 95:17
accomplished 144:17
accomplishments
95:18
account 77:11 accounts 32:17
accurate 90:4
achieve 28:19 85:15
acknowledge 7:9 8:3,7
8:10,18
acronym 57:13
acronyms 15:1
act 131:7
acting 130:22
action 6:19 86:12 113:8
115:12 118:15,21 119:6 124:18
actionable 90:14
actions 15:17 123:21
active 36:16
actively 135:14
activities 5:16 6:20
16:2 69:3 70:18 117:2
124:12 129:16 130:20
activity 14:9 42:1,2
71:21 98:20 119:11 124:10 125:11
acts 117:17
actual 88:12 89:13

ad 38:15 adamantly 24:1 add 27:4 92:12 127:17 140:17 addition 53:12 90:7 additional 128:10 address 58:2 75:19 107:18 140:21 addressing 141:16 adjourn 33:5 Adjourned 3:21 admin 42:8 administration 1:3 2:13 2:17,19 3:6,8,18 8:12 9:3 10:17 11:9 12:6 15:20 32:11 39:22 123:1 125:3 128:4 142:16 Administration's 105:11 administrations 2:16 8:4 15:12 administrative 58:6 63:3 69:8 advance 7:1 145:16 advancement 100:18 advances 92:11 advancing 117:3 advantage 119:18 advice 62:5 108:13,18 108:19.21 110:18.20 110:21 114:2,18 117:1 119:5 advise 9:2 81:8 advising 119:5 **Advisor** 3:16 11:7 134:15 135:1 advisors 79:20 80:19 advisory 1:5 79:16 80:3 80:4 119:3 123:5,6 Advocacy 125:13 advocate 144:12 **Affairs** 2:13 3:18 142:14 **African** 136:20 afternoon 5:2 10:19,20 age 61:6 62:9,11 68:21 **agencies** 7:4 17:19 35:9 36:20,22 37:7 38:15 42:8 44:13 77:17 114:2,5,11 115:18 121:2 124:8 124:11 145:13 agency 3:4 5:9 14:11 75:17 91:7 122:6 agenda 5:6

aggregate 94:13

aggregated 88:21

aggregating 94:19 aggressive 121:20 aggressively 34:10 Agnes' 132:21 **ago** 11:14 23:20 48:22 76:20 132:19 agree 24:14 51:17 110:9 ahead 12:8 94:21 101:22 **AIA** 102:15 aid 34:5 align 83:3 145:11 aligned 78:20 87:9 alignment 122:19 129:2 Alliance 1:20 allocated 139:8 allow 26:15 allowance 103:14 128:12 allowed 43:13 allowing 41:18 **alum** 104:11 amazing 40:2 amazingly 131:22 America 89:8 101:17 133:8 137:7 **America's** 97:6 136:8 139:11 American 136:15,21 American's 11:18 Americans 135:20 amount 83:8 amplification 21:1 amplified 97:5 **amplifying** 97:9 126:7 **analysis** 32:12 76:1 80:10 89:10 138:2 analysts 66:12 **Andrew** 2:6 7:11 33:2 79:13 82:19 116:11 127:18 135:5 **Angeles** 137:5 **Annie** 16:9 annual 57:5,10 59:4,20 60:6,8 62:22 68:5 135:8 137:21 answer 19:14 96:15 118:17 119:21 ante 72:16 **anymore** 57:11 89:18 anyway 39:12 94:1 apologize 120:16 apparently 25:10 appearance 137:12 appetizing 107:22 **apples** 91:1,2 applicants 109:13

application 51:12 apply 27:7 appointees 121:11,14 122:5 **appreciate** 7:17 38:18 54:10 143:22 appreciation 144:4 **apprentice** 17:22 18:13 apprenticeable 28:1 **apprentices** 19:9 24:2 27:12 apprenticeship 15:21 16:14,18 17:9,13,16 17:19 18:7,18 21:11 21:12 22:14,16 23:18 26:3,6 27:2,5 29:14 29:19 30:15,20 31:6 31:12 33:18 79:6 96:4 96:13 97:21 98:4 99:1 99:19 apprenticeships 11:14 15:4 16:4,5,20 17:11 19:18 21:12,21 23:16 24:9 25:7,14 26:10,14 27:20 28:2,8,12,17 29:22 appropriated 38:2 appropriation 38:5 41:2 approval 63:7 128:21 131:9 **approve** 113:7 approved 43:6,11 approves 81:11 112:11 approximately 4:11 111:12 area 27:8 78:9 83:14 84:12,21 87:6 127:13 130:21 131:10 areas 12:9 27:14 84:5 91:14 137:4 argue 13:7 102:13 arrangement 93:9 array 83:1,15 Ascension 12:1 **ASE** 57:12,13,16 58:13 59:17 60:4 63:4,6 65:22 66:14 69:16 138:22 aside 41:17 74:1 asking 61:11 62:4 65:8 76:15 141:1 aspect 143:12 assembled 83:15 assessment 81:12 82:3 **Assist** 142:13 assistance 14:12 41:18 42:9 47:20 48:3 100:13 142:15

bodies 80:5 **Assistant** 2:12 3:17 1:18 27:13 **Buerstatte** 2:14 3:2 4:3 assisted 74:17 **base** 69:3,4 **body** 118:20 119:9 4:22 7:13 9:7 10:15 Associate 57:2 **based** 69:4 **BOESCH** 1:19 19:6 10:22 11:3 19:3 20:11 20:7 22:20 26:8 27:6 associated 31:5 57:20 **bases** 44:22 20:17 22:4 31:18 32:8 **Associates** 1:21 2:2 **basically** 14:11 15:3 78:10 79:2 86:16 33:11 34:1,4,13 38:13 **Atlanta** 118:5 16:16,17 19:10 36:1 129:19 38:19 50:12 54:17 attach 120:3 60:1 69:2 74:16 75:16 **boils** 110:19 55:14,20 56:3,11 attempt 58:13 125:19 bombardment 88:6 57:13 73:21 74:11 basis 10:6 60:8 81:14 border 130:14 attempted 73:15 75:5 76:4,7 79:12 attention 135:6 141:2 **BBA** 59:18 borne 33:20 82:19 86:5 90:12 145:7 **BDS** 59:9 71:18 **boss** 60:14 142:10 93:19 94:22 95:22 attorneys 102:6 **BEA** 77:10,12 **Boston** 84:12 137:5 97:4 101:22 104:7 AU 1:15 3:19 beat 39:18 142:10 **bounce** 41:6 118:13 120:22 122:20 audible 47:7 beautiful 39:13 **BOWLES** 1:20 19:15 131:11 133:19 139:14 141:20 142:6 144:1 authority 36:1,21 113:1 becoming 68:11 50:15,18,20 51:7,10 113:12,17 114:6 beginning 92:20 51:14 52:20 54:9,14 145:18 authorization 36:5 behalf 76:11 118:15,22 54:16 88:13 91:5 **build** 50:3 59:20 66:1 authorize 39:19 130:22 131:7 **Bradley** 1:13,15 3:3,19 69:20 74:9 75:3 84:18 authorized 38:2 39:17 Behavioral 2:4 6:12 7:15 10:1,20 86:13 87:16 105:18 **belabor** 131:14 48:16 63:20 65:10 98:11 117:15 automation 12:22 believe 16:20 21:11,22 116:20 144:3 **building** 9:14 10:9 135:16 23:2 33:14,21 79:16 brainstorming 118:4 24:19 52:2 56:10 58:1 Automotive 25:20 139:6 **brand** 48:2 77:11 83:9 84:5,11,16 available 14:2 54:1 59:2 **belong** 139:4 brash 131:12 84:20 90:18 99:5 **beneficial** 37:7 76:2 **brave** 142:9 105:19.19 117:13 72:9 116:4 avenue 1:12 115:21 **benefit** 31:7 96:14 breadth 77:6 146:13 average 137:14,17,19 benefits 17:2.3 31:5 break 5:3 32:1 146:1,6 **builds** 89:19 awardees 109:13 best 2:4 4:15 50:9 53:2 breakout 81:5 85:17 built 58:5 59:8 awarding 114:11 56:12,19 58:4 91:18 143:4 **bullet** 141:15 awards 39:6 40:5 104:19 117:10,10 breath 10:8 **bunch** 41:19 45:9 aware 15:18 52:5 99:11 122:21 126:18 **Brian** 1:18 7:9 9:10 134:10 121:6.15 141:3 better 5:19 11:19 12:10 73:22 burden 63:15 93:1 **awful** 37:5 13:22 31:12 45:20 **bridge** 123:1 bureau 2:15 3:4,10 12:2 61:7 63:14 83:15 **brief** 17:13 32:11 56:20,21 57:1 В 86:18 90:18 94:4.15 **briefing** 35:7 112:9 58:1 60:11 65:19 69:2 back 9:6 37:1 45:2 96:21 97:11 104:14 briefings 120:19 121:1 77:1 93:10 112:20 106:5 118:22 123:16 69:16 96:18 106:3 briefly 22:9 bureaucracy 46:17 108:4 113:5,22 131:13 132:12 141:18 **bring** 36:15 48:5 51:21 107:21 116:11 117:12 118:5,13 big 38:14 40:18 41:12 58:15 76:16 85:1 bureaucratic 115:5 127:7 128:18 133:18 42:7 48:19 51:22 100:9,10 110:2 bureaus 112:15,16,20 146:8 80:18 87:10,14 90:20 123:12,15 140:2 **Burham** 129:5 backend 110:22 114:15 97:19 141:2 business 2:4,17,19 3:8 114:22 bigger 104:1 bringing 45:22 79:13 11:20 15:12,14,15 88:15 127:6 135:6 32:13 51:5 58:8,17,22 background 45:19 biggest 18:18 50:10 59:15,21 60:4 61:4,9 59:1 96:10 **brings** 113:14 57:19 Brittany 55:11 **BAGLEY** 1:17 28:20 **bill** 37:15 41:15,17 62:5 63:13,16 66:1,18 broad 80:10 82:9 109:3 29:17 30:16 83:18 **billion** 35:14 36:4,5,7 67:15,19 68:11,12,19 90:6 95:7 36:19 136:15 broaden 26:15 30:14 68:20,22 69:5 71:1,15 **balance** 40:1 117:2 bills 44:20.22 broader 9:15 14:5 59:6 71:17 74:12 75:8,18 67:14 125:7 77:10,11,16 88:6 97:7 **birds** 134:1 balancing 118:10 **BALDWIN** 1:18 85:7 **bit** 8:11,14 11:13 22:15 **broadly** 12:20 28:22 100:6,12 101:19 86:15 101:1 26:13 29:9 48:11 79:22 110:5 128:13 133:2 57:19 67:14 74:3 83:7 brought 12:6 13:18 133:11 140:15 145:4 **bang** 50:10 83:20 87:13 133:15 39:4 78:14 92:5 95:9 **businesses** 16:3 36:2,8 bank 62:17 136:3 146:14 146:8 59:22 60:3,4,12,18,19 **barely** 53:14 **barrier** 101:16,17 black 138:4,12 145:1 **brown** 145:1 61:6 62:13,16,17,18 barriers 26:12 101:6,7 board 99:8 123:6,6 64:9 67:17,22 68:4,8 **buck** 50:10 **BARTHOLOMEUSZ Bob's** 72:19 **budget** 115:15,18,19 68:9,17 69:18 71:2,13

87:12 93:1 95:2 98:22 101:15 102:18 133:4 135:20,21 136:3 139:1 **busy** 8:1 C **C-Corps** 71:3 C-O-N-T-E-N-T-S 3:1 **cadre** 67:2 calendar 121:21 call 57:10.11 67:19.22 107:14,19 109:11 144:14 145:7 called 12:11 13:18 14:10 16:15 28:14 58:7,17 61:22 89:6 **calls** 13:9 109:2 115:2 candidates 46:9 capabilities 51:16 capacities 126:1 capacity 83:7,9 84:5,11 84:13,16,20 capital 1:16 3:20 61:8 62:10 64:1 65:12 68:5 84:14 113:10,14 133:3 134:17 136:7,9 136:13 137:8,13 138:1.3.13.18.21 139:8,16 140:2,7,14 **Capitol** 128:14 capture 4:17 card 92:22 cards 52:14 care 44:14,16 91:12 career 8:14 CareerBuilder 94:10 **careers** 97:19 Carolina 23:1 **carried** 125:21 case 15:5 16:11 17:7 18:8 24:20 140:12 cases 18:3 19:10 26:16 31:9,11 70:21 105:12 125:9 140:8 Cases' 89:7 **Casey** 16:9 cataloging 88:15 90:15 categories 139:5 caused 135:16 **CDFIs** 100:14 cease 71:17 **Census** 2:15 3:10 12:2 56:20,21 57:1 58:1 60:11 65:17,19 66:15 69:2 77:1,2 93:10,14 **Center** 1:15,16,18,20

71:14 72:3.5 75:20

2:9 3:19 centering 87:10 centers 12:11,11,14 13:5 21:9 51:5 67:3 100:12 137:12 central 124:12 century 135:15 certain 21:15 80:12 86:2 113:15 115:16 129:12 certainly 7:6 13:5 20:13 25:18 42:15 52:16 67:9 123:11 127:15 130:6 143:18 certification 18:1,2,6 cetera 99:9 119:10 **CHAD** 2:10 chain 30:15 challenge 49:6 80:15 96:11 97:19 144:19 **challenges** 79:20 84:8 chambers 99:20 Champions 89:6 change 12:13 65:1,3,4 99:6 109:4 120:5 135:16 changes 78:12 **channel** 110:6 channels 117:14 characteristics 58:21 **charge** 92:22 chargers 146:9 **chart** 128:12 129:8 **Chase** 2:8 16:8 30:1 94:17 cheaper 19:1 Chicagoland's 2:5 Chief 15:7 133:14 **chime** 78:19 chosen 82:1 cite 31:10 cities 126:18 136:20 **citizens** 105:13 City 1:16 Civilian 42:5 clarification 85:6 **classic** 24:18 26:20 classroom 17:20 clean 29:3 clear 60:9 65:22 93:22 107:17 128:11 clearly 31:20 82:6 91:3 clicker 11:1 client's 95:1 clientele 49:19 **clients** 49:22

close 35:2 45:7 56:22

70:12 71:5 145:20

closed 70:5 71:14 closely 94:9 **closer** 100:12 Closing 3:21 **clusters** 105:15 **co-** 53:8 **Co-Chair** 1:16,17 3:19 6:12 7:15,22 10:1,20 63:20 65:10 76:11 78:18 79:10 98:11 103:20 116:20 127:17 129:13 142:9 144:3 Co-Chairs 1:13 3:3 5:8 112:7 coaches 53:9 83:10 **coded** 71:18 coffee 5:3 **cohort** 73:11 **collaborate** 52:12 56:5 56:14 66:9 123:11 collaborated 74:15 123:4 collaborating 34:7 134:5 collaboration 51:8 61:21 collaborative 145:15 colleagues 8:19 collect 64:3 90:9 **collected** 58:20 92:4,12 collecting 76:21 **collection** 58:16 61:3 63:5,8 77:6 92:10 collections 58:7 collective 144:13 145:15 collects 77:2 college 2:4,7 18:4,5 53:8,17 colleges 20:4 53:10,11 54:13 99:17 Columbia 2:1,1 combined 89:9 combining 89:11 **come** 18:2 24:7 47:20 66:8 78:4 85:22 104:19 113:7 126:16 142:10 **coming** 6:15 49:2 66:3 86:10 93:21 122:17 123:20 136:8 142:19 comment 4:10,15 10:21 11:5 14:16 23:5 30:2 30:5 38:20 39:10 52:15 54:19 55:9 83:18 93:18 94:20 95:6,21 101:21 104:21 120:15 132:5

134:12 140:18 142:2 142:4,5 143:1 comments 104:18 139:10 141:22 142:12 Comments/Q&A 3:15 **commerce** 1:1,12 3:12 9:3 15:11 59:19 79:17 80:2,20 82:12,12 83:2 88:16 91:14 95:3 97:6 97:6 98:10 106:21 108:19 110:5 112:15 112:16 114:9 115:17 118:22 119:7,8 120:19 121:10 122:4 124:6 127:21 128:8 145:13 commercialization 37:13 41:18 42:5,9 44:10 108:8 114:13 commiserating 95:10 Commission 28:15 141:9 commissioned 127:20 commitment 117:5 commits 139:20.22 committee 45:2 100:20 128:21 committees 101:11 **common** 25:13 communicate 86:11 97:12 communities 14:8,13 25:6,7,10 54:2,4 83:5 83:7,17 84:1,7 86:3 98:21 105:14 106:10 106:11 113:14 117:22 140:5 **community** 2:3,7 18:4,5 20:3 53:7,9,11 54:7 54:12 63:16 67:9,15 75:19 77:16 89:20 99:17 100:14 109:16 118:6,10,11,14,16 123:16 126:17 128:18 128:19 129:11,15,22 139:15 **companies** 16:12,17 17:6 20:5 21:7,8,11 21:16,21 23:11,17,21 23:22 24:15,21 25:11 26:9,15,21 27:4,10 31:10 43:3,14,16,18 44:1 46:9 71:4 89:17 94:10 96:11 99:3 101:9 104:2 companies' 26:17

company 2:6 19:13

24:20 25:19,21 27:9

30:7 33:20 89:18,18 96:16 **compare** 91:1 121:17 **COMPETES** 101:18 competition 54:12 133:13 competitive 105:22 compile 80:10 complaints 59:1 complement 56:6 completely 24:14 complex 107:20 115:4 132:1 compliment 13:1 concentrated 137:2 concept 46:1 concern 87:9 concerned 53:16 135:18 **conclude** 145:22 concludes 145:19 conclusion 127:8 129:11 conduct 109:6 conducted 16:10 135:10 conference 29:22 98:14 99:11 confirmation 122:11 confirmed 122:9 **Congress** 32:13 36:22 48:21 50:4 82:14 115:20 Congressional 124:17 connection 12:22 connections 47:15 140:6 connotation 24:3 consensus 117:13 consequences 144:18 144:20 145:5 consider 20:6 80:17 91:21 114:12 considered 139:1 consistency 88:11 consortium 93:4,7 consortiums 20:5 constituents 90:20 Constitution 1:12 consult 112:19 consultations 123:13 consulting 67:21 contact 63:10 64:1 content 61:2,15 63:21 65:12 66:4 context 57:18 68:10 102:20 107:10 118:12 continual 100:5

continuation 89:7 continue 45:11 93:22 145:7 continued 143:19 continues 112:4 continuing 6:20 29:12 121:20 143:6 contract 19:13 control 76:1 controls 124:11 convene 6:1 convened 8:2 Convening 139:15 convenings 113:11 conversation 4:12 76:18 81:6 100:21 conversations 6:7 9:12 13:1 16:6 79:14 86:9 100:4 convoluted 22:15 **cooler** 49:14 **coolest** 49:12 coordinate 12:17 coordinated 11:17 coordinating 52:18 coordination 12:10 13:11 124:12 copies 136:11,12 copy 20:7 core 61:13 corner 51:2 55:21 Corp 42:9,21,22 corporate 26:22 Corporation 2:3 Correct 103:18 cost 17:14 18:13,17,18 18:18 19:2 33:19 101:3,7,13 102:3,4 costs 17:1 41:19 44:9 44:10,15 102:10,18 102:22 103:7 Council 1:5,12 3:11 22:6 76:12,15 80:3,4 86:7 105:4 106:8 119:4 121:5 125:2,14 132:2 139:18,21 councils 79:16 120:16 120:20 122:18 123:1 counties 84:3 countries 15:21 16:18 country 6:16 40:16 100:10 couple 4:20 8:11 20:18 22:12 41:6 49:2 76:19

88:13 92:16 125:1

127:18

course 13:11,15

cover 80:1 102:21

covered 5:4 69:10 84:3 covering 78:15 **CR** 38:5 crack 23:20 craft 128:19 Craig 2:14 3:2 6:18 7:12 10:6,10 32:6 33:9 76:19 90:11 93:21 127:2 134:22 136:10 142:20 Craig's 127:6 **create** 83:16 90:3 100:17 104:2 127:6 **creates** 83:13 creating 83:12 creation 58:11 60:22 100:16 creatively 56:19 credits 18:5 23:11 **critical** 21:19 68:22 **cross** 90:3 **Cross-14:10 Crowd** 141:7 Crystallizing 9:1 **Cummins** 96:17 **curious** 22:8 72:10 current 5:20 78:15 104:15 currently 103:13 142:14 **cut** 34:14 **CVS** 26:20,21 **cyber** 28:11,11,15,18 **cycle** 108:1 115:3 116:21 **cylinders** 105:3 106:9 **D.C** 1:13 4:5 30:1 106:3

120:4 135:3 137:19 144:9 **Dallas** 1:20,20 damage 102:16 **Dartmouth-Hitchcock** 21:9 24:21 data 12:4 17:5 32:13 58:1,2,5,6,15 59:4,5,8 59:13,21 61:19 62:21 62:22 63:3,5,14 64:3 65:2,7 66:11,12,15 67:3 68:16,18 69:1,7 69:8,11,15 70:4 71:13 72:10 73:9,16,19 74:2 74:21 75:3,22 77:6,10 77:17 79:13 80:2,5,10 81:3,14,17,20 82:10 85:9,10,11,20 87:19 88:12,16 89:10,16

90:3.4.10.13.18.19 91:10,11 92:4,5,9,12 92:13,14,22 93:8,10 94:11,14 95:10,11,13 95:17,19 98:12 116:19 123:6 137:20 database 58:8 68:22 74:13 93:15 dates 98:18 **Dave** 31:21 **David** 2:4,16 3:5 10:16 10:17 11:6 19:3 20:11 32:10 76:12 77:9 78:19 109:7,11 110:4 118:14 128:10,15 129:3 day 6:22 29:16 35:11 55:17 96:12 125:14 days 76:19 134:11 deal 24:9 38:14 45:7 47:2 death 71:18,19 **debt** 35:18 36:6,11 decades 92:17 137:3 **December** 63:9 104:9 decent 105:10 decide 21:17 95:16 decided 111:19 decision 21:16 61:20 65:2,8 111:18 113:6 declaring 124:15 deeper 9:13 20:13 32:2 55:21 **Defense** 33:12 124:19 define 85:18.20 defining 85:8 definitely 20:10 definition 17:16 18:11 degree 18:4 **degrees** 45:19 Delaware 73:1 **delay** 4:19 deliberate 118:15 deliberative 27:11 Deloitte 13:4 delve 11:22 20:2 demand 97:17 105:6 demographic 58:21 61:4 144:21 demonstrate 139:7 department 1:1,12 11:12,15 13:12 15:5 15:10,11 16:15 17:18 18:3 23:1 25:2 27:20 28:10 29:15 33:13 83:2 88:18 99:7 106:4 118:22 124:19 141:11 department's 29:8

Departments 22:21 depend 18:16 115:14 dependent 66:2 depending 4:11 111:16 depends 84:16 depicted 112:12 deploy 6:2 **Deputy** 2:12 3:17 142:13 description 59:14 design 92:3 111:3 Designated 2:14 3:2 desks 7:14 despite 10:7 destruction 58:11 detail 31:17 56:1 detailed 122:14 detect 72:14 determine 91:18 detour 107:20 116:10 **develop** 7:10 46:2,3,15 65:14 108:2 123:3 131:20 developed 92:21 93:4 developers 83:4 **developing** 9:1 36:13 development 1:3 2:13 3:18 11:11 12:15,18 13:8,17,19 48:10 51:1 80:13 100:11 133:2,6 142:16 development/ecosys... 83:4 devoted 128:2 **diagram** 111:8 dialing 4:9 difference 40:18 differences 18:16 different 23:16 35:13 39:7 58:18 73:12 83:20 84:4,11 85:4 88:15 89:2 91:13 92:1 104:10 108:22 110:17 112:16 114:14 116:17 126:14,18,19 differentiate 72:4,11 differs 62:10 difficult 39:1 difficulties 141:4 difficulty 12:12 digital 80:3 123:5,14 dimension 99:13 dinner 52:19 direct 14:18,18 80:19 85:12 directed 128:8 direction 104:17 113:20 128:9 143:9

Directive 42:2 44:12 directly 6:5 108:19 111:7 **Director** 3:7 34:18 57:2 disapproves 112:11 disclosure 101:10 discouraged 117:5 discuss 91:4 97:2 discussed 104:10 116:2 128:4,14 discussion 3:11 76:14 81:3 85:14 86:7 102:11 131:15 discussions 9:18 13:13 104:15 106:4 disparate 83:13 disproportionate 138:21 distinct 77:2 distribute 20:8 98:19 131:4 134:16 136:12 distribution 137:1 **District** 55:4,5 districts 39:7 dive 9:8.13 20:12 32:2 diverse 26:18 77:13 diversify 98:21 diversifying 27:19 diversity 27:1 dives 55:22 divide 146:11 doable 82:18 doc 46:19 docs 46:6 doctoral 98:6 document 7:16 112:9 124:22 125:15 **DoD** 13:12 **DOE** 48:4 doing 5:13,15 7:8,11,18 8:16 13:10 22:2 36:5 38:22 41:17 47:16 48:1,10 53:2 55:21 57:6 58:16 59:7 63:15 67:20 70:10 75:11 82:2 89:10 95:3 99:21 108:3 117:8 118:8,11 130:6,15 131:21 139:16 **DOL** 23:9 dollars 14:1 35:17 37:13 38:4 44:10 46:10 doubling 27:19 dovetailing 82:21 **Dr** 25:19

drafting 44:20

drill 61:7

drive 95:13 driven 61:20 106:8 driving 67:11 93:22 Duke 2:9 duplicity 49:10 duties 142:14 dwell 11:12 dynamics 59:11,21 60:17,19 66:18 68:19

Ε **E** 16:9 earlier 95:9 96:5 110:5 early 36:13 127:22 Eastern 2:3 53:7 easy 54:13 111:8 echo 144:4 economic 1:3 2:13 3:18 13:17,18 32:12 51:1 57:2 80:13 83:4 128:6 135:1,16 142:15 **economics** 2:16 3:5 10:17 11:8 30:10 32:10 economist 15:7 30:9 economy 59:22 61:1 69:11 80:3 93:6 123:5 123:14 135:22 143:12 **ecosystem** 46:16 49:5 50:5 89:13 ecosystems 100:8 105:21 **EDA** 13:15 14:15 113:12,16 140:2 **EDA's** 14:5 edification 66:19 **EDOs** 13:21 Education 106:5 educational 24:22 **effectively** 89:3 90:2 efficacy 92:6 efficiently 139:9 effort 14:11 15:5 29:13 29:14 59:7 105:11 113:11 118:17 139:18 efforts 29:19,19 104:20 131:20 133:22 eight 136:1 either 17:18 26:17 63:8 69:3 72:11 77:1 85:2 130:16 139:1 elected 8:19 election 121:9 electronic 136:12 **element** 81:19 elevate 80:11 105:11 123:11

emails 52:17 embodiment 132:10 **Emily** 2:7,17 3:16 54:18 79:4 134:14,16,20,22 139:14 140:6,19 141:20 **Emily's** 134:19 empathize 91:16 emphasis 94:18 **employee** 14:19 45:16 69:14 **employees** 67:18 98:1 101:9 **employer** 33:16 59:11 60:3,4 68:8 69:14 employers 34:11 employment 30:12 64:18 enable 95:18 113:5 **enacted** 141:8 encourage 144:10 ended 110:13 127:7 ends 17:22 energized 118:4 energy 1:19 13:12 96:5 124:20 127:1,3,6,16 engage 96:10,22 119:10 135:13 engaged 105:4 106:1 120:11 engaging 4:15 97:4 enhanced 92:14 enhancing 93:2 enlighten 123:19 **ensure** 11:19 entered 26:11 **enterprise** 1:21 2:2 57:20 enterprises 101:15 entities 13:22 40:6 entity 48:2 entrepreneur 1:20 91:8 91:9,12,17 131:12 entrepreneurial 110:12 133:6 entrepreneurs 6:3 57:6 57:11 66:16 72:3 86:22 87:11 91:22 101:4 135:9 136:17 136:19,21,22 137:21 138:11,11,12,14,15 138:16,17 139:12 140:8,9 entrepreneurs' 140:15 entrepreneurship 1:5 2:14,18 3:13 5:13 12:3 35:3,4 56:22

eligible 87:1

57:22 58:3 59:4,15,21

excluded 117:1 60:20 88:17 99:10 67:9 68:17 75:4 76:22 family 38:9,10 62:14 77:7 79:22 80:12 **Excuse** 133:19 88:5 108:4 110:11 111:17 81:13,21 82:11 83:16 exercise 118:8 far 29:3 45:5 66:22 116:16 118:19 126:4 88:4 96:1 125:5 exist 83:2 89:18 144:22 90:15 97:8 109:2 126:15 137:1 141:2 132:13 135:12 141:16 145:12 121:4 128:20 132:16 142:20 146:3 141:19 existed 114:6 fascinated 87:20 fit 55:1 107:14 116:7 Entrepreneurship/Q&A **existence** 14:4 120:20 fast 142:17 five 41:12 46:7 49:1 existing 88:16 94:3 fat 46:14 58:15,20 59:3 64:14 exists 89:5 113:13 **FDI** 14:8.14 68:6 90:21 134:4 envious 87:14 **epicenters** 83:12,16 exit 70:4 fear 12:21 137:7 142:17 flexibility 18:11 exits 58:12 82:3 feasibility 112:22 86:20 **Equity** 141:7 **expand** 24:8,9 **feature** 61:10 flexible 17:14 expectation 115:8 Eric 2:9,18 3:13 4:22 FEBRUARY 1:10 floor 7:20 10:11 106:22 107:5,7 expectations 107:5,12 **fed** 50:7 focus 5:17 14:5 46:19 129:9 131:18 146:9 131:19 federal 2:14 3:2,4 5:12 47:11 56:10 60:5 Eric's 86:9 105:1 **expecting** 122:1,12 14:1,19 22:16,21 50:9 61:18 86:4 104:12,16 123:20 128:11 expending 93:2 69:11 75:7 76:8,21 111:11 144:13,16 **ESA** 3:6 focused 13:14 37:12 expenditure 68:5 77:6,16 79:19 81:22 **especially** 10:10 47:5 **expense** 33:21 102:8 91:6 92:10,13,17 95:4 40:11 46:5 79:22 54:2 64:10 105:14 expensive 105:17 107:20 118:1 124:16 99:15 140:4 essentially 111:9 **experience** 16:13,13 federally 93:5,17 focusing 6:19 62:8 established 40:7 51:16 118:2 feedback 22:6 77:8 144:21 establishment 58:9 experiences 143:16 113:4 folks 34:8 36:11 41:13 69.4 experimental 34:5 feeds 118:7 49:22 63:22 70:20 establishments 92:19 feel 24:3 75:4 83:11 97:18 98:3 experiments 100:10 Esther 1:18 95:9.15 expertise 109:22 fees 102:5 113:14 104:1 **experts** 13:16 Fellow 132:9.20 follow 146:12 et 99:8 119:10 expire 41:20,22 female 138:6,17 **follow-** 71:8 **Europe** 98:5 **expires** 103:14 field 62:4 119:6 following 11:22 evaluate 75:7 **expiring** 79:1 103:13 **fight** 44:14,19 footprints 78:5 evaluated 75:14.14 explain 74:1 figuratively 7:4 force 30:13 67:11 evaluates 70:4 explicitly 26:16 27:17 figure 39:21 48:17 50:5 Ford 21:9 24:19.19 **evaluation** 17:2 88:1 68:19 50:9 53:3 56:15 70:21 forefront 108:15 evening 111:17 exploration 127:21 96:9 97:20,22 foreign 14:17,18 128:1 event 46:22 **exploring** 28:13 87:16 **figured** 96:19 forgetting 123:9 events 37:8,8 extended 41:11 files 74:21 form 114:8 **filled** 31:8 everybody 8:16 65:7 Extension 75:9 **formal** 121:7 extent 32:20 53:6,10 formally 12:11 119:16 69:13 filling 31:8 ex 72:16 72:10 98:13 final 34:2 54:17 145:8 119:18 exact 103:21 external 65:18 Finally 138:20 former 125:2 **exactly** 8:22 44:6 **extremely** 17:14 137:2 financial 23:8 forms 101:10 109:1 eyes 27:22 131:13 **example** 12:1 23:2 financing 35:18 36:11 110:17 formula 72:15 24:18 26:20 27:4 28:9 75:15 F 58:5 70:3 104:22 find 23:4 33:1 49:4 Fort 34:11 106:8 109:7 113:9 fabulous 6:15 117:4 120:4 136:9,17 forth 123:14,22 114:1 117:10 126:10 face 21:16 135:16 141:5 forward 9:22 23:15 27:3 **finding** 127:14 130:12 findings 17:12 139:10 126:15 facilities 46:12 29:12,20 32:20 48:18 **examples** 28:6 56:19 facing 17:1 101:15 finds 138:3 81:10,19 91:20 97:3 fine 130:20 131:3.6 85:22 92:16 96:21 fact 15:2 27:22 28:5 106:12 121:20 139:9 115:9,11 117:6 finished 63:5 143:18 56:17 108:18 111:22 126:12 127:18 found 15:22 26:14 finite 9:20 122:22 firm 61:7 62:9,10 68:20 excellent 85:17 129:3,4 **factor** 25:13 72:15 127:4 138:10 69:4 71:22 72:21 foundation 16:9,9 30:7 exceptionally 90:1 facts 5:21 firms 58:12 60:21 59:18 61:18 65:16 Exchange 141:9 fail 88:2,7 failed 142:17 founders 138:9 exchanges 126:17 105:21,22 106:15 four 18:12 30:3 32:14 excited 6:10 7:3 9:5 **fall** 51:6 136:14 138:2 139:3 fallen 135:22 first 10:16 15:4 16:10 49:1 53:12 66:20 139:20 **exciting** 35:8 56:13 familiar 105:8 29:21 30:22 44:12 90:21 134:4 136:19

helping 7:10 14:7 15:15 137:4.16 80:18 89:12.15 102:4 grow 101:6,19 **fourth** 136:8 106:13 117:13 119:5 **growing** 105:15 22:1 23:17 48:9 55:12 fractally 107:20 121:21 122:7 135:19 grown 74:22 62:6 92:3,4 106:14 give 4:20 23:15 32:14 frame 117:10 growth 16:18 21:20 **helps** 17:10 117:15 framework 9:9,16 86:7 34:22 37:3 66:14,19 36:12 40:2,3 48:15 **HERSKOWITZ** 2:1 frameworks 7:10,11 75:10 92:16 110:18 61:1 72:6,21 73:3,10 42:17 43:1,5,8,15,20 Francisco 106:2 110:21 114:18,20 73:13 43:22 44:4 52:7,10 **FREDERICK** 1:21 2:2 117:1 120:21 126:14 growth-accelerator 102:1 103:1,4,10,16 94:6 132:15 134:20 146:5 37:20 103:19 free 48:4 guess 60:14 88:10 given 76:20,22 111:22 heterogeneous 67:16 frequency 64:10,12 113:20 116:8 109:14 113:9 hey 88:5 114:10 124:15 friends 7:3 34:16 38:8,9 gives 50:10 94:14 guest 134:13 126:13 giving 14:6 62:7 135:7 high 26:3 35:10 36:12 **Guevara** 2:12 3:17 front 113:10 130:11 glad 25:1 34:6 57:9 142:11,20 143:2 64:9,12 72:6,20 73:2 135:10 global 2:9 31:1 73:10,13 101:13 frontier 92:9 94:2 Н globalization 135:17 105:7 full 13:22 139:21 goal 14:11 20:21 53:22 half 22:15,17 40:17 higher 30:19 145:11 **full-time** 47:18 goals 26:17,22 27:19 137:3 highest 136:15 fun 38:1 116:9 107:5 hands 20:22 79:8 105:8 highlight 5:7 9:8 28:5 fund 6:1 35:17 37:22 **GOLDIN** 1:22 37:4 38:17 104:18 **hanging** 76:10 40:3,6 42:12,20 53:20 gotten 8:2 67:8 99:8 happen 44:5 45:10,12 133:20 141:6 113:4 131:9 highlighted 34:7 55:2 113:22 118:1 fund-to-fund 35:15 **government** 5:12 15:16 happened 8:5 45:9 Hill 37:9 38:22 39:2 fundamental 102:16 30:8 33:16 38:9,15 125:14 128:14 122:11 126:20 Hint 1:22 funded 38:11 40:21 46:17 70:16 75:17 happening 98:20 42:8 55:4 65:18 74:14 76:21 81:22 82:15 hipper 49:14 114:22 74:15 77:4 93:6.17 90:17 92:10.17 94:4 **happens** 38:3 42:15 hired 51:3.18 100:11 95:4 102:7,9 103:6 93:14 106:22 116:8 hiring 26:15 27:1 93:13 **funders** 99:12 124:16 131:16 141:17 **Hispanic** 136:21 138:5 122:12 124:10 funding 38:16 42:21 144:16 happy 20:20 67:12 138:15 43:15 55:3 62:15 governmental 88:18 124:1 136:11 historic 8:3 65:15,17,21,21 71:10 governments 22:11 hard 10:12 35:7 52:2 historical 119:20 103:6 137:4,8 138:9 56:19 132:13 56:12 68:9 71:16 72:8 historically 144:22 138:19 139:4,13 grab 5:3 89:3 92:12 harder 45:1 47:1,6 52:3 **hit** 5:3 47:14 105:3 68:11,13 135:19 140:1,11 141:7 146:7 106:9 **funds** 102:21 103:9 grabbing 92:22 hardest 23:19 hits 86:1 funny 56:11 124:10 graduate 74:16 93:12 head 23:4 32:21 **hitting** 40:12 further 127:21 128:9 grant 14:5,6 102:15 Headhunter 94:10 hoc 38:15 furthest 6:14 113:13,17 133:1 heads 112:20 122:10 holding 7:12 future 2:5 5:20 16:1 **grantees** 109:13 Health 25:2 home 137:10 hear 5:9,12,22 10:6 grants 54:6 96:2 hope 30:4 61:11 63:11 G 76:8,14 90:13 130:8 104:7 granular 63:14 Gannett 2:6 graphic 67:7 heard 5:10 21:10 78:7 hopefully 50:4 56:14 gray 130:21 63:5 75:21 104:13 gaps 78:16 81:17 82:4 85:8 107:2 126:15 greater 14:12 88:11 128:3 116:10 109:17 137:22 141:16 hoping 17:4 41:2 64:6 garner 84:14 green 41:4 hearing 100:4 139:10 gender 137:22 Greentown 2:7 **HEATHER** 1:19 **hours** 6:11 49:19 122:2 general 12:4 59:16 **GRIFFITH** 2:7 House 45:6 106:5 heightened 8:11 household 59:11 69:3,6 103:5 ground 7:1 89:16 help 13:21 21:17 23:11 **HRC** 34:12 group 6:20 51:3,6 70:5 36:1,2 43:3 46:9 generally 68:11 72:17 76:1 124:15 56:15 65:17 77:22 hub 136:20 generate 119:15 generous 16:7 127:5,16 138:9 78:8 79:5 83:3 86:11 **hubs** 140:5 huge 14:4 51:10 82:16 geographic 137:1 139:15 87:2,4,17 98:10 George 2:6 **group's** 66:19 118:17 139:11 131:16 groups 40:12 56:16 hurdle 41:12 helped 18:22 65:14 **German** 25:21 **getting** 9:2,5 31:14 68:13 99:14 107:13 86:18 hurt 42:15 39:20 40:18 43:10 136:17 139:7 141:5 **Helper** 15:7 45:12 46:21 67:11 146:1.12 helpful 119:17 120:12

