

UNITED STATES DEPARTMENT OF COMMERCE

+ + + + +

U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

+ + + + +

NATIONAL ADVISORY COUNCIL ON INNOVATION
AND ENTREPRENEURSHIP (NACIE)

+ + + + +

MEETING

+ + + + +

TUESDAY
MAY 2, 2017

+ + + + +

The Council met in the Department of
Commerce Library, 1401 Constitution Avenue, N.W.,
Washington, D.C., at 1:00 p.m., Melissa Bradley,
Co-Chair, presiding.

PRESENT

MELISSA BRADLEY, Co-Chair, AU Center for
Innovation in the Capital
REBECCA BAGLEY, University of Pittsburgh
ESTHER BALDWIN, Intel
HEATHER BOESCH, IDEO
TREY BOWLES, III, The Dallas Innovation Alliance;
The Dallas Entrepreneur Center
SCOTT FREDERICK, New Enterprise Associates
JULIE GOONEWARDENE, Associate Vice Chancellor for
Innovation and Strategic Investment,
University of Texas System
ORIN HERSKOWITZ, Columbia Technology Ventures,
Columbia University
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

JOE SCHOCKEN, President at Broadmark Capital, LLC

SUE GRIFFITH SMITH, Ivy Tech Community College

WHITNEY SMITH, JPMorgan Chase

TIFFANY STEVENSON, Sephora USA, Inc.

TIFFANY WILSON, Global Center for Medical

Innovation

ALSO PRESENT

DENNIS ALVORD, 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

AGENDA ITEM:	PAGE
START and Welcoming Remarks.	4
Craig Buerstatte, Acting Director, Office of Innovation and Entrepreneurship, EDA; DFO, NACIE	
Denis Alvord, Deputy Assistant	6
Secretary for Regional Affairs, EDA	
Melissa Bradley, Co-Chair, NACIE . . . . .	.11
Guest Briefs	
Department of Energy, Advanced . . . . .	.13
Manufacturing Office: Drew Steigerwald, Senior Advisor to the Director, AST Support (Contractor)	
U.S. Government Entrepreneurship . . . . .	.39
Program Research: Andrew Reamer	
Public Comment	
EveryLibrary Foundation . . . . .	.64
Entrepreneurship Programs: John Chrastka, Executive Director	
Council Discussion and Updates . . . . .	.93
(With a focus on workforce and skills)	
OIE Updates on Current Recommendations:	
Eric Smith, Senior Policy Advisor, OIE	--
Closing Remarks.	116
Adjourn.	118

P R O C E E D I N G S

(1:17 p.m.)

MR. BUERSTATTE: Welcome, everyone.

Welcome to our third National Advisory Council on Innovation and Entrepreneurship quarterly meeting. As the designated federal officer, I am officially kicking off our public portion today. Thank you so much for working through the security to come here. I know we're a little bit late.

Those of you who are dialed in, please forgive us as well. Thanks for your patience.

As a reminder, this is a public federal advisory committee meeting. And we're doing it a little bit differently today. We're on Webex instead of our typical spider phone. So really, really want to highlight, please, if you're talking, use the microphones, pass them around, otherwise those listening in and the reporter won't capture it.

Other logistics. Bathrooms in the back just outside the doors. Coffee is to your

1 left. Feel free to take a break when you need
2 it. Otherwise, we're going to rock and roll all
3 the way to 3:00 p.m.

4 Most of you are pretty comfortable
5 with this by now. We're going to hear from --
6 well, we'll have our standard run of show today.
7 We'll hear from a few federal guests and,
8 actually, one of our own guests, Andrew Reamer,
9 on a recent research report, and hear from the
10 public.

11 We had a great research update from
12 Third Way last time. We've got another visiting
13 public member from EveryLibrary, a great industry
14 association working to support entrepreneurship
15 in libraries across the nation. And then we'll
16 move into our general dialog session.

17 What I hope to encourage is, as
18 always, this is a lively group, and let's keep
19 that up, so keep the dialog moving both ways. If
20 you've got a question to a presenter or anything,
21 anyone else, please bring it up. Let's have a
22 fun time today.

1 That's all I have. Before, I'd like
2 to introduce our new, newest member, our newest
3 leader of the Economic Development
4 Administration, my new boss Dennis Alvord, the
5 Deputy Assistant Secretary for Regional Affairs.
6 Dennis is no, no foreigner to Department of
7 Commerce. He's been here for quite some time.
8 So we're thrilled to have him at EDA really
9 during this time. He brings a lot of expert
10 knowledge from, really from the most senior
11 levels.

12 Before -- well, actually I won't go
13 into more. Dennis, I'll let him give a few
14 remarks and tell us a little bit about where he's
15 coming from and his role at EDA.

16 MR. ALVORD: Thanks very much, Craig.
17 A pleasure to be with you here today. I, as
18 Craig said, I am the Deputy Assistant Secretary
19 for Regional Affairs of EDA. Actually, my
20 official title, if you'd like a little chuckle,
21 is the Deputy Assistant Secretary of Regional
22 Affairs Performing the Non-Exclusive Duties and

1 Functions of the Assistant Secretary of Commerce
2 for Economic Development. I challenge any of you
3 to get that on a business card. Really, really
4 tiny print on the business card.

5 These are the kinds of things that we
6 go to during transitions between administrations.

7 But as Craig said, I'm not -- though
8 I'm new to NACIE and I'm new to the COMPETES Act
9 and some of your work here, I'm not new to EDA.
10 And I'm not new to Commerce either. I previously
11 served a long tour of duty at EDA from about 1998
12 to 2010 where I served in a variety of different
13 roles overseeing I guess what I think of as the
14 traditional EDA Public Works and Economic
15 Development Act programs.

16 After that I went off and did a few
17 other things throughout the department. I worked
18 on a secretarial initiative called Commerce
19 Connect and a presidential initiative called
20 Business USA. And the goal of that initiative
21 was to make it easier for businesses and
22 entrepreneurs to discover and access new sources

1 from throughout the entire federal government to
2 make it easier for government to address their
3 business needs.

4 And following that, most recently I
5 come from the Office of the Deputy Secretary
6 where I served as the Commerce Department's --
7 one of the co-leads at the Commerce Department's
8 2016-2017 presidential transition, where we
9 coordinated the entire department's activities
10 related to off-boarding the previous
11 administration and helping to onboard the new
12 administration.

13 And from there I've now found my way
14 pleasantly back to EDA, where I'm very excited to
15 kind of re-engage with old colleagues and meet
16 new colleagues, to re-engage with old programs
17 and learn about new programs and initiatives and
18 the work that we have underway. And Craig has
19 been quickly educating me and bringing me up to
20 speed about all your good work.

21 I know that we have a very
22 entrepreneurial group of folks here. And I

1 understand very hard-charging, you know, folks
2 that want to get things done. And I also
3 understand that it may have been a bit
4 frustrating the last few months as we've gone
5 through this transition. Just as I'm
6 transitioning into EDA, we're undergoing a
7 transition on a much larger scale throughout the
8 government.

9 And slowly but surely we have
10 continued to onboard our new political team. And
11 while we don't have as much definitive direction
12 as we might like today, we're starting to get
13 more and more each day as things go on. So I
14 would ask your patience as we continue to get
15 things solidified and bring our new colleagues up
16 to speed on all the diverse activities that are
17 happening throughout the department, and begin to
18 set new priorities as we move ahead.

19 I hope that we'll have clearer and
20 stronger direction for you on where we'd like to
21 see NACIE going in subsequent meetings, but for
22 the time being I know you have, from looking over

1 the agenda, a really robust agenda already
2 developed and underway. You have a number of
3 very important projects that you've been working
4 on for some time.

5 I look forward to learning a lot more
6 about that work and being able to really act as a
7 conduit for you all to the incoming team, kind of
8 serve as your transition coordinator, if you
9 will, and hopefully help to make that go smoothly
10 when the time comes and we're able to fully
11 engage folks.

12 With that I'd just like to really
13 welcome you to the Commerce Department today.
14 And I look forward to learning about the work.
15 Thanks.

16 MR. BUERSTATTE: Thanks, Dennis.

17 And I think what I appreciate most
18 about Dennis coming onboard is that, as you all
19 have learned, learning government can be tough:
20 our acronyms, our programs, our agencies, and
21 bureaus. But, again, with Dennis' expertise and
22 knowledge of Commerce we have been running

1 quickly from day one. So it's been fun and we're
2 lucky to have him.

3 Steve sends his regrets. As we know,
4 as he sent out prior, he's receiving an award for
5 leadership in the innovation ecosystem there in
6 Philadelphia. He'll be with us in the morning.

7 But, Melissa.

8 CO-CHAIR BRADLEY: So, first and
9 foremost, all NACIE members, it's so good to see
10 your faces. It has been a pleasure chatting with
11 some of you individually on the phone and getting
12 to know you. I think that as entrepreneurs, as
13 you so aptly put, we are used to constant change,
14 so we forge ahead. And I look forward to the
15 next couple of days together.

16 I want to acknowledge our guests who
17 took time out to be with us. Thank you very
18 much. We're excited. And we look forward to
19 working with you in the future with greater
20 clarity, hopefully, next time around.

21 Thank you.

22 MR. BUERSTATTE: And I'll second that.

1 What's been fun observing the Council thus far is
2 seeing all the ideas that have come in through
3 the informal interactions that you've had.
4 Visiting your organizations at the community
5 level, just connecting with each other on the
6 phone. And, in fact, Emily and Sue came here to
7 DC partially on their own accord, but rolled in
8 some NACIE meetings, related meetings as well to
9 further investigate manufacturing talent
10 opportunities.

11 And, so thank you for taking that
12 amount of time. And thank you to so many others
13 who have spent time either collaborating at South
14 by Southwest or in your travels through each
15 other's communities and organizations. It's been
16 fun being a part of that dialog. And I can
17 definitely say that the Council is fully formed
18 and relationships are starting to deliver some
19 fun and exciting outcomes.

20 So, with that being said, on the
21 manufacturing piece Sue and Emily were here again
22 last week. And we heard from a number of program

1 leads across Commerce agencies as well as DOE.
2 And if you note on the schedule, first up we have
3 a guest brief from Drew Steigerwald from
4 Department of Energy.

5 Drew, if you want to come up here and
6 get started.

7 Drew is working on a number of items
8 around advanced manufacturing for Department of
9 Energy. Of note, though, is some of their
10 interest in the talent development or that
11 pipeline.

12 So, Drew, I'll kick it off, pass it
13 over to you.

14 MR. STEIGERWALD: Hi. Hi, everyone.
15 Like Craig said, I'm Drew Steigerwald. I'm from
16 the Department of Energy.

17 I should start off by saying I guess
18 this is the time when I say I'm not a federal
19 employee, I'm a support contractor. So my title
20 is -- actually my title is longer than this, not
21 quite as long as yours, but it's actually Senior
22 Technical Advisor to the Director. But we deal

1 with technical stuff in my day-to-day job, so
2 scratch that.

3 So, the point of that is that I'm not
4 speaking on behalf of the department. I'm giving
5 you my perspective from my experience in my
6 capacity as a support contractor.

7 Okay, can I just ask real quick how
8 many people -- I looked at sort of the line-up --
9 how many people have worked with DOE before?

10 PARTICIPANT: Can you talk a little
11 louder?

12 MR. STEIGERWALD: Yes. Sorry.

13 So anybody work with AMO before?

14 (Show of hands.)

15 MR. STEIGERWALD: Okay, at least one.

16 Sorry, guys. Department of Energy and
17 the Advanced Manufacturing Office within DOE.

18 (Show of hands.)

19 MR. STEIGERWALD: So, a couple.

20 So, just briefly, at the Advanced
21 Manufacturing Office we're part of the Applied
22 Technology wing of DOE. So, for people who

1 aren't familiar with the department, DOE
2 essentially does three things, again my opinion:

3 We do nuclear and nuclear clean-up.

4 We do Office of Science, which is
5 basic research.

6 And then we do the applied technology.

7 So that's I think things that you
8 traditionally think about when you think of
9 energy: solar, wind, geothermal.

10 The Advanced Manufacturing Office
11 falls in that slate. So we're an applied
12 technology office. But I think we're a little
13 bit different because of our mission space. So
14 we have sort of three core motivations: clean
15 energy; national security, particularly in the
16 industrial base of the country, and we work very
17 closely with our colleagues at DoD; and also the
18 environment. So, like manufacturing at the
19 department sort of in the energy-intense industry
20 space really hits on all three of these.

21 So, because we are at the Department
22 of Energy, we have to focus primarily on things

1 that impact energy use, energy efficiency, or our
2 ability to be competitive at manufacturing clean
3 energy technologies, so things like iron and
4 steel refining, pulp and paper, chemicals, so oil
5 and petroleum, those sort of things. But it's
6 actually pretty broad.

7 But, and I think importantly, as an
8 office we're non-sector-specific. So we don't,
9 we don't work directly with the iron and steel
10 industry. Instead, we focus on technologies that
11 if you can overcome key sort of R&D challenges, a
12 number of industries can move forward either
13 being more energy efficient or more competitive
14 in their manufacturing of energy technologies.

15 So, a good example of this is process
16 heating, like it's just heating stuff up. A lot
17 of industries do it. It takes a ton of energy.
18 Traditionally you do it in, you know, big
19 furnaces, depending on what you're making. As an
20 example, there's, you know, micro, concentrated
21 microwave heating for chemical applications. So
22 that's an example of an R&D challenge that can

1 make a number of industries more efficient.

2 So this constellation actually lists
3 out 14 technology areas that were developed in
4 our quadrennial technology review in 2015. It's
5 very broad. I think I told the folks that came
6 in last week, I sort of, like, dare you guys to
7 find something that doesn't fall in one of these
8 buckets. So we have a very broad mission space.

9 But the point that I want you to sort
10 of like take away, we really focus on
11 technologies, not on, not on sectors. So how do
12 we execute on this? The office is broken down
13 into three pillars. One is direct technical
14 partnerships with industries. So this is going
15 out and helping the small and medium size
16 businesses become more energy efficient,
17 oftentimes in very practical ways.

18 We have R&D consortia. So this is
19 large-scale public/private partnerships with
20 universities, industry, national labs and other
21 stakeholders.

22 And then we have R&D projects. So I

1 think this is, like, what you would think about
2 more traditionally as like direct engagements on
3 a specific research and development challenge.
4 But again we do it with industry, university, and
5 lab partners.

6 So all of the things that we fund are
7 in, they're collaborative and they're in
8 partnership with both industry and university.

9 Okay. So, I just wanted to get
10 through that really fast. Let me know if you
11 have any questions on the background of the
12 office.

13 Workforce development. So, we've been
14 thinking a lot about workforce development in the
15 office for a couple reasons. Actually, the main
16 reason is that we don't have a coordinated
17 workforce strategy, believe it or not. We don't
18 even have a workforce lead, to be honest with
19 you. So why is that?

20 Well, we're primarily a technical
21 office but we're in a weird position because
22 we're the manufacturing office. So when people

1 want to talk about manufacturing they naturally
2 want to talk about workforce.

3 So we have three, sort it's sort of
4 broken into three things. Again, this is just --
5 I sort of made this up. You won't find this in
6 any, any documents anywhere.

7 We have what I call implicit workforce
8 development programs. As an example, inside our
9 technical partnerships is something called the
10 industrial assessment centers. So this is where
11 we take -- these are university-based groups. A
12 PI will go with engineering students and do
13 hands-on energy efficiency assessments. They'll
14 leave a business with a set of recommendations.
15 And then it's up to the business to implement
16 these recommendations.

17 So, here businesses are becoming more
18 competitive by better use of energy. But
19 students are also getting, like, hands-on
20 training. So the sort of the core objective of
21 the IACs is not necessarily workforce
22 development. There's a very strong, implied

1 workforce component.

2 On the other end of the spectrum is
3 our Cyclotron Road program, which some of you may
4 have heard, depending on, you know, where you're
5 at in the innovation space. So this is focused
6 actually on post-graduate work. It's based out
7 of national labs. So Cyclotron Roads was the
8 pilot program. We take in two-year fellows, but
9 instead of focusing on research, we focus on
10 giving them entrepreneurial training. So they
11 have access to work, work class R&D technology to
12 help develop their particular innovation.

13 But we also build connections and
14 relationships with the venture capital community
15 in the Bay Area in the case of Lawrence Berkeley.
16 And we just expanded to Oak Ridge and also
17 Argonne.

18 Okay. So then second is what I would
19 call explicit workforce activities. So this is
20 programs that have a built-in sort of workforce
21 mandate or component. So just as an example, we
22 do a lot of internships a lot of times with our

1 partners at Oak Ridge. We sponsored the first
2 robotics internship, which some of you might have
3 heard of.

4 We also run graduate-level
5 traineeships. So this is where if we think there
6 is a gap in, like an anticipated gap in skilled
7 workforce down the road we set up curriculum in
8 that area, house the universities to start
9 training graduate students. Last year at the
10 request of the Secretary we started a power
11 electronic engineering graduate traineeship. So,
12 it's kind of a niche topic with a big lead.

13 And then thirdly, we are partners in
14 the Manufacturing USA network. Again, some of
15 you guys might have heard of this. The
16 Manufacturing USA is a collection of 14
17 manufacturing institutes, institutes or
18 public/private partnerships. So they can have
19 anywhere between I think the, I think the lowest
20 number is maybe 20 all the way up to 200
21 industry, university, national lab partners. And
22 these are cost shared. So partners are putting

1 in money, not just sort of signing up on the list
2 to participate.

3 The manufacturing institutes were
4 actually written into law through -- well, so
5 they were written into law and tacked onto one of
6 the defense spending bills a couple years ago.
7 But by statute they have a workforce component.
8 So the mission of the institutes is not just to
9 be a national leader in a particular technology
10 area, it's also to foster the next generation
11 skilled workforce in that technology area. So
12 it's a big lift.

13 Yes?

14 MEMBER BOESCH: Yes, this is Heather.
15 I had a question.

16 So my organization just joined, like,
17 AFFOA, the Advanced Functional Fabrics Institute
18 of America.

19 MR. STEIGERWALD: Yes.

20 MEMBER BOESCH: Is that part of that

21 --

22 MR. STEIGERWALD: It is.

1 MEMBER BOESCH: -- manufacturing
2 institute group?

3 MR. STEIGERWALD: It is. So, DOE runs
4 five. The Department of Defense runs eight.
5 Commerce runs one. And then Commerce also
6 coordinates the network.

7 AFFOA is a defense lab institute.
8 But, yes, it's part of the network.

9 MEMBER BOESCH: What's the one that
10 Commerce runs?

11 MR. STEIGERWALD: It is the -- and I'm
12 going to ask my colleague Peter to correct me if
13 I'm wrong -- but I believe it's the
14 Pharmaceutical Manufacturing Institute. Is that
15 right?

16 Thank you. Bio-pharmaceutical
17 manufacturing.

18 So I could talk about this at length.
19 But one of the things I would highlight is we
20 work extremely closely with DoD and DOC multiple
21 times a week coordinating on the phone. Because
22 it is truly a network. But each institute has

1 dramatically different technology areas.

2 So AFFOA is a advanced fibers and
3 textiles institute.

4 DOE just announced a chemical
5 manufacturing institute and a sustainable
6 manufacturing institute focused on recycling in
7 manufacturing. So these span the spectrum of
8 technology areas.

9 But they all have the same sort of
10 workforce mandate, so all of us are sort of
11 grappling with the same issue of wrapping our
12 heads around how do we take advantage of this
13 unique opportunity where we have established
14 built-in relationships with industry. They
15 signed up for a particular reason. When they
16 signed onto the team they knew there was a
17 workforce component. And we have resources
18 behind it.

19 So all of the federal partners are
20 trying to think through this problem. And one of
21 the biggest challenges is we're primarily
22 technologists, so the amount of thought and

1 planning that goes into the technology side of
2 things has sort of naturally led the workforce
3 side of things to lag behind. So, and I'll talk
4 about that in a minute.

5 The last type of workforce development
6 at AMO is assumed manufacturing because
7 manufacturing -- or, sorry, assumed workforce
8 development, because is our name and everybody
9 wants to do workforce development in advanced
10 manufacturing. So every conversation we have
11 naturally tends towards workforce. What are you
12 guys doing in workforce?

13 Every time we go up to the Hill, you
14 know, it's brought up. And even though we don't
15 have a specific set-aside for workforce, you
16 know, we believe very strongly that it's
17 obviously an important component. And so that
18 was sort of the motivation, starting about 12
19 months ago, to really pivot to make sure that
20 we're doing as good as we can be doing on the
21 workforce side.

22 So just really quickly on the

1 institutes. I just mentioned this. There's 14
2 institutes across the country. It's inter-
3 agency. The cost share funding is, I think it's
4 higher than this now, this number was \$1.2
5 billion. I think it's, I think it's up around
6 1.5.

7 The model looks like this, so sort of
8 the -- so the consortia acts as a central hub for
9 SMEs, large companies, start-ups, brings in the
10 universities, community colleges for training,
11 and then state and local governments. And as
12 time has gone on, one of the really encouraging
13 things is that we've gotten a lot of buy-in from
14 state governments. So states like New York,
15 California, Kentucky, Ohio, Illinois -- the list
16 is much longer -- because the institutes align
17 with what they want to do in terms of economic
18 development, they've been putting real money
19 behind the launch of the institutes. So that's
20 encouraging to see.

21 MEMBER HERSKOWITZ: Can I ask a
22 question?

1 MR. STEIGERWALD: Sure.

2 MEMBER HERSKOWITZ: When you say
3 within the state government where within -- like,
4 within New York would that be NYSERDA of some
5 other office of the Governor's --

6 I'm sorry, I'll repeat the question.

7 When you say engagement from the
8 states, is that typically through the state
9 energy-related groups like NYSERDA in New York,
10 or is it through some sort of workforce
11 development group? Or where does it typically
12 come out from?

13 MR. STEIGERWALD: So to my knowledge,
14 and I, of course, I can't speak for all of the
15 institutes, it actually has not been the energy
16 offices. So a lot of times it's been the mayor's
17 office. So L.A. gave a lot of space.

18 I think, I think in the case of New
19 York it was directly from the Governor's Office
20 as well. It was state money. Whether or not
21 they're from the economic development state-level
22 agencies, I'm not sure. But primarily they seem

1 to come from sort of the main, the main offices.

2 It's a lot of money, too. I mean I,
3 I don't -- so there was a DoD photonics
4 institute, I don't remember the exact number, but
5 it was a tremendous amount that the state gave,
6 tens of millions or up into the 100 million over
7 five years.

8 Sorry, one more thing I'd like to
9 mention. The institutes, as a program, by design
10 they have to be self-sustaining after five years.
11 So that's unique. Especially at DOE they're
12 truly public/private partnerships. And the
13 institutes are 501(c)(3)s. Four of the five DOE
14 ones are 501(c)(3)s, and they're co-managed with
15 the federal partners. And the people, the folks
16 that run the 501(c)(3)s, the institutes, they
17 know they have to be self-sustaining in five
18 years.

19 So, self-sustaining doesn't mean no
20 federal funds. It just means that the annual
21 funds, which right now is 14 million per year,
22 per institute, will be shut off after five

1 years. So they can still be -- they can still
2 apply for competitive funding.

3 The reason I mention that is we think
4 that workforce could potentially be a key cog of
5 the self-sustainability plan at an institute if
6 the right relationships can be made and it's
7 designed in the right way. So, those are some of
8 -- like, that's really the main question that
9 we're dealing with is, given the sort of unique
10 position of the institutes, bringing together
11 regional partners, establishing these
12 relationships that take a lot of time to
13 establish, can we execute on our workforce
14 component in a way that will bring in enough
15 resources to contribute meaningfully to the life
16 of the institute?

17 Sorry. Was that a, was that the ding
18 on my time?

19 Okay, so I'll wrap up real quick.
20 What I really want to say is, you know, I think a
21 lot of times we want to come and say we're doing
22 XYZ in workforce. And, actually, it's the other

1 way around, we're trying to figure out what to do
2 on workforce. So the questions that we're asking
3 ourselves are how do we think about workforce
4 development in the same way, in the same rigor
5 that we think about our technology investments?

6 We have no ability, really, in the
7 office to think about this from a hiring
8 perspective. We almost always interact with CTO
9 level or VP for R&D type folks, which is great,
10 but we just have a -- we're missing a lot on sort
11 of the hiring side. Who should we be talking to?
12 And when we talk to them, what types of questions
13 should we be asking?

14 I mean, on some level we're not sure
15 what questions we should be asking, even if we
16 can get the right people in the room to have a
17 conversation.

18 Most importantly, once we do have
19 these conversations, how do we make sure that
20 it's translated into our funding opportunities so
21 that the people getting the money know that they
22 have to do things in a certain way or give us a

1 plan to do things in a certain way to capture
2 some of these ideas, to get beyond sort of the
3 conversational point.

4 And then, finally, actually there's a
5 lot of sort of one-off university, industry
6 models to do workforce development, and we're
7 wondering how can we scale those, given that we
8 have these consortia in place? Maybe I can talk
9 more about this later, but we are moving towards
10 a conversation like this with the Council on
11 Competitiveness.

12 As one of the many things we're trying
13 to do, we're going to try and engage the hiring
14 side of the -- I guess the hiring executives with
15 the council to have this type of conversation in
16 the second half of the year. And then that's
17 just a -- the slide with the logos of our
18 partners on it.

19 So thanks. Thanks for your time. And
20 happy to answer any questions that you guys have.

21 MEMBER BAGLEY: I was just going to
22 ask if there was one or two instances that -- I

1 know the workforces and their mandate -- is there
2 an institute where you feel like they're doing a
3 particularly good job or is that --

4 MR. STEIGERWALD: Yes. So, so there's
5 one institute, it's the Lightweight Metals
6 Institute. I think it's often cited as the one
7 that's doing the best. And I think one of the
8 interesting things -- and I mentioned this when
9 Sue and Emily came to town -- it's not
10 necessarily a money thing, although you do need
11 money to do it well. What they've done -- and
12 it's been led by Emily DeRocco, who worked at the
13 Department of Labor. I think she was assistant
14 secretary or -- Yeah, just a little bit.

15 But what she's done a great job of is
16 pulling together a tremendous number of existing
17 state and local-level workforce activities that
18 without a central organizing force had been sort
19 of doing the same thing, you know, not bad, just
20 sort of doing it in silos without talking to each
21 other. And she's really done a great job of
22 stepping in and being a central focal point.

1 MEMBER BAGLEY: Yes. So, I know one
2 of the breakouts is in workforce manufacturing.
3 And so Emily and I both sit on MFOresight, which
4 is an NSF and Department of Commerce funded
5 initiative that is hosted at the University of
6 Michigan, but it's a national board. Really
7 manufacturing foresight is the frame. And so
8 manufacturing workforce, as you can imagine, is a
9 huge topic that Emily is driving the
10 implementation of the, you know, or the paper and
11 sort of what our recommendations will be.

12 So just as a FYI.

13 MR. STEIGERWALD: So I got the answer
14 to the question, right? By saying Emily.

15 MEMBER BAGLEY: I wasn't sure what you
16 were going to say.

17 MR. STEIGERWALD: Thanks.

18 MEMBER BALDWIN: Are any of the
19 manufacturing institutes or other organizations
20 supporting the maker movement? Is there any
21 manufacturing maker resources where people can
22 come in and make things, whether it be machine

1 shops, or printed circuit boards? You know,
2 what's available to the community to foster that
3 entrepreneurship?

4 MR. STEIGERWALD: Sure. So, so I
5 would say that it's -- I would say yes and no. I
6 think yes, but in a limited way.

7 There is an Additive Manufacturing
8 Institute in Youngstown. And I think they're
9 primarily focused on engaging the labor
10 community.

11 Some of the institutes, you know,
12 aren't, aren't right for that, just given the
13 technology focus. But I think the fact is a lot
14 of the institutes sort of fall in the middle.
15 Where Additive is sort of the natural open house
16 for the maker community.

17 I think things like there's a -- I'm
18 sorry, I'm talking about another funding
19 agencies, institutes. But I think, you know,
20 NextFlex, which does flexible electronics. I
21 think even getting hands-on experience for
22 students, you know, even if they're not walking

1 out with a flexible television, it's very useful
2 for them to see what and how, you know, what can
3 be done and how you can do it.

4 And then the last thing I would say on
5 that is that the funding agency offices have
6 engaged in the maker community. So, so we were
7 very involved in the White House maker fair last
8 year. But I haven't heard if that's going to be
9 on again, it's not going to be on again.

10 But the offices have been involved in
11 the past.

12 MR. BUERSTATTE: So that's a good
13 question, Esther. So one of the other jobs that
14 I have is actually co-chairing the Interagency
15 Makers' Working Group, so, the 90-plus programs
16 and bureaus and agencies that are supporting
17 making across government. And I'll briefly
18 explain that right now we've organized this group
19 into three categories.

20 One, in the early pipeline development
21 of making, you have programs and agencies
22 supporting the education and engagement. And

1 it's typically your high school or even younger.
2 How do we encourage people to participate in the
3 making movement?

4 Then transferring those skills
5 internally where we have a number of programs
6 supporting internal innovation by making. A
7 great example is some of the marine expeditionary
8 units leveraging 3D printing to source realtime
9 widgets to fix the machinery, weapons, et cetera,
10 and exponentially decrease costs. So, think
11 about the supply chain involved in supporting
12 troops down range in Afghanistan, it's very
13 costly to send a widget. But if they can print
14 in theater, it's much more cost effective.

15 Similarly with what we're doing over
16 at HHS and the VA on how we're supporting some of
17 our customers, innovation and making is really
18 important. So that's the internal category.

19 And thirdly is the economic
20 development realm. This is where we, EDA, play.
21 How do we encourage and support maker
22 organizations, whether that's maker type of

1 incubators or maker spaces?

2 But I can tell you that there is a big
3 gap between all three of them where there is --
4 we certainly, we as the federal government, have
5 supported this movement in a variety of ways over
6 the last few years. But I think the next
7 opportunity is to better connect and integrate
8 these efforts where we're doing this childhood
9 education in making, but how are we transferring
10 that pipeline and passing them into some of our
11 supported incubator or accelerators where they
12 can then learn how to take that talent and create
13 a business.

14 And one of the gaps that we've
15 identified, too, is where there is still a lot of
16 copyists, where they see making as a creative
17 output, this is just what I enjoy doing. Just as
18 I would paint or sing or play my guitar, I'm a
19 maker, I'm a creator. But there's an opportunity
20 to help educate them to say, hey, you've got a
21 talent. How can we help you leverage that to not
22 only do what you love but do it in a way where

1 you can make a living?

2 So there's a few opportunities there.
3 I'd say overall we're early in that, in that
4 process, partly due to we're waiting to see what
5 guidance is going to come from this
6 administration and how we can, how we can catalog
7 inventory and align everything here.

8 But interesting opportunity. And I'm
9 glad you brought that up.

10 At this point, though, I think we're
11 -- Drew's going to hang tight, and he'll be with
12 us for the rest of the afternoon and participate,
13 hopefully, in a little bit of the dialog after
14 these presentations.

15 But a quick show of hands, switching
16 topics, how many of you have individually reached
17 out to Andrew Reamer for some insight on a
18 government program.

19 (Show of hands.)

20 MR. BUERSTATTE: Okay. Four, five,
21 six. Okay. A number, a number. Okay.

22 Yes, Andrew has been a wealth of

1 knowledge not only for OIE but the Council as a
2 whole. And recently Andrew concluded a pretty
3 meaningful investigation, probably exhausting,
4 into all the various entrepreneurship and
5 innovation supporting organizations or programs
6 across government. And Andrew is going to
7 present that to us today.

8 So, Andrew, take it away.

9 MEMBER REAMER: Thank you, Craig.

10 In lieu of a slide deck, I have
11 printed a thing out.

12 MR. BUERSTATTE: Andrew, could you use
13 that microphone.

14 MEMBER REAMER: Yes.

15 And there's some for guests.

16 MR. BUERSTATTE: Andrew, these will be
17 available electronically? Can we get these
18 electronically as well?

19 MEMBER REAMER: Yeah, yeah. It's
20 available electronically. Thank you, Craig.

21 I'll talk about, briefly about the
22 purpose of this and a little bit about the method

1 and then what's in it, and then conclude with
2 some thoughts about how NACIE might make use of
3 it.

4 So, this is a guide to federal efforts
5 that support entrepreneurship. It is part of a
6 task. I'm responsible for a grant from the
7 Kauffman Foundation. And I proposed this, so
8 I've gotten grants from the Kauffman Foundation
9 since about 2008. And since I'm self-employed,
10 you know, basically I try to make myself useful
11 to people that want to fund me. And suggested to
12 Kauffman there would be a decent, it would be a
13 decent return on their investment if they gave me
14 some money to put together a guide to federal
15 entrepreneurship.

16 Because the federal government has
17 been promoting entrepreneurship for a long time,
18 but there's really no single resource to
19 understand all the different things the
20 government has been supporting from Congress
21 through various departments, through the White
22 House, and so forth.

1 So the purpose of this, the purpose of
2 this is really threefold. One is just as a
3 reference, just to look up things to see who's
4 doing what.

5 The second is as a basis for analysis.
6 I did not do an evaluation. I did not look and
7 say, okay, where are the gaps? Where's the
8 overlap? How many of these things have been
9 evaluated and what do they say? None of that.
10 My aim was to be entirely descriptive.

11 The third reason to do it is a little
12 subtle, but basically it was to take away the
13 option of deniability on the part of Congress and
14 senior political leadership so they couldn't say
15 they didn't know something was going on. Because
16 Congress runs on a committee system and
17 committees jealously guard their territory,
18 programs supporting entrepreneurship come out
19 across many committees that are not aware of what
20 other committees have done.

21 And so the aim here was to really
22 inform people so instead of charging down into an

1 area where in fact someone else has been doing
2 something. And so those three reasons.

3 The methods were basically me sitting
4 in front of a laptop with headphones on and
5 coffee and getting into a zone. It was not, you
6 know, in the scheme of things not a lot of work.
7 It was about 12 to 15 days of work. Okay? The
8 idea is to have this thing -- I would like to see
9 this thing live. I don't want to be the one to
10 maintain it.

11 So I'm talking to Kauffman about where
12 might it go? And I'm open to talking to the
13 Commerce Department about where might it go.
14 But, basically, this is a turnkey operation.
15 I'll get it. This is a draft. I'm going to
16 finish this thing by the summer. And then I
17 would love to find someone to turn it over to.

18 Okay. So I want to walk you through
19 this thing relatively quickly. Here's a table of
20 contents. So if you flip to the first few pages
21 you'll see From the U.S. Code, which is it's a
22 compendium of laws that Congress passes. And

1 there are pages upon pages of laws in support of
2 entrepreneurship.

3 And basically there the themes are
4 small business is great, it's really important to
5 America. You get, you know, a lot of this stuff
6 came out of the '50s, the early '50s when the big
7 super hierarchical corporations were dominating
8 the economic landscape and there was fear that
9 small businesses would be gone. And that's why
10 the SBA was created in 1953. So there's that.

11 That has kind of morphed over time
12 into entrepreneurship. That's not a term that
13 was used in the '50s. And the notion -- the
14 original small business legislation didn't really
15 differentiate between businesses that were mom
16 and pop shops and businesses that were really
17 competing and going to markets.

18 But there's more of a differentiation
19 now in the last 20 years about the ability of
20 small businesses to compete in global markets,
21 and in particular, in the, like the advanced
22 manufacturing and advanced technology areas.

1 There's a whole other stream which is
2 around procurement. And there, if you look at,
3 if you look through the list of laws you will see
4 for any initiative that Congress is putting
5 together around hybrid, electric vehicles, or
6 around the Alaska Pipeline, or around the
7 transportation Security Administration there is
8 language in there about making sure small
9 businesses get a fair share of the dough.

10 So there is and then another part of
11 that procurement aspect is around making sure
12 that non-traditional entrepreneurs, that is
13 people who are not white and male, get a share of
14 procurement.

15 Again, back outside of procurement,
16 from the late '60s going forward there was a
17 substantial amount of emphasis on promoting women
18 and minority entrepreneurship more generally. So
19 there's a procurement piece, but then there's
20 also -- that's the reason why the Minority
21 Business Development Agency exists.

22 So just a footnote: the Minority

1 Business Development Agency exists through an
2 Executive Order by Richard Nixon. It's not an
3 act of Congress. Any president can shut it down
4 in a moment.

5 So when you look at the list of
6 agencies that are referred to in this, on that
7 long list of laws, just to read them off to you,
8 that all these agencies have responsibilities
9 around small business development: USDA,
10 Department of Defense, Federal Trade Commission,
11 Export-Import Bank, Security and Exchange
12 Commission, NIST, Small Business Administration,
13 Overseas Private Investment Corporation,
14 Department of Transportation, Department of
15 Interior, Patent Office, Veterans' Affairs,
16 Appalachian Regional Commission, National Science
17 Foundation, Economic Development Administration,
18 Department of Energy, Federal Communications
19 Commission, and NASA.

20 So it is embedded in -- it's a kind of
21 a value touchstone for Congress. It's good
22 politics. And it's kind of ubiquitous in the

1 laws.

2 Okay. Then if you turn a few more
3 pages you'll see a list of the acts, the
4 legislation that was passed from the early '50s.
5 And you will see, basically, every Congress
6 passes something that has "small business" in the
7 title. Very, very few Congresses don't.

8 All right, moving from Congress to
9 programs, there are a number of pages -- you can
10 organize this stuff in multiple ways. And I'm
11 not -- you know, this is a way that made sense to
12 me. But whoever I turn this over to, you're
13 welcome to, you know, organize it in a different
14 way. There are certain agencies their mission is
15 to entrepreneurship expand.

16 And so that's Part A of the federal
17 programs. You can see the first one is the Small
18 Business Administration, the Office of Innovation
19 and Entrepreneurship in the Department of
20 Commerce.

21 And then there are Part B are
22 programs, entrepreneurship development programs

1 in agencies with a broader mission. But they
2 have some kind of standing unit to promote
3 entrepreneurship. So NIST has the Manufacturing
4 Extension Partnership. The Department of
5 Homeland Security has the EB-5 Immigrant Investor
6 Program. The Administration for Children and
7 Families in HHS has the Microenterprise
8 Development Program. So there are
9 entrepreneurship-focused programs inside of
10 agencies with broader missions.

11 And then the third category are
12 programs that have a broader mission but there is
13 a entrepreneurship element to it. And I would
14 say Drew and the Advanced Manufacturing Officer,
15 that's an element of that. Manufacturing USA,
16 the federal laboratory consortium, ARPA-E in the
17 Department of Energy, so there are lots and lots
18 of these things.

19 And people who are interested in
20 particularly the dimension of entrepreneurship
21 it's, you know, unfortunately, incumbent upon
22 them to kind of try to figure out where the

1 bodies are, where all these pieces are. And it's
2 kind of an entrepreneurial activity to connect
3 the dots here.

4 Okay. So the Part D is simply a kind
5 of recasting of what came before in terms of the
6 catalog of federal domestic assistance, which is
7 the catalog of the grants that are available
8 through some of these programs.

9 The next section has to do with
10 interagency working groups. And Craig just
11 mentioned one which I don't think is on my list.
12 There was -- and we have a, we have the former
13 director or the former coordinator for the
14 Interagency Network of Enterprise Assistance
15 Providers. Heidi, you want to wave. And there's
16 an SBIR/STTR Interagency Policy Committee. They
17 are standing organizations that are interagency
18 working groups around things that deal with
19 entrepreneurship, around procurement.

20 Every agency has an office of small
21 and disadvantaged businesses. That's for the
22 purposes of procurement, to make sure those

1 businesses get a share of federal procurement.