I
. 40 0 04
I- 42:8,21
I-Corp 42:18,19,20
43:10
i.e 144:20
idea 27:22 78:4 87:21
106:21 109:15 126:16
ideas 9:1,13 78:7 79:11
117:3,13 120:2 125:4
126:4 139:11 143:8
143:15 144:12 145:16
identified 31:20 112:15
112:16
identify 70:5 72:9
identifying 90:1
IDEO 1:19
II 42:2 44:12
III 1:20
illness 34:12
illustration 17:8
imagine 81:11,18
immigrating 78:1
impact 25:6 36:14 93:5
101:17
impacts 59:22 76:2
80:13
implement 113:13,16
114:10 116:4 124:6
implementation 112:17
113:18 116:6
implemented 6:7 45:13
111:1 114:5,15,19
124:18
implementing 113:2
importance 62:9,12
98:8 105:12
important 62:15,16
82:16 90:1 91:13,20
92:6 98:5 139:12
143:10 145:17
importantly 7:8 60:10
64:17
improve 114:12 119:1
inadvertently 27:21
inauguration 121:9
inbound 121:13
incarnations 8:6
incentives 23:8,15
incentivize 23:11 97:21
incentivizing 97:1
include 12:9 68:3
134:18
included 89:2
includes 18:4 60:2
93:11 125:15,17
including 59:7 137:9
inclusion 84:8
incorporated 73:1
increase 44:22 45:3

115:15 122:12 133:3 141:19 increasing 37:12 41:17 incredibly 101:9 143:10 independently 124:19 Indiana 23:14 **indicate** 135:19 indicators 85:19 individual 69:6 107:4 120:2 130:15 138:8 individually 126:1 individuals 128:17 industries 30:19 136:22 industry 18:6 79:9 80:6 94:13 96:9,10,22 97:5 97:19,22 99:16 105:14 136:18 industry's 20:22 inflection 29:5,5 influence 85:10 118:6 **inform** 5:19 90:19 104:14 106:6 119:1 informally 119:16 information 16:21 20:21 31:2 37:5 58:11 58:21 59:10 61:4 63:10 68:2 70:12.22 75:17 89:3,11,21 92:11 98:14 99:22 109:12 110:3 115:18 120:5 121:3 131:4 139:1 informative 144:6 informed 63:2 informs 75:4 infrastructure 128:5 **Infusing** 105:20 initial 9:11 22:5 81:3 107:14 initiated 106:4 initiative 32:13 77:11 90:18 105:5 106:8 **initiatives** 9:1,14 11:11 11:17 78:16 133:7 141:14,17 InnovateHER 133:12 **innovation** 1:5,15,20 2:10,14,18 3:7,8,13 3:20 5:13 34:17,19,20 35:1,4 51:11 55:15 61:17 76:22 77:3,6 79:21 80:12 81:13,21 82:10 83:17 90:8 96:2 100:6 105:20 108:8 125:5,13 127:20 128:2 132:13,22

innovative 34:9 61:10 101:9 110:12 **innovators** 6:3 89:13 101:4 input 65:12 73:18 **inputs** 143:8 inquiries 95:4 **inside** 91:14 insight 5:19 72:18 insights 58:14 62:19 134:20 insignificant 83:8 instance 67:2 70:15 71:19 77:9 84:6,14 87:13 institutions 24:22 insurance 69:9 integrate 92:13 integrating 94:4 132:12 integration 13:17 100:21 Integrators 13:19 Intel 1:18 intellectual 101:18 102:12 interagency 9:9 interest 28:11 31:21 41:7 47:1 102:16 122:19 **interested** 9:5 44:17 47:17 48:7 52:22 70:20 80:8 85:7 86:17 87:15 130:6 135:11 interesting 60:18 66:3 71:8 73:7 77:15 79:14 102:12 116:22 129:8 interests 120:2 129:3 interim 7:18 115:2 interlocking 59:12 intermediaries 16:12 20:4 99:17 **internal** 117:18 internally 90:19 105:18 122:4 interpret 92:5 intersect 78:13 introduce 132:5 Introduction 3:2,14 invention 101:10 inventory 82:3 invest 36:7 96:18 **invested** 136:14 investigation 87:22 investigators 93:12 investing 100:8 investment 3:8 14:8,10 14:18,18 21:18 34:20 36:3 50:9 97:15

132:22 137:14,18 **Investments** 14:14 **involve** 112:13 involved 9:18 36:18 93:16 99:14 112:17 129:15 involvement 22:10 24:16 120:8 involves 17:20 **IPR** 102:13,14 irritating 46:16 IRS 58:6 issue 79:19 103:21,22 104:1 127:22 128:7,8 129:6 140:22 issues 27:8 78:22 132:1 135:14 it'll 82:18 items 86:12 iteration 116:16 133:12 **ITIF** 125:1 Ivy 2:7

Japanese 23:20,22 99:3 **Jarmin** 2:15 3:9 57:1,8 57:15 64:5 65:13 66:21 70:8,14 71:12 72:7,13 73:8 74:5,12 75:13 76:6 Jen 55:12 Jen's 47:11 Jennifer 45:17 52:12,14 **job** 27:14 31:8 40:1,2 58:11,11 60:22 69:10 69:10,15 100:16,16 Job-Creating 14:10 **jobs** 28:1,5,12,18 59:10 135:15 **Joe** 24:11 77:21 87:9 **John** 2:19 3:7 34:18,20 35:5 38:13 50:12,14 54:18 55:14 56:18 76:12 132:7,21 **JOHNSON** 2:2 33:9,12 34:3,10 77:20 joining 4:8 34:21 57:4 joint 15:5 140:1 jointly 65:18 JOSEPH 2:3 Journal 67:6 **Joyce** 16:8 JP 16:8 94:17 **JPMorgan** 2:8 30:1

Κ

jump 55:6

135:12

Innovation/Q&A 3:7

KAPP 2:3 24:10,12 25:4 53:6 82:21 **KARA** 1:22 **Kauffman** 59:18 62:6 65:11,13 70:10 74:4 75:3 89:12 **keep** 108:14,15 110:7 115:3 116:3 123:7 141:21 keeping 114:16 118:10 **KENNEY** 2:4 72:1,8 73:5 124:3 Kentucky 2:2 25:21,21 26:3 kept 127:6 **key** 12:15 15:16,17,19 17:12 70:6 104:12 140:2 kinds 16:2 34:12 37:1 78:5 96:20 **known** 16:3 knows 88:10

L

Knox 34:11

labor 16:15 17:18 18:3 20:4 22:21 23:1 25:14 27:20 29:15 30:11,12 30:13 99:5,7,18 106:5 **Labs** 2:7 laid 27:21 29:14 31:4 **Langdon** 2:16 3:5 10:16 10:19 11:2,6,6 14:17 14:22 19:5,8,17 20:1 20:10,16,18 22:12,22 23:6 24:5,13,18 25:8 26:13 27:9,17 29:4,18 30:3,6,21 32:16,19 33:1,6 77:10 110:4 language 92:1 **laptops** 146:9 large 60:2 83:14 101:8 largely 18:17 larger 7:2 largest 33:21 35:15 136:20 late 15:3 **latest** 136:6 Laughter 14:21 47:4 54:15 111:5 **lawyer** 108:6 **layout** 28:16 **LBD** 59:7 74:9,11 75:7 lead 55:11 82:2 131:19 leaders 5:14 16:15 121:12 leadership 13:15

139:16 **leads** 5:10 **Lean** 133:8 learn 8:16 70:1,7 131:13,21 134:5 144:11 learned 63:2 120:1 140:13 **learning** 19:11 47:9 48:11 98:15 learnings 26:9 88:20 106:3 leave 22:3 35:7 leaving 137:6 left 78:20 118:3 legislation 23:14 37:9 37:11 41:8 128:20 **legislative** 113:1 114:3 130:1 legitimate 67:19 legs 29:20 146:4 **LEHD** 69:1,7 93:15 **lending** 136:3 length 21:6 33:22 97:2 **lens** 145:8 let's 66:8 90:15 105:18 131:21 letter 110:15 112:7 level 22:9,18 25:15 26:4 30:7,7,8 35:10 38:10 53:14 83:22 89:16 118:1 136:16 140:3 levels 89:11 136:4 leverage 5:18 48:12 53:4.18 leveraging 51:15 levers 5:22 **Library** 1:12 48:20 50:4 life 60:21 108:1 115:3 116:21 **lift** 38:14 82:16,16 lifted 125:19 **light** 38:14 41:4 76:16 likelihood 138:8.10 line 4:9 38:5 130:14 142:2,3 145:20 Liner 2:17 3:16 134:14 134:21,22 141:1 lines 45:16 link 75:22 linked 58:9 62:21 69:16 list 42:18 123:9,20 literally 7:4 131:17 little 4:19 8:14 11:12 22:15 26:13 28:22 29:9 36:15 45:5 48:11 54:22 57:19 61:7

67:14,21 74:3 77:3

133:15 **live** 144:9 **LLC** 2:4 loan 35:11,14 loans 62:17 **local** 25:15 50:6,7 95:3 140:3 locally 105:22 130:7 located 53:9 locations 89:14 126:19 logistics 5:5 long 14:9 18:12 30:11 54:8 100:1 115:4 131:15 long-31:6 82:5 long-term 7:7 74:6 longer 70:18 121:9 longitudinal 58:8 59:9 59:10 64:3 68:21 74:12 look 5:6 7:7 9:16 12:8 39:5 68:7,20 73:9,12 76:1 77:5 78:17 83:6 90:22 92:15 101:3 128:6 137:22 138:7 139:9 144:14 looked 18:21 21:3 25:5 26:21 30:22,22 53:7 53:14 looking 13:21 27:4 34:11 53:11,15 56:4 61:6,7,8 80:5 82:22 83:14 87:21 88:17 95:2 100:3 108:10 109:16 123:12,20 143:18 looks 17:9 26:19 64:16 86:13 136:14 Los 137:5 **lot** 8:2 17:4,10 18:7 21:5,14 26:16 27:6 30:8 31:21 35:6 36:10 37:5,10 39:2,3,14 40:5,5,15 41:13 45:1 45:2 46:6,16,22 47:6 47:14 48:5 49:6 52:1 52:10,11 55:3 56:6 64:8 67:10 69:20 72:2 79:5 87:11 94:7 96:1 96:4,5 99:8 100:8 102:3 107:4 108:17 108:22 110:17,22 114:14 121:2 124:11 126:5 127:2 129:2 130:9 134:8 142:18 143:15,17

83:20 104:6 112:5

98:20 love 20:9,22 31:2 47:17 87:22 88:10 100:19 low 18:13 30:12,13 lucky 134:2 luggage 146:8 LYNCH 2:5

M

M&A 71:20 macro 89:11 macro- 89:4 magnifying 49:21 mailing 68:3 main 15:1 47:11 51:18 72:4 95:8 133:8 major 60:22 majority 105:10 124:9 makers 135:13 141:3 making 4:14 15:15 39:3 61:20 65:2,8 90:13 92:2 126:8 130:10 male 138:16 managed 36:19,20 **Management** 61:19,22 115:19 132:9 **Manager** 132:20 managers 35:16,18 109:15 mandated 82:14 manner 131:20 manufacturing 12:1,10 13:4 28:7 29:16 36:10 62:2 75:8 79:3 123:7 123:13 143:13 map 39:4,12,13 **maps** 39:9 marginalized 145:1 MARIBEL 2:6 Marie 2:5 104:20 106:16 121:3 market 26:19 30:11 86:18 **marketing** 44:9,16 markets 139:17 140:13 Massachusetts 23:3 match 84:19 matching 35:17 material 112:8 125:12 materials 100:3 matter 78:21 146:15 matured 75:1 maximum 33:22 **maze** 146:14 mean 23:22 39:13 42:21 43:9 44:19 46:7 51:22 52:17 53:15 55:1 66:22 71:1,12

lots 58:19 69:22 95:4

leading 127:8 133:22

74:5 82:17 91:11 94:11 101:8 102:2 103:5 117:9 129:3,17 130:19 143:7 meaning 22:20 128:17 137:18 meaningful 131:20 meanings 57:16 means 18:8 38:21 40:12 70:17 72:12 128:18 meant 59:19 68:20 measurable 85:8,14 measure 85:18 93:5 **Measures** 127:19 mechanisms 29:11 median 101:14 medical 2:9 21:9 98:7 meet 49:22 meeting 1:7 3:21 4:5,6 104:10 118:3 121:19 126:15 143:4 meetings 115:1 126:21 Melissa 1:13,15 3:3,19 6:11 7:22 9:4,10,14 10:15 76:19 118:18 119:14 144:1 Member's 125:2 members 4:4,7,9 35:8 106:2 109:9 125:22 142:1.10 144:5 145:21 memo 111:1,4 mention 67:13 119:22 **mentioned** 6:18 9:10 22:9 28:20,21 42:18 93:15 94:8 120:16 123:5 132:7 134:22 136:10 **mentor** 51:16 mentorship 17:21 140:9 **MEP** 75:14 merging 104:19 message 110:2 messaging 97:9 met 1:12 methodology 6:6 75:11 metro 137:4 mic 4:19 100:1 **Michael** 129:4 **Michigan** 93:4,13 micro 89:15 micro-data 67:3 micro-level 89:4 microphone 4:16 middle 40:16 125:6 **MIKE** 2:5

milestone 122:12 milestones 8:14,15 million 18:15 38:4,7,8 40:22,22 41:1,2 42:4 millions 67:18 mills 46:3 mind 30:13 108:16 110:7 114:16 115:3 116:3 mindful 144:20 minorities 40:13 minutes 22:5 23:20 50:13 57:17 146:6 misperceptions 17:11 missed 144:17 **mission** 12:16 Mississippi 137:11 mistake 20:1 MIT 46:22 47:5 72:17 model 15:22 20:6 47:17 53:1 63:12 66:2 89:22 modeled 16:16 29:15 models 12:19 17:13 28:13 99:1 **module** 63:20 64:2 modules 61:14 64:7 65:22 66:5 moment 10:2 momentum 34:14 117:16 money 32:12 36:19 40:8,10 41:3 42:11 44:13 47:22 48:18 50:7.7 53:21 99:8 monitor 36:21 month 92:18 monthly 92:17 months 11:13 33:14,22 34:2 48:22 49:1 79:15 107:3 125:1 132:19 133:21 **MOPS** 65:11,15 Morgan 16:8 94:17 move 6:22 9:22 27:2 85:11 86:8 131:17 moved 132:22 133:5,13 moving 8:4 29:20 36:11 91:19 106:12 141:21 multi-colored 7:15 multiple 49:9

N

N.W 1:12 NACIE 1:5 4:4 8:4,6 37:10 56:15 77:14 78:21 80:9 81:8 82:9 103:21 104:11 106:2 108:13 110:11 111:13

127:11 128:12,13,16 129:1,11 131:1,8,9 132:12 135:11 139:18 142:10 145:21 Nagesh 55:20 name 6:2 12:13 72:19 75:19 80:11 134:22 146:9 names 58:18 93:11 **national** 1:5 13:20 29:13,16,22 61:17 65:16 99:11 126:22 nature 8:3 114:3 **NDA** 45:14 near- 6:5,7 near-term 7:7 86:11,12 neat 132:9,17 **necessarily** 28:4 72:14 necessary 140:7 need 5:2 8:22 12:16 27:15 40:8 49:9 63:7 84:19 89:1 90:2 91:20 95:16 104:15 124:18 130:12.13 143:7 145:10 needs 11:20 12:21 13:1 13:2 30:14 58:2 78:13 83:9 136:9 **NEMETH** 2:5 87:7 102:20 103:2.8.12.18 **Network** 89:6 90:8 networks 49:20 78:5 110:1 117:12 140:6 never 60:9 72:14 **new** 1:21 2:2 9:2,3 13:9 21:21 39:22 45:16 48:2 61:5 69:20 71:21 88:5 90:17 92:9 94:2 94:11,18 104:14,17 106:13,13 108:8 120:19 121:4,6,11,13 122:3 132:6 135:20 135:21 137:5 newbies 123:19 **niche** 21:13 **NIH** 42:3 43:17 45:17 48:8 nine 124:11 **NIST** 124:8 **NNMI** 12:11 **NOAA** 124:8 **nominee** 122:8 non-68:7 non-employer 60:3

66:17 67:22 68:4,9,12

118:9,10,15 119:9

125:2,11,17,19,22

non-German 26:1 Non-Hispanic 138:14 non-leverage 36:6 non-tech 136:22 normal 8:8 normally 40:9 50:1 Nortec 84:2 note 4:13 132:4 noted 29:18 136:3 **notice** 34:15 noticed 5:1 **NSF** 42:21 77:4 number 23:10 28:17 52:8 58:16 69:19 77:1 80:4 99:13 106:4 **numbers** 40:2 96:19 numerical 28:16 nut 23:19

0 **Obama** 105:11 objective 82:2 **objectives** 85:8,15 86:12 observations 100:2 observe 65:6 68:1 69:10,13,13,14 observing 70:11 **obtain** 64:15 **obviously** 46:12 59:4 66:22 85:4 occupation 18:1 19:12 occupations 21:15 25:16 27:5 October 8:19 **odd** 7:19 **OED** 50:22 off-hand 98:18 off-line 76:19 offer 44:1 104:22 office 2:14,18 3:5,7,13 11:7 13:20 34:19 35:10 49:19 51:1 82:8 102:5 115:19 132:21 133:1,5,10 Officer 133:14 offices 13:21 22:16 55:4,6 134:4 official 2:15 3:3 4:5 118:16,21 128:13,22 129:8 130:4 145:19 officially 130:13,18 offset 103:7 **Ohio** 87:13 **OIE** 10:2 81:7,20 82:8 82:13 112:3 132:12 133:16

68:18

OII 35:10 133:18

old 138:3 129:8 130:4 136:19 pass 5:8 7:21 52:17 **pivot** 128:15 older 19:10 60:19 62:17 over-sampled 60:11 **passed** 41:20 **Pizza** 72:19 patent 37:14 41:18 44:9 71:22 overall 15:10 137:13 **place** 29:11 49:12,15 **OMB** 60:8 overcome 17:10 44:15 102:4,5,22 50:9 72:19 83:9 84:12 on-the-job 17:21 overlook 96:3 103:16 **placed** 23:10 onboarding 122:13 oversee 22:16 patents 101:3,7 102:2,3 places 49:8,22 52:5 once 39:17 40:1 64:2 oversight 32:11 35:22 102:6,17 104:3 82:11,12 65:4 110:21 113:4 path 111:9 plan 81:8 82:5 36:21 planned 6:11 122:11 overwhelming 124:9 pathways 34:9 ones 21:22 36:21 40:7 owned 23:21,22 138:4 patience 120:7 **planning** 2:5 81:18 52:3 73:10,12 123:4 **patient** 134:9 138:5,6 **plant** 81:2 126:5 owners 58:17,22 61:5 pay 33:16 47:22 102:6 planted 104:8 ongoing 14:9 104:15 70:22 plate 142:19 **paying** 70:15 play 50:8 117:21 onus 13:16 Ownership 133:11 payroll 70:15 open 27:22 63:17 90:18 penetrated 106:12 played 10:12 99:19 owns 101:18,19 142:2 Pennsylvania 83:22 **please** 4:15 5:3 93:20 opening 94:7 people 7:17 16:19 134:9 plight 91:17 operate 16:22 P-R-O-C-E-E-D-I-N-G-S 19:10 26:11 27:7 40:4 41:9 47:20 49:16 pockets 82:10 operated 116:15,17 4:1 operating 89:14 115:11 51:15 52:4 53:2 58:19 **p.m** 1:13 4:2 146:16 **podium** 119:19 133:14 pace 4:11 59:3 65:10 66:3,14 **point** 12:6 21:16 29:5,6 operation 71:17 69:22 74:19 86:18 package 60:9 112:6 30:10 33:9 34:6 54:16 operations 26:1 87:17 92:2 93:11,14 81:12 85:6 90:14 92:8 packed 5:1 6:19 **OPM** 69:12 93:16 105:8 109:22 93:22 94:1 95:8 page 41:16 111:4 110:9 127:4 130:11 102:11 111:18 114:17 opportunities 14:2 papers 37:11 76:16 80:17 84:10 parentheses 63:22 145:2 116:19.22 119:14 97:11 100:18 104:11 65:11 people's 27:22 122:2 128:10.15 percent 42:7 44:13 45:6 104:19 122:19 123:12 park 104:16 133:18 134:13 45:6 88:2 135:22 **points** 30:14 131:18 opportunity 12:17 part 12:15 16:14 19:12 20:13 51:7 77:5,19 32:10 34:4 40:6 59:6 136:1 137:6,7,16 **poised** 72:5 79:5 80:9 84:8.18 67:14 71:20,21 73:18 138:4,4,5,12,15,16,22 **poke** 101:2 94:8 95:20 96:22 97:8 85:13 103:20,22 139:3 policies 6:2 103:17 106:19 134:8 **PEREZ** 2:6 109:20 121:16 125:11 **policy** 3:16 8:9 11:7 135:4 140:1 125:16 127:11 128:2 perfect 46:8 15:15 28:10 37:1 **opposed** 24:1 73:10 138:8 performance 68:20 79:19 99:13,14 109:3 83:12 partially 79:17 performing 142:14 115:22,22 116:4 order 42:1 PARTICIPANT 19:20 period 4:10 64:4,6 122:3 125:15 127:13 ordered 128:5 participants 109:12 121:8 133:22 134:15 135:1 participated 121:1 person 47:19 51:3,19 135:13,14 139:11 Oregon 2:4 organically 126:21 participation 30:13 122:6 142:21 141:3.6 political 121:11,13 127:10 personal 8:15 62:13 122:1 organization 89:5 91:7 particular 75:9 80:15 politicals 122:13 personnel 56:13 **Organizational** 62:1 123:4 **perspective** 35:1 51:12 politics 8:9 particularly 6:13 12:3 70:17 117:11 120:21 pool 26:15 93:8 organizations 16:8 65:19 126:2 86:17 95:2 117:4 123:17 124:10 **pooling** 93:10 organizer 129:12 parties 51:21 89:2 **pervades** 143:11 **popped** 21:6 original 74:9 126:4 119:14 **Phase** 42:2,3 44:12 popularize 79:8 partly 99:6 48:7 populations 106:13 originally 74:6 **Orin** 2:1 101:22 partners 29:2 144:15 **phones** 146:8 145:1 outcomes 95:14 114:13 portion 25:5 101:12 145:13 **phrase** 78:3 picked 125:10 145:20 124:2 partnership 12:2 20:6 output 137:14,18 59:18 74:3 75:9 89:8 **picture** 64:16 position 39:1 98:6,7 piece 13:8 14:7 22:18 144:8 outputs 69:21 74:19 89:22 outreach 42:10 47:13 22:19 23:7 80:9 91:20 positive 66:22 partnerships 7:6 18:21 109:19 117:12 118:7 97:5 120:13 19:6,15,17,22 98:12 possibility 144:13 123:21 130:11 119:15 **pilot** 41:19 42:6 possible 44:7 55:7 outside 50:7 82:12 pipeline 105:20 98:13 122:16 123:21 **parts** 13:9 86:20 87:6 88:3 94:3 party 46:18 117:5 Pittsburgh 1:17 post 46:6,19

post- 102:14 posting 67:7 potential 76:20 77:18 potentially 83:3,12,14 power 108:14,17 powerful 106:9 117:19 **PRA** 60:9 practical 126:14 130:3 practice 53:3 practices 61:19 62:1 126:19 practitioner 99:15 pragmatic 127:12 pre-26:2 pre-crisis 136:4 pre-reading 134:18 predicting 72:16 predictions 73:17 prepare 81:7 prescription 9:20 present 1:14 2:12 112:10 presentation 35:3 73:6 86:10 96:6 105:1 135:8 Presentation/Q&A 3:13 presentations 3:4 9:9 76:13 presenter 32:5 presenters 101:2 President 115:20 Presidential 132:9,20 presiding 1:13 press 67:8 pressure 132:14 pretty 26:5 27:3 59:14 64:15 67:6 115:4 132:16 preview 11:21 13:6 previous 136:2 primarily 77:4 principle 93:12 principles 108:4 **printed** 136:11 **prior** 15:7 16:13 priorities 12:8 15:16 145:11 prioritization 27:14 **priority** 12:9 15:19,20 Pritzker 105:4 106:1 private 74:3 89:21 92:12 93:3 141:13,18 privilege 10:5 **prize** 59:8 **probably** 6:14 21:10 44:21 45:13 46:13 48:19 54:22 58:4

72:20 111:22 112:19 123:8 134:4 **problem** 39:17 70:11 131:10 problems 52:1 process 3:12 29:1 81:9 81:15,19 82:6 86:13 88:14 101:12 102:13 105:2 107:15 115:17 117:19 118:20 119:13 121:7 131:9,14 134:7 145:15 processes 87:4 114:7 129:21 produce 73:19 74:20 92:14 94:4 producing 74:19 **products** 69:21 73:19 professional 87:2 139:2 professionally 27:7 profiles 95:3 **profits** 128:1 program 5:9 6:4 16:14 16:16 17:15,17 18:17 21:13 26:3,7 33:13,18 34:5 35:13,14,15,21 36:8,16,17,19 37:2,20 37:20 38:15 39:3 40:2 40:3,21 41:22 42:3,6 42:8,9,18,19 43:4 44:1 45:18 46:7 48:4 48:8,19 59:11 74:2 76:2 78:12 79:6 105:9 106:6 113:13.17 114:13 115:16 119:2 135:1 141:10 programmatic 112:21 programs 11:19 16:22

135:1 141:10 programmatic 112:21 programs 11:19 16:22 18:11,21,22 19:20 23:12 27:2,5 30:15 31:12 35:12 36:14 37:19 41:19 48:2 49:9 57:3 59:13 72:2 75:7 77:2 83:15 86:19 97:21 98:4 99:5,20 109:4,14 114:10 124:7,9 133:1 progressing 31:13 114:21 progression 17:22 project 79:3 92:7 projects 42:20 74:8,17 74:21 75:15 93:13

promote 16:17 79:5

144:12

81:20 100:15 125:4

promoting 15:21 130:7

130:17 promotions 31:14 pronouncing 12:12 property 101:19 102:12 proportion 137:13 proposal 46:18 48:9 97:2 119:8 130:9 **proposals** 78:11 107:10 110:16 141:6 proposes 119:9 proposition 101:5 prosecute 104:3 **prove** 14:19 proven 15:21 provide 11:21 14:12 35:17 37:21 47:19 48:3 59:13,20 62:20 63:14 101:5 108:13 **provided** 17:8 31:11,19 65:15 77:7 providing 15:14 108:18 108:20 110:20 114:1 **provisions** 102:14,15 **public** 3:15 4:6,7,9,10 74:3,20 89:21 132:5 134:12 141:22 142:1 145:19 **publicly** 71:4 72:9 100:11 124:14 published 15:3 136:7 **pull** 54:3 89:20 90:2 105:16 **pulse** 123:8 purchased 71:15,22 **purpose** 95:12 purposes 90:5 **pursue** 104:3 111:19 **push** 37:1 45:2 48:18 95:18 **pushed** 99:7 put 23:13 37:15 66:4 97:3 107:10 110:11 111:3 133:7 144:5 145:8 **puts** 39:1 putting 23:14 66:7 82:4 99:19

Q quality 81:16 82:4 93:2 100:16 140:15 quantitative 17:5 quarter 18:14 quarterly 4:5 115:1 question 19:4,14 20:2 23:17 25:8 30:21 32:7 49:10 50:11 65:7 71:8 72:1 73:21 86:6 96:15

107:8 118:18 119:21 120:15 121:16 130:3 questions 20:14 21:2 22:5 31:21 50:13 54:17 61:12,13 63:18 63:21 64:10 65:14 66:4,13 91:6,8,18 96:4 107:4 116:11 134:9 quick 19:3 32:1,5,7,8 38:13 48:15 87:21 90:7 104:22 105:7 116:10 132:15 139:21 quicker 19:1 quickly 9:8 26:5 31:14 55:7 95:22 quite 27:11 55:1 57:21 83:7 114:18 131:17 quote 108:7

R **R&D** 36:2 37:13 61:16 93.6 racial 137:22 radar 121:18 raise 38:8 41:3 **raised** 77:9 **raises** 92:8 rally 119:14 139:16 ran 43:18 45:18 127:5 134:3 range 14:1 rare 62:17 rate 30:12 60:2 rates 60:7 ratio 116:13 137:14,17 137:19 re-approved 43:6 re-authorized 41:8,9 re-orient 104:16 reaching 31:14 47:10 reaction 99:3 read 20:9 111:6 115:10 readiness 140:16 ready 9:2 10:18 14:8,13 140:10 real 9:8 32:5,8 35:10 38:13 48:15 49:11 95:22 105:7 111:17 140:10,16

realistic 104:9

Reamer 2:6 32:6,9,18

92:8 94:1 116:12

reason 12:13 15:1

32:22 33:3,8 66:10

75:6 76:18 81:4 85:5

123:17 126:11 129:10

129:17 135:5 140:19

27:18 51:18 109:20 regulations 62:5 reasonably 115:4 regulatory 22:17 reasons 8:20 45:21 **REICHERT** 2:7 22:8 REBECCA 1:17 107:7 receipts 64:19 reinvent 90:16 receive 14:14 138:3,9 related 64:22 135:15 relationship 56:10 138:13,18 received 107:4 137:8 63:22 74:6 75:2 92:21 receives 138:20 relationships 120:8 receiving 121:10 relatively 10:5 26:5 recognize 89:1 144:21 released 11:13 13:4 recognizing 116:20 137:20 recommend 106:20 relevancy 91:9 109:5 116:5 relevant 6:5 86:10 recommendation 3:12 106:14 140:7 81:6 106:18 108:1 reliable 81:20 110:11 111:10 112:6 remain 21:2 105:22 112:18 113:7,11,19 remarks 3:21 142:9 remember 44:11 98:18 115:14 116:8 120:6 104:9 120:10,11 127:19 130:16 131:3 renew 103:15 recommendations **renewed** 103:11 108:2,10 109:3,4,10 repatriated 128:1 109:18 111:15 113:3 repeated 88:1 114:3,4,12 116:1,13 report 13:4 20:8 28:15 117:14,16 122:17 36:22 49:1 110:15.16 123:21 124:4,5,13,22 127:11 134:19 136:8 125:3,7,10,16,18,20 141.7 reported 139:4 126:3,8 128:13,16 130:2,5,10 131:5 reports 20:3 49:2 82:13 record 10:21 11:5 14:16 109:5.6 23:5 30:2,5 38:20 representing 119:7 39:10 52:15 54:19 130:22 55:9 93:18 94:20 95:6 require 124:17 130:10 95:21 101:21 140:18 research 48:10 60:16 142:5 143:1 146:16 67:3 69:21 74:7,9,19 records 68:1 94:3 142:1 74:21 94:18 109:5,6 Recovering 108:6 130:11 131:3 134:17 recruit 79:19 97:18 98:3 135:9,15 136:2,6 105:17 researchers 67:2 researching 130:16 reduce 101:16 102:9 **reduced** 63:15 Reserve 15:6 reducing 93:1 reside 50:16,21 82:11 refers 17:16 19:9 resonate 9:17 refine 6:21 144:11 resorted 25:14 resource 87:5,17 140:3 **refining** 117:13 resources 53:4,19 54:1 regarding 123:19 regardless 15:11 19:2 60:7 62:14 83:1,13 region 83:11 84:20 87:14 90:19.22 139:17 140:14 Regional 2:13 3:18 13:21 90:8 142:14 respect 28:9 79:13 80:5 regions 105:17 113:15 113:22 114:6 respond 24:12 81:4 register 23:12 registered 17:18 91:19 124:3 **S** 23:13 24:6,11,17 25:3 registration 24:2 73:16 response 47:7 66:11,21 96:8 97:13 regular 10:6 68:13 81:3 **S3** 2:5 regularly 135:13 responsibility 26:22 sake 29:8 95:11 regulate 6:2 rest 10:11 31:22 55:17 **salary** 33:17,21

76:10 137:7 restroom 5:3 result 85:12 results 20:20 21:2 retail 28:7 92:18,19 retention 30:18,20 31:10,11 retraining 105:13 return 96:18 97:14 returned 136:4 review 83:1 102:15 reviewed 101:11 reviewing 85:20 reviving 78:21 Rhoten 2:17 3:14 132:6 132:18 **RIAN** 90:7 rich 58:20 59:14 **Richard** 2:2 82:22 riding 29:7 **rights** 101:19 risk 24:4 road 37:7 Robin 4:3 93:19,21 142:3.7 145:19 robust 90:4 136:14 **Rohit** 129:5 role 7:8 13:15 22:10 76:20 97:7 98:16 99:19 117:21 125:17 roles 5:15 22:13 **roll** 10:18 **Ron** 2:15 3:9 57:1,4 74:1 76:5,12 93:15 room 13:16 52:8 room's 146:5 rose 98:19 **Ross** 122:9 rotating 64:8 rotations 132:16 roughly 79:16 106:11 122:5 round 106:1,19 116:15 rule 26:14 run 43:18 141:10 run-down 132:15 running 10:9 46:6 rural 25:6,7,9,12,21 54:7 83:5,17,19 84:1 84:15 85:2 144:21 Russell 25:20 S

sample 60:5,7 93:2 samples 68:7 sampling 60:2 San 106:2 satellite 32:17 satellites 77:12 **savings** 62:13 saw 39:12 123:20 128:11 saying 66:8 74:20 126:6 says 113:11 **SBA** 3:8 34:16,20 35:9 35:11,11 36:20 40:11 45:15 49:7,12,17,21 55:2,4 62:6 75:15 77:17,22 78:8 124:11 132:7 133:18 139:22 **SBDC** 53:9 83:10 **SBDC's** 51:5 **SBDCs** 49:7,13,17 54:3 54:21,22 55:7 78:2 **SBIC** 35:14 36:4 **SBICs** 36:16 **SBIR** 35:21.22 36:17 41:8 42:13 45:18 47:18 52:11.11 78:12 86:19 87:8 96:2 102:21 103:8 109:9 109:12 114:1,5,9,11 118:17 119:1 124:4,7 124:9,10 125:18 **SBIRs** 87:17 **SBO** 59:20 60:1,7 61:3 62:20.21 68:6 **SBR** 37:13 41:9 46:3,10 **scale** 79:7 **ScaleUp** 133:8 scattered 83:11 Schneider's 25:19 scholars 67:10 school 26:4 schools 45:20 Science 1:16 2:2 45:2 61:17 65:16 scientific 139:2 scope 70:18 82:14 **SCORE** 50:15,18 51:5 51:11 52:4 Scott 1:21 2:2 72:17 73:16 scratched 70:2 **SDA** 132:19 second 4:5 23:7 66:13 83:19 88:22 121:16 137:20 seconds 4:20

Secretaries 16:1

	ı	1	1
Secretary 2:12 3:5,12	set 9:19 41:17 67:14	simplification 87:3	102:14 107:21 108:3
3:17 9:3 11:8 16:1	77:13 110:16 125:7	Simultaneous 19:19	110:4 111:2,17 112:3
80:20 81:7,11 82:14	sets 27:14 95:19	43:12 73:4	112:12 113:8 124:14
105:4 106:1,21	setting 115:8	sit 89:16 144:8	133:9
108:19 112:9,10,10	settings 25:12,12	site 146:2	sorts 62:19 92:2
113:5 114:9 119:8	settle 146:6	six 33:14,22 34:2 45:6	sounds 129:10
120:19 122:8 127:19	setup 25:22 26:5 105:1	90:21 138:4	source 58:10 60:22
142:13,15 145:12	109:2	sketch 66:20 75:10	62:15,22 63:3 66:15
Secretary's 82:8 116:12	seven 35:11	skew 137:12	68:16 90:4 139:12
sector 28:6 59:15 62:2	shaking 122:10	skill 27:14	sourced 68:21
92:12 141:14,18	Shannon 2:17 3:14	skills 2:5 32:2,4 34:15	sources 88:16 94:12
sectors 98:21,22 145:5	132:6,8,10,14 133:20	35:3 96:3 100:5,19	sourcing 30:20
Securities 141:8	Shannon's 134:1	105:7,19 106:13	South 23:1
security 28:11,11,15,18	shape 29:9	Skills/Apprenticeshi	space 21:11 27:3 100:7
seed 81:2	share 13:6 15:2 16:21	3:5	speak 4:16 11:10 91:22
seeds 104:8	25:2 90:19 94:13	slide 111:3	135:4
seeing 49:21 63:9	98:13 99:22 120:17	slides 11:4 37:16 39:12	speaker 134:14
122:10	120:18 135:21 138:21	slightly 84:11 126:14	speakers 11:22
seeking 26:10	sharing 38:15 49:19	144:8	speaking 10:5 19:19
seen 13:5 109:1 124:21	98:16 125:15	slowly 65:1	43:12 73:4
select 27:12	shell 65:21	small 2:17,19 3:8 26:6	specialized 61:15
selected 109:21	Shieh 45:17	32:13,17 36:1,8 62:13	specific 6:4 9:13 14:5
selection 72:12	shocks 61:9	72:3 75:8 77:10,11	17:1,17 18:1,9,10
selective 27:10	shop 25:22 56:2 132:21	87:12 95:2 100:6,12	19:11 25:15 79:19,20
self 116:15	short 17:15 18:12	101:11,14,15 102:18	89:14 109:4 115:14
self- 72:11	107:19 141:21	104:2 124:7 136:3	116:6 129:21
self-cancelling 78:3	short-term 31:6,7	146:1	specifically 15:6 88:14
self-fund 44:2	shortages 25:15	smaller 60:5	91:6 103:5,8 144:6
sell 98:7 Senate 41:16 45:4	shortly 5:9 20:14 62:4 142:8	smallest 124:8	spectra 80:10
send 52:13,14,16 98:18	show 96:20 97:14 98:4	Smith 2:7,8,18 3:13 4:18 23:13 24:6,11,17	spending 80:21 spent 96:1
121:2	105:8	25:3 94:17,21 95:1	spinouts 52:11
senior 3:16 11:7 122:3	showed 129:9	96:8 97:13 98:17	sponsored 30:1 61:17
134:15 135:1	Shukla 129:5	106:22 107:6,16	99:5
sense 28:1 41:11 62:8	shut 71:9	111:6 116:14 117:9	spot 15:9 56:2
91:15 116:7	Sickler 55:11	130:19 146:11	spread 39:8
sent 39:11 107:13	side 22:17 26:9 35:22	social 26:22	Springs 25:20
111:1 115:20	36:2,3 37:6,14,14	socialization 109:20	SRRT 86:19
sentence 32:14	41:5,16 45:3 47:15	soft 139:20,22	SSBCI 141:9
separate 32:9 71:13	55:12 67:21 97:17	solely 138:5,6	SSTI 125:13
100:4 125:16	102:8	solution 106:20	stab 9:11
separately 107:18	Siemens 21:8 24:20	solves 103:22	staff 8:8 10:3 13:18
separating 145:4	Sign 82:20	somebody 67:20	112:21 123:18 131:22
separation 121:12	signaled 142:4	somebody's 33:15	132:6 144:6
Sephora 2:8	signals 94:15	somewhat 90:17	stage 36:13
September 41:21 79:1	signed 110:15 112:7	soon 86:10	stakeholders 90:2
103:13	significant 10:13 84:8	sorry 4:18 10:1 11:4	118:21 140:3
serendipitous 135:7	102:4	14:17 19:5 28:21	stand 5:2 47:18
series 11:17 13:18	signing 110:15	42:17 73:21,22	standpoint 115:5
16:11	signs 45:4 135:18	sort 8:8 12:7 15:9 17:6	stands 39:22
serve 83:3	Silicone 84:13 137:4	17:11 18:17 20:6 25:5	Stanford 1:19
served 144:15 service 4:14 10:7 33:15	silo 80:6 100:5 silver 141:15	26:18 57:22 58:12,13 59:8,20 60:10 61:9,13	stars 17:6 start 4:20 9:12 46:9
services 48:4 139:3	similar 29:18 33:17	61:19 62:5,8 63:13	78:18 84:17 92:22
143:14	61:3	64:19 67:10 71:8 74:8	130:20,21 131:7
session 76:14 104:4	similarities 144:22	76:3 83:11 84:18,21	135:20
sessions 85:17 111:16	Similarly 125:13	85:1,3 87:8,22 88:21	started 9:5 19:1 28:22
143:5	simple 112:13 113:9	89:7 95:9 98:6,7	33:13 48:22 59:17
	'		
II			