2 CO-CHAIR BRADLEY: Andrew, can I just
3 jump in?

4 MEMBER REAMER: Yes.

5 CO-CHAIR BRADLEY: So I'm looking at
6 people's faces. We're all going, Wow. And
7 luckily you shared it with us, so I've seen it
8 before. Can you just share less with the guide
9 but what can we do with it and what did you learn
10 as you talked to these groups? Are they aware of
11 each other and, you know?

12 MEMBER REAMER: So I didn't talk to
13 anybody. This is all me --

14 CO-CHAIR BRADLEY: Just, okay.

15 MEMBER REAMER: -- with headphones.

16 Right?

17 CO-CHAIR BRADLEY: Okay. Okay.

18 MEMBER REAMER: And although, I mean,
19 I've talked to a few people.

20 CO-CHAIR BRADLEY: So you talked to
21 everybody.

22 MEMBER REAMER: Well, --

1 CO-CHAIR BRADLEY: I guess how best
2 would you advise that we use this? In light of
3 our time --

4 MEMBER REAMER: Yes. So that's where
5 I was going.

6 CO-CHAIR BRADLEY: -- because we can
7 take this into the groups, too.

8 MEMBER REAMER: Right. So let me, I
9 was going to point to one more section here which
10 is the section on other advisory committees.
11 Okay. So you'll see that after the interagency
12 working groups. And, again, there are a number
13 that are natural companions in conversation to
14 NACIE.

15 So in terms of what NACIE might do
16 with this, I think three things. Or, well, one
17 is if our strategic planning process gets off the
18 ground, that this is kind of a, you know, an
19 asset map for thinking about. Okay.

20 The second is we have two other
21 committees around capital formation and around
22 manufacturing workforce that might find this

1 useful for their purposes. Okay. So it's an
2 internal resource for us.

3 If the strategic planning process gets
4 going, the idea is to do, help OIE do a strategic
5 plan. And then a question is, so what kind of
6 landscape assessment should OIE be doing around
7 its functions so it can understand how it might
8 add value to all these efforts?

9 MR. BUERSTATTE: Andrew, can you
10 explain that function? I know where you're
11 going. I just want to make sure everyone else is
12 following with that function that we're supposed
13 to be executing.

14 MEMBER REAMER: Okay. Well, the
15 Office of Innovation and Entrepreneurship by law,
16 by the America COMPETES Act, is a policy advisor
17 to the Secretary around, in the topics of
18 innovation and entrepreneurship. And that while
19 the act was passed in 2010, staffing has been --
20 it's only been fully staffed --

21 MR. BUERSTATTE: Right. Well,
22 specifically -- sorry, I didn't mean to cut you

1 off -- but the other interesting piece is that by
2 statute we're supposed to be serving as an
3 integrator for federal innovation and
4 entrepreneurship programs.

5 MEMBER REAMER: Right.

6 MR. BUERSTATTE: So when you talk
7 about an asset map, it's not so much about the
8 strategic plan, but it's about the strategic plan
9 to reach that goal of being a federal integrator.

10 MEMBER REAMER: Correct.

11 MR. BUERSTATTE: We talked about this
12 in a group, there's roughly, there's been a
13 variety of studies -- and now probably out of
14 date. The last one I think I saw by GAO was
15 maybe a 2012 or '13 study saying there was \$7
16 billion or \$8 billion going towards innovation
17 and entrepreneurship programs.

18 So if there was a tool, a mechanism in
19 the federal government where we could better
20 align and deliver or serve our customers through
21 USDA and all the other programs that Andrew just
22 --

1 MEMBER REAMER: Right.

2 MR. BUERSTATTE: -- just listed, I
3 think we'd be more efficient and productive. So
4 it's a really exciting opportunity.

5 CO-CHAIR BRADLEY: Yes.

6 MEMBER SCHOCKEN: Seven or eight
7 billion dollars?

8 MR. BUERSTATTE: Just for
9 entrepreneurship programming. So you got to
10 consider this is, this is the small innovation
11 and research program with billions of dollars,
12 billions of dollars going towards commercializing
13 early stage research. This is the small business
14 associations' growth accelerator challenge, which
15 is ranked from \$2 to \$4 million a year. Our
16 grants competition which is ranged from \$10
17 million to \$15 million.

18 So if you encompass all of those,
19 there's a lot of capital going towards supporting
20 different types of entrepreneurship and
21 innovation, but understanding the right way to
22 organize that is critical.

1 As Andrew pointed out, there is no
2 shortage of both Main Street supporting programs
3 and policies as well as some of the more high
4 growth/high tech innovation and entrepreneurship
5 which OIE mostly focuses on. So there's so many
6 different ways, so many different lenses that we
7 could apply to this, but knowing how and starting
8 on the right foot I guess is what I'm getting at.

9 MEMBER REAMER: Thank you for that.
10 And I'm very excited to be able to basically give
11 raw material to OIE to work with.

12 CO-CHAIR BRADLEY: Yeah. And in terms
13 of the --

14 MR. BUERSTATTE: Hold on. One
15 question.

16 MEMBER HERSKOWITZ: I'm sorry. Just
17 a question, Craig. You said that part of the
18 role is to act as a coordinator. Do all of -- I
19 don't know how to ask this politically
20 sensitively -- do all of the groups in here share
21 that vision, that OIE is going to help coordinate
22 what they need to be coordinated.

1 MR. BUERSTATTE: Well, if anyone knows
2 the history of COMPETES, Andrew, if you've got
3 any light on this, please share, but I think this
4 was we were charged with this goal purely with
5 the intent and not, frankly, not with a plan. We
6 have minimal resources to do so, and that's at
7 the salary and staff level, let alone the podium
8 to do so.

9 We have the authorization to do it but
10 no real plan or long-term strategy.

11 Andrew, do you have any follow-up to
12 add to that?

13 MEMBER REAMER: I don't have the
14 language in front of me. It's a little subtle.
15 It basically gives OIE the charge to look across
16 the federal government, but it reports to the
17 Secretary. So it's trying to help the Secretary
18 look more broadly across the federal government.

19 But its mandate is from Congress. So
20 it can go to any federal agency and say, we have
21 a congressional mandate to do this, and we'd like
22 you to talk to us.

1 MEMBER HERSKOWITZ ORIN: Could you
2 theoretically go into the NIH's SBIR program --
3 and tell them what?

4 MEMBER REAMER: To talk with them.
5 And they have a convening power that they can
6 convene people from across the government. And
7 they have the power to recommend to the
8 Secretary, who sits on a number of White House
9 task forces that cover all this stuff.

10 MEMBER HERSKOWITZ ORIN: Got it.

11 MEMBER REAMER: But basically,
12 Congress said Congress wants the secretary to
13 think about innovation and entrepreneurship
14 across the federal government, not just in
15 Congress, and that OIE is to be there to help the
16 secretary.

17 MEMBER HERSKOWITZ ORIN: So the OIE is
18 the Secretary of Commerce's arm to aggregate it.
19 And Congress has given the Secretary of Commerce
20 the charge to look across --

21 MEMBER REAMER: Correct.

22 MEMBER HERSKOWITZ ORIN: -- broadly

1 beyond Commerce's boundaries.

2 MEMBER REAMER: Correct.

3 MEMBER HERSKOWITZ ORIN: But the other
4 groups are under not necessarily under any
5 obligation to follow the advice --

6 MEMBER REAMER: Correct.

7 MEMBER HERSKOWITZ ORIN: -- of the
8 Secretary?

9 MEMBER REAMER: Correct. Correct.

10 MEMBER HERSKOWITZ ORIN: Okay, thank
11 you.

12 MEMBER REAMER: Yes. When Gary Locke
13 became Secretary of Commerce in 2009 under
14 President Obama, he created an Office of
15 Innovation and Entrepreneurship that was in his
16 office, and it was not congressionally mandated.
17 It was just something he wanted to do. But a
18 year later with America COMPETES, somebody gave
19 the idea to somebody in Congress, and they threw
20 it into the bill, and they ended up authorizing
21 something that had been in place more informally.

22 MR. BUERSTATTE: And for longevity's

1 sake, that's often the norm here in D.C. where
2 Congress needs to find a home for something where
3 it will stick.

4 MEMBER REAMER: Right.

5 MR. BUERSTATTE: Oftentimes in a
6 political environment, as administrations and
7 leadership changes, you put something at risk if
8 it's housed in a politically appointed office.
9 So by establishing the Office of Innovation and
10 Entrepreneurship with career staff and with grant
11 programs and more, you build out a sustainable
12 platform.

13 But honestly, right now, we're in the
14 early stage of that but certainly need -- and why
15 we're having this conversation --

16 MEMBER REAMER: Right.

17 MR. BUERSTATTE: -- I think it's an
18 opportunity.

19 MEMBER REAMER: And so to your point,
20 OIE was moved from the Secretary's Office to EDA
21 for stability and funding purposes. But really,
22 it has a dotted line relationship with the

1 Secretary's Office, while administratively it
2 reports to Dennis.

3 So the last piece is something to
4 think about, is the idea is, would each member of
5 NACIE be up for picking a program or an advisory
6 group to just talk to and create a relationship
7 with? Because again, so much is going on. And
8 it's great, you know, but we meet four times a
9 year. We can hear from one or two guests. And
10 we're all hard-charging people. It would be
11 useful for each of us to have a person-to-person
12 relationship with National Women's Business
13 Council or the Manufacturing Extension
14 Partnership, and just as a way of kind of
15 building some soft relational infrastructure.

16 MEMBER BOWLES: Yes, my question was
17 does any other group in any other department have
18 a similar mandate?

19 MEMBER REAMER: No.

20 MR. BUERSTATTE: You can look at this
21 packet and maybe I could give a 90 percent
22 confidence guess that there isn't. But there's

1 an abundance of information that would have to be
2 scoured. And maybe, maybe there's a similar
3 charge that's maybe more targeted. Or let's take
4 the National Women's Business Council, focused on
5 business.

6 MEMBER REAMER: Most of it, most of
7 this is programmatic. OIE has program
8 responsibility, but it was created for policy
9 purposes. And so that's its uniqueness is that
10 it focuses on policy which sits above program.

11 MR. BUERSTATTE: Yes, go ahead real
12 quick.

13 MEMBER KAPP: So first of all, I
14 applaud your efforts. This is an amazing
15 resource. And I know personally, having gotten
16 together with you for lunch, and from bringing
17 some other folks to bear, that you're a
18 phenomenal resource, and we're really lucky to
19 have you. So thank you so much for putting this
20 together.

21 Based on the knowledge that you have,
22 and one of the things that you had asked of us,

1 is there an area where you think we can serve as
2 liaisons? And one of the things that I would
3 potentially ask back is, based on the array of
4 things that you put together, perhaps maybe
5 offline you can identify either low-hanging fruit
6 or the highest places where there may be --
7 because there's so many here that I would love
8 for us to be able to maybe put in some sort of
9 prioritization around that.

10 MEMBER REAMER: Sure. I'd be happy to

11 --

12 MEMBER KAPP: I think that might be
13 useful.

14 MEMBER REAMER: -- to do that.

15 And I will say, one in particular, the
16 Securities and Exchange Commission has an
17 advisory committee on small capital formation for
18 small business, which is something a lot of
19 people here care about. So it would be great to
20 talk to them.

21 MEMBER KAPP: Yes. Just a
22 prioritization. Because I think that -- I don't

1 want to speak for everybody here, but I think
2 that knowing some things that are priorities --

3 MEMBER REAMER: Sure.

4 MEMBER KAPP: -- for both of you would
5 really sort of elevate our interest, and
6 certainly my interest.

7 MEMBER REAMER: I'd be happy to.

8 MR. BUERSTATTE: Yes. And again,
9 we'll have a little bit longer later in the
10 afternoon to dive into this more. But just to
11 keep things moving --

12 MEMBER REAMER: Sorry, Craig. To
13 Orin's question, this is online. I will send out
14 the link to it.

15 The blue underlines, of course, are
16 live links. So you can click on any of these and
17 go to the website.

18 MR. BUERSTATTE: Thank you, Andrew.
19 I think this has given all of us a few new ideas
20 and an interesting perspective to take a look at
21 things.

22 At this point I'd like to, and before

1 we have our broader discussion this afternoon,
2 I'd like to open up the floor for public comment.
3 Last time, we heard from a researcher from the
4 Third Way on access to capital. And today, as
5 we've talked about inclusive entrepreneurship and
6 outreach to all types of communities, both urban,
7 city center, as well as rural, and everything in
8 between, we thought that it might be interesting
9 to hear from the executive director of
10 EveryLibrary.

11 So John Chrastka is the executive
12 director. And welcome John here to give us a few
13 thoughts.

14 And as I mentioned earlier,
15 EveryLibrary is an organization working to
16 advocate for libraries in every community. And
17 one of their more recent missions is to support
18 entrepreneurship through the assets and resources
19 they have in those libraries, which is especially
20 important if you think about some communities
21 that might not have the robust research or
22 university assets or start-up hubs or incubators.

1 Where do entrepreneurs go?

2 So John, thanks for coming.

3 MR. CHRASTKA: Thank you very much.

4 And Joe, I appreciate running into you again at
5 South by Southwest a couple weeks ago and the
6 impetus for this kind of conversation.

7 The work that I do is not as a
8 librarian. I am not a librarian by trade. I've
9 never worked in a library. I come at this as a
10 civilian. I come at it as a failed entrepreneur
11 or perhaps a serial entrepreneur if we want to be
12 really polite about it. The entrepreneurial work
13 that I did before starting EveryLibrary has
14 influenced part of our mission and purpose with
15 this organization.

16 Many library-facing organizations
17 focus on education, cradle-to-grave, lifelong
18 learning, pre-K to K-12. That's lovely. I'd
19 like to try and address with the library
20 community why my business failed.

21 The work that we did before starting
22 EveryLibrary was with an organization or a

1 business called ClassMap. The ClassMap model was
2 to set up, for university professors, course
3 modules. There's Moodle. There's a few others
4 in the space right now.

5 We didn't make it out. We didn't make
6 it out not because we didn't have a good set of
7 developers, we didn't make it out because we
8 didn't know what we were doing when it came to
9 market analytics and business intelligence. We
10 made the wrong decisions. We failed, when it
11 came right down to it, at the work that we should
12 do in order to understand, interrogate, and
13 exploit our market.

14 Now, taking that into a library
15 advocacy organization, a library research
16 organization, sure, K-12, pre-K, lifelong
17 learning, that space is pretty well-explored.
18 What isn't really, hasn't really been explored
19 very well is the role that the public library
20 could have had if I had asked.

21 We had 86 people working for us. We
22 had \$4.6 million in venture capital funding, all

1 angel round. We burned through a lot of lives
2 doing that, and I know it's because we didn't
3 understand our market, not because we couldn't
4 figure out how to do a dev cycle well.

5 The library has a few key
6 differentiators in the 21st Century than it had
7 in the previous generations for the average
8 entrepreneur, for the nascent entrepreneur, for
9 the person moving from ideation to market,
10 whether it is the access point to technology, or
11 it is the access point to market, or it is the
12 access point to analytics and business
13 intelligence.

14 I want to take you through it very
15 briefly. You guys have a really packed agenda,
16 but I hope to leaven the conversation, thinking
17 through what the built environment can already do
18 through public libraries to advance your goals.

19 The library as an incubator is a theme
20 that I want to bring before you. The incubation
21 of new ideas requires capital, access to capital,
22 access to markets, access to talent, and access

1 to intelligence. Well, I can tell you that the
2 library community does not have a great deal of
3 access to capital going on. Though I will bring
4 up at the end a little bit about how the
5 501(c)(3) philanthropic community could be
6 leveraged for this.

7 We certainly have an access to market
8 that I want to go into in some more detail.

9 The access to talent. The venue that
10 is the public library, the built space, the fact
11 that you can drive no more than 45 minutes
12 anywhere in this country and have access to this
13 point of contact, to broadband, though that needs
14 some work; access to the maker movement, though
15 that is coming up to scale; access to the
16 business reference space or the business
17 reference that librarians do. These are massive
18 points of leverage in small towns, in urban
19 centers, and in big and small communities,
20 whether it's a county-wide system or a town as
21 big as Chicago.

22 The work that library as incubator

1 does brings together space, it brings together
2 experience, and allows for capital to have some
3 validation about the idea. The partnerships that
4 exist in many communities are not done to scale
5 yet. The successful communities, the examples of
6 successes that I have for you are all places
7 where the partnership between the library and the
8 SBA or SCORE or the EOCs have come to fruition.
9 And yet, there are some library communities out
10 there, actually more than I would like to admit
11 to, that don't have those kinds of partnerships
12 because there has not been an organized level of
13 support to make those partnership connections
14 happen.

15 The innovations that happen at
16 libraries because, through the incubator idea,
17 well, it could start with co-working. I finally
18 have a place to do it that's not my kitchen
19 table.

20 It could start with I finally have
21 access to somebody who has skill sets that I
22 don't have.

1 I finally have access to a community
2 of other creators through this intentional
3 incubation at a neighborhood level. Sometimes at
4 a ZIP Code level.

5 There are some fantastic examples of
6 success stories for incubators, and they're not
7 the ones I'm going to leave you with at the end
8 because these are rare, because the triad of
9 partnerships, of built environment, and
10 encouragement that comes from policy hasn't
11 pervaded libraries in this country. But we've
12 got a wonderful example of the success here at
13 the New York Public Library, the New York
14 StartUP! Business Plan Competition at the
15 Science, Industry, and Business Library.

16 This is the perfect marriage. There's
17 capital coming in from Citibank to award a
18 business plan start-up that has been built in an
19 environment that has early access to market
20 through the library and is helped by the
21 librarians, who can bring some analytics and
22 business intelligence to it.

1 There's other examples out there as
2 well that I'd like to be able to share with you
3 in the future, but it's Houston. It is Brooklyn
4 Public. But they're rare, folks, and I think we
5 should be exploring this more.

6 This idea of the library as showroom
7 is something that is a core competency of
8 libraries. We all know the story of the
9 librarian who makes a recommendation for a book:
10 hey, I really like John Grisham. What else
11 should I read?

12 Well, that happens right now with
13 wearables. That happens right now with health
14 apps. That happens right now with iPhones or
15 Androids, or that happens with technology up and
16 down the spectrum. The librarian is a trusted
17 validator and a trusted partner in helping you
18 find the resources you need. And new media is
19 part of that; new ideas are part of that. And
20 quite honestly, the reason that the local Chamber
21 of Commerce does their events at the library is
22 to be validated by the library as a showroom

1 space.

2 And yet we don't necessarily do this
3 at scale. We do it in a mom and pop kind of
4 fashion. And for us to do it at scale is to
5 recognize that for the maker movement, the idea
6 that this is the first point of access, the first
7 showrooming, the first chance to be tactile and
8 in contact, but to move from making and crafting,
9 which is lovely, to craftsmen, artisans, and
10 entrepreneurs, that's what I'm trying to move
11 here forward.

12 What is not missing is the idea --
13 well, perhaps the vocabulary is missing of the
14 library as a beta site, the library as a place
15 for user groups to convene. If you've got a new
16 idea and you want to test it out, who's the most
17 friendly and the most honest? Your neighbors.
18 Who's also going to be your cheering squad? Your
19 neighbors.

20 To build out a beta site as, to frame
21 the library as that beta site that you need for
22 early intervention in bad ideas and early

1 validation of good ideas, the library as showroom
2 is shovel-ready for that.

3 Yes, Mid-Continent Public Library. My
4 good friends at the Mid-Continent Public Library
5 outside of Kansas City, Missouri, it's a three-
6 county system on the Missouri side of Kansas
7 City. Their Square One and Main Street programs
8 have been directly responsible for 45 business
9 over the last two-and-a-half, three years. And
10 those have all started not just as an idea and as
11 a business plan but as them trying it out at the
12 library.

13 My favorite one is the guy with the
14 food cart, with the food truck. And it's
15 literally pulled up there for lunch because he's
16 trying out his menu. And the fan club that he's
17 developed and the three new trucks he's been able
18 to buy and employ folks with. There's technology
19 inside this as well, either in or at the library
20 location. Well, if it's in the library location,
21 at the library location, or with the library's
22 brand attachment, the showroom idea helps carry

1 things forward.

2 I want to reframe in the 21st Century
3 the idea that the collection is anything other
4 than for the business community, business
5 intelligence, and market analytics. We're
6 sitting in a fabulous reference collection. The
7 digital collection that's available here as a
8 support for this department of the U.S.
9 Government is available to every single American
10 through their library card. And I'm not just
11 talking about it in a virtuous way. The market
12 intelligence and analytics that I missed when I
13 was doing my development work for that university
14 ecosystem, I wish, I simply wish.

15 There are some extraordinary examples
16 of this, but with the right kind of support and
17 the right kind of framing, that could be taken
18 out to folks. It's not a popular fiction; it's
19 not your average non-fiction. We have a
20 fantastic example for business intelligence and
21 market analytics success is through the Michigan
22 e-Library program. MeL, the Michigan e-Library

1 program, it is direct support, 24/7, staffed by
2 real humans most of the 24, for support and
3 resources directed to entrepreneurs and small
4 businesses. And it is focused on the Michigan
5 market, expensed for the Michigan market. It
6 comes through a IMLS grant, the Institute of
7 Museum and Library Services, a federal program,
8 through the state Library of Michigan. And
9 without these resources, thousands of people
10 would be short, falling short, sometimes at 2:00
11 in the morning, sometimes when they're burning
12 that midnight oil, on the intelligence that they
13 need to succeed.

14 Likewise, I want to reframe for you
15 all here the role of the librarian not just as
16 the story time librarian, though that is
17 absolutely essential for early growth of the
18 child, learning how to read so they can read to
19 learn, the librarian who makes the reference
20 question happen, the librarian who provides. I
21 would like to reframe the librarian in our lives
22 as what they truly are, which is a market

1 analyst. All of those resources in the
2 collection are static without somebody who can
3 help support the interrogation of the data and
4 support, well, business literacy.

5 We have a lot of supports in this
6 ecosystem that are about how to: How do I do?
7 How do I find? How do I know? And to have
8 somebody as a partner in you developing literacy
9 skills, that's a lovely idea. Libraries have
10 been doing it for generations. On the business
11 side we've been doing it for years and years and
12 years. And there is not necessarily an
13 integration of the librarian into that matrix.

14 The expertise and the experience that
15 they bring, for example, with the National
16 Institute of Health and the National Library of
17 Medicine, there is a certification program for
18 health medicine librarianship. I would suggest
19 that there is something like that that could be
20 available through SBA or Department of Commerce
21 or one of our other agencies where a trusted
22 professional who can teach business literacy

1 skills, who has the asterisk next to his or her
2 name about them being certified in developing
3 small businesses would go a long way to making
4 that trusted provider of family literacy
5 resources a powerful provider, a highly leveraged
6 provider of business literacy resources as well.

7 There's some great examples of it.
8 Biz Boost at the Denver Public Library is one.
9 They've got a heck of a team over there.
10 Thousands of people have walked through the door
11 since 2013 to ask their business reference
12 librarian those kind of questions and have that
13 relationship develop that helps build skills and
14 not just provide answers.

15 The last piece that I want to leave
16 you with today is a reminder about the built
17 infrastructure, the built infrastructure of the
18 library. It is a first mile and a last mile
19 opportunity for innovation, entrepreneurship,
20 small business development. The last mile/first
21 mile on it is either wrap-around services when it
22 comes to a fully functional partnership with an

1 SBA or an EOC. The first mile/last mile on it in
2 a business literacy desert is that they can
3 provide those kinds of skills with the right
4 kinds of supports.

5 The built infrastructure includes
6 access to broadband, access to the collection,
7 access to the librarians. It completes the
8 ecosystem in venture capital funded environments
9 as well. I got to say this: the local
10 infrastructure of having a librarian who's
11 sitting behind a reference desk at the local
12 public library and not with 1871 in Chicago, not
13 with another business -- I live in Chicagoland --
14 not with another business incubator doing that
15 kind of reference service I think is a shortfall
16 for many of these kinds of high tech enterprises.
17 It jumpstarts the ecosystem in otherwise isolated
18 communities by being the co-working space, the
19 space that accesses. And it provides a wrap-
20 around, like I said before, with other existing
21 partnerships.

22 I appreciate you taking a few minutes

1 and just putting this in your head. I want to
2 give you a couple keywords to talk about. And I
3 do want to encourage the opportunity to chat
4 about what this environment of public libraries
5 could do to accelerate the work that you guys are
6 charged with.

7 Yes, please?

8 MEMBER BOESCH: Yes. So I had kind of
9 a comment and a request.

10 MR. CHRASTKA: Certainly.

11 MEMBER BOESCH: So, the kind of the
12 new role of the library is kind of dear to my
13 heart. My husband did the renovation of the
14 Boston Public Library as an architect. We're
15 also doing amazing programs like this.

16 But one thing that we have found is
17 that for places that don't have the kind of
18 resources like the New York City Library or
19 Boston Public Library, the organization that I
20 work for and the Gates Foundation collaborated on
21 a free resource toolkit for librarians, which is
22 like a design learning toolkit for librarians on

1 how to help them, like, reimagine their roles and
2 prototype things at very low cost.

3 So I would encourage you to use that
4 as a resource in your network. I think it's very
5 helpful for kind of thinking about the librarians
6 inside of the library.

7 The other question that I had is that
8 I often get requests from people that want to use
9 libraries as resources from other things. For
10 example, there's an amazing guy on the digital
11 development team in the city of Boston that
12 wanted to talk exactly about libraries as places
13 to convene music groups, because he would love to
14 have a beta test group for new government
15 services that he's designing digitally.

16 So how does somebody like that that
17 just has that idea actually make a connection to
18 this group to kind of make it happen?

19 MR. CHRASTKA: Well, the opportunity
20 to do it starts, of course, with local
21 relationships, but it also starts with the
22 leavening of a policy conversation that says this

1 is normal and normative. So on both prongs, the
2 local, yes, I'd like to do this; let's talk it
3 through. That's the human-to-human. But from a
4 policy perspective, the idea that that is
5 validated and that is encouraged is the magical
6 approach I would suggest.

7 MEMBER KAPP: So I just want to add
8 two things, because your presence here came out
9 of really a conversation I had with Andy Stoll
10 over at the Kauffman Foundation after some of the
11 work that we did. And when you think about rural
12 communities and sort of non-traditional
13 communities, there's a couple of anchor
14 institutions. And as you know, I carry the flag
15 for community colleges in particular. But the
16 library, and one of the things that Andy and I
17 were having a conversation with was that
18 libraries are often one of the first places that
19 many entrepreneurs still go to when they think
20 about starting a business.

21 So for the organizations that we
22 represent, in addition to thinking about it as a

1 macro, from a macro perspective, it still is one
2 of the primary entrees for entrepreneurs and
3 people who are thinking about starting
4 businesses, and particularly in communities. And
5 so I just want to underscore what you said,
6 particularly in communities that may not
7 necessarily have the resources of a large city,
8 that outside of a community college the library
9 is going to be one of the primary institutions
10 where people are going to come.

11 And having the ability of those
12 librarians to both collaborate with them and also
13 point them in a right direction is a significant
14 opportunity to help spur rural entrepreneurship,
15 which has recently become very important as a
16 result of a new Executive Order that Andrew had
17 made me aware of that came out on April 25th from
18 the president underscoring and putting together a
19 rural task force among a number of agencies.

20 So this conversation is germane on a
21 number of different levels. And it's important
22 to understand that, that the various roles that

1 the library can play in some of the more non-
2 traditional, as we talk about access to capital
3 and we talk about communities that don't
4 necessarily always have access to the amount of
5 resources, a library is one of those anchor
6 institutions that offers a bunch, a number of
7 possibilities.

8 MR. CHRASTKA: Yes, in the presence of
9 an existing ecosystem of entrepreneurship and
10 support through either VC-funded or philanthropy-
11 funded incubators or accelerators, the library
12 has a component. In the absence of that, the
13 library might be a sole provider.

14 We've got some states where everyone
15 has a community college, like Illinois. Not
16 everyone has a library. There are some gaps in
17 the service area. We flip that in other places.
18 And the fact that it works in a way that is
19 relevant to the local community, whether it's an
20 urban, rural, suburban, farming community,
21 whatever, that relevancy makes it possible to
22 move very quickly into this kind of a model.

1 Yes, sir?

2 MEMBER KENNEY: First of all, this is
3 great, a really though-provoking thought about
4 resources that we can take advantage of,
5 especially in the far-flung parts of the country.

6 I know in Oregon, where I'm from, a
7 lot of our rural areas, the libraries have closed
8 branches and are also down to, like, two days a
9 week of being open.

10 MR. CHRASTKA: Right.

11 MEMBER KENNEY: And I'm just curious,
12 if I were to try to approach them, they're not
13 thinking about adding services; they're thinking
14 about trying to keep the doors open. Is there
15 sort of a financial access to capital for
16 libraries kind of argument? You know, hey, if
17 you consider doing this you may be able to access
18 some additional resources to support the library
19 overall.

20 MR. CHRASTKA: Right now the financial
21 -- so the average public library receives about
22 90 percent of its revenue and funding from the

1 local ZIP Code, 90 to 93 percent. There's
2 another 3 to 5 percent that is state, and then
3 another 3 percent or so that's federal on a pass-
4 through basis, usually for programmatic.

5 There is no innovation fund right now
6 in this country that's at the federal level, and
7 there are no innovation funds at the state level
8 that I'm aware of. What we see are built
9 environment tax credits happening in certain
10 states to try and encourage a public/private
11 partnership between a developer and the library
12 as a public institution, and that allows then for
13 states to be utilized for making, for
14 fabrication, for co-working, that kind of stuff.

15 Indiana's got some good models.
16 Colorado's got some very robust models as well.
17 But at the federal level right now, an innovation
18 fund that would move through public libraries to
19 impact small and rural, to impact urban business
20 literacy deserts would be a fascinating
21 discussion to have.

22 In Oregon, you're right. There's some

1 real issues in timber country right now. We're
2 actually losing a library system in Oregon this
3 year. Douglas County, Oregon, is closing in 11
4 towns, 9 branches, because they failed on a local
5 ballot measure. That's that 90 percent of the
6 funding formula.

7 Yeah? Yes, please.

8 MEMBER BALDWIN: So there's a new high
9 school in Chandler, Arizona. And the high school
10 library is the public library. And that seems to
11 me that that's a very efficient model, that it's
12 closed during the weekend: high school kids
13 aren't at school; it's open on the weekend for
14 the public. And it gives economies of scale.

15 So do you see any more of that
16 happening in order to keep libraries open?

17 MR. CHRASTKA: There is a significant
18 push going on in the Dakotas to do co-located
19 spaces for public libraries and school libraries.
20 And there's some real intentionality on the part
21 of the state library agency to help cultivate
22 those. It tends to be in more rural and

1 isolated, though there are also examples in the
2 exburbs in a place like Oakley, California, where
3 it started, the public library started as the
4 third room of a three-classroom size high school
5 space. And now the city's grown enough -- it's
6 outside of, it's about an hour and 15, hour and
7 20 minutes west of San Francisco or Oakland -- to
8 then emancipate the library as a stand-alone.

9 So those kinds of relevant local
10 partnerships certainly help bridge the funding
11 divide between the public library and the school
12 system and certainly help leverage the staff.
13 What's appropriate for the community, given its
14 size though, is always an issue. I don't know
15 the community in Arizona that you're referring
16 to, but it is a working model.

17 Yes, please.

18 MEMBER BOWLES: How do you measure
19 success? How do you know if this is working?

20 MR. CHRASTKA: Well, in the Mid-
21 Continent Public Library example from earlier
22 where there's 45 fully built-out businesses in

1 either one, two, or three years of at-market,
2 there's another 45 or 50 that didn't get all the
3 way fledged, and they're going back to the
4 drawing board. So you can measure the metrics on
5 outputs.

6 In Dallas, where there's the Dallas
7 B.R.A.I.N. project which brings together -- maybe
8 you're familiar -- the measures of success there
9 vary. They are point of contact, how many folks
10 did we actually help? How's the quality of the
11 business reference interview? I think that there
12 still has to be some work done in terms of
13 looking at business literacy in the same way that
14 we can score early childhood reading literacy. I
15 don't think we've gotten there quite yet.

16 And that has to be a collaborative
17 discussion because if we're looking at college-
18 ready, that's one thing. If we're looking at
19 career-ready, that's another.

20 MEMBER BOWLES: And how do you ensure
21 that the people that are there advising, helping,
22 building these companies actually have any

1 experience doing that?

2 MR. CHRASTKA: Right. Right.

3 MEMBER BOWLES: I think that's what we
4 struggle with in Dallas with the B.R.A.I.N.

5 MR. CHRASTKA: Business reference, on
6 the part of a librarian doing business reference,
7 there is training; there is standards and
8 practices; there are ongoing opportunities to
9 learn to do business reference. The partnerships
10 that exist with organizations like SBA and SCORE
11 and other for-profit or not-for-profit local
12 partnerships have to be vetted.

13 My ideal is a project called the
14 Alexandria Network in Arizona. It's Maricopa
15 County. It is Phoenix. It is one or two other,
16 Goodyear, where it is a relationship between the
17 library both as venue and as business reference
18 resources, private capital, and some
19 philanthropic capital coming in to encourage
20 different populations, and ASU. And they have
21 Arizona State University in that mix is certainly
22 the validator that we're looking for.

1 I would look at the community college
2 environment as being one of those in many
3 communities. Otherwise, access to business
4 intelligence is one thing. Access to mentorship,
5 we all have our conundrums.

6 MEMBER BOWLES: Thank you.

7 MR. CHRASTKA: Thank you so much.

8 MR. BUERSTATTE: Thank you so much,
9 John. Yes, we --

10 MEMBER BAGLEY: Is there a website or
11 something where --

12 MR. CHRASTKA: Everylibrary.org.

13 MEMBER BAGLEY: Okay. But I didn't
14 see entrepreneurship there.

15 MR. CHRASTKA: I will work on
16 highlighting another tab for you in the next day
17 or two, and I'll pass some information along from
18 Craig, if that's all right.

19 MEMBER BAGLEY: Okay. Sorry about
20 that.

21 MR. CHRASTKA: You're good, don't
22 worry.

1 Thank you.

2 MR. BUERSTATTE: Thanks so much for
3 spending some time with us, John. That was
4 really insightful. Really appreciate it.

5 So lots of new ideas. And rather than
6 -- but it's always good to deliver on the things
7 that we've been discussing already, making sure
8 we're wrapping things up and packaging them well
9 for the Secretary. So as I mentioned earlier,
10 Sue and Emily had visited D.C. and have made a
11 lot of progress on their manufacturing talent
12 initiative. And I think they might have some
13 updates.

14 And also Trey and Joe probably have
15 some updates on the entrepreneurship initiative
16 and engaging more communities.

17 So really wanted to open up the
18 platform right now for some general updates
19 before we all breakout later.

20 Sue or Emily, would you want to kick
21 things off?

22 MEMBER REICHERT: Is there anything in

1 particular you wanted to cover?

2 MEMBER SMITH: Yes. I think just kind
3 of talking about some of the things that we found
4 out and some of the observations that we made.
5 There's no real good definition, no universal
6 definition for advanced manufacturing. And so
7 it's kind of all over the place. And so the
8 Department of Labor had suggested modern
9 manufacturing, which is advanced manufacturing
10 and also high tech manufacturing. So that was
11 kind of interesting.

12 And there's really also no -- although
13 apprenticeship is well-recognized as a solution
14 or one of the solutions for the workforce skills
15 gap, there's no real champion of apprenticeship
16 programs across the country. So we talked about
17 that a lot.

18 And getting all the -- just figuring
19 out what was going on across the country and from
20 various groups within the state or federal
21 government was amazing, too, I thought. So, yes,
22 so we took all that and we sort of, we revamped

1 our recommendation. And Eric was good enough to
2 fix that up for us. And so I think it's really
3 pretty good actually, pretty comprehensive.

4 MEMBER REICHERT: So I assume we'll be
5 distributing the recommendation here. Oh, we
6 have distributed it already.

7 So you will notice that what I think
8 has been done very skillfully -- and again I'll
9 credit Eric for figuring this out -- is that we
10 not only talked about advanced manufacturing and
11 what needs to be done there based on the research
12 that we have done across both the Department of
13 Commerce, talking to the National Association of
14 Manufacturers, and Department of Labor on our
15 recent trip, but we've also been able to pull in
16 there the relationship to hard technology
17 development.

18 So really we're looking at this as a
19 way that hard technology, entrepreneurship, and
20 innovation and be enabled by having a stronger
21 advanced manufacturing workforce across the
22 board. So, you'll see in the recommendations

1 made that it really spans across everything from
2 DOE and some of the things that we heard about
3 today, all the way to some of the programs under
4 Department of Commerce, including the
5 Manufacturing Extension Partnership.

6 MR. BUERSTATTE: Just to be clear, it
7 is attached to the back of your agenda. So this
8 draft recommendation that they just discussed, if
9 you haven't browsed through it, please do. And
10 they'll be diving into that again later this
11 afternoon.

12 But maybe more related to this
13 EveryLibrary discussion is Trey and Joe's effort.
14 I think we're calling it in draft form right now
15 E for All, Entrepreneurship for All. Trey or
16 Joe, any interest in sharing updates there?

17 MEMBER SCHOCKEN: You don't have a
18 microphone. Can somebody give him a microphone.

19 MEMBER BOWLES: I'll start. Joe and
20 I got the chance to meet in Austin during --

21 MR. BUERSTATTE: Hold on just a second.
22 Can't hear you.

1 All right. We're back.

2 MEMBER BOWLES: Joe and I had the
3 opportunity to meet at South by Southwest to sort
4 of talk through this concept of what does it look
5 like to bring support services to entrepreneurs
6 across the country and how do we make that work?
7 And so we have been working through a proposal
8 for the rest of the NACIE group to walk through a
9 how NACIE can participate in this.

10 And I think forgive Joe and I that we
11 have discovered a problem. And it's hard to get
12 an entrepreneur to discover the problem then not
13 try to solve the problem at the same time. So we
14 are still working on generalizing it a little
15 bit, making it a little bit more high level as to
16 how we can be involved as opposed to actually
17 going and developing a plan and implementing it.

18 But we have separated this problem
19 into four different areas, the four Cs as we call
20 them: competence, capital, coaching, and
21 capacity. And so we can walk through some of
22 that later as we want to. But the idea is -- and

1 I'll let Joe go into a little bit more on the
2 community college side -- but recognizing that we
3 believe one of the most important components of
4 helping entrepreneurs be successful is that
5 coaching or mentorship piece, recognizing that
6 things like the libraries and the community
7 colleges and the different institutions that
8 exist can be helpful.

9 But until you put somebody who's done
10 it before in front of an entrepreneur, that's
11 really the most valuable thing you can add.
12 They're even more valuable than capital in some
13 cases. So we are working on that and I think
14 hope to have that up to the group prior to the
15 next meeting.

16 Joe, you want to?

17 MEMBER SCHOCKEN: Yeah. I would just
18 add to that that when we look at entrepreneurship
19 and scale, the challenge that I think we all have
20 is that, how do we go ahead and identify
21 organizations and communities across the United
22 States that can help leverage assets and

1 resources to help entrepreneurs? And those are
2 the institutions that I previously sort of
3 referenced as anchor institutions that exist.

4 And unlike perhaps some other
5 institutional organizations where you may have
6 sort of one-off non-profits that focus on
7 economic development, community colleges have a
8 history, one, of working with industry and
9 collaborating with workforce development. And
10 they're fairly ubiquitous. There's about a
11 thousand community colleges across the United
12 States. And so while we were trying to identify
13 institutions that may be able to serve as the
14 sort of proverbial hub, the community college
15 institution really lends itself well because of
16 the expanse of geography and the nature and the
17 history of it.

18 In addition, I'd also add is the
19 ability for the community colleges to also work
20 and collaborate with K through 12 systems in
21 their local communities, and the ability to bring
22 other resources, both from a local perspective, a

1 state perspective, a federal perspective, and
2 even international perspective. And so part of
3 this is, you know, as we discussed the sort of
4 four C's, what is the ability, how can we go
5 ahead and leverage it so it scales across the
6 United States?

7 And so, in collaboration, one of the
8 things that we found is that in working and
9 collaborating with four-year institutions and the
10 ability to work with universities who also have a
11 significant role and often have a lot of the
12 research, the ability for those organizations to
13 work collaboratively to really help drive sort of
14 these four Cs, part of this is to go ahead and
15 identify opportunities into sort of non-
16 traditional communities, communities that maybe
17 historically have been bypassed, marginalized
18 communities.

19 So we've done a lot of thinking and
20 work around this. And we're looking forward to
21 continuing the input so we can make sure that
22 we're both expansive but also are able to put

1 together some things that the OIE and this team
2 can really help from an execution perspective and
3 fits within -- under the framework of what this
4 group and OIE is supposed to do.

5 MEMBER GOONEWARDENE: Just a comment
6 on the mentoring. So this is an issue that we
7 think about a lot at UT system because we're
8 trying to cover places like El Paso and Rio
9 Grande Valley. And so we have piloted
10 successfully a mentoring network that has
11 curriculum, code of conduct, a selection process
12 for mentors, puts mentors together on teams, and
13 then has an IT infrastructure customized
14 underneath it where you can schedule
15 appointments. You can every -- after every
16 mentoring session, each party gets an evaluation
17 mechanism. There's tracking, and there's a
18 virtual mentoring component to it.

19 And the first pilot has gone very
20 well, and so now it's being expanded through UT
21 System. So if you ever want to talk to the
22 person that works in my office that's doing that,

1 we might be able to save you a little bit of
2 time.

3 MEMBER HERSKOWITZ ORIN: So you built
4 that -- is it Union, 1776 was Union software.
5 You guys custom built this?

6 MEMBER GOONEWARDENE: No. We work
7 with the guy that developed Blackboard.

8 MEMBER HERSKOWITZ ORIN: Okay.

9 MEMBER GOONEWARDENE: And we
10 customized his product. Yeah, I'm familiar with
11 the 1776 solution.

12 MEMBER HERSKOWITZ ORIN: Thank you.

13 MR. BUERSTATTE: So real quick, I
14 think that would be -- that's a great example of
15 a program or a tool that could complement one of
16 the categories that Joe and Trey just described.
17 So from a federal perspective what they were
18 alluding to was, Andrea and I have been pushing
19 them to think how in government's mind can we be
20 a facilitator, a catalyst for this conversation.

21 And if you look at a theoretical
22 national initiative to support confidence,

1 coaching, capital, and capacity, how do you
2 organize national and regional players in those
3 verticals to double down on what they're doing?
4 So I think national players goes without saying.
5 But the effort aligns in also finding the right
6 regional solutions that can or maybe have an
7 opportunity to scale or at the right time in
8 their organizations grow so they can reach more
9 communities. That's the end goal here, right?

10 So, we are not the ones -- and again,
11 Joe and Trey, sorry if I sound like a broken
12 record -- but we're not the ones, federal
13 government are not the ones rolling out these
14 programs, but how can we be the convener, a
15 funder, a supporter, an amplifier of those
16 solutions that are working? And how do we spread
17 the news?

18 MEMBER KAPP: And I would just add to
19 that one component. Maribel and I had lunch
20 today. And I think when we talk about this in
21 some of the broader contexts of robotics and
22 innovation, the future of workforce, what I call

1 the future of wealthforce, because the nature of
2 work is changing as more artificial intelligence
3 and more of those things come online the
4 importance of -- I'll give you a really good
5 tangible example.

6 With the automation of automated cars
7 and self-driving cares, about 1.5 million truck
8 drivers are potentially out of work when that
9 happens. And so the role that this has in that
10 workforce development -- and a lot of people
11 referenced West Virginia and the coal economies
12 and what's happened there -- and I believe that
13 with automation robotics, we're on the cusp of a
14 significant change in the way that the workforce
15 is going to be utilized in the future.

16 And so in many respects, this
17 conversation about the four Cs is a bit of a
18 visionary conversation as well about the future
19 of workforce and how do we begin to mobilize and
20 have those conversation in meaningful ways, and
21 what' the role that government plays, what's the
22 role that foundations play, and what's the role

1 that corporations play to ensure that we have
2 workforces and/or that the United States has the
3 ability to make sure that its population
4 continues to engage in meaningful and purposeful
5 activities?

6 So that's a bit further out there. I
7 get it. But this work is very, very important.

8 MEMBER BOWLES: And I think what we're
9 learning as we have to sort of take this problem,
10 come up with a solution, and then back out of it
11 into where NACIE can play a role, because there's
12 so many different parties that will need a play a
13 role. Fortunately, OIE has been very helpful in
14 letting us know what that can look like. And so
15 I'm hoping that we're going to make even more
16 progress today. But I think that it's something
17 that Joe and I are exceptionally passionate
18 about, and I know several other people around the
19 table are.

20 And we're looking forward to coming
21 back with something that you guys can get excited
22 about.

1 MR. BUERSTATTE: Any other questions?
2 Questions or thoughts on that?

3 MEMBER HERSKOWITZ ORIN: The only one
4 being that Andrew from Venture for America --
5 thank you -- he's posted frequently on that
6 specific, Joe, on what you were just talking
7 about, about the sort of -- what the impact of
8 machine learning and natural language processing
9 and those other things, robotics and automated
10 manufacturing, are going to have on the
11 workforce.

12 And when Bill Gates and Warren Buffett
13 were at Columbia -- I think I sent that link
14 around -- but they spent a good chunk of that
15 talk, of their talk talking about the challenge
16 that these technological innovations accrue --
17 the benefits accrue to a very small number of
18 people, but the damage accrues very widely. And
19 that there's no clear market-based approach to
20 try and rectify that. That it's sort of those
21 are the classic must-be-done-by-government
22 problems because there's no free market incentive

1 to redistribute the wealth backwards.

2 And so it seems like it's a great
3 topic.

4 MEMBER KAPP: Yes. And Mark Cuban
5 I'll add to that list. Mark Cuban's another one
6 who's having, you know, those conversations. And
7 so I think that if there's any sort of legacy
8 piece when we look a little bit forward as well,
9 it's kind of maybe offering up some ideas. You
10 know, I know that we want to get traction as soon
11 as possible, but also, you know, thinking a
12 little bit further out as well on some of the
13 ways that we can go ahead and initiate this
14 dialog within OIE, and the role that government
15 can play, because it's an important piece.

16 And we've seen it in Appalachia in
17 coal-affected communities. And I think that that
18 is sort of an indicator, a leading indicator of
19 some of the potential challenges. And I think
20 it's a good conversation to have.

21 MR. BUERSTATTE: Anything from someone
22 who hasn't spoken yet today? A lot of you have

1 been quiet. This is unusual.

2 Anything related to John's
3 presentation on EveryLibrary, or Drew? We'll
4 have Drew with us for the rest of the day but
5 wanted to take advantage of them while we've got
6 them here.

7 All right, Andrew.

8 MEMBER REAMER: I introduced her
9 briefly but I just want to introduce again Heidi
10 Sheppard who, for four years, coordinated the
11 Interagency Network of Enterprise Assistance
12 Providers; is that right? Can you say just a
13 couple words about what that was?

14 MR. BUERSTATTE: Heidi, can you go to
15 a mic please.

16 MS. SHEPPARD: So the acronym is
17 AnyApp, which was a group of agency
18 representatives across the federal government,
19 all of whom were working to support the
20 development of small businesses. So we had folks
21 from EDA, from Department of Labor, from DOE,
22 from EPA, from NIST/MEP, ARC, DRA, I mean a whole

1 -- yes, all the acronyms, AACC. There were other
2 people involved as well, other organizations. So
3 there were non-profits and associations that
4 would come to the meetings.

5 And the sole focus was to hear about
6 what each other -- what everybody was doing and
7 how they could leverage and build stronger
8 partnerships and relationships and understand
9 what each other was doing and help each other
10 achieve the goals that they were setting out to
11 do to support small businesses.

12 Unfortunately, it dissolved. There,
13 I was leading the charge and just didn't have the
14 capacity to really work on it anymore. We looked
15 for other folks to take it over, and just that
16 never really happened. So it would be great to
17 revive it if anybody wants to. But this is
18 certainly kind of like that. But that was
19 something that I worked on for a number of years
20 while being at MEP.

21 MR. BUERSTATTE: I'll just add my
22 take-away from that and having participated in

1 AnyApp, it is a great example of what we
2 discussed earlier around being tactical with
3 where you place your policies and efforts and
4 programs to ensuring that there is the right
5 resources and it's housed in the right agency
6 with a long-term game plan perhaps. And we --
7 Heidi, she was really doing this by just
8 volunteering really. And it was like she had a
9 full program she was managing on the side.

10 And so when we think about maybe these
11 ideas and solutions that we think might be good,
12 make sure we're also thinking about how they
13 could possibly be sourced and ensuring we've got
14 a long-term game plan.

15 MS. STEVENSON: Can I ask a layperson
16 question? So one of the things I don't
17 understand is it seems like there would be so
18 much value in having a full-time role or head
19 count that dedicated to integration, maintenance
20 marketing of integration. It seems like it could
21 almost pay for itself in terms of finding
22 scalability, efficiency, effectiveness.

1 I'm just curious sort of how head
2 count decisions are made? Or is that an area
3 where we could also provide some perspective or
4 influence? Because when I look at what Andrew
5 put together and the fact that this was sort of,
6 as we would say at my company, your side hustle,
7 like you're doing this just out of will. But it
8 just seems like there would be so much value to
9 this. Is there anything that we could do to help
10 to support that effort?

11 MR. BUERSTATTE: Absolutely. A short,
12 quick answer is I think the easiest way to
13 address that might be through the OIE strategic
14 plan development and talking about that
15 integration role. But I'll -- and there's a few
16 other ways we could look into that. And I'd love
17 to spend some time peeling back layers.

18 But my maybe more robust answer is,
19 because of the way we're structured, we are
20 inherently biased to protect what we do. And it
21 is hard in D.C. to go to another agency and say,
22 hey, I'm doing this. Let me, let me help you.

1 And it happens in any organization.
2 It's no different in corporate America. People
3 feel that you are infringing on their territory.
4 So I think there's multiple problems or
5 opportunities that you'd have to look at, not
6 only sourcing, what type of head count and
7 resources would be needed, but also finding the
8 right podium or venue that would help decrease
9 any sort of friction and increase buy-in from all
10 the stakeholders.

11 We're learning -- we actually have a
12 traditional economic development integration
13 role. So this is your bricks and mortar, some
14 of your technical assistance in strategic
15 planning that EDA does, we, by OMB, have been
16 mandated to be the integrator for all the federal
17 government for economic development. That's
18 aside from the innovation and entrepreneurship
19 charge.

20 And we're about 10 or 11 months into
21 that now. And that's exactly what we're finding.
22 There's apprehension. There's some lack of buy-

1 in. And at the scale to which we operate, too,
2 it's a massive movement where you're literally
3 trying to steer the Titanic. So lots of
4 challenges there. But we've got lots of
5 opportunity.

6 MEMBER STEVENSON: And are successes
7 is measured sort of vertically, or is there
8 opportunity to look at incentivizing shared
9 integration in terms of how people's individual
10 performance is measured?

11 MR. BUERSTATTE: I think that's
12 another challenge where we all, agencies, and
13 Andrew identified the variety of entrepreneurship
14 happening across government, and we're all
15 looking for different outputs or different
16 outcomes, right? Whether it's at EDA, it's a
17 thriving economy and competitive innovation and
18 high-wage jobs. In other agencies, let's take
19 the Small Business Innovation Research Program,
20 for example, billions of dollars going towards
21 commercialization of early-stage research, many
22 of them are less concerned, most of them might be

1 less concerned about the economic development
2 outputs, but they're more concerned about the
3 actual technology.

4 DoD wants their armor. Navy wants a
5 new vessel, and so on and so forth. While the
6 jobs numbers are important, so how do you -- what
7 mechanisms at a macro, like, management level can
8 you use to incentivize if they're all looking --
9 if they all have different incentives. That's my
10 long-winded way of saying that's a challenge,
11 too.

12 Joe.

13 MEMBER SCHOCKEN: Do you want me to
14 talk about some of the things that I've been
15 working on?

16 MR. BUERSTATTE: Sure. Please.

17 MEMBER SCHOCKEN: So my experience in
18 innovation and entrepreneurship is such that
19 capital formation is just absolutely critical and
20 terribly important. As I listen to everybody
21 around the table and all these very thoughtful
22 programs, I hear that with great respect.

1 I look back to the experience I had
2 around the JOBS Act which passed in 2012. And
3 let me just do a little got and bad around the
4 JOBS Act.

5 The good would be on the IPO side that
6 there has been an increase in the number of IPOs
7 as a result of the JOBS Act. I can go into the
8 thinking behind that. It has not been as
9 successful in generating new IPOs, but that's for
10 other market-related kind of reasons. But,
11 nonetheless, it has been successful.

12 I would say three things around the
13 good side of the JOBS Act. So, one being IPOs.
14 The second being general solicitation. And
15 without going into an awful lot of detail around
16 general solicitation, I can give you an eye-
17 popping number that I think is \$33 billion funded
18 in a year-and-a-half. Under the general
19 solicitation provisions of the JOBS Act, \$33
20 billion of capital.

21 Now, how much of that would have been
22 created anyway via private placements without the

1 benefits of the JOBS Act isn't clear. It's still
2 a pretty impressive number. And much of that was
3 made possible by the minor regulatory fixes in
4 the JOBS Act.

5 And the third thing I would say on the
6 good side of the ledger is online funding. In
7 the first I think it is two years since the JOBS
8 Act, \$1.4 billion of funding went into various
9 kinds of enterprises under rules created by the
10 JOBS Act.

11 And so those are pretty significant
12 financial impacts on job creation and
13 entrepreneurship.

14 On the negative side talking about the
15 JOBS Act, I will say two things. First of all,
16 the bad side on general solicitation is that the
17 rules put in by the SEC, which requires third
18 party verification -- and, again, I don't want to
19 get too detailed here -- and while that may not
20 seem like a major distinction, I can tell you it
21 has had a major chilling effect. The general
22 solicitation provisions would have been far more

1 successful had the previous self-verification
2 rules been allowed to remain in force.

3 And the second thing I would say is
4 the equity crowd funding, which is one of the
5 really central pieces of the JOBS Act. Equity
6 crowd funding around the world is a major
7 modality when it comes to capital creation. It
8 is not in the United States. And the SEC rules
9 created around the JOBS Act have been an abject
10 failure. I think we've had about 18 months of
11 experience under equity crowd funding, and I
12 think the total amount of capital that's been
13 raised is something like \$15 or \$20 million
14 nationally. I mean it's just an absolute
15 failure.

16 So the frame that I bring to this
17 discussion is my experience in funding early-
18 stage companies and the importance of capital in
19 doing so. And so what we have been working on is
20 a piece of legislation to address some of the
21 short-term issues and to begin to address some of
22 the longer term issues facing capital in the

1 innovation economy. And we have draft language
2 on that legislation. We have sponsors in both
3 the House and the Senate. We're kind of haggling
4 these days over the wording on some of the
5 findings and some of the actual provisions in the
6 legislation. But you should expect to see it --
7 unless I'm terribly disappointed here -- I expect
8 to see it introduced in both houses of the
9 Congress in the next 30 days.

10 And I think this can also, I think
11 this can be hugely influential from a job
12 creation and innovation standpoint. And I'm
13 happy to talk about that more.

14 MR. BUERSTATTE: Yes, thanks, Joe.
15 And, again, we'll have more time this afternoon.
16 So those that maybe it might have piqued your
17 interest just now, I'd encourage you to speak
18 with Joe on that.

19 I'd also encourage you to remember
20 that we are, friendly reminder, we are an
21 advisory council to the Secretary, so anything
22 discussed as far as legislative issues, as Joe is

1 also doing in a different capacity, make sure
2 that we keep things related to our jobs and roles
3 here on the advisory council.

4 But with that said, I did breeze
5 through the rest of the public comment earlier
6 because I was so happy to hear from John that I
7 forgot to mention are there any other public
8 members here that would like to comment at this
9 point, either in the room or on the line?

10 (No audible response.)

11 MR. BUERSTATTE: Also, I think we have
12 Rick Johnson and Whitney were dialed in for
13 portions of this. Rick or Whitney, any comments
14 on your end? Want to make sure we include you.

15 (No audible response.)

16 MR. BUERSTATTE: All right. So a lot
17 of information today. I'm hoping that as we get
18 up and stretch our legs, the energy and
19 engagement might be a little bit higher. I'm
20 looking at you, Mike. Rarely quiet. And Scott
21 Frederick, I'm not sure if we've heard from you
22 today. But hopefully the breakouts will add a

1 little bit more depth to the conversation.

2 And that is it from me formally.

3 Melissa, any remarks?

4 CO-CHAIR BRADLEY: I would just say
5 thank you to Emily and Sue, to Trey and Joe,
6 certainly to Andrew. I want to acknowledge the
7 work that has transpired between the time we've
8 met. I know we're going to hear from you,
9 Heather, tomorrow as well, I think.

10 And so I really appreciate the
11 momentum. I also appreciate your patience in
12 trying to understand all the acronyms of what our
13 role is and is not. But I'm looking forward to
14 the breakout session to figure out how do we
15 connect the dots, and certainly working with Trey
16 and Joe and others.

17 Thank you. Oh, and Tiffany stepped up
18 as a leader. You mean Stevenson. Yes, I got
19 her. We had a good call.

20 So I guess I just want to make sure
21 that as we go into the breakout sessions, while
22 we oftentimes get into minutia in these sessions,

1 we're clear, and I appreciate Trey and Joe
2 stepping back and saying how do we reverse
3 engineer. But we respectfully stay in our lane,
4 but also keep a running parking lot because we do
5 also have the opportunity, much like Joe, thank
6 you for what you do in your work and outside of
7 the NACIE role. So I look forward to our report
8 outs this afternoon.

9 MR. BUERSTATTE: Great. At this point
10 then, as the designated federal officer, I would
11 like to officially close the meeting, the public
12 portion. This concludes today's session.

13 We will begin tomorrow morning I
14 believe at 8:45 here at the Commerce Library.
15 Thanks so much.

16 (Whereupon, the above-entitled matter
17 went off the record at 3:13 p.m.)
18
19
20
21
22

A		
AACC 106:1	6:4 8:11,12 38:6 44:7 45:12,17 46:18 47:6	51:16 57:18 103:4 109:2
ability 16:2 30:6 43:19 81:11 96:19,21 97:4 97:10,12 102:3	administrations 7:6 58:6	American 73:9
abject 114:9	administratively 59:1	AMO 14:13 25:6
able 10:6,10 54:10 61:8 70:2 72:17 83:17 92:15 96:13 97:22 99:1	admit 68:10	amount 12:12 24:22 28:5 44:17 82:4 114:12
above-entitled 118:16	advance 66:18	amplifier 100:15
absence 82:12	advanced 3:8 13:8 14:17,20 15:10 22:17 24:2 25:9 43:21,22 47:14 91:6,9 92:10,21	analysis 41:5
absolute 114:14	advantage 24:12 83:4 105:5	analyst 75:1
absolutely 74:17 108:11 111:19	advise 57:5	analytics 65:9 66:12 69:21 73:5,12,21
abundance 60:1	advising 87:21	anchor 80:13 82:5 96:3
accelerate 78:5	advisor 3:9,18 13:22 51:16	and/or 102:2
accelerator 53:14	advisory 1:5 4:4,14 50:10 59:5 61:17 115:21 116:3	Andrea 99:18
accelerators 37:11 82:11	advocacy 65:15	Andrew 2:4 3:11 5:8 38:17,22 39:2,6,8,12 39:16 49:2 51:9 52:21 54:1 55:2,11 62:18 81:16 103:4 105:7 108:4 110:13 117:6
access 7:22 20:11 63:4 66:10,11,12,21,22,22 66:22 67:3,7,9,12,14 67:15 68:21 69:1,19 71:6 77:6,6,7 82:2,4 83:15,17 89:3,4	advocate 63:16	Androids 70:15
accesses 77:19	Affairs 2:16 3:6 6:5,19 6:22 45:15	Andy 80:9,16
accord 12:7	AFFOA 22:17 23:7 24:2	angel 66:1
accrue 103:16,17	Afghanistan 36:12	announced 24:4
accrues 103:18	afternoon 38:12 62:10 63:1 93:11 115:15 118:8	annual 28:20
achieve 106:10	agencies 10:20 13:1 27:22 34:19 35:16,21 45:6,8 46:14 47:1,10 75:21 81:19 110:12 110:18	answer 31:20 33:13 108:12,18
acknowledge 11:16 117:6	agency 26:3 35:5 44:21 45:1 48:20 55:20 85:21 105:17 107:5 108:21	answers 76:14
acronym 105:16	agenda 3:2 10:1,1 66:15 93:7	anticipated 21:6
acronyms 10:20 106:1 117:12	aggregate 56:18	AnyApp 105:17 107:1
act 7:8,15 10:6 45:3 51:16,19 54:18 112:2 112:4,7,13,19 113:1,4 113:8,10,15 114:5,9	ago 22:6 25:19 64:5	anybody 14:13 49:13 106:17
Acting 3:3	ahead 9:18 11:14 60:11 95:20 97:5,14 104:13	anymore 106:14
activities 8:9 9:16 20:19 32:17 102:5	aim 41:10,21	anyway 112:22
activity 48:2	Alaska 44:6	Appalachia 104:16
acts 26:8 46:3	Alexandria 88:14	Appalachian 45:16
actual 111:3 115:5	align 26:16 38:7 52:20	applaud 60:14
add 51:8 55:12 80:7 95:11,18 96:18 100:18 104:5 106:21 116:22	aligns 100:5	applications 16:21
adding 83:13	Alliance 1:17	applied 14:21 15:6,11
addition 80:22 96:18	allowed 114:2	apply 29:2 54:7
additional 83:18	allows 68:2 84:12	appointed 58:8
Additive 34:7,15	alluding 99:18	appointments 98:15
address 8:2 64:19 108:13 114:20,21	Alvord 2:15 3:5 6:4,16	appreciate 10:17 64:4 77:22 90:4 117:10,11 118:1
Adjourn 3:22	amazing 60:14 78:15 79:10 91:21	apprehension 109:22
administration 1:3 2:17	America 22:18 43:5	apprenticeship 91:13 91:15
		approach 80:6 83:12 103:19
		appropriate 86:13
		apps 70:14
		April 81:17
		aptly 11:13
		ARC 105:22
		architect 78:14
		area 20:15 21:8 22:10
		22:11 42:1 61:1 82:17 108:2
		areas 17:3 24:1,8 43:22 83:7 94:19
		Argonne 20:17
		argument 83:16
		Arizona 85:9 86:15 88:14,21
		arm 56:18
		armor 111:4
		ARPA-E 47:16
		array 61:3
		artificial 101:2
		artisans 71:9
		aside 109:18
		asked 60:22 65:20
		asking 30:2,13,15
		aspect 44:11
		assessment 19:10 51:6
		assessments 19:13
		asset 50:19 52:7
		assets 63:18,22 95:22
		assistance 48:6,14 105:11 109:14
		assistant 2:15 3:5 6:5 6:18,21 7:1 32:13
		Associate 1:19
		Associates 1:18
		association 5:14 92:13
		associations 106:3
		associations' 53:14
		assume 92:4
		assumed 25:6,7
		AST 3:10
		asterisk 76:1
		ASU 88:20
		at-market 87:1
		attached 93:7
		attachment 72:22
		AU 1:15
		audible 116:10,15
		Austin 93:20
		authorization 55:9
		authorizing 57:20
		automated 101:6 103:9
		automation 101:6,13
		available 34:2 39:17,20 48:7 73:7,9 75:20
		Avenue 1:12
		average 66:7 73:19 83:21
		award 11:4 69:17
		aware 41:19 49:10 81:17 84:8
		awful 112:15
		B
		B 46:21

B.R.A.I.N 87:7 88:4
back 4:22 8:14 44:15
 61:3 87:3 93:7 94:1
 102:10,21 108:17
 112:1 118:2
background 18:11
backwards 104:1
bad 32:19 71:22 112:3
 113:16
BAGLEY 1:16 31:21
 33:1,15 89:10,13,19
BALDWIN 1:16 33:18
 85:8
ballot 85:5
Bank 45:11
base 15:16
based 20:6 60:21 61:3
 92:11
basic 15:5
basically 40:10 41:12
 42:3,14 43:3 46:5
 54:10 55:15 56:11
basis 41:5 84:4
Bathrooms 4:21
Bay 20:15
bear 60:17
becoming 19:17
behalf 14:4
Behavioral 1:22
believe 18:17 23:13
 25:16 95:3 101:12
 118:14
benefits 103:17 113:1
Berkeley 20:15
best 2:1 32:7 50:1
beta 71:14,20,21 79:14
better 19:18 37:7 52:19
beyond 31:2 57:1
biased 108:20
big 16:18 21:12 22:12
 37:2 43:6 67:19,21
biggest 24:21
bill 57:20 103:12
billion 26:5 52:16,16
 53:7 112:17,20 113:8
billions 53:11,12
 110:20
bills 22:6
Bio-pharmaceutical
 23:16
bit 4:9,15 6:14 9:3
 15:13 32:14 38:13
 39:22 62:9 67:4 94:15
 94:15 95:1 99:1
 101:17 102:6 104:8
 104:12 116:19 117:1
Biz 76:8
Blackboard 99:7

blue 62:15
board 33:6 87:4 92:22
boards 34:1
bodies 48:1
BOESCH 1:17 22:14,20
 23:1,9 78:8,11
book 70:9
Boost 76:8
boss 6:4
Boston 78:14,19 79:11
boundaries 57:1
BOWLES 1:17 59:16
 86:18 87:20 88:3 89:6
 93:19 94:2 102:8
Bradley 1:13,15 3:7
 11:8 49:2,5,14,17,20
 50:1,6 53:5 54:12
 117:4
branches 83:8 85:4
brand 72:22
break 5:1
breakout 90:19 117:14
 117:21
breakouts 33:2 116:22
breeze 116:4
bricks 109:13
bridge 86:10
brief 13:3
briefly 14:20 35:17
 39:21 66:15 105:9
Briefs 3:8
bring 5:21 9:15 29:14
 66:20 67:3 69:21
 75:15 94:5 96:21
 114:16
bringing 8:19 29:10
 60:16
brings 6:9 26:9 68:1,1
 87:7
broad 16:6 17:5,8
broadband 67:13 77:6
broader 47:1,10,12
 63:1 100:21
broadly 55:18 56:22
Broadmark 2:6
broken 17:12 19:4
 100:11
Brooklyn 70:3
brought 25:14 38:9
browsed 93:9
buckets 17:8
Buerstatte 2:18 3:3 4:3
 10:16 11:22 35:12
 38:20 39:12,16 51:9
 51:21 52:6,11 53:2,8
 54:14 55:1 57:22 58:5
 58:17 59:20 60:11
 62:8,18 89:8 90:2

93:6,21 99:13 103:1
 104:21 105:14 106:21
 108:11 110:11 111:16
 115:14 116:11,16
 118:9
Buffett 103:12
build 20:13 58:11 71:20
 76:13 106:7
building 59:15 87:22
built 66:17 67:10 69:9
 69:18 76:16,17 77:5
 84:8 99:3,5
built-in 20:20 24:14
built-out 86:22
bunch 82:6
bureaus 10:21 35:16
burned 66:1
burning 74:11
business 1:22 7:3,4,20
 8:3 19:14,15 37:13
 43:4,14 44:21 45:1,9
 45:12 46:6,18 53:13
 59:12 60:4,5 61:18
 64:20 65:1,9 66:12
 67:16,16 69:14,15,18
 69:22 72:8,11 73:4,4
 73:20 75:4,10,22 76:6
 76:11,20 77:2,13,14
 80:20 84:19 87:11,13
 88:5,6,9,17 89:3
 110:19
businesses 7:21 17:16
 19:17 43:9,15,16,20
 44:9 48:21 49:1 74:4
 76:3 81:4 86:22
 105:20 106:11
buy 72:18
buy- 109:22
buy-in 26:13 109:9
bypassed 97:17

C

C 3:1 4:1
C's 97:4
California 26:15 86:2
call 19:7 20:19 94:19
 100:22 117:19
called 7:18,19 19:9 65:1
 88:13
calling 93:14
capacity 14:6 94:21
 100:1 106:14 116:1
capital 1:15 2:6 20:14
 50:21 53:19 61:17
 63:4 65:22 66:21,21
 67:3 68:2 69:17 77:8
 82:2 83:15 88:18,19
 94:20 95:12 100:1

111:19 112:20 114:7
 114:12,18,22
capture 4:20 31:1
card 7:3,4 73:10
care 61:19
career 58:10
career-ready 87:19
cares 101:7
carry 72:22 80:14
cars 101:6
cart 72:14
case 20:15 27:18
cases 95:13
catalog 38:6 48:6,7
catalyst 99:20
categories 35:19 99:16
category 36:18 47:11
center 1:15,18 2:10
 63:7
centers 19:10 67:19
central 26:8 32:18,22
 114:5
Century 66:6 73:2
certain 30:22 31:1
 46:14 84:9
certainly 37:4 58:14
 62:6 67:7 78:10 86:10
 86:12 88:21 106:18
 117:6,15
certification 75:17
certified 76:2
cetera 36:9
chain 36:11
challenge 7:2 16:22
 18:3 53:14 95:19
 103:15 110:12 111:10
challenges 16:11 24:21
 104:19 110:4
Chamber 70:20
champion 91:15
chance 71:7 93:20
Chancellor 1:19
Chandler 85:9
change 11:13 101:14
changes 58:7
changing 101:2
charge 55:15 56:20
 60:3 106:13 109:19
charged 55:4 78:6
charging 41:22
Chase 2:8
chat 78:3
chatting 11:10
cheering 71:18
chemical 16:21 24:4
chemicals 16:4
Chicago 67:21 77:12
Chicagoland 77:13

Chicagoland's 2:1
child 74:18
childhood 37:8 87:14
Children 47:6
chilling 113:21
Chrastka 3:14 63:11
 64:3 78:10 79:19 82:8
 83:10,20 85:17 86:20
 88:2,5 89:7,12,15,21
chuckle 6:20
chunk 103:14
circuit 34:1
cited 32:6
Citibank 69:17
city 63:7 72:5,7 78:18
 79:11 81:7
city's 86:5
civilian 64:10
clarity 11:20
class 20:11
classic 103:21
ClassMap 65:1,1
clean 15:14 16:2
clean-up 15:3
clear 93:6 103:19 113:1
 118:1
clearer 9:19
click 62:16
close 118:11
closed 83:7 85:12
closely 15:17 23:20
closing 3:20 85:3
club 72:16
Co-Chair 1:13,15 3:7
 11:8 49:2,5,14,17,20
 50:1,6 53:5 54:12
 117:4
co-chairing 35:14
co-leads 8:7
co-located 85:18
co-managed 28:14
co-working 68:17 77:18
 84:14
coaching 94:20 95:5
 100:1
coal 101:11
coal-affected 104:17
code 42:21 69:4 84:1
 98:11
coffee 4:22 42:5
cog 29:4
collaborate 81:12 96:20
collaborated 78:20
collaborating 12:13
 96:9 97:9
collaboration 97:7
collaborative 18:7
 87:16

collaboratively 97:13
colleague 23:12
colleagues 8:15,16
 9:15 15:17
collection 21:16 73:3,6
 73:7 75:2 77:6
college 1:22 2:7 81:8
 82:15 89:1 95:2 96:14
college- 87:17
colleges 26:10 80:15
 95:7 96:7,11,19
Colorado's 84:16
Columbia 1:20,21
 103:13
come 4:9 8:5 12:2 13:5
 27:12 28:1 29:21
 33:22 38:5 41:18 64:9
 64:10 68:8 81:10
 101:3 102:10 106:4
comes 10:10 69:10
 74:6 76:22 114:7
comfortable 5:4
coming 6:15 10:18 64:2
 67:15 69:17 88:19
 102:20
comment 3:12 63:2
 78:9 98:5 116:5,8
comments 116:13
Commerce 1:1,12 6:7
 7:1,10,18 8:6,7 10:13
 10:22 13:1 23:5,5,10
 33:4 42:13 46:20
 56:19 57:13 70:21
 75:20 92:13 93:4
 118:14
Commerce's 56:18
 57:1
commercialization
 110:21
commercializing 53:12
Commission 45:10,12
 45:16,19 61:16
committee 4:14 41:16
 48:16 61:17
committees 41:17,19
 41:20 50:10,21
Communications 45:18
communities 12:15
 63:6,20 67:19 68:4,5
 68:9 77:18 80:12,13
 81:4,6 82:3 89:3
 90:16 95:21 96:21
 97:16,16,18 100:9
 104:17
community 1:21 2:7
 12:4 20:14 26:10 34:2
 34:10,16 35:6 63:16
 64:20 67:2,5 69:1

73:4 80:15 81:8 82:15
 82:19,20 86:13,15
 89:1 95:2,6 96:7,11
 96:14,19
companies 26:9 87:22
 114:18
companions 50:13
company 2:3 108:6
compendium 42:22
compete 43:20
competence 94:20
competency 70:7
COMPETES 7:8 51:16
 55:2 57:18
competing 43:17
competition 53:16
 69:14
competitive 16:2,13
 19:18 29:2 110:17
Competitiveness 31:11
complement 99:15
completes 77:7
component 20:1,21
 22:7 24:17 25:17
 29:14 82:12 98:18
 100:19
components 95:3
comprehensive 92:3
concentrated 16:20
concept 94:4
concerned 110:22
 111:1,2
conclude 40:1
concluded 39:2
concludes 118:12
conduct 98:11
conduit 10:7
confidence 59:22 99:22
Congress 40:20 41:13
 41:16 42:22 44:4 45:3
 45:21 46:5,8 55:19
 56:12,12,15,19 57:19
 58:2 115:9
Congresses 46:7
congressional 55:21
congressionally 57:16
connect 7:19 37:7 48:2
 117:15
connecting 12:5
connection 79:17
connections 20:13
 68:13
consider 53:10 83:17
consortia 17:18 26:8
 31:8
consortium 47:16
constant 11:13
constellation 17:2

Constitution 1:12
contact 67:13 71:8 87:9
contents 42:20
contexts 100:21
Continent 86:21
continue 9:14
continued 9:10
continues 102:4
continuing 97:21
contractor 3:10 13:19
 14:6
contribute 29:15
conundrums 89:5
convene 56:6 71:15
 79:13
convener 100:14
convening 56:5
conversation 25:10
 30:17 31:10,15 50:13
 58:15 64:6 66:16
 79:22 80:9,17 81:20
 99:20 101:17,18,20
 104:20 117:1
conversational 31:3
conversations 30:19
 104:6
coordinate 54:21
coordinated 8:9 18:16
 54:22 105:10
coordinates 23:6
coordinating 23:21
coordinator 10:8 48:13
 54:18
copyists 37:16
core 15:14 19:20 70:7
corporate 109:2
Corporation 45:13
corporations 43:7
 102:1
correct 23:12 52:10
 56:21 57:2,6,9,9
cost 21:22 26:3 36:14
 79:2
costly 36:13
costs 36:10
council 1:5,12 3:15 4:4
 12:1,17 31:10,15 39:1
 59:13 60:4 115:21
 116:3
count 107:19 108:2
 109:6
country 15:16 26:2
 67:12 69:11 83:5 84:6
 85:1 91:16,19 94:6
county 72:6 85:3 88:15
county-wide 67:20
couple 11:15 14:19
 18:15 22:6 64:5 78:2

80:13 105:13
course 27:14 62:15
 65:2 79:20
cover 56:9 91:1 98:8
cradle-to-grave 64:17
crafting 71:8
craftsmen 71:9
Craig 2:18 3:3 6:16,18
 7:7 8:18 13:15 39:9
 39:20 48:10 54:17
 62:12 89:18
create 37:12 59:6
created 43:10 57:14
 60:8 112:22 113:9
 114:9
creation 113:12 114:7
 115:12
creative 37:16
creator 37:19
creators 69:2
credit 92:9
credits 84:9
critical 53:22 111:19
crowd 114:4,6,11
Cs 94:19 97:14 101:17
CTO 30:8
Cuban 104:4
Cuban's 104:5
cultivate 85:21
curious 83:11 108:1
Current 3:17
curriculum 21:7 98:11
cuspid 101:13
custom 99:5
customers 36:17 52:20
customized 98:13
 99:10
cut 51:22
cycle 66:4
Cyclotron 20:3,7

D

D 4:1 48:4
D.C 1:13 58:1 90:10
 108:21
Dakotas 85:18
Dallas 1:17,18 87:6,6
 88:4
damage 103:18
dare 17:6
data 75:3
date 52:14
DAVID 2:1
day 9:13 11:1 89:16
 105:4
day-to-day 14:1
days 11:15 42:7 83:8
 115:4,9

DC 12:7
deal 13:22 48:18 67:2
dealing 29:9
dear 78:12
decent 40:12,13
decisions 65:10 108:2
deck 39:10
decrease 36:10 109:8
dedicated 107:19
defense 22:6 23:4,7
 45:10
definitely 12:17
definition 91:5,6
definitive 9:11
deliver 12:18 52:20
 90:6
deniability 41:13
Denis 3:5
Dennis 2:15 6:4,6,13
 10:16,18 59:2
Dennis' 10:21
Denver 76:8
department 1:1,12 3:8
 6:6 7:17 9:17 10:13
 13:4,8,16 14:4,16
 15:1,19,21 23:4 32:13
 33:4 42:13 45:10,14
 45:14,18 46:19 47:4
 47:17 59:17 73:8
 75:20 91:8 92:12,14
 93:4 105:21
department's 8:6,7,9
departments 40:21
depending 16:19 20:4
depth 117:1
Deputy 2:15 3:5 6:5,18
 6:21 8:5
DeRocco 32:12
described 99:16
descriptive 41:10
desert 77:2
deserts 84:20
design 28:9 78:22
designated 2:19 4:6
 118:10
designed 29:7
designing 79:15
desk 77:11
detail 67:8 112:15
detailed 113:19
dev 66:4
develop 20:12 76:13
developed 10:2 17:3
 72:17 99:7
developer 84:11
developers 65:7
developing 75:8 76:2
 94:17

development 1:3 2:16
 6:3 7:2,15 13:10 18:3
 18:13,14 19:8,22 25:5
 25:8,9 26:18 27:11,21
 30:4 31:6 35:20 36:20
 44:21 45:1,9,17 46:22
 47:8 73:13 76:20
 79:11 92:17 96:7,9
 101:10 105:20 108:14
 109:12,17 111:1
DFO 3:4
dialed 4:11 116:12
dialog 5:16,19 12:16
 38:13 104:14
different 7:12 15:13
 24:1 40:19 46:13
 53:20 54:6,6 81:21
 88:20 94:19 95:7
 102:12 109:2 110:15
 110:15 111:9 116:1
differentiate 43:15
differentiation 43:18
differentiators 66:6
differently 4:15
digital 73:7 79:10
digitally 79:15
dimension 47:20
ding 29:17
direct 17:13 18:2 74:1
directed 74:3
direction 9:11,20 81:13
directly 16:9 27:19 72:8
director 3:3,9,14 13:22
 48:13 63:9,12
disadvantaged 48:21
disappointed 115:7
discover 7:22 94:12
discovered 94:11
discussed 93:8 97:3
 107:2 115:22
discussing 90:7
discussion 3:15 63:1
 84:21 87:17 93:13
 114:17
dissolved 106:12
distinction 113:20
distributed 92:6
distributing 92:5
dive 62:10
diverse 9:16
divide 86:11
diving 93:10
DOC 23:20
documents 19:6
DoD 15:17 23:20 28:3
 111:4
DOE 13:1 14:9,17,22
 15:1 23:3 24:4 28:11