74:7,18,19 94:18 106:18 120:6 122:7 127:5 132:19,20 starting 55:5 81:12 88:5 99:6 133:4 starts 95:13 112:4,4 startup 89:6,7 138:9 startups 58:12 88:2 136:15 **state** 17:19 22:9,10,18 22:21,22 29:3 50:6,6 55:3 69:8 81:13 83:22 109:14 136:6 137:10 137:18 states 1:1 17:9 22:14 22:15,17 23:10 39:14 40:13 53:12 80:22 98:20 99:8 137:8,15 137:16,19 statistic 88:1 statistical 64:15 **statistics** 2:16 3:6 10:17 11:8 30:18 31:11 32:10 66:17,18 68:19 71:18 76:21 77:14 94:5 stats 30:18 31:1 128:6 **status** 32:15 **statute** 108:6,7 **stay** 13:3 64:2 stealth 129:1 **step** 5:21 8:20 118:20 **Stephen** 1:13,16 3:3 stepping 99:18 **steps** 106:6 144:10 Stern 72:17 **Steve** 6:11 7:21 10:4 89:7 104:21 109:8 144:2 **STEVENSON** 2:8 30:17 70:3,13 71:10 122:16 stick 55:16 stitch 90:3 stone 134:1 stop 65:8 70:14 stories 25:2 straight 108:5 125:19 strategic 9:21 81:7,18 82:5 85:13 133:7 strategically 11:16 **strategies** 56:15 85:4 107:1 145:16 strategy 6:6 7:2 9:15 56:17 64:22 71:11 streamline 63:13 streamlining 114:7 street 15:13 67:6 72:4 133:8

strength 26:2 50:2 94:15 strengthen 11:18 **stretch** 146:4 strong 28:10 40:20 102:17 123:7 stronger 36:15 143:17 structure 22:13 **STTR** 42:4 78:12 109:9 students 26:11 74:16 86:22 93:12 studies 16:12 17:7 25:5 study 11:13 13:9 15:4 16:10 17:7 18:8 20:20 25:10,19 48:21 80:11 128:9 140:21 **studying** 58:2 68:17 stuff 38:19 44:8,13,16 58:12 61:5 64:19 67:10 69:12 71:3 118:11 142:18 **sub-** 68:6 subcontract 46:13,14 submission 119:13 **submit** 101:9 115:18 suburban 25:12 success 14:4.15 85:19 104:12 successes 12:7 successful 18:20,22 19:21 26:5,6 98:9 **Sue** 2:7 15:7 97:5 **suite** 35:5 59:13 suited 27:15 28:8 **sum** 139:6 summary 32:14 **summer** 63:6,9 super 111:8 supplementary 112:8 **supply** 26:9 30:14 97:17 support 5:15 6:1,2 10:13,13 11:18 16:7 65:17 72:2 75:8 79:3 87:8 88:11 91:19 supporting 135:12 supports 39:3 surface 70:1 136:13,16 surprised 56:20 surprisingly 27:10 **survey** 57:5,10,21 58:17 61:21 62:1 63:1 63:11 64:11 65:15 68:6,10 70:4,18 72:13 80:16 85:12 92:18 118:21 119:10 135:9 137:21

surveys 60:11 63:13 68:5,7,16 69:2 72:11 80:11 92:18 **suspend** 57:16 Sustainable 1:19 **sweet** 15:9 synergies 7:5 system 22:14 46:4 100:11 systems 25:20 69:9 81:17 Т table 6:17 8:17 9:19 40:4 41:14 48:6 66:3 92:3 99:12 106:2,19 129:15 tackle 86:6 tactics 116:6 119:1 taken 101:12 takes 69:7 111:10 talent 105:17.20 136:9 talented 131:22 134:2 talk 5:14 8:14,21 16:1

21:5,20 29:9 31:16 34:17 35:19 37:15 52:12 57:5,9,17 74:2 77:21 78:1,14 84:22 96:11,12,12 107:9 129:20 136:5 141:13 talked 23:19 34:15 96:16 99:2 127:2 talking 4:21 21:8 34:8 95:14,15 110:4 118:9 118:9 128:15 talks 66:15 **Tang** 1:13,16 3:3 7:22 76:11 78:18 79:10 103:20 127:17 129:13 tangential 109:19 tank 135:2 **taste** 59:3 tax 23:10,15 58:6 68:1 taxes 70:15 team 10:12 32:2 35:8 51:20 55:16 73:17 105:1 121:6,8,13 122:3 123:13,14 129:5 133:7,16,21 134:3 teaser 31:20 55:15 tech 2:7 105:7,13,15,21 105:21 138:20 **TechHire** 105:5,9 TechHires 106:10 technical 2:3 14:12 53:8 100:13 139:2

technically 119:3

technological 12:18 technologies 108:9 technology 2:1,2 3:7 34:19 46:20 92:11 tee 104:5 tee-off 76:15 tell 60:21 telling 88:4 114:9 temporarily 57:16 ten 60:20 86:1,2 114:11 tend 30:19 tent 66:7 term 6:6,8 31:7 80:7 82:6 terms 8:22 67:5 79:2 98:15 124:2 128:4 130:4 territories 81:1 text 111:3 thank 4:3,4 7:22 9:10 10:2,10,14,15 30:16 54:5 55:18,20 57:8 76:6,7,12 79:10 82:19 85:6 131:18 132:18 134:21 135:5 139:13 140:19 141:1 143:6 143:20 145:20 thanks 4:8,22 25:3 34:13,20 35:6 50:12 55:14 56:18 57:4 76:4 79:13 107:6 135:4 141:20 142:6,19,20 144:1 **themes** 70:6 things 20:15,19 23:16 31:4 35:12 36:12 37:1 37:2,6,14 39:7,8 40:9 41:7,15 44:11,15 45:9 45:15 46:8,17 49:7,17 53:8 56:6,12 62:8 63:3 64:8,17,21 66:20 69:22 77:15 80:14,21 84:18 87:1,2 94:2 110:10 114:15,21 115:13 118:6 120:1,3 120:9 124:1,5,16 126:6 127:18 130:5,7 133:9 141:21 thinks 124:15 thinner 13:8 third 2:17 3:16 40:17 117:5 119:14 134:15 135:2,11 136:2 137:16 140:20 thirsty 5:11 **THOMAS** 2:12

surveying 68:10 70:17

thought 29:1 47:2,6

70:10 79:12 105:3

109:17 111:2 120:9 thoughts 9:2 21:1 22:6 24:7 79:11 87:7 88:14 96:7 106:16 107:1 143:8 thousand 86:1,2 three 8:18 37:22 42:7 44:13 48:22 64:14 78:6 105:3 112:15,16 123:22 127:9 136:17 136:21 141:4 throw 69:11 87:20 throwing 14:20,22 thrown 18:7 78:8 thumbnail 66:20 75:10 thumbs 29:8 THURSDAY 1:9 tied 11:19 26:16 ties 85:3 Tiff 104:21 109:8 118:14 128:18 129:4 139:16 140:16 **Tiffany** 2:8,9 78:19 tight 30:11 times 35:9 52:1 79:17 79:18 112:13 142:17 144:16 timing 115:8 135:7 **Titanic** 131:17 titled 136:8 today 6:19,19 9:12 15:2 17:10 20:12 31:22 32:2 76:10 104:8 122:1,10 135:5,6 136:5 137:10 143:20 today's 86:8 **Tom** 3:17 142:11,11,13 142:19 144:1 Tom's 142:18 **TomKat** 1:18 tomorrow 6:21 9:15,19 33:5 86:6,14 106:14 111:15 ton 90:22 tons 95:19 tools 42:14 102:9 116:3 **TOONE** 2:9 top 23:3 32:21 85:21 topic 32:9 totally 124:4 touching 102:2 tour 37:8 tours 47:13 track 93:14 tracks 23:9 trade 13:2 92:18 traded 71:4 trades 24:19 99:5

traditional 72:4 traditionally 99:4,18 train 42:13 train-the-trainer 48:1 trained 33:15 training 11:19 12:19 14:6 15:22 17:17,20 17:21 28:13 33:19 37:5,8 42:10 47:21,22 48:1,3 87:8 105:12 140:9 trajectory 10:7 transactions 94:19 transcription 4:14 transition 8:8,9,9 10:14 29:6,7 32:4 34:2,5 35:8 121:1,7,7,13 132:4 134:12 145:22 transitioning 139:19 treasury 128:7 140:1 141:10 treatments 75:18 trends 80:13 141:3 **Trey** 1:20 77:20 90:14 92:8 tried 28:4 73:9 trip 6:15 true 88:8 truly 89:15 **Trump** 125:3 trust 89:19 **try** 4:15 37:6 67:13 70:21 71:16 72:11 85:10 98:21 142:16 trying 28:21 36:12,15 39:16 46:15 49:4,20 52:22 53:18 54:21 60:13 63:12 66:1 69:20 72:2,14 75:3 85:15 90:5 95:16 100:10,15 131:16 132:11 133:2,7,11 tuned 13:3 turn 89:17 turns 87:11 tweaked 48:9 twice 138:18 **two** 5:17,21 8:5 15:13 17:5 44:22 53:17 54:4 56:9 63:21 66:13 111:14 123:22 124:7 127:9 130:5 134:1,11

136:20 137:3 138:2,4

type 17:17 21:18 36:12

76:1 84:20 89:3

139:4

tying 12:18

two-way 75:2

119:11 120:11 126:14 types 17:2 25:15 145:6 typically 101:4

U

U.S 1:3 2:15 3:9 15:4

U.K 16:16

16:10,15 17:18 33:16 58:9 81:14 99:4 106:12 113:15 128:1 135:21 138:22 **UAW** 24:19 **UC** 47:15 **UI** 69:10 ultimately 110:19 111:10 123:10 127:7 128:20 **UNCF** 2:10 under-utilized 87:5 underestimate 117:21 undermining 102:16 underrepresented 40:12,13 86:2 underserved 85:1,2,2 136:18 139:7,17 141:4 understand 13:22 15:15 22:1 23:17 55:16 92:1 understanding 14:13 21:15 81:16 82:9 84:2 understands 46:19 undertake 141:18 undertaking 90:20 unemployment 69:8 unfortunate 45:8 unfortunately 102:3 141:11 unintended 144:17,20 145:5 union 24:3,15 **unions** 20:4 unique 60:11 79:18 80:6 86:1 101:5 122:22 144:8 unit 69:9 United 1:1 17:9 22:14 53:11 137:15 units 115:11 universally 68:12 universe 116:3 universes 80:1 universities 42:5 46:1,3 46:15 47:1,10,14 52:8 53:12,15 86:19 87:10 93:5,7 110:14 145:6 university 1:16,17,19

2:1,6,9 15:6 19:16

45:3,18 46:4,11 47:18 53:17 87:3,14 93:3 110:12 145:6 unnoticed 7:19 unofficially 130:14 update 139:21 updates 114:20 upgrade 53:5 urban 25:12 83:6,19 84:1,6,16 85:2 137:12 140:5 **USA** 2:8 12:10 13:4 use 37:13 42:2 46:2,12 61:14 65:1 73:15,18 74:21 85:9 102:21 103:6 127:22 135:8 137:20 useful 77:15,16 81:20 82:7 102:18 **users** 63:14 66:12 **uses** 69:8 **USPTO** 104:5 usually 50:6 60:20 65:4 70:16 112:7

utilizing 120:8

VA 34:8 vacant 123:2 vain 98:12 validates 139:15 validator 117:17 Valley 84:13 137:5 **valuable** 58:10 80:22 117:15 143:21 value 23:18 51:10 81:16 97:22 98:1 101:5 127:4.14 value-added 49:11 variation 65:6 varied 27:9 variety 8:20 31:5 80:1 141:17 **various** 5:15 144:5 vary 64:9,11,17 **VC** 136:7,14,18,20 137:2,3,17 138:9 139:4 **VC-to-GDP** 137:15 venture 84:14 136:7,9 136:13 137:8,13 138:1,3,13,18,21 139:7 140:10,16 Ventures 2:1 versus 73:13 80:15 84:15,16 91:7 127:12 veteran's 123:22 veterans 123:18 133:2

Western 15:6 133:3 69:12 100:11 0 **vetting** 117:18 whatnot 96:2 146:4 Workgroup 109:1 view 30:10 83:20 wheel 90:16 111:16 115:2 1 Virginia 53:7 54:6 137:9 white 106:5 138:10,11 workgroups 111:19 **1.5** 42:11 Visa 92:21 **WHITNEY** 2:8 144:7 1.6 42:11 vision 86:4 140:21 Whitney's 104:18 working 7:20 10:12 **1:15** 1:13 **visitors** 121:22 wide 82:15 25:11 28:19 39:15,21 **1:17** 4:2 voice 15:12,14 97:7,10 widely 139:8 45:15 47:12 51:4 52:5 **10.000** 96:17 wider 94:16 141:17 56:16 79:4 109:9 97:15 98:16 110:5 **107** 3:13 Williams 2:19 3:7 34:18 111:20 135:14 139:19 volunteer 16:17 **11** 3:6 36:20 124:8 vote 111:13,15,21 35:6 38:18,21 39:11 145:10 **119** 138:16 112:2,2,3 42:19 43:2,7,9,13,17 works 84:21 105:2 **13** 16:12 104:10 135:22 43:21 44:3,6 47:5,8 115:7 129:1 voting 118:20 138:5 50:17,19,22 51:9,13 world 100:6 **130** 110:14 W 51:17 52:9,13,16,21 worse 88:9 **132** 3:14 **W** 94:17,21 95:1 98:17 53:13 54:10,20 55:10 worth 66:11 94:7 **134** 3:16 WADSWORTH 2:6 55:18 56:1,4 132:7 114:16 **14** 12:14 40:21 wouldn't 40:9 116:19 wage 17:21 18:17 willing 16:21 24:4 94:9 **140** 110:14 willingness 94:12 **wages** 18:19 wrap 73:22 142:8 **1401** 1:12 **WILSON** 2:9 117:20 write 46:18 waiting 117:7 **142** 3:18 walk 107:1 119:20 126:13 writing 110:10 144 3:20 **Wall** 67:6 win 46:11 87:21 wrong 80:7 145 3:21 wanted 29:10 38:16 wins 123:19 wrote 125:9 **146** 3:21 41:13,14 52:11 54:11 winter 8:1 **WV** 2:3 **15** 40:22 138:22 Wisconsin 23:4,6 59:5 81:2 101:1 108:3 **16** 41:1 X 133:19 141:2 143:5 wishing 142:1 **17** 132:19 **WOMACK** 2:10 143:19 **x** 119:9 18 42:15 43:21 138:11 wash 76:3 women 40:13 46:5 Xs 72:22 **1976** 58:10 136:20 **Washington** 1:13 2:6 **1980** 135:22 Women's 51:5 133:11 135:3 **1995** 137:3 wasn't 16:2 31:8 41:10 won 54:5 **y** 119:9 102:20 120:10 125:11 wondering 78:13 year 13:14 15:3 18:12 watching 38:6 word 18:7 28:21 46:2 36:6,7 37:22 38:3,7 **2** 1:10 way 2:17 3:16 4:16 9:22 125:8,8,9,9 38:11 43:19 45:1,8,12 **2.0** 78:21 103:21 104:4 15:13 44:2 48:5 54:8 words 4:17 45:14 53:12,17 58:15 104:11 117:1,6 118:3 74:7 91:19 116:18 work 5:20,20 6:20 7:10 61:12,12,13,14 64:13 121:4 123:18,20 117:10 124:14 129:12 7:11,17 10:11 12:2 64:18,18,20 65:3,3 139:18 129:14 130:1 131:13 16:21 25:1 34:2 36:13 67:1 68:6 73:6 79:1 **2.5** 36:5.18 40:22 132:3 134:10,16 37:2,9,17 39:16 41:4 94:18 103:14 141:12 2:30 35:7 135:2,11 136:2 138:7 44:9 45:11,22 49:16 year's 66:10 133:12 **200,000** 96:18 140:20 51:20 52:22 54:13 years 11:16 18:12 38:1 **2000** 136:16 69:17,20 72:2 75:20 41:12 46:7 56:9 57:7 ways 5:18,18 34:9 **2014** 61:16 136:1 63:12 87:16 104:2 76:17 82:17 84:7 58:3,17,20 59:3 60:13 137:21 110:6 114:14 129:1,8 90:13 94:9 103:21 60:20 64:14,14 82:18 **2015** 61:18 63:4 136:14 144:11 112:3 120:12 121:3 90:21 132:2 134:6 137:6.15 125:22 128:6 129:4,4 website 39:5 86:2 138:2 **2016** 62:3 63:6 websites 37:4 129:7 130:16 133:1 yesterday 96:16 125:14 **2017** 1:10 41:21 Week 29:14 133:13 141:14 143:6 York 137:5 **21** 84:3 weeks 8:11 143:19 144:4 145:8 young 19:10 59:22 **21st** 135:15 worked 37:10 56:7 weird 54:22 60:12,17 62:18 68:17 22 42:1 137:7 welcome 3:2 4:4,7 6:9 75:11 83:21 93:13 86:22 **24** 6:10 122:2 6:13 8:1,15 9:6 143:5 112:1 121:8 124:1,2 younger 62:15 **25,000** 18:14 131:22 133:6,10 welcoming 133:20 **27** 139:3 Ζ workers 19:11 21:18 well-known 40:14 **29** 138:14 went 17:4 42:4 45:4,5,6 31:13 69:17 **z** 119:10 128:20 137:4 146:16 **workforce** 11:11,18 **Zero** 42:3 48:7 3 12:4,15,19,21,22 13:2 weren't 73:11 **Zs** 72:22 3.0 8:4 West 53:7 54:6 137:9 13:7 14:1,6 26:18

3.2 45:5 3.5 38:8 45:5 3.75 41:1 3:10 146:16 3:15 4:11 30 122:5 30th 41:21 313 36:16 35 38: 122:5 4 4 3:3 35:14 36:4 40:22 4.5 45:7 40 93:7 42 39:6,14 46 137:18 47,000 122:6 5 5 42:4 50 43:18 80:22 50,000 37:21 40:17 54:7 50,000 37:21 40:17 54:7 500 40:11 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17 7 70 106:11	3.5 38:8 45:5 3.75 41:1 3.10 146:16 3:15 4:11 30 122:5 30th 41:21 313 36:16 35 3:8 122:5 4 4 3:3 35:14 36:4 40:22 4.5 45:7 40 93:7 42 39:6,14 46 137:18 47,000 122:6 5 5 42:4 50 43:18 80:22 50,000 37:21 40:17 54:7 500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17	3.5 38:8 45:5 3.75 41:1 3.10 146:16 3:15 4:11 30 122:5 30th 41:21 313 36:16 35 3:8 122:5 4 4 3:3 35:14 36:4 40:22 4.5 45:7 40 93:7 40 93:7 40 93:6,14 46 137:18 47,000 122:6 5 5 42:4 50 43:18 80:22 50,000 37:21 40:17 54:7 500 36:9 57 3:10 59.1 136:14 6 6 36:7 6 41:16 79:16 120:15 120:20 121:17 7 70 106:11 78 137:6 8 80 106:11 85 37:22 38:11 39:6			
4 3:3 35:14 36:4 40:22 4.5 45:7 40 93:7 42 39:6,14 46 137:18 47,000 122:6 5 5 42:4 50 43:18 80:22 50,000 37:21 40:17 54:7 500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17	4 3:3 35:14 36:4 40:22 4.5 45:7 40 93:7 42 39:6,14 46 137:18 47,000 122:6 5 5 42:4 50 43:18 80:22 50,000 37:21 40:17 54:7 500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17 7 70 106:11 76 3:11 78 137:6 8 80 106:11 85 37:22 38:11 39:6	4 3:3 35:14 36:4 40:22 4.5 45:7 40 93:7 42 39:6,14 46 137:18 47,000 122:6 5 5 42:4 50 43:18 80:22 50,000 37:21 40:17 54:7 500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17 7 70 106:11 76 3:11 78 137:6 8 80 106:11 85 37:22 38:11 39:6	3.5 38:8 45:5 3.75 41:1 3:10 146:16 3:15 4:11 30 122:5 30th 41:21 313 36:16		
500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17 7	500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17 7 70 106:11 76 3:11 78 137:6 8 80 106:11 85 37:22 38:11 39:6	500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17 7 70 106:11 76 3:11 78 137:6 8 80 106:11 85 37:22 38:11 39:6	4 3:3 35:14 36:4 40:22 4.5 45:7 40 93:7 42 39:6,14 46 137:18 47,000 122:6 5 5 42:4 50 43:18 80:22		
	76 3:11 78 137:6 8 80 106:11 85 37:22 38:11 39:6 9	76 3:11 78 137:6 8 80 106:11 85 37:22 38:11 39:6 9	500 36:9 57 3:10 59.1 136:14 6 6 36:7 60 41:16 79:16 120:15 120:20 121:17		

<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: National Advisory Council on Innovation and Entrepreneurship

Before: US DOC

Date: 02-02-17

Place: Washington, DC

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

Mac Nous &

UNITED STATES DEPARTMENT OF COMMERCE

+ + + + +

U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

+ + + + +

NATIONAL ADVISORY COUNCIL ON INNOVATION
AND ENTREPRENEURSHIP (NACIE)

+ + + + +

MEETING

+ + + + +

FRIDAY FEBRUARY 3, 2017

+ + + + +

The Council met in the Department of Commerce Library, 1401 Constitution Avenue, N.W., Washington, D.C., at 8:45 a.m., Melissa Bradley and Stephen Tang, Co-Chairs, presiding.

PRESENT

MELISSA BRADLEY, AU Center for Innovation in the Capital, Co-Chair

STEPHEN TANG, University City Science Center, Co-Chair

REBECCA BAGLEY, University of Pittsburgh ESTHER BALDWIN, Intel

BRIAN BARTHOLOMEUSZ, TomKat Center for Sustainable Energy at Stanford University HEATHER BOESCH, IDEO

TREY BOWLES, III, The Dallas Innovation Alliance;
The Dallas Entrepreneur Center
SCOTT FREDERICK, New Enterprise Associates

KARA GOLDIN, Hint Inc.

ORIN HERSKOWITZ, Columbia Technology Ventures,
Columbia University

RICHARD JOHNSON, Kentucky Science and Technology Corporation

JOSEPH KAPP, Eastern WV Community & Technical College; Behavioral Business, LLC

DAVID KENNEY, Oregon BEST

MARIE LYNCH, Skills for Chicagoland's Future MIKE NEMETH, S3 Planning

MARIBEL PEREZ WADSWORTH, Gannett Company, Inc. ANDREW REAMER, George Washington University EMILY REICHERT, Greentown Labs

SUE GRIFFITH SMITH, Ivy Tech Community College WHITNEY SMITH, JPMorgan Chase TIFFANY STEVENSON, Sephora USA, Inc.

ERIC TOONE, Duke University

TIFFANY WILSON, Global Center for Medical Innovation

CHAD WOMACK, UNCF

ALSO PRESENT

THOMAS GUEVARA, Deputy Assistant Secretary for
Regional Affairs, Economic Development
Administration

CRAIG BUERSTATTE, Office of Innovation and
Entrepreneurship; Designated Federal
Official

ERIC SMITH, Office of Innovation and
Entrepreneurship

C-O-N-T-E-N-T-S

Meeting Begins: Welcoming Remarks	•	•	•	•	•	•	•	. 4
Workgroup Report-Outs	•	•	•	•	•	•	•	. 8
Council Framework Discussion	•	•	•	•	•	•	•	.71
Next Steps	•	•	•	•	•	•	•	118
Closing Remarks and Public Comment	•	•	•	•	•	•	•	141
Adjourned	•	•	•	•	•	•	•	155

1	P-R-O-C-E-E-D-I-N-G-S
2	8:52 a.m.
3	CO-CHAIR TANG: Good morning,
4	everybody. Just a quick welcome. I was going to
5	start by asking either Heather or Emily to make a
6	Super Bowl prediction. But since they're not
7	here, I'm going to ask Tiffany Wilson if she'll
8	make a Super Bowl prediction.
9	MEMBER WILSON: Oh, an unbiased one,
10	right? Rise up, you all. Go Falcons. We're
11	going to crush it.
12	CO-CHAIR TANG: Thank you. Anybody
13	else want to chime in?
14	MEMBER FREDERICK: Yeah. What's a
15	Super Bowl?
16	(Laughter.)
17	CO-CHAIR TANG: I'll explain it to you
18	later.
19	MEMBER GOLDIN: I heard the Audi
20	commercial is the best one. I haven't seen it.
21	I heard that.
22	MEMBER KAPP: I heard there's a Lady

Gaga show this weekend.

(Laughter.)

CO-CHAIR TANG: Yes, and there is some sport event around it. That's basically what it is. That's right.

All right. Well, I'm a Philadelphia

Eagles fan. So the only cheering interest I have

is the quarterback from the Falcons is from

Philadelphia. That's where I'm moving.

We have a busy morning. We had some very robust discussions. I think all three groups yesterday afternoon had different approaches, different outcomes. But we're going to share all that this morning.

I just want to emphasize -- and then

I'll ask Melissa for her comments as well -- that

it's really important that each of us show up

prepared for the discussion with some background

of where the discussion has been and what needs

to happen at these individual breakout sessions.

Recognize that even if you come prepared that

consensus is often difficult because we all come

with a different set of experiences from our own background.

That's where I will leave the feedback. Melissa, do you have something else you want to add to that?

CO-CHAIR BRADLEY: I mean, I think I just want to thank everybody. We just said a quick brief. And I can speak Eric worked hard in sending emails and posting stuff on Slack. And I know Craig did the same.

But I think for a NACIE 3.0 we are off to a great start. I just want to make sure we focus on that, focus on what we're accomplishing despite all the things that are changing around us. And where there are things still to be accomplished, this is a chance for us also to think about to Steve's point coming prepared and remaining engaged.

I think one of our challenges and opportunities is what do we do when we leave here. So for those groups like mine who had a robust discussion, who talked about a lot of

things, who took a little detour but got back and stayed focused how do we continue to stay engaged and advance these moving forward.

I just want to echo that for those that may get voted our work is not done. For those who still have work to do, you can count us to support you and count on other groups to share what we have done.

The other piece is this is not a separate agenda. It's how do we get this to come together. And we're going to have some time before we leave of how do these all fit together and how do we continue to augment them. That's it.

MR. BUERSTATTE: And I think you mentioned, Melissa, but we've got two recommendations that we're going to put up for a vote today most likely. Comparatively, I think by the time we got to a clear, concise, readyfor-submission proposal on 2.0 it was at the third or fourth meeting.

You guys are doing great. I think the

subject matter has been really meaningful. And it's been tough, too.

Again, I know some of you aren't used to working with the Titanic of the Federal Government. But this is a great pace. I'm excited where we're at.

I'm going to pass things off to
Tiffany I think who is going to brief out on the
capital group's work. Then we'll move to the
strategy session. I think Andrew is going to
take that one. Actually Heather maybe, Heather
and Andrew. And then after that we'll close
these brief-outs with the skills team.

Tiff, if you're ready.

MEMBER WILSON: Yes. So the capital issue is something we've been working on for a while and really felt the timing was right going into this NACIE and Administration to go ahead and finalize that and have it ready and waiting as a recommendation. We're really looking for the support of the entire Council for a vote.

We're calling this the Community

Capital Convening C3 Pilot Program. And it's really looking at bringing together in a convening local leaders from across the public, private, academic and business development areas really to address this issue of access to capital and gaps in the capital continuum, moving from early stage technologies into full commercial launch.

What we're proposing to do is run a pilot where we identify seven to ten cities/communities across the country that have an entrepreneurial mindset and really have an active discussion among all those groups of how we bridge the capital continuum and have more of an impact there.

What we're talking about doing is running a grant program, putting it out to communities around the U.S. to really tell us how they would pull those activities together. It will have an emphasis on inclusion, diversity, focused on the technologies of the industry sectors in those communities, hopefully having a

very broad report back on that. That ultimately 1 2 would result in us drafting facilitation guides and best practices for building on those 3 activities in other communities and that sort of 4 5 thing. Any questions or? 6 7 MEMBER BOWLES: I've got a question. 8 Can I ask it or? 9 MEMBER WILSON: Yeah. 10 MEMBER BOWLES: No. 11 MEMBER WILSON: No, sorry. I wanted 12 to add one thing that's a critical thing. 13 looking at partnering with other agencies such as 14 SBA and Treasury to build on other programs that This would be an interagency 15 are existing there. 16 collaboration opportunity which is a good thing, increased efficiencies. 17 18 MEMBER BOWLES: What is the money for? 19 I mean, have you gone through what size grants 20 there are and what they're for? Is it for paying

for the meeting space and organizing?

MEMBER WILSON:

21

22

That's something that

once this is voted on assuming it goes forward we would sit down with the OIE team. They've got a lot of experience in putting these programs together and what the right parameters are and things like that. But NACIE would have input on what those parameters would be and what the metrics and reporting requirements would be.

MEMBER BOWLES: Would cities represented by people in this be precluded from participating?

MEMBER WILSON: No.

MR. BUERSTATTE: A couple of questions that I have that I'm looking forward to working with you all on. If we're talking about a national effort to convene seven to ten or dozen communities, is this managed by a singular organization? Is it a foundation of sorts that can bring these communities together in specific, concrete engagements, elevate those studies and practices across various sectors and regions? Or are these awards, these funds, going towards specific entities at the local level where they

would be \$50,000 a pop and a local ESO would be the convener? But the question there is how do we elevate those practices and those ideas and lessons to that national conversation?

MEMBER WILSON: Yes. So we talked about this a little bit yesterday in our breakout session where as part of the reporting requirements and report back all of those would come to OIE after completion. And then we could look at consolidating those, doing a little bit of analysis and then amplify that through a report from OIE or the other agencies.

CO-CHAIR BRADLEY: When you say in terms of where does the money go, I think that's TBD.

MEMBER WILSON: Yes.

CO-CHAIR BRADLEY: I think that's where we would look to OIE and our funding of what is best practices of the money goes into one intermediary who then manages it or in their capacity to manage five or seven grantees. I think the key though is that there is a layer

where this is an opportunity for NACIE members to engage, oversee, particularly if it's in their community tray or people that you know.

And this is a chance to encourage others in our network to really be a part of it.

I want to distinguish between who gets the money and who has the opportunity to be engaged and drive the documentation.

MEMBER WILSON: And I would expect
just given the diversity in the room here and
around the table we are all from very active,
entrepreneurial communities that I would look to
the entire Council, whatever communities we ended
up, to really spearhead that in your own
communities.

MEMBER BOWLES: I think this is a great idea and a great program. I think also, too, looking around the room that there is an opportunity to bring people in from other communities to help facilitate, encourage and provide feedback for how maybe this is done in other places and maybe this could be done well

there.

CO-CHAIR BRADLEY: Exactly. So taking those learnings. No matter what community you live in, what the industry sector focus of that community and what that ecosystem looks like, ultimately you've got a blueprint for having a discussion around access to capital and gaps in the capital continuum where people aren't simply having those conversations right now. I think having and pulling in outside input from other communities at the table in that discussion and sharing what works in their communities or at a national level would be part of that.

MEMBER BOWLES: And we're going to be doing something like this in Dallas soon. So what I would love assuming it's going to take a while to do this is maybe talk to you guys and say, "What would this look like?" And we'll just do it as a pre-pilot.

MEMBER WILSON: Right.

MEMBER BOWLES: And then we'll come back and say, "This is what we learned based on

that."

MEMBER WILSON: And what we can do as well is we piloted something like this in

Nashville last March and we've got great

documentation and takeaways. I think that's been shared in a prep packet. I'll make sure we share that again. Hopefully, it will provide some insight.

CO-CHAIR BRADLEY: I just want to say

I think that's an important point that the goal

of this is not only done though unless we get

funding, right?

MEMBER WILSON: Right.

CO-CHAIR BRADLEY: There's not a chance for us. D.C. would probably never get it, but I would want to be able to do it in D.C. So I think it's also a roadmap as we go along. So I guess it won't take long. I think because there's some momentum that it won't take that long.

But to the extent that people want to try it themselves, let's do that. And we will

get what worked and what didn't work. That then can form the grander scheme. It's a reference.

MEMBER KAPP: So I really applaud your efforts on this. This is great and there's no but at the end of this statement. So don't worry about that.

(Laughter.)

This is really important for the R world, the rural communities. And I wear several hats when I sit at this table. There is a number of hats that I wear.

Community and Technical College. But I'm now also working with all nine community colleges in this State of West Virginia to begin coordinating efforts. And we have something within the state called our District Consortium meetings, but not all the schools are doing them. At Eastern West Virginia, we have a bit of a concept of us bringing together what is roughly equivalent to the size of the geography of three times the size of Rhode Island to bring together folks to have

these conversations.

And then the other organization that I represent is an organization called NACCE which is the National Association for Community College Entrepreneurship which is about 300 community colleges that all work together over the course of the United States.

This is one particular issue that consistently -- So I really applaud the efforts.

And this is a great document. I'm really excited to be able to endorse this.

MEMBER WILSON: Thank you.

co-chair bradley: And we totally encourage you to have them apply individually. I also want to take a moment to thank Scott who was very helpful yesterday. He has willingly to stay to help people here. He had some strategies about what we talked about things. He had experience in North Carolina.

So I think that's the beauty of if you're not on the committee and you don't want your city, but if you have some expertise please

share that with us. You have connection on how we can learn to make this better.

MEMBER WILSON: Yes, and I'll echo
that. It's been really fantastic with this group
in discussing these issues. I've learned from
Scott that just even the vocabulary is different
in different communities and how you refer to
certain aspects about little pockets of capital.
Just making sure that the language that we use is
clear across the board and we're not leaving
anything important out.

CO-CHAIR BRADLEY: Other questions?

Comments?

MR. BUERSTATTE: All right. At this point, we're going to cross the threshold and no return. Emily, please.

MEMBER REICHERT: First, I want to just applaud the efforts of the team in bringing the proposal together. I think it looks like a really good plan. And I'm happy to endorse it.

I guess I would like to understand a little bit better how the proposal might evolve

based on the priorities of the new

Administration. I think the original intent here

was we were formed before we knew who was going

to win the next election.

And I'm just wondering we're only 12 or 13 days into this new Administration. So how do you see what the propose is for bringing new ideas or bringing it might even be new language into this proposal?

MR. BUERSTATTE: Emily, let me take that one. What happened between December and now was a very deliberate effort to elevate issues that we felt given the knowledge we've had, the engagements we've had with inbound team and just institutional knowledge here at Commerce. The issues we've discussed over the last 12 hours or so we think compliment the direction quite well.

MEMBER REICHERT: Okay.

MR. BUERSTATTE: However, should there be an opportunity adjust OIE will certainly steer you in that direction. We'll inform you and I shouldn't say steer but rather ask, right. You

guys are our advisors. So if something or priorities might change or shift, then we'll let you know.

But I just want to communicate that

I'm very confident in the conversations we had

yesterday that they will continue to be relevant.

Should there be tweaks? Very possible. Always

possible. But we as a staff are not too

concerned.

MEMBER REICHERT: And just one more comment. I'm happy as a resident of Boston, one of the ecosystems cited as places maybe to emulate or maybe get help from, to provide support or network resources of anything that would be needed.

MEMBER WILSON: We'll definitely take you up on that.

MR. BUERSTATTE: All right. So we're going to do a quick vote. We're going to vote by hands. We know who is here in the room. So we will do a visual reference. Will the team note yeas and nays? But at this point, all in favor

1 of this effort to submit to the Secretary of 2 Commerce as a formal recommendation from the Council please raise your hand. 3 4 Thank you. Any not in favor? 5 Thank you. 6 (Applause.) 7 PARTICIPANT: One for one. Come on 8 people. One for one. 9 MR. BUERSTATTE: And I'll take a quick second to emphasize that part of that 10 recommendation was NACIE's involvement in the 11 12 development. So we make this and we will submit And it's not OIE or EDA taking this off and 13 it. 14 creating something in a silo. 15 This will be real time engagement in 16 development of this program. And we look forward 17 to that consultation. Much more work to be done. 18 We'll transition to Andrew and 19 Heather. Do you want to talk the strategy session? 20 21 MEMBER REAMER: Great. Thank you, What I want to do is it's a short 22

recommendation and you haven't seen it because Craig just wrote this version of it an hour ago.

MR. BUERSTATTE: I edited your wise thoughts, Andrew.

MEMBER REAMER: Well, you did a great job in the revisions. I'll explain the rationale for this. This project is a bit unusual in that our point of focus is OIE. So I want Craig to say a few words about his perception of the value of this to OIE and then ask Heather to speak about if this is approved and the Secretary approves it then Heather would lead the effort. I'll let Heather give her views of how this might move forward.

If you pull out the recommendation.

On behalf of NACIE, we are pleased to recommend

OIE to prepare a strategic plan with NACIE's

advice for your review by fall of 2017. Congress

through the America COMPETES Act direct the

Secretary to establish an Office of Innovation

Entrepreneurship to foster innovation and

commercialization of new technologies, products,

processes and services with the goal of promoting productivity and economic growth in the United States.

Since this statute passes in early 2011, OIE both received dedicated appropriations for its grants program and hired career staff for the first time in 2014. In Federal terms, it is well within its startup phase and given its impacts to date has great potential to increase that impact including through its work direct and indirect that builds regional capacities to create jobs and increase economic growth and global competitiveness.

To better fulfill its mandate and to realize its full potential, NACIE believes OIE would benefit from the development of a periodically updated strategic plan that is approved and supported by senior departmental leadership.

Among its 27 members, NACIE has substantial experience in and knowledge about promoting customer driven business through a

strategic assessment and action. NACIE believes that OIE should be as entrepreneurial as the businesses it serves and use one of its most experienced and knowledgeable resources NACIE to enhance its own operation. We appreciate your consideration of this recommendation.

So the idea is to as the resolution says -- this is information that Craig inserted -- OIE itself didn't really have full-time staff until fairly recently. It has a pretty ambitious mandate that Congress gave it. And as we saw, the prior Secretary gave OIE additional responsibilities.

One of the I think anomalies of the OIE operation is that while entrepreneurship is in the title, it's not mentioned in the legislation. So to the extent to which OIE can focus on the entrepreneurship is that something needs to be directed by the Secretary.

The idea here is to enable OIE to thoughtfully develop goals and objectives, to work with us to identify means to achieve those

and develop consensus with the departmental leadership in that process. And the results are if the plan is approved by the Secretary, then it gives OIE the authority, the running room, to go in directions for which we, OIE and NACIE and the departmental leadership, have some consensus.

It also helps build the capacity of OIE staff. The idea is to make this a regularly updated strategic plan. This would be a collaborative relationship between OIE staff and NACIE.

This is not NACIE writing this plan.

This is working with OIE staff. They need to own it and they're the ones taking it to the Secretary for review.

This also would provide a framework and model for future NACIEs, NACIE 4.0, to infinity and beyond to work with.

(Laughter.)

And to the earlier point, a strategic plan if approved gives OIE the authority to work on subjects not specifically mentioned in the

legislation.

With that introduction, I'm going to ask Craig to say a few words about his perceptions of the value of this effort.

MR. BUERSTATTE: Sure. To put it bluntly, many of you asked, "Craig, do you really want the strategic plan?" Well, look. Start with the end in mind, over the last few years, we've been lucky to award nearly \$60 million in grants towards I&E focused activities, focused on economic development practices, using innovation and entrepreneurship to create jobs, economic resilience and stronger regional economies.

We know, us professionals at the table understand, the value of this to our nation. We know that this is an important practice. And I think OIE is on the cusp of something very interesting. And we want to be able to scale that. We want to better understand the opportunities across all government agencies and the billions of dollars going towards other grant programs and other policies.

There is a statute for us to be an integrator across Federal agencies. What does that look like? How can we do that effectively and what's our first step?

I think the last four years or so have showed tons of promise and now we want to take a look at, a serious look at, the best steps forward and no better way to do that than leverage our close friends on NACIE. Thank you.

MEMBER REAMER: Heather.

MEMBER BOESCH: I can say a few words.

I also thought it might be clarifying because it was for me in terms of steps that are being taken. Our mission as NACIE is to advise the Secretary. We want to be able to include in that mission the ability to advise OIE. This is the first step towards that.

With that said, if we can get approval for that, we'd like to move forward pretty quickly. We're thinking about it in a few phases.

A lot of us around this table have

experience in corporate and strategic planning.
So we're hoping to bring that to bear.

and layered. We think that it's important to have a really clear kind of mission and narrative for the agency to point it in the right direction given the broad mandate that it has and understand the real kind of value submission that we're working for. Then how is that translated into maybe a three or five year strategy that helps us achieve that mission? And then what's the one to two year plan for the exact steps we're going to take there?

We have some early ideas about the kinds of things that that's going to include such as being an integrator for all of the great programs that actually already exist around the Government. Where can we look for overlaps?

Where can we find efficiencies?

How can we clarify the process using a user-centered point of view to entrepreneurs and innovators looking towards the Federal

Government for help? And where can we find white space or gaps where OIE might need to fill an important role in that? That's what we plan to do.

MEMBER REAMER: I also want to ask the co-chairs if you would say a few words about your view about this?

CO-CHAIR TANG: Certainly. I'll say a few words and then I'm going to ask in addition to Melissa the other members of the Committee that were in discussion. We had I think a very robust discussion about this.

To me, the most significant piece of this work is that we are convened to serve innovation and entrepreneurship in the start-up community. Why shouldn't OIE as a start-up community in its own right be part of that overall purview? This is essentially a way to begin a business plan for OIE to connect the dots with various programs within Commerce and outside of Commerce and also looking forward what programs may be in legislation that OIE might

have a role in steering or funding, etc.

That's my view and that's why I fully support. Melissa.

CO-CHAIR BRADLEY: I would just say that I think the important part here is developing and planning a process. I want to make sure we come in that this is not what we do at our own company or what we do at our own boards.

There are two things I want to highlight. One is as Andrew said this is really going to be driven by the staff and by what we can and cannot do and really be aligned with the priorities going forward. And, two, I think our job in the development is really support, kind of the sounding board and mirror, sharing additional resources and opportunities.

And as it goes forward, now we have a collaborative and evaluation process. So I just want to state that we should not look at it as something else we've done but a unique opportunity to have a permanent framework moving

forward that will be flexible and malleable but that part of our job is implementation as well as evaluation.

CO-CHAIR TANG: Brian, Eric, Maribel or Chad, also in the discussion, any thoughts to share?

MEMBER BARTHOLOMEUSZ: To me, the interesting part of this discussion was in terms of who the perpetual customers of all of us are. Have a definition of them. I think everybody has a somewhat different opinion of who they are and what constituencies they serve. Trying to pull all of these together and to catalog and classify them I think would be very interesting.

For me personally, a knowledge of all other programs and initiatives that overlap with what we are trying to do would be extremely helpful. Every meeting I come to I'm learning of more stuff that seems to be related to what we're doing. It's sort of progressive disclosure.

But I think Andrew is doing some kind of a project where he's collecting and collating

all this stuff. I think that would be extremely valuable. The last thing we want to is have yet another program that duplicates what exists.

I thought it was very interesting discussion and couched very much in terms of staff-ups, you know, what's your markets, what's the pain point, what's your solution, who are your customers, what's your value proposal. All of these things would in some way, shape or form implicitly enter into the formulation and the discussion. I think it will be a very interesting exercise.

MEMBER BOESCH: I just have one follow-up point to that that was mentioned. I think one of the great values to this is so many agencies are doing really incredible things already. How can we amplify those efforts and make sure they're having the most success with those programs as well I think will very valuable.

MEMBER HERSKOWITZ: One structural question. Does this then absorb -- on this map

here, does this then absorb the line with DOC I&E program and the federal convening authority? Is this sort of taking the landscaping piece of what you are planning on doing?

MR. BUERSTATTE: It could. That's the part of the strategic plan, right. We haven't done it yet. There is a reason why we grouped the groups together the way we did. So I think there's certain alignment with an OIE strategy and aligning I&E activities across Commerce. I think they are very complimentary as well as perhaps the Federal Innovation Summit.

We'll focus on that framework later today. Great question. We should be thinking about this. But I'll just say that there are no confining bricks on the framework. This is just a conversation starter. As these develop, we'll have a better idea of how things fit where.

(Off the record comment.)

MEMBER TOONE: Absolutely. And I think that we all felt that it's almost impossible to even think about a strategic plan

without doing that sort of analysis to see what's 1 2 out there. I had a question about 3 MEMBER BAGLEY: the wording, the use of the word "business." 4 5 I think this goes back to Brian's customercentric. So in the last paragraph, we talk about 6 7 promoting customer-driven businesses through 8 strategic assessment and then again we say you 9 should be as entrepreneurial as your businesses. I guess that given the set of programs 10 and the set of activities of OIE it didn't seem 11 12 like that was necessarily the key direct 13 constituent. It might be the second tier, 14 right, because you're actually working with the 15 organizations. 16 I don't want to make it sound too 17 bureaucratic. But on the other hand, I don't 18 want to make it sound like --19 MEMBER REAMER: Rebecca, if we put the word "ultimately" in front of "serves" would that 20 21 fix it?

MEMBER BAGLEY:

22

I guess I was thinking

more like Craig said during entrepreneurial economies or something. I mean, you're really serving regions which I don't think we want to use that word. I'm not sure what the new, updated word for ecosystems, regions, entrepreneurial economies should be. But that's what it feels like here. That's our target for most of our programs and things at this point, right.

MEMBER REAMER: One of the suggestions that was is there was consensus in the room about trying to put in the word "businesses" or something like that.

CO-CHAIR TANG: Let me just make sure I understand your question, Rebecca. Let me read this and you identify the point.

It says, "Among its 27 members, NACIE has substantial experience in the knowledge about promoting customer-driven businesses for strategic assessment and action." That refers to NACIE, right. "NACIE believes that OIE should be as entrepreneurial as the businesses it serves."

In other words, entrepreneurs, right. "And use 1 2 one of its most experienced or knowledgeable resources at NACIE to enhance its own 3 4 operations." What are you offering as an edit? 5 I guess I was offering 6 MEMBER BAGLEY: a conversation about I think language is going to 7 8 be extremely important as we go into the new 9 Secretary. And that the word "businesses" struck me as something that could be construed in a way 10 that we're trying to affect a current capitalist 11 12 economy. 13 CO-CHAIR TANG: Okay. I think we 14 actually edited it the other way which is to be more in line with the pro-business strategy. 15 16 MEMBER BAGLEY: Okay. 17 CO-CHAIR TANG: That was the 18 intention. 19 MEMBER BAGLEY: You guys spent a lot 20 of time on it. So I don't want to totally suck 21 up this discussion. But it's just one reaction. 22 MEMBER REAMER: Are there other people

that share Rebecca's concern? 1 2 (Off the record comment.) 3 MEMBER BAGLEY: Yes, I mean I'm a little out of loss for what the actual word is. 4 5 But I think it's like entrepreneurs, entrepreneurial economy, entrepreneurial 6 7 activities. That to me sort of sets better than 8 But I'm not quite sure how you businesses. 9 incorporate it into the language. Again, you guys spent a lot of time on 10 11 this. So if it's not an issue for others, I 12 don't want to derail the conversation. 13 (Off the record comments.) 14 MEMBER BAGLEY: Yes, that's true. 15 MEMBER REAMER: I want to add one 16 other element reporting back on the conversation 17 we had yesterday. It was clear that one of the 18 functions of OIE as desired by the members in the 19 room was to identify and make available publicly 20 the list of all the resources offered by the 21 Federal Government Innovation and 22 Entrepreneurship.

Another opportunity that was brought up -- I brought it up -- is there was until about a year ago a loosely-organized federal entity called the Interagency Network for Entrepreneurial Assistance Programs or INEAP.

And it was a gathering that went on for four or five years maybe of all the federal agencies that provide assistance to entrepreneurs.

It was hosted by NIST which is part of the Department of Commerce. I would say there were probably 15 agencies that would come. And it had no authority. It was just social as much as anything. It was just sharing information.

But the woman running INEAP had other things to do and no one has taken it over. It's not that INEAP has to be recreated in the mold it was informally, but it's to say that there is experience in bringing together and doing relationship building and coordination among federal agencies that support entrepreneurship. That's something that could be looked at as part of the strategic planning process.

MEMBER WILSON: I think that this is very valuable in bringing together and making available what's already been planned. And I think that as we go forward you should consider opening beyond the Government to NDOs and entrepreneurs that they could also be playing in that space for them to say "I'm here, too." They can attach their label to whatever that one-stop shop is that we end up using.

There's a lot of things that I hear about that I didn't even know existed, and they're not all necessarily in the Government.

So I think we should consider the open source type model.

MR. BUERSTATTE: Great. Is that it for comments and questions? All right.

Our number two vote for the day. So this is voting for NACIE's recommendation to participate in a collaborative experience with OIE to develop a strategic plan. This would be target submission by fall 2017 to the Secretary of Commerce. All in favor?

1 Thank you.

Any against?

(No response.)

No. For the record, that's a unanimous vote. Thank you very much.

And I think, Tiffany, will you be talking about skills then?

MEMBER STEVENSON: Okay. We had a very hearty conversation about skills and though what you won't see is us in a space to start to vote yet. But we would like to share the journey and where we are in the process. And we look forward to coming back with a more formalized proposal in a subsequent session.

I would also like to invite my peers to feel free to amend, edit, amen anything as we go through the skills mandate. In our balcony moment when we had a chance to step back, you can see when you look at the framework that there are quite a few initiatives that fall under training and workforce development. All of them are really strong ideas.

But in recognizing that we have a new Administration with some very strong views on the future of jobs, we recognized that we had an opportunity to do a couple of things: (1) to speak to why we feel that people development and training belongs as a pillar within NACIE and then why not Department of Labor, being really crisp on what we think the vision and the purpose of training and workforce development is as it relates to NACIE; and (2) how our focuses can really enable the current Administration's agenda as it relates to jobs; and then (3) making sure that our proposed actions are really the most critical and the most relevant for this upcoming two years as a team.

In saying that, our discussion to address this first point around why people development belongs with NACIE, we were able to really reflect on what we've learned about our future Secretary as well as what we know about the current Administration's focus on job creation, bringing in new jobs and the

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

sustainability of jobs. We recognize that whatever we need in order to enable that we have to ensure that we have the workforce who are prepared to take on these new jobs as they are being created.

We also recognize that
entrepreneurship is a key driver of job growth.
So we have an opportunity to ensure that we're
training and preparing entrepreneurs to be able
to take that on.

Our conversation around why people's development belongs with NACIE is really our answer to those two things. We think that it's important going forward that we have clearly stated that. And I would also would recommend for our strategy team that we look at being explicit about that because it's not really clear on the original mandate of NACIE.

The second thing around how our two focuses enable the current Job Administration's agenda is what you see in this mandate is first starting with workforce development. We came

away with the conclusion that it's being increasingly clear that some of the shifts in capabilities means that we're not necessarily prepared to support the demand.

If we look at things like advanced manufacturing, it's one thing to say we're bringing manufacturing back to America. But if it's advanced manufacturing, are we really prepared with the field with capabilities to do so? As we look at the emergence of new sectors whether it's technology, automation, automobile industry, we just really want to make sure that whatever we're doing is in service to really bridging the capability divide.

When we talk about entrepreneurial leaders, we know that their network isn't as open for all, providing all communities with the opportunity to access. Whether it's mentorship development, are we really preparing entrepreneurs to be successful? We feel like we have an opportunity there to ensure that we're providing the correct networks.

Long story short, we feel that these are the two areas under NACIE that we feel like we have the opportunity to put together and relook at the proposals that we have to make sure that they are where they need to be.

Under action, we think that this twopronged approach of highly skilled workforce and
highly skilled entrepreneurs is really where we
want to provide our focus. What you see at the
bottom of page one under highly skilled workforce
are current actions.

We would like to come back together to relook at these actions to make sure that these are still right. What we feel confident in is the advanced manufacturing initiative. We feel like it is the right initiative. But we also had some great discussion around regional workforce development, really understanding the role that Federal Government can play at the same regional workforce development efforts.

Under highly skilled entrepreneurs, we still feel strongly that having mentorship

networks is still a good place for us to focus.

But we also want to look at this idea of the

national innovation and entrepreneurship academy

idea to ensure that it's continuing to align with

this idea of developing and equipping our best

entrepreneurial to succeed.

More work to come. Again, what we feel good about is alignment of the purpose of people development. We feel like it will have a continually strong role in NACIE. We want to take a step back to look at the initiatives that we have under both highly skilled workforce and highly skilled entrepreneurs to make sure that they're aligned.

I'm going to open it to the team to see if there are any other comments or takeaways from yesterday's conversation.

MEMBER BOWLES: I hope this is important. It took a long time to get. At least it's at the bar level, right. I think that's great. I think what I would say to clarify is that we're not suggesting that workforce

development doesn't exist in the Department of Labor as well.

But I think what we're saying is that we think there is a reason and a valid point for why we should focus on this inside of NACIE as well. A small nuance, but we don't want DOL to think we're trying to steal this.

MEMBER JOHNSON: From my point of view, there's a short-term problem and a long-term problem. It's one thing to say we're going to stop jobs from leaving the country and we're going to bring jobs back. That's fine. That exacerbates an already existing problem from workforce in the advanced manufacturing sector. Some thought should be given to that.

But that's short term because you can't do that forever and keep growing the economy. The long-term solution is through this entrepreneurial development. And they both have really the same focus. So that in my mind is how they're related.

CO-CHAIR BRADLEY: I just want to say

this is -- While we're not voting, I want to acknowledge this is significant work because you have probably one of the larger bodies of work than the other groups. I think framing is everything.

I would put the question back. What is next? Only because I think yesterday we heard of one opportunity around the apprenticeship piece. Because of the short-term, long-term complications or opportunities while this group is here as you all will continue to meet, what can we do to help advance that, to share insight, to think about some shorter term deliverables even if it's making sure we're present at the apprenticeship conference, having Whitney report back to us?

I just want to make sure that we can support your momentum since we don't meet again. But you have people who are committed to this topic around the table.

MEMBER STEVENSON: I definitely agree.

I think our next step is to reconvene fairly

quickly to think about how we can take advantage of low-hanging fruit. To your point, we think that apprenticeship is exactly a perfect opportunity for us to leverage. And there are probably some others.

So we think that there is an opportunity even to understand what is the landscape today. So even if we're looking at the mentorship program for entrepreneurs we have some immediate action steps to understand what is out there that we can be better taking advantage of.

We sort of ran out of time. We hit
the buzzer before we were able to get there. But
I think that is our very next step is to identify
what are the short-term things that we can go
over.

But I think language is one thing that we want to take advantage of right now and making sure that we're repositioning the purpose of workforce development so it feels really aligned.

CO-CHAIR BRADLEY: So I would just encourage you to use Slack so that we can all see

it and weigh in and give you feedback and you don't have to wait for us.

MEMBER BALDWIN: So if I could just add that I think this is another opportunity for us to look for collaboration interdepartmentally. So we said, how is it different from the Department of Labor or the Department of Education. But how could be also be the same so that they join us in collaboration to deliver this?

make a comment not specifically to this group,
but to all of us in everything that we do. In
all of these things, we should be thinking at the
outset about evaluation and how we're going to
measure the impact of what we're doing. I think
that we can massively, massively, massively
amplify the impact of what we're doing if we can
create good metrics for demonstrating success.

And I would suggest that there are a lot of smart people in business schools at Duke and in other places that are thinking about this.

It's not simple to do those things. What people inevitably do in this space when they want to talk about success is they tell stories. Oh, so and so did this and that happened.

And somebody pointed out to me a long time ago that the plural of anecdote is not data.

(Laughter.)

MEMBER TOONE: And so you know

figuring out way at the outset that we can

separate selection from treatment and things like
that and being sophisticated about how we measure
the impact of what we're doing will massively,

massively amplify the value of all that we do.

MEMBER KAPP: Just as an addendum to all that, first of all, I have a model that I developed in concert with a couple of other colleges that I would love for you to take a look at in terms of it's certainly not scientific.

And since I am new to this area of data in this respect and how we capture it and attribution and all that.

I was fortunate to go to SSTI and

learn how much I don't know about this. I would welcome the opportunity to be able to learn about how we've done this particularly within a community college realm.

As you all know, there's a couple of flags that I raised. So I'm going to go back to the community college piece because across the United States we have an infrastructure that already exists on the workforce development side.

Every community college has primarily two functions. One is academics. And the second is workforce development. One of the reasons that I am on this Council and one of the things that I am working on very steadfastly is the addition of entrepreneurship as that third leg of the stool.

The reason why I bring that up is because it will allow us to go ahead and leverage off of existing resources across the United States in places that already exist with resources that are already there. When we think about the possibilities and the opportunities,

how can we possibly leverage those community colleges and how can each of us at our institutions look at those colleges to be able to leverage those assets so that we can further the work of NACIE and our individual organizations.

MEMBER REAMER: I want to raise and just make people aware of some things that are going on so that you have the sense of some of the options to pursue. The U.S. Chamber of Commerce Foundation has a Center for Educational Workforce. The director of that is a man named Jason Tidsco.

Marie spoke with him recently.

Jason has gotten a big chunk of money from USA Funds to create -- He is approaching workforce development at a regional level with a supply chain management approach. So the idea is to create employer collaboratives at a regional level that are connecting to education and training providers. The providers understand what the employers are looking for and building regional data systems to track the success or

lack of success of people coming out of various institutions.

It's called TPM, Talent Pipeline

Management. They are doing an academy. So it

started recently. They are bringing in people

from various regions to train them how to do

this. I'd be happy to make a point to talk to

Jason.

Jason is also working with -- I can't describe this project very well, but I could get information on the data side. So the National Association of Manufacturers has its own little thing called the Manufacturing Institute. The Manufacturing Institute is working with one of my colleagues at GW and the Census Bureau to try to create a data system that better understands the movement of people who are getting certifications in manufacturing related fields as to what happens to them, what kind of jobs they get and so forth.

The third thing is there is another advisory committee in the Department of Labor and

I'm a member of it called the Workforce
Information Advisory Council. The Workforce
Innovation and Opportunity Act, WIOA, 2014 which
is the primarily legislation that guides federal
workforce development activities, a side piece of
it is Congress recognized that in this internet
age that data can be used by people in labor
markets to make better decisions, students,
workers, educators, employers about what careers
to go into, where the jobs are, what's in demand,
what employers are asking educators to teach
students, where to locate businesses.

So Congress directed the Secretary of Labor to create a nationwide workforce and labor market information system that enables, not the Federal Government, folks at the ground level to have the information they need to make good decisions. And the legislation creates this council that I'm on to advise the Secretary.

That group, the WIAC, is coming up with its own strategic plan. It would be great to have your input and you can just use me as a

conduit. I'll stop there.

MEMBER STEVENSON: Perfect. I think one of the challenges that we're going to have increasingly is sharing the front, too. So in the spirit of having stronger metrics, getting a firm grasp on once we do select the industries that we want to focus on, what is the state of the union today? Then we will be able to show some measurable impact even if it's beyond our term. I think that would be fantastic to get some baseline information once we hone in on the industries. Thank you.

CO-CHAIR BRADLEY: Could I just ask

Maribel and Kara particularly because of your

positions do you have any thoughts on this one in

particular?

MEMBER WADSWORTH: This, to me, is I think arguably some of the most important work that can happen, getting to a concrete what does a proposal look like, what does a pilot look like. Something that I think about on a daily basis is how we can build truly that crosswalk

from the jobs that are disappearing and not to other countries, but to technological advances. Build that crosswalk to the jobs that exist that companies are struggling to fill because we don't have the right labor, the right skill sets in the workforce.

We can solve for that. We are absolutely solving for the heart of what is creating this kind of division, this kind of stress in our economy and frankly just a quality of life issue. This is a really, really big deal. I'm glad you all are being as thoughtful as you are and taking your time with the detail around it.

But I would imagine that beyond just looking at all of the federal programs that exist across all these variety of agencies this is a real opportunity to engage and partner with the private sector very directly. And so I would encourage you to seek those opportunities.

For example, the jobs that may exist in one community may be very different than

another. So as you think about the industries, think about identifying places to pilot this kind of partnership where there's a clear jobs disappearing from this sector or these types of manufacturing jobs but jobs exist in this other realm. How can we swarm that with the right private and public resources to create that crosswalk for people from one place to the other?

I'd be delighted -- I know that our company would be delighted to help on that front. So tap in.

That's how I would think about it.

CO-CHAIR BRADLEY: Will do.

MEMBER GOLDIN: I think Tiffany recapped it really, really well. Thanks for going back to the room and doing that. But I just think that the key thing really is the innovation piece and sort of what happens not just outside of the U.S. but when jobs are going away in the U.S. from as I mentioned to this group like things like the toll booth operator, right. It's gone. And what happens to those people.

I think also we just need to make sure that there isn't another group that's working on these things. I'm not sure that every toll booth operator, for example, is going to become an entrepreneur. But can we figure out a way to create an environment for those people as well?

I think we just need more definition more than anything else.

MEMBER BOWLES: I have a question. I think we all agree that collecting the data on what organizations already exist and working across departmentally as well as inside the different initiatives of Commerce is important.

But at what point -- How long can we take to do that? Maybe this is a part of the strategic plan. But we could spend the next two years cataloging initiatives. What's the Council's thought on how much time do you spend on looking around before you just start doing things?

MEMBER S. SMITH: Well, I would go back to the comment that anecdotes aren't data.

So we can spend years looking at anecdotal information. But I think the real data out there is what we need to be looking at. And I think that's much less than the anecdotal kinds of things.

MEMBER REICHERT: I would propose that most people are entrepreneurs of some sort around this table. And we're used to doing things in a quick and dirty way and then act it. So I would think you're doing a span. You're looking at what's out there already especially, for example, on the advanced manufacturing topic. Just in one call someone was able to identify there's already something out there called Manufacturing.gov. That already led to a whole bunch of information being found.

So I think we wanted to understand what is it out there that exists in a broad sense and then we want to start moving forward based on that information. And we're, of course, going to find new things as we go.

I would say the discovery period is

short. The learning period is long. But we just need to start. We need to take action.

MEMBER FREDERICK: Not to over complicate it, but there is so much work out there. Should we use something like Slack to kick some ideas in? Obviously, the U.S. Chamber is doing a lot here. There's the Manufacturers Association.

Believe it or not, I've had
discussions over the last couple of months with
groups as diverse as DOE who is doing a lot in
advanced manufacturing. The Department of
Defense and then our U.S. Intelligence are really
focused on this issue because of the
destabilizing impact.

I mean I don't mean to overdramatize the issue. But they recognize it as incredibly destabilizing. And they're studying it in interesting ways, in quantitative ways. I don't know to what extent some of those groups will share.

But you can use me as the tip of the

spear to ask. I'm not afraid to ask for 1 2 anything. MEMBER REAMER: I have a lot of this 3 4 information in my head. 5 PARTICIPANT: Me too. MEMBER REAMER: I'm with Emily in 6 this. 7 The aim is to have good enough information 8 going forward. And between me and a few people I 9 can put people in touch with they can just do brain dumps. And as I mentioned this morning, 10 11 for the Kauffman Foundation, I have a deliverable 12 of listing all the federal entrepreneurship 13 programs. That's going to be handed to the 14 strategic planning group. MEMBER STEVENSON: Maybe offline we 15 16 can just take a couple. 17 MEMBER REAMER: Fine. 18 CO-CHAIR BRADLEY: Two quick things. 19 One is I want to keep supporting enthusiasm. Ι cannot underestimate the need to write it down 20 21 because this is not just about us. So the point 22 of strategic plan to perpetuity, beginning to

leverage a framework of which like your research or discovery and then learn and then do, I think just a level of transparency at least within the group. But let's make sure we're documenting this so that there's progress.

And the second thing is I just want to say that there are always things that we can do individually. And we should continue to do those. Before we jump and do things though, we should just remember what hat we're wearing and be mindful of how we leverage our NACIE affiliation.

Unlike entrepreneurship, this is one of those things where we really can't afford to fail. And so I just really want to echo Eric's comments around evaluation and making sure that we have both evaluations but also metrics.

I'm a visual person. I would love to see a dashboard that at some point in time we can track, but really continue to amplify what our impact is. But I do think it's important that we are just mindful of sharing and what lens

we're going to act and recognizing that we can act individually probably sooner than we can as NACIE.

MEMBER REAMER: I want to just introduce the term to the discussion of due diligence. Part of the work as entrepreneurs and as advisory council is to do due diligence up front so you're not walking into a situation where you're going to fail. And due diligence is not perfect, but it's good enough.

MEMBER FREDERICK: The term we use is don't like the perfect be the enemy of the good.

CO-CHAIR BRADLEY: You guys are so technical.

(Laughter.)

MR. BUERSTATTE: I'll also add that one of the things we wanted to touch base on towards the end of today's meeting is next steps. And I think some of the comments dovetail nicely with what are your next action items and how are you as a council planning to hold yourselves accountable to some of these discussions and

goals.

Is it compiling information and engaging via Slack? Do we need to set up a certain rhythm of calls? I'm ahead of myself, but we've got a quarter under us now. So I think we need to understand a little bit what's working well and what's not and where we as a team can improve. Just frame that thought in your head for now and we'll get to it at the end.

CO-CHAIR BRADLEY: Does Tiffany need anything from us in terms of any actions?

MEMBER STEVENSON: I would say Slack is probably the best way. So I'm hearing that there's lots of resources out there of work that's already happening. So it's on the workforce page. You can start to drop those things. That would be perfect. But I think as a team we need to regroup and tighten up around what are the priorities that are going to fall under these two categories of job skills and entrepreneurship.

MEMBER REICHERT: From the perspective

of one who was part of the group yesterday, I would suggest that we have subcommittees that are working on these two streams. I think there are several people that are very passionate about the manufacturing piece and are very willing to do work on that. And I assume that there are -- Well, I knew from the discussion that there are definitely people who are passionate about the academy and also passionate about the other topic as well.

MR. BUERSTATTE: We're a few minutes ahead of time. But I do see Tom Guevara in the back. And, Tom, real quick, did you have any thoughts on this? I wanted to get your feedback while you're down here.

MR. GUEVARA: Of course, since you asked. First of all again, thank you. This is really great to watch this thoughtful engagement and exchange of ideas. I think it's really something that's very heartening in terms of your engagement and real interest in doing things that are meaningful.

A couple of observations. One is that I'm certainly very heartened to hear about the need to think about experimentation. A lot of times we look at things and we look at saying let's do some empirical work in this particular area. But I think particularly when it comes to innovation and entrepreneurship and figuring out what is a true ecosystem and what are the essential elements of that in what I call a decontextualized situation, then you probably need to do some experimentation to really figure that out and carry that across.

I'm a little bit weary of things like best practices. Usually they involve a particular context. And I usually tell people to try to this best practice. I say, "Sure. If you give me your people, your resources, your situation and your constraints, I think I'll get exactly the same results as you, really great results." I think we do have to be a little bit careful as we think about some of our recommendations.

The only other thought and this is really mostly a thought about the workforce side of it because I think about this constantly, too, in looking at the research I look at is that I hope someone else thinks about the other side of the equation. That is actually educating employers.

We think about this almost strictly from the supply side. However, I think that often times -- and I think many of you know -- it becomes down between hiring somebody with a specific skill or somebody with an aptitude and a preference for the work. In other words, they like that kind of work. I think I'd almost rather take the person with the aptitude and wants to do that kind of work rather than whether they have a particular skill.

I can train them. And they will be an incredibly long-serving employee that will be probably highly engaged and come up with a lot of great ideas. And I think sometimes employers overlook this. We don't talk enough about that

part of it in terms of helping to solve the skills gap for a lot of employers.

I hope also that you think about that and think about your work in the workforce area. Think about the other side of the equation, too. What can do to help employers be a little more flexible and creative and engaging in building their workforces?

Just a couple of thought. But really great ideas here in terms of what you're doing.

Again, thank you.

MEMBER BAGLEY: I just wanted to reinforce what he said because that's a great point that wasn't -- In Pittsburgh, we're doing actually the Allegheny Conference which is our Economic Development Business Organization Chamber. We're doing a big push with the HR representatives from all the large companies looking at how they're doing their job descriptions, hiring, getting rid of the entry level, needs two years' experience instead being able to hire out of college and then the

retraining and all the other things. And how you actually look for in a large corporation not necessarily exact skill set but the types of things Tom was talking about. I think that's a great addition to the conversation.

CO-CHAIR BRADLEY: And the beauty is Maribel has stepped up already. So that could be a great model.

MR. BUERSTATTE: We did have a few offline conversations about -- I think it was Whitney who commented about it yesterday -- the JP Morgan Chase Summit. That could be an interesting opportunity for NACIE really to activate and serve as that voice and rally some key employers to communicate those points. I just want to put that on everyone's radar. I think that's something that you all might want to take a more serious look at.

MEMBER FREDERICK: Another potential resource, firms like ours, NEA, we have two-talent partners. And I know they're very connected to the other large Valley firms.

Almost all venture firms will have a talent partner. And these are issues they talk about a lot.

I got the benefit of sitting in on one of their workshops on how to rewrite job requirements and specs. Absolutely eye-opening to me. This one had a particular focus on how wording can basically discourage women from applying to certain positions in unintended ways. Literally just saying something like "Looking for rock stars" and things like that, it was fascinating. And they had concrete data on what then happens to the number of women versus men applying for that position.

This is top of mind in the Valley. To your point, the Valley is becoming much less focused on academic degrees, but things like passion and can they just get in and get things done. It's just another resource.

They're out there. And I know the talent folks do a very good job of networking.

So I think there even is a group of like VC

talent professionals.

MR. BUERSTATTE: Is that it, Tiffany?

Great. I think that was a lot of awesome

feedback for report-outs. We're about 15 minutes

ahead which will save time for maybe more robust

discussion on next steps at the end.

I'd like to break at this point. We'll do 15 minutes. If you look at your schedule, we're ahead of time. Instead of breaking at 10:15 a.m., I'd like to come back at 10:15 a.m.

Please enjoy a quick break and those of you who might be dialed in we'll mute and convene back at 10:15 a.m. Eastern. Thanks so much.

(Whereupon, the above-entitled matter went off the record at 10:02 a.m. and resumed at 10:21 a.m.)

MR. BUERSTATTE: So we teased this earlier. Scott, could you go ahead and put us off mute please. Welcome back to anyone who's dialing in. We're getting started on our next session.

MR. BUERSTATTE: We spoke earlier this

morning about working our efforts towards a broader framework. So that's what this next 45 minutes or an hour is going to focus on. To lead that I'd ask the co-chairs to kick things off.

Melissa coming back here. We're talking about the framework right here. This is a snapshot actually of where we were after our last meeting in October. And, Orin, you very purposely asked the question where things fit in. And that's the whole point is that the framework is designed to illustrate where things are fitting in.

This is a dynamic model. It does not yet reflect I think the discussion that we've already had and the approvals that we've just had and the discussion we had on the skills side. So keep that in mind.

But what I like about this is that it gives a reference at least on how we are integrating the various thoughts and initiatives and where they fit together across themes.

That's helpful I think not only in terms of

organizing scarce resources within OIE and scarce time among NACIE, but also in evolving our thoughts on how to coalesce around high impact initiatives and programs.

With that in mind, the other thing I think is the lesson learned from previous NACIE experiences which is this does evolve as the Council gets a better sense of the working relationship it has within itself and the external organizations or people that they want to bring into the discussion.

This has been I think very, very helpful at least to me at least based on past experience of how we can begin looking at the impact of what we're doing.

Melissa, I was stalling so that you could get back in the room here to offer any other comments.

CO-CHAIR BRADLEY: I think this is -I again want to acknowledge Brian for getting it
started. To Orin's question earlier, this is our
opportunity to also use this and, Eric, it would

be great to hear from you of how this can integrate with our evaluation and our checkpoint.

I think we should see this more as a white board where things can be moved around. It is not etched in stone. And I think the biggest thing for me was as we talked about how does this all roll up. I think yesterday several people kept saying or actually Eric kicked us off with the end in mind, always being mindful of the end engaging all communities.

We talk about universities and making sure we're talking about community colleges. And we talk about various demographics. It's rural. It's urban. It's underserved communities. It's the new majority. It's women. It's disabled.

And then when we think about how and what our message is we're mindful. Yesterday I learned a lot around innovators and entrepreneurs and businesses, small and large and that we are continuing to operate across a continuum. I would open it up now. Or, Brian, if you want to say anything about your original thinking and how

we should be looking at this and even changing things up as we advance these various recommendations.

MEMBER BARTHOLOMEUSZ: As you said, this was just a snapshot in time. And when we went through the first round of proposals, initially they seemed like just a bunch of disjointed, disparate ideas and concepts.

For my edification, I sat down and just tried to organize it. And I found that they actually created a continuous fabric that I just sat down and banged out in an evening. So there's not a lot of thought in it. But it gave me the comfort to know that there was integrated or some cohesive vision here.

And I did this from two perspectives.

One was it sort of concerned me a little bit and

I accepted the fact that we could only do a

limited number of detailed projects. Three of

them I think was the number Craig raised.

But it seemed to me a pity that there was all this other stuff. And I wondered where

they would go. On Eric's graph they were parked somewhere.

And I thought to myself in just abandoning them when they were just one or two page proposals it almost seemed to me like it would make sense if we could flesh them out into maybe four or five or six pages, spend a little time and maybe not burden OIE staff, but there's a lot of people here working for two years. I mean groups of three or four can sit down and just flesh those out a little bit and then park them and have a repository of ideas.

Otherwise, I think this would be a good historical record. It tracks the breadth and extent of the thinking here at NACIE. But I think it could also serve as catalysts and germination points for new ideas and maybe for future NACIEs even.

But it seemed to me they are kind of interrelated. And I don't want them to be lost.

That's really where it started out. And then I looked at it and I felt comforted because they

all -- I could convince myself that they made a coherent story and a continuous rational framework. That's how I started.

CO-CHAIR TANG: Thank you. Just to the point of lost, yesterday Eric presented the flow of how projects get discussed and negotiated and voted on. Nothing is ever lost. Things are just parked I guess in the verbiage of that process.

But your point is well taken. The discussion and deliberation we have is valuable for a lot of reasons and it shouldn't be lost.

CO-CHAIR TANG: Thank you.

CO-CHAIR BRADLEY: Comments on the framework?

MR. BUERSTATTE: While you're thinking about that, I'll add on this parking note. What sometime we really need to see is when the stars align and maybe there's another agency that starts to look into or investigate an opportunity around a new program or a policy. And Eric and I have at times said, "Hey, look at this. Here's a

nice three-page concept drafted by the National
Advisory Council on Innovation and
Entrepreneurship."

I just don't want you to think in any way that parking something is invaluable. We really do value words on paper. And I do endorse Brian's thought of if there's opportunity and interest to further vet some of these of course with OIE's input we can help guide in the right direction. I think some of them could help in future conversations. That's all.

MEMBER BAGLEY: I like the framework.

I think it makes sense and it aligns things which
is always good because you can see the pyramid of
how it starts from the top and goes down into
more details.

One of the general thoughts that I had and it fits into this discussion because I think these are the things that we're considering doing is we made a lot of progress this morning I think by approving two initiatives. I think it positions in front of the Secretary in a good way

that we have suggestions that we can make as he or she comes in, he.

My concern is that I also want to position NACIE as a big thinker with big ideas.

So I think as the Secretary comes in and defines a little bit of policy direction we want to be careful not to get too big too fast or outside of the Administration's goals.

But I think that I'd like to see -The two things that we passed are a little bit of
-- The strategic planning and the convening in
regions, it's not really here's a big thing that
the Administration could do to solve for the
challenges or the opportunities that are across
the blue or that interconnect across the access
to capital workforce training. I would just like
us to consider as we go into our next meeting and
as we have a little bit more policy direction,
can we be thought of as a big thinking entity
that can put big things in front of the Secretary
for consideration. That's just one comment.

CO-CHAIR BRADLEY: I would just say

that what was evident in 2.0 was this balance of the advice is internal and centered around what the agency could do. But the opportunity of who we are and why we got selected to really have an external presence, to be careful when we're representing and when we're not. But we need to think about how do we think big outside in our own roles and our own communities.

I don't know how we advance that. I want to be honest, but I saw a couple of heads shake when you said think big. And I just want to say that this is really the opportunity where we need to start taking some more ownership.

The staff has been phenomenal in organizing us. But I think to your point is internal accountability of us having our own phone calls and organizing them. And I know everybody doesn't have an assistant, but how do we do that? How do we in certain areas because we have advanced two priorities -- How does those of us whose priorities are working or almost on autopilot lend a hand to some of the

other committees?

Dare I say I think by default we've had people step up like Tiff, Andrew and Heather, Tiffany that we will be co-chairs looking to say how can we help you to keep this going. We don't meet again for a long time. But I expect that Steve and I will just confirm that we'll be here.

We're going to see some folks in a couple of weeks in the State of Entrepreneurship here in D.C. Whitney is going to make sure that we get to the conference. I would say also thinking about what do we do with these internally, but what can we bring back to put some meat under these and to have us be larger thinkers for sure.

MEMBER KENNEY: I was going to ask

Brian if you could elaborate a little on the

shared resources column. I understand what

access to capital is and training workforce

development. I wasn't sure if I really

understood -- And I was curious if you just try

to organize all of the topics that were out there

and try and find some natural groupings for them. 1 2 Or is this more here are the big things that we should be working on and then put the topics out 3 4 there? 5 MEMBER BARTHOLOMEUSZ: The former. So I basically took what we had and I just tried to 6 7 make some sense of them. 8 Okay. Could you talk MEMBER KENNEY: a little bit more about the shared resources one? 9 What is that? How would you define that? 10 MEMBER BARTHOLOMEUSZ: I tried to find 11 12 a word that covered what ended up in that column 13 basically. 14 MEMBER KENNEY: Okav. 15 MEMBER BARTHOLOMEUSZ: So that was the 16 best descriptor I could find. And like I said, this is not a lot of thought. 17 This is one glass 18 of wine and my pathetic attempt at Excel or 19 PowerPoint or something. I'm not an expert at 20 drawing this stuff. You can tell. It's 21 horrible.

MEMBER KENNEY:

22

This is great and I

would love to see what you could do with two or three glasses of wine.

CO-CHAIR BRADLEY: Do you have suggestions?

MEMBER KENNEY: I don't know that I have a suggestion. In a prior NACIE we started right off the bat with this organizing principle around an innovation group and an entrepreneurship group and a workforce development group. We actually felt constrained by that because we didn't get to talk amongst groups as much as we wanted to. That was one of our pieces of advice to not force us into these separate areas.