28:13 93:2 105:21
doing 4:15 25:12,20,20
 29:21 32:2,7,19,20
 36:15 37:8,17 41:4
 42:1 51:6 65:8 66:2
 73:13 75:10,11 77:14
 78:15 83:17 88:1,6
 98:22 100:3 106:6,9
 107:7 108:7,22
 114:19 116:1
dollars 53:7,11,12
 110:20
domestic 48:6
dominating 43:7
door 76:10
doors 4:22 83:14
dots 48:3 117:15
dotted 58:22
double 100:3
dough 44:9
Douglas 85:3
DRA 105:22
draft 42:15 93:8,14
 115:1
dramatically 24:1
drawing 87:4
Drew 3:9 13:3,5,7,12,15
 47:14 105:3,4
Drew's 38:11
drive 67:11 97:13
drivers 101:8
driving 33:9
due 38:4
Duties 6:22
duty 7:11

E

E 3:1 4:1,1 93:15
e-Library 73:22,22
earlier 63:14 86:21 90:9
 107:2 116:5
early 35:20 38:3 43:6
 46:4 53:13 58:14
 69:19 71:22,22 74:17
 87:14
early- 114:17
early-stage 110:21
easier 7:21 8:2
easiest 108:12
Eastern 1:21
EB-5 47:5
economic 1:3 2:16 6:3
 7:2,14 26:17 27:21
 36:19 43:8 45:17 96:7
 109:12,17 111:1
economies 85:14
 101:11
economy 110:17 115:1

ecosystem 11:5 73:14
75:6 77:8,17 82:9
EDA 3:4,6 6:8,15,19 7:9
7:11,14 8:14 9:6
36:20 58:20 105:21
109:15 110:16
educate 37:20
educating 8:19
education 35:22 37:9
64:17
effect 113:21
effective 36:14
effectiveness 107:22
efficiency 16:1 19:13
107:22
efficient 16:13 17:1,16
53:3 85:11
effort 93:13 100:5
108:10
efforts 37:8 40:4 51:8
60:14 107:3
eight 23:4 53:6
either 7:10 12:13 16:12
61:5 72:19 76:21
82:10 87:1 116:9
EI 98:8
electric 44:5
electronic 21:11
electronically 39:17,18
39:20
electronics 34:20
element 47:13,15
elevate 62:5
emancipate 86:8
embedded 45:20
Emily 2:5 12:6,21 32:9
32:12 33:3,9,14 90:10
90:20 117:5
emphasis 44:17
employ 72:18
employee 13:19
enabled 92:20
encompass 53:18
encourage 5:17 36:2,21
78:3 79:3 84:10 88:19
115:17,19
encouraged 80:5
encouragement 69:10
encouraging 26:12,20
ended 57:20
energy 3:8 13:4,9,16
14:16 15:9,15,22 16:1
16:1,3,13,14,17 17:16
19:13,18 27:15 45:18
47:17 116:18
energy-intense 15:19
energy-related 27:9
engage 10:11 31:13

102:4
engaged 35:6
engagement 27:7 35:22
116:19
engagements 18:2
engaging 34:9 90:16
engineer 118:3
engineering 19:12
21:11
enjoy 37:17
ensure 87:20 102:1
ensuring 107:4,13
Enterprise 1:18 48:14
105:11
enterprises 77:16
113:9
entire 8:1,9
entirely 41:10
entrees 81:2
entrepreneur 1:18
64:10,11 66:8,8 94:12
95:10
entrepreneurial 8:22
20:10 48:2 64:12
entrepreneurs 7:22
11:12 44:12 64:1
71:10 74:3 80:19 81:2
94:5 95:4 96:1
entrepreneurship 1:5
2:19,22 3:4,11,13 4:5
5:14 34:3 39:4 40:5
40:15,17 41:18 43:2
43:12 44:18 46:15,19
46:22 47:3,13,20
48:19 51:15,18 52:4
52:17 53:9,20 54:4
56:13 57:15 58:10
63:5,18 76:19 81:14
82:9 89:14 90:15
92:19 93:15 95:18
109:18 110:13 111:18
113:13
entrepreneurship-fo...
47:9
environment 15:18
58:6 66:17 69:9,19
78:4 84:9 89:2
environments 77:8
EOC 77:1
EOCs 68:8
EPA 105:22
equity 114:4,5,11
Eric 2:21 3:18 92:1,9
especially 28:11 63:19
83:5
essential 74:17
essentially 15:2
establish 29:13

established 24:13
establishing 29:11 58:9
Esther 1:16 35:13
et 36:9
evaluated 41:9
evaluation 41:6 98:16
events 70:21
everybody 25:8 49:21
62:1 106:6 111:20
EveryLibrary 3:13 5:13
63:10,15 64:13,22
93:13 105:3
Everylibrary.org 89:12
exact 28:4
exactly 79:12 109:21
example 16:15,20,22
19:8 20:21 36:7 69:12
73:20 75:15 79:10
86:21 99:14 101:5
107:1 110:20
examples 68:5 69:5
70:1 73:15 76:7 86:1
exburbs 86:2
exceptionally 102:17
Exchange 45:11 61:16
excited 8:14 11:18
54:10 102:21
exciting 12:19 53:4
execute 17:12 29:13
executing 51:13
execution 98:2
executive 3:14 45:2
63:9,11 81:16
executives 31:14
exhausting 39:3
exist 68:4 88:10 95:8
96:3
existing 32:16 77:20
82:9
exists 44:21 45:1
expand 46:15
expanded 20:16 98:20
expanse 96:16
expansive 97:22
expect 115:6,7
expeditionary 36:7
expensed 74:5
experience 14:5 34:21
68:2 75:14 88:1
111:17 112:1 114:11
114:17
expert 6:9
expertise 10:21 75:14
explain 35:18 51:10
explicit 20:19
exploit 65:13
explored 65:18
exploring 70:5

exponentially 36:10
Export-Import 45:11
Extension 47:4 59:13
93:5
extraordinary 73:15
extremely 23:20
eye- 112:16

F

fabrication 84:14
Fabrics 22:17
fabulous 73:6
faces 11:10 49:6
facilitator 99:20
facing 114:22
fact 12:6 34:13 42:1
67:10 82:18 108:5
failed 64:10,20 65:10
85:4
failure 114:10,15
fair 35:7 44:9
fairly 96:10
fall 17:7 34:14
falling 74:10
falls 15:11
familiar 15:1 87:8 99:10
Families 47:7
family 76:4
fan 72:16
fantastic 69:5 73:20
far 12:1 113:22 115:22
far-flung 83:5
farming 82:20
fascinating 84:20
fashion 71:4
fast 18:10
favorite 72:13
fear 43:8
federal 2:19 4:6,14 5:7
8:1 13:18 24:19 28:15
28:20 37:4 40:4,14,16
45:10,18 46:16 47:16
48:6 49:1 52:3,9,19
55:16,18,20 56:14
74:7 84:3,6,17 91:20
97:1 99:17 100:12
105:18 109:16 118:10
feel 5:1 32:2 109:3
fellows 20:8
fibers 24:2
fiction 73:18
figure 30:1 47:22 66:4
117:14
figuring 91:18 92:9
finally 31:4 68:17,20
69:1
financial 83:15,20
113:12

find 17:7 19:5 42:17
50:22 58:2 70:18 75:7
finding 100:5 107:21
109:7,21
findings 115:5
finish 42:16
first 11:8 13:2 21:1
42:20 46:17 60:13
71:6,6,7 76:18 77:1
80:18 83:2 98:19
113:7,15
fits 98:3
five 23:4 28:7,10,13,17
28:22 38:20
fix 36:9 92:2
fixes 113:3
flag 80:14
fledged 87:3
flexible 34:20 35:1
flip 42:20 82:17
floor 63:2
focal 32:22
focus 3:15 15:22 16:10
17:10 20:9 34:13
64:17 96:6 106:5
focused 20:5 24:6 34:9
60:4 74:4
focuses 54:5 60:10
focusing 20:9
folks 8:22 9:1 10:11
17:5 28:15 30:9 60:17
70:4 72:18 73:18 87:9
105:20 106:15
follow 57:5
follow-up 55:11
following 8:4 51:12
food 72:14,14
foot 54:8
footnote 44:22
for-profit 88:11
force 32:18 81:19 114:2
forces 56:9
foreigner 6:6
foremost 11:9
foresight 33:7
forge 11:14
forgive 4:12 94:10
forgot 116:7
form 93:14
formally 117:2
formation 50:21 61:17
111:19
formed 12:17
former 48:12,13
formula 85:6
forth 40:22 111:5
Fortunately 102:13
forward 10:5,14 11:14

11:18 16:12 44:16
71:11 73:1 97:20
102:20 104:8 117:13
118:7
foster 22:10 34:2
found 8:13 78:16 91:3
97:8
Foundation 3:13 40:7,8
45:17 78:20 80:10
foundations 101:22
four 28:13 38:20 59:8
94:19,19 97:4,14
101:17 105:10
four-year 97:9
frame 33:7 71:20
114:16
framework 98:3
framing 73:17
Francisco 86:7
frankly 55:5
Frederick 1:18 116:21
free 5:1 78:21 103:22
frequently 103:5
friction 109:9
friendly 71:17 115:20
friends 72:4
front 42:4 55:14 95:10
fruit 61:5
fruition 68:8
frustrating 9:4
full 107:9
full-time 107:18
fully 10:10 12:17 51:20
76:22 86:22
fun 5:22 11:1 12:1,16
12:19
function 51:10,12
functional 22:17 76:22
functions 7:1 51:7
fund 18:6 40:11 84:5,18
funded 33:4 77:8 82:11
112:17
funder 100:15
funding 26:3 29:2 30:20
34:18 35:5 58:21
65:22 83:22 85:6
86:10 113:6,8 114:4,6
114:11,17
funds 28:20,21 84:7
furnaces 16:19
further 12:9 102:6
104:12
future 2:1 11:19 70:3
100:22 101:1,15,18
FYI 33:12

G

G 4:1

game 107:6,14
Gannett 2:3
GAO 52:14
gap 21:6,6 37:3 91:15
gaps 37:14 41:7 82:16
Gary 57:12
Gates 78:20 103:12
general 5:16 90:18
112:14,16,18 113:16
113:21
generalizing 94:14
generally 44:18
generating 112:9
generation 22:10
generations 66:7 75:10
geography 96:16
George 2:4
geothermal 15:9
germane 81:20
getting 11:11 19:19
30:21 34:21 42:5 54:8
91:18
give 6:13 30:22 54:10
59:21 63:12 78:2
93:18 101:4 112:16
given 29:9 31:7 34:12
56:19 62:19 86:13
gives 55:15 85:14
giving 14:4 20:10
glad 38:9
global 2:10 43:20
goal 7:20 52:9 55:4
100:9
goals 66:18 106:10
Goodyear 88:16
GOONEWARDENE
1:19 98:5 99:6,9
gotten 26:13 40:8 60:15
87:15
government 3:11 8:1,2
9:8 10:19 27:3 35:17
37:4 38:18 39:6 40:16
40:20 52:19 55:16,18
56:6,14 73:9 79:14
91:21 100:13 101:21
104:14 105:18 109:17
110:14
government's 99:19
governments 26:11,14
Governor's 27:5,19
graduate 21:9,11
graduate-level 21:4
Grande 98:9
grant 40:6 58:10 74:6
grants 40:8 48:7 53:16
grappling 24:11
greater 11:19
Greentown 2:5

GRIFFITH 2:7
Grisham 70:10
ground 50:18
group 5:18 8:22 23:2
27:11 35:15,18 52:12
59:6,17 79:14,18 94:8
95:14 98:4 105:17
groups 19:11 27:9
48:10,18 49:10 50:7
50:12 54:20 57:4
71:15 79:13 91:20
grow 100:8
grown 86:5
growth 53:14 74:17
growth/high 54:4
guard 41:17
guess 7:13 13:17 31:14
50:1 54:8 59:22
117:20
guest 3:8 13:3
guests 5:7,8 11:16
39:15 59:9
guidance 38:5
guide 40:4,14 49:8
guitar 37:18

H

haggling 115:3
half 31:16
hands 14:14,18 38:15
38:19
hands-on 19:13,19
34:21
hang 38:11
happen 68:14,15 74:20
79:18
happened 101:12
106:16
happening 9:17 84:9
85:16 110:14
happens 70:12,13,14
70:15 101:9 109:1
happy 31:20 61:10 62:7
115:13 116:6
hard 92:16,19 94:11
108:21
hard-charging 9:1
59:10
he'll 11:6 38:11
head 78:1 107:18 108:1
109:6
headphones 42:4 49:15
heads 24:12
health 70:13 75:16,18
hear 5:5,7,9 59:9 63:9
93:22 106:5 111:22
116:6 117:8
heard 12:22 20:4 21:3

21:15 35:8 63:3 93:2
116:21
heart 78:13
Heather 1:17 22:14
117:9
heating 16:16,16,21
heck 76:9
Heidi 48:15 105:9,14
107:7
help 10:9 20:12 37:20
37:21 51:4 54:21
55:17 56:15 75:3 79:1
81:14 85:21 86:10,12
87:10 95:22 96:1
97:13 98:2 106:9
108:9,22 109:8
helped 69:20
helpful 79:5 95:8
102:13
helping 8:11 17:15
70:17 87:21 95:4
helps 72:22 76:13
HERSKOWITZ 1:20
26:21 27:2 54:16 56:1
56:10,17,22 57:3,7,10
99:3,8,12 103:3
hey 37:20 70:10 83:16
108:22
HHS 36:16 47:7
Hi 13:14,14
hierarchical 43:7
high 36:1 54:3 77:16
85:8,9,12 86:4 91:10
94:15
high-wage 110:18
higher 26:4 116:19
highest 61:6
highlight 4:17 23:19
highlighting 89:16
highly 76:5
Hill 25:13
hiring 30:7,11 31:13,14
historically 97:17
history 55:2 96:8,17
hits 15:20
Hold 54:14 93:21
home 58:2
Homeland 47:5
honest 18:18 71:17
honestly 58:13 70:20
hope 5:17 9:19 66:16
95:14
hopefully 10:9 11:20
38:13 116:22
hoping 102:15 116:17
hosted 33:5
hour 86:6,6
house 21:8 34:15 35:7

40:22 56:8 115:3
housed 58:8 107:5
houses 115:8
Houston 70:3
How's 87:10
hub 26:8 96:14
hubs 63:22
huge 33:9
hugely 115:11
human-to-human 80:3
humans 74:2
husband 78:13
hustle 108:6
hybrid 44:5

I

IACs 19:21
idea 42:8 51:4 57:19
59:4 68:3,16 70:6
71:5,12,16 72:10,22
73:3 75:9 79:17 80:4
94:22
ideal 88:13
ideas 12:2 31:2 62:19
66:21 70:19 71:22
72:1 90:5 104:9
107:11
ideation 66:9
identified 37:15 110:13
identify 61:5 95:20
96:12 97:15
IDEO 1:17
Ill 1:17
Illinois 26:15 82:15
imagine 33:8
IMLS 74:6
Immigrant 47:5
impact 16:1 84:19,19
103:7
impacts 113:12
impetus 64:6
implement 19:15
implementation 33:10
implementing 94:17
implicit 19:7
implied 19:22
importance 101:4
114:18
important 10:3 25:17
36:18 43:4 63:20
81:15,21 95:3 102:7
104:15 111:6,20
importantly 16:7 30:18
impressive 113:2
incentive 103:22
incentives 111:9
incentivize 111:8
incentivizing 110:8

include 116:14
includes 77:5
including 93:4
inclusive 63:5
incoming 10:7
increase 109:9 112:6
incubation 66:20 69:3
incubator 37:11 66:19
67:22 68:16 77:14
incubators 37:1 63:22
69:6 82:11
incumbent 47:21
Indiana's 84:15
indicator 104:18,18
individual 110:9
individually 11:11
38:16
industrial 15:16 19:10
industries 16:12,17
17:1,14
industry 5:13 15:19
16:10 17:20 18:4,8
21:21 24:14 31:5
69:15 96:8
influence 108:4
influenced 64:14
influential 115:11
inform 41:22
informal 12:3
informally 57:21
information 60:1 89:17
116:17
infrastructure 59:15
76:17,17 77:5,10
98:13
infringing 109:3
inherently 108:20
initiate 104:13
initiative 7:18,19,20
33:5 44:4 90:12,15
99:22
initiatives 8:17
innovation 1:5,15,17,19
2:11,18,21 3:4 4:5
11:5 20:5,12 36:6,17
39:5 46:18 51:15,18
52:3,16 53:10,21 54:4
56:13 57:15 58:9
76:19 84:5,7,17 92:20
100:22 109:18 110:17
110:19 111:18 115:1
115:12
innovations 68:15
103:16
input 97:21
inside 19:8 47:9 72:19
79:6
insight 38:17

insightful 90:4
instances 31:22
institute 22:17 23:2,7
23:14,22 24:3,5,6
28:4,22 29:5,16 32:2
32:5,6 34:8 74:6
75:16
institutes 21:17,17 22:3
22:8 26:1,2,16,19
27:15 28:9,13,16
29:10 33:19 34:11,14
34:19
institution 84:12 96:15
institutional 96:5
institutions 80:14 81:9
82:6 95:7 96:2,3,13
97:9
integrate 37:7
integration 75:13
107:19,20 108:15
109:12 110:9
integrator 52:3,9
109:16
Intel 1:16
intelligence 65:9 66:13
67:1 69:22 73:5,12,20
74:12 89:4 101:2
intent 55:5
intentional 69:2
intentionality 85:20
inter- 26:2
interact 30:8
interactions 12:3
interagency 35:14
48:10,14,16,17 50:11
105:11
interest 13:10 62:5,6
93:16 115:17
interested 47:19
interesting 32:8 38:8
52:1 62:20 63:8 91:11
Interior 45:15
internal 36:6,18 51:2
internally 36:5
international 97:2
internship 21:2
internships 20:22
interrogate 65:12
interrogation 75:3
intervention 71:22
interview 87:11
introduce 6:2 105:9
introduced 105:8 115:8
inventory 38:7
investigate 12:9
investigation 39:3
investment 1:19 40:13
45:13

investments 30:5
Investor 47:5
involved 35:7,10 36:11
 94:16 106:2
iPhones 70:14
IPO 112:5
IPOs 112:6,9,13
iron 16:3,9
isolated 77:17 86:1
issue 24:11 86:14 98:6
issues 85:1 114:21,22
 115:22
ITEM 3:2
items 13:7
Ivy 2:7

J

jealously 41:17
job 14:1 32:3,15,21
 113:12 115:11
jobs 35:13 110:18
 111:6 112:2,4,7,13,19
 113:1,4,7,10,15 114:5
 114:9 116:2
Joe 2:6 64:4 90:14
 93:16,19 94:2,10 95:1
 95:16 99:16 100:11
 102:17 103:6 111:12
 115:14,18,22 117:5
 117:16 118:1,5
Joe's 93:13
John 3:14 63:11,12
 64:2 70:10 89:9 90:3
 116:6
John's 105:2
Johnson 116:12
joined 22:16
JOSEPH 1:21
JPMorgan 2:8
JULIE 1:19
jump 49:3
jumpstarts 77:17

K

K 96:20
K-12 64:18 65:16
Kansas 72:5,6
KAPP 1:21 60:13 61:12
 61:21 62:4 80:7
 100:18 104:4
Kauffman 40:7,8,12
 42:11 80:10
keep 5:18,19 62:11
 83:14 85:16 116:2
 118:4
KENNEY 2:1 83:2,11
Kentucky 26:15
key 16:11 29:4 66:5

keywords 78:2
kick 13:12 90:20
kicking 4:7
kids 85:12
kinds 7:5 68:11 77:3,4
 77:16 86:9 113:9
kitchen 68:18
knew 24:16
knowing 54:7 62:2
knowledge 6:10 10:22
 27:13 39:1 60:21
knows 55:1

L

L.A 27:17
lab 18:5 21:21 23:7
labor 32:13 34:9 91:8
 92:14 105:21
laboratory 47:16
labs 2:5 17:20 20:7
lack 109:22
lag 25:3
landscape 43:8 51:6
lane 118:3
language 44:8 55:14
 103:8 115:1
laptop 42:4
large 26:9 81:7
large-scale 17:19
larger 9:7
late 4:10 44:16
launch 26:19
law 22:4,5 51:15
Lawrence 20:15
laws 42:22 43:1 44:3
 45:7 46:1
layers 108:17
layperson 107:15
lead 18:18 21:12
leader 6:3 22:9 117:18
leadership 11:5 41:14
 58:7
leading 104:18 106:13
leads 13:1
learn 8:17 37:12 49:9
 74:19 88:9
learned 10:19
learning 10:5,14,19
 64:18 65:17 74:18
 78:22 102:9 103:8
 109:11
leave 19:14 69:7 76:15
leaven 66:16
leavening 79:22
led 25:2 32:12
ledger 113:6
left 5:1
legacy 104:7

legislation 43:14 46:4
 114:20 115:2,6
legislative 115:22
legs 116:18
lends 96:15
length 23:18
lenses 54:6
let's 5:18,21 60:3 80:2
 110:18
letting 102:14
level 12:5 30:9,14 55:7
 68:12 69:3,4 84:6,7
 84:17 94:15 111:7
levels 6:11 81:21
leverage 37:21 67:18
 86:12 95:22 97:5
 106:7
leveraged 67:6 76:5
leveraging 36:8
liaisons 61:2
librarian 64:8,8 70:9,16
 74:15,16,19,20,21
 75:13 76:12 77:10
 88:6
librarians 67:17 69:21
 77:7 78:21,22 79:5
 81:12
librarianship 75:18
libraries 5:15 63:16,19
 66:18 68:16 69:11
 70:8 75:9 78:4 79:9
 79:12 80:18 83:7,16
 84:18 85:16,19,19
 95:6
library 1:12 64:9,19
 65:14,15,19 66:5,19
 67:2,10,22 68:7,9
 69:13,15,20 70:6,21
 70:22 71:14,14,21
 72:1,3,4,12,19,20,21
 73:10 74:7,8 75:16
 76:8,18 77:12 78:12
 78:14,18,19 79:6
 80:16 81:8 82:1,5,11
 82:13,16 83:18,21
 84:11 85:2,10,10,21
 86:3,8,11,21 88:17
 118:14
library's 72:21
library-facing 64:16
lieu 39:10
life 29:15
lifelong 64:17 65:16
lift 22:12
light 50:2 55:3
Lightweight 32:5
Likewise 74:14
limited 34:6

line 58:22 116:9
line-up 14:8
link 62:14 103:13
links 62:16
list 22:1 26:15 44:3 45:5
 45:7 46:3 48:11 104:5
listed 53:2
listen 111:20
listening 4:19
lists 17:2
literacy 75:4,8,22 76:4
 76:6 77:2 84:20 87:13
 87:14
literally 72:15 110:2
little 4:9,15 6:14,20
 14:10 15:12 32:14
 38:13 39:22 41:11
 55:14 62:9 67:4 94:14
 94:15 95:1 99:1 104:8
 104:12 112:3 116:19
 117:1
live 42:9 62:16 77:13
lively 5:18
lives 66:1 74:21
living 38:1
LLC 1:22 2:6
local 26:11 70:20 77:9
 77:11 79:20 80:2
 82:19 84:1 85:4 86:9
 88:11 96:21,22
local-level 32:17
location 72:20,20,21
Locke 57:12
logistics 4:21
logos 31:17
long 7:11 13:21 40:17
 45:7 76:3
long-term 55:10 107:6
 107:14
long-winded 111:10
longer 13:20 26:16 62:9
 114:22
longevity's 57:22
look 10:5,14 11:14,18
 41:3,6 44:2,3 45:5
 55:15,18 56:20 59:20
 62:20 89:1 94:4 95:18
 99:21 102:14 104:8
 108:4,16 109:5 110:8
 112:1 118:7
looked 14:8 106:14
looking 9:22 49:5 87:13
 87:17,18 88:22 92:18
 97:20 102:20 110:15
 111:8 116:20 117:13
looks 26:7
losing 85:2
lot 6:9 10:5 16:16 18:14

20:22,22 26:13 27:16
27:17 28:2 29:12,21
30:10 31:5 34:13
37:15 42:6 43:5 53:19
61:18 66:1 75:5 83:7
90:11 91:17 97:11,19
98:7 101:10 104:22
112:15 116:16 118:4
lots 47:17,17 90:5
110:3,4
louder 14:11
love 37:22 42:17 61:7
79:13 108:16
lovely 64:18 71:9 75:9
low 79:2
low-hanging 61:5
lowest 21:19
luckily 49:7
lucky 11:2 60:18
lunch 60:16 72:15
100:19
LYNCH 2:1

M

machine 33:22 103:8
machinery 36:9
macro 81:1,1 111:7
magical 80:5
main 18:15 28:1,1 29:8
54:2 72:7
maintain 42:10
maintenance 107:19
major 113:20,21 114:6
maker 33:20,21 34:16
35:6,7 36:21,22 37:1
37:19 67:14 71:5
Makers' 35:15
making 16:19 35:17,21
36:3,6,17 37:9,16
44:8,11 71:8 76:3
84:13 90:7 94:15
male 44:13
management 111:7
managing 107:9
mandate 20:21 24:10
32:1 55:19,21 59:18
mandated 57:16 109:16
Manufacturers 92:14
manufacturing 3:9 12:9
12:21 13:8 14:17,21
15:10,18 16:2,14
18:22 19:1 21:14,16
21:17 22:3 23:1,14,17
24:5,6,7 25:6,7,10
33:2,7,8,19,21 34:7
43:22 47:3,14,15
50:22 59:13 90:11
91:6,9,9,10 92:10,21

93:5 103:10
map 50:19 52:7
marginalized 97:17
Maribel 2:3 100:19
Maricopa 88:14
MARIE 2:1
marine 36:7
Mark 104:4,5
market 65:9,13 66:3,9
66:11 67:7 69:19 73:5
73:11,21 74:5,5,22
103:22
market-based 103:19
market-related 112:10
marketing 107:20
markets 43:17,20 66:22
marriage 69:16
massive 67:17 110:2
material 54:11
matrix 75:13
matter 118:16
mayor's 27:16
mean 28:2,19 30:14
49:18 51:22 105:22
114:14 117:18
meaningful 39:3 101:20
102:4
meaningfully 29:15
means 28:20
measure 85:5 86:18
87:4
measured 110:7,10
measures 87:8
mechanism 52:18
98:17
mechanisms 111:7
media 70:18
Medical 2:10
medicine 75:17,18
medium 17:15
meet 8:15 59:8 93:20
94:3
meeting 1:7 4:6,14
95:15 118:11
meetings 9:21 12:8,8
106:4
MeL 73:22
Melissa 1:13,15 3:7
11:7 117:3
member 5:13 6:2 22:14
22:20 23:1,9 26:21
27:2 31:21 33:1,15,18
39:9,14,19 49:4,12,15
49:18,22 50:4,8 51:14
52:5,10 53:1,6 54:9
54:16 55:13 56:1,4,10
56:11,17,21,22 57:2,3
57:6,7,9,10,12 58:4

58:16,19 59:4,16,19
60:6,13 61:10,12,14
61:21 62:3,4,7,12
78:8,11 80:7 83:2,11
85:8 86:18 87:20 88:3
89:6,10,13,19 90:22
91:2 92:4 93:17,19
94:2 95:17 98:5 99:3
99:6,8,9,12 100:18
102:8 103:3 104:4
105:8 110:6 111:13
111:17
members 11:9 116:8
mention 28:9 29:3
116:7
mentioned 26:1 32:8
48:11 63:14 90:9
mentoring 98:6,10,16
98:18
mentors 98:12,12
mentorship 89:4 95:5
menu 72:16
MEP 106:20
met 1:12 117:8
Metals 32:5
method 39:22
methods 42:3
metrics 87:4
MForesight 33:3
mic 105:15
Michigan 33:6 73:21,22
74:4,5,8
micro 16:20
Microenterprise 47:7
microphone 39:13
93:18,18
microphones 4:18
microwave 16:21
Mid- 86:20
Mid-Continent 72:3,4
middle 34:14
midnight 74:12
Mike 2:2 116:20
mile 76:18,18,21 77:1
mile/first 76:20
mile/last 77:1
million 28:6,21 53:15
53:17,17 65:22 101:7
114:13
millions 28:6
mind 99:19
minimal 55:6
minor 113:3
minority 44:18,20,22
minute 25:4
minutes 67:11 77:22
86:7
minutia 117:22

missed 73:12
missing 30:10 71:12,13
mission 15:13 17:8
22:8 46:14 47:1,12
64:14
missions 47:10 63:17
Missouri 72:5,6
mix 88:21
mobilize 101:19
modality 114:7
model 26:7 65:1 82:22
85:11 86:16
models 31:6 84:15,16
modern 91:8
modules 65:3
mom 43:15 71:3
moment 45:4
momentum 117:11
money 22:1 26:18
27:20 28:2 30:21
32:10,11 40:14
months 9:4 25:19
109:20 114:10
Moodle 65:3
morning 11:6 74:11
118:13
morphed 43:11
mortar 109:13
motivation 25:18
motivations 15:14
move 5:16 9:18 16:12
71:8,10 82:22 84:18
moved 58:20
movement 33:20 36:3
37:5 67:14 71:5 110:2
moving 5:19 31:9 46:8
62:11 66:9
multiple 23:20 46:10
109:4
Museum 74:7
music 79:13
must-be-done-by-go...
103:21

N

N 3:1,1 4:1
N.W 1:12
NACIE 1:5 3:4,7 7:8
9:21 11:9 12:8 40:2
50:14,15 59:5 94:8,9
102:11 118:7
name 25:8 76:2
NASA 45:19
nascent 66:8
nation 5:15
national 1:5 4:4 15:15
17:20 20:7 21:21 22:9
33:6 45:16 59:12 60:4

75:15,16 92:13 99:22
100:2,4
nationally 114:14
natural 34:15 50:13
103:8
naturally 19:1 25:2,11
nature 96:16 101:1
Navy 111:4
necessarily 19:21
32:10 57:4 71:2 75:12
81:7 82:4
need 5:1 32:10 54:22
58:14 70:18 71:21
74:13 102:12
needed 109:7
needs 8:3 58:2 67:13
92:11
negative 113:14
neighborhood 69:3
neighbors 71:17,19
NEMETH 2:2
network 21:14 23:6,8
23:22 48:14 79:4
88:14 98:10 105:11
never 64:9 106:16
new 1:18 6:2,4 7:8,8,9
7:10,22 8:11,16,17
9:10,15,18 26:14 27:4
27:9,18 62:19 66:21
69:13,13 70:18,19
71:15 72:17 78:12,18
79:14 81:16 85:8 90:5
111:5 112:9
newest 6:2,2
news 100:17
NextFlex 34:20
niche 21:12
NIH's 56:2
NIST 45:12 47:3
NIST/MEP 105:22
Nixon 45:2
non- 82:1 97:15
Non-Exclusive 6:22
non-fiction 73:19
non-profits 96:6 106:3
non-sector-specific
16:8
non-traditional 44:12
80:12
norm 58:1
normal 80:1
normative 80:1
not-for-profit 88:11
note 13:2,9
notice 92:7
notion 43:13
NSF 33:4
nuclear 15:3,3

number 10:2 12:22 13:7
16:12 17:1 21:20 26:4
28:4 32:16 36:5 38:21
38:21 46:9 50:12 56:8
81:19,21 82:6 103:17
106:19 112:6,17
113:2
numbers 111:6
NYSERDA 27:4,9

O

O 3:1 4:1
Oak 20:16 21:1
Oakland 86:7
Oakley 86:2
Obama 57:14
objective 19:20
obligation 57:5
observations 91:4
observing 12:1
obviously 25:17
off-boarding 8:10
offering 104:9
offers 82:6
office 2:18,21 3:4,9 8:5
14:17,21 15:4,10,12
16:8 17:12 18:12,15
18:21,22 27:5,17,19
30:7 45:15 46:18
48:20 51:15 57:14,16
58:8,9,20 59:1 98:22
officer 4:6 47:14 118:10
offices 27:16 28:1 35:5
35:10
official 2:20 6:20
officially 4:7 118:11
offline 61:5
oftentimes 17:17 58:5
117:22
Ohio 26:15
OIE 3:17,18 39:1 51:4,6
54:5,11,21 55:15
56:15,17 58:20 60:7
98:1,4 102:13 104:14
108:13
oil 16:4 74:12
old 8:15,16
OMB 109:15
onboard 8:11 9:10
10:18
once 30:18
one-off 31:5 96:6
ones 28:14 69:7 100:10
100:12,13
ongoing 88:8
online 62:13 101:3
113:6
open 34:15 42:12 63:2

83:9,14 85:13,16
90:17
operate 110:1
operation 42:14
opinion 15:2
opportunities 12:10
30:20 38:2 88:8 97:15
109:5
opportunity 24:13 37:7
37:19 38:8 53:4 58:18
76:19 78:3 79:19
81:14 94:3 100:7
110:5,8 118:5
opposed 94:16
option 41:13
order 45:2 65:12 81:16
85:16
Oregon 2:1 83:6 84:22
85:2,3
organization 22:16
63:15 64:15,22 65:15
65:16 78:19 109:1
organizations 12:4,15
33:19 36:22 39:5
48:17 64:16 80:21
88:10 95:21 96:5
97:12 100:8 106:2
organize 46:10,13
53:22 100:2
organized 35:18 68:12
organizing 32:18
original 43:14
ORIN 1:20 56:1,10,17
56:22 57:3,7,10 99:3
99:8,12 103:3
Orin's 62:13
other's 12:15
outcomes 12:19 110:16
output 37:17
outputs 87:5 110:15
111:2
outreach 63:6
outs 118:8
outside 4:22 44:15 72:5
81:8 86:6 118:6
overall 38:3 83:19
overcome 16:11
overlap 41:8
Overseas 45:13
overseeing 7:13

P

P 4:1
p.m 1:13 4:2 5:3 118:17
packaging 90:8
packed 66:15
packet 59:21
PAGE 3:2

pages 42:20 43:1,1
46:3,9
paint 37:18
paper 16:4 33:10
parking 118:4
part 12:16 14:21 22:20
23:8 40:5 41:13 44:10
46:16,21 48:4 54:17
64:14 70:19,19 85:20
88:6 97:2,14
partially 12:7
PARTICIPANT 14:10
participate 22:2 36:2
38:12 94:9
participated 106:22
particular 20:12 22:9
24:15 43:21 61:15
80:15 91:1
particularly 15:15 32:3
47:20 81:4,6
parties 102:12
partly 38:4
partner 70:17 75:8
partners 18:5 21:1,13
21:21,22 24:19 28:15
29:11 31:18
partnership 18:8 47:4
59:14 68:7,13 76:22
84:11 93:5
partnerships 17:14,19
19:9 21:18 28:12 68:3
68:11 69:9 77:21
86:10 88:9,12 106:8
parts 83:5
party 98:16 113:18
Paso 98:8
pass 4:18 13:12 89:17
pass- 84:3
passed 46:4 51:19
112:2
passes 42:22 46:6
passing 37:10
passionate 102:17
Patent 45:15
patience 4:12 9:14
117:11
pay 107:21
peeling 108:17
people 14:8,9,22 18:22
28:15 30:16,21 33:21
36:2 40:11 41:22
44:13 47:19 49:19
56:6 59:10 61:19
65:21 74:9 76:10 79:8
81:3,10 87:21 101:10
102:18 103:18 106:2
109:2
people's 49:6 110:9

percent 59:21 83:22
 84:1,2,3 85:5
PEREZ 2:3
perfect 69:16
performance 110:10
Performing 6:22
person 66:9 98:22
person-to-person
 59:11
personally 60:15
perspective 14:5 30:8
 62:20 80:4 81:1 96:22
 97:1,1,2 98:2 99:17
 108:3
pervaded 69:11
Peter 23:12
petroleum 16:5
Pharmaceutical 23:14
phenomenal 60:18
Philadelphia 11:6
philanthropic 67:5
 88:19
philanthropy- 82:10
Phoenix 88:15
phone 4:16 11:11 12:6
 23:21
phonics 28:3
PI 19:12
picking 59:5
piece 12:21 44:19 52:1
 59:3 76:15 95:5 104:8
 104:15 114:20
pieces 48:1 114:5
pillars 17:13
pilot 20:8 98:19
piloted 98:9
pipeline 13:11 35:20
 37:10 44:6
piqued 115:16
Pittsburgh 1:16
pivot 25:19
place 31:8 57:21 68:18
 71:14 86:2 91:7 107:3
placements 112:22
places 61:6 68:6 78:17
 79:12 80:18 82:17
 98:8
plan 29:5 31:1 51:5
 52:8,8 55:5,10 69:14
 69:18 72:11 94:17
 107:6,14 108:14
planning 2:2 25:1 50:17
 51:3 109:15
platform 58:12 90:18
play 36:20 37:18 82:1
 101:22 102:1,11,12
 104:15
players 100:2,4

plays 101:21
pleasantly 8:14
please 4:11,17 5:21
 55:3 78:7 85:7 86:17
 93:9 105:15 111:16
pleasure 6:17 11:10
podium 55:7 109:8
point 14:3 17:9 31:3
 32:22 38:10 50:9
 58:19 62:22 66:10,11
 66:12 67:13 71:6
 81:13 87:9 116:9
 118:9
pointed 54:1
points 67:18
policies 54:3 107:3
policy 3:18 48:16 51:16
 60:8,10 69:10 79:22
 80:4
polite 64:12
political 9:10 41:14
 58:6
politically 54:19 58:8
politics 45:22
pop 43:16 71:3
popping 112:17
popular 73:18
population 102:3
populations 88:20
portion 4:7 118:12
portions 116:13
position 18:21 29:10
possibilities 82:7
possible 82:21 104:11
 113:3
possibly 107:13
post-graduate 20:6
posted 103:5
potential 104:19
potentially 29:4 61:3
 101:8
power 21:10 56:5,7
powerful 76:5
practical 17:17
practices 88:8
pre-K 64:18 65:16
presence 80:8 82:8
present 1:14 2:13 39:7
presentation 105:3
presentations 38:14
presenter 5:20
president 2:6 45:3
 57:14 81:18
presidential 7:19 8:8
presiding 1:13
pretty 5:4 16:6 39:2
 65:17 92:3,3 113:2,11
previous 8:10 66:7

114:1
previously 7:10 96:2
primarily 15:22 18:20
 24:21 27:22 34:9
primary 81:2,9
print 7:4 36:13
printed 34:1 39:11
printing 36:8
prior 11:4 95:14
priorities 9:18 62:2
prioritization 61:9,22
private 45:13 88:18
 112:22
probably 39:3 52:13
 90:14
problem 24:20 94:11,12
 94:13,18 102:9
problems 103:22 109:4
process 16:15 38:4
 50:17 51:3 98:11
processing 103:8
procurement 44:2,11
 44:14,15,19 48:19,22
 49:1
product 99:10
productive 53:3
professional 75:22
professors 65:2
program 3:11 12:22
 20:3,8 28:9 38:18
 47:6,8 53:11 56:2
 59:5 60:7,10 73:22
 74:1,7 75:17 99:15
 107:9 110:19
programmatic 60:7
 84:4
programming 53:9
programs 3:13 7:15
 8:16,17 10:20 19:8
 20:20 35:15,21 36:5
 39:5 41:18 46:9,17,22
 46:22 47:9,12 48:8
 52:4,17,21 54:2 58:11
 72:7 78:15 91:16 93:3
 100:14 107:4 111:22
progress 90:11 102:16
project 87:7 88:13
projects 10:3 17:22
promote 47:2
promoting 40:17 44:17
prongs 80:1
proposal 94:7
proposed 40:7
protect 108:20
prototype 79:2
proverbial 96:14
provide 76:14 77:3
 108:3

provider 76:4,5,6 82:13
Providers 48:15 105:12
provides 74:20 77:19
provisions 112:19
 113:22 115:5
public 3:12 4:7,13 5:10
 5:13 7:14 63:2 65:19
 66:18 67:10 69:13
 70:4 72:3,4 76:8
 77:12 78:4,14,19
 83:21 84:12,18 85:10
 85:14,19 86:3,11,21
 116:5,7 118:11
public/private 17:19
 21:18 28:12 84:10
pull 92:15
pulled 72:15
pulling 32:16
pulp 16:4
purely 55:4
purpose 39:22 41:1,1
 64:14
purposeful 102:4
purposes 48:22 51:1
 58:21 60:9
push 85:18
pushing 99:18
put 11:13 40:14 58:7
 61:4,8 95:9 97:22
 108:5 113:17
puts 98:12
putting 21:22 26:18
 44:4 60:19 78:1 81:18

Q

quadrennial 17:4
quality 87:10
quarterly 4:5
question 5:20 22:15
 26:22 27:6 29:8 33:14
 35:13 51:5 54:15,17
 59:16 62:13 74:20
 79:7 107:16
questions 18:11 30:2
 30:12,15 31:20 76:12
 103:1,2
quick 14:7 29:19 38:15
 60:12 99:13 108:12
quickly 8:19 11:1 25:22
 42:19 82:22
quiet 105:1 116:20
quite 6:7 13:21 70:20
 87:15

R

R 4:1
R&D 16:11,22 17:18,22
 20:11 30:9

raised 114:13
range 36:12
ranged 53:16
ranked 53:15
rare 69:8 70:4
Rarely 116:20
raw 54:11
re-engage 8:15,16
reach 52:9 100:8
reached 38:16
read 45:7 70:11 74:18
 74:18
reading 87:14
ready 87:18
real 14:7 26:18 29:19
 55:10 60:11 74:2 85:1
 85:20 91:5,15 99:13
realm 36:20
realtime 36:8
Reamer 2:4 3:11 5:8
 38:17 39:9,14,19 49:4
 49:12,15,18,22 50:4,8
 51:14 52:5,10 53:1
 54:9 55:13 56:4,11,21
 57:2,6,9,12 58:4,16
 58:19 59:19 60:6
 61:10,14 62:3,7,12
 105:8
reason 18:16 24:15
 29:3 41:11 44:20
 70:20
reasons 18:15 42:2
 112:10
REBECCA 1:16
recasting 48:5
receives 83:21
receiving 11:4
recognize 71:5
recognizing 95:2,5
recommend 56:7
recommendation 70:9
 92:1,5 93:8
recommendations 3:17
 19:14,16 33:11 92:22
record 100:12 118:17
rectify 103:20
recycling 24:6
redistribute 104:1
reference 41:3 67:16,17
 73:6 74:19 76:11
 77:11,15 87:11 88:5,6
 88:9,17
referenced 96:3 101:11
referred 45:6
referring 86:15
refining 16:4
reframe 73:2 74:14,21
regional 2:16 3:6 6:5,19

6:21 29:11 45:16
 100:2,6
regrets 11:3
regulatory 113:3
REICHERT 2:5 90:22
 92:4
reimagine 79:1
related 8:10 12:8 93:12
 105:2 116:2
relational 59:15
relationship 58:22 59:6
 59:12 76:13 88:16
 92:16
relationships 12:18
 20:14 24:14 29:6,12
 79:21 106:8
relatively 42:19
relevancy 82:21
relevant 82:19 86:9
remain 114:2
remarks 3:3,20 6:14
 117:3
remember 28:4 115:19
reminder 4:13 76:16
 115:20
renovation 78:13
repeat 27:6
report 5:9 118:7
reporter 4:20
reports 55:16 59:2
represent 80:22
representatives 105:18
request 21:10 78:9
requests 79:8
requires 66:21 113:17
research 3:11 5:9,11
 15:5 18:3 20:9 53:11
 53:13 63:21 65:15
 92:11 97:12 110:19
 110:21
researcher 63:3
resource 40:18 51:2
 60:15,18 78:21 79:4
resources 24:17 29:15
 33:21 55:6 63:18
 70:18 74:3,9 75:1
 76:5,6 78:18 79:9
 81:7 82:5 83:4,18
 88:18 96:1,22 107:5
 109:7
respect 111:22
respectfully 118:3
respects 101:16
response 116:10,15
responsibilities 45:8
responsibility 60:8
responsible 40:6 72:8
rest 38:12 94:8 105:4

116:5
result 81:16 112:7
return 40:13
revamped 91:22
revenue 83:22
reverse 118:2
review 17:4
revive 106:17
Richard 45:2
Rick 116:12,13
Ridge 20:16 21:1
rigor 30:4
Rio 98:8
risk 58:7
road 20:3 21:7
Roads 20:7
robotics 21:2 100:21
 101:13 103:9
robust 10:1 63:21 84:16
 108:18
rock 5:2
role 6:15 54:18 65:19
 74:15 78:12 97:11
 101:9,21,22,22
 102:11,13 104:14
 107:18 108:15 109:13
 117:13 118:7
roles 7:13 79:1 81:22
 116:2
roll 5:2
rolled 12:7
rolling 100:13
room 30:16 86:4 116:9
roughly 52:12
round 66:1
rules 113:9,17 114:2,8
run 5:6 21:4 28:16
running 10:22 64:4
 118:4
runs 23:3,4,5,10 41:16
rural 63:7 80:11 81:14
 81:19 82:20 83:7
 84:19 85:22

S

S 3:1 4:1
S3 2:2
sake 58:1
salary 55:7
San 86:7
save 99:1
saw 52:14
saying 13:17 33:14
 52:15 100:4 111:10
 118:2
says 79:22
SBA 43:10 68:8 75:20
 77:1 88:10

SBIR 56:2
SBIR/STTR 48:16
scalability 107:22
scale 9:7 31:7 67:15
 68:4 71:3,4 85:14
 95:19 100:7 110:1
scales 97:5
schedule 13:2 98:14
scheme 42:6
SCHOCKEN 2:6 53:6
 93:17 95:17 111:13
 111:17
school 36:1 85:9,9,12
 85:13,19 86:4,11
Science 15:4 45:16
 69:15
score 68:8 87:14 88:10
Scott 1:18 116:20
scoured 60:2
scratch 14:2
SEC 113:17 114:8
second 11:22 20:18
 31:16 41:5 50:20
 93:21 112:14 114:3
secretarial 7:18
secretary 2:15 3:6 6:5
 6:18,21 7:1 8:5 21:10
 32:14 51:17 55:17,17
 56:8,12,16,18,19 57:8
 57:13 90:9 115:21
Secretary's 58:20 59:1
section 48:9 50:9,10
sectors 17:11
Securities 61:16
security 4:9 15:15 44:7
 45:11 47:5
seeing 12:2
seen 49:7 104:16
selection 98:11
self-driving 101:7
self-employed 40:9
self-sustainability 29:5
self-sustaining 28:10
 28:17,19
self-verification 114:1
Senate 115:3
send 36:13 62:13
sends 11:3
senior 3:9,18 6:10
 13:21 41:14
sense 46:11
sensitively 54:20
sent 11:4 103:13
separated 94:18
Sephora 2:9
serial 64:11
serve 10:8 52:20 61:1
 96:13

served 7:11,12 8:6
service 77:15 82:17
services 74:7 76:21
 79:15 83:13 94:5
serving 52:2
session 5:16 98:16
 117:14 118:12
sessions 117:21,22
set 9:18 19:14 21:7 65:2
 65:6
set-aside 25:15
sets 68:21
setting 106:10
Seven 53:6
share 26:3 44:9,13 49:1
 49:8 54:20 55:3 70:2
shared 21:22 49:7
 110:8
sharing 93:16
Sheppard 105:10,16
shops 34:1 43:16
short 74:10,10 108:11
short-term 114:21
shortage 54:2
shortfall 77:15
shovel-ready 72:2
show 5:6 14:14,18
 38:15,19
showroom 70:6,22 72:1
 72:22
showrooming 71:7
shut 28:22 45:3
side 25:1,3,21 30:11
 31:14 72:6 75:11 95:2
 107:9 108:6 112:5,13
 113:6,14,16
signed 24:15,16
significant 81:13 85:17
 97:11 101:14 113:11
signing 22:1
silos 32:20
similar 59:18 60:2
Similarly 36:15
simply 48:4 73:14
sing 37:18
single 40:18 73:9
sir 83:1
sit 33:3
site 71:14,20,21
sits 56:8 60:10
sitting 42:3 73:6 77:11
six 38:21
size 17:15 86:4,14
skill 68:21
skilled 21:6 22:11
skillfully 92:8
skills 2:1 3:15 36:4 75:9
 76:1,13 77:3 91:14

slate 15:11
slide 31:17 39:10
slowly 9:9
small 17:15 43:4,9,14
 43:20 44:8 45:9,12
 46:6,17 48:20 53:10
 53:13 61:17,18 67:18
 67:19 74:3 76:3,20
 84:19 103:17 105:20
 106:11 110:19
SMEs 26:9
Smith 2:7,8,21 3:18
 91:2
smoothly 10:9
soft 59:15
software 99:4
solar 15:9
sole 82:13 106:5
solicitation 112:14,16
 112:19 113:16,22
solidified 9:15
solution 91:13 99:11
 102:10
solutions 91:14 100:6
 100:16 107:11
solve 94:13
somebody 57:18,19
 68:21 75:2,8 79:16
 93:18 95:9
soon 104:10
sorry 14:12,16 25:7
 27:6 28:8 29:17 34:18
 51:22 54:16 62:12
 89:19 100:11
sort 14:8 15:14,19 16:5
 16:11 17:6,9 19:3,3,5
 19:20 20:20 22:1 24:9
 24:10 25:2,18 26:7
 27:10 28:1 29:9 30:10
 31:2,5 32:18,20 33:11
 34:14,15 61:8 62:5
 80:12 83:15 91:22
 94:3 96:2,6,14 97:3
 97:13,15 102:9 103:7
 103:20 104:7,18
 108:1,5 109:9 110:7
sound 100:11
source 36:8
sourced 107:13
sources 7:22
sourcing 109:6
South 12:13 64:5 94:3
Southwest 12:14 64:5
 94:3
space 15:13,20 17:8
 20:5 27:17 65:4,17
 67:10,16 68:1 71:1
 77:18,19 86:5

spaces 37:1 85:19
span 24:7
spans 93:1
speak 27:14 62:1
 115:17
speaking 14:4
specific 18:3 25:15
 103:6
specifically 51:22
spectrum 20:2 24:7
 70:16
speed 8:20 9:16
spend 108:17
spending 22:6 90:3
spent 12:13 103:14
spider 4:16
spoken 104:22
sponsored 21:1
sponsors 115:2
spread 100:16
spur 81:14
squad 71:18
Square 72:7
stability 58:21
staff 55:7 58:10 86:12
staffed 51:20 74:1
staffing 51:19
stage 53:13 58:14
 114:18
stakeholders 17:21
 109:10
stand-alone 86:8
standard 5:6
standards 88:7
standing 47:2 48:17
standpoint 115:12
start 3:3 13:17 21:8
 68:17,20 93:19
start-up 63:22 69:18
start-ups 26:9
started 13:6 21:10
 72:10 86:3,3
starting 9:12 12:18
 25:18 54:7 64:13,21
 80:20 81:3
starts 79:20,21
StartUP 69:14
state 26:11,14 27:3,8
 27:20 28:5 32:17 74:8
 84:2,7 85:21 88:21
 91:20 97:1
state-level 27:21
states 1:1 26:14 27:8
 82:14 84:10,13 95:22
 96:12 97:6 102:2
 114:8
static 75:2
statute 22:7 52:2

stay 118:3
steel 16:4,9
steer 110:3
Steigerwald 3:9 13:3,14
 13:15 14:12,15,19
 22:19,22 23:3,11 27:1
 27:13 32:4 33:13,17
 34:4
stepped 117:17
stepping 32:22 118:2
Steve 11:3
Stevenson 2:9 107:15
 110:6 117:18
stick 58:3
Stoll 80:9
stories 69:6
story 70:8 74:16
strategic 1:19 50:17
 51:3,4 52:8,8 108:13
 109:14
strategy 18:17 55:10
stream 44:1
Street 54:2 72:7
stretch 116:18
strong 19:22
stronger 9:20 92:20
 106:7
strongly 25:16
structured 108:19
struggle 88:4
students 19:12,19 21:9
 34:22
studies 52:13
study 52:15
stuff 14:1 16:16 43:5
 46:10 56:9 84:14
subsequent 9:21
substantial 44:17
subtle 41:12 55:14
suburban 82:20
succeed 74:13
success 69:6,12 73:21
 86:19 87:8
successes 68:6 110:6
successful 68:5 95:4
 112:9,11 114:1
successfully 98:10
Sue 2:7 12:6,21 32:9
 90:10,20 117:5
suggest 75:18 80:6
suggested 40:11 91:8
summer 42:16
super 43:7
supply 36:11
support 3:10 5:14
 13:19 14:6 36:21 40:5
 43:1 63:17 68:13 73:8
 73:16 74:1,2 75:3,4

82:10 83:18 94:5
99:22 105:19 106:11
108:10
supported 37:5,11
supporter 100:15
supporting 33:20 35:16
35:22 36:6,11,16 39:5
40:20 41:18 53:19
54:2
supports 75:5 77:4
supposed 51:12 52:2
98:4
surely 9:9
sustainable 24:5 58:11
switching 38:15
system 1:20 41:16
67:20 72:6 85:2 86:12
98:7,21
systems 96:20

T

T 3:1,1
tab 89:16
table 42:19 68:19
102:19 111:21
tacked 22:5
tactical 107:2
tactile 71:7
take-away 106:22
taken 73:17
takes 16:17
talent 12:9 13:10 37:12
37:21 66:22 67:9
90:11
talk 14:10 19:1,2 23:18
25:3 30:12 31:8 39:21
49:12 52:6 55:22 56:4
59:6 61:20 78:2 79:12
80:2 82:2,3 94:4
98:21 100:20 103:15
103:15 111:14 115:13
talked 49:10,19,20
52:11 63:5 91:16
92:10
talking 4:18 30:11
32:20 34:18 42:11,12
73:11 91:3 92:13
103:6,15 108:14
113:14
tangible 101:5
targeted 60:3
task 40:6 56:9 81:19
tax 84:9
teach 75:22
team 9:10 10:7 24:16
76:9 79:11 98:1
teams 98:12
tech 2:7 54:4 77:16

91:10
technical 1:21 13:22
14:1 17:13 18:20 19:9
109:14
technological 103:16
technologies 16:3,10
16:14 17:11
technologists 24:22
technology 1:20 14:22
15:6,12 17:3,4 20:11
22:9,11 24:1,8 25:1
30:5 34:13 43:22
66:10 70:15 72:18
92:16,19 111:3
television 35:1
tell 6:14 37:2 56:3 67:1
113:20
tends 25:11 85:22
tens 28:6
term 43:12 114:22
terms 26:17 48:5 50:15
54:12 87:12 107:21
110:9
terribly 111:20 115:7
territory 41:17 109:3
test 71:16 79:14
Texas 1:20
textiles 24:3
thank 4:8 11:17,21
12:11,12 23:16 39:9
39:20 54:9 57:10
60:19 62:18 64:3 89:6
89:7,8 90:1 99:12
103:5 117:5,17 118:5
thanks 4:12 6:16 10:15
10:16 31:19,19 33:17
64:2 90:2 115:14
118:15
theater 36:14
theme 66:19
themes 43:3
theoretical 99:21
theoretically 56:2
things 7:5,17 9:2,13,15
15:2,7,22 16:3,5 18:6
19:4 23:19 25:2,3
26:13 30:22 31:1,12
32:8 33:22 34:17
40:19 41:3,8 42:6
47:18 48:18 50:16
60:22 61:2,4 62:2,11
62:21 73:1 79:2,9
80:8,16 90:6,8,21
91:3 93:2 95:6 97:8
98:1 101:3 103:9
107:16 111:14 112:12
113:15 116:2
third 4:4 5:12 41:11

47:11 63:4 86:4 113:5
113:17
thirdly 21:13 36:19
though-provoking 83:3
thought 24:22 63:8
83:3 91:21
thoughtful 111:21
thoughts 40:2 63:13
103:2
thousand 96:11
thousands 74:9 76:10
three 15:2,14,20 17:13
19:3,4 35:19 37:3
42:2 50:16 72:9,17
87:1 112:12
three- 72:5
three-classroom 86:4
threefold 41:2
threw 57:19
thrilled 6:8
thriving 110:17
Tiffany 2:9,10 117:17
tight 38:11
timber 85:1
times 20:22 23:21
27:16 29:21 59:8
tiny 7:4
Titanic 110:3
title 6:20 13:19,20 46:7
today 4:7,15 5:6,22
6:17 9:12 10:13 39:7
63:4 76:16 93:3
100:20 102:16 104:22
116:17,22
today's 118:12
told 17:5
tomorrow 117:9 118:13
ton 16:17
tool 52:18 99:15
toolkit 78:21,22
topic 21:12 33:9 104:3
topics 38:16 51:17
total 114:12
touchstone 45:21
tough 10:19
tour 7:11
town 32:9 67:20
towns 67:18 85:4
tracking 98:17
traction 104:10
trade 45:10 64:8
traditional 7:14 82:2
97:16 109:12
traditionally 15:8 16:18
18:2
traineeship 21:11
traineeships 21:5
training 19:20 20:10

21:9 26:10 88:7
transferring 36:4 37:9
transition 8:8 9:5,7
10:8
transitioning 9:6
transitions 7:6
translated 30:20
transpired 117:7
transportation 44:7
45:14
travels 12:14
tremendous 28:5 32:16
Trey 1:17 90:14 93:13
93:15 99:16 100:11
117:5,15 118:1
triad 69:8
trip 92:15
troops 36:12
truck 72:14 101:7
trucks 72:17
truly 23:22 28:12 74:22
trusted 70:16,17 75:21
76:4
try 31:13 40:10 47:22
64:19 83:12 84:10
94:13 103:20
trying 24:20 30:1 31:12
55:17 71:10 72:11,16
83:14 96:12 98:8
110:3 117:12
TUESDAY 1:9
turn 42:17 46:2,12
turnkey 42:14
two 31:22 50:20 59:9
80:8 83:8 87:1 88:15
89:17 113:7,15
two-and-a-half 72:9
two-year 20:8
type 25:5 30:9 31:15
36:22 109:6
types 30:12 53:20 63:6
typical 4:16
typically 27:8,11 36:1

U

U.S 1:3 3:11 42:21 73:8
ubiquitous 45:22 96:10
undergoing 9:6
underlines 62:15
underneath 98:14
underscore 81:5
underscoring 81:18
understand 9:1,3 40:19
51:7 65:12 66:3 81:22
106:8 107:17 117:12
understanding 53:21
underway 8:18 10:2
unfortunately 47:21

106:12
Union 99:4,4
unique 24:13 28:11
 29:9
uniqueness 60:9
unit 47:2
United 1:1 95:21 96:11
 97:6 102:2 114:8
units 36:8
universal 91:5
universities 17:20 21:8
 26:10 97:10
university 1:16,20,21
 2:4 18:4,8 21:21 31:5
 33:5 63:22 65:2 73:13
 88:21
university-based 19:11
unusual 105:1
update 5:11
updates 3:15,17 90:13
 90:15,18 93:16
urban 63:6 67:18 82:20
 84:19
USA 2:9 7:20 21:14,16
 47:15
USDA 45:9 52:21
use 4:18 16:1 19:18
 39:12 40:2 50:2 79:3
 79:8 111:8
useful 35:1 40:10 51:1
 59:11 61:13
user 71:15
usually 84:4
UT 98:7,20
utilized 84:13 101:15

V

VA 36:16
validated 70:22 80:5
validation 68:3 72:1
validator 70:17 88:22
Valley 98:9
valuable 95:11,12
value 45:21 51:8 107:18
 108:8
variety 7:12 37:5 52:13
 110:13
various 39:4 40:21
 81:22 91:20 113:8
vary 87:9
VC-funded 82:10
vehicles 44:5
venture 20:14 65:22
 77:8 103:4
Ventures 1:20
venue 67:9 88:17 109:8
verification 113:18
vertically 110:7

verticals 100:3
vessel 111:5
Veterans' 45:15
vetted 88:12
Vice 1:19
Virginia 101:11
virtual 98:18
virtuous 73:11
vision 54:21
visionary 101:18
visited 90:10
visiting 5:12 12:4
vocabulary 71:13
volunteering 107:8
VP 30:9

W

WADSWORTH 2:3
waiting 38:4
walk 42:18 94:8,21
walked 76:10
walking 34:22
wanted 18:9 57:17
 79:12 90:17 91:1
 105:5
wants 25:9 56:12
 106:17 111:4,4
Warren 103:12
Washington 1:13 2:4
wasn't 33:15
wave 48:15
way 5:3,12 8:13 21:20
 29:7,14 30:1,4,22
 31:1 34:6 37:22 46:11
 46:14 53:21 59:14
 63:4 73:11 76:3 82:18
 87:3,13 92:19 93:3
 101:14 108:12,19
 111:10
ways 5:19 17:17 37:5
 46:10 54:6 101:20
 104:13 108:16
wealth 38:22 104:1
wealthforce 101:1
weapons 36:9
wearables 70:13
Webex 4:16
website 62:17 89:10
week 12:22 17:6 23:21
 83:9
weekend 85:12,13
weeks 64:5
weird 18:21
welcome 4:3,4 10:13
 46:13 63:12
Welcoming 3:3
well-explored 65:17
well-recognized 91:13

went 7:16 113:8 118:17
west 86:7 101:11
what' 101:21
white 35:7 40:21 44:13
 56:8
Whitney 2:8 116:12,13
widely 103:18
widget 36:13
widgets 36:9
WILSON 2:10
wind 15:9
wing 14:22
wish 73:14,14
women 44:17
Women's 59:12 60:4
wonderful 69:12
wondering 31:7
wording 115:4
words 105:13
work 7:9 8:18,20 10:6
 10:14 14:13 15:16
 16:9 20:6,11,11 23:20
 42:6,7 54:11 64:7,12
 64:21 65:11 67:14,22
 73:13 78:5,20 80:11
 87:12 89:15 94:6
 96:19 97:10,13,20
 99:6 101:2,8 102:7
 106:14 117:7 118:6
worked 7:17 14:9 32:12
 64:9 106:19
workforce 3:15 18:13
 18:14,17,18 19:2,7,21
 20:1,19,20 21:7 22:7
 22:11 24:10,17 25:2,5
 25:7,9,11,12,15,21
 27:10 29:4,13,22 30:2
 30:3 31:6 32:17 33:2
 33:8 50:22 91:14
 92:21 96:9 100:22
 101:10,14,19 103:11
workforces 32:1 102:2
working 4:8 5:14 10:3
 11:19 13:7 35:15
 48:10,18 50:12 63:15
 65:21 86:16,19 94:7
 94:14 95:13 96:8 97:8
 100:16 105:19 111:15
 114:19 117:15
works 7:14 82:18 98:22
world 114:6
worry 89:22
Wow 49:6
wrap 29:19
wrap- 77:19
wrap-around 76:21
wrapping 24:11 90:8
written 22:4,5

wrong 23:13 65:10
WV 1:21

X

XYZ 29:22

Y

year 21:9 28:21 31:16
 35:8 53:15 57:18 59:9
 85:3
year-and-a-half 112:18
years 22:6 28:7,10,18
 29:1 37:6 43:19 72:9
 75:11,11,12 87:1
 105:10 106:19 113:7
York 26:14 27:4,9,19
 69:13,13 78:18
younger 36:1
Youngstown 34:8

Z

ZIP 69:4 84:1
zone 42:5

0

1

1.2 26:4
1.4 113:8
1.5 26:6 101:7
1:00 1:13
1:17 4:2
10 53:16 109:20
100 28:6
11 3:7 85:3 109:20
116 3:20
118 3:22
12 25:18 42:7 96:20
13 3:8 52:15
14 17:3 21:16 26:1
 28:21
1401 1:12
15 42:7 53:17 86:6
 114:13
1776 99:4,11
18 114:10
1871 77:12
1953 43:10
1998 7:11

2

2 1:10 53:15
2:00 74:10
20 21:20 43:19 86:7
 114:13
200 21:20
2008 40:9
2009 57:13

2010 7:12 51:19
2012 52:15 112:2
2013 76:11
2015 17:4
2016-2017 8:8
2017 1:10
21st 66:6 73:2
24 74:2
24/7 74:1
25th 81:17

3

3 84:2,3
3:00 5:3
3:13 118:17
30 115:9
33 112:17,19
39 3:11
3D 36:8

4

4 3:3 53:15
4.6 65:22
45 67:11 72:8 86:22
 87:2

5

5 84:2
50 87:2
501(c)(3) 67:5
501(c)(3)s 28:13,14,16
50s 43:6,6,13 46:4

6

6 3:5
60s 44:16
64 3:13

7

7 52:15

8

8 52:16
8:45 118:14
86 65:21

9

9 85:4
90 59:21 83:22 84:1
 85:5
90-plus 35:15
93 3:15 84:1

C E R T I F I C A T E

This is to certify that the foregoing transcript


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

Before: US DOC/EDA

Date: 05-02-17

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

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

UNITED STATES DEPARTMENT OF COMMERCE

+ + + + +

U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

+ + + + +

NATIONAL ADVISORY COUNCIL ON INNOVATION
AND ENTREPRENEURSHIP (NACIE)

+ + + + +

MEETING

+ + + + +

WEDNESDAY
MAY 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, Co-Chair, AU Center for
Innovation in the Capital
STEPHEN TANG, Co-Chair, University City Science
Center
REBECCA BAGLEY, University of Pittsburgh
ESTHER BALDWIN, Intel
HEATHER BOESCH, IDEO
TREY BOWLES, III, The Dallas Innovation Alliance;
The Dallas Entrepreneur Center
SCOTT FREDERICK, New Enterprise Associates
JULIE GOONEWARDENE, Associate Vice Chancellor for
Innovation and Strategic Investment,
University of Texas System

ORIN HERSKOWITZ, Columbia Technology Ventures,
Columbia University
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
JOE SCHOCKEN, President at Broadmark Capital, LLC
SUE GRIFFITH SMITH, Ivy Tech Community College
WHITNEY SMITH, JPMorgan Chase
TIFFANY STEVENSON, Sephora USA, Inc.
TIFFANY WILSON, Global Center for Medical
Innovation

ALSO PRESENT

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

CONTENTS

START and Welcoming Remarks.	4
November Offsite Pitches	
Indianapolis, IN - Sue Smith . . . . .	.12
Philadelphia, PA - Steve Tang. . . . .	.25
Dallas, TX - Trey Bowles . . . . .	.32
Potomac Highlands, WV - Joe Kapp . . . . .	.42
Workgroup Report-Outs. . . . .	.52
Break.	110
NACIE Framework Discussion	
Heather Boesch	111
Next Steps - What should we accomplish by our August meeting?.	139
Closing Remarks.	170
Adjourn.	170

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

2 8:53 a.m.

3 MR. BUERSTATTE: All right. Good
4 morning everyone.

5 Welcome to our second day of the
6 National Advisory Council on Innovation and
7 Entrepreneurship's third quarterly meeting.

8 As the designated federal officer, I
9 am officially kicking it off. So, thanks for
10 your patience once again working through security
11 to come in and find your way to the library.

12 We still have a few more members
13 trickling in. They're in the building, but on
14 the way. To keep ourselves on schedule, I wanted
15 to rock and roll.

16 So, you all know the drill by now.
17 You've got the agendas in front of you. Pretty
18 standard. Although, one tweak for today. We're
19 going to do things a little bit different to
20 start things off with a pitch.

21 Most of you are familiar with this.
22 We've sent some emails out and you've seen some

1 of the correspondence.

2 And what this is, is a pitch for our
3 November offsite meeting. November is National
4 Entrepreneurship Month. And to switch things up
5 and bring the council into the community -- down
6 to the community level, we thought it would be
7 fun to do an offsite meeting.

8 And as you'll see, we'll hear from Sue
9 Smith. Rick Johnson, I believe, is also dialed
10 into the WebEx. Rick will be pitching from us
11 virtually. Steve Tang, Trey Bowles and Joe Kapp.

12 I know many of you are super excited
13 to participate in this and the timing just didn't
14 work out for November, where November was a rough
15 month for your organization to host or your city
16 and what have you.

17 We're very hopeful that we'll do
18 another one of these next year with -- as long as
19 the timing and policy issues align. So, don't be
20 dismayed if you couldn't participate. I
21 certainly hope we can do another offsite in 2018.

22 Other than that, we'll be excited to

1 hear the report-outs. And, again, nothing
2 informal, we're not expected to hear anything
3 specific or, in fact, I don't think we're ready
4 for any votes today, but that's fine.

5 Let me just emphasize that this is an
6 opportunity for the broader group as a whole to
7 hear what some of the smaller groups have worked
8 on.

9 So, if you've hit a wall, you've had
10 a specific question you're toying with and trying
11 to -- trying to wrap your heads around, let's
12 elevate that to the broader group and let's work
13 through it.

14 So, you don't have to have all the
15 answers. In fact, we hope you don't. Because if
16 you do, that would be, you know, we're lacking
17 the --- or not leveraging all the brain power at
18 the table.

19 So, with that said, that's it for me.
20 Logistics, you know the drill also. A restroom
21 is in the back. We'll break at 10:30. Take
22 breaks as you need, and I'll kick things over to

1 the co-chairs.

2 CO-CHAIR BRADLEY: So, one, welcome
3 back, Steve, and congratulations on your award.
4 I'm glad you made it.

5 (Applause.)

6 CO-CHAIR BRADLEY: I hope that -- when
7 I was driving home out to the country last night,
8 I was like, wow, how much fun I had yesterday.

9 So, I think I want to thank everyone
10 again for their patience in this process. I
11 think we had some great conversations yesterday.

12 I want to commend Joe and Trey and
13 Heather, because at least those are the groups I
14 was in where I think we made a lot of great
15 progress.

16 And it was good to see everybody
17 getting a little more relaxed and having fun at
18 dinner. So, I look forward to today.

19 CO-CHAIR TANG: It's great to be here.
20 I wish I were with you yesterday, especially for
21 the breakout groups, which we'll hear more about,
22 and the dinner, which I heard was spectacular.

1 And in case you're wondering, if you
2 take the six o'clock train from Philadelphia,
3 it's a really quiet train for some reason. So,
4 I'm happy to be here with you.

5 And I apologize, again, I'll have to
6 leave at the first break to do the testimony at
7 Congress for Small Business, but also a plug for
8 what we're doing here at NACIE. So, glad to be
9 with you.

10 MR. BUERSTATTE: Real quick for those
11 that might be dialed in, I think Whitney and
12 Rick, can you chime in and give us a comms check?

13 I just want to make sure that you're
14 able to contribute via voice before we really
15 dive into things.

16 (Pause.)

17 MR. BUERSTATTE: We'll get started,
18 but Rick and Sue -- excuse me, I'm sorry. Rick
19 and Whitney --- Whitney Smith, the other Smith,
20 let us know if --- just give us a good, positive
21 comms check.

22 Eric Smith is looking into this right

1 now. We want to make sure we've got voice
2 capabilities for you. So, we'll start off with
3 the pitches. First up is Sue.

4 We also have distributed -- underneath
5 the agenda, take a look real quick, we have a
6 voting box or pamphlet for you.

7 We avoided any --- inserting any
8 chads, so hopefully there will be no problems ---
9 issues there.

10 But we've got five options here, and
11 we simply want you to rank them one through five
12 on your preference.

13 I'll also highlight that your
14 preference is one of three inputs into this
15 decision process.

16 We will weight this and get an idea of
17 what location is a top preference for the
18 council, but number 2 will of course be Secretary
19 Ross' guidance on where he sees the council best
20 engaged. And, three, our own policy
21 considerations.

22 As you know, we're still in the early

1 phases of developing some of these broader, real
2 big picture policy ideas. And we want to make
3 sure that the site we travel to complements, as
4 best as possible, some of the issues that we're
5 working through on the team.

6 So, those three factors, again, your
7 vote; our chair, Secretary Ross; and, third,
8 policy considerations.

9 We'll keep you abreast of this
10 process. I'm hopeful that we can have a final
11 decision by late June mainly because we need to
12 make the decision soon so that individual and the
13 community there has enough time to prepare for
14 our visit in November.

15 It's quite a lift and we want to be
16 respectful of your own full-time jobs. So, keep
17 that in mind --- but, actually, any questions on
18 that real quick before we start off with Sue?

19 (Pause.)

20 MR. BUERSTATTE: All right.

21 MEMBER STEVENSON: Is there criteria
22 that we should be thinking about in terms of

1 based on some of the work projects that we're
2 doing?

3 So, like, advance manufacturing, is it
4 in proximity of? So, just other criteria that we
5 can be thinking about to help frame our decision?

6 MR. BUERSTATTE: Yeah. Absolutely.
7 And I think we'll get that information from the
8 pitches.

9 So, I'm hopeful that each individual
10 that's pitching today will help communicate the
11 type of exposure and lessons gained from that
12 immersive experience.

13 But, no, there's no specific value,
14 matrix to apply to this, how many policy ideas
15 does this community complement, how many issues
16 we will cover while there, especially since some
17 of the issues we worked on vary on scope.

18 We know some are smaller and more
19 tactical. And others like the ones we -- most of
20 the ones we worked through yesterday were very
21 broad-reaching, very big picture. And those are
22 going to take some time.

1 And possibly if we were to weight
2 those, theoretically we would weight those with a
3 little bit more just because of their scope and
4 impact versus some of the earlier stuff we worked
5 through quicker.

6 Does that answer your question,
7 Tiffany?

8 Okay. Thanks. Anything else?

9 MEMBER STEVENSON: I just want to say
10 "thank you" to everybody in advance for the hard
11 work.

12 I'm looking forward to the handouts
13 and the entertainment. I'm sure Joe's getting
14 entertainment.

15 MR. BUERSTATTE: All right.

16 (Laughter.)

17 MR. BUERSTATTE: So, we'll start off
18 with Sue. Sue, here you go.

19 MEMBER SMITH: Okay. Thank you very
20 much. I really appreciate the opportunity. I
21 will say that I can't take credit for this. My
22 staff put all this together.

1 And our Chamber of Commerce gave all
2 the information, materials, and of course our
3 college did, too. So, they're very excited about
4 the opportunity to host in November.

5 So, first of all, some Indiana facts.
6 The things that I will tell you that are not on
7 the slides, are that Indiana is the No. 1
8 manufacturing state.

9 We are the center for BioCrossroads.
10 We have a BioCrossroads center. We have an
11 Orthopedic Capital of the World in the northern
12 part of our state.

13 So, we have Salesforce that just came
14 into Indianapolis, and that's an IT center that
15 we're having some opportunities in innovation and
16 in technology.

17 And so, it is a very progressive
18 state, it's a very manufacturing-oriented state,
19 but it also has some IT and it also has some
20 health sciences with Lilly and some of the other
21 folks that are there.

22 "Crossroads to America," of course,

1 but Ivy Tech Community College is kind of a
2 unique place.

3 It's the largest community college
4 system in the United States. We have about
5 170,000 students and we blanket the state of
6 Indiana with all of our campuses.

7 Our flagship campus is in Indianapolis
8 and that is our largest campus. And it has
9 several interesting labs that would probably be
10 of interest to you all.

11 One of the main centers there is
12 culinary. And so, we have a tremendous amount of
13 tourism and gambling boats and that kind of thing
14 in our state. And so, we teach a lot of that
15 there.

16 So, this is the schedule that we had
17 proposed. We had talked about having the
18 reception with our culinary art students and
19 having them show off their talents and abilities.

20 A lot of those folks will go on to do
21 vertical farming, they go on to do, you know,
22 open their own restaurants. And so, it's a very

1 innovative kind of program.

2 We are looking at guest speakers. We
3 are hoping to talk to Mike Pence and see if he
4 would come. I think he might, if he's available.

5 If not, we have some other folks
6 within our state that would be interested in
7 doing it. The governor is always an option and,
8 of course, the mayor of Indianapolis.

9 Indianapolis is a very international
10 city. We have a lot of international
11 relationships.

12 One of those that sort of drives that
13 international relationship and innovation is our
14 Indy500, which is the "greatest spectacle in
15 racing," as many of you. And the Indianapolis
16 Motor Speedway is one of the bucket list
17 destinations for a lot of people.

18 And I think it's --- I've been there
19 every year since 1987, '90, something like that.
20 And my husband has been there every year since he
21 was seven, and he is 62. So, we are very
22 committed to the Speedway.

1 So, Dinner at the Speedway is quite a
2 unique event. I don't know if you know much
3 about it, but there's a pagoda out in the middle
4 of the Speedway and we usually get that donated
5 by the Speedway to have dinner there.

6 So, then our group meeting, we could
7 ride around the track. The museum is always
8 interesting.

9 Our downtown is -- if you look at the
10 top 10 things to do in Indy, you can see our
11 downtown is quite robust and there is a lot of
12 things to do there.

13 If you haven't had the shrimp
14 cocktails downtown that we're famous for with the
15 special sauce, that's always a good thing to do.

16 And then Friday, of course, is our
17 wrap-up and next steps. So, we do think we have
18 accommodated for the meeting, as well as, you
19 know, for the entertainment.

20 And we're really excited and hope to
21 see you in Indy in November. Thank you.

22 (Applause.)

1 MR. BUERSTATTE: Real quick, any
2 questions for Sue while we've got her up?

3 MEMBER PEREZ WADSWORTH: So, I just --
4 less a question and more an offer. With our deep
5 roots in Indianapolis, we of course own the
6 IndyStar, we could rather than have meetings in a
7 hotel and have that expense, we would certainly
8 be happy to host onsite at our facilities for our
9 meetings.

10 And can also be helpful with all of
11 our connections there in terms of speakers, even
12 something like a panel of community business
13 leaders who might, you know, whose perspective
14 might be interesting to us as we focus on our
15 work. So, happy to help with that.

16 MEMBER SMITH: That's great. And,
17 yeah, we could have --- we could get industry
18 leaders as well.

19 Cummins has offered their new
20 headquarters. One of their buildings is downtown
21 Indy. It's beautiful. They have offered to
22 host, as well.

1 So, I think we would have a lot of
2 southern hospitality in Indianapolis.

3 MR. BUERSTATTE: Great. And,
4 actually, Rick wasn't able to make it online and
5 he did warn us. He had an emergency come up, so
6 he wasn't sure if he'd be able to make it.

7 But in lieu of Rick, I thought it
8 might be helpful for Tiffany Wilson to share her
9 experience as a council member when we visited
10 Nashville and did this community visit on the
11 last council.