It does feel like there's some value ultimately of self-organizing into some big buckets. So I agree. I might have come up with the same label if I was doing the same exercise of trying to organize these concepts and these specific ideas.

I think it also might be worth -- and

I don't have a suggested grouping -- us thinking

at that high level and maybe as part of the strategic planning process about workforce as clearly a big area and capital is a big area. Is there another big area that we collectively think we want to have maybe multiple projects and a group of people working on together?

It could be more around that innovation, converting ideas into businesses or it could around -- There is a whole bunch of different categories. And some of the things here in the shared resource may fall into a different name. That's just a naming thing. That's just my thought.

CO-CHAIR BRADLEY: That's what I thought.

MEMBER KENNEY: I think that's a good point.

CO-CHAIR BRADLEY: We will carve them out. So I don't think we're have all the wordsmithing. But I think we want to make this a collaborative process. Naming Heather and Andrew and others, not that they're going to go off and

do it. I'm not pushing you to come up with something. But I think this is the time for us to say what else we would like to see.

MEMBER KENNEY: Yes, which is great.

And I've been sitting here thinking I was working on the capital one. We just passed it. So what do I work on now?

(Laughter.)

CO-CHAIR BRADLEY: That's a good question.

MEMBER KENNEY: I would welcome other ideas and would love to help think about that at both a high level as well as specific ideas.

MEMBER STEVENSON: I would say that
when I look at items C, D and N they really
represent to me the how. So are there some
common measurements or measurements of success on
how we want to get our work done? I would say
there might be more than fall into that category.
But I think our purpose is we want to make sure
that we're always aligning and that we're taking
advantage of what's happening with Federal and

convening and working with established businesses. Maybe it's working at a local and regional level to understand how to accommodate our suggestions and to existing framework as a suggestion.

MEMBER WOMACK: So I'm getting increasingly excited about all of this. But the entrepreneurial personality inside of me wants to engage external stakeholders and leverage what we're doing to really engage thought leaders and doers out there in so-called real world.

Part of the challenge is we are a client or rather OIE is a client to NACIE.

They're our customer in a sense. But there are all these other customers and clients out there.

I'm wondering if we should consider establishing some sort of forum that would allow us to engage more directly folks like Kauffman and other folks who are out there doing good things in various buckets that could inform NACIE. Therefore, they could inform OIE within the framework that we're discussing. I'm actually putting forth an idea

for consideration.

(Off the record comment.)

MR. BUERSTATTE: OIE has been engaged with Kauffman to discuss some strategies to identify the continuum of entrepreneurship and innovation servicing programs and policies across government in preparation for their E-SHIP Summit in June of which OIE will likely have a decent sized role in that category to helping pull together the resources in that continuum of players on the Fed side. That would be a great way to engage Kauffman through OIE and NACIE.

And Kauffman being the convener that they are, no doubt I think there will some other great external players there.

But I think that's also just a great nod again to Whitney's conference in April -May. So we'll go to Chicago in May and then -D.C.

(Laughter.)

MR. BUERSTATTE: You guys are making me crazy. We'll come back in May. What are the

dates on that, Whitney?

(Off the record comment)

MR. BUERSTATTE: Okay. Interesting.

I'm wondering if we could wrap a NACIE meeting

around that. Right. So maybe we have our

official meeting either the day before or the day

after. I'm getting ahead of myself. We'll talk

about that at the end.

But I love it. I'll just emphasize that all these nods and mentions of various organizations. Joe, the National Association for Community Colleges and Entrepreneurship, that's 300 community colleges. That's an awesome channel. Heather's organization, Heather has offered to share some of the resources and consulting and innovative services they have to help us work through this. And I know many others of you as well. Looking at you actually, Rebecca, with the Innovation Advocacy Council through SSTI.

Absolutely, let's use what we've got.

That's the power of the team. That's why we

bring you in here and happy to see all the discussions happening. Happy to see the friendships growing because that's where the neat ideas start.

CO-CHAIR BRADLEY: Things are going to be very strategic for OIE and maybe you should try and coordinate. But if you have other ideas for Kauffman or other groups then we should also

MEMBER WOMACK: Yes, I don't want to be Kauffman-centric. But I think they're great, but there are other folks doing great things as well. The point I was making is I'm certainly willing to roll up my sleeves and work with everybody here on this idea that we, NACIE, could externally engage stakeholders, thought leaders, organizations. We all represent networks.

I represent a huge network of
historical black colleges and universities, about
100 of them, that are engaged in innovation and
entrepreneurship. But they're not plugged in
with you guys. And they need to be. That's just

one example.

But I think the concept of the forum would be that it would allow NACIE to engage and therefore be informed and therefore inform OIE through its framework what's actually going on in the real world out there and how policy can impact in a positive sense those activities. So I'm happy to --

I think Craig's idea of leveraging existing events is great. I don't think that's a bad idea at all. Maybe that's a step towards doing something independently.

MEMBER KAPP: Chad, let me. We had at some point during the course of the iterations there was a conversation about a national innovation summit which dovetails onto what you're saying. So potentially this is this carving these out for that which is taking place in June and then there's the apprenticeship piece.

One of the things that I have found -- and maybe somebody has additional information on

this, but to piggyback off of what you're saying

-- as a challenge is that when you take a look at
the public policy aspect of things, when you take
a look at what foundations are doing, in
Appalachia, we have a group of funders who are
funding things with regards to workforce
development and entrepreneurship, economic
development, public policy folks, potentially
venture capitalists.

And my experience is -- and

potentially this is not the case -- I have not

come across a convening of all of those folks who

have vested interests where there's been a

national summit or national conversation or

national discourse to really meet out some of the

things in terms of the ways that we can create

leverage and collaboration unless somebody else

is aware of something.

I know SSTI was really fascinating for me and I started to go to a number of conferences, South by Southwest, USASBE and a whole host of different conferences. But what

I'm finding is that there are these conversations that are taking place in silos. One of the things that we have talked about in a not insignificant way is -- and the community college and academics at that table as well -- that there's a not insignificant opportunity to bring all those folks together with a very targeted agenda that we can put together to see what is it that it would look like and what would we want the outcomes to be.

MEMBER BAGLEY: There was a group that used to convene called National Association of Seed and Venture Funds, but it dissolved about three or four years ago. I was on the board.

It brought together entrepreneurs, some of the SSTI stakeholders, venture capital, seed funders, not everybody. But it was more broad. I think there is a gap in that market from what I've seen. I think that it may be more sustainable if like an association could pick it up as a major push of something that they are interested in rather than organizing a meeting

1	like that at OIE would be really tough. But I do
2	think that there is an opportunity to figure out
3	what the right way is.
4	MEMBER KAPP: That's good to hear.
5	I'm happy to work with you on that because I
6	think that piece is going to be really important.
7	MEMBER WOMACK: One last point is I
8	don't think this needs to be necessarily an
9	official OIE function per se.
10	MEMBER BAGLEY: Right.
11	MEMBER WOMACK: But more of a NACIE-
12	driven thing. Obviously, OIE would be present
13	supportive.
14	MR. BUERSTATTE: I hope you are
15	inviting me to the party.
16	MEMBER WOMACK: Oh absolutely.
17	(Laughter.)
18	MEMBER TOONE: You've got to think
19	this is an epic lift, right. We did this at
20	AARP. We ran the summit.
21	MEMBER BAGLEY: Right.
22	MEMBER TOONE: It was hugely impactful

and helped us punch way above our weight. But I am telling you this is an epic workforce.

MEMBER BAGLEY: It's huge, yes.

MR. BUERSTATTE: That's a great point.

I was just thinking the same thing. But with

respect to, yes, we can't do this solo. But how

can the Federal Government act to be the

convener? What are our best levers? Is it

funding mechanism where we fund the foundation to

do the lift?

Do we use the bully pulpit? We've seen a lot of that in the past few years. Where funding has lacked, we've been able to amplify with designations, with challenges and prizes that maybe not necessarily amount in funding or amount to funding but some sort of designation or just acknowledgment. That seems to rally communities. And I would be interested in any thoughts as you guys chew on this in how we might be able to support that aside as we as a team trying that lift.

MEMBER REAMER: I have an idea I want

to see what you think as a compliment to what you're talking about. It's a low level of effort which I think potentially impacted. When Emily from Third Way was speaking yesterday, I had this. Right here, this is a think tank in D.C. Clearly, you're doing work that relates to this.

Did anybody know Emily before? I met her two weeks ago. There are a lot of organizations in this town that work in this space. And I look at that space outside that door and think could we just set up four tables so before each meeting we invite four organizations like the Economic Innovation Group or Third Way or Brookings. They just send to staff. They put out their wares and you guys mingle and you meet them.

I know there's an opportunity to make presentations. But they would not be taking meeting time. How many people walked up to Emily yesterday? So several of you.

And there would be that opportunity for the meet and greet. It's a very efficient

way to learn what all these people are doing and to exchange cards. I'm happy to help arrange that if that's of interest.

CO-CHAIR BRADLEY: I want to echo that because I love the big idea. But I think that there is probably a gap in everyone's understanding of these groups, how they operate. Before we can invite them to all come together, we need to better understand them. I think that idea is great.

I think last night's dinner. I don't see why we couldn't invite HBCU folks or if somebody is in town or there's another representative from the board to get some VCs around the table. This is again where we need to take ownership though and think about how do we use the in-between space and how do we use the social space when we're here.

Except maybe Whitney who's not allowed to access various forms of technology, there are webinars. Chad, if there are webinars coming up, send it out to us. It doesn't have to be an

official thing. But if there is something that you think or, Joe, there's something that's public and at least two of us can sign on to and pay attention and take notes.

I think like people don't know about us I do not want us personally to enter a space and we don't know enough about them and identify an overlying framework of their shared views and opportunities.

I just keep hearing this is a call.

And I think Steve and I will make ourselves

available. But how do we keep this moving and

how do we continue to remain connected and not

having to rely on Eric and Craig to do?

MEMBER REICHERT: So I'd like to build a little bit on Andrew's idea and wonder if he brought in the Third Way folks as part of the public comment period so that we could hear what they have to say. It was very relevant to work that we were potentially going to be doing.

Is the public comment period a forum in which we could do similar things, if we wanted

to have people from the Manufacturing Institute come in and talk to this group about what is advanced manufacturing for example or what are the challenges, using that as an example. I think Craig and his team have been very good about bringing in speakers who are helping us understand different capabilities of government and different channels that we have.

But we could also if it's okay with the group use the public comment period for providing information to NACIE. It's just an idea.

anything wrong with that. The only thing I would say is I was vetting this here. It would have been great if we had more time. So I think thinking about all the spaces we have, there's no reason why we can't recept and listen to someone and then sit down and have dinner with them.

I just want to say that I think any of this time is available. But I also felt like we could have heard 20 more minutes from Emily and

had more time for Q&A. So we should be mindful of what is allowed in terms of time and what are other venues to go deep. I would think for the American Manufacturing and particularly the significance of the issue have them in public, but then also have them come to dinner and do something else for us. I just think it's a management of time and making sure we get what we want because we only get one chance.

CO-CHAIR TANG: If I may just call our attention back to the framework. I think we're talking about next steps which is great, but aim further discussion about the framework.

CO-CHAIR BRADLEY: Dave would agree to fix it or revise it. I'm sorry. Not fix it.

MEMBER NEMETH: I just have a couple quick thoughts on the framework side. It strikes me. I suppose it's the systems engineering perspective I reluctantly have. I think identifying them alphabetically almost implies that each of them carry the same weight and you see N kind of stuck along off in the bottom

corner there.

And I think it's okay to maybe start looking at combining them as well as an option.

We talk about putting them aside. But now that I understand connecting community capital resources better I think that's really just a small subset. It's like if we're going to convene all of these stakeholders, the point of N was that capital doesn't necessarily come from your traditional sources of capital. Capital can come from an existing business that's thinking about investing in R&D and how can we better encourage.

I think as far as the framework of where we're going to put things another option should be not shelf it, but roll it into other ones. So I would propose that we roll N into E.

One other thought, too, was -- and I very reluctantly go down the road of introducing a grand, other piece to our discussion because I'm really excited how much work we have done in a short amount of time -- something that struck me in our conversation yesterday about regulatory

and trade, two things that aren't a big part of what we've talked about but from an administration standpoint, we see at the forefront, was looking at L. It reminds everybody that in certain environments for entrepreneurs they're saddled with long regulatory approvals and the idea of creating some easy to operate either digital or physical sandboxes to experiment. This strikes me as a really opportune focus for us. And then maybe we include trade and regulatory as a better label for shared resources.

I just put that out that we should start thinking about where to find a home for trade and regulatory. And one final thought on the trade, that's the other thing for a technical business exporting to customers overseas that are often greater, more eager customers of our technology. That's really intimidating for a smaller entrepreneur.

So then it ultimately gets either shelved or the larger organization comes in and

1	buys it purely for the sake that they have an
2	export committee and team that can sell it
3	overseas. I think that could really unlock a
4	whole different subset of entrepreneurs. They
5	could more easily sell their equipment without
6	having to worry about months and years of ITAR
7	and every other frankly Commerce regulation on
8	trade.
9	CO-CHAIR BRADLEY: I just had a
10	technical question. You have great suggestions.
11	Who is going to I don't want to assume it's
12	Brian. Are you going to edit it?
13	MEMBER BOESCH: I was about to
14	volunteer to work with Brian.
15	CO-CHAIR BRADLEY: Awesome.
16	MEMBER BOESCH: For digital clarity.
17	(Laughter.)
18	MEMBER NEMETH: I like the PowerPoint
19	on that color scheme though. It works.
20	(Off the record comment.)
21	CO-CHAIR BRADLEY: So we have David
22	and then Esther.

MEMBER KENNEY: I was sitting here thinking about there's a huge amount of unknowns related to the new Administration and the new Secretary and policy priorities. Mike's comment just made me think.

Regulation is one we know is a big topic that there's a strong desire to reduce the amount of regulations. To the extent we could have an initiative that could say "Here's some well thought out suggestions for improving regulations." I would think that would be embraced and welcomed. I think that that's a very interesting one that we could be thinking about.

And I would also encourage all of us as we hear the priorities of the new Administration becoming more apparent that if there are things that we feel like we can constructively jump on as a council -- some of them are obviously way outside our scope and anything that we can do constructively -- to the extent that there are things that we can jump on

and influence, I think that would be a great thing for us to be quick to work on if we can.

MEMBER BALDWIN: And I think that there's an opportunity to either color code or identify what can be done that fall under fund, convene and the other things that are possible for OIE. So what's the charter? What can they do? Convene what? Fund what?

MR. BUERSTATTE: Just so you know as a reminder, we're advising the Secretary of Commerce. So we've got a lot more than what just OIE can do. So we really do have the assets of Commerce behind us.

MEMBER BALDWIN: Okay. But I don't see -- I see one convening and a couple of funding. But it's not labeled. It might help us as "Yes, this is possible."

MEMBER BOESCH: As I think about how to draft this, what might be nice, too, is maybe we can make a draft and put it up on the Slack channel so that people can get feedback as we evolve this. At the beginning of the discussion,

I would not have taken all the notes I have taken had I volunteered for it. So I'll appreciate if you guys can do that.

What I think would be very helpful and this will probably be a good exercise in practice for our strategic planning for OIE is what I want to remember here is I think it needs to simultaneously achieve two goals. I think it's great to have clarity so we can have a mental model of what's the scope of things that we're working on, where do we fit them in and how they have action.

But I also really want it to bring in what Rebecca is saying that I think it's important to remind us of what's the big picture mission of these things. We'll try to make it in a way that can capture and that can be inspirational in that way. We can then always ask ourselves, "Are we thinking big enough?"

MEMBER JOHNSON: I agree with that.

I think you don't want to leave Rebecca's idea

out of this. And what if the Commerce Secretary

asked you, Craig, "Forget all this stuff. What's something really big that we could do that would make an impact?" What would you say? That's sort of where I'm at.

An entrepreneur always has their elevator speaker ready. They always do.

MR. BUERSTATTE: My elevator speech right now, one of which we're working on in the OIE strategy is there is \$7 or \$8 billion going towards innovation, entrepreneurship program and policies right now across the Federal Government. There is an opportunity to elevate OIE's role to be a convener and expert in this field for all of Federal Government. So we are going to make the Federal Government's I&E programs more effective and more valuable. That's one pitch.

So I just respectively disagree with some of it. Sometimes it's how you sell it. I think the strategy plan and that work is going to be hugely valuable if done right.

I also think many of the conversations here are in infancy right now. So we will build

towards those big, bold ideas as long as we all 1 2 push each other. 3 MEMBER BAGLEY: -- presidential 4 candidates through the transition -- thank you --5 evolved into a presidential that we shared with both candidates through the presidential election 6 7 and had some pickup from some of the wording and 8 That was positive on both sides. things. 9 So we then recreated that into a suggested set of ideas for legislators, but more 10 11 for administrators. I can post that up on Slack 12 because it gives a little bit of fuel. And it 13 was really worked at the SSTI conference with a 14 fairly broad set of people. Again, to Joe's point, it's more 15 16 practitioners, university, the industry flares in 17 there. So it would be good for us to test it. 18 But it could give some ideas to start with. 19 MEMBER REAMER: Does everyone know 20 what SSTI is? 21 MEMBER BAGLEY: It actually used to stand for State Science and Technology Institute. 22

1	But it has evolved. So it's an association.
2	Well, it's not an association. It's C3
3	organization that works on best practice sharing
4	between people that are working in technology-
5	based economic development.
6	So it's independent non-profits like
7	the Science Center, like my previous job at
8	NorTech. It's universities who are doing
9	economic development in a technology-based way.
10	It's states and their funding mechanisms.
11	It's practitioners in technology-based
12	economic development. And there are 46 states
13	that are involved. So it's a pretty broad set of
14	constituents.
15	CO-CHAIR TANG: The current chairman
16	is former Governor Tom Ridge who was also the
17	first head of the Department of Homeland
18	Security.
19	MEMBER BAGLEY: Correct.
20	CO-CHAIR TANG: A strong advocate both
21	nationally and at the state level.
22	MEMBER BAGLEY: And I'm both on the

board of SSTI as well as I chaired the Innovation 1 2 Advocacy Council for the first three years. So I've been pretty involved. 3 4 CO-CHAIR TANG: They're based in 5 Columbus. They are based in 6 MEMBER BAGLEY: 7 Columbus, but that's just leadership. 8 PARTICIPANT: Don't knock Columbus. 9 (Laughter.) CO-CHAIR TANG: That was not a knock. 10 11 I'm going to offer just in the spirit 12 of big ideas and this is perhaps not just an 13 example of an idea but how you may be thinking 14 about from your own community perspective of how 15 to gain support for big ideas. Let me just 16 preface it by saying I think Mike very, very 17 appropriately has caught onto the two anchors I 18 think of this Administration which are trade and 19 deregulation which I think we ought to be aware 20 of. 21 The other piece which I think is being discussed a lot is infrastructure and the 22

opportunity to invest heavily in infrastructure during the campaign. Their numbers thrown around are \$1.0 to \$2.0 trillion that could be accessed and primarily from repatriating foreign profits back into the U.S.

I did some business on the Hill yesterday to define and expand the definition of infrastructure to innovation infrastructure and assets as well. And this could be obviously a huge windfall to everything that we are advocating I think for the economy.

But obviously it goes beyond Commerce. In order to create that ground swell support you're going to have to do your own work if you believe in that with your own local communities to get support at the legislative level. I offer that as one thing that's in the background. I'm not ready yet to present it to the Council for support. But I'm trying to see whether I have local traction within our legislators and I hope you would do the same thing.

(Off the record comment.)

CO-CHAIR TANG: Yes, and by the way part of this was advocated in the previous NACIE.

I think we'll add to that. Sure.

(Off the record comment.)

CO-CHAIR TANG: Sure, absolutely.

MEMBER WILSON: I just wanted to tag
on to that infrastructure. I'm not an
entrepreneur. But I've spent years and years and
years doing innovation as a discipline. And the
highest ROI from an innovation standpoint comes
from reapplied innovation.

If we look at what's been done for innovation infrastructure elsewhere, I've got some examples. A Chinese national infrastructure for supporting entrepreneurs and innovators from a structural standpoint, where they can go. They have an office. They have mentors that help them get their licenses. They have funding.

I really would like to engage on that infrastructure. But what can be reapplied that is already successful and working? What can we learn from those successes and reapply it?

CO-CHAIR TANG: Good point. Whitney.

MEMBER W. SMITH: Yesterday in the workforce work group, David Langdon shared with us that the Department has been commissioned over the next 120 days through a consultation period and then a writing period look at how to streamline the permitting and procedure and indeed figure out how to remove regulations that hinder the growth of manufacturing in the U.S.

What was talked about in the work force group knowing the manufacturing sector and many owners of manufacturing firms that work force is their top of mind issue, not that permitting and regulation might not get in the way. But workforce is their number one challenge in terms of economic growth.

Just picking up on the what would you say if you got someone's attention, when some of the appointees come in and say "What should the priorities be" I would appreciate if you could say "One of the things that NACIE has been thinking about is how to meet your goals of

growing the manufacturing sector." And as you go through this process around regulation and permitting, could we have a parallel inquiry process around what we could do around skilling the workforce for manufacturing and partner with the U.S. Department of Labor on it. And NACIE has a number of experts and resources in this place and could be one of the thought burners.

CO-CHAIR TANG: Andrew.

MEMBER REAMER: I appreciate the desire to have a lot of impact and the idea of picking some big ideas to create that impact.

And I appreciate last night I think we adopted the cleaned-up version of the motto of NACIE 3.0 which is get stuff done.

My perspective is that in my mind in public policy the way to create the biggest impact is create the capacity for other people to do big stuff. That's why I'm particularly interested in the strategic planning process.

One of my aims in working with this group is to help build the capacity of OIE and to

create a framework not only for this NACIE but future NACIEs to have an impact. Hence is the idea for building a structure for strategic planning.

About five years ago I was part of the team. That's how I know Tom. We were hired to look at how EDA might improve its evaluation of its impact. And I've done probably five or six evaluations of EDA programs over the years. And the way it's traditionally done is you count the number of jobs that are created.

And our argument was which EDA adopted is you now look at EDA's mission statement.

EDA's mission is to enhance the capacity of regions to create jobs. And EDA then hired one of the think tanks to figure out ways of how you measure increases in capacity. It is not as easy as actually measuring the number of jobs. But EDA has adopted that.

And that's how I think about it. I want to encourage others to think about NACIE's role in building the capacity for other people to

do good things which often takes below the radar 1 2 But it's a large multiplier effect. screen. MEMBER BAGLEY: I think in this 3 environment where so much is unknown you never 4 5 know what disruption is available. So you're being prepared to put some things forward that 6 7 are big is I guess all I'm arguing for. 8 I agree with you that watching public 9 policy for the last 15 years its capacity tends to be incremental. But there are points of 10 11 disruption where things happen. And it feels 12 like we're at one. And now whether some of our stuff is there or not is unclear. 13 14 MEMBER REAMER: I don't feel like they're mutually exclusive. 15 16 MEMBER BAGLEY: No, that's what I was 17 saying, too. 18 MEMBER REAMER: And if big stuff, there can be marketing reasons, branding reasons 19 20 to do something. You get people to notice you. 21 MEMBER BAGLEY: Right. 22 MEMBER REAMER: There may be an

opportunity to do something big. But there needs 1 2 to be a strategic reason for doing the big thing in the context of --3 4 MEMBER BAGLEY: I think we're in 5 agreement is what I hear. CO-CHAIR TANG: Anything further on 6 the framework? Heather. 7 8 MEMBER BOESCH: Just something that 9 would be helpful to me as I do this, could someone put on the Slack channel an org chart of 10 11 Commerce? 12 CO-CHAIR TANG: That would take hours to download I would think. 13 14 (Laughter.) 15 MEMBER BOESCH: Just to I make sure 16 that we're referencing all of the groups. 17 you. 18 CO-CHAIR TANG: Melissa, what I've 19 heard is that thanks Brian and Heather for taking 20 the lead to process our ideas here. I think big 21 support from Mike, from David, perhaps others who 22 have offered different thinking. Be mindful of

what we're hearing in terms of anchors in this Administration's agenda. Manufacturing, jobs, deregulation, trade, infrastructure. If you could help us visually portray that.

I think with the understanding that this is a fluid document, a fluid document, right now. But we need something to map our ideas and our initiatives right now including the two that we've already approved.

Any additional thoughts beyond that?

(No audible response.)

Thank you, Brian and Heather.

MR. BUERSTATTE: I'm going to call an audible real quick. We'll take a seven minute break and what I want you to do during that break is think and perhaps discuss with a colleague what one thing you can do between now and the next few weeks and do I mean accomplish to move some of these things forward.

We'll talk about that in the next steps. And we'll talk about scheduling and how we can accomplish those together. But I'd really

like a report out from everyone. I think it's an opportunity to do a quick self-audit. Do we have and have we identified the right things, so we can think big? And we're moving in the right direction.

Quick break. Seven minutes. We'll be back shortly.

(Whereupon, the above-entitled matter went off the record at 11:10 a.m. and resumed at 11:19 a.m.)

MR. BUERSTATTE: Hopefully everybody's identified a specific task, action, they can take that defines or they feel will be very valuable for the team given the discussion and help define our next steps, not only individually but what direction are we heading in. And I see this as an opportunity to give feedback and sure that we're clear on things in that specific building block that you serve for the broader picture.

I'll start with two examples. (1) We have two great, very clear initiatives that have been voted on. So OIE will take those. We will

formalize and prepare documentation to submit to the Secretary. We will brief and we will bring back specific guidance and feedback to you all.

That guidance might involve two thumbs up. And we will race forward with for instance the capital convening effort and OIE will immediately take that, start drafting a funding opportunity and again bring that to you for that ongoing dialogue.

(2) It is clear that there is still some uncertainty around what some priorities might be and how we can think big. My commit to you is to ensure that OIE is continually engaged with the inbound team as they onboard and bring you up to date information to ensure how we are crafting our policy ideas as meaningful and up to date.

CO-CHAIR TANG: I am trying through several intermediaries to meet the Secretary-Designate as a way of previewing what we're doing here with NACIE. That's Item 1.

Item 2 I think as I mentioned before

is the issue of infrastructure and funding. I am making the rounds on Capitol Hill to see if there is a groundswell support in expanding that definition. I would encourage you to do the same.

MR. BUERSTATTE: Real quick update.

MR. BUERSTATTE: Real quick update.

Melissa and Steve will actually have a call

shortly with the Secretary.

CO-CHAIR TANG: Ah, thanks. I need to find another one then. Let me think.

MR. BUERSTATTE: We don't have a schedule yet, but it will be soon.

MEMBER BOWLES: Can I just at the risk of being a little hokey? I would like just to say to the rest of the Council that I was exceptionally encouraged yesterday by the healthy and hardy discussions that we were having. As I'm sure all of you have experienced when you're building teams and councils and things like that, there is nothing like a little bit of healthy discussion to build and bond a group together.

As I watched all the stuff that was

happening yesterday, I sort of just smiled thinking this is our bonding moment. And like I said at the sake of being hokey, I think it's really important and exciting and I think it will help make us more effective as we move forward.

Thank you all for being willing to be honest and open and confrontational. And I think that's going to be a great thing for us moving forward. You never know what will happen. For a group to truly gel is important and essential and I'm glad ours happened now versus two or three meetings from now. Thank you.

CO-CHAIR TANG: Let's continue around for one or two things.

MEMBER NEMETH: Also as a member of that meeting, I enjoyed the experience of seeing some passion behind our discussions. And I think that's a good thing. As you recall, I shared my professional thoughts earlier about what our focus was.

I would also just like to share some personal thoughts that aside from the

professional place I have in the technical and nanotech world I also do a lot of products and branding. I'm not aware of any official NACIE logo or perhaps unofficial logo. Now that we have an official motto perhaps you'll see little bit of work from me on that side that will show up in your mailbox over the next couple of weeks. So keep your eye out for some good NACIE swag that will be off the record.

(Off the record comment.)

MEMBER REAMER: I think the role I want to take is designated free safety.

(Simultaneous speaking.)

It's Super Bowl week. Yes, being available as useful. I will be available to the workforce team around sharing my understanding of resources and people they may talk with. I feel like I'll be feeding info to Heather and as useful and needed engaged in the strategic planning process.

I would like to talk to the co-chairs and staff about ways I might be able to help with

outreach to these outside groups in a way that we can do relationship building.

earlier for Kauffman I'm supposed to produce a listing of federal efforts in support of entrepreneurship. You saw some of the early or the first stage stuff on that, the advisory committees and interagency working groups. The more complicated stuff is around the programs and the laws. But in the first half of this year, I should be completing that.

I also have a document that I just did on spec, but didn't get anyone to fund it. Four years ago, I got a research assistant to do the same thing with innovation programs which I think I shared with you guys a while ago.

MR. BUERSTATTE: Let's keep it moving.

And I violated my own rule by doing two examples.

So 30 seconds and then we elevate everything.

MEMBER REICHERT: So when it gets to my turn now it's 30 seconds.

(Laughter.)

CO-CHAIR BRADLEY: And you just used ten. Oh no.

(Off the record comment.)

MEMBER REICHERT: Sue and I have been talking about what's kind of next on the advanced manufacturing topic of the workforce group. And one thing we talked about is setting up a call in the very near future to talk about next steps.

We also talked about having a core subcommittee to get stuff done and then sharing that information with a broader group. We thought one thing that might be very important is first developing a bit of a mission statement and also which would help the team as a whole understand the importance of advanced manufacturing to innovation and entrepreneurship.

I feel like that's maybe a missing piece. And we feel strongly that it is very central to innovation and entrepreneurship. But we should maybe think about how to communicate that better. I'll let Sue add anything I've forgotten.

1 MEMBER S. SMITH: Yeah, only one 2 That was good, Emily. We're going to thing. start with these meetings to talk to other folks 3 and invite other folks in on the conversation. 4 5 The National Association of Manufacturers was Some of the others that have been talked 6 one. 7 about here are others that we will consider. 8 We're going to schedule those as well to connect 9 with other groups. And the other thing 10 MEMBER REICHERT: we talked about is one of the first things we're 11 12 going to do which is interview Andrew. 13 MEMBER W. SMITH: I'm really 14 interested in working on the manufacturing group. So I'll join whatever you organize. 15 I love the 16 idea of not just having the group be a 17 manufacturing workforce group, but be across the 18 three areas that we're working in. 19 But on apprenticeship, I'm happy that 20 people are interested in the conference. 21 push out the information about the conference.

One of the 2.0 members, Fred Dedrick, is one of

the main organizers. I'll follow up with Fred, get more information about the content so I can advise on how you can plug in and use the conference. It's great if you want to come.

And then there are a lot of things beyond the conference really to apprenticeship that David brought up when he presented on the research around collecting stories in your own backyard of companies that are seen ROI and how do we craft the message. Ultimately, if Commerce is -- what was the tag? The face of --

CO-CHAIR TANG: Voice for Visit.

MEMBER W. SMITH: The Voice for Visit.

The more we can craft messages on the value of apprenticeship that Commerce can push out through its various programs related to business I think the better.

MEMBER STEVENSON: I think with my role I'll be focused on how we can finalize the narrative around workforce development. I would love to partner with Heather as you're building out this strategic framework to say more

specifically how workforce development is in service to that.

And then my most immediate action is inviting everyone who is on the workforce team if you have 30 minutes after today. We'd like to do a quick huddle to make sure that we're aligned on what next steps are particularly as we start to subgroup.

MEMBER TOONE: I really believe strongly in this idea of looking at other resources that exist across other branches of government. I think that's a huge untapped resource and to make those ongoing activities more effective. I plan to plug my contacts at DOE especially, at ARPA-E where we had attacked the market's program within ARPA-E but also other parts of the Department of Energy and at NIH.

I'll certainly connect with Andrew on that.

MEMBER GOLDIN: So I joined this group primarily because I'm an entrepreneur and because I really want to encourage entrepreneurs overall.

And there's just a ton of great ideas that have

been around the table here and discussed.

My feeling is that mentorship is super key to entrepreneurs and actually getting people to actually go and do stuff and help them think through the hows. And whether or not this Administration understand that, I'm not sure. But regardless I think we need to take a lot of these ideas and just go do them.

MEMBER BAGLEY: David and I talked at the break. We committed to share the SSTI or the Innovation Advocacy Council Policy platforms that have some of the big ideas in them and then convene a call around that to get feedback from NACIE members and see if there is anything of interest or sticks. So we'll do that in the next couple weeks.

CO-CHAIR BRADLEY: I think I'm just going to keep doing hopefully what I've been doing which is push people along, call you, email you, keep chiming in on Slack. Maybe I'll be the cheerleader.

To your point, I resigned from two

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

other boards so that I could focus on this.

Regardless of what happens, I think this is the one unique opportunity particularly for the entrepreneurs that I represent that we have the closest shot ever to really change things.

So I appreciate your comments. You can call me hokey, but I will be the cheerleader to make sure that we're staying accountable to each other and to the communities that all we represent as diverse as they are.

MEMBER WILSON: Craig and Eric, whatever you need from me to help take the capital thing across the finish line just from a nuts and bolts getting it done let me know. I think, Steve and Melissa, to the extent you need back up along the way just don't hesitate to call on me and likewise to the rest of the Council, if I can be a set of ears or help brainstorm around certain issues and provide perspective. After thinking about some of these things and how they all intersect and relate over the past couple of years, I'm happy to do that, too. Just message

me.

MEMBER LYNCH: I met with Heather and I'll let her say what she's going to send to me. But I'm going to send to her specific examples under infrastructure of things are working. I'm also going to send to her some notes that I have and what I know of around infrastructure, jobs, US share of IEP and GDP growth.

And I will do that by the end of February. If we can add some accountability to ourselves of where we said what we would do, let's say when we're going to do it.

MEMBER BARTHOLOMEUSZ: I had a quick chat with Eric about perhaps setting up a Slack channel that lists all the conferences and webinars that might be of interest to NACIE members. I think that would be really useful. Some of that stuff is buried in all of the threads and you can't find them.

It might be also useful to have I thought a list of resources along the lines that Andrew and others have proposed that maybe we

could tap into or speak to. And maybe everybody submits a list of people. Then we vote in terms of who we might want to speak to, not simply who they are but why it is that we should talk to them or what it is they might have to offer to us. I think that would be very useful. I would be very interested to see such a list.

MEMBER BOESCH: Okay. Well, first of all, if we need a slightly toned down language version of our motto, one that I like is Don't Get Ready Get Started. I have three things that are my immediate action items.

First, I'm going to collaborate with Fran on revising the framework to provide some clarity and a mental model for all the work that we're doing. I'll share a draft on the Slack channel for everybody's feedback. That will probably happen realistically looking at my schedule late February or early March.

Second, I'm going to send out a summary of the next step action items to the rest of the people that were in my subcommittee where

we discussed yesterday. I think we have some subsets that we can start working on simultaneously.

And, finally, I just wanted to make myself and my organization available as a resource. There are two things that we're very good at and which I already have volunteers from my company asking how they can help.

One of them is doing qualitative research interviews. We do research to inspire action and how do you structure and plan those and run those so that you can actually start to understand what people's unmet needs are, what psychology that's driving some of these things. So I've already volunteered to help with research plans or things like that.

And then, second, like Mike, I have a pretty good design organization behind me. So if there's some things that we want to do to make some of our outward facing communications visually impactful I offer those resources as well.

MEMBER REAMER: Do you do animation?

MEMBER BOESCH: Yes. But that takes
a little longer.

MEMBER BOWLES: So my action items are to take the conversation that we had yesterday in the skills and workforce development and reevaluate the mentorship network group proposal that we are putting together. I want to make sure that we're updating it based on that information and circulating that around to the people who were on the call we had a couple of weeks ago as well as the rest of our group to come back with something that we think can be pushed forward and presented to the rest of the group for approval. I'll stop.

MEMBER FREDERICK: I think the way that I can help most in a short term and probably in the long term as well is as a connector. From my entrepreneurial aperture, I see a lot of stuff both in the start-up world and then in the big business world. And I'm out there as the tip of the spear.

Right now, I'm deep into meetings with most the agencies on the transition team. So

I'll certainly try to do that at Commerce as well to figure out what people's hot button issues are. And I'm doing the same thing with NBCA and the biggest companies out there.

On the manufacturing front, I've been talking to the GEs. So use me as a resource and I can knock down doors for you.

MEMBER WADSWORTH: Two quick things.

One, I feel very committed especially after an earlier conversation to put pen to paper on a synthesis of my thoughts around what a public/private/academic kind of partnership on these workforce development issues might look like. I've been sharing that with that team for your consideration as you get to more concrete next steps.

And then of course I will make myself available to Heather and Andrew as we start to build out a framework for a strategic plan assuming that we get the go-ahead to fulfill on

that. And I will be taking you up on this tutoring Andrew keeps offering, most immediately on the periodic table of Federal Government acronyms. Thank you for that.

(Laughter.)

MEMBER HERSKOWITZ: I had three. I was on two committees, but I could only attend one meeting yesterday. So it sounds like the capital team is in a pretty good place. Similar to Tiffany, if I can be useful, that's great.

But in the meantime the topic of mentorship in particular and connecting entrepreneurs to mentors is something that I care a lot about. So I'm looking forward to reengaging directly with whoever. I think Trey is leading that effort. As that starts to take more shape if I can be useful, please let me know. I'm happy to join the calls.

Two, I think to something Chad mentioned earlier if gathering information from other stakeholders who care deeply about this topic, it's useful.

When we're at a stage where it's useful to gather information from other university center of entrepreneurship or technology innovation or tech transfer, that is a very, very tight community with a very active network. In fact, our annual meeting is coming up in mid-March. We're pretty much the leaders of every university tech transfer. All of us get together for five days. If it's useful to get feedback or to gather data or compile practices of things we're doing, I'm happy to be a resource to connect to the rest of the broader university community.

And, thirdly, I was struck by something that I think Rebecca said of -Actually, no, I think it was Richard on just remembering to always have your elevator pitch and looking back on when we were talking last night about how to make sure that at the end of two years we've done stuff we're all proud of and not just executed on what we came up with today.

I would really like to keep that focus

over the next couple of months but also years on just what's the big picture of what we're trying to accomplish. What are the things that we could add to the stew that would make it really transformative.

MEMBER JOHNSON: On mentorship

networks, I'm talking to the Endeavor Group and

the University of Kentucky. We also just had 500

mentors sign up for the Lieutenant Governor's

Entrepreneurial Challenge in Kentucky. I'm going

to try to figure out if that's something that can

be replicated elsewhere.

High school kid/college scholarship competition, we're giving away \$100,000. I don't know if this is just parents or what. We'll have to sort through that list and see. But an incredible amount of energy on that.

And the final thing is I'm working with a group of students and faculty at Harvard Law School. They want to provide fellowships, two-year, fully-paid fellows, for graduates to go out to Middle America to be part of a mentor

network. That's going to the dean this month for signoff. We'll see what happens on that.

MEMBER KAPP: Before I talk about the deliverables, I just want to say one thing just as a reminder. I know that we are all in different communities. But at the end of the day for us, the final outcome is about increasing economic outcomes. Whether that's through new jobs or through new businesses, I think that fundamentally what we're here to do is to help create economic opportunity.

I work in Appalachia. I've worked in cities as well. And I'm all too familiar about the challenges. And I think that fundamentally our role is to go ahead and help people shift from poverty to prosperity. So in each of the things that we do really thinking about how that manifests.

Chad and I are going to work on this national conference together to come up with a one-pager of what that would look like, who are the potential types of invitees, not specifically

the potential organizations, but an amalgamation of all these pieces.

Once we have that together, then we will look at putting together a proposed agenda for us to review in consideration so that we can go ahead and move on that. We both have a lot of experience in conference planning. I think we'd be able to collaborate on that and figure out those pieces.