12 Tiffany, could you share some light on
13 why you felt it was valuable and what you took
14 away from the experience?

15 MEMBER WILSON: Yeah. I think the
16 first one --- I guess the main one when we did
17 the voting last time, Nashville won. Michael
18 Burcham pulled out the whole --- rolled out the
19 red carpet with the boots and this music and the
20 whole nine yards.

21 I think my takeaway from that was it
22 just wasn't around --- kind of focused on

1 innovation and entrepreneurship. It really ---
2 with all the things, the topics that we cover at
3 NACIE, the program that was put together was a
4 really great snapshot example of that in that
5 community.

6 So, we started --- we had the mayor
7 talk to us. She had --- Megan Barry had just
8 been elected, had a little overview of the
9 Nashville --- the Music Hall of Fame.

10 The next day we got to tour Thistle
11 Farms, which is a not-for-profit organization
12 that gives women who have been in --- abused and
13 with addiction, a real clear pathway forward.

14 And so, that was really an interesting
15 model of workforce development and kind of a
16 social impact entrepreneurship.

17 They had just signed a big contract
18 with Whole Foods and were planning on
19 manufacturing and bringing in workers from the
20 community. So, it was unique, right?

21 And so, then we headed over to Casa
22 Azafran, which was an opportunity to help the

1 Latino community in Nashville that was growing
2 and it was an interesting intersection of
3 services to help the Latino community in terms of
4 immigration, education, law, but then also a day
5 care.

6 And then what I found incredibly
7 fascinating was they had an incubator kind of
8 accelerator there for food trucks. It was like
9 an industrial kitchen.

10 So, that actually got me thinking
11 about, you know, with all these NACIE
12 experiences, I always take it back to Atlanta and
13 say, "What can we be doing in Atlanta to do
14 better," right?

15 And so, for example, on that we've got
16 a big westside development going on with the new
17 Falcons stadium. And we just completed a study -
18 -- or Georgia Tech did, that EDA had funded, to
19 look at building out this biomedical innovation
20 neighborhood.

21 Well, if that's going to really be
22 successful, I kind of drew on what I saw in

1 Nashville, you know, how do you pull from those
2 surrounding communities, right, so the whole
3 thing doesn't just get gentrified, but we're
4 integrating the community on the west side in the
5 overall development.

6 So, could there be kind of a Casa
7 Azafran, you know, for food service, for hotel,
8 hospitality, you know, and that sort of thing.

9 So, you know, as we're going to these
10 different communities, there's so many
11 opportunities to learn and grow.

12 And then we spent a lot of time,
13 obviously, at the EC, the Entrepreneur Center,
14 that Michael basically founded and started.

15 And so, it was a --- we spent a night
16 at a secret music hall, like invitation only.
17 Everyone has their own little whiskey locker. I
18 was really kind of jealous, but it was fun,
19 right, but very educational.

20 And I think that experience was so
21 unique and different and a good example of
22 bringing together all these ideas that we discuss

1 here that other people wanted to highlight their
2 cities and their unique ecosystems, too.

3 And so, that led to, you know, Austin,
4 which I wasn't able to attend, then Chicago. And
5 Chicago was hosted by Marie Lynch and her
6 background is very workforce-oriented.

7 So, Chicago and everything going on
8 there in terms of underserved communities,
9 workforce development, poverty and all of the
10 unique things that Chicago is doing to address
11 that, we got to see firsthand and how the
12 community is coming together, you know, with
13 Whitney and J.P. Morgan.

14 And so, these strong, public-private
15 partnerships to address some of these key issues
16 has been great.

17 So, I guess that's kind of like
18 anything, right? So, you know, when you were in
19 school and go on field trips and you got to take
20 what you learned in the classroom and what you
21 were discussing and then see it in play, you
22 know, I think these city tours are a great way to

1 have insight that we can bring back and have even
2 more meaningful policy discussions.

3 MR. BUERSTATTE: And I'll just add
4 that on the note of our presentation from Mayor
5 Barry starting off the Nashville visit, on
6 through the variety of places that we visited, it
7 was clear that Nashville has infused
8 entrepreneurship into their music culture.

9 And the same sentiment was true for
10 Chicago, except it was more workforce-related.
11 And the sentiment there was really the public-
12 private partnerships helping drive the 77
13 neighborhoods across the Chicago metroplex area.

14 And when you're talking about that
15 diverse of a community, you're really relying on
16 those subject matter experts that are providing
17 great support in unique ways and they're able to
18 do that through those public-private
19 partnerships.

20 So, each of those visits had a unique
21 theme and I think we walked away with a clearer
22 understanding of the personality or the

1 characteristics.

2 And we also, as many of us --- as we
3 call ecosystem builders or entrepreneurship
4 supporters, I've referred to that as the culture
5 --- the culture of that is the thread across the
6 community.

7 So, we think about this --- these
8 pitches, what culture, what personality --- what
9 community personalities might be most valuable
10 for the council to better understand.

11 So, thank you so much, Tiffany. That
12 was great.

13 MEMBER STEVENSON: Uh-huh.

14 MR. BUERSTATTE: With that said, I
15 think we're ready for Philadelphia.

16 Steve Tang.

17 CO-CHAIR TANG: Thank you, Craig.

18 And let me just echo what Tiff shared
19 with you. This is a tremendous learning
20 experience.

21 By the way, you cannot go wrong with
22 any of the choices that are on the ballot here.

1 All, I think, are going to offer different
2 dimensions of what we've been doing, focus on
3 access inclusion, as well as innovation and
4 entrepreneurship.

5 What I try to do is take some lessons
6 learned from the experiences in NACIE 2.0.
7 Michael Burcham's experience having the entire
8 NACIE convene there, and then Julia's experience
9 in Austin and Marie's experience in Chicago.

10 So, the first thing I want to share
11 with you is, we've hired a professional event
12 organizer to help us do this. Okay. And that's
13 the Economy League of Greater Philadelphia.

14 They do a yearly Greater Philadelphia
15 leadership exchange, which is a program to both
16 educate local leaders in terms of what's going on
17 in Philadelphia, and then other cities like San
18 Francisco, Toronto -- well, it's Los Angeles of
19 late.

20 So, that's --- my up front offer is
21 that we've learned enough to know that we need
22 professionals to do this.

1 The other thing I'd offer to you is
2 that we have set aside budget at the Science
3 Center to host this.

4 So, should you pick Philadelphia, the
5 only expenses that you would be responsible for
6 are getting yourself there and lodging, and we'll
7 take care of the rest.

8 So, three elements to Philadelphia.
9 Eds and Meds innovation in University City, which
10 is the part of the city that the Science Center
11 is located in; the Navy Yard --- the country's
12 oldest navy yard, which is undergoing a
13 renaissance to focus in on a --- kind of a
14 suburban campus on a waterway; and then the
15 overall tech scene in Philadelphia.

16 So, just as a background for
17 Philadelphia, we like to say that we are the home
18 to the country's first startup, which is this
19 thing called the United States of America. And
20 the founders of that, obviously, are well-known
21 to all of you.

22 The other thing which is, I think,

1 obvious, is it is a large city, fifth largest
2 city in the country. We have both opportunities
3 and challenges.

4 We are at once the largest --- the
5 biggest --- the city that has received the
6 highest influx of millennials in the last five
7 years.

8 Over a hundred thousand millennials
9 have moved into Philadelphia. That creates a
10 certain vibrancy for the city.

11 On the other side of that, we are also
12 the poorest big city in the county with an
13 endemic poverty rate close to 26 percent. I see
14 that firsthand and I'll talk more about that for
15 University City.

16 So, the idea here is to not just show
17 you the glitz and glamor and everything that's
18 going right, but also engage you and the input
19 that you might have on how to work with
20 underserved communities that have been
21 historically very poor for many generations.

22 So, University City, just a snapshot.

1 We are the home to University of Pennsylvania,
2 Drexel University, Children's Hospital of
3 Philadelphia, but also some really exciting and
4 emerging companies.

5 Spark Therapeutics, which is a gene
6 therapy company, which is working for a ---
7 working on a therapy to cure forms of childhood
8 blindness by introducing genetic engineering to
9 infected patients, and of course my organization,
10 the Science Center. So, one of the highest
11 densities of Eds and Meds in the country.

12 Second of all the navy yard, the
13 world's oldest navy yard which was shuttered back
14 in the 1990s, has had a significant comeback.

15 There are actually more jobs in the
16 navy yard today based on high tech and based on
17 entrepreneurial ventures, than there were actual
18 shipbuilding jobs in the heyday of the navy yard.

19 So, some of the --- you'll recognize
20 the logos for Urban Outfitters, GSK, Glaxo-
21 SmithKline, Tastykake. We'll tempt you always
22 with Tastykakes. And a lot of very interesting

1 development going on there.

2 And then last, but not least, the tech
3 community. Overall, a hundred thousand tech
4 workers. Comcast will open their Innovation
5 Tower in two years, a million and a half square
6 feet of space.

7 So, if you're having trouble with your
8 Comcast service, I'll take you directly to the
9 customer service area. You can work it out with
10 them there.

11 So, here's a brief look at how we see
12 the agenda. We do not have a prescription yet
13 about what the entertainment will be, but there's
14 a vibrant restaurant scene, there's a vibrant
15 music scene especially in the jazz area. And of
16 course November, we typically have some of our
17 sports teams still playing.

18 The Phillies used to play in early
19 November. Not so much these days. We'll see
20 what happens there.

21 But we are looking to open on that
22 Thursday morning with an overview and some

1 notable guests there, leaders of the city,
2 leaders of the state. Explore University City
3 hands on, have lunch, then have our NACIE meeting
4 and then a group dinner. Place to be determined.

5 The morning presentation on Friday
6 will focus on the tech scene, then take a trip to
7 the navy yard, then lunch in another block from
8 there.

9 So, we are ready to welcome you.
10 Again, if you don't pick Philadelphia, any of the
11 other choices are going to be outstanding, but we
12 would love to have you. So, thank you.

13 (Applause.)

14 MR. BUERSTATTE: Any questions?

15 MEMBER REAMER: What is DuckDuckGo?

16 CO-CHAIR TANG: DuckDuckGo is a
17 website that actually is encrypted so that
18 cookies do not work.

19 So, in other words, your web history
20 doesn't exist if you use the web browser
21 DuckDuckGo.

22 MEMBER KAPP: So, I was in graduate

1 school at University of Pennsylvania and helped
2 write some of the revitalization documents for
3 the naval ship yard -- for the shipyard.

4 So, I'd like to take credit for that
5 and --

6 (Laughter.)

7 MEMBER KAPP: -- want to go ahead and
8 preempt the conversation so that you can come out
9 to West Virginia and just see what we're going to
10 do out there.

11 CO-CHAIR TANG: Touche.

12 (Laughter.)

13 MR. BUERSTATTE: before we move on to
14 Trey, I'll add that Steve touched on an important
15 point.

16 I know many of you are, as we've
17 identified over and over, many of you are doers
18 and want to make impacts today.

19 That was another great output from
20 these events where relationships were
21 established, partnerships were developed and many
22 NACIE members have gone on to support the

1 programming in Nashville, in Austin and in
2 Chicago.

3 So, this is also an opportunity for us
4 to drive some change --- some immediate change at
5 the local level versus the meta federal, national
6 level that we're focused on right now.

7 MEMBER BOWLES: All right. Good
8 morning.

9 GROUP RESPONSE: Good morning.

10 MEMBER BOWLES: How we doing?

11 GROUP RESPONSE: Good.

12 MEMBER BOWLES: I get excited --- I
13 tell people I get excited when I talk about
14 Dallas, because I don't just drink the Kool-Aid,
15 I help stir it. So, if I get really excited, I
16 apologize.

17 In lieu of not being able to bring any
18 materials, Mark Cuban was going to come with me
19 this morning to vie for Dallas and he couldn't.

20 And President --- former President W.
21 Bush --- George W. Bush is available now. He
22 doesn't have a lot of stuff going on. So, he's

1 agreed to be our event planner for the trip to
2 Dallas.

3 (Laughter.)

4 MEMBER BOWLES: So, good morning.
5 Many of you have heard it said "everything is
6 bigger and better in Texas." Well, we agree.

7 And we also agree that we had this
8 great campaign several years ago called Don't
9 mess with Texas, it was about not littering, but
10 we're talking about some of the things that stand
11 out about what we're doing.

12 In Dallas we have 21 Fortune 500
13 companies, which doesn't take into account the
14 tens and tens of other major corporations that
15 have large headquarters there from the second
16 largest location for Microsoft and Ericsson's
17 North American headquarters.

18 We have the largest arts district in
19 the US. Our downtown has a walkability score of
20 97. I don't know how many of you guys have been
21 to Dallas, but with as sprawling as it is, I'm
22 assuming you did not think you could walk through

1 the downtown, but you easily can.

2 We also have the largest light rail
3 system in the country, which goes to both of our
4 international airports that you can fly into.
5 And for, I think, about \$2.50 you can get into
6 the city on our new light rail system.

7 We are centrally located in the middle
8 of the country. If you will look at this map
9 that we have, I put several examples of where
10 each of you live to show you that nobody is
11 having to travel cross-country to get here.

12 Many people have been to Dallas and
13 through Dallas, but not as many people have been
14 into Dallas. And so, I'm excited to show that to
15 you.

16 We're looking at a humongous
17 population growth. 10.5 million by 2040. We
18 have six Major League teams, including a WNBA
19 team and several Minor League teams.

20 We have a Federal Reserve Bank and one
21 of the only four US Patent and Trademark Office
22 regional offices.

1 You will be hosted by two
2 organizations when you come to Dallas. One is
3 the Dallas Entrepreneur Center, or the DEC, which
4 is an organization I lead.

5 And the second is the Dallas
6 Innovation Alliance, which has been cast by the
7 City of Dallas, the mayor and the city manager,
8 to help come up with a Smart City Strategy for
9 the city.

10 If you look at the bottom of this
11 banner, these are several of the different
12 locations that we have that fall underneath the
13 DEC.

14 We have nine announced locations
15 across Texas now, and these are just a few of
16 them that sort of exist across the 9200-square-
17 mile region that is north Texas.

18 As you can see, I'm showing some of
19 the stuff that we have going on here in terms of
20 sports.

21 There will be several of our sports
22 teams that will still be playing in November.

1 So, that would be a great way for us to go to a
2 game if that's of interest to you.

3 Talked about the Federal Reserve Bank,
4 the United States Patent and Trademark Office and
5 the George W. Bush Presidential Library.

6 Which I don't know how many of you
7 have been to a presidential library before. But
8 regardless of whether you like a president or you
9 don't, they are fascinating.

10 And we would --- and I'll get to it
11 later, but we'd like to have the president come
12 and speak to us one of those days and maybe have
13 some meetings at the George Bush Institute.

14 One of the things I'm really excited,
15 though, when I think about what we can show you
16 that's going on in Dallas as we have the
17 conversation on innovation and entrepreneurship,
18 is the great things that are going on there.

19 I mentioned the DEC. I would love for
20 you guys to come see the work that we are doing
21 in Dallas and how it is affecting entrepreneurs
22 at the ground level.

1 Same with the Dallas Innovation
2 Alliance. We're one of only a few public-private
3 partnerships in the country that works very well
4 with the city and about 23 other organizations to
5 make that work.

6 We recently launched at the end of
7 March, a Smart Cities Lab powered by AT&T, which
8 fills up an area that we are calling the Dallas
9 Innovation District.

10 So, we would be able to walk you
11 through that, show you around, show you the
12 different things that are working and the data
13 that's being collected and how it will help
14 create efficiencies inside of our city, as well
15 as revenue opportunities for our city ultimately
16 creating the best possible place for our citizens
17 to live, work and play.

18 One of the things that we believe
19 makes up an innovation district, there's three
20 components; one is startup innovation, one is
21 corporate innovation, and one is civic
22 innovation.

1 Our Innovation District has startup
2 innovation through the DEC, civic innovation
3 through the Smart Cities Living Lab, and
4 corporate innovation through organizations like
5 BlueCross BlueShield which is launching an
6 innovation lab called C1, which is Customers
7 First, in about 40,000-square-foot space inside
8 of that district, which we would love to show
9 you.

10 Toyota recently moved to Dallas and
11 has a connected innovation component. Blackstone
12 just launched something called Launch Pad at
13 University of Texas at Dallas, which is one of
14 our rising stars in terms of being a Tier 1
15 research university. We have AT&T Foundry, which
16 is one of their innovation labs.

17 And then you guys were talking --- I
18 think Tiff was talking about this earlier. We
19 have something called the GroundFloor, which is a
20 social innovation accelerator and fund -- funded
21 by the United Way, in Dallas as well, which is
22 right around the corner from where our office is.

1 When I look at sort of our agenda,
2 this is a proposed agenda. If you want to get
3 there early and see the Dealey Plaza and the
4 grassy knoll, sometimes they are not wonderful
5 stories in your history, but they're still part
6 of your history. And a lot of people come to see
7 the Book Depository and the six-floor museum.

8 We'll have our mayor come out and
9 participate. Cafe Momentum is actually an
10 interesting social enterprise started by a chef
11 who brings in workers that are juvenile
12 delinquents that he brings back into his program
13 and helps substantially reduce the recidivism
14 rate in Dallas as a result.

15 We'll probably have Senator Cornyn
16 come, the president of the Federal Reserve, the
17 executive director for the US Patent and
18 Trademark Office.

19 As I mentioned, we will try to get
20 President Bush to come in there. He's usually
21 good about that kind of stuff. He's in town.
22 And as you, I think, Orin, suggested, maybe we

1 can get him to do a NACIE portrait for us while
2 we're there.

3 One of the other things that I think
4 is really exciting is as we think about what kind
5 of things we can be doing in Dallas, one of the
6 projects that we're working on that you'll hear a
7 little bit more about later this morning is the
8 mentor networks and Entrepreneurship for All.

9 I would love to invite the president
10 of our community college district to come in and
11 talk about their commitment to this initiative
12 and how they see this playing out across the rest
13 of their seven-school program.

14 And I think that being able to see how
15 the work that we do and the things that we're
16 proposing here will affect in an individual
17 community, would be really exciting for all of
18 us.

19 Here's a couple of examples of the
20 Fortune 500 companies that exist in Dallas.
21 We'll make sure that we will make a good, fun
22 time for you. Definitely hit up some barbecue --

1 - some Texas barbecue, but just excited to have
2 you guys come and do this.

3 I can say that I'm a part of another
4 organization called the Startup Champions Network
5 and we do this where we go to a different
6 community every single, you know, every six
7 months or so.

8 And to Steve's point earlier, I will
9 agree there is nothing like being able to bring a
10 bunch of people into your community, have them
11 connecting with the leaders of that community to
12 advocate for you the work that you're doing, to
13 showcase the work that's being done around the
14 rest of the country.

15 So, wherever we decide to go, I think
16 this is a really exciting initiative that we've
17 done in other cases and I think can be
18 transformational and a real shot in the arm for a
19 community. Thank you.

20 (Applause.)

21 MEMBER REAMER: I think we should
22 create a spinoff of NACIE that's a for-profit

1 pitch group that sells tours. We clearly have
2 the talent.

3 (Off the record comments.)

4 MEMBER KAPP: Well, first of all, I'd
5 like to go ahead and let everybody know that as a
6 part of the tour to the Potomac Highlands, we are
7 -- actually, the host and the event planner is
8 Alexander Hamilton, who will be hosting the tour.

9 (Laughter.)

10 MEMBER KAPP: So, I'm excited to
11 present about the Potomac Highlands. In many
12 respects, I think what I'm representing is
13 communities across the United States. And I
14 actually struggled with two ways to go about
15 this.

16 One community was actually in the
17 heart of coal --- coal community --- coal-
18 affected communities, and the other is where
19 we're located in the Potomac Highlands in
20 Appalachia.

21 And the challenge with Appalachia is
22 that it's not one of the easiest places to get

1 to.

2 But being mindful of the folks around
3 this table and also striking a balance between
4 understanding what's from a coal-affected
5 community, but also understanding how --- what
6 you might have the opportunity to see is playing
7 out across the United States, I went with the
8 Potomac Highlands, because I feel like it's
9 representative of --- and while we're here
10 representing the organizations that we work with,
11 in many respects we also are here to speak for
12 voices that can't necessarily speak for
13 themselves with regards to entrepreneurship.

14 So, that's a little bit of a precursor
15 to kind of give you a little bit of a rural
16 perspective on economic development.

17 A lot of people don't necessarily know
18 where West Virginia is. And so, you start with
19 Virginia and you go west.

20 The area that I am in is in the
21 Potomac Highlands, and a lot of the coal country
22 is down in the south. And so, there's a number

1 of initiatives going on here.

2 We're actually the most agricultural
3 community in the State of West of Virginia. And
4 so, a lot of what we're going to be seeing is
5 things associated with agriculture, actually
6 going to see some farms and stuff like that.

7 It's nice, because it's actually a
8 two-hour --- it's about a two-hour, hour-and-a-
9 half drive from Dulles Airport where we are. So,
10 in many respects it's --- it kind of can dovetail
11 with some of the stuff that we're doing.

12 You know, we don't have huge numbers
13 of incubators and huge numbers of employers.
14 This is individual farmers and folks who are
15 running their own businesses. They don't
16 necessarily see themselves as entrepreneurs.

17 And so, what you will find is that we
18 have sparse populations. This is the way it
19 exists across all of --- both Appalachia, as well
20 as rural communities within your own states.

21 Expansive geographies, limited
22 internet and mobile capabilities. You're going

1 to see some of the challenges of what it means to
2 really start a business in a rural community.

3 And I know that Craig had the opportunity to go
4 out there and see it.

5 We have amazing, beautiful scenery,
6 beautiful vistas and the people are wonderful.
7 You'll have the opportunity to meet some of the -
8 -- both the employers of --- the small employers,
9 but we have a very large manufacturer in two
10 areas.

11 One is in a chicken processing plant.
12 And depending on biohazard issues, we may or may
13 not be able to go ahead and see that, but also
14 the manufacturing --- cabinet manufacturing.

15 So, looking at our institution as a
16 community college, we represent community
17 colleges in rural communities and community
18 colleges across the United States.

19 And I think what you will find is in
20 rural communities, there's largely been a
21 reliance on single economies, single industries.

22 So, as a result, we work with what

1 we've got. We work with what we've got. And so,
2 we're working on creative rural economies. And
3 we'll have the opportunity to go see a couple of
4 different places within the economy that
5 highlights creative rural economies.

6 And that includes ag tourism, the
7 opportunity to see farms that are actually trying
8 to go ahead and move the needle in terms of their
9 own particular income.

10 Rural and ag innovation, and what does
11 that mean? We have farmers that are working on
12 really, really fascinating projects, chicken
13 manure and the rendering of that into potential
14 coal, those sorts of things. And so, looking at
15 the creative initiatives that it represents.

16 You will walk away from this
17 experience with, really, a couple different
18 things.

19 One, what do rural communities look
20 like and how does that impact entrepreneurship
21 and innovation and the national landscape? I
22 think a lot of us kind of have heard about that.

1 Leveraging community colleges, we'll
2 have the tour of the community college, we'll
3 understand what does a rural accelerator look
4 like. We'll tour a working farm and we'll tour
5 some of the area businesses and manufacturers.

6 Potential speakers in addition to
7 Alexander Hamilton, we've reached out to the
8 chancellor of the community college system, as
9 well as the West Virginia Governor and reaching
10 out to the Appalachian Regional Commission.

11 As I mentioned, this tour is not just
12 a tour of West Virginia, but also spans
13 Appalachia.

14 For those of you who don't know,
15 Appalachia runs all the way from New York pretty
16 much all the way down to Alabama in that whole
17 swath.

18 And so, looking at that and
19 understanding --- we'll see a representative from
20 a foundation and why they are so instrumental in
21 sort of funding these types of initiatives and
22 understanding the challenges and the

1 opportunities that rural communities represent.
2 And then our senators.

3 Finally, you also get to hear from Dr.
4 Terrell, who is the award winner of the 2016
5 Entrepreneur Community College President, and
6 understand his background and how anchor
7 institutions play in rural communities.

8 So, that's my pitch. It's not nearly
9 as sexy. We don't have handouts. But if you
10 really want to understand -- what's that? If you
11 really want to understand, you know, some of the
12 challenges that are playing out in rural
13 communities and in Appalachia, I encourage you to
14 go ahead and check the bottom of the box. It's
15 the easiest one. Just go all the way down to the
16 bottom and just check that box.

17 I assure you we'll have a good
18 opportunity and you'll have the opportunity to
19 see a number of things that certainly, you know,
20 is going to be different from a lot of the
21 experiences which, like you said, they're all
22 really, really good experiences. So, thank you.

1 Any questions?

2 (Applause.)

3 MEMBER REICHERT: Would we meet
4 students?

5 MEMBER KAPP: Would you meet --- yeah.

6 So, there would be a couple different
7 --- there would be a couple of students that
8 you'd meet.

9 I have a couple already in mind. One
10 of them raises award-winning pigs. And so, you'd
11 get the opportunity to meet a number of the
12 students from FFA, as well as the students in our
13 own incubator which are learning skills about 3D
14 printing and laser cutting and learning more
15 about technology and gaming and those sorts of
16 things. All of the things that previously have
17 not been --- the students haven't been exposed
18 to.

19 So, in addition to the businesses,
20 you'll have the opportunity to see some of the
21 work that we're doing to help drive culture
22 change as well.

1 MEMBER REICHERT: Joe, another
2 question.

3 MEMBER KAPP: Sure.

4 MEMBER REICHERT: So, you mentioned
5 briefly that we would learn more about Appalachia
6 in general and what's going on across a variety
7 of states.

8 Can you talk a little bit more about
9 how would we --- or who would we be hearing from?

10 MEMBER KAPP: So, in particular, we
11 would hear from the folks from the Appalachia
12 Regional Commission.

13 They --- it's a commission that
14 comprises all of the states of Appalachia. They
15 actually drive a not insignificant amount of
16 projects both in capital projects, as well as
17 economic development projects. So, you would
18 hear from them.

19 The other possibility is for us to go
20 ahead and loop in --- we have another project
21 that's going on and it's something that we have
22 the ability to be able to do is to loop in the

1 seven or eight other community colleges within
2 Appalachia to be able to talk about some of the
3 things that they are working on.

4 For example, there's a broadband
5 initiative going on at a community college, at
6 Big Sandy Community College down in Kentucky.
7 So, this is the reason why I say we're really
8 spanning a large area. So, in addition to
9 Appalachia, it's also the agricultural
10 communities.

11 But what I would look to do is to go
12 ahead and loop in some of those other community
13 colleges that are working on entrepreneurship and
14 economic development to really give you a sense
15 of sort of the broad array of things that are
16 going on in Appalachia.

17 MEMBER REICHERT: Thank you.

18 MR. BUERSTATTE: All right. So, we've
19 got the headcounts. We know how many ballots are
20 out.

21 (Laughter.)

22 MR. BUERSTATTE: All that I ask is

1 before you head out today, please hand those to
2 Shannon. Shannon, can you raise your hand?
3 Shannon.

4 And before you leave -- and why I say
5 that, if you do want to spend some time talking
6 offline with the potential host to ask him some
7 more questions about what that would look like,
8 please do.

9 This is clearly a very important
10 opportunity. So, at your convenience, feel free
11 to pass it along to Shannon.

12 With that said, looking at the agenda
13 we're a little bit behind, but hopefully we can
14 get through these report-outs pretty quickly.

15 We don't have a run of show for the
16 workgroups. We had four of them meet yesterday.
17 I'm hopeful that one of you is excited enough
18 about the discussion that you had yesterday that
19 you want to break the ice and share with the
20 broader group some of the ideas that were
21 generated and worked through. But also, again,
22 some of the challenges that you're still

1 continuing to figure out.

2 Anyone want to kick it off?

3 MEMBER REICHERT: Good morning,
4 everyone. And I'm going to give the report-out
5 on the Advanced Manufacturing Workgroup.

6 And just to go back and remind
7 everyone a little bit about this topic, we are
8 looking at advanced manufacturing workforce,
9 because we believe it is truly critical to
10 promoting and growing America's innovation
11 economy.

12 If you have a good idea in the United
13 States, you should be able to make it in the
14 United States.

15 And the advanced manufacturing
16 workforce is an issue and a topic because of the
17 number of jobs that remain unfilled in this
18 workforce in the United States.

19 This is an across-the-country problem
20 and it has been estimated that there are about
21 two million jobs that are going to go unfilled in
22 the next decade.

1 And that's according to the
2 Manufacturing Institute, which is part of the
3 National Association of Manufacturers.

4 So, we need to figure out
5 ways/strategies to be able to get people that are
6 potentially going to be able to fill these jobs,
7 whether they're currently not --- whether they're
8 currently not able to find them, so there's a
9 lack of connection, whether they're currently not
10 inspired to do manufacturing because their
11 parents are telling them that this is not the
12 most exciting thing you could do versus being a
13 doctor or a lawyer, but there are many reasons
14 why these jobs are not going --- are going
15 unfilled. And so, Sue Smith and I set out to
16 attack this topic.

17 I'll say one other thing that this is
18 something that's on the minds of many across the
19 nation.

20 And when Trump --- President Trump
21 brought together two dozen manufacturing CEOs to
22 the White House just a month or two ago, it was

1 suggested to him that there were actually still
2 plenty of openings in the United States for
3 factory jobs, but too few qualified people to
4 fill them.

5 And the CEOs urged Trump --- President
6 Trump to support vocational training for the
7 high-tech skills that today's manufacturers
8 increasingly require.

9 The jobs are there, but the skills are
10 not. And so, that's the topic that we're trying
11 to tackle.

12 We had some additional ideas, because
13 Sue Smith is a leader in this topic. At Ivy Tech
14 she is part of really running programs that are
15 all about training folks for manufacturing jobs
16 in the state of Indiana. And so, she brings a
17 lot of good experience to the table.

18 But as we are setting off to do this
19 or learn more about this topic, we felt that we
20 needed to get some additional background.

21 And so, in the last month or two,
22 we've gathered additional feedback from a variety

1 of different experts.

2 So, of course, first and foremost we
3 went to Andrew Reamer who is the font of all
4 government knowledge and interviewed him. And he
5 had some excellent suggestions.

6 One of which was to bring all of the
7 parts of Department of Commerce that deal with
8 manufacturing together in one room.

9 And as far as we know having done
10 that, a lot of these people were meeting each
11 other for the first time.

12 So, even just doing that act of
13 bringing people together is something that
14 perhaps can start us thinking about how to
15 address this challenge as a nation and the
16 recommendations that we can make to the Secretary
17 of Commerce.

18 We also met with David Langdon,
19 Department of Commerce. We met with the National
20 Association of Manufacturers, the head of the
21 Manufacturing Institute, as well as the COO of
22 that organization.

1 We met with the Department of Labor's
2 apprenticeship's program leader. And as I
3 mentioned, with Eric Smith's help, and thank you,
4 Eric, we met with a number of folks from the
5 Department of Commerce, including NIST, ITA,
6 EDA's Innovative Technologies and Manufacturing
7 Loan Guarantee Program, the EDA's Investing in
8 Manufacturing Communities Partnership.

9 And these -- this gathering that we
10 had two weeks ago was really both an amazing
11 opportunity to learn about all the different
12 things Commerce is doing in manufacturing, but
13 also an incredible amount of information which we
14 are still, at this point, processing to be able
15 to understand how to best move forward with
16 making the recommendations to the Secretary.

17 But we did attempt to put all these
18 recommendations together to the extent that we
19 could process them and come up with some ideas
20 that we wanted to move forward with in the page
21 that you received yesterday.

22 And in yesterday's workgroup, we were

1 able to share that and get some helpful feedback
2 from the workgroup that was assembled.

3 And many of them, of course, are
4 around this table and I would encourage them to
5 speak up if you have things that you personally
6 want to share about the proposal.

7 But I'd say the main bottom line was
8 that based on the amount of information that we
9 had collected and tried to put in
10 recommendations, maybe the first suggestion was
11 this could be actually five different sets of
12 recommendations.

13 Perhaps one around the Manufacturing
14 Extension Partnerships and that program and
15 making that, you know, more -- it's really
16 updating that program, evaluating its metrics, et
17 cetera.

18 Another one was around the
19 Manufacturing USA Institutes and how they're
20 working in workforce, and better understanding
21 that and coming up with some specific
22 recommendations around that.

1 And there were a variety of others,
2 all of which could be, I think, pulled forward
3 into some more -- some specific recommendations
4 for various parts of Commerce.

5 And also, various parts of agencies
6 that work on manufacturing across the government
7 simply talking to each other more, understanding
8 what each other is doing. And so, there's
9 potentially some interagency work and
10 recommendations that we could have here as well.

11 Then I think at this point, I will
12 pass the mic to Sue. And if there are additional
13 comments around the table about the manufacturing
14 workforce proposal, we'd be happy to hear them at
15 this point.

16 I think in general, we received really
17 good, constructive feedback yesterday and we look
18 forward to putting this feedback into the next
19 version of our proposal that you will see perhaps
20 between now and the August meeting.

21 MEMBER SMITH: Yeah. Thanks, Emily.
22 And thanks, everyone.

1 It was just what we needed, I guess,
2 yesterday's discussion, because, you know,
3 there's that -- there's that you know something
4 is just not right exactly the way you want it,
5 but you really are too close to it to kind of
6 figure out what that is. So, that was helpful.

7 I think the next steps for us are to
8 regroup as a team and to take a good look at some
9 of the things that we have talked about and we
10 talked about yesterday, and really flesh out
11 maybe three to five recommendations. So, that's
12 really our next steps.

13 So, anyone who wants to participate in
14 that is certainly welcome to do so.

15 CO-CHAIR TANG: It's like musical
16 chairs with the mics here.

17 I'm curious as to whether the topic of
18 apprenticeships came up. This is something that
19 we discussed in NACIE 2.0.

20 And then separately, what's the role
21 of organized labor as you see in this -- in that
22 overall mix of solutions?

1 MEMBER SMITH: So, it did come up. We
2 did talk to the Department of Labor and we talked
3 to two folks there and it was a very good
4 conversation.

5 We talked about a number of things.
6 One of the things that we talked about with the
7 DOL was that it's apprenticeship doesn't really
8 have a good, defined value proposition. So,
9 industry kind of isn't aware that that's a really
10 good opportunity for them.

11 And there's also this -- whether it's
12 perceived or earned, this reputation that it's
13 very difficult to register a program and very
14 cumbersome to register a program.

15 So, we have to -- that's why we were
16 talking about bringing that out as its own
17 initiative and then trying to look at how we
18 might deal with those two issues around
19 apprenticeship.

20 But everyone, I think, feels that it's
21 a good and viable solution, it's just how do we
22 make it work for industry.

1 CO-CHAIR TANG: Good. Thank you.

2 MR. BUERSTATTE: I think that wraps up
3 the manufacturing discussion. Pretty concrete.
4 Making some great headway.

5 And I love the fact that the group
6 session in person where you were able to roll up
7 your sleeves, was really beneficial and get that
8 feedback.

9 So, and once again, thank you both Sue
10 and Emily, for taking the lead on this. I know
11 it's -- with potentially five separate
12 recommendations, it's a lot.

13 So, opening the floor. Who else?
14 What group is next? David, please.

15 MEMBER KENNEY: All right.

16 So, in contrast to the last report-
17 out, which had done a fair amount of work
18 already, this -- the topic of meta clusters was a
19 brand new topic for this meeting and it emerged
20 from a conversation that Eric Smith, Emily and I
21 had at lunch.

22 At the tail end of the last NACIE

1 meeting as everyone was leaving for their
2 flights, we grabbed a quick bite together.

3 Emily and I were sharing information
4 about a network that we're part of called the
5 Incubatenergy Network. And Eric suggested it
6 might be worth exploring that as a model for how
7 other programs around the country could come
8 together similarly.

9 And so, the concept -- and I know
10 clusters -- one of the things we talked about in
11 our conversation yesterday, is that there is many
12 different definitions of "clusters."

13 And in our case, we're not necessarily
14 a cluster organization, we're actually -- it's a
15 collection of incubator programs from around the
16 country.

17 But the idea is that the EDA often
18 funds regionally-focused efforts for either
19 clusters or startup support ecosystems, capital
20 formation efforts within a specific geographic
21 region, sometimes within a specific industry
22 sector, things that share common supply chains,

1 workforce resources, talent and other things.

2 And the idea here is, could there be
3 benefits of groups like that around the country
4 coming together nationally and benefitting from a
5 more structured sharing of resources across
6 clusters -- across geographic clusters within a
7 particular industry sector, within a particular
8 research area, within a particular, you know, set
9 of technologies. And that's exactly what we're
10 part of.

11 The Department of Energy created a
12 national clean energy incubator network that
13 Emily's organization, my organization have been
14 part of and we've seen a lot of value from it.

15 And I'll let Emily chime in here in a
16 minute about, you know, some of the value that
17 we've gotten from being part of that.

18 And so, in our conversation yesterday,
19 there were some good insights shared about, you
20 know, actually some good questions for us, you
21 know. What was it that made that group
22 successful?

1 And part of it was the specificity of
2 the fact that we were not trying to serve the
3 entire industry, but we were really focused on
4 startup support.

5 And so, there was a shared set of
6 common issues and concerns and resources
7 available that we could share with each other,
8 but also the support of a federal agency that had
9 a particular interest in that topic.

10 In this case, the Department of
11 Energy, which was trying to promote some specific
12 goals and they helped to convene that.

13 And so, one of the suggestions is if
14 we do move forward with the idea of EDA helping
15 to facilitate something like this in other areas,
16 that it would also be valuable to have another
17 federal agency involved in some way to identify
18 the, you know, the potential partners and parties
19 to participate in something like that.

20 So, this is -- as I said, it's a very
21 nascent concept. Eric agreed to write up some of
22 the notes from this that we'll be bringing

1 forward, but we had great input from the
2 participants in the discussion.

3 And I'll let Emily add anything about
4 the Incubatenergy Network and we can open it up
5 for any questions or comments.

6 MEMBER REICHERT: Sure.

7 Well, Dave, you've covered it pretty
8 well, but I'll just add that this Incubatenergy
9 Network which was set up about three years ago
10 through a Department of Energy grant, is now
11 going to be an independent -- well, not quite
12 independent, but is going to be continued to be
13 run by an organization called the EPRI, Electric
14 Power Research Institute.

15 And that is because they see value in
16 hosting the organization. And so, it is an
17 example of a program that launched a network that
18 is now sustainable through a partner that sees
19 value in this convening. And so, I think that is
20 a good element of the model as well.

21 The value of this Incubatenergy
22 Network to us has been really far beyond what I

1 believe was even originally envisioned.

2 It has become a place to share best
3 practices. There aren't too many people running
4 energy incubators in the United States or
5 anywhere.

6 And so, there are few leaders or
7 guideposts that you can look to in order to
8 figure out what you're doing well and to learn
9 from others. And so, this has been an incredible
10 forum for doing that.

11 It also started out three years ago
12 that a bunch of organizations that were -- and
13 there was ten of us competing with one another
14 for grant funding.

15 They have really found a way now to
16 work together very collaboratively and we've gone
17 together for grant funding as a network, which I
18 don't think any of us would have imagined that we
19 would do at the outset.

20 And these leaders across the country
21 are people that any of us can pick up the phone
22 and, you know, ask about a particular topic, help

1 one another's startups -- that happens a lot --
2 promote each other's programs.

3 And so, there's really just a lot of
4 value created just by the fact of convening this
5 group of incubators over the course of a period
6 where we both meet in person twice a year through
7 other meetings that we're all a part of in our
8 industry, but also often phone calls that are set
9 up either ahead of time or, you know, maybe a few
10 days in advance, because we all realize there's a
11 critical topic to be addressed.

12 So, I think there's a lot of power
13 there, there's a lot of value creation, and I
14 hope that this model can be shared and perhaps
15 expanded upon into other industries.

16 So, I would think that the NIH might
17 be a good partner for a network of incubators or
18 other similar organizations for biotech or
19 medtech.

20 You might think the Department of
21 Defense could be a good partner for a robotics
22 network. So, I think that there's a lot of

1 potential industries that could have value in
2 setting up a similar network across the country.

3 Also to say that when people think
4 innovation, they often think of the two coasts.
5 And I think that what's very valuable about this
6 network is that it is the two coasts are
7 represented, but there is a lot of power in
8 having the middle of the country represented.

9 And, in fact, more than half of our
10 members are from states that are Midwestern and
11 southwest and southern. And that makes the
12 network much more powerful.

13 MR. BUERSTATTE: All right. Any
14 final, quick questions for this team?

15 (Pause.)

16 MR. BUERSTATTE: All right. We've got
17 about 25 minutes left -- I take that back. 30.
18 Let's keep driving on.

19 Any other teams?

20 Heather, thanks.

21 MEMBER BOESCH: All right. So, we
22 revived an earlier proposal that had been made

1 last November around thinking about regulation
2 and innovation sandboxes.

3 It was really interesting yesterday,
4 because since it had been so long since any of us
5 had talked about it, we kind of unpacked it into
6 two different tracks that we thought were
7 interesting.

8 So, we kind of identified two related
9 needs for commercializing innovations
10 domestically in heavily-regulated industries like
11 healthcare, financial services, transportation
12 and energy.

13 One of them was a need for a more
14 consistent and entrepreneur-friendly process for
15 kind of applying for and obtaining low-level
16 regulatory exemptions from agencies in highly-
17 regulated industries.

18 The EPA actually has a good example of
19 this that was shared. And so, it would be
20 interesting to do some kind of best practice
21 research around that and see how the Department
22 of Commerce could kind of provide guidance on,

1 you know, how to make that an entrepreneur-
2 friendly experience.

3 The second was to actually think about
4 an innovation or regulation sandbox program
5 within regulatory agencies that allow
6 entrepreneurs to pilot and test their innovations
7 while they work towards regulatory compliance.

8 This is something that has recently
9 been done in Singapore, in Australia, in Canada,
10 in the UK and in Bahrain in the fintech industry,
11 because they found that, you know, not -- either
12 having some clarity on regulatory compliance or
13 being able to actually test their products in any
14 kind of scale or in a live pilot was kind of
15 freezing innovation investment in those areas,
16 but it's possible that this could be applied
17 across a kind of broader section of industries
18 and we could kind of run with a successful pilot.

19 So, what they actually are -- so,
20 there are a set of rules that allow people to
21 test kind of products or business models in a
22 live environment.

1 And they have to -- they don't have to
2 follow all of the regulatory requirements, but
3 subject to a lot of predefined conditions.

4 Like, there are limitations on the
5 risk exposure or the number of people that you
6 can be exposed to. It's very time limited.
7 You're only given these exemptions for the actual
8 time that you're testing it and it's entirely
9 under the regulator's supervision.

10 So, you know, the way that it works,
11 actually, to be a little bit more specifically
12 like if you think about how the UK's fintech
13 sandbox works, actually firms have to apply in a
14 cohort.

15 It's not like a thing that you can
16 just do at any time. And they have to apply to
17 it about 60 at a time.

18 And that establishes baselines for
19 quality, making sure the consumer benefit is high
20 enough, and also establishing the appropriate
21 amount of risk.

22 And the firms that get accepted get

1 individual guidance from regulators on how they
2 would interpret the relevant rules in the context
3 of the test not necessarily after, but just to
4 allow them to get through that kind of prototype
5 and testing moment.

6 They can also choose to waiver/modify
7 certain rules or issue no enforcement letters for
8 the duration of the test, but critically they
9 don't actually limit liability for customers.

10 So, there's still kind of an amount of
11 responsibility that has to be maintained.

12 In exchange, the companies have to be
13 very transparent, they have to agree to testing
14 parameters, they have to treat customers really
15 fairly.

16 For example, if they're kind of doing
17 a more broader client test, they have to agree to
18 actually restore them to their pretest state if
19 something goes wrong in the test.

20 If it's a much more sophisticated
21 group of investors, then they just have to
22 provide, you know, very clear disclosures.

1 They have to have exit strategies for
2 transitioning them to other products and services
3 once the tests end.

4 So, this has been very successful
5 already in a number of places. And there was
6 actually a bill introduced into Congress in
7 September to kind of encourage agencies to try
8 and develop these.

9 So, we think that the Department of
10 Commerce as a kind of convener, could play an
11 interesting role here.

12 And there are a number of ways that
13 could happen, which I'm going to try and develop
14 into a recommendation for August.

15 So, you know, we could research and
16 promote best practices and kind of convene
17 agencies on the design of these innovation
18 sandboxes.

19 The Department of Commerce could even
20 pilot a regulatory sandbox and things that are
21 within its purview like export regulations as a
22 way of testing it.

1 We can look at also what's being done
2 in the private sector. You could research or
3 promote best practices in these private sector
4 consortia that allow testing of new things or
5 kind of otherwise incentivize those industries
6 like, for example, the R3 Consortium, which is
7 also in the fintech industry. It's about 40
8 banks that allow people to kind of test those
9 technologies within their customer bases.

10 You know, you could convene private
11 sector organizations that might be willing to
12 participate in these sandboxes, you know, and
13 kind of publicly incentivize it in other ways,
14 you know.

15 Or even if you're trying to provide
16 low-level exemptions, you could kind of fund
17 grant programs to help companies to conduct the
18 tests that they need to clear these kind of
19 regulatory hurdles.

20 So, I think there's -- there's a lot
21 of things that you could do and it's basically
22 trying to align the level of regulation in

1 proportion to the scale of the innovation being
2 tested for the duration of the test.

3 So, I think this could be very
4 interesting and it's something that's being done,
5 you know, internationally as we're looking to
6 kind of keep companies in these very competitive
7 industries in the United States.

8 So, we just kind of pivoted this a
9 little bit yesterday. So, we're certainly open
10 for any recommendations or suggestions. Please
11 feel free to contact me, you know, and I may kind
12 of share drafts as I start to write them up.

13 CO-CHAIR TANG: Heather, I'm wondering
14 did you cover the general topic of disruptive
15 technology?

16 And what I'm thinking of is companies
17 that emerged from the sharing economy, so Uber
18 and Airbnb, where the regulations were only
19 addressed in hindsight or in the wake of the
20 innovation.

21 So, the examples I'll give in
22 Philadelphia, Uber was approved at the state

1 level, but outlawed in Philadelphia.

2 Those that have a history working with
3 Uber know that they are slash and burn from a
4 legal perspective and that's causing a tremendous
5 amount of blowback. So, I don't know what you do
6 in terms of regulation and how you address that
7 issue.

8 On the Airbnb side, of course it's the
9 issue of taxation. Because as Airbnb becomes
10 more popular, the traditional hotels and
11 hospitality industries are going to react by
12 saying, "You're just undercutting us because
13 you're flying below the radar screen."

14 So, I'm just wondering how those
15 challenges fit into this overall sandbox concept.

16 MEMBER BOESCH: Yeah. I think it's
17 important to make the distinction that it's very
18 specifically for kind of testing and piloting
19 things at that stage and it's not meant to, you
20 know, even encourage any kind of workaround.

21 In fact, I think it could help avoid
22 some situations like that, because it basically

1 makes the regulator kind of an entrepreneurial
2 partner in the development of the service.

3 So, when they're still at a kind of
4 small testing phase, they can be working
5 alongside the regulatory agencies and kind of
6 interpret those rules as they go kind of before
7 it gets to scale.

8 Because I think there is a tendency to
9 -- and some of those companies can throw enough
10 money behind it that you can sidestep it.

11 And I think if we make a more kind of
12 collaborative relationship between organizations
13 in these kind of highly-regulated industries and
14 the agencies themselves, it might make some of
15 those things smoother in the future.

16 CO-CHAIR BRADLEY: And the other thing
17 is yesterday we made a distinction based on the
18 examples what would be a good, quick win for us,
19 and so thinking about the meta strategy of
20 deregulation opening up markets as opposed to
21 trying to impose regulation.

22 I also think there was a very keen

1 focus on what we could do at a federal level
2 since those issue exist, but many of them start
3 locally.

4 But I think David did bring up, as we
5 think this through where certain regulatory
6 things are pushed down to the state, what are the
7 incentives around funding, points, tax credits
8 that could be used to help support regulation on
9 a local level.

10 MEMBER REAMER: In terms of Commerce
11 agencies that might be interested, the Commerce
12 has a National Telecommunications and Information
13 Administration which clearly those industries
14 deal with some aspects of regulation.

15 You had mentioned that a bill was
16 introduced in the fall in Congress regarding
17 financial regulation.

18 The sponsor of that is Patrick
19 McHenry, who is a Republican from North Carolina.
20 And it just -- in one of these small-world
21 stories, the chief economist at NTIA is his wife.

22 So, Julia McHenry is a Department of

1 Commerce economist who works at NTIA. And so,
2 she would be an appropriate person to talk about
3 this.

4 MEMBER BOESCH: Andrew continues to
5 know everything ---

6 (Laughter.)

7 MEMBER BOESCH: -- and everyone.
8 That's a great idea.

9 MR. BUERSTATTE: All right. If
10 there's no other questions, then I think the last
11 up is Trey and Joe with the Entrepreneurship for
12 All Workgroup.

13 MEMBER BOWLES: Great.

14 So, we had a productive, active
15 discussion yesterday. Really, I think what we're
16 trying to figure out here is we kind of know --
17 and we mentioned this yesterday, we kind of know
18 where we want to go, we know what we want to have
19 happen. What we're really sort of working on now
20 is, what role does NACIE plan in that?

21 And so, as we look at sort of just
22 from a broad perspective, what do entrepreneurs

1 across the country need to be successful, we
2 believe that we have separated that up into these
3 four different categories that we mentioned
4 yesterday, the four Cs of confidence, coaching,
5 capacity and capital.

6 And so, what we're sort of noodling
7 with now is how do we convene a group of
8 stakeholders that represent the resources that go
9 into these -- providing these resources for these
10 different stages that exist in entrepreneurship?

11 And from my take yesterday -- and,
12 Tiffany, you may want to weigh in on this,
13 because she really tried to help consolidate this
14 into something that would be something that we
15 could communicate -- is really going now and
16 saying, let's identify these stakeholders, let's
17 pull them into the room, let's determine the
18 outcomes that we want to realize not from the
19 overall program, which we kind of know what we
20 want those outcomes to be, but what do we want
21 the outcomes to be from a convening of these
22 different stakeholders.

1 Because we believe that by putting
2 these stakeholders in a room together and
3 showcasing to them and allowing them to see the
4 opportunities where they can dive in and support,
5 that this becomes an actionable initiative across
6 the country not that NACIE is responsible for
7 implementing, but the stakeholder is responsible
8 for implementing.

9 Joe.

10 MEMBER KAPP: Yeah. I mean, I would
11 just add to that.

12 I think one of the things, and just to
13 underscore and echo what you've said, is that we
14 believe that with the four areas, that one of the
15 primary pieces is the convening piece, I think
16 that power to bring those folks together and have
17 a meaningful dialog about capacity, coaching,
18 access to capital and confidence and what that
19 looks like.

20 Because, frankly -- and one of the
21 things that we know is that it's going to be
22 different across different communities. And that

1 includes even from within the cities, rural
2 communities.

3 And so, I think what became probably
4 most apparent yesterday was that convening piece,
5 what ultimately the agenda looks like, who the
6 attendees might be and what the outcomes, I
7 think, are still, you know, some things that are
8 being reviewed and addressed.

9 But I think when you look at how do we
10 spur entrepreneurship and communities across the
11 United States, it's -- that convening piece, I
12 think, is probably going to have the opportunity
13 to play a central role.

14 I think over the course of the next
15 couple weeks we're going to try to come to a much
16 more solid idea and identification of what the
17 intended outcomes are so that we can be more
18 intentional about who should be at the table, the
19 participants and those sorts of things and that
20 we're able to go ahead and represent a broad
21 range and community of participants who would be
22 invited to it.

1 Is there anything I'm missing?

2 MEMBER BOWLES: Well, and just
3 understanding that one of those groups of
4 stakeholders would be organizations that exist
5 across different departments in government.

6 And obviously from what Andrew
7 created, that gives us a good -- a good place to
8 start to begin to identify those along with our
9 friends at OIE who can sort of say this is who I
10 think needs to be there, but one of those
11 stakeholders is the governmental organizations,
12 one of those stakeholders are the people who
13 actually do the coaching, which are some of the
14 corporations.

15 Mike came up with a good point
16 yesterday that we're not just -- we don't need to
17 go just find major corporations whose, you know,
18 chief innovation officer could come and assign
19 projects within their organization, but also mid-
20 level and smaller organizations that can provide
21 those coaching capabilities.

22 And then you've got to look at the

1 community colleges, which is a key point for a
2 physical meeting and education as a component of
3 what we're doing, how do they play that role.

4 And then technology platforms so that
5 we can not only manage and implement a mentorship
6 network, but that we can measure the success of
7 its working.

8 If you remember yesterday, I asked the
9 gentleman from EveryLibrary, how do you measure -
10 - how do you know if this is working?

11 And he said, well, in Kansas City, 45
12 companies were created in three years. My
13 question is, is that good or bad?

14 It could be great, it could be a huge
15 failure. Who knows, but we've got to determine
16 those sorts of things.

17 And so, we need to bring the people
18 into the room that can -- that have the
19 experience and expertise in building that.

20 Julie had a good example yesterday of
21 something that they have developed for the
22 University of Texas system that does some of this

1 stuff as a platform.

2 But if you bring those different
3 resources to the table, people will find their
4 way to figure out the role that they can play and
5 how they can contribute.

6 And ultimately getting somebody to
7 commit to participating and playing a role in the
8 roll-out and implementation of this is something
9 that we want to do.

10 Tiffany, do you want to add anything
11 as the voice of reason in the room?

12 MEMBER KAPP: Before you speak, can I
13 just applaud you?

14 Because I know that there's a lot of
15 people that -- but Tiffany has done a great job
16 of herding the cats and keeping us on track.

17 And I just want to applaud you because
18 you have -- I mean, seriously, you've done a
19 fantastic job.

20 (Applause.)

21 MEMBER KAPP: And I think that that
22 sometimes may get a little bit overlooked in the

1 course of all this reporting out. So, thank you.

2 MEMBER STEVENSON: You're very kind.

3 I definitely think we captured what was said.

4 I'm really excited about it.

5 I think that what I was struck with is
6 thinking about -- I was looking at sort of the
7 strategy and where we're going next around what
8 are the things that NACIE are uniquely prepared
9 and set up to do?

10 I think that was sort of our takeaway
11 as how do we leverage the best of what the
12 strength is of NACIE.

13 And I think us kind of coming away
14 with, like, this idea of convening, which we
15 spoke to, but I thought the idea of amplify and
16 promote would be the other topic that maybe we
17 also spoke to as, like, what is the lasting
18 trailer effect?

19 And is it -- does NACIE have an
20 opportunity to think about how we can amplify and
21 promote the platforms that already exist today,
22 how can we create sort of an overarching strategy

1 that would allow other people to gain access
2 within a region.

3 So, I think that that's sort of the
4 second part of this above and beyond convening,
5 but thinking about how NACIE specifically can
6 amplify and promote the strategy, resources or
7 platforms.

8 I think Scott had a good example of a
9 platform that sort of ties everything together.
10 And so, where can we start to leverage those and
11 allow NACIE to be that integrator and promoter of
12 what is already out there within the region.

13 CO-CHAIR BRADLEY: So, I would just
14 add to that, that I think that it's clear for
15 those who weren't in the room, that this is
16 something that I think, particularly because of
17 Trey and Joe, is going to happen regardless.

18 And I think the question becomes, what
19 is NACIE's role? Because I think at the end,
20 thanks to Tiffany's facilitation, we realize that
21 NACIE and the federal government is probably one
22 or four to five stakeholders.

1 So, I think we have to be mindful of
2 what is the larger opportunity and what is our
3 ability to participate.

4 I will just share one example, because
5 I gave it some more thought yesterday, which is
6 how some of this -- and there's been a theme of
7 what the government can start and what the
8 private sector can pick up.

9 And so, we talked a lot about
10 yesterday the Startup in a Day example, which was
11 the SBA, OSTP and the National League of Cities.

12 But the idea was to create a system
13 that helped people start up in a day, to create
14 an online entry point nationally that people
15 could plug into, to develop a community of
16 practice which is still facilitated by National
17 League of Cities and to have a pledge.

18 And so, to thinking about while
19 there's probably a much broader strategy and set
20 of outcomes in that great PowerPoint, what is it
21 that we can do moving forward.

22 So, I do want to applaud how far we

1 got yesterday.

2 MEMBER KAPP: And I would just say
3 given the list that we've seen from Andrew, I
4 think that one of the things that we, as a NACIE
5 group, the requests that we can make of the other
6 agencies within the federal government, is to --
7 as representatives of entrepreneurship and
8 innovation communities around the United States,
9 that we are requesting their presence, as a NACIE
10 council, as a NACIE body, that they participate
11 in a meaningful way to sort of amalgamate or
12 create an easier onboarding process for
13 entrepreneurs.

14 Because that was the piece that we had
15 talked about is that there's a lot of brand
16 confusion about where you go to start a business.
17 Is it the state? Is it, you know, those sorts of
18 things.

19 And so, I think as part of the role
20 that we play as NACIE, is the ability to also go
21 ahead and say, you know, we, as representatives
22 of a diverse section of the United States, want

1 to be able to solicit their participation in a
2 meaningful and active way in sort of this process
3 of gathering.

4 MEMBER BALDWIN: If I could just add,
5 what resonated for me was pointing back to
6 Andrew's consolidation again, which was the gap
7 that was identified.

8 When one of us said, "Oh, we need
9 this," then Orin spoke up and said, "Oh, there's
10 three apps that do that." When we need something
11 else, Scott said, "Oh, there's a platform that
12 can do that."

13 And so, for each stage of the
14 entrepreneurial process, it seems like there's
15 existing things out there, but nobody has put it
16 all together like Andrew has.

17 And if I look at entrepreneurship,
18 there's the desire and there's the opportunity.
19 If you've got desire, which is the confidence
20 piece, then you can get past towards the
21 opportunity, but opportunity seems to be the
22 people that are in the know right now are the

1 ones that can get the funding and can navigate
2 all of the paths.

3 And that if we, as a council, can put
4 together an initiative that gets everybody in the
5 know, then we're democratizing access and
6 entrepreneurship.

7 CO-CHAIR TANG: First of all, great
8 work. Great discussion.

9 I'm wondering if you -- if this
10 distinction has come into the thinking, which
11 I've been sort of wondering about also, which is,
12 is the target of this to create more founders, or
13 is the target of this to create a larger people
14 that work in the entrepreneurial community?

15 So, the distinction is you don't have
16 to be a founder to be an entrepreneur or
17 contribute to the community.

18 And it's one of the things I run
19 across in my own work, because you're trying to
20 have broader inclusion for underrepresented
21 communities, but not everybody is going to be a
22 founder and, in fact, could you -- is this a

1 pathway into other career development?

2 Because I think that those of us that
3 review resumes for would-be entrepreneurs, one of
4 the biggest, you know, sort of shutdowns is, oh,
5 they're all corporate, they've never worked in a
6 startup, right?

7 So, how do we create that bridge to
8 sort of the established career paths, and how
9 does an entrepreneurial pathway or
10 entrepreneurial approach fit into this notion of
11 Entrepreneurship for All?

12 MEMBER BOWLES: So, I think where I
13 agree with you is this concept of teaching
14 entrepreneurial skillsets, because an
15 entrepreneurial skillset can be used in whatever,
16 you know, role or vocation that you take.

17 I find in my background, that I see
18 the opportunity to do that at an education level,
19 because you -- I have classes where at the
20 beginning of the class, 95 percent of the
21 students say they want to be entrepreneurs. And
22 at the end of the class, five percent of the

1 class say that they want to be entrepreneurs,
2 which I think is a great thing.

3 Which is why I then say, this is why
4 we learned what we did. Because even though you
5 may not want to be an entrepreneur now, these are
6 the skillsets you learned that will help you in
7 any business.

8 And so, I think there's -- to answer
9 your question, there's a piece of it that's about
10 teaching these entrepreneurial skillsets which at
11 the very simple nature can just be problem-
12 solving, things -- I mean, things like that.

13 There's all these different skillsets
14 that you can learn, but I also think what we're
15 really trying to do is enlarge the number of
16 people that believe that they can be an
17 entrepreneur, enlarge the number of people who
18 are willing to take a chance at being an
19 entrepreneur, the courage it takes to start
20 something, creating and instilling in them a
21 persistence that's necessary to be successful,
22 but ultimately we want to equip them with the

1 skillset to build good, sound, fundamental
2 businesses.

3 Because if we can do that, then we
4 will -- and this is in our presentation -- we
5 first will reduce the number of companies that
6 fail. And, second, we will increase the number
7 of companies that succeed. And I really believe
8 it is a two-step process.

9 And so, I see so often in my work that
10 entrepreneur and startups fail not because they
11 have bad ideas, but because they have no idea
12 what they're doing.

13 And so, if we can help take that lack
14 of experience piece, which is often the one thing
15 that they need more than anything else and
16 definitely the one thing that they don't have,
17 this -- these four Cs if infused in the right way
18 with the right partners, can help solve that
19 problem, which will increase the number of
20 founders from a diversity of backgrounds and, you
21 know, whatever that diversity category is,
22 geographic, ethnic, age, gender, but then it will

1 also help increase the number to be successful.

2 And then at the end of it as we are
3 building their confidence and, really, the
4 capacity, explaining to somebody that building a
5 company that does not work is not a failure, it's
6 an education, and you could either take that
7 education, plug it back in and go try to start
8 something else, or you can take that education
9 and use that as you go out and try to apply for
10 jobs and participate in other vocations.

11 Does that answer your question?

12 MEMBER KAPP: Let me just add to this
13 education piece as a practitioner and educator in
14 entrepreneurship, because there's three large
15 buckets of entrepreneurship education.

16 The first is some of the traditional.
17 This is what gets taught in academia. But when
18 you look at the pedagogy, a lot of it falls in
19 the space of QuickBooks and marketing and very,
20 very technical skills. So, that's sort of the
21 first piece.

22 The second piece then falls into a

1 little bit more of the -- what we would say is
2 traditional. Business startup conversations,
3 business plans, you know, developing a lean
4 canvas startup, those sorts of things, a little
5 bit more closer.

6 Then there's the third piece. And I
7 think that in some respects, the challenge that
8 we're having is that this third piece really is
9 dealing in some respects with the entrepreneurial
10 mindsets and the skillsets that you can teach by
11 association working and partly by going through
12 it.

13 And so, when we talk about the -- this
14 idea of a convener, it's that last piece of how
15 do we go ahead and instill and infuse
16 entrepreneurial mindsets and then create from
17 that, entrepreneurs, and can we use the
18 opportunity to -- for NACIE to be able to bring
19 people together as a convening to really address
20 that piece.

21 And I'm talking about it from a couple
22 different perspectives. One is at a very young

1 age, how do we infuse entrepreneurship, grit,
2 perseverance, those sorts of things in order to
3 be able to change culture, but then also increase
4 the success and outcomes of entrepreneurs who --
5 people who have been in the corporate environment
6 and have them more exposure to that.

7 MEMBER STEVENSON: And I would just
8 add I think there's also a benefit to the
9 coaching model as well as I think part of what
10 we've been talking about is trying to get mid-
11 sized/large-sized companies to invest more in
12 being coaches.

13 And I think that that has another
14 benefit in that the coaches oftentimes if you're
15 pulling them from that landscape, they haven't
16 worked with an entrepreneur. They have no idea
17 about how much of a generalist that an
18 entrepreneur has to be.

19 And I think that there is also sort of
20 a dual education that gets people from corporate
21 America to think a little bit more broadly about
22 some of the unique challenges that underlie

1 entrepreneurs in general to help support their
2 growth and development.

3 Which, in turn, also helps companies
4 have a bigger appreciation on how they need to
5 provide some of those functional skills, support
6 and development for entrepreneurs.

7 I think it's a dual benefit as well in
8 terms of collective education.

9 MR. BUERSTATTE: Any final comments on
10 this one?

11 (Pause.)

12 MR. BUERSTATTE: Great. We finished
13 a few minutes early. And another great example
14 of putting smart minds together and maybe add a -
15 - two smart minds and one extra variable being a
16 cold beverage, you get other good ideas.

17 So, Orin and David, I understood, had
18 an interesting conversation last night around
19 some accelerator work.

20 Do you want to talk about that right
21 now? We've got a couple extra minutes before we
22 break.

1 MEMBER HERSKOWITZ: I'll be less than
2 five. Do we have a clicker? There was something
3 floating around before -- oh, there it is.

4 So, after talking to you, I was
5 speaking to Nikesh (phonetic) about this and he
6 suggested that rather than just go do it, we
7 should just see -- this is one of those we're
8 going to do some version of this anyway, but
9 maybe this is a role for NACIE kind of
10 conversations.

11 So, just by way of context, and I'm
12 not going to dwell on this, Columbia -- and this
13 is -- I didn't make these slides for today. We
14 had these already.

15 (Laughter.)

16 MEMBER HERSKOWITZ: The -- Columbia
17 already runs four technology accelerators. This
18 basically happened organically.

19 We got a \$5 million grant from the
20 Coulter Foundation to do one in biomedical
21 engineering -- so, medical devices, diagnostics
22 and imaging -- and we sort of figured out a lot

1 of stuff about how to run an accelerator.

2 How do you, you know, do a call for
3 proposals? How do you have IP reviews? How do
4 you get through a mentor network?

5 So, after that, NYSERDA, the energy
6 research group in New York, offered a \$10 million
7 grant to do the same thing for energy.

8 So, we proposed building off of what
9 we learned from medical devices, we partnered
10 with NYU, CUNY, Stony Brook, Brookhaven and
11 Cornell on that one and won the \$10 million
12 accelerator for energy. We called it Coulter for
13 Clean Energy.

14 We basically took everything we
15 learned from Coulter, reapplied it to clean
16 energy.

17 Based on those two, we also applied
18 for a grant from the mayor of New York to help
19 run the New York City Media Lab, which was also
20 joined with NYU, CUNY and a number of other
21 institutions. Very similar model.

22 And then finally we just got an

1 accelerator from the NIH for therapeutics, which
2 is part of their CTSA programs.

3 And, actually, in the meantime we also
4 are partnering with Celgene and some other
5 institutions doing one on cancer, blue-skies
6 cancer research.

7 What we found was that there was --
8 some of these were industry-specific, but a lot
9 of them were very generalizable.

10 It's actually interesting, because if
11 you think of it, it's sort of a meta meta
12 clusters discussion in the sense that these are
13 cross-verticals.

14 Many of the activities that we were
15 doing we were finding was essentially the same
16 across all the accelerators.

17 So, what we started to do was these
18 four groups started to meet regularly to share
19 ideas and best practices like, how do you hire an
20 IP attorney, what startup counsel do you
21 recommend, what -- can you negotiate master
22 service agreements with the startup counsel so

1 it's cheaper for your startups, can you share
2 mentors and executives and residents, things like
3 that.

4 And so, what we're now doing at
5 Columbia, which is where I think there's a NACIE
6 component potentially on the last slide, is we
7 are now in the process at Columbia of bringing
8 these together.

9 So, we're taking the sort of 80
10 percent of the stuff that is common and creating
11 the Columbia Accelerator Network.

12 So, what we're doing is we're
13 basically merging the common ops and admin roles
14 into a shared service across the university while
15 keeping the sort of industry-specific knowledge
16 within each vertical.

17 What that means is you can do this
18 much more efficiently and effectively, we think,
19 because you can share resources.

20 You don't need an actual FTE for each
21 vertical. You can have one person who does all
22 your Twitter, LinkedIn, social media websites,

1 putting out a call for proposals, handling the
2 FluidReview judging software, booking rooms,
3 coordinating the physical networking events for
4 the judges, managing the network.

5 All that stuff can just be shared in
6 common where the verticals can go out and raise
7 funds for their own pieces.

8 One way to -- so, this is just a slide
9 -- I'm not going to go through this, but just to
10 give you a sense of -- we went through and
11 brainstormed all the different things that we
12 were all doing essentially the same way. And,
13 therefore, could probably be coordinated and
14 actually just shared. I'm happy to make these
15 slides available, by the way.

16 So, the opportunity, I think, is --
17 well, actually, this is just a visualization, but
18 basically there will be this accelerator network
19 core. And that we're telling our faculty is,
20 look, you want to go start a battery accelerator?
21 All you need to do now is raise the money to fund
22 the battery projects. We'll run all the

1 administration and infrastructure for you.

2 You want to do another in clean
3 energy, you want to do another one in
4 cybersecurity, you want to do one in cosmetics,
5 fashion, whatever you want to do, we can run it
6 for you. You just raise the funding from the
7 donors directly without all that overhead.

8 So, opportunity potentially for NACIE,
9 there's two things that we've been talking about
10 doing to broaden this conversation out to make
11 it a national opportunity.

12 The first is we have an article coming
13 out next month in The Journal of National Academy
14 of Inventors on the lessons we have learned from
15 this. I'm happy to make a pre-draft of that
16 available to anyone who wants it.

17 But one of the things we proposed in
18 that, is that we would be happy to host again for
19 free, a compendium of any of those templates that
20 we all use, sort of a discussion group online for
21 people to say, hey, how do you do judging
22 software? How do you manage your networks? Do

1 you use Union, you know, from 1776 for sharing
2 content, or do you use some other platform? How
3 do you do your video editing? Are there any
4 national law firms that provide discounts? What
5 do you pay? Things like that. So, that article
6 is coming out anyway.

7 We have been talking about putting
8 together a physical conference sometime during
9 this next academic year, which would be a
10 recurring event, hopefully, where people who run
11 these kind of either physical or vertical
12 accelerators can get together and share best
13 practices, can maybe share templates, could help
14 new accelerators that are just figuring out what
15 to do, sort of get some hands-on support, maybe
16 share our EIR networks and our mentors.

17 Like, I might have a great
18 ophthalmologist, but I don't have a lot of
19 ophthalmology projects. So, if we can share that
20 across institutions, that would be great.

21 I am sure that we would be able to get
22 sponsorship from this from the Wilson Sonsinis,

1 the Goodwin Procters of the world, because they
2 would love to work with all your startups.

3 So, that's it. I mentioned this to
4 Nikesh yesterday and he was like, well, it sounds
5 like it should fit somewhere within NACIE, just
6 not really sure where.

7 But we don't want to slow this down
8 too much, because left to our own devices we'll
9 still hold this conference.

10 So, it was more of a -- if people --
11 we don't need to talk about it now if people
12 don't want to, but if people are interested in
13 this either as an individual institution or as
14 part of NACIE, I'm happy to -- or if you want to
15 fold this into something around meta clusters, I
16 --

17 MR. BUERSTATTE: What I'd suggest,
18 Orin, is to keep things on track, we do need to
19 break at this moment.

20 But those of you that are interested,
21 touch base with Orin. Let's have some dialog
22 offline. And I think we might be able to bake in

1 some more conversation time toward the end of the
2 day if needed, but I know Steve's got to go.

3 Steve, not to put you on the spot, but
4 any final remarks for the team?

5 CO-CHAIR TANG: Great discussion. I
6 understand why the continual discussion needs to
7 happen here.

8 And hopefully as we position towards
9 August, we'll get a little better direction from
10 the Administration because I think you're ready
11 to crystallize many of these ideas.

12 But I understand your sensitivity
13 towards language and positioning of these
14 options, but it's great work. So, thank you.

15 And I'm sorry I have to leave, but
16 I'll be carrying a different cause here.

17 MR. BUERSTATTE: And -- so, thank you,
18 Steve.

19 And before we break, one more thank
20 you. Heather, thanks for bringing in coffee and
21 donuts this morning.

22 (Applause.)

1 MEMBER FREDERICK: Craig, I have one
2 quick question.

3 One, I thought that idea was
4 tremendous -- one of the things that I'm struck
5 by the last 48 hours is how many good ideas and
6 how many good resources there are, but how hard
7 it is to keep tabs of them and organize it.

8 And I just went to our Slack channel
9 and I love it, but I got to tell you I'm even
10 confused by it, because I'm trying to map our
11 channels to the four ideas, and they don't.

12 I mean, I was in the -- so, we don't
13 need to solve it now, but it's something to think
14 about.

15 Like Entrepreneurship For All, I
16 wanted to share some materials, and I'm like,
17 wait, is that K through 14, or is that mentor?

18 CO-CHAIR BRADLEY: So, we'll just
19 create some new ones so we can -- now that we
20 have the priorities, we'll add ours. We can just
21 create new channels and then plug them in.

22 MEMBER FREDERICK: But it's something

1 to think about organizationally going forward and
2 it also underscores the problem at a national
3 level if it's hard for us to maintain -- a six-
4 month-old Slack channel becomes -- really, have
5 Andrew take care of it all.

6 MR. BUERSTATTE: Actually, Scott,
7 really it's perfect, because after the break
8 we'll convene with a framework discussion.

9 Heather has put together a reference
10 document for us, a great visual, and we can dive
11 into some of that next.

12 So, let's take a few minutes, enjoy
13 Heather's coffee, and well convene back at 10:45.
14 Thanks so much.

15 (Whereupon, the above-entitled matter
16 went off the record at 10:34 a.m. and resumed at
17 10:52 a.m.)

18 MR. BUERSTATTE: Okay. So, this
19 reconvenes Day 2 after our break and we'll start
20 off now with Heather.

21 I understand you're going to lead the
22 discussion that presents this wonderful document

1 that you've been working on. All members, you
2 should have this in front of you, this framework
3 discussion.

4 Take it away, Heather.

5 MEMBER BOESCH: So, yeah. So, I had
6 agreed at our last meeting to take that
7 PowerPoint slide that Brian had made around --
8 trying to get his head around both what we're
9 working on and what NACIE can work on, and kind
10 of give it a rev with some of our communication
11 designers.

12 So, I'm going to thank Fran Barrios
13 who did this for me, but the -- as I was going
14 through it, it kind of unpacked two needs that I
15 thought.

16 I think for those of us that don't
17 work in government, it can be very confusing.
18 What can we do? What can the Department of
19 Commerce do? Where do we sit? What's OIE?
20 What's NACIE?

21 So, I kind of -- the first two pages
22 are a bit of a primer on that I'll show you. And

1 then the last one we kind of, like, redid the
2 slide.

3 And this, we kind of redid the slide
4 of the projects. So, I'll just go through a
5 little bit so you can see.

6 And it's definitely, like, in draft,
7 but could be used as an organizing function
8 around some things that we're doing.

9 So, you know, I just put our mission
10 statement up here. I kind of visualize where we
11 sit within DOC, EDA, all the acronyms, and kind
12 of, you know, what the flow of our work is.

13 So, if you look at, you know, there's
14 many things we can do as individuals on our own.
15 There's lots of things the Department of Commerce
16 can do.

17 Our formal recommendations really need
18 to sit at the intersection of that, but that
19 doesn't mean there's not kind of great value in
20 doing the things that sit on the individual
21 action side.

22 Those get filtered through a set of

1 kind of Department of Commerce and national
2 priorities around innovation and
3 entrepreneurship.

4 And if they're accepted, there are
5 kind of actions fall in these major groups and
6 they can, you know, implement programs, they can
7 fund things, they can convene things, they can
8 promote policy, they can amplify.

9 And since I also didn't necessarily
10 know what that meant, on the next page I asked
11 Eric for a bunch of examples.

12 So, it will say, you know, what's the
13 kind of process. So, what we can do, the things
14 that our proposal should actually think about
15 addressing. So, as we make the proposals, I
16 think we can always ask ourselves, like, for this
17 issue, like, what can the DOC kind of fund,
18 convene, amplify, promote, you know, as Tiffany
19 was saying.

20 So, I also tried to put some thoughts
21 around the difference between policy and
22 programs, which I did not know.

1 So, it says based on what we -- the
2 recommendation we put forward, what could the
3 Department of Commerce actually do and then what
4 are examples of those, just to have as a
5 reference to keep us on topic.

6 Because, personally, I found it so
7 easy to, like, what actually goes in the
8 recommendation and what's kind of just like a
9 thing that we should do. So, hopefully that's
10 helpful.

11 And then on the next slide, I had put
12 just all of the things that we talked about to
13 date.

14 So, this included all of the December
15 recommendations. It also included the things
16 that we were still working on in this area.

17 I grouped them into where they're
18 sitting. So, the top two are formal
19 recommendations that we approved last time.

20 They have yet to be signed by the
21 Secretary, which is why we haven't discussed them
22 at this meeting, you know, but those kind of

1 continue to be in mind.

2 The second set are things that are
3 currently under discussion. The third set are
4 things that we propose, but were parked.

5 So, I'm happy to update this as things
6 and titles evolve. I think maybe an idea for the
7 Slack channel could be once it makes its way to
8 under discussion, we kind of can make a channel
9 for that, you know, and keep those matching.

10 I had taken the original priorities
11 just from the list Brian had made that I put at
12 the top to see, like, how does this map to some
13 priorities and where do each of these sit, you
14 know.

15 Those might not be right, and I'd love
16 kind of direction, too, from you guys in
17 Commerce, you know, as those evolve and the
18 Secretary and the Administration have influence,
19 like what are those real things that we think
20 will impact whether or not some of these
21 proposals make through, you know.

22 And I can just, you know, modify this

1 and keep it updated, but I just -- I needed a
2 visual frame, because I was also like, wait, what
3 happened to that other thing?

4 So, hopefully this is helpful. And,
5 you know, if you need things visualized with
6 clarity for various initiatives -- I want to get
7 my hand on Andrew's document --

8 (Laughter.)

9 MEMBER BOESCH: -- next. So, I'll put
10 it on the Slack channel. And if you guys -- as
11 you are, like, changing names, updating things
12 that we're working on like clusters isn't about
13 clusters anymore, I'll change it.

14 And maybe you guys can kind of
15 reconcile it with the Slack channel so that we
16 have a bit of organization. All right. That's
17 it.

18 MR. BUERSTATTE: Anyone have any
19 comments or questions?

20 MEMBER BOESCH: It's NACIE for
21 government novices. Okay?

22 (Laughter.)

1 MEMBER KENNEY: I have a question.

2 MEMBER BOESCH: Well, that's why I'm
3 hoping it could potentially be used maybe to
4 onboard people in the future.

5 So, that -- because it took me like
6 two meetings to understand where I was. No
7 offense, but it's complicated.

8 MEMBER KENNEY: Heather, a question
9 for you.

10 MEMBER BOESCH: Yes.

11 MEMBER KENNEY: At the end of our last
12 NACIE there was a document that a few members
13 created that had a bunch of recommendations for
14 the next NACIE.

15 And I'm trying to remember -- and,
16 Eric, you or Craig might remember there may have
17 been some things that were irrelevant for this
18 from that and I wasn't sure if anybody looked at
19 that to see if there's anything that could be
20 brought over.

21 MEMBER BOESCH: I don't know what that
22 is. I had just asked Eric, like, what are the

1 things that are currently on the table and I took
2 the December list.