In addition, personally I'm going to continue to work with Tiffany and Maribel on this whole workforce development piece and bring additional resources and contacts to bear.

MEMBER KENNEY: Rebecca already shared that she and I together are going to share the SSTI material via a call that we hope many of you will be able to join.

The other thing I'll offer to anyone who is working in this space is my organization has applied both successfully and unsuccessfully in many cases to a variety of innovation and entrepreneurship programs across Department of

Energy, SBA as well as EDA and in NIST I think as well either on our own or with other organizations in collaborative efforts. So I feel like I've got a lot of experience as an organization appealing to the Federal Government for support in some of these things. I think that may be a valuable perspective particularly as the groups are thinking about strategic plan and looking across the Federal Government.

And the other thing just from the conversation about regulation, I'm going to try to think a little bit more about whether there's something there that we could turn into something of value. It's a hugely overwhelming topic to me not being an expert in that space. But I also feel like if there was something that was specific to entrepreneurship that could be addressed in an environment where people were really trying to cut through regulations that something we might be able to contribute to positively.

MR. BUERSTATTE: What are we missing?

Do you feel pretty good? Do you feel like that's the right direction? Okay, a lot of heads shaking.

MEMBER REAMER: Can we have a band the next time we get dinner together?

MR. BUERSTATTE: So we will certainly work on changing up the meetings. It's an important goal. I will comment that I can sense the bonding to Trey's point, storming and informing. The more interesting we can make these we certainly will try. I'm serious about that.

But if you take a quick look at -
Actually before we dive into the calendar, you

can pull out your calendar, but I think Steve has

a few comments real quick.

CO-CHAIR TANG: First, I want to thank everybody for their commitments in the Next Steps and in particular on what we've discussed today and approved. Thanks, Andrew and Heather, for stepping up on the OAI strategy, Tiffany Wilson on the capital community continuum and Tiffany

Stevenson on the workforce side.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

I know you have your huddles scheduled. I would just offer that Melissa and I are willing to participate. If you want to have a follow-up call to not involve just the people here but the broader group, we're happy to do that.

I would like the Council's concurrence on a slight change in language to what we've already adopted for the strategy piece. you'll bear with me and just look at your sheet. I'm going to offer with your concurrence to change in their third paragraph the last sentence which currently reads as follows: "NACIE believes that OAI should be as entrepreneurial as the businesses it serves and use one of its most experience and knowledgeable resources, NACIE, to enhance its own operations." We're going to change that slightly to the following: "NACIE believes that OAI should be as innovative and strategic as the entrepreneurs it serves and to use" -- from then on the same -- "one of its most

1 experienced and knowledgeable resources, NACIE, 2 to enhance its own operations." It makes it more specific to 3 4 entrepreneurs and businesses. Are we all okay 5 with that? 6 (Chorus of yes.) Okay. And thanks, Rebecca, for 7 8 prompting that discussion. 9 MR. BUERSTATTE: All right. So real quick if you could take a look at the 12 month 10 11 calendar in front of you. This was green text 12 above the months. It might be in the bottom of 13 the packet. NACIE meeting options, keynote 14 options. The options are highlighted in yellow. 15 16 And I would also like to highlight a few dates 17 that we identified today that might be important. 18 Starting in May, I think that second week, 19 Whitney, you said here. 20 (Off the record comment.) 21 May 4th and 5th. 22 (Off the record comment.)

May 4th and 5th could be great. And 1 2 we'll try and maybe straddle a meeting around But any quick feedback on that or 3 that. thoughts? We'll push this out in an email so 4 5 that you have a chance to look into your 6 calendars in more depth. I just wanted to broach the conversation now. 7 8 Then in June --9 (Off the record comment.) 10 Correct. 11 The other thing that's MEMBER KENNEY: 12 going on is the National Innovation Summit and the National SBIR Conference. 13 They are all 14 located together the week of the 14th. I was 15 just sharing that date. I don't know if you 16 wanted consider scheduling around that either. 17 MR. BUERSTATTE: Yes, that's a good 18 opportunity. Thanks. Part of this is --19 MEMBER KENNEY: It's down at National 20 Harbor. 21 MR. BUERSTATTE: So National Tech and Ed Conference. A lot of SBIR stakeholders and 22

other government funders participating as well as 1 2 the entrepreneurs and businesses themselves. many of you participate in that I know. 3 4 Good to know options because as we 5 look at these, it's hard to get something fixed right now because I think our next priority 6 7 should be getting the new Secretary into the 8 meetings. I'd like to get some concrete options 9 for us that we can propose to the should-he-beconfirmed in-bound Mr. Ross and his team and see 10 what works best for his schedule. 11 12 In June, we noted the E-SHIP Summit and this is the 21st or 24th. 13 It's not marked on 14 the calendar, but just make a mark of that please. We'll follow up with more details. 15 16 PARTICIPANT: What's E-SHIP? 17 MR. BUERSTATTE: E-SHIP, 18 Entrepreneurship Summit. They're calling it E-19 SHIP. 20 And again Kauffman, that's going to be 21 in Kansas City. We're working on some government

convenings there across federal innovation and

entrepreneurship stakeholders.

(Off the record comment.)

MR. BUERSTATTE: No. I think that there might be a role for us to participate, but not as a full Council. This might be individual basis to better inform some of our efforts.

But looking in August I think would be our next target time frame for a late summer meeting. Something to note there, we always seem to struggle with getting a critical mass due to vacations. Kids are out of school. People take vacations.

so please take a hard look at your calendar there. Again, we'll follow up. We'll poll the team and see which dates work for the critical mass. But 10th and 11th seems to be a nice time. If we have to bump it to the right on the 17th or 18th, that's possible. But again just putting some dates out there.

And then November we're looking at

National Entrepreneurship Week. That could be
really advantageous for us to meet during. Maybe

at that point we've gotten some great traction with certain things and could be an opportunity for us to amplify.

But I also know that most of you are very busy during that week in your own organizations and communities. So we want to be realistic and cognizant of that. But let's put on a marker. We could do the week before. We can't do the week after. That is Thanksgiving week. But in or around that time frame would be great I think.

Quick feedback/thoughts? Other big conferences or events that we might want to be aware of right now on the calendar? Brian, I know you're putting that stuff together with Eric on the Slack channel of conferences and events in general. But any thoughts? Melissa.

(Off the record comment.)

Yes, and we're excited to support that. OIE is really hopeful we can execute that. We would do it even sooner in fact, but again just prioritizing engagement with the Secretary.

It's much easier to get that engagement if we're here in D.C.

Again, no better to amplify our work than going out into the communities during
National Entrepreneurship Week. So that's a great point. Thanks, Melissa.

(Off the record comment.)

Yes, I'd love to know more and good of have personal experience on the Council on that.

So maybe that's another one we should look at closely.

And just to be more clear, David,
Tiffany, Steve and many others in the previous
council did go out and engage in an official
capacity as a NACIE member. So we don't always
need to do it as a council. We can certainly
attend these and whether serving on panels or
pulling panels together to better inform us.

Think creatively around it. I know you all are hustlers. Hopefully, we can get some good opportunities. Heather.

MEMBER BOESCH: Can I just suggest for

my own convenience that in addition to the Slack channel you just maybe have like a shared Google calendar for NACIE where these things can start showing up and potentially blocking our calendars from that. I don't know if everyone uses it, but it would be really helpful to me.

MR. BUERSTATTE: We'll look at a technology solution for that. We have our NACIE email and that NACIE calendar which we sent out through Microsoft Outlook. I know sometimes depending on your mail server some people have expressed confusion with it. But could we do it through that? Through that means? Through the NACIE calendar when we send out those calendar invites to you? Would that work?

(Off the record comment.)

Sure. Okay. Yeah, I know there's been some issues lately. We'll look into a couple of options. Thanks.

MEMBER BOESCH: Two other things I'll mention is that (1) it's beautiful in the fall and we have good offices and meetings spaces in

1	both of those locations. I will also sponsor
2	breakfast at the next meeting Since it's
3	starting at 8:30 a.m. we need breakfast.
4	MR. BUERSTATTE: Andrew.
5	MEMBER REAMER: I would suggest a
6	Doodle poll in the next couple weeks about these
7	three sets of dates.
8	MR. BUERSTATTE: Yes, absolutely, like
9	we typically do. I just wanted to tease the
10	crowd now.
11	MEMBER WOMACK: Can I also say is
12	September better than August given that we
13	struggle with critical mass? It still falls
14	within the quarter and would give us maybe the
15	vacations, the challenges of organizing.
16	Then I also would make a pitch for San
17	Francisco. We also have space and we feed
18	people. And we have eye shadow.
19	(Laughter.)
20	MR. BUERSTATTE: You had me at
21	eyeshadow.
22	PARTICIPANT: I know what that is. I

don't know sports.

MR. BUERSTATTE: Yes, absolutely. I would say actually to be more specific across the summer that we've had issues. So it's not just August. I meant more broadly. If September is better, again we'll push it out. Take a look and thank you. Thank you for all offers to host. That's awesome.

MEMBER KAPP: Actually, I'd like to just make an offer that potentially in addition to a large city that we potentially look at maybe some place in Appalachia. I would love for you guys to understand the struggles that people are feeling and that they're experiencing firsthand. So to the extent that we can identify, I'm happy to go and help identify a place where we can do that.

MEMBER HERSKOWITZ: That was close.

Despite coming from a big city and being happy to host also, I would think -- I would be very interested in going into a region that doesn't have the kind of infrastructure that San

Francisco, New York, Boston, Austin and others have just to see how that works and where the kinds of programs we're putting together are likely to have the most impact.

I would second that. I would love to go somewhere we haven't been.

MR. BUERSTATTE: Since we have such an abundance of options, I sense we'll do something very similar as we did with the last Council.

We'll put together our pitches and we'll vote. I think we had five or six communities pitch to host a NACIE.

We ultimately chose, the majority chose, Nashville for our first official visit.

We did some smaller exchanges at the group level in Chicago and Austin too. But start thinking about that. Yes.

MEMBER REAMER: I like the idea of actually having an auction for naming rights for each meeting. Then we can have people bid against each other.

(Laughter.)

1	That way we can augment your budget.
2	MR. BUERSTATTE: I don't want to hear
3	about finances right now.
4	MEMBER REAMER: Whitney is on my team.
5	(Laughter.)
6	MR. BUERSTATTE: This has been a great
7	discussion. I think we've got some good ideas.
8	At this point, I'd like to open up to any public
9	members here in person for public comment.
LO	(No audible response.)
L1	Not seeing anyone. Or an operator on
L 2	the line, if you could open the call for any
L3	members signaling comments on the line please?
L 4	(No audible response.)
L5	Thank you very much. And Steve and
L6	Melissa.
L7	CO-CHAIR BRADLEY: Thank you. Truly.
L8	I don't say that. I think I look around the room
L9	and I think I respect how far you have traveled.
20	I respect those of you who have kids and are
21	juggling play dates. I respect the open-
22	mindedness. I respect the commitments. So truly,

1	thank you.
2	CO-CHAIR TANG: Yeah. Thank you for
3	the level of engagement also. I think this level
4	of deliberation that some of us who are used to
5	who work in academia and close to government.
6	Folks who may not be as close may not be as used
7	to. But this is part of the process.
8	And our basketball team in
9	Philadelphia's slogan is Trust the Process. So I
10	hope you'll join me in that.
11	The last thing, Emily and Heather, I
12	offered Tiffany Wilson a chance to predict the
13	Super Bowl outcome and you weren't here then. So
14	would you like to offer a prediction for the
15	game?
16	MEMBER BOESCH: I have no knowledge
17	about football ever.
18	MEMBER REICHERT: We never cheat.
19	CO-CHAIR TANG: I think that's a
20	defer.
21	(Off the record comment.)
22	MEMBER BOESCH: You know what? The

1 weather could have done that. I have a physicist 2 friend who proved it. (Laughter.) 3 4 CO-CHAIR TANG: Okay. And last but 5 not least, thanks to the OIE team. Craig, Eric, Andrea, thank you. 6 7 (Applause.) 8 MEMBER BOWLES: Real quick, at the 9 risk of sounding like a mother on prom night can we get a group picture before we all leave? 10 11 Yeah, let's do it. MR. BUERSTATTE: 12 Let's do a picture and we also hopefully shared the pictures with Secretary Pritzker last time. 13 14 Hopefully you guys go those. If not, we'll 15 resend. But as the Designated Federal Officer, 16 this officially concludes our meeting. Thanks so 17 much for coming. 18 (Whereupon, at 11:58 a.m., the above-19 entitled matter went off the record.) 20 21 22

A
a.m 1:13 4:2 71:10,10
71:13,15,16 118:9,10
150:3 155:18
AARP 93:20
abandoning 76:4
ability 27:16
able 15:16 17:11 26:18 27:15 41:18 42:9
48:13 51:2 52:3 55:8
59:13 68:22 94:13,20
122:22 139:8,17
140:20
above- 155:18
above 100:10
118:8
absolutely 33:20 56:8
70:6 88:21 93:16
111:5 150:8 151:2
absorb 32:22 33:1
abundance 152:8
academia 154:5
academic 9:4 70:17
academics 51:11 92:5
academy 45:3 53:4
65:9
accepted 75:18
access 9:5 14:7 43:18
79:15 81:19 96:20
accessed 110:3
accommodate 86:3
accomplish 117:18,22
137:3
accomplished 6:16 accomplishing 6:13
accountability 80:16
130:10
accountable 63:22
129:8
achieve 24:22 28:11
105:8
acknowledge 47:2
73:20
acknowledgment 94:17
acronyms 135:4
act 22:19 54:3 59:9 63:1
63:2 94:7
action 24:1 35:20 44:6
48:10 60:2 63:20
105:12 118:12 127:3
131:12,21 132:11
133:4
actions 41:13 44:11,13
64:11
activate 69:14
active 9:13 13:11 136:5
activities 9:19 10:4
26:10 33:10 34:11
II.

II

37:7 54:5 90:7 127:13 actual 37:4 add 6:5 10:12 37:15 49:4 63:16 77:17 111:3 124:21 130:10 137:4 addendum 50:14 addition 29:9 51:15 69:5 139:10 149:1 151:10 additional 24:12 30:16 90:22 117:10 139:13 address 9:5 41:17 addressed 140:18 Adjourned 3:20 adjust 19:20 administration 1:3 2:17 8:18 19:2,6 41:2 79:13 101:3 103:3,17 109:18 128:6 Administration's 41:11 41:21 42:20 79:8 117:2 administrators 107:11 adopted 113:13 114:12 114:19 142:10 advance 7:3 47:12 75:2 80.9 advanced 43:5,8 44:15 46:14 59:12 60:12 80:20 98:3 124:5.15 advances 56:2 advantage 48:1,11,18 85:22 advantageous 146:22 advice 22:18 80:2 83:13 advise 27:14,16 54:19 126:3 advising 104:10 advisors 20:1 advisory 1:5 53:22 54:2 63:7 78:2 123:7 **Advocacy** 88:19 109:2 128:11 advocate 108:20 advocated 111:2 advocating 110:11 Affairs 2:16 affect 36:11 affiliation 62:12 afford 62:14 afraid 61:1 afternoon 5:12 age 54:7 agencies 10:13 12:12 26:20 27:2 32:16 38:7 38:11,20 56:17 134:2 agency 28:6 77:19 80:3

agenda 7:10 41:11 42:21 92:8 117:2 139:4 **ago** 22:2 38:3 50:6 92:14 95:8 114:5 123:14,16 133:12 agree 47:21 58:10 83:17 99:14 105:20 115:8 agreement 116:5 **Ah** 120:9 ahead 8:18 51:18 64:4 65:12 71:5,9,18 88:7 138:15 139:6 aim 61:7 99:12 aims 113:21 align 45:4 77:19 aligned 30:13 45:14 48:20 127:6 aligning 33:10 85:21 alignment 33:9 45:8 aligns 78:13 Allegheny 68:15 Alliance 1:20 allow 51:18 86:17 90:3 allowed 96:19 99:2 alphabetically 99:20 amalgamation 139:1 ambitious 24:10 amen 40:16 amend 40:16 America 22:19 43:7 137:22 American 99:4 amount 94:15.16 100:21 103:2,8 137:17 amplify 12:11 32:17 49:18 50:13 62:20 94:13 147:3 148:3 **analysis** 12:11 34:1 anchors 109:17 117:1 **Andrea** 155:6 **Andrew** 2:6 8:10.12 21:18 22:4 30:11 31:21 81:3 84:21 113:9 125:12 127:18 130:22 134:20 135:2 141:20 150:4 **Andrew's** 97:16 anecdotal 59:1,4 anecdote 50:6 anecdotes 58:22 animation 133:1 annual 136:6 anomalies 24:14 **answer** 42:13 anybody 4:12 95:7

aperture 133:19 **Appalachia** 91:5 138:12 151:12 **apparent** 103:17 appealing 140:5 applaud 16:3 17:9 18:18 **Applause** 21:6 155:7 applied 139:20 apply 17:14 **applying** 70:9,14 appointees 112:19 **appreciate** 24:5 105:2 112:20 113:10,13 129:6 apprenticeship 47:8,15 48:3 90:19 125:19 126:6.15 approach 44:7 52:17 approaches 5:13 approaching 52:15 appropriately 109:17 appropriations 23:5 **approval** 27:18 133:15 approvals 72:15 101:7 approved 22:11 23:18 25:3,21 117:9 141:20 approves 22:12 approving 78:21 **April** 87:17 aptitude 67:12,15 area 50:19 66:6 68:4 84:3.3.4 areas 9:4 44:2 80:19 83:14 125:18 arguably 55:18 arguing 115:7 argument 114:12 **ARPA-E** 127:15,16 arrange 96:2 aside 94:20 100:4 121:22 asked 26:6 65:17 72:9 106:1 asking 4:5 54:11 132:8 aspect 91:3 aspects 18:8 assessment 24:1 34:8 35:20 assets 52:4 104:12 110:9 assistance 38:5,8 assistant 2:15 80:18 123:14 Associates 1:21 **association** 17:4 53:12 60:8 88:11 92:12,20 108:1,2 125:5

assume 65:6 102:11 assuming 11:1 14:16 134:22 attach 39:8 attacked 127:15 attempt 82:18 attend 135:7 148:17 attention 97:4 99:11 112:18 attribution 50:20 **AU** 1:15 **auction** 152:19 **Audi** 4:19 audible 117:11,14 153:10,14 augment 7:13 153:1 **August** 146:7 150:12 151:5 **Austin** 152:1,16 authority 25:4,21 33:2 38:12 automation 43:11 automobile 43:11 autopilot 80:22 available 37:19 39:3 97:12 98:21 115:5 122:15,15 132:5 134:20 Avenue 1:12 award 26:9 awards 11:21 aware 52:7 91:18 109:19 122:3 147:14 awesome 71:3 88:13 102:15 151:8

В

back 7:1 10:1 12:8

14:22 34:5 37:16 40:13,18 43:7 44:12 45:11 46:12 47:6,16 51:6 57:15 58:22 65:13 71:10,12,19 72:6 73:17 81:13 87:22 99:11 110:5 118:7 119:3 129:16 133:13 136:18 background 5:18 6:2 110:17 backyard 126:9 **bad** 90:11 **BAGLEY** 1:17 34:3,22 36:6,16,19 37:3,14 68:12 78:12 92:11 93:10,21 94:3 107:3 107:21 108:19,22 109:6 115:3,16,21 116:4 128:9

BALDWIN 1:18 49:3 104:3,14 band 141:4 **banged** 75:12 bar 45:20 BARTHOLOMEUSZ 1:18 31:7 75:4 82:5 82:11,15 130:13 base 63:17 based 14:22 19:1 59:19 73:13 108:5 109:4,6 133:9 baseline 55:11 basically 5:4 70:8 82:6 82:13 **basis** 55:22 146:6 basketball 154:8 bat 83:7 bear 28:2 139:13 142:11 beautiful 149:21 beauty 17:20 69:6 becoming 70:16 103:17 beginning 61:22 104:22 **Begins** 3:10 **behalf** 22:16 **Behavioral** 2:3 **believe** 60:9 110:15 127:9 believes 23:15 24:1 35:21 142:15,20 belongs 41:6,18 42:12 benefit 23:16 70:4 best 2:4 4:20 10:3 12:19 27:7 45:5 64:13 66:14,16 82:16 94:8 108:3 145:11 better 18:2,22 23:14 26:19 27:8 33:18 37:7 48:11 53:16 54:8 73:8 96:9 100:6,12 101:11 124:21 126:17 146:6 148:3,18 150:12 151:6 beyond 25:18 39:5 55:9 56:15 110:12 117:10 126:6 **bid** 152:20 big 52:14 56:11 68:17 79:4,4,7,12,19,20 80:7,11 82:2 83:16 84:3,3,4 96:5 101:1 103:6 105:15,19 106:2 107:1 109:12 109:15 113:12,19 115:7,18 116:1,2,20

balance 80:1

balcony 40:17

118:4 119:12 128:12 133:20 137:2 147:12 151:19 **biggest** 74:5 113:17 134:6 **billion** 106:9 billions 26:21 bit 12:6,10 16:19 18:22 22:7 64:6 66:13.20 75:17 76:11 79:6,10 79:18 82:9 97:16 107:12 120:20 122:6 124:13 140:12 black 89:19 **block** 118:19 blocking 149:4 **blue** 79:15 blueprint 14:6 bluntly 26:6 board 18:10 30:16 74:4 92:14 96:14 109:1 boards 30:9 129:1 bodies 47:3 **BOESCH** 1:19 27:11 32:13 102:13,16 104:18 116:8.15 131:8 133:2 148:22 149:20 154:16,22 **bold** 107:1 **bolts** 129:14 bond 120:21 bonding 121:2 141:9 **booth** 57:20 58:3 **Boston** 20:11 152:1 **bottom** 44:10 99:22 143:12 **Bowl** 4:6,8,15 122:14 154:13 **BOWLES** 1:20 10:7,10 10:18 11:8 13:16 14:14,21 45:18 58:9 120:13 133:4 155:8 **Bradley** 1:13,15 6:6 12:13,17 14:2 15:9,14 17:13 18:12 30:4 46:22 48:21 55:13 57:12 61:18 63:13 64:10 69:6 73:19 77:14 79:22 83:3 84:14,18 85:9 89:5 96:4 98:13 99:14 102:9,15,21 124:1 128:17 153:17 **brain** 61:10 brainstorm 129:18 branches 127:11 **branding** 115:19 122:3 breadth 76:14

break 71:7.11 117:15 117:15 118:6 128:10 breakfast 150:2,3 breaking 71:9 breakout 5:20 12:6 Brian 1:18 31:4 73:20 74:21 81:17 102:12 102:14 116:19 117:12 147:14 Brian's 34:5 78:7 **bricks** 33:16 **bridge** 9:14 bridging 43:14 brief 6:8 8:8 119:2 brief-outs 8:13 bring 11:18 13:19 16:22 28:2 46:12 51:17 73:11 81:13 89:1 92:6 105:13 119:2,8,14 139:12 **bringing** 9:2 16:20 18:18 19:7,8 38:18 39:2 41:22 43:7 53:5 98:6 **broach** 144:6 **broad** 10:1 28:7 59:18 92:18 107:14 108:13 broader 72:2 118:19 124:11 136:12 142:6 **broadly** 151:5 **Brookings** 95:14 brought 38:1,2 92:15 97:17 126:7 **buckets** 83:17 86:20 **budget** 153:1 **BUERSTATTE** 2:18 7:15 11:12 18:14 19:10,19 20:18 21:9 22:3 26:5 33:5 39:15 63:16 65:11 69:9 71:2 71:17,22 77:16 87:3 87:21 88:3 93:14 94:4 104:9 106:7 117:13 118:11 120:6,11 123:17 140:22 141:6 143:9 144:17,21 145:17 146:3 149:7 150:4,8,20 151:2 152:7 153:2.6 155:11 **build** 10:14 25:7 55:22 56:3 97:15 106:22 113:22 120:21 134:21 building 10:3 38:19 52:21 68:7 114:3,22 118:18 120:19 123:2 126:21 **builds** 23:11 **bully** 94:11

bump 146:17 care 135:13.21 checkpoint 74:2 72:4 81:4 122:21 **bunch** 59:15 75:7 84:9 career 23:6 cheering 5:7 coalesce 73:3 **burden** 76:8 careers 54:9 cheerleader 128:21 **code** 104:4 **Bureau** 53:15 careful 66:21 79:7 80:5 129:7 cognizant 147:7 bureaucratic 34:17 Carolina 17:19 **chew** 94:19 coherent 77:2 **buried** 130:18 carry 66:12 99:21 Chicago 87:18 152:16 cohesive 75:15 Chicagoland's 2:4 **burners** 113:8 collaborate 131:13 carve 84:18 business 2:3 9:4 23:22 carving 90:18 **chime** 4:13 139:8 29:19 34:4 49:21 case 91:11 **chiming** 128:20 collaboration 10:16 68:16 100:11 101:17 cases 139:21 **Chinese** 111:14 49:5,9 91:17 **Chorus** 143:6 collaborative 25:10 110:6 126:16 133:21 catalog 31:13 30:19 39:19 84:21 **businesses** 24:3 34:7,9 cataloging 58:17 **chose** 152:13,14 35:12,19,22 36:9 37:8 catalysts 76:16 **chunk** 52:14 140:3 54:12 74:19 84:8 86:2 **categories** 64:20 84:10 circulating 133:10 collaboratives 52:18 138:9 142:16 143:4 category 85:19 87:9 cited 20:12 collating 31:22 caught 109:17 **cities** 11:8 138:13 colleague 117:16 145:2 **busy** 5:10 147:5 **Census** 53:15 cities/communities colleagues 53:15 **button** 134:4 center 1:15,16,18,20 **collecting** 31:22 58:10 2:9 52:10 108:7 136:3 city 1:16 17:22 145:21 **buys** 102:1 126:8 collectively 84:4 **buzzer** 48:13 centered 80:2 151:11,19 **central** 124:19 **clarify** 28:20 45:21 college 2:3,7 16:13 C centric 34:6 clarifying 27:12 17:4 51:4,7,10 68:22 C 85:15 certain 18:8 33:9 64:4 clarity 102:16 105:9 92:4 **C-O-N-T-E-N-T-S** 3:8 70:9 80:19 101:5 131:15 colleges 16:14 17:6 C3 9:1 108:2 129:19 147:2 classify 31:13 50:17 52:2.3 74:12 calendar 141:14.15 certainly 19:20 29:8 cleaned-up 113:14 88:12.13 89:19 143:11 145:14 146:14 50:18 66:2 89:13 clear 7:19 18:10 28:5 color 102:19 104:4 147:14 149:3,9,14,14 127:18 134:3 141:6 37:17 42:17 43:2 57:3 Columbia 2:1,1 141:11 148:16 118:18,21 119:10 **Columbus** 109:5,7,8 calendars 144:6 149:4 call 59:13 66:9 97:10 certifications 53:17 148:12 **column** 81:18 82:12 clearly 42:14 84:3 95:6 99:10 117:13 120:7 Chad 2:10 31:5 90:13 combining 100:3 124:7 128:13,19 96:21 135:19 138:19 client 86:13,13 come 5:21,22 7:10 12:9 14:21 21:7 30:7 31:18 129:7,16 133:11 chain 52:17 **clients** 86:15 139:16 142:5 153:12 chaired 109:1 close 8:12 27:9 151:18 38:11 44:12 45:7 called 16:17 17:3 38:4 chairman 108:15 154:5.6 67:20 71:10 83:17 53:3,13 54:1 59:14 **challenge** 86:12 91:2 **closely** 148:11 85:1 87:22 91:12 96:8 98:2 99:6 100:9,10 92:12 112:16 137:10 closest 129:5 calling 8:22 145:18 **challenges** 6:19 55:3 Closing 3:18 112:19 126:4 133:13 calls 64:4 80:17 135:18 79:14 94:14 98:4 **Co-Chair** 1:16,17 4:3,12 138:20 campaign 110:2 138:14 150:15 4:17 5:3 6:6 12:13,17 comes 66:6 79:2,5 candidates 107:4,6 **Chamber** 52:9 60:6 14:2 15:9,14 17:13 101:22 111:10 comfort 75:14 **capabilities** 43:3,9 98:7 68:17 18:12 29:8 30:4 31:4 **chance** 6:16 13:4 15:15 capability 43:14 35:14 36:13,17 46:22 comforted 76:22 40:18 99:9 144:5 48:21 55:13 57:12 coming 6:17 40:13 53:1 capacities 23:11 154:12 61:18 63:13 64:10 54:20 72:6 96:21 capacity 12:21 25:7 change 20:2 129:5 69:6 72:5 73:19 77:4 136:6 151:19 155:17 113:18,22 114:14,17 114:22 115:9 148:15 142:9,13,19 77:13,14 79:22 83:3 comment 3:18 20:11 capital 1:16 8:9,15 9:1 changing 6:14 75:1 84:14,18 85:9 89:5 33:19 37:2 49:12 58:22 79:21 87:2 88:2 9:5,6,14 14:7,8 18:8 141:7 96:4 98:13 99:10,14 102:9,15,21 108:15 **channel** 88:14 104:21 97:18,21 98:10 79:16 81:19 84:3 85:6 108:20 109:4,10 116:10 130:15 131:17 102:20 103:4 110:22 92:16 100:5,8,10,10 119:6 129:13 135:9 147:16 149:2 111:1,5 112:1 113:9 111:4 122:10 124:3 channels 98:8 116:6,12,18 119:18 141:8 143:20,22 141:22 capitalist 36:11 **chart** 116:10 144:9 146:2 147:18 120:9 121:13 124:1 148:7 149:16 153:9 charter 104:7 126:12 128:17 141:17 capitalists 91:9 **Chase** 2:7 69:12 **Capitol** 120:2 153:17 154:2,19 154:21 capture 50:20 105:17 **chat** 130:14 155:4 commented 69:11

co-chairs 1:13 29:6

cheat 154:18

cards 96:2

comments 5:16 18:13

consultation 21:17 37:13 39:16 45:16 **compliment** 19:17 95:1 countries 56:2 62:16 63:19 73:18 complimentary 33:11 112:5 country 9:11 46:11 77:14 129:6 141:16 concept 16:19 78:1 consulting 88:16 couple 11:12 41:4 contacts 127:14 139:13 153:13 50:16 51:5 60:10 61:16 66:1 68:9 80:10 **Commerce** 1:1,12 concepts 75:8 83:19 content 126:2 81:9 99:16 104:15 19:15 21:2 29:20,21 concern 37:1 79:3 context 66:15 116:3 33:11 38:10 39:22 concerned 20:9 75:17 continually 45:10 122:7 128:16 129:21 133:11 137:1 149:19 52:10 58:13 102:7 concert 50:16 119:13 concise 7:19 continue 7:2,13 20:6 104:11,13 105:22 150:6 110:12 116:11 126:10 concludes 155:16 47:11 62:8,20 97:13 course 17:6 59:20 126:15 134:3 conclusion 43:1 121:13 139:11 65:16 78:8 90:14 commercial 4:20 9:7 **concrete** 11:19 55:19 **continuing** 45:4 74:20 134:19 commercialization 70:12 134:17 145:8 continuous 75:11 77:2 covered 82:12 22:22 concurrence 142:8,12 continuum 9:6,14 14:8 craft 126:10,14 commissioned 112:4 74:20 87:5,10 141:22 crafting 119:16 conduit 55:1 **conference** 47:15 68:15 commit 119:12 contribute 140:20 Craig 2:18 6:10 21:22 81:11 87:17 107:13 commitments 141:18 convene 11:15 71:12 22:2,8 24:8 26:3,6 153:22 125:20,21 126:4,6 92:12 100:7 104:6,8 35:1 75:20 97:14 98:5 committed 47:19 138:20 139:7 144:13 128:13 106:1 129:11 155:5 128:10 134:11 144:22 convened 29:14 Craig's 90:9 committee 17:21 29:10 **convener** 12:2 87:13 conferences 91:21,22 crazy 87:22 53:22 102:2 94:8 106:13 create 23:12 26:12 130:15 147:13,16 committees 81:1 123:8 confident 20:5 44:14 convenience 149:1 49:19 52:15,18 53:16 135:7 confining 33:16 **convening** 9:1,3 33:2 54:14 57:7 58:6 91:16 common 85:17 confirm 81:7 79:11 86:1 91:12 110:13 113:12,17,18 communicate 20:4 confirmed 145:10 104:15 119:6 114:1,15 138:11 69:15 124:20 confrontational 121:7 convenings 145:22 created 42:5 75:11 communications confusion 149:12 conversation 12:4 114:11 132:20 Congress 22:18 24:11 33:17 36:7 37:12,16 creates 54:18 communities 9:18,22 54:6.13 40:9 42:11 45:17 69:5 creating 21:14 56:9 10:4 11:16,18 13:12 connect 29:19 125:8 90:15 91:14 100:22 101:7 13:13,15,20 14:11,12 127:18 136:12 125:4 133:5 134:12 creation 41:22 16:9 18:7 43:17 74:10 connected 69:22 97:13 140:11 144:7 creative 68:7 74:14 80:8 94:18 connecting 52:19 100:5 conversations 14:9 creatively 148:19 110:15 129:9 138:6 135:12 17:1 20:5 69:10 78:11 crisp 41:8 147:6 148:4 152:11 connection 18:1 92:1 106:21 critical 10:12 41:14 **community** 2:3,7 8:22 connector 133:18 converting 84:8 146:10,16 150:13 13:3 14:3,5 16:13,14 **consensus** 5:22 25:1,6 convince 77:1 cross 18:15 17:4,5 29:16,17 51:4 coordinate 89:7 crosswalk 55:22 56:3 51:7,10 52:1 56:22 consider 39:4,13 79:17 coordinating 16:15 57:8 74:12 88:12,13 92:4 86:16 125:7 144:16 coordination 38:19 crowd 150:10 100:5 109:14 136:5 consideration 24:6 core 124:9 crush 4:11 136:13 141:22 79:21 87:1 134:17 **corner** 100:1 **curious** 81:21 companies 56:4 68:18 current 36:11 41:11.21 139:5 corporate 28:1 126:9 134:6 considering 78:19 corporation 2:2 69:2 42:20 44:11 108:15 correct 43:22 108:19 consistently 17:9 currently 142:14 company 2:5 30:8 57:10 132:8 consolidating 12:10 144:10 cusp 26:17 Comparatively 7:18 Consortium 16:17 couched 32:5 customer 23:22 86:14 **COMPETES** 22:19 constantly 67:3 council 1:5.12 3:14 customer- 34:5 constituencies 31:12 8:21 13:13 21:3 51:13 customer-driven 34:7 competition 137:14 competitiveness 23:13 constituent 34:13 54:2,19 63:7,21 73:8 35:19 compile 136:10 constituents 108:14 78:2 88:19 103:19 **customers** 31:9 32:8 compiling 64:2 Constitution 1:12 109:2 110:18 120:15 86:15 101:17,18 completing 123:11 constrained 83:10 128:11 129:17 146:5 cut 140:19 148:9,14,16 152:9 completion 12:9 constraints 66:18 D Council's 58:18 142:8 complicate 60:4 constructively 103:19 complicated 123:9 103:21 **councils** 120:19 **D** 85:15 complications 47:10 construed 36:10 count 7:6,7 114:10 **D.C** 1:13 15:15,16 81:10

87:19 95:5 148:2	25:1,6	direction 19:17,21 28:6	68:10,14,17,19 73:15
daily 55:21	departmentally 58:12	78:10 79:6,18 118:5	78:19 83:18 86:10,19
Dallas 1:20,20 14:15	depending 149:11	118:16 141:2	89:12 90:12 91:4 95:6
Dare 81:2	depth 144:6	directions 25:5	96:1 97:20 108:8
dashboard 62:19	Deputy 2:15	directly 56:19 86:18	111:9 116:2 119:20
data 50:6,19 52:22	derail 37:12	135:15	123:18 128:18,19
53:11,16 54:7 58:10	deregulation 109:19	director 52:11	131:16 132:9 134:5
58:22 59:2 70:12	117:3	dirty 59:9	136:11
136:10	describe 53:10	disabled 74:15	DOL 46:6
date 23:9 119:15,17	descriptions 68:20	disagree 106:17	dollars 26:21
144:15	descriptor 82:16	disappearing 56:1 57:4	Doodle 150:6
dates 88:1 143:16	design 132:18	discipline 111:9	door 95:11
146:15,19 150:7	Designate 119:20	disclosure 31:20	doors 134:9
153:21	designated 2:19 122:12	discourage 70:8	dots 29:19
Dave 99:14	155:15	discourse 91:15	doubt 87:14
David 2:4 102:21 112:3	designation 94:16		doubt 67.14 dovetail 63:19
116:21 126:7 128:9		discovery 59:22 62:2	
	designations 94:14	discuss 87:4 117:16	dovetails 90:16
148:12	designed 72:11	discussed 19:16 77:6	download 116:13
day 39:17 88:6,6 138:6	desire 103:7 113:11	109:22 128:1 132:1	dozen 11:15
days 19:6 112:5 136:9	desired 37:18	141:19	draft 104:19,20 131:16
deal 56:12	despite 6:14 151:19	discussing 18:5 86:22	drafted 78:1
dean 138:1	destabilizing 60:15,18	discussion 3:14 5:18	drafting 10:2 119:7
December 19:11	detail 56:13	5:19 6:22 9:13 14:7	drawing 82:20
decent 87:8	detailed 75:19	14:11 29:11,12 31:5,8	drive 13:8
decisions 54:8,18	details 78:16 145:15	32:5,11 36:21 41:16	driven 23:22 30:12
decontextualized 66:10	detour 7:1	44:17 63:5 65:7 71:6	93:12
dedicated 23:5	develop 24:21 25:1	72:14,16 73:11 77:11	driver 42:7
Dedrick 125:22	33:17 39:20	78:18 99:13 100:19	driving 132:14
deep 99:3 134:1	developed 50:16	104:22 118:14 120:21	drop 64:16
deeply 135:21	developing 30:6 45:5	143:8 153:7	due 63:5,7,9 146:10
default 81:2	124:13	discussions 5:11 60:10	Duke 2:8 49:21
Defense 60:13	development 1:3 2:16	63:22 89:2 120:17	dumps 61:10
defer 154:20	9:4 21:12,16 23:16	121:17	duplicates 32:3
define 82:10 110:7	26:11 30:15 40:21	disjointed 75:8	dynamic 72:13
118:14	41:5,9,18 42:12,22	disparate 75:8	
defines 79:5 118:13	43:19 44:18,20 45:9	disruption 115:5,11	E
delines 73.5 110.15			
definitely 20:16 47:21	46:1,19 48:20 51:9,12	dissolved 92:13	E 100:16
	46:1,19 48:20 51:9,12 52:16 54:5 68:16		E 100:16 E- 145:18
definitely 20:16 47:21		dissolved 92:13	
definitely 20:16 47:21 65:8	52:16 54:5 68:16	dissolved 92:13 distinguish 13:6	E- 145:18
definitely 20:16 47:21 65:8 definition 31:10 58:7	52:16 54:5 68:16 81:20 83:10 91:7,8	dissolved 92:13 distinguish 13:6 District 16:17	E- 145:18 E-SHIP 87:7 145:12,16
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14	E- 145:18 E-SHIP 87:7 145:12,16 145:17
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4	E- 145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10 demographics 74:13	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6 difficult 5:22	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4 DOE 60:11 127:15	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5 Eastern 2:3 16:12,18
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10 demographics 74:13 demonstrating 49:19	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6 difficult 5:22 digital 101:8 102:16 diligence 63:6,7,9	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4 DOE 60:11 127:15 doers 86:11 doing 7:22 9:16 12:10	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5 Eastern 2:3 16:12,18 71:13 easy 101:8 114:17
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10 demographics 74:13 demonstrating 49:19 Department 1:1,12 38:10 41:7 46:1 49:7	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6 difficult 5:22 digital 101:8 102:16	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4 DOE 60:11 127:15 doers 86:11	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5 Eastern 2:3 16:12,18 71:13
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10 demographics 74:13 demonstrating 49:19 Department 1:1,12 38:10 41:7 46:1 49:7 49:7 53:22 60:12	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6 difficult 5:22 digital 101:8 102:16 diligence 63:6,7,9 dinner 96:11 98:19 99:6 141:5	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4 DOE 60:11 127:15 doers 86:11 doing 7:22 9:16 12:10 14:15 16:18 31:20,21 32:16 33:4 34:1 38:18	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5 Eastern 2:3 16:12,18 71:13 easy 101:8 114:17 echo 7:4 18:3 62:15 96:4
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10 demographics 74:13 demographics 74:13 demonstrating 49:19 Department 1:1,12 38:10 41:7 46:1 49:7 49:7 53:22 60:12 108:17 112:4 113:6	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6 difficult 5:22 digital 101:8 102:16 diligence 63:6,7,9 dinner 96:11 98:19 99:6	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4 DOE 60:11 127:15 doers 86:11 doing 7:22 9:16 12:10 14:15 16:18 31:20,21 32:16 33:4 34:1 38:18 43:13 49:16,18 50:12	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5 Eastern 2:3 16:12,18 71:13 easy 101:8 114:17 echo 7:4 18:3 62:15 96:4 economic 1:3 2:16 23:2
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10 demographics 74:13 demonstrating 49:19 Department 1:1,12 38:10 41:7 46:1 49:7 49:7 53:22 60:12 108:17 112:4 113:6 127:17 139:22	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6 difficult 5:22 digital 101:8 102:16 diligence 63:6,7,9 dinner 96:11 98:19 99:6 141:5 direct 22:19 23:10 34:12	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4 DOE 60:11 127:15 doers 86:11 doing 7:22 9:16 12:10 14:15 16:18 31:20,21 32:16 33:4 34:1 38:18 43:13 49:16,18 50:12 53:4 57:15 58:19 59:8	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5 Eastern 2:3 16:12,18 71:13 easy 101:8 114:17 echo 7:4 18:3 62:15 96:4 economic 1:3 2:16 23:2 23:12 26:11,12 68:16
definitely 20:16 47:21 65:8 definition 31:10 58:7 110:7 120:4 degrees 70:17 deliberate 19:12 deliberation 77:11 154:4 delighted 57:10,11 deliver 49:9 deliverable 61:11 deliverables 47:13 138:4 demand 43:4 54:10 demographics 74:13 demographics 74:13 demonstrating 49:19 Department 1:1,12 38:10 41:7 46:1 49:7 49:7 53:22 60:12 108:17 112:4 113:6	52:16 54:5 68:16 81:20 83:10 91:7,8 108:5,9,12 126:20 127:1 133:6 134:15 139:12 dialed 71:12 dialing 71:20 dialogue 119:9 different 5:12,13 6:1 18:6,7 31:11 49:6 56:22 58:13 84:10,12 91:22 98:7,8 102:4 116:22 138:6 difficult 5:22 digital 101:8 102:16 diligence 63:6,7,9 dinner 96:11 98:19 99:6 141:5 direct 22:19 23:10	dissolved 92:13 distinguish 13:6 District 16:17 dive 141:14 diverse 60:11 129:10 diversity 9:20 13:10 divide 43:14 division 56:9 DOC 33:1 document 17:10 117:6 117:6 123:12 documentation 13:8 15:5 119:1 documenting 62:4 DOE 60:11 127:15 doers 86:11 doing 7:22 9:16 12:10 14:15 16:18 31:20,21 32:16 33:4 34:1 38:18 43:13 49:16,18 50:12	E-145:18 E-SHIP 87:7 145:12,16 145:17 eager 101:18 Eagles 5:7 earlier 25:20 71:18,22 73:21 121:19 123:4 134:12 135:20 early 9:7 23:4 28:14 123:6 131:19 ears 129:18 easier 148:1 easily 102:5 Eastern 2:3 16:12,18 71:13 easy 101:8 114:17 echo 7:4 18:3 62:15 96:4 economic 1:3 2:16 23:2

112:16 138:8.11 **economies** 26:13 35:2 35:6 economy 36:12 37:6 46:18 56:10 110:11 ecosystem 14:5 66:8 **ecosystems** 20:12 35:5 Ed 144:22 **EDA** 21:13 114:7,9,12 114:15,19 140:1 **EDA's** 114:13,14 edification 75:9 edit 36:5 40:16 102:12 edited 22:3 36:14 educating 67:6 **education** 49:8 52:19 Educational 52:10 educators 54:9.11 effect 115:2 effective 106:15 121:5 127:14 effectively 27:3 efficiencies 10:17 28:19 efficient 95:22 effort 11:15 19:12 21:1 22:12 26:4 95:2 119:6 135:16 efforts 16:4,16 17:9 18:18 32:17 44:20 72:1 123:5 140:3 146:6 either 4:5 88:6 101:8,21 104:4 140:2 144:16 elaborate 81:17 **election** 19:4 107:6 element 37:16 elements 66:9 **elevate** 11:19 12:3 19:12 106:12 123:19 elevator 106:6,7 136:17 email 128:19 144:4 149:9 **emails** 6:9 **embraced** 103:12 emergence 43:10 **Emily** 2:6 4:5 18:16 19:10 61:6 95:3,7,19 98:22 125:2 154:11 emphasis 9:20 **emphasize** 5:15 21:10 88:9 empirical 66:5 **employee** 67:19 employer 52:18 **employers** 52:21 54:9 54:11 67:7,21 68:2,6 69:15

emulate 20:13 **enable** 24:20 41:11 42:2,20 **enables** 54:15 encourage 13:4,20 17:14 48:22 56:20 100:12 103:15 114:21 120:4 127:21 encouraged 120:16 Endeavor 137:7 ended 13:13 82:12 endorse 17:11 18:20 78:6 enemy 63:12 energy 1:19 127:17 137:17 140:1 engage 13:2 56:18 86:9 86:10,17 87:12 89:16 90:3 111:19 148:14 engaged 6:18 7:2 13:7 67:20 87:3 89:20 119:13 122:19 engagement 21:15 65:18,21 147:22 148:1 154:3 engagements 11:19 19:14 engaging 64:3 68:7 74:10 engineering 99:18 enhance 24:5 36:3 114:14 142:18 143:2 enjoy 71:11 **enjoyed** 121:16 **ensure** 42:3,8 43:21 45:4 119:13.15 enter 32:10 97:6 Enterprise 1:21 enthusiasm 61:19 entire 8:21 13:13 entities 11:22 entitled 155:19 entity 38:3 79:19 entrepreneur 1:20 58:5 101:20 106:5 111:8 127:20 entrepreneurial 9:12 13:12 24:2 34:9 35:1 35:6.22 37:6.6 38:5 43:15 45:6 46:19 86:8 133:19 137:10 142:15 entrepreneurs 28:21 36:1 37:5 38:8 39:6 42:9 43:20 44:8,21 45:13 48:9 59:7 63:6 74:18 92:15 101:6

142:21 143:4 145:2 entrepreneurship 1:5 2:19,22 17:5 22:21 24:15,18 26:12 29:15 37:22 38:20 42:7 45:3 51:15 61:12 62:13 64:21 66:7 78:3 81:9 83:9 87:5 88:12 89:21 91:7 106:10 123:6 124:16,19 136:3 139:22 140:17 145:18 146:1,21 148:5 entry 68:20 environment 58:6 115:4 140:18 environments 101:5 epic 93:19 94:2 **equation** 67:6 68:5 equipment 102:5 equipping 45:5 equivalent 16:20 **Eric** 2:8,21 6:8 31:4 73:22 74:8 77:5,21 97:14 129:11 130:14 147:15 155:5 Eric's 62:15 76:1 **ESO** 12:1 **especially** 59:11 127:15 134:11 **essential** 66:9 121:10 essentially 29:18 establish 22:20 established 86:1 establishing 86:16 Esther 1:18 102:22 etched 74:5 **evaluation** 30:19 31:3 49:15 62:16 74:2 114:7 evaluations 62:17 114:9 evening 75:12 event 5:4 events 90:10 147:13,16 **everybody** 4:4 6:7 31:10 80:18 89:15 92:17 101:5 131:1 141:18 everybody's 118:11 131:17 everyone's 69:16 96:6 evident 80:1 evolve 18:22 73:7 104:22 evolved 107:5 108:1 evolving 73:2 exacerbates 46:13 exact 28:12 69:3

exactly 14:2 48:3 66:19 example 56:21 58:4 59:11 90:1 98:3,4 109:13 examples 111:14 118:20 123:18 130:4 **Excel** 82:18 exceptionally 120:16 **exchange** 65:19 96:2 exchanges 152:15 excited 8:6 17:10 86:7 100:20 147:19 exciting 121:4 exclusive 115:15 **execute** 147:20 **executed** 136:21 exercise 32:12 83:18 105:5 exist 28:17 46:1 51:20 56:3,16,21 57:5 58:11 127:11 existed 39:11 **existing** 10:15 46:13 51:19 86:4 90:10 100:11 exists 32:3 51:9 59:18 **expand** 110:7 expanding 120:3 **expect** 13:9 81:6 **experience** 11:3 17:19 23:21 28:1 35:18 38:18 39:19 68:21 73:14 91:10 121:16 139:7 140:4 142:17 148:9 experienced 24:4 36:2 120:18 143:1 experiences 6:1 73:7 experiencing 151:14 experiment 101:9 experimentation 66:3 66:11 **expert** 82:19 106:13 140:15 expertise 17:22 experts 113:7 **explain** 4:17 22:6 explicit 42:17 **export** 102:2 exporting 101:17 expressed 149:12 extent 15:21 24:17 60:20 76:15 103:8,22 129:15 151:15 external 73:10 80:5 86:9 87:15 externally 89:16

102:4 111:15 127:21

128:3 129:4 135:13

extremely 31:17 32:1

follow 126:1 145:15 felt 8:17 19:13 33:21 free 40:16 122:12 36:8 eye 122:8 150:18 76:22 83:10 98:21 146:14 **FRIDAY** 1:9 eye-opening 70:6 field 43:9 106:13 follow-up 32:14 142:5 friend 155:2 eyeshadow 150:21 following 142:19 **fields** 53:18 friends 27:9 figure 58:5 66:11 93:2 follows 142:14 friendships 89:3 front 34:20 55:4 57:11 F 112:8 114:16 134:4 **football** 154:17 fabric 75:11 137:11 139:8 for-submission 7:20 63:8 78:22 79:20 134:7 143:11 face 126:11 figuring 50:9 66:7 force 83:13 112:11,13 fruit 48:2 facilitate 13:20 fill 29:2 56:4 forefront 101:4 facilitation 10:2 final 101:15 137:18 foreign 110:4 fuel 107:12 **forever** 46:17 fulfill 23:14 134:22 facing 132:20 138:7 fact 75:18 136:6 147:21 **finalize** 8:19 126:19 **Forget** 106:1 full 9:7 23:15 146:5 **finally** 132:4 forgotten 124:22 full-time 24:9 faculty 137:19 fail 62:15 63:9 finances 153:3 form 16:2 32:9 fully 30:2 formal 21:2 fairly 24:10 47:22 find 28:19 29:1 59:21 fully-paid 137:21 82:1,11,16 101:14 107:14 formalize 119:1 function 93:9 Falcons 4:10 5:8 120:10 130:19 formalized 40:13 functions 37:18 51:11 fall 22:18 39:21 40:20 fund 94:9 104:5,8 finding 92:1 **formed** 19:3 fine 46:12 61:17 former 82:5 108:16 64:19 84:11 85:19 123:13 forms 96:20 fundamentally 138:10 finish 129:13 104:5 149:21 falls 150:13 firm 55:6 formulation 32:10 138:14 firms 69:20,22 70:1 forth 53:20 86:22 funders 91:5 92:17 familiar 138:13 fan 5:7 112:12 fortunate 50:22 145:1 fantastic 18:4 55:10 first 18:17 23:7 27:4,17 forum 86:17 90:2 97:21 funding 12:18 15:12 41:17 42:21 50:15 forward 7:3 11:1.13 far 100:13 153:19 30:1 91:6 94:9,13,15 65:17 75:6 108:17 21:16 22:14 27:8.19 94:16 104:16 108:10 fascinating 70:12 91:19 fast 79:7 109:2 123:7.10 29:21 30:14.18 31:1 111:18 119:7 120:1 favor 20:22 21:4 39:22 124:13 125:11 131:8 39:4 40:13 42:14 funds 11:21 52:15 131:13 141:17 152:14 **February** 1:10 130:10 59:19 61:8 115:6 92:13 firsthand 151:14 117:19 119:5 121:5,9 further 52:4 78:8 99:13 131:19 Fed 87:11 **fit** 7:12 33:18 72:10,21 133:14 135:14 116:6 federal 2:19 8:4 23:7 105:11 foster 22:21 future 2:4 25:17 41:3,20 27:2 28:22 33:2,12 fits 78:18 found 59:16 75:10 76:18 78:11 114:2 37:21 38:3,7,20 44:19 fitting 72:12 90:21 124:8 54:4.16 56:16 61:12 five 12:21 28:10 38:7 foundation 11:17 52:10 G 85:22 94:7 106:11,14 76:7 114:5,8 136:9 61:11 94:9 106:15 123:5 135:3 152:11 foundations 91:4 **Gaga** 5:1 four 27:5 38:6 76:7,10 140:5,9 145:22 fix 34:21 99:15,15 gain 109:15 155:15 **fixed** 145:5 92:14 95:11,12 game 154:15 feed 150:17 **flags** 51:6 123:13 Gannett 2:5 feedback 6:4 13:21 **flares** 107:16 fourth 7:21 gap 68:2 92:18 96:6 flesh 76:6,11 frame 64:8 146:8 49:1 65:14 71:4 gaps 9:6 14:7 29:2 104:21 118:17 119:3 flexible 31:1 68:7 147:10 gather 136:2,10 128:13 131:17 136:10 flow 77:6 framework 3:14 25:16 gathering 38:6 135:20 144:3 fluid 117:6,6 30:22 33:13,16 40:19 **GDP** 130:8 focus 6:13,13 14:4 22:8 62:1 72:2,7,11 77:3 feedback/thoughts **gel** 121:10 147:12 24:18 33:13 41:21 77:15 78:12 86:4,21 general 78:17 147:17 44:9 45:1 46:5,20 90:5 97:8 99:11,13,17 feeding 122:18 geography 16:21 55:7 70:7 72:3 101:10 feel 40:16 41:5 43:20 100:13 114:1 116:7 George 2:6 121:20 129:1 136:22 126:22 131:14 134:21 44:1,2,14,15,22 45:8 germination 76:17 focused 7:2 9:21 26:10 framing 47:4 45:9 83:15 103:18 **GEs** 134:8 115:14 118:13 122:17 26:10 60:14 70:17 Fran 131:14 getting 53:17 55:5,19 68:20 71:20 73:20 126:19 Francisco 150:17 152:1 124:17,18 134:11 focuses 41:10 42:20 frankly 56:10 102:7 140:4,16 141:1,1 86:6 88:7 128:3 folks 16:22 54:16 70:21 feeling 128:2 151:14 Fred 125:22 126:1 129:14 145:7 146:10 feels 35:7 48:20 115:11 81:8 86:18,18 89:12 **FREDERICK** 1:21 4:14 qive 22:13 49:1 66:17 fellows 137:21 91:8,12 92:7 96:12 60:3 63:11 69:19 107:18 118:17 150:14 fellowships 137:20 97:17 125:3,4 154:6 133:16 given 13:10 19:13 23:8

28:7 34:10 46:15 9:13 33:8 47:4 60:11 **Heather** 1:19 4:5 8:11 hoping 28:2 118:14 150:12 60:20 76:10 83:12 8:11 21:19 22:10,12 horrible 82:21 host 91:22 151:7,20 gives 25:4,21 72:19 89:8 96:7 116:16 22:13 27:10 81:3 123:1,8 125:9 140:8 84:21 88:14 116:7,19 107:12 152:12 giving 137:14 growing 46:17 89:3 117:12 122:18 126:21 **hosted** 38:9 glad 56:12 121:11 130:2 134:20 141:20 hot 134:4 113:1 growth 23:2,12 42:7 148:21 154:11 hour 22:2 72:3 glass 82:17 glasses 83:2 112:9,16 130:8 **Heather's** 88:14 hours 19:16 116:12 global 2:9 23:13 guess 15:18 18:21 heavily 110:1 hows 128:5 help 13:20 17:17 20:13 HR 68:17 go-ahead 134:22 34:10,22 36:6 77:8 29:1 47:12 57:11 68:6 huddle 127:6 goal 15:10 23:1 141:8 115:7 goals 24:21 64:1 79:8 Guevara 2:15 65:12,16 78:9,10 81:5 85:12 **huddles** 142:2 105:8 112:22 quidance 119:3,4 88:17 96:2 104:16 huge 89:18 94:3 103:2 **guide** 78:9 **GOLDIN** 1:22 4:19 111:17 113:22 117:4 110:10 127:12 118:14 121:5 122:22 57:13 127:19 guides 10:2 54:4 hugely 93:22 106:20 **GW** 53:15 124:14 128:4 129:12 **Google** 149:2 140:14 gotten 52:14 147:1 129:18 132:8,15 **hustlers** 148:20 Н **government** 8:5 26:20 133:17 138:10,15 28:18 29:1 37:21 39:5 half 123:10 151:16 helped 94:1 39:12 44:19 54:16 hand 21:3 34:17 80:22 **I&E** 26:10 33:1,10 87:7 94:7 98:7 106:11 **handed** 61:13 helpful 17:16 31:18 106:15 106:14 127:12 135:3 hands 20:20 72:22 73:13 105:4 idea 13:17 24:7.20 25:8 140:5,9 145:1,21 happen 5:20 55:19 116:9 149:6 33:18 45:2,4,5 52:17 154:5 helping 68:1 87:9 98:6 86:22 89:15 90:9,11 115:11 121:9 131:18 Government's 106:15 helps 25:7 28:11 happened 19:11 50:4 94:22 96:5,10 97:16 **Governor** 108:16 **HERSKOWITZ** 2:1 98:12 101:7 105:21 121:11 Governor's 137:9 happening 64:15 85:22 32:21 135:6 151:18 109:13 113:11 114:3 graduates 137:21 89:2 121:1 **hesitate** 129:16 125:16 127:10 152:18 grand 100:19 **Hey** 77:22 happens 53:19 57:17 ideas 12:3 19:8 28:14 grander 16:2 57:21 70:13 129:2 high 73:3 84:1 85:13 40:22 60:6 65:19 grant 9:17 26:21 138:2 137:13 67:21 68:10 75:8 **highest** 111:10 grantees 12:21 happy 18:20 20:11 53:7 76:12,17 79:4 83:20 grants 10:19 23:6 26:10 89:1,2 90:8 93:5 96:2 highlight 30:11 143:16 84:8 85:12,13 89:4,7 **graph** 76:1 125:19 129:22 135:18 highlighted 143:15 107:1,10,18 109:12 grasp 55:6 136:11 142:6 151:15 highly 44:7,8,10,21 109:15 113:12 116:20 **greater** 101:18 151:19 45:12,13 67:20 117:7 119:16 127:22 green 143:11 **Harbor** 144:20 Hill 110:6 120:2 128:8,12 153:7 Greentown 2:6 hard 6:8 145:5 146:13 **hinder** 112:9 **identified** 118:3,12 greet 95:22 hardy 120:17 Hint 1:22 143:17 **GRIFFITH** 2:7 **Harvard** 137:19 hire 68:22 identify 9:10 24:22 ground 54:16 110:13 hat 62:10 hired 23:6 114:6,15 35:16 37:19 48:14 groundswell 120:3 hats 16:10,11 hiring 67:11 68:20 59:13 87:5 97:7 104:5 group 18:4 47:10 49:12 **HBCU** 96:12 historical 76:14 89:19 151:15,16 54:20 57:20 58:2 head 61:4 64:8 108:17 hit 48:12 identifying 57:2 99:20 61:14 62:4 65:1 70:22 hokey 120:14 121:3 **IDEO** 1:19 **heading** 118:16 83:8,9,10 84:6 91:5 129:7 **IEP** 130:8 heads 80:10 141:2 hold 63:21 92:11 95:13 98:2,10 healthy 120:16,20 **III** 1:20 112:3,11 113:22 hear 39:10 66:2 74:1 home 101:14 illustrate 72:12 120:21 121:10 124:6 93:4 97:18 103:16 **Homeland** 108:17 imagine 56:15 124:11 125:14,16,17 hone 55:11 116:5 153:2 immediate 48:10 127:3 127:19 133:7,12,15 heard 4:19,21,22 47:7 honest 80:10 121:7 131:12 137:7,19 142:6 98:22 116:19 **hope** 45:18 67:5 68:3 immediately 119:7 152:15 155:10 93:14 110:20 139:16 hearing 64:13 97:10 135:2 154:10 group's 8:9 117:1 **impact** 9:15 23:10 grouped 33:8 **heart** 56:8 hopeful 147:20 49:16,18 50:12 55:9 grouping 83:22 heartened 66:2 hopefully 9:22 15:7 60:15 62:21 73:3,15 118:11 128:18 148:20 90:7 106:3 113:11,12 groupings 82:1 heartening 65:20 **groups** 5:12 6:21 7:7 hearty 40:9 155:12,14 113:18 114:2,8 152:4

impacted 95:3 impactful 93:22 132:21 impacts 23:9 implementation 31:2 implicitly 32:10 **implies** 99:20 importance 124:15 **important** 5:17 15:10 16:8 18:11 26:16 28:4 29:3 30:5 36:8 42:14 45:19 55:18 58:13 62:21 93:6 105:15 121:4,10 124:12 141:8 143:17 impossible 33:22 **improve** 64:8 114:7 improving 103:10 in-between 96:17 in-bound 145:10 inbound 19:14 119:14 **include** 27:15 28:15 101:11 including 23:10 117:8 inclusion 9:20 incorporate 37:9 **increase** 23:9.12 increased 10:17 increases 114:17 increasing 138:7 increasingly 43:2 55:4 86:7 incredible 32:16 137:17 incredibly 60:17 67:19 incremental 115:10 independent 108:6 independently 90:12 indirect 23:11 individual 5:20 52:5 146:5 **individually** 17:14 62:8 63:2 118:15 industries 55:6,12 57:1 industry 9:21 14:4 43:12 107:16 **INEAP** 38:5,14,16 inevitably 50:2 **infancy** 106:22 infinity 25:18 influence 104:1 info 122:18 inform 19:21 86:20,21 90:4 146:6 148:18 informally 38:17 **information** 24:8 38:13 53:11 54:2,15,17 55:11 59:2,15,20 61:4 61:7 64:2 90:22 98:11 119:15 124:11 125:21

126:2 133:10 135:20 136:2 informed 90:4 informing 141:10 infrastructure 51:8 109:22 110:1,8,8 111:7,13,14,20 117:3 120:1 130:5,7 151:22 initially 75:7 **initiative** 44:15,16 103:9 initiatives 31:16 40:20 45:11 58:13,17 72:20 73:4 78:21 117:8 118:21 innovation 1:5,15,20 2:9,18,21 22:20,21 26:11 29:15 33:12 78:9

37:21 45:3 54:3 57:17 66:7 78:2 83:8 84:8 87:6 88:19 89:20 90:16 95:13 106:10 109:1 110:8 111:9,10 111:11,13 123:15 124:16,19 128:11 136:4 139:21 144:12 145:22 innovative 88:16 142:20 innovators 28:22 74:18 111:15 **input** 11:5 14:10 54:22 **inquiry** 113:3 inserted 24:8 inside 46:5 58:12 86:8 insight 15:8 47:12 insignificant 92:4,6 inspirational 105:18 **inspire** 132:10 instance 119:5 **Institute** 53:13,14 98:1 107:22 institutional 19:15 institutions 52:3 53:2 integrate 74:2 integrated 75:14 integrating 72:20 **integrator** 27:2 28:16 **Intel** 1:18 Intelligence 60:13 **intent** 19:2 intention 36:18 **interagency** 10:15 38:4 123:8 interconnect 79:15 interdepartmentally 49:5

interest 5:7 65:21 78:8 96:3 128:15 130:16 interested 92:22 94:18 113:20 125:14,20 131:7 151:21 **interesting** 26:18 31:8 31:14 32:4,12 60:19 69:13 88:3 103:13 141:10 interests 91:13 intermediaries 119:19 intermediary 12:20 internal 80:2,16 internally 81:13 internet 54:6 interrelated 76:20 intersect 129:21 interview 125:12 interviews 132:10 intimidating 101:19 introduce 63:5 introducing 100:18 introduction 26:2 invaluable 78:5 invest 110:1 investigate 77:20 investing 100:11 invite 40:15 95:12 96:8 96:12 125:4 **invitees** 138:22 **invites** 149:15 inviting 93:15 127:4 involve 66:14 119:4 142.5 involved 108:13 109:3 involvement 21:11 **Island** 16:22 **issue** 8:16 9:5 17:8 37:11 56:11 60:14,17 99:5 112:13 120:1 issues 18:5 19:12,16 70:2 129:19 134:4,15 149:18 151:4 **ITAR** 102:6 Item 119:21,22 items 63:20 85:15 131:12,21 133:4 iterations 90:14 Ivy 2:7

Jason 52:12,14 53:8,9 job 22:6 30:15 31:2 41:21 42:7,20 64:20 68:19 70:5,21 108:7 **iobs** 23:12 26:12 41:3 41:12,22 42:1,4 46:11 46:12 53:19 54:10

56:1,3,21 57:3,5,5,18 114:11,15,18 117:2 130:7 138:9 **Joe** 88:11 97:2 Joe's 107:15 **JOHNSON** 2:2 46:8 105:20 137:6 join 49:9 125:15 135:18 139:17 154:10 joined 127:19 JOSEPH 2:3 **journey** 40:11 **JP** 69:12 JPMorgan 2:7 juggling 153:21 jump 62:9 103:19,22 **June** 87:8 90:19 144:8 145:12

Κ

Kansas 145:21 **KAPP** 2:3 4:22 16:3 50:14 90:13 93:4 138:3 151:9 **Kara** 1:22 55:14 Kauffman 61:11 86:18 87:4,12,13 89:8 123:4 145:20 Kauffman-centric 89:11 **keep** 46:17 61:19 72:17 81:5 97:10,12 122:8 123:17 128:18,20 136:22 keeps 135:2 **KENNEY** 2:4 81:16 82:8 82:14,22 83:5 84:16 85:4,11 103:1 139:14 144:11,19 Kentucky 2:2 137:8,10 kept 74:8 key 12:22 34:12 42:7 57:16 69:15 128:3 **keynote** 143:13 kick 60:6 72:4 **kicked** 74:8 kid/college 137:13 kids 146:11 153:20 kinds 28:15 59:4 152:3 knew 19:3 65:7 knock 109:8,10 134:9 knowing 112:11 **knowledge** 19:13,15 23:21 31:15 35:18 154:16 knowledgeable 24:4

36:2 142:17 143:1

lesson 73:6 40:12.19 42:16 43:5 malleable 31:1 man 52:11 lessons 12:4 43:10 45:2,11 49:5 L 101:4 let's 15:22 62:4 66:5 50:17 52:3 55:20,20 manage 12:21 label 39:8 83:18 101:11 88:21 121:13 123:17 managed 11:16 66:4,4 67:4 69:2,18 **labeled** 104:16 130:12 147:7 155:11 71:8 77:20,22 85:15 management 52:17 labor 41:7 46:2 49:7 91:2,4 92:9 95:10 53:4 99:8 155:12 53:22 54:7,14,14 56:5 level 11:22 14:13 45:20 111:12 112:6 114:7 manages 12:20 52:16,19 54:16 62:3 114:13 134:15 138:21 mandate 23:14 24:11 Labs 2:6 139:4 141:13 142:11 28:7 40:17 42:18,21 68:21 84:1 85:13 86:3 lack 53:1 95:2 108:21 110:16 143:10 144:5 145:5 manifests 138:18 lacked 94:13 152:15 154:3,3 146:13 148:10 149:7 Manufacturers 53:12 Lady 4:22 leverage 27:9 48:4 149:18 151:6,11 60:7 125:5 landscape 48:8 51:18 52:1,4 62:1,11 manufacturing 43:6,7,8 153:18 landscaping 33:3 86:9 91:17 looked 38:21 76:22 44:15 46:14 53:13,14 **Langdon** 112:3 53:18 57:5 59:12 leveraging 90:9 looking 8:20 9:2 10:13 language 18:9 19:8 levers 94:8 11:13 13:18 28:22 60:12 65:5 98:1,3 36:7 37:9 48:17 131:9 Library 1:12 29:21 48:8 52:21 99:4 112:9,11,12 142:9 **licenses** 111:18 56:16 58:19 59:1,3,10 113:1,5 117:2 124:6 large 68:18 69:2,22 Lieutenant 137:9 67:4 68:19 70:10 124:16 125:14,17 74:19 115:2 151:11 73:14 75:1 81:4 88:18 **life** 56:11 134:7 larger 47:3 81:14 lift 93:19 94:10,21 100:3 101:4 127:10 Manufacturing.gov 101:22 **likewise** 129:17 131:18 135:14 136:18 59:14 late 131:19 146:8 **limited** 75:19 140:9 146:7,20 map 32:22 117:7 lately 149:18 line 33:1 36:15 129:13 looks 14:5 18:19 **March** 15:4 131:19 Laughter 4:16 5:2 16:7 153:12.13 Maribel 2:5 31:4 55:14 loosely-organized 38:3 25:19 50:7 63:15 85:8 lines 130:21 loss 37:4 69:7 139:11 87:20 93:17 102:17 list 37:20 130:21 131:2 lost 76:20 77:5.7.12 Marie 2:4 52:12 109:9 116:14 123:22 131:7 137:16 **lot** 6:22 11:3 27:22 mark 145:14 135:5 150:19 152:22 listen 98:18 36:19 37:10 39:10 marked 145:13 153:5 155:3 **listing** 61:12 123:5 49:21 60:7,11 61:3 **marker** 147:8 launch 9:8 lists 130:15 66:3 67:20 68:2 70:3 market 54:15 92:18 Law 137:20 Literally 70:10 71:3 74:18 75:13 76:9 market's 127:16 laws 123:10 little 7:1 12:6,10 18:8 77:12 78:20 82:17 marketing 115:19 layer 12:22 18:22 37:4 53:12 64:6 94:12 95:8 104:11 markets 32:6 54:8 layered 28:4 66:13,20 68:6 75:17 109:22 113:11 122:2 mass 146:10,16 150:13 lead 22:12 72:3 116:20 76:7,11 79:6,10,18 126:5 128:7 133:19 massively 49:17,17,17 leaders 9:3 43:16 86:10 50:12,13 81:17 82:9 97:16 135:14 139:6 140:4 89:16 136:7 141:2 144:22 107:12 120:14,20 material 139:16 leadership 23:19 25:2,6 122:5 133:3 140:12 lots 64:14 matter 8:1 14:3 71:14 109:7 live 14:4 love 14:16 50:17 62:18 118:8 155:19 **leading** 135:16 **LLC** 2:3 83:1 85:12 88:9 96:5 mean 6:6 10:19 35:2 learn 18:2 51:1,2 62:2 125:15 126:21 148:8 37:3 60:16,16 76:10 local 9:3 11:22 12:1 96:1 111:22 86:2 110:15,20 151:12 152:5 117:18 learned 14:22 18:5 locate 54:12 low 95:2 meaningful 8:1 65:22 41:19 73:6 74:18 located 144:14 low-hanging 48:2 119:16 learning 31:18 60:1 means 24:22 43:3 locations 150:1 **lucky** 26:9 learnings 14:3 **LYNCH** 2:4 130:2 logo 122:4,4 149:13 leave 6:3,20 7:12 long 15:18,20 44:1 meant 151:5 105:21 155:10 M 45:19 50:5 58:14 60:1 measurable 55:9 leaving 18:10 46:11 81:6 101:6 107:1 mail 149:11 measure 49:16 50:11 **led** 59:15 133:18 114:17 mailbox 122:7 **leq** 51:15 long-46:9 main 126:1 measurements 85:17 legislation 24:17 26:1 85:17 long-serving 67:19 major 92:21 29:22 54:4,18 long-term 46:18 47:9 measuring 114:18 majority 74:15 152:13 legislative 110:16 meat 81:14 longer 133:3 making 18:9 39:2 41:12 legislators 107:10 look 12:10,18 13:12 47:14 48:18 62:16 mechanism 94:9 110:20 74:11 87:21 89:13 mechanisms 108:10 14:18 21:16 26:7 27:3 lend 80:22 27:7,7 28:18 30:20 99:8 120:2 Medical 2:9 lens 62:22

meet 47:11.18 81:6 91:15 95:16,22 112:22 119:19 146:22 meeting 1:7 3:10 7:21 10:21 31:18 63:18 72:8 79:17 88:4,6 92:22 95:12,19 121:16 135:8 136:6 143:13 144:2 146:9 150:2 152:20 155:16 meetings 16:17 121:12 125:3 134:1 141:7 145:8 149:22 Melissa 1:13,15 5:16 6:4 7:16 29:10 30:3 72:6 73:16 116:18 120:7 129:15 142:3 147:17 148:6 153:16 members 13:1 23:20 29:10 35:17 37:18 125:22 128:14 130:17 153:9,13 men 70:13 mental 105:9 131:15 mention 149:21 mentioned 7:16 24:16 25:22 32:14 57:19 61:10 119:22 123:3 135:20 mentions 88:10 mentor 137:22 mentors 111:17 135:13 137:9 mentorship 43:18 44:22 48:9 128:2 133:7 135:12 137:6 message 74:17 126:10 129:22 **messages** 126:14 met 1:12 95:7 130:2 metrics 11:7 49:19 55:5 62:17 Microsoft 149:10 mid-March 136:7 Middle 137:22 Mike 2:5 109:16 116:21 132:17 Mike's 103:4 million 26:9 mind 26:8 46:20 70:15 72:17 73:5 74:9 112:13 113:16 mindedness 153:22 mindful 62:11,22 74:9 74:17 99:1 116:22 mindset 9:12 mine 6:21 mingle 95:16

minute 117:14 minutes 65:11 71:4,8 72:3 98:22 118:6 127:5 mirror 30:16 missing 124:17 140:22 mission 27:14,16 28:5 28:11 105:16 114:13 114:14 124:13 model 25:17 39:14 50:15 69:8 72:13 105:10 131:15 mold 38:16 moment 17:15 40:18 121:2 momentum 15:19 47:18 money 10:18 12:14,19 13:6 52:14 month 138:1 143:10 months 60:10 102:6 137:1 143:12 **Morgan** 69:12 morning 4:3 5:10,14 61:10 72:1 78:20 mother 155:9 motto 113:14 122:5 131:10 move 8:9 22:14 27:19 117:18 121:5 139:6 **moved** 74:4 movement 53:17 moving 5:9 7:3 9:6 30:22 59:19 97:12 118:4 121:8 123:17 multiple 84:5 multiplier 115:2

Ν

mute 71:12,19

mutually 115:15

N 85:15 99:22 100:8,16 **N.W** 1:12 **NACCE** 17:3 **NACIE** 1:5 6:11 8:18 11:5 13:1 22:16 23:15 23:20 24:1,4 25:5,11 25:12,17 27:9,14 35:17,21,21 36:3 41:6 41:10,18 42:12,18 44:2 45:10 46:5 52:5 62:11 63:3 69:13 73:2 73:6 76:15 79:4 83:6 86:13,20 87:12 88:4 89:15 90:3 98:11 111:2 112:21 113:6 113:14 114:1 119:21 122:3,8 128:14

143:1,13 148:15 149:3,8,9,14 152:12 **NACIE's** 21:11 22:17 39:18 114:21 **NACIE-** 93:11 **NACIEs** 25:17 76:18 114:2 **name** 84:12 named 52:11 naming 84:12,21 152:19 nanotech 122:2 narrative 28:5 126:20 Nashville 15:4 152:14 **nation** 26:15 national 1:5 11:15 12:4 14:13 17:4 45:3 53:11 78:1 88:11 90:15 91:14,14,15 92:12 111:14 125:5 138:20 144:12,13,19,21 146:21 148:5 nationally 108:21 nationwide 54:14 natural 82:1 navs 20:22 **NBCA** 134:5 **NDOs** 39:5 **NEA** 69:20 near 124:8 nearly 26:9 **neat** 89:3 necessarily 34:12 39:12 43:3 69:3 93:8 94:15 100:9 **need** 25:13 29:2 42:2 44:5 54:17 58:1,7 59:3 60:2,2 61:20 64:3,6,10,18 66:3,11 77:18 80:6,13 89:22 96:9,15 117:7 120:9 128:7 129:12,15 131:9 148:16 150:3 needed 20:15 122:19 needs 5:19 24:19 68:21 93:8 105:7 116:1 132:13 negotiated 77:6 **NEMETH** 2:5 99:16 102:18 121:15 network 13:5 20:14 38:4 43:16 89:18 133:7 136:6 138:1

130:16 142:14,17,19

121:9 154:18 new 1:21 19:1,6,7,8 22:22 35:4 36:8 41:1 41:22 42:4 43:10 50:19 59:21 74:15 76:17 77:21 103:3,3 103:16 138:8,9 145:7 152:1 nice 78:1 104:19 146:17 **nicely** 63:19 night 113:13 136:19 155:9 night's 96:11 **NIH** 127:17 **nine** 16:14 NIST 38:9 140:1 nod 87:17 **nods** 88:10 non-profits 108:6 NorTech 108:8 **North** 17:19 note 20:21 77:17 146:9 noted 145:12 notes 97:4 105:1 130:6 notice 115:20 November 146:20 **nuance** 46:6 number 16:10 39:17 70:13 75:19,20 91:20 112:15 113:7 114:11 114:18 **numbers** 110:2 **nuts** 129:14

0

OAI 141:21 142:15,20 objectives 24:21 observations 66:1 **obviously** 60:6 93:12 103:20 110:9,12 October 72:9 offer 73:17 109:11 110:16 131:5 132:21 139:18 142:3,12 151:10 154:14 offered 37:20 88:15 116:22 154:12 offering 36:5,6 135:2 offers 151:7 office 2:18,21 22:20 111:17 Officer 155:15 offices 149:22 official 2:20 88:6 93:9 97:1 122:3,5 148:14 152:14 officially 155:16 offline 61:15 69:10

networking 70:21

never 15:15 115:4

89:17 137:7

networks 43:22 45:1

PEREZ 2:5

OIE 11:2 12:9.12.18 19:20 21:13 22:8,10 22:17 23:5,15 24:2,9 24:12,15,17,20 25:4,5 25:8,10,13,21 26:17 27:16 29:2,16,19,22 33:9 34:11 35:21 37:18 39:20 73:1 76:8 86:13,21 87:3,8,12 89:6 90:4 93:1,9,12 104:7,12 105:6 106:9 113:22 118:22 119:6 119:13 147:20 155:5 **OIE's** 78:9 106:12 **onboard** 119:14 once 11:1 55:6,11 139:3 one-pager 138:21 one-stop 39:8 ones 25:14 100:16 ongoing 119:9 127:13 open 39:13 43:16 45:15 74:21 121:7 153:8,12 open- 153:21 opening 39:5 operate 74:20 96:7 101:8 **operation** 24:5,15 operations 36:4 142:18 operator 57:20 58:4 153:11 **opinion** 31:11 opportune 101:10 opportunities 6:20 26:20 30:17 47:10 51:22 56:20 79:14 97:9 148:21 **opportunity** 10:16 13:1 13:7,19 19:20 30:22 38:1 41:4 42:8 43:18 43:21 44:3 47:8 48:4 48:7 49:4 51:2 54:3 56:18 69:13 73:22 77:20 78:7 80:3,12 92:6 93:2 95:17,21 104:4 106:12 110:1 116:1 118:2,17 119:8 129:3 138:11 144:18 147:2 option 100:3,14 options 52:9 143:13,14 143:15 145:4,8 149:19 152:8 order 42:2 110:13 Oregon 2:4 **orq** 116:10 organization 11:17

17:2.3 68:16 88:14 101:22 108:3 132:5 132:18 139:19 140:5 organizations 34:15 52:5 58:11 73:10 88:11 89:17 95:9,13 139:1 140:3 147:6 organize 75:10 81:22 83:19 125:15 organizers 126:1 organizing 10:21 73:1 80:15,17 83:7 92:22 150:15 original 19:2 42:18 74:22 Orin 2:1 72:9 Orin's 73:21 ought 109:19 outcome 138:7 154:13 outcomes 5:13 92:10 138:8 Outlook 149:10 outreach 123:1 outset 49:15 50:9 outside 14:10 29:20 57:18 79:7 80:7 95:10 103:20 123:1 outward 132:20 overall 29:18 127:21 overdramatize 60:16 overlap 31:16 overlaps 28:18 overlook 67:22 overlying 97:8 overseas 101:17 102:3 oversee 13:2 overwhelming 140:14 owners 112:12

Ρ

ownership 80:13 96:16

P-R-O-C-E-E-D-I-N-G-S 4:1 **pace** 8:5 packet 15:6 143:13 page 44:10 64:16 76:5 **pages** 76:7 pain 32:7 panels 148:17,18 paper 78:6 134:12 paragraph 34:6 142:13 parallel 113:3 parameters 11:4,6 **parents** 137:15 park 76:11 parked 76:1 77:8 parking 77:17 78:5 part 12:7 13:5 14:13

31:8 33:6 38:9,21 58:15 63:6 65:1 68:1 84:1 86:12 97:17 101:1 111:2 114:5 137:22 144:18 154:7 **PARTICIPANT** 21:7 61:5 109:8 145:16 150:22 participate 39:19 142:4 145:3 146:4 participating 11:10 145:1 particular 17:8 55:16 66:5,15 67:17 70:7 135:12 141:19 particularly 13:2 51:3 55:14 66:6 99:4 113:19 127:7 129:3 140.7 partner 56:18 70:2 113:5 126:21 partnering 10:13 partners 69:21 partnership 57:3 134:14 parts 127:17 party 93:15 **pass** 8:7 passed 79:10 85:6 **passes** 23:4 passion 70:18 121:17 **passionate** 65:4,8,9 pathetic 82:18 **pay** 97:4 **paying** 10:20 **peers** 40:15 pen 134:12 **people** 11:9 13:3,19 14:8 15:21 17:17 21:8 36:22 41:5,17 45:9 47:19 49:21 50:1 52:7 53:1,5,17 54:7 57:8 57:22 58:6 59:7 61:8 61:9 65:4,8 66:15,17 73:10 74:7 76:9 81:3 84:6 95:19 96:1 97:5 98:1 104:21 107:14 108:4 113:18 114:22 115:20 122:17 125:20 128:3,19 131:2,22 133:11 138:15 140:18 142:5 146:11 149:11 150:18 151:13 152:20 people's 42:11 132:13 134:4 perception 22:9 perceptions 26:4

21:10 29:17 30:5 31:2

perfect 48:3 55:2 63:10 63:12 64:17 period 59:22 60:1 97:18 97:21 98:10 112:5,6 periodic 135:3 periodically 23:17 permanent 30:22 permitting 112:7,14 113:3 perpetual 31:9 perpetuity 61:22 person 62:18 67:15 153:9 personal 121:22 148:9 personality 86:8 personally 31:15 97:6 139:10 perspective 64:22 99:19 109:14 113:16 129:19 140:7 perspectives 75:16 **phase** 23:8 **phases** 27:21 phenomenal 80:14 Philadelphia 5:6.9 Philadelphia's 154:9 **phone** 80:17 physical 101:8 physicist 155:1 pick 92:20 picking 112:17 113:12 **pickup** 107:7 **picture** 105:15 118:19 137:2 155:10.12 **pictures** 155:13 **piece** 7:9 29:13 33:3 47:9 51:7 54:5 57:17 65:5 90:20 93:6 100:19 109:21 124:18 139:12 142:10 **pieces** 83:13 139:2,9 piggyback 91:1 pillar 41:6 **pilot** 9:1,10 55:20 57:2 piloted 15:3 Pipeline 53:3 pitch 106:16 136:17 150:16 152:11 pitches 152:10 **Pittsburgh** 1:17 68:14 pity 75:21 place 45:1 57:8 90:18 92:2 113:8 122:1 135:9 151:12,16 **places** 13:22 20:12 49:22 51:20 57:2 plan 18:20 22:17 23:17

25:3.9.12.21 26:7 28:12 29:3,19 33:6,22 39:20 54:21 58:16 61:22 106:19 127:14 132:11 134:21 140:8 planned 39:3 planning 2:5 28:1 30:6 33:4 38:22 61:14 63:21 79:11 84:2 105:6 113:20 114:4 122:20 139:7 **plans** 132:16 platforms 128:11 play 44:19 153:21 players 87:11,15 playing 39:6 please 17:22 18:16 21:3 71:11,19 135:17 145:15 146:13 153:13 pleased 22:16 plug 126:3 127:14 plugged 89:21 plural 50:6 pockets 18:8 point 6:17 15:10 18:15 20:22 22:8 25:20 28:6 28:21 32:7,14 35:8,16 41:17 46:4,8 48:2 53:7 58:14 61:21 62:19 68:14 70:16 71:7 72:11 77:5.10 80:15 84:17 89:13 90:14 93:7 94:4 100:8 107:15 112:1 128:22 141:9 147:1 148:6 153:8 pointed 50:5 points 69:15 76:17 115:10 policies 26:22 87:6 106:11 policy 77:21 79:6,18 90:6 91:3,8 103:4 113:17 115:9 119:16 128:11 poll 146:15 150:6 **pop** 12:1 portray 117:4 **position** 70:14 79:4 positions 55:15 70:9 78:22 **positive** 90:7 107:8 positively 140:21 possibilities 51:22 possible 20:7,8 104:6 104:17 146:18 possibly 52:1 post 107:11

posting 6:9 potential 23:9,15 69:19 138:22 139:1 potentially 90:17 91:8 91:11 95:3 97:20 149:4 151:10,11 **poverty** 138:16 power 88:22 PowerPoint 82:19 102:18 practice 26:16 66:16 105:5 108:3 practices 10:3 11:20 12:3,19 26:11 66:14 136:10 practitioners 107:16 108:11 pre-pilot 14:19 precluded 11:9 **predict** 154:12 prediction 4:6,8 154:14 preface 109:16 preference 67:13 **prep** 15:6 preparation 87:7 prepare 22:17 119:1 prepared 5:18,21 6:17 42:4 43:4,9 115:6 preparing 42:9 43:19 presence 80:5 present 1:14 2:13 47:14 93:12 110:18 presentations 95:18 presented 77:5 126:7 133:14 presidential 107:3,5,6 presiding 1:13 pretty 24:10 27:19 108:13 109:3 132:18 135:9 136:7 141:1 previewing 119:20 **previous** 73:6 108:7 111:2 148:13 primarily 51:10 54:4 110:4 127:20 principle 83:7 prior 24:12 83:6 **priorities** 19:1 20:2 30:14 64:19 80:20,21 103:4,16 112:20 119:11 prioritizing 147:22 priority 145:6 **Pritzker** 155:13 private 9:4 56:19 57:7 **prizes** 94:14 pro-business 36:15

probably 15:15 38:11

47:3 48:5 63:2 64:13 66:10 67:20 96:6 105:5 114:8 131:18 133:17 problem 46:9,10,13 procedure 112:7 process 25:2 28:20 30:6,19 38:22 40:12 77:9 84:2,21 113:2,4 113:20 116:20 122:20 154:7,9 processes 23:1 **produce** 123:4 productivity 23:2 products 22:22 122:2 professional 121:19 122:1 professionals 26:14 71:1 **profits** 110:4 program 9:1,17 13:17 21:16 23:6 32:3 33:2 48:9 77:21 106:10 127:16 programs 10:14 11:3 26:22 28:17 29:20,22 31:16 32:19 34:10 35:8 38:5 56:16 61:13 73:4 87:6 106:15 114:9 123:9,15 126:16 139:22 152:3 progress 62:5 78:20 progressive 31:20 project 22:7 31:22 53:10 projects 75:19 77:6 84:5 **prom** 155:9 promise 27:6 promoting 23:1,22 34:7 35:19 prompting 143:8 pronged 44:7 **proposal** 7:20 18:19,22 19:9 32:8 40:14 55:20 133.7 proposals 44:4 75:6 76:5 propose 19:7 59:6 100:16 145:9 proposed 41:13 130:22 139:4 proposing 9:9 prosperity 138:16 **proud** 136:20 **proved** 155:2 provide 13:21 15:7

20:13 25:16 38:8 44:9

129:19 131:14 137:20 **providers** 52:20,20 **providing** 43:17,22 98:11 psychology 132:14 public 3:18 9:3 57:7 91:3,8 97:3,18,21 98:10 99:5 113:17 115:8 153:8.9 public/private/acade... 134:14 publicly 37:19 pull 9:19 22:15 31:12 87:9 141:15 **pulling** 14:10 148:18 **pulpit** 94:11 **punch** 94:1 **purely** 102:1 purpose 41:8 45:8 48:19 85:20 purposely 72:9 **pursue** 52:9 **purview** 29:18 push 68:17 92:21 107:2 125:21 126:15 128:19 144:4 151:6 pushed 133:14 pushing 85:1 **put** 7:17 26:5 34:19 35:12 44:3 47:6 61:9 69:16 71:18 79:20 81:13 82:3 92:8 95:15 100:14 101:13 104:20 115:6 116:10 134:12 147:7 152:10 putting 9:17 11:3 86:22 100:4 133:8 139:4 146:19 147:15 152:3 pyramid 78:14

Q

Q&A 99:1 qualitative 132:9 quality 56:10 quantitative 60:19 quarter 64:5 150:14 quarterback 5:8 question 10:7 12:2 32:22 33:14 34:3 35:15 47:6 58:9 72:10 73:21 85:10 102:10 questions 10:6 11:12 18:12 39:16 quick 4:4 6:8 20:19 21:9 59:9 61:18 65:13 71:11 99:17 104:2 117:14 118:2,6 120:6 127:6 130:13 134:10

141:13,16 143:10 144:3 147:12 155:8 quickly 27:20 48:1 quite 19:17 37:8 40:20 R **R** 16:8

R&D 100:12 race 119:5 radar 69:16 115:1 raise 21:3 52:6 raised 51:6 75:20 rally 69:14 94:17 ran 48:12 93:20 rational 77:2 rationale 22:6 reaction 36:21 read 35:15 reads 142:14 ready 8:14,19 106:6 110:18 131:11 readv-7:19 real 21:15 28:8 56:18 59:2 65:13,21 86:11 90:6 117:14 120:6 141:16 143:9 155:8 realistic 147:7 realistically 131:18 **realize** 23:15 realm 51:4 57:6 **REAMER** 2:6 21:21 22:5 27:10 29:5 34:19 35:10 36:22 37:15 52:6 61:3,6,17 63:4 94:22 107:19 113:10 115:14,18,22 122:11 133:1 141:4 150:5 152:18 153:4 reapplied 111:11,20 reapply 111:22 reason 33:7 46:4 51:17 98:18 116:2 reasons 51:12 77:12 115:19.19 Rebecca 1:17 34:19 35:15 88:19 105:14 136:15 139:14 143:7 Rebecca's 37:1 105:21 recall 121:18 recapped 57:14 received 23:5 recept 98:18 recognize 5:21 42:1,6

recommendation 8:20 21:2,11 22:1,15 24:6 39:18 recommendations 7:17 66:22 75:3 reconvene 47:22 record 33:19 37:2,13 40:4 71:15 76:14 87:2 88:2 102:20 110:22 111:4 118:9 122:9,10 124:3 143:20,22 144:9 146:2 147:18 148:7 149:16 154:21 155:19 recreated 38:16 107:9 **reduce** 103:7 reengaging 135:15 reevaluate 133:7 refer 18:7 reference 16:2 20:21 72:19 referencing 116:16 refers 35:20 reflect 41:19 72:14 regardless 128:7 129:2 regards 91:6 region 151:21 regional 2:16 23:11 26:13 44:17,19 52:16 52:18,22 86:3 regions 11:20 35:3,5 53:6 79:12 114:15 regroup 64:18 regularly 25:8 regulation 102:7 103:6

112:8 140:19

regulatory 100:22

19:18 20:10 59:6

101:7,11,15

reinforce 68:13

related 31:19 46:21

relationship 25:10

relatively 28:3

relook 44:4,13

reluctantly 99:19

97:19

100:18

rely 97:14

38:19 73:9 123:2

relevant 20:6 41:14

relate 129:21

112:14 113:2 140:11 regulations 103:8,11 **REICHERT** 2:6 18:17 64:22 97:15 123:20 124:4 125:10 154:18 53:18 103:3 126:16 relates 41:10,12 95:6 136:12 result 10:2 results 25:2 66:19,20 resumed 71:15 118:9

remain 97:13 remaining 6:18 **Remarks** 3:10,18 remember 62:10 105:7 remembering 136:17 remind 105:15 reminder 104:10 138:5 **reminds** 101:4 remove 112:8 repatriating 110:4 replicated 137:12 report 10:1 12:8,12 47:15 118:1 report-outs 3:12 71:4 reporting 11:7 12:7 37:16 repositioning 48:19 repository 76:12 represent 16:12 17:3 85:16 89:17,18 129:4 129:10 representative 96:14 representatives 68:18 represented 11:9 representing 80:6 requirements 11:7 12:8 70:6 research 62:1 67:4 123:14 126:8 132:10 132:10.15 resend 155:15 resident 20:11 resigned 128:22 resilience 26:13 resolution 24:7 resource 69:20 70:19 84:11 127:13 132:6 134:8 136:11 resources 20:14 24:4 30:17 36:3 37:20 51:19,21 57:7 64:14 66:17 73:1 81:18 82:9 87:10 88:15 100:5 101:12 113:7 122:17 127:11 130:21 132:21 139:13 142:17 143:1 respect 50:20 94:6 153:19,20,21,22 respectively 106:17 response 40:3 117:11 153:10,14 responsibilities 24:13 rest 120:15 129:17 131:21 133:12,14

retraining 69:1 return 18:16 review 22:18 25:15 139:5 revise 99:15 revising 131:14 revisions 22:6 rewrite 70:5 Rhode 16:22 **rhythm** 64:4 Richard 2:2 136:16 rid 68:20 **Ridge** 108:16 rights 152:19 Rise 4:10 risk 120:13 155:9 road 100:18 roadmap 15:17 robust 5:11 6:22 29:12 71:5 rock 70:11 **ROI** 111:10 126:9 role 29:3 30:1 44:18 45:10 87:9 106:12 114:22 122:11 126:19 138:15 146:4 roles 80:8 roll 74:7 89:14 100:15 100:16 room 13:10,18 20:20 25:4 35:11 37:19 57:15 73:17 153:18 **Ross** 145:10 roughly 16:20 round 75:6 rounds 120:2 **rule** 123:18 run 9:9 132:12 running 9:17 25:4 38:14 rural 16:9 74:13

S

S 58:21 125:1 **S3** 2:5 **saddled** 101:6 safety 122:12 sake 102:1 121:3 **San** 150:16 151:22 sandboxes 101:9 **sat** 75:9,12 **save** 71:5 saw 24:11 80:10 123:6 saying 41:16 46:3 66:4 70:10 74:8 90:17 91:1 105:14 109:16 115:17 says 24:8 35:17 **SBA** 10:14 140:1

60:17

42:15

recognized 41:3 54:6

recognizing 41:1 63:1

recommend 22:16

п			170
ODID 444 40 00	00744404500	10.45	
SBIR 144:13,22	90:7 141:8 152:8	48:15	snapshot 72:7 75:5
scale 26:18	sent 149:9	shorter 47:13	so-called 86:11
scarce 73:1,1	sentence 142:13	shortly 118:7 120:8	social 38:12 96:18
schedule 71:8 120:12	separate 7:10 50:10	shot 129:5	solo 94:6
125:8 131:19 145:11	83:14	should-he-be- 145:9	solution 32:7 46:18
scheduled 142:3	Sephora 2:8	show 5:1,17 55:8 122:6	149:8
scheduling 117:21	September 150:12	showed 27:6	solve 56:7 68:1 79:13
144:16	151:5	showing 149:4	solving 56:8
scheme 16:2 102:19	serious 27:7 69:18	side 51:9 53:11 54:5	somebody 50:5 67:11
scholarship 137:13	141:11	67:2,5,9 68:5 72:16	67:12 90:22 91:17
school 137:13,20	serve 29:14 31:12	87:11 99:17 122:6	96:13
146:11	69:14 76:16 118:19	142:1	someone's 112:18
schools 16:18 49:21	server 149:11	sides 107:8	somewhat 31:11
Science 1:16 2:2	serves 24:3 34:20	sign 97:3 137:9	soon 14:15 120:12
107:22 108:7	35:22 142:16,21	signaling 153:13	sooner 63:2 147:21
scientific 50:18	service 43:13 127:2	significance 99:5	sophisticated 50:11
scope 103:20 105:10	services 23:1 88:16	significant 29:13 47:2	sorry 10:11 99:15
Scott 1:21 17:15 18:6	servicing 87:6	signoff 138:2	sort 10:4 31:20 33:3
71:18	serving 35:3 148:17	silo 21:14	34:1 37:7 48:12 57:17
screen 115:2	session 8:10 12:7	silos 92:2	59:7 75:17 86:17
se 93:9	21:20 40:14 71:21	similar 97:22 135:9	94:16 106:4 121:1
second 21:10 34:13	sessions 5:20	152:9	137:16
42:19 51:11 62:6	set 6:1 34:10,11 64:3	simple 50:1	sorts 11:17
131:20 132:17 143:18	69:3 95:11 107:10,14	simply 14:8 131:3	sound 34:16,18
152:5	108:13 129:18	Simultaneous 122:13	sounding 30:16 155:9
seconds 123:19,21	sets 37:7 56:5 150:7	simultaneously 105:8	sounds 135:8
Secretary 2:15 21:1	setting 124:7 130:14	132:3	source 39:13
22:11,20 24:12,19	seven 9:10 11:15 12:21	singular 11:16	sources 100:10
25:3,15 27:15 36:9	117:14 118:6	sit 11:2 16:10 76:10	South 91:21
39:21 41:20 54:13,19	shadow 150:18	98:19	Southwest 91:21
78:22 79:5,20 103:4	shake 80:11	sitting 70:4 85:5 103:1	space 10:21 29:2 39:7
104:10 105:22 119:2	shaking 141:3	situation 63:8 66:10,18	40:10 50:2 95:10,10
120:8 145:7 147:22	shape 32:9 135:17	six 76:7 114:8 152:11	96:17,18 97:6 139:19
155:13	share 5:14 7:7 15:6	size 10:19 16:21,21	140:15 150:17
Secretary- 119:19	18:1 31:6 37:1 40:11	sized 87:9	spaces 98:17 149:22
sector 14:4 46:14 56:19	47:12 60:21 88:15	skill 56:5 67:12,17 69:3	span 59:10
57:4 112:11 113:1	121:21 128:10 130:8	skilled 44:7,8,10,21	speak 6:8 22:10 41:5
sectors 9:22 11:20	131:16 139:15	45:12,13	131:1,3
43:10	shared 15:6 81:18 82:9	skilling 113:4	speaker 106:6
Security 108:18	84:11 97:8 101:12	skills 2:4 8:13 40:7,9,17	speakers 98:6
seed 92:13,17	107:5 112:3 121:18	64:20 68:2 72:16	speaking 95:4 122:13
seeing 121:16 153:11	123:16 139:14 149:2	133:6	spear 61:1 133:22
seek 56:20	155:12	Slack 6:9 48:22 60:5	spearhead 13:14
seen 4:20 22:1 92:19	sharing 14:12 30:16	64:3,12 104:20	spec 123:13
94:12 126:9	38:13 55:4 62:22	107:11 116:10 128:20	specific 11:18,22 67:12
select 55:6	108:3 122:16 124:10	130:14 131:16 147:16	83:20 85:13 118:12
selected 80:4	134:16 144:15	149:1	118:18 119:3 130:4
selection 50:10	she'll 4:7	sleeves 89:14	140:17 143:3 151:3
self-audit 118:2	sheet 142:11	slight 142:9	specifically 25:22
self-organizing 83:16	shelf 100:15	slightly 131:9 142:19	49:12 127:1 138:22
sell 102:2,5 106:18	shelved 101:22	slogan 154:9	specs 70:6
send 95:14 96:22 130:3	shift 20:2 138:15	small 46:6 74:19 100:6	speech 106:7
130:4,6 131:20	shifts 43:2	smaller 101:20 152:15	spend 58:16,18 59:1
149:14	SHIP 145:19	smart 49:21	76:7
sending 6:9	shop 39:9	smiled 121:1	spent 36:19 37:10
senior 23:18	short 21:22 44:1 46:16	SMITH 2:7,7,21 58:21	111:8
sense 52:8 59:18 73:8	60:1 100:21 133:17	112:2 125:1,13	spirit 55:5 109:11
76:6 78:13 82:7 86:14	short-term 46:9 47:9	126:13	spoke 52:12 71:22
		l	I
			

sponsor 150:1
sport 5:4
sports 151:1
SSTI 50:22 88:20 91:19
92:16 107:13,20
109:1 128:10 139:16 staff 20:8 23:6 24:9
25:8,10,13 30:12 76:8
80:14 95:15 122:22
staff-ups 32:6
stage 9:7 123:7 136:1 stakeholders 86:9
89:16 92:16 100:8
135:21 144:22 146:1
stall 72:5
stalling 73:16 stand 107:22
standpoint 101:3
111:10,16
Stanford 1:19
stars 70:11 77:18 start 4:5 6:12 26:7
40:10 58:19 59:19
60:2 64:16 80:13 89:4
100:2 101:14 107:18
118:20 119:7 125:3
127:7 132:2,12 134:20 149:3 152:16
start-up 29:15,16
133:20
started 53:5 71:20
73:21 76:21 77:3 83:6 91:20 131:11
starter 33:17
starting 42:22 143:18
150:3
starts 77:20 78:15
135:16 startup 23:8
state 16:15,16 30:20
55:7 81:9 107:22
108:21
stated 42:15 statement 16:5 114:13
124:13
states 1:1 17:7 23:3
51:8,20 108:10,12
statute 23:4 27:1
stay 7:2 17:16 stayed 7:2
staying 129:8
steadfastly 51:14
steal 46:7
steer 19:20,22 steering 30:1
step 27:4,17 40:18
45:11 47:22 48:14 81:3 90:11 131:21

0111-10-10
Stephen 1:13,16
stepped 69:7
stepping 141:21
steps 3:16 27:7,13
28:12 48:10 63:18
71:6 99:12 117:21
118:15 124:8 127:7
134:18 141:18
Steve 81:7 97:11 120:7
129:15 141:15 148:13
153:15
Steve's 6:17
Stevenson 2:8 40:8
47:21 55:2 61:15
64:12 85:14 126:18
142:1
stew 137:4
sticks 128:15
stone 74:5
stool 51:16
stop 46:11 55:1 133:15
stories 50:3 126:8
storming 141:9
story 44:1 77:2
straddle 144:2
straightforward 28:3
strategic 22:17 23:17
24:1 25:9,20 26:7
28:1 33:6,22 34:8
35:20 38:22 39:20
54:21 58:16 61:14,22
79:11 84:2 89:6 105:6
113:20 114:3 116:2
122:19 126:22 134:21
140:8 142:21
strategies 17:17 87:4
strategy 8:10 21:19
28:10 33:10 36:15
42:16 106:9,19
141:21 142:10
streamline 112:7
streams 65:3
stress 56:10
strictly 67:8
strikes 99:17 101:9
strong 40:22 41:2 45:10
103:7 108:20
stronger 26:13 55:5
Stronger 20. 13 55.5
strongly 44:22 124:18
127:10
struck 36:9 100:21
136:14
structural 32:21 111:16
structure 114:3 132:11
struggle 146:10 150:13
struggles 151:13
struggling 56:4
stuck 99:22
Study 33.22

students 54:8,12 137:19 **studies** 11:19 studying 60:18 stuff 6:9 31:19 32:1 75:22 82:20 106:1 113:15,19 115:13,18 120:22 123:7,9 124:10 128:4 130:18 133:19 136:20 147:15 subcommittee 124:10 131:22 subcommittees 65:2 subgroup 127:8 subject 8:1 subjects 25:22 submission 28:8 39:21 **submit** 21:1,12 119:1 **submits** 131:2 subsequent 40:14 **subset** 100:6 102:4 **subsets** 132:2 substantial 23:21 35:18 succeed 45:6 success 32:18 49:19 50:3 52:22 53:1 85:17 successes 111:22 successful 43:20 111:21 successfully 139:20 **suck** 36:20 **Sue** 2:7 124:4,21 suggest 49:20 65:2 148:22 150:5 suggested 83:22 107:10 suggesting 45:22 **suggestion** 83:6 86:5 **suggestions** 35:10 79:1 83:4 86:4 102:10 103:10 **summary** 131:21 **summer** 146:8 151:4 **summit** 33:12 69:12 87:7 90:16 91:14 93:20 144:12 145:12 145:18 super 4:6,8,15 122:14 128:2 154:13 **supply** 52:17 67:9 **support** 7:7 8:21 20:14 30:3,15 38:20 43:4 47:18 94:20 109:15 110:13,16,19 116:21 120:3 123:5 140:6 147:19 supported 23:18 supporting 61:19

111:15 supportive 93:13 suppose 99:18 supposed 123:4 sustainability 42:1 sustainable 1:19 92:20 swag 122:8 swarm 57:6 swell 110:13 synthesis 134:13 system 53:16 54:15 systems 52:22 99:18

T table 13:11 14:11 16:10 26:14 27:22 47:20 59:8 92:5 96:15 128:1 135:3 tables 95:11 tag 111:6 126:11

tag 111:6 126:11 takeaways 15:5 45:16 taken 27:14 38:15 77:10 105:1,1 takes 115:1 133:2 talent 53:3 69:21 70:1 70:21 71:1 talk 14:17 21:19 34:6 43:15 50:3 53:7 67:22 70:2 74:11,13 82:8 83:11 88:7 98:2 100:4 117:20,21 122:17,21 124:8 125:3 131:4 138:3 talked 6:22 12:5 17:18 74:6 92:3 101:2 112:10 124:7,9 125:6

125:11 128:9 **talking** 9:16 11:14 40:7 69:4 72:6 74:12 95:2 99:12 124:5 134:8 136:18 137:7

136:18 137:7

Tang 1:13,16 4:3,12,17
5:3 29:8 31:4 35:14
36:13,17 72:5 77:4,13
99:10 108:15,20
109:4,10 111:1,5
112:1 113:9 116:6,12
116:18 119:18 120:9
121:13 126:12 141:17
154:2,19 155:4

tank 95:5

tank 95:5 tanks 114:16 tap 57:11 131:1 target 35:7 39:21 146:8 targeted 92:7 task 118:12 TBD 12:15 teach 54:11

•
team 8:13 11:2 18:18
19:14 20:21 41:15
42:16 45:15 64:7,18
88:22 94:20 98:5
102:2 114:6 118:14 119:14 122:16 124:14
127:4 134:2,16 135:9
145:10 146:15 153:4
154:8 155:5
teams 120:19
tease 150:9 teased 71:17
tech 2:7 136:4,8 144:21
technical 2:3 16:13
63:14 101:16 102:10
122:1
technological 56:2 technologies 9:7,21
22:22
technology 2:1,2 43:11
96:20 101:19 107:22
136:4 149:8
technology-108:4 technology-based
108:9,11
tell 9:18 50:3 66:15
82:20
telling 94:2
ten 9:10 11:15 124:2 tends 115:9
term 46:10,16 47:13
55:10 63:5,11 133:17
133:18
terms 12:14 23:7 27:13 31:8 32:5 50:18 64:11
65:20 68:1,10 72:22
91:16 99:2 112:16
117:1 131:2
test 107:17
text 143:11 thank 4:12 6:7 17:12,15
21:4,5,21 27:9 40:1,5
55:12 65:17 68:11
77:4,13 107:4 116:16
117:12 121:6,12
135:4 141:17 151:7,7 153:15,17 154:1,2
153:15,17 154:1,2
thanks 57:14 71:13
116:19 120:9 141:20
143:7 144:18 148:6
149:19 155:5,16 Thanksgiving 147:9
themes 72:21
things 6:14,15 7:1 8:7
11:5 17:18 28:15
30:10 32:9,16 33:18
35:8 38:15 39:10 41:4

```
42:13 43:5 48:15
 49:14 50:1,10 51:13
 52:7 57:20 58:3,20
 59:5,8,21 61:18 62:7
 62:9,14 63:17 64:17
 65:21 66:4,13 69:1,4
 70:11,17,18 72:4,10
 72:12 74:4 75:2 77:7
  78:13,19 79:10,20
 82:2 84:10 86:19 89:5
 89:12 90:21 91:3,6,16
 92:3 97:22 100:14
  101:1 103:18,22
  104:6 105:10,16
 107:8 112:21 115:1,6
 115:11 117:19 118:3
  118:18 120:19 121:14
  125:11 126:5 129:5
  129:20 130:5 131:11
 132:6,14,16,19
 134:10 136:11 137:3
  138:17 140:6 147:2
  149:3,20
thinker 79:4
thinkers 81:15
thinks 67:5
third 7:21 51:15 53:21
 95:4,14 97:17 142:13
thirdly 136:14
THOMAS 2:15
thought 27:12 32:4
  46:15 58:18 64:8 67:1
 67:2 68:9 75:13 76:3
 78:7 79:19 82:17
 84:13,15 86:10 89:16
  100:17 101:15 103:10
  113:8 124:12 130:21
thoughtful 56:12 65:18
thoughtfully 24:21
thoughts 22:4 31:5
 55:15 65:14 72:20
 73:3 78:17 94:19
 99:17 117:10 121:19
  121:22 134:13 144:4
  147:17
threads 130:19
three 5:11 16:21 28:10
  75:19 76:10 83:2
 92:14 109:2 121:11
 125:18 131:11 135:6
 150:7
three-page 78:1
threshold 18:15
```

thrown 110:2

thumbs 119:4

Tidsco 52:12

Tiff 8:14 81:3

tier 34:13

```
Tiffany 2:8,9 4:7 8:8
  40:6 57:13 64:10 71:2
  81:4 135:10 139:11
  141:21,22 148:13
  154:12
tight 136:5
tighten 64:18
times 16:21 66:4 67:10
  77:22
timing 8:17
tip 60:22 133:21
Titanic 8:4
title 24:16
today 7:18 33:14 48:8
  55:8 127:5 136:21
  141:19 143:17
today's 63:18
toll 57:20 58:3
Tom 65:12,13 69:4
  108:16 114:6
TomKat 1:18
ton 127:22
toned 131:9
tons 27:6
TOONE 2:8 33:20 49:11
  50:8 93:18.22 127:9
top 70:15 78:15 112:13
topic 47:20 59:12 65:9
  103:7 124:6 135:11
  135:22 140:14
topics 81:22 82:3
totally 17:13 36:20
touch 61:9 63:17
tough 8:2 93:1
town 95:9 96:13
TPM 53:3
track 52:22 62:20
tracks 76:14
traction 110:20 147:1
trade 101:1,11,15,16
  102:8 109:18 117:3
traditional 100:9
traditionally 114:10
train 53:6 67:18
training 40:21 41:6,9
  42:9 52:20 79:16
  81:19
transfer 136:4,8
transformative 137:5
transition 21:18 107:4
  134:2
translated 28:9
transparency 62:3
traveled 153:19
tray 13:3
Treasury 10:14
treatment 50:10
Trey 1:20 135:15
```

Trey's 141:9 tried 75:10 82:6,11 trillion 110:3 true 37:14 66:8 truly 55:22 121:10 153:17,22 **Trust** 154:9 try 15:22 53:15 66:16 81:21 82:1 89:7 105:16 134:3 137:11 140:11 141:11 144:2 trying 31:12,17 35:12 36:11 46:7 83:19 94:21 110:19 119:18 137:2 140:19 turn 123:21 140:13 tutoring 135:2 tweaks 20:7 two 7:16 28:12 30:10,14 39:17 41:15 42:13,19 44:2 51:11 58:16 61:18 64:20 65:3 68:21 75:16 76:4,9 78:21 79:10 80:20 83:1 95:8 97:3 101:1 105:8 109:17 117:8 118:20.21 119:4 121:11,14 123:18 128:22 132:6 134:10 135:7,19 136:20 149:20 **two-** 44:6 69:20 two-year 137:21 **type** 39:14 types 57:4 69:3 138:22 typically 150:9

U.S 1:3 9:18 52:9 57:18 57:19 60:6,13 110:5 112:9 113:6 **ultimately** 10:1 14:6 34:20 83:16 101:21 126:10 152:13 unanimous 40:5 unbiased 4:9 uncertainty 119:11 **UNCF** 2:10 unclear 115:13 underestimate 61:20 underserved 74:14 understand 18:21 26:15,19 28:8 35:15 48:7,10 52:20 59:17 64:6 81:18 86:3 96:9 98:7 100:5 124:15 128:6 132:13 151:13 understanding 44:18

96:7 117:5 122:16 96:20 126:16 78:22 87:12 92:4 93:3 wonder 97:16 understands 53:16 **VC** 70:22 94:1 95:4,14 96:1 wondered 75:22 97:17 103:20 105:17 understood 81:21 **VCs** 96:14 wondering 19:5 86:16 105:18 108:9 111:1 unintended 70:9 venture 70:1 91:9 92:13 union 55:8 92:16 112:15 113:17 114:10 word 34:4,20 35:4,5,12 unique 30:21 129:3 Ventures 2:1 119:20 123:1 129:16 36:9 37:4 82:12 **United** 1:1 17:7 23:2 **venues** 99:3 133:16 153:1 wording 34:4 70:8 51:8.19 verbiage 77:8 ways 60:19,19 70:9 107:7 universities 74:11 version 22:2 113:14 91:16 114:16 122:22 words 22:9 26:3 27:11 89:19 108:8 131:10 29:6,9 36:1 67:13 wear 16:9,11 university 1:16,17,19 versus 70:13 121:11 wearing 62:10 78:6 2:1,6,8 107:16 136:3 **vested** 91:13 weary 66:13 wordsmithing 84:20 136:8,12 137:8 vet 78:8 weather 155:1 work 7:5,6 8:9 16:1 **unknown** 115:4 vetting 98:15 webinars 96:21,21 17:6 21:17 23:10 unknowns 103:2 view 28:21 29:7 30:2 130:16 24:22 25:18,21 29:14 45:7 47:2,3 52:5 unlock 102:3 46:9 week 122:14 143:18 unmet 132:13 views 22:13 41:2 97:8 144:14 146:21 147:5 55:18 60:4 63:6 64:14 unofficial 122:4 violated 123:18 147:8,9,10 148:5 65:6 66:5 67:13,14,16 unsuccessfully 139:20 weekend 5:1 68:4 85:7,18 88:17 Virginia 16:12,15,19 weeks 81:9 95:8 117:18 **untapped** 127:12 vision 41:8 75:15 89:14 93:5 95:6,9 122:7 128:16 133:12 unusual 22:7 visit 126:12,13 152:14 97:19 100:20 102:14 upcoming 41:14 150:6 104:2 106:19 110:14 visual 20:21 62:18 **update** 120:6 visually 117:4 132:21 weigh 49:1 112:3,10,12 122:6 **updated** 23:17 25:9 weight 94:1 99:21 131:15 138:12,19 vocabulary 18:6 voice 69:14 126:12,13 welcome 4:4 51:2 71:19 139:11 141:7 146:15 35:5 updating 133:9 volunteer 102:14 85:11 148:3 149:15 154:5 urban 74:14 volunteered 105:2 welcomed 103:12 worked 6:8 16:1 107:13 **USA** 2:8 52:15 132:15 Welcoming 3:10 138:12 **USASBE** 91:21 volunteers 132:7 went 38:6 71:15 75:6 workers 54:9 use 18:9 24:3 34:4 35:4 **vote** 7:18 8:21 20:19,19 118:9 155:19 workforce 40:21 41:9 36:1 48:22 54:22 60:5 39:17 40:5,11 131:2 weren't 154:13 42:3.22 44:7.10.17.20 60:22 63:11 73:22 152:10 West 16:12,15,18 45:12,22 46:14 48:20 88:21 94:11 96:17,17 voted 7:5 11:1 77:7 white 29:1 74:4 51:9,12 52:11,16 54:1 98:10 126:3 134:8 118:22 Whitney 2:7 47:15 54:2,5,14 56:6 64:16 142:16.22 voting 39:18 47:1 69:11 81:10 88:1 67:2 68:4 79:16 81:19 useful 122:15,19 96:19 112:1 143:19 83:9 84:2 91:6 94:2 W 130:17,20 131:6 153:4 112:3,15 113:5 135:10,17,22 136:2,9 **W** 112:2 125:13 126:13 **Whitney's** 87:17 122:16 124:6 125:17 user-centered 28:21 WADSWORTH 2:5 **WIAC** 54:20 126:20 127:1,4 133:6 uses 149:5 55:17 134:10 willing 65:5 89:14 121:6 134:15 139:12 142:1 usually 66:14,15 wait 49:2 142:4 workforces 68:8 waiting 8:19 willingly 17:16 Workgroup 3:12 walked 95:19 Wilson 2:9 4:7,9 8:15 working 8:4,16 11:13 vacations 146:11,12 10:9,11,22 11:11 12:5 16:14 25:13 28:9 walking 63:8 wanted 10:11 59:17 12:16 13:9 14:20 15:2 34:14 51:14 53:9,14 150:15 valid 46:4 15:13 17:12 18:3 58:2,11 64:6 65:3 63:17 65:14 68:12 Valley 69:22 70:15,16 83:12 97:22 111:6 20:16 39:1 111:6 72:1 73:8 76:9 80:21 valuable 32:2,20 39:2 132:4 144:6,16 150:9 129:11 141:21 154:12 82:3 84:6 85:5 86:1,2 77:11 106:16,20 wants 67:16 86:8 win 19:4 105:11 106:8 108:4 windfall 110:10 111:21 113:21 123:8 118:13 140:7 wares 95:15 wine 82:18 83:2 value 22:9 26:4,15 28:8 Washington 1:13 2:6 125:14,18 130:5 32:8 50:13 78:6 83:15 wasn't 68:14 81:20 **WIOA** 54:3 132:2 137:18 139:19 126:14 140:14 watch 65:18 wise 22:3 145:21 values 32:15 watched 120:22 **WOMACK** 2:10 86:6 works 14:12 102:19 108:3 145:11 152:2 variety 56:17 139:21 watching 115:8 89:10 93:7,11,16 various 11:20 29:20 way 27:8 29:18 32:9 150:11 workshops 70:5 53:1,6 72:20 74:13 woman 38:14 world 16:9 86:11 90:6 33:8 36:10,14 50:9 75:2 86:19 88:10 58:5 59:9 64:13 78:5 women 70:8,13 74:15 122:2 133:20,21

<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: National Advisory Council on Innovation and Entrepreneurship

Before: US DOC

Date: 02-03-17

Place: Washington, DC

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

Mac Nous &