3 I don't know if you're referring to,
4 like, the actions we all agreed to take as action
5 items at the end of ---

6 MEMBER KENNEY: No. This was actually
7 from NACIE 2.0 ---

8 MEMBER BOESCH: Oh, okay.

9 MEMBER KENNEY: -- the prior group,
10 because we struggled so much with these very
11 questions.

12 It was a small group that put together
13 a document and it was really like how to make
14 sure that this NACIE didn't have the same
15 learning curve duration.

16 And I don't know, Eric, if you think
17 there's anything in that that might be relevant
18 that would be worth looking at, or if you already
19 did that.

20 (Off microphone comments.)

21 MEMBER BOESCH: Yes, and I mean, this
22 is yours now. So, if anyone needs training in

1 design, I can teach them.

2 MEMBER NEMETH: This is probably the
3 closest segue to a small project that I've been
4 working on.

5 Some of you had a chance to see it
6 yesterday. But as promised from our last
7 meeting, I've put together a logo for NACIE.

8 It's a determined-looking eagle. And
9 if you take a look at the eagle in the Commerce
10 logo instead of whatever that eagle is holding,
11 our eagle is holding a Slack channel hashtag and
12 a cell phone since I feel those two items best
13 represent our committee.

14 So, I have a small preview of it here
15 on my phone if you care to offer me anymore input
16 on it.

17 And then shortly I'll have some custom
18 Moleskine notebooks, as well as some other
19 corporate swag available for our team.

20 MEMBER BOESCH: I have a request.

21 I just saw from your phone it looks
22 circular. So, you should make it a challenge

1 coin.

2 MEMBER NEMETH: Done.

3 (Simultaneous speaking.)

4 MEMBER BOESCH: A challenge coin is
5 like a kind of adult Pokemon that is played in
6 the government where different organizations,
7 projects, institutions, they make a kind of metal
8 coin.

9 You can see them for sale sometimes,
10 like, you can get the President's in the gift
11 shop if you all went to it the first time. And
12 people trade them with each other and kind of
13 collect them as they meet almost like business
14 cards.

15 So, yeah, if you -- you can search
16 them online, but it's a -- it's a kind of insider
17 currency that you can give people as reminders of
18 what you're working on.

19 MR. BUERSTATTE: Any other maybe more
20 focused questions on the framework, that is?

21 MEMBER REICHERT: Hi, Heather.

22 First of all, this is great work and

1 very helpful in clarifying a lot of the verbiage
2 that we've all been throwing around in our heads
3 and putting on paper, but maybe not in an
4 organized way such as we now have here.

5 My question is about -- we've talked
6 about within the Advanced Manufacturing Workforce
7 Initiative, the idea of bringing together both
8 folks within an agency and also interagency
9 brining, you know, maybe the DOE and the DOC and
10 Department of Labor together.

11 So, does that fit under convenings
12 here?

13 MEMBER BOESCH: So, it would fit in
14 two places. And I'm also not an expert in this,
15 so feel free to tell me, but I would have it fit
16 under convening, like they can convene gatherings
17 across agencies.

18 I also made a note on the first two
19 items on the second page that if we're making
20 policy or program recommendations or best
21 practices that might be outside the purview of
22 the agency, I think it's something they can do is

1 recommend or share it, you know, with those other
2 agencies.

3 MEMBER REICHERT: Okay. Thank you.

4 MEMBER STEVENSON: I think one of the
5 questions -- and I completely echo what Emily
6 said. This is magical.

7 The question I have around -- we've
8 been talking about the purpose of workforce
9 development particularly given that there are
10 other agencies that tackle workforce development.

11 I'm just curious where it would
12 potentially fit in with the description of NACIE
13 and what NACIE is set to do.

14 MEMBER BOESCH: So, I have -- kind of
15 developing a competitive workforce is like in our
16 kind of original mission that comes from the
17 NACIE document.

18 So, it's kind of, you know, it's
19 thought of as contained within that innovation
20 and entrepreneurship language.

21 I had also made encouraging workforce
22 development one of the kind of priority buckets

1 about which -- we're kind of seeing which of our
2 projects applied to that, you know.

3 I'm personally also interested in
4 being able to continue that first -- that first
5 line on the sheet if it is approved, because I
6 think that could start to put some things around
7 that, too, like a lot of the things we've talked
8 about, about kind of convening resources, being a
9 front door, what are some of those goals. So,
10 that might be able to articulate some of those.

11 But if there's sharper thoughts around
12 what these things that I just said are around
13 here from Commerce, let's update them.

14 MR. BUERSTATTE: And to Scott's point,
15 I think there's an opportunity for us to
16 reinventory what we're working on. And this is,
17 as Heather has done so nicely in this last page,
18 organized the original discussions.

19 And we can take a look at this, maybe
20 do some reprioritization and rebranding on some
21 of these topics as the conversations have
22 evolved. And from there, I think it might be

1 helpful to build towards a broader message.

2 And I think that's what you were
3 getting at, Heather. What's our tag line, what's
4 our -- in fact, maybe the last time I think it
5 was, Orin, you said it, you know, what's our
6 elevator pitch? I think this will be a great
7 starting point for that.

8 MEMBER BOESCH: I was just going to
9 say one thing that might be a good exercise for
10 maybe a few of us to do in between to pitch back,
11 because, like, I just listed them here, but a lot
12 of them were similar, right? Like, it's aligning
13 the entrepreneurship programs, something that
14 might be under the strategic plan, are we, you
15 know, there was a couple that were starting to
16 merge together or get renamed.

17 So, doing a quick synthesis of this
18 where maybe we could be a little more streamlined
19 might be a helpful thing for a working group to
20 do just virtually before we meet again.

21 MR. BUERSTATTE: Okay. Any final
22 notes on this subject?

1 MR. BUERSTATTE: I know we cut things
2 a little short on Orin.

3 Any follow-on discussion during the
4 break that you wanted to report out on your
5 Accelerator Network pitch?

6 MEMBER HERSKOWITZ: Sure.

7 I mean, it wasn't anything specific
8 about whether we wanted to do this as part of
9 NACIE or not, but a number of individuals came
10 over and asked to see the slides to talk about
11 other kinds of resources.

12 I think Melissa and I already have a
13 breakfast meeting set up to come back here next
14 week anyway. So, she's trying to do something
15 similar within D.C.

16 And so, to the extent that we already
17 have resources that she could put to use, I'm
18 happy to share them. Beyond that, that's pretty
19 much what we talked about during the break.

20 I didn't know if you -- if you want to
21 get into, like, what -- is this something that we
22 want to -- I don't -- we're not quite ready yet.

1 So, you know what? I think probably the best
2 thing to do is why I don't get my own -- this was
3 opportunistic because of the beers.

4 And so, maybe -- why don't I over the
5 next couple of weeks, pull together what we plan
6 to do with this and I'll share the slides as they
7 exist within a couple of weeks when they're a
8 little tightened up.

9 And then if NACIE feels like this is
10 something that wants -- we want to try and do
11 under the NACIE umbrella in some way or other,
12 happy to do it.

13 If not, then we can just say, yeah,
14 can you include me on the mailing list that gets
15 created, can you invite me to this conference
16 when you have it? I mean, I'm happy to do any of
17 that stuff.

18 I think it's not quite ready for prime
19 time in terms of, like, there's no consumable
20 yet. But once we have a consumable, I'm happy to
21 share that.

22 MEMBER BOWLES: Well, I think we were

1 talking about this in one of our groups. I think
2 what you guys have created is something that
3 probably 50 organizations across the country
4 have, but what's unique about what you guys are
5 doing is you're willing to share it.

6 And so, one of the things that we
7 could help do -- and the example we used was the
8 SBA accelerator grant that they have, is just
9 incentivize people to host the content that they
10 already are using into a centralized location
11 that could be managed by you guys or something
12 else or maybe there's an SBA grant written
13 specifically for managing the assimilation and
14 aggregation of that data.

15 But I think, you know, whether it's
16 GAN, which is the Global Accelerator Network,
17 that Techstars has, or the 17 accelerators that
18 are in Texas that are all -- they're all trying
19 to figure out a way to do this.

20 But I think your example of leadership
21 of saying, hey, we're going to be willing to make
22 this available for free, how do we think through

1 incentivizing other groups to do the same.

2 MEMBER HERSKOWITZ: Yeah. And we --
3 we do this a lot. It's something some of you
4 know. I had mentioned this to Scott, but we did
5 something similar around merging our -- I think
6 I've mentioned this before -- merging -- there
7 was an observation that many universities have
8 their entrepreneurs and residents networks, but
9 they're only captive to their own university.

10 And so, if you've got a great
11 cybersecurity guy, but no cybersecurity startups,
12 then it's kind of a waste, and vice versa.

13 So, we merged our -- we got -- it's
14 just very elitist in this case. It just happens
15 to be a group that meets once a year anyway. So,
16 we got sort of the Ivy League tech transfer
17 office, plus MIT, Stanford, Johns Hopkins, WashU
18 and UChicago to merge our EIR programs so that
19 startups from any institution can tap into any of
20 the mentors.

21 And we're -- because that seemed to
22 work, we're now packaging up those materials and

1 making them available to other groups that want
2 to try and do the same kind of network, whether
3 it's -- we're talking about doing something for
4 New York City within life sciences, and with New
5 York State around energy-related companies to
6 create sort of regional entrepreneurship -- the
7 EIR networks, but we've generally found that
8 people don't share unless you share.

9 But once they see that you're sharing
10 it and offer to take the, like, grease the
11 machinery by offering to maintain something, then
12 everybody shares.

13 So, at least in our experience so far,
14 because we've done this repeatedly around how do
15 you run an EIR program, how do you run a fellow's
16 internship program -- and we have all those
17 materials packaged up and shared on our website.
18 And we found that when we offer to share, then
19 everyone else offers to share, too.

20 It hasn't needed an economic
21 incentive, it's needed like a manual labor
22 incentive, and we're always happy to do that.

1 MR. BUERSTATTE: It's positive peer
2 pressure.

3 MEMBER REICHERT: Orin, a couple of
4 comments.

5 So, one is I think this is a really
6 good initiative. And I agree that there's
7 probably pockets of this information around the
8 country that's not being shared.

9 And it would be, I mean, if your
10 organization is willing to do the lift of having
11 a place to maintain it, I would see a lot of
12 value in that.

13 The other thing is that someone has
14 probably mentioned to you groups like -- and I'm
15 sure you know the International Business
16 Incubators Association, which tries to do
17 something like this or is equivalent -- oh, you
18 don't know that. Okay.

19 So, there's a Business -- it used to
20 be NBIA. Now, it's InBIA to reflect the fact
21 that they're turning their focus to be
22 international, but it is a repository of

1 information on the web, as well as a listserv for
2 organizations that do incubation, acceleration
3 and kind of anything that --

4 MEMBER HERSKOWITZ: So, maybe they
5 could maintain it.

6 MEMBER REICHERT: -- falls under that,
7 so then maybe they could maintain it.

8 But what I like about what you're
9 doing, is that it is very specific to accelerator
10 programs.

11 So, what I found is InBIA is not the
12 best resource for me, because it's not focused
13 enough.

14 MEMBER HERSKOWITZ: It's not focused
15 on, like, hard science tech.

16 MEMBER REICHERT: It's not focused on
17 hard science tech or the type of incubation that
18 we do.

19 So, I think having kind of
20 subcategories of information that is specific to
21 how do you run an accelerator program, how do you
22 run an incubator, that's the thing that I've had

1 trouble finding through other resources.

2 And for the Incubatenergy Network,
3 that's what's been so valuable about that, is
4 that there are ten organizations that are doing
5 very similar things who are all learning from
6 each other.

7 So, I'm wondering if you focus on
8 accelerator programs, I think that could be of
9 value no matter where it lives.

10 MEMBER HERSKOWITZ: But you could
11 actually go either way with that. So, when you
12 guys see the material in the article, feel free
13 to tell me someone's already done this.

14 Because if it -- to take your sort of
15 meta clusters idea, if it turns out the best --
16 the highest and best use for this is to be
17 contributing, we all start contributing material
18 towards what the InBIA is doing, but some of the
19 material that we're all contributing is specific
20 for technology-based accelerators, some of it is
21 not.

22 So, the idea of having startup

1 attorneys that we've discounted, you know,
2 negotiated a fixed and discounted referred rate
3 for would apply just as well towards people
4 opening a bakery.

5 You might have different attorneys,
6 but the concept would be the same, or insurance
7 providers or, you know, when we were talking
8 earlier, Tiffany suggested HR executives, you
9 know, someone who can help with those first
10 couple of hires.

11 So, that doesn't need to be technology
12 accelerator only, but hiring IP attorneys would
13 probably be less useful for a bakery.

14 So, there could be -- if you could
15 organize the information right, then you could
16 either sort of go meta, or you could keep it to a
17 network of just technology accelerators.

18 We have no preference, nor are we
19 experts in the topic. We just know what we want.

20 MEMBER REICHERT: I'm just saying
21 there's value in kind of a subset of incubators
22 and accelerators having a shared knowledge base.

1 MEMBER HERSKOWITZ: And Trey said that
2 he knows the CEO of InBIA.

3 MR. BUERSTATTE: Yeah. Kristie
4 Chadwick.

5 MEMBER HERSKOWITZ: Okay.

6 MEMBER BOWLES: Yeah. I think she's
7 trying to make some changes inside the
8 organization. She's trying to have it be more
9 relevant to current -- the current needs of
10 incubators and entrepreneur centers.

11 And so, maybe there's movement in
12 that, but --

13 MR. BUERSTATTE: Yes. Trey, let me
14 stop you right there. Sorry.

15 I want to add that EDA has funded
16 InBIA for a research grant to better understand
17 outputs and outcomes from the various incubation
18 organizations.

19 As we know recently in the last few
20 years especially, we've seen a huge change in the
21 landscape whether it's coworking spaces, an
22 incubator, an accelerator, a mix of all of the

1 above --

2 MEMBER BOWLES: Entrepreneur centers.

3 MR. BUERSTATTE: Entrepreneur centers.

4 Correct. And InBIA is, I'd say, maybe one-third
5 of the way through a large research study
6 leveraging the thousand plus stakeholders that
7 they have to better understand how -- what types
8 of activities are delivering meaningful outcomes
9 across the spectrum of those organizations.

10 So, I think with that information with
11 some -- a bit of standardized understanding of
12 what's working in the coworking space, what's
13 working in acceleration and so on and so forth, I
14 think we're -- we, from a federal perspective,
15 get a little bit closer to helping support an
16 accepted best practices, in a way.

17 Because it's -- we talk about these a
18 lot and this was actually a product of NACIE 2.0
19 where we talked about identifying and
20 communicating best practices in this space, but
21 it's hard to do that if you haven't done some
22 sort of standardization as well.

1 Because what might be a best practice
2 in one accelerator organization, might be
3 completely wrong in a certain type of community
4 or in a certain type of business cluster.

5 So, I just wanted to offer that up
6 that we are supporting them and this is -- as
7 this conversation has developed, it's very clear
8 to me that that could be an interesting
9 opportunity.

10 Trey, I cut you off. Sorry. I just
11 wanted to inject that.

12 MEMBER BOWLES: No, that's good.

13 MEMBER REAMER: To introduce, I guess,
14 Julia McHenry is the chief economist at the
15 National Telecommunications and Information
16 Administration, NTIA, and we had talked about
17 regulatory sandbox.

18 NTIA clearly is interested in
19 innovation and entrepreneurship. So, I just
20 asked her to come down and at an appropriate
21 moment, whether it's now or sometime in the
22 meeting, just to have her say a couple words

1 about NTIA, but also to make a connection with
2 Heather regarding the regulatory sandbox idea.

3 MR. BUERSTATTE: Yeah. Thanks,
4 Andrew. I think we might have some extra time.
5 So, let's keep moving forward and then we'd love
6 to hear if we get some time. Thanks. Or on
7 anything else to close that one out. Okay.

8 So, we also, I think -- Joe, do you
9 have some thoughts you wanted to discuss?

10 MEMBER SCHOCKEN: As I listen to this
11 conversation, you know, it occurs to me that so
12 much we talk about is impacted by the laws and,
13 you know, around innovation and entrepreneurship.

14 So, I -- and I understand here I'm
15 beyond NACIE so that we're talking about us as
16 individuals and what we do individually.

17 We're learning so much about this part
18 of the economy and how important it is. And so,
19 I just want to make a point that all of us have
20 connections with elected officials.

21 And as I think about the elected
22 officials who make these policies, you know,

1 they're pretty busy people.

2 Mike, we were talking about the
3 congressman coming by to see you. And this is
4 not NACIE. So, this is individually.

5 And I think about these congress
6 people, you know, they're spending half their
7 time raising money to get elected, and then they
8 deal with all these really important national and
9 international issues.

10 The issue we talk about is so
11 critically important, because this is where all
12 the job creation comes from in the economy. That
13 is not something they know about innately, you
14 know. Very few of them have the background on
15 these issues.

16 And so, you know, all of us connect
17 with these elected officials, and this is just an
18 encouragement by me, that you pay attention to
19 that and you take them aside and explain the
20 importance of the innovation economy and the
21 regulations they make, how impactful those are in
22 job creation and economic development.

1 And if anybody wants to talk further
2 about that offline, I'm more than happy to do
3 that.

4 MR. BUERSTATTE: All right. So, at
5 this time, we're a little bit ahead of schedule.
6 At 11:30 we will hear some next steps, but,
7 Andrew, I did want to offer up some time, it
8 looks like.

9 MEMBER REAMER: Thank you.

10 Julia, you want to come up and just
11 grab a mic and introduce yourself and say a few
12 words about NTIA, and then we can tell you a bit
13 about the idea we're playing with.

14 MS. MCHENRY: Great. Hi.

15 So, my name is Julia McHenry. I am
16 the chief economist at NTIA. NTIA is the
17 National Telecommunications and Information
18 Administration, but it is, more importantly, an
19 executive branch agency within the Department of
20 Commerce that actually has a dotted line to the
21 White House in terms of advising on internet-
22 related and telecommunications-related issues.

1 So, we've been around since 1978 and
2 have been sort of playing that role as an advisor
3 on internet and telecommunications issues.

4 So, playing in the digital space,
5 obviously, innovation and economic development is
6 incredibly important to us.

7 And we have a variety of initiatives
8 around the digital economy focused on everything
9 from measuring the digital economy to we have our
10 own advisory group on the digital economy,
11 Digital Economy Board of Advisors.

12 So, we really are interested in
13 everything in this space. We also are obviously
14 within the Department of Commerce. So, we can
15 talk to and try and work with other agencies.

16 So, I know you guys are focused on
17 sandboxes. And the Department of Commerce,
18 because we're not traditionally the regulatory
19 group, can't really help with the regulation side
20 of things, but we certainly can -- we work a lot
21 with industry and we do our best to help industry
22 in terms of economic development.

1 So, we'd be happy to work with you and
2 I can answer any questions. And certainly, you
3 know, I think we certainly at NTIA would be happy
4 to start thinking about are there ways that we
5 can sort of start to think about sandboxes from
6 the digital economy point of view.

7 MEMBER BOESCH: I was actually just
8 wondering has it come up as something you guys
9 have discussed already?

10 MS. MCHENRY: No. So, it actually
11 hasn't. And I don't actually know why. I'm more
12 familiar with them from actually the legislative
13 side and from the financial side. So -- but I
14 don't know why.

15 I think we may be focused more on in
16 terms of service, like, entrepreneurship and
17 innovation how maybe from the internet side, you
18 know, platforms can help innovation and
19 entrepreneurship.

20 But really I was actually just
21 yesterday at a PayPal lunch thing on the Hill
22 where they were talking about really, you know,

1 licensing is a huge aspect for -- a huge
2 challenge for small businesses.

3 MR. BUERSTATTE: Julia, speaking of
4 DEBA, the Digital Economy Board of Advisors, one
5 thing that this council is very interested is the
6 collaborative opportunities across agencies and
7 advisory councils.

8 What's the status of DEBA right now?

9 MS. MCHENRY: So, we are -- I think
10 right now the next meeting is scheduled for June.
11 So, like you all, the current group was appointed
12 by Penny Pritzker, but is very interested in
13 moving forward in the new administration.

14 So, we've sent a letter up to the
15 Secretary's office and sort of have, you know,
16 are just sort of awaiting next steps. So, we are
17 currently looking at June, I think, for our next
18 meeting.

19 MR. BUERSTATTE: That's great. OIE
20 would love to support and participate however we
21 can just so we can be better aware of what you
22 guys are discussing.

1 MS. MCHENRY: Excellent. So, I'm also
2 one of the SMEs on the Digital Measurement Group.
3 So, to the extent I can be helpful in terms of
4 facilitating that, just let me know.

5 MR. BUERSTATTE: Great. And the
6 second question just out of curiosity, so our
7 prior councils, we call them NACIE 2.0, this is
8 the third iteration, so NACIE 2.0 collaborated
9 with ESA on -- I believe it was the Platform
10 Economy Report, is what it was titled.

11 I'm curious to what your role in that
12 report was if you had any contribution.

13 MS. MCHENRY: So, we didn't -- I was
14 familiar as it was going along. We actually --
15 NTIA works very closely with ESA -- or has worked
16 very closely in the past, and particularly with
17 their economists who work on digital economy
18 issues.

19 So, but, you know, we have -- so, ESA
20 has some measurement around the digital economy.
21 We are very focused on the measurement of the
22 digital economy and particularly are looking for

1 ways we can better understand the impact of the
2 digital economy on small businesses and
3 entrepreneurship.

4 So, if you all had any idea as how to
5 do that, you know, we had explored the concepts
6 of surveys, because we have a survey on the
7 population side, the household side, but, you
8 know, if there are better ways that we can think
9 about measuring, you know, the relationship
10 between the digital economy, broadband
11 connection, innovation and entrepreneurship, we
12 would be more than happy -- or if there are
13 things like better measuring components to the
14 digital economy that are focused on
15 entrepreneurship, we'd be happy to get involved.

16 MR. BUERSTATTE: Thank you.

17 Any other questions real quick?

18 MEMBER REAMER: I know there are a few
19 members of NACIE who work in the space of
20 telecommunications and information. So, just
21 give Julia like a sentence about -- like, Scott,
22 I imagine you do something.

1 Now, just introduce yourself to --

2 MEMBER FREDERICK: Sure.

3 MEMBER REAMER: Microphone.

4 MEMBER FREDERICK: I head up business
5 development, corporate development in federal
6 initiatives for NEA, New Enterprise Associates.

7 So, we're the world's largest
8 financial capital firm.

9 MEMBER KAPP: My name is Joe Kapp.
10 I started a nonprofit -- I'm cofounder of
11 nonprofit organization called the LGBT Technology
12 Partnership.

13 So, you're probably -- you may have
14 heard of some of the work that we do with the
15 FCC, an advocacy on the intersection of LGBT
16 communities and telecommunications policy,
17 homeless LGBT youth and access to closing the
18 digital divide.

19 Can you just help me understand just
20 a little bit and it may be helpful for folks, the
21 distinction between NTIA and the FCC? Because
22 that sometimes gets a little bit muddy.

1 MS. MCHENRY: Right. So, number one,
2 FCC is a fully independent agency. So, they are
3 not beholdng to the executive branch or the
4 legislative branch, actually.

5 FCC's major role is both regulatory
6 and then also -- but regulatory in terms of
7 working with the commercial sector.

8 So, for instance, what I'm most
9 familiar with, FCC holds all, you know,
10 distributes all of the -- and manages all of the
11 licenses for commercial and private spectrum
12 holders, right?

13 So, but they also manage -- they also
14 work on regulation related to the
15 telecommunication industry more broadly.

16 NTIA's job is both more on the agency
17 side -- so, for example, we manage spectrum
18 related to -- to the extent that radio spectrum
19 is something that you're familiar with, we manage
20 it from the federal side, but we are also then,
21 again, have this advisory, sort of internet and
22 telecommunications policy advisory role.

1 We also have played the role of
2 administering BTOP grants for broadband access in
3 the past.

4 And going forward, we will administer
5 any grants for states who opt out of FirstNet, if
6 that's something you're familiar with.

7 So, we take more -- less of a
8 regulatory role, and more of an industry -- more
9 of a, essentially, policy advisory role and
10 federal role.

11 With respect to digital adoption, I
12 don't know if you're familiar, we have been --
13 actually, since 1994 we have been administering a
14 survey through the current population survey on
15 digital adoption, computer and internet use.

16 So, we do that every two years. We're
17 slated for October -- or November 2017 is coming
18 up to be our next one.

19 And, actually, we write quite a bit on
20 the digital -- on broadband adoption and the
21 digital divide and are very focused on closing
22 the digital divide both in terms of facilitating

1 broadband access and connectivity through our --
2 originally the BTOP grants, but also we have an
3 office that works with local communities in terms
4 of identifying grants and funding in terms of to
5 close those divides, but also on digital
6 literacy.

7 So, ensuring that we actually have the
8 digital literacy to use the internet in order to
9 facilitate some of this stuff.

10 So, broadband adoption is actually
11 less than 80 percent, which would surprise a lot
12 of people. Whereas connectivity, you know, those
13 people who could have access, I think there's
14 closer to four or five percent of households that
15 have no connectivity possibility.

16 So, there's really -- there is a major
17 divide there that has to be filled and, you know,
18 we really work hard to do what we can on that
19 front. So, I hope that --

20 MEMBER KAPP: I also represent rural
21 communities and also Appalachia. And so, I'm
22 sure you're --

1 MS. MCHENRY: Yes.

2 MEMBER KAPP: -- more than familiar
3 with a lot of those challenges as well.

4 MEMBER BALDWIN: Julia, I work for
5 Intel Corporation and, you know, we're clearly in
6 the IT space, but we also have a program called
7 Teach for the Future which supports STEM
8 education. And we've trained over 40 million
9 educators around the world to help improve
10 digital literacy among educators and passing
11 through to the students.

12 MS. MCHENRY: Oh, great. Actually,
13 this is something that I have been asking myself
14 quite a bit recently, which is in terms of
15 connecting schools and ensuring that schools have
16 the connectivity they need, but also that the
17 educators have the training they need to actually
18 be productive with those.

19 MEMBER BALDWIN: I'd be happy to give
20 you more info on Teach for the Future.

21 MS. MCHENRY: Yes. That would be
22 great. Thank you.

1 MR. BUERSTATTE: Okay. Thanks for
2 coming, Julia. It's clear that there is a number
3 of opportunities for us to continue the
4 conversation and, like I said, looking forward to
5 June and seeing how Eric, myself and other OIE
6 staff can support and collaborate.

7 So, at this time, we do need to move
8 on to our next steps. Melissa.

9 CO-CHAIR BRADLEY: So, first, I again
10 cannot thank you enough. I feel like this was a
11 very different meeting than before in terms of a
12 lot of momentum.

13 And that's what happens when
14 entrepreneurs have very little parameters and no
15 guardrails. So, that's a good thing.

16 I've been making notes and I want to
17 be fair that I can only note who I've talked to,
18 but I want to just list a few things that have
19 come up and then ask us to have a running list of
20 things to do moving forward.

21 So, first is the Slack channel, kind
22 of getting that aligned. And I'll be honest, I

1 don't know who can do that. I'm happy to do it
2 if I have rights, but to add the working group so
3 that we can start putting more information.

4 I think it's been a great tool. I
5 want to thank everybody for using it, but I think
6 it helps keep us offline and give us a chance to
7 communicate with each other.

8 Yes, Trey.

9 MEMBER BOWLES: I would just say in
10 the hopes of not losing some information, I think
11 some of these channels that have been created
12 need to be renamed and merged, but not start a
13 new one without -- because we'll lose all the
14 data from before if we don't do that.

15 CO-CHAIR BRADLEY: I would agree.

16 MEMBER FREDERICK: Yeah. I was going
17 to say if they get too narrow, it makes it hard
18 to decide where to put some of the content and
19 that's what I was wrestling with. I wish I had
20 an easy answer for you, but --

21 CO-CHAIR BRADLEY: So, I think we can
22 do that. I also would say -- I say this

1 respectfully for all of us texters, there are
2 also a way to cross-reference channels.

3 So, we might do a better job of doing
4 that as well of using hashtags and @ symbols so
5 that if we're posting something in one or the
6 other, because I think mass migration -- I don't
7 want to change what people have put, but there's
8 certainly a way to cross-reference that. So,
9 I'll be very tactical.

10 Is that something we can do, Eric, or
11 we need to leave that to you guys?

12 (Off mic comment)

13 CO-CHAIR BRADLEY: Okay. Okay.

14 The other thing was obviously to keep
15 doing for the working groups. Obviously, there's
16 something already happening for advanced
17 manufacturing that may just need to review.
18 We've got EShip for all.

19 So, I would encourage to not only
20 leverage staff, but if there's anything that
21 Steve and I can do to help facilitate those
22 calls, I want to commend the groups that made

1 great progress in the last meeting to this
2 meeting.

3 And so, I will say that I would expect
4 we have some things ready to go and sign either
5 before we get to August, or, at a minimum,
6 wherever we end up beyond D.C. in August would be
7 awesome.

8 The other piece is something that
9 Andrew touched upon yesterday and we talked about
10 briefly over drinks, is we have a tremendous
11 opportunity with resources. How do we tap them?

12 And I want to thank Andrew and all the
13 guests that continue to come, but how could we
14 facilitate that in between meetings?

15 So, Andrew had suggested yesterday
16 that we each identify a group and reach out. And
17 what I have suggested is that we pick two to
18 three, and Andrew and I, we can do that, and say,
19 here's two to three based on proximity, based on
20 work, based on alignment that we can maybe get in
21 groups of two or three and just have
22 conversations with.

1 And I want to be clear to your point,
2 Joe, I think that's going to be valuable for
3 NACIE, but hopefully valuable to people
4 individually as many of us work in different
5 capacities with the federal government.

6 So, you're not going to be assigned,
7 but we'll identify a group and say, if this can
8 help you personally, if this can help advance
9 NACIE, if it helps your workgroup, then how do we
10 get those conversations started.

11 I don't know how many we're going to
12 get scheduled before August, but at least Andrew
13 and I will commit to coming up with a few to
14 choose from and then take it from there.

15 The other piece is also just meeting
16 one on one. I am -- I have the privilege to be
17 here in D.C., but I feel like I don't travel as
18 much as everybody else. So, I look forward to
19 hosting Orin when he comes back, but I think just
20 keep meeting because it's clear, for example, the
21 group that Heather led, that things are popping
22 up, or that David and Orin in our personal lives

1 and professionally, how do we bring that to the
2 group.

3 So, I think some of that is
4 facilitated by Slack, but then some of that is
5 facilitated in person.

6 The other piece is, how many folks are
7 going to Kansas City in June for the EShip
8 conference for Kauffman? Anybody going there?
9 Okay.

10 So, we'll do another poll of people --
11 are people familiar with it and aware of it?
12 Yes? No? Maybe? No? Okay.

13 So, we can send some information out.
14 Go ahead, Trey.

15 MEMBER BOWLES: I was going to
16 advocate for the conference. I think it's -- I
17 think there's been a lot of changes at Kauffman
18 in the last year or two.

19 They brought in somebody new to sort
20 of run the entrepreneurship component of it,
21 Victor Hwang. And he's brought a team of people
22 underneath him that are doing amazing things.

1 And they are really sort of
2 transitioning from being research-driven to being
3 -- to understanding the needs of entrepreneurs,
4 making their initiatives and their priorities
5 based on that and then building the research
6 component to that.

7 So, they are -- I think it would be
8 really great to have some NACIE representation
9 there.

10 They are trying to bring people from
11 across the country who really represent
12 entrepreneurship and innovation and they're
13 looking at a broad swath of stakeholders that
14 could do that.

15 So, I would encourage you that if you
16 have an interest in having those conversations
17 and really forwarding the work that we're doing
18 here, it would make a lot of sense to have, you
19 know, at least three or four of us there to sort
20 of carry the flag of NACIE in addition to the OIE
21 stuff that's already going.

22 CO-CHAIR BRADLEY: So, we can -- I can

1 find the link and send it out, put it on a Slack
2 channel, but I would highly encourage it.

3 We had talked about if there is enough
4 of us, to, at minimum, have a social event. And
5 then if there's a way to use that as an entre for
6 EShip For All, if there's a way to bring some
7 leverage there to convene people or however that
8 may work as a precursor to, I think, the
9 conference we all agree to happen in the fall.

10 So, hopefully -- that's the 21st to
11 the 23rd, I think, of June. It's 199 bucks. So,
12 it should be pretty good.

13 And they've been pretty intent to --
14 I know they've been talking to a lot of NACIE
15 members on how to make it relevant. So, I can
16 assure you even with turnover there's been a
17 good, I would say, touch with the community in
18 terms of what we're looking for.

19 So, those are the immediate action
20 items. I want to pause there and see if there's
21 anything else that people need or want to get
22 done.

1 Yes, sir.

2 MEMBER REAMER: I may have missed it
3 yesterday, but can we get an update around the
4 number of politicals in the building and the -- I
5 know our recommendations are on hold, but just
6 the status of OIE's relationship.

7 CO-CHAIR BRADLEY: Anything else?

8 MEMBER KAPP: Just a quick comment
9 about the next meeting.

10 Is that kind of where we're at? I
11 want to make sure -- okay. Just based on the
12 list that Andrew has put together, I'm wondering
13 -- I mean, it is very beneficial.

14 I know that we have a short period of
15 time, but I'm wondering whether or not an
16 opportunity exists for us to go ahead and
17 continue kind of what we've done already, but
18 maybe potentially even reach out to a number of
19 those folks who are represented on that list to
20 maybe come in and do like a ten-minute -- five to
21 ten-minute, you know, synopsis of the programs.

22 And based on what Andrew has put

1 together, I mean, even having folks here from
2 NTIA, I'm just wondering if that's something that
3 you guys would entertain so that at the August
4 meeting we might be able to gain more -- greater
5 clarity in terms of some of those other
6 governmental functions that are here in D.C.

7 MEMBER HERSKOWITZ: I second that. I
8 think that would be fascinating.

9 MR. BUERSTATTE: Yeah. Let's talk
10 about that more. I think we did have Drew from
11 the Advanced Manufacturing Office. And while
12 that's -- it's always great and I think
13 beneficial to have that and Julia come in and
14 visit, we do need to strike a balance between
15 getting work done and learning.

16 I think learning is hearing directly
17 from the actors in government is important -- is
18 a critical piece of you all formulating your
19 recommendations.

20 So -- but, yes, we will continue to
21 try to do that and, of course, find the right
22 balance though.

1 CO-CHAIR BRADLEY: To that point,
2 though, and I know we've raised it before, I
3 mean, I think some of these I think we can look
4 and prioritize.

5 I'd be wondering if because of where
6 people are, if there are ways prior to August to
7 identify two or three that could do some kind of
8 video conference or teleconference with us so
9 that it could maybe even begin to frame some of
10 our final recommendations, but I think we -- I
11 think that's a great call for partnership when we
12 reach out to them to say, hey, we're here and
13 we'd love to get to know you better. So, I
14 appreciate it.

15 Other thoughts for NACIE before we
16 talk about admin stuff? Did everybody vote? The
17 final thing.

18 MEMBER HERSKOWITZ: You know, I will
19 say on the Slack channel, I find it -- I don't
20 know -- it's -- I don't know if people -- where
21 they are on the being bombarded versus wanting
22 more information stage.

1 I actually really appreciate it when
2 people send around interesting articles they've
3 found. And if you -- if people are going to
4 conferences or events that they think would be of
5 general interest, I personally would love to hear
6 about them.

7 So, like, if Kauffman is having a
8 conference, I may not attend, but maybe I'd send
9 someone to go or at least have it on my radar,
10 see who's speaking. So, I would just encourage
11 people to share those.

12 I know some people share a lot, and
13 some people don't share at all. So, I was just -
14 - I actually haven't shared that much, so I
15 should do more.

16 CO-CHAIR BRADLEY: But the stuff you
17 share is good. That video was good.

18 MEMBER HERSKOWITZ: We do a lot of
19 videos on that. I'll keep posting and people
20 like seeing the links to videos and -- like
21 videos on entrepreneurship, not family videos.

22 (Laughter.)

1 CO-CHAIR BRADLEY: Are all the heads
2 of workgroups good? Do you all need anything
3 from the group?

4 (Pause.)

5 CO-CHAIR BRADLEY: Great. Thanks.

6 MR. BUERSTATTE: I've got one question
7 on next steps.

8 I do like the idea for some conference
9 calls with other US government offices. I think
10 that would be valuable not only for us, but also
11 despite having many advisory councils, there's
12 many offices and programs that don't have the
13 resource that you all provide. So, I think
14 there's a lot of feds that would love to engage
15 with you.

16 With that said, it is a lift for us to
17 coordinate that and reach out to all these
18 offices that we -- that list is long and we
19 clearly don't have connections everywhere.

20 But if we could find a way to -- thank
21 you. Great. Great. Because I would love to be
22 able to say, hey, our council is uniquely

1 interested in X, Y and Z. It will just help
2 provide a little more glue to the relationship.

3 So, on a couple of administrative
4 items that I have, Eric and I have been
5 approached about group assignments.

6 And as always -- well, as ideas
7 continue to develop and you think you might be
8 able to offer new insight to a different group,
9 by all means, please -- please contribute however
10 you see fit.

11 And also for those of you that haven't
12 been able to be as active because maybe the topic
13 isn't related to your professional wheelhouse as
14 much, don't worry. We'll get to you soon enough.

15 Things will develop over time and we
16 will get new and different insight from
17 leadership as they come on board. So, this is a
18 two-year term, don't forget.

19 And if we are ready to polish off and
20 conduct a vote on either of these more developed
21 initiatives, we can absolutely do so before
22 August.

1 We can call a virtual meeting. It
2 will be an official virtual session and we'll do
3 so mostly just because the dialog is best in
4 person. We know that.

5 But when we do a call like that,
6 typically it's when we have something that's
7 ready for a vote and final discussion. So, we're
8 more than happy to do that, just for your
9 awareness.

10 Also, want to make you aware of OIE's
11 grant program. So, many of you are familiar with
12 it. It's our Regional Innovation Strategies
13 Program.

14 Congress just came through authorizing
15 us for 17 million this year. This is a two-
16 million-dollar bump.

17 And one thing that we really love to
18 engage NACIE on is being champions for us for the
19 Department of Commerce and our programs at the
20 community level.

21 So, we're nearing release of that
22 program. I expect it will come out soon. Early

1 summer, hopefully. And would love to -- would
2 love your assistance in getting the word out, the
3 funding opportunity.

4 The classic problem that we have is we
5 can't make awards to organizations that don't
6 apply. So, in order to get the award, you got to
7 apply. So, it's so important to get the word out.

8 Many of you have a lot of experience
9 with federal grants and it's not an easy lift,
10 it's not something you submit overnight. It
11 takes some big, strategic planning.

12 So, the sooner we can get the word out
13 to a diverse set of stakeholders, the better our
14 investments will be.

15 So, we'll have a specific ask for you
16 to open your networks up and get the word out
17 when that comes out.

18 Eric, anything else?

19 (Pause.)

20 MR. BUERSTATTE: All right. At this
21 time, then, I think we have -- the scheduled
22 public comment we had from Ryan Vogel, he was

1 unable to make it. So, we will be skipping his
2 remarks.

3 But I will open the floor to anyone in
4 the room for public comments, or online for
5 public comments. First, in the room. Looks like
6 we have no public comment in the room.

7 Online?

8 (Pause.)

9 MR. BUERSTATTE: Eric's giving me the
10 thumbs up. No one online for public comment.

11 Closing remarks. Melissa.

12 CO-CHAIR BRADLEY: I think the only
13 thing to say is a huge "thank you." I know that
14 during the one-on-ones, people really stepped up
15 and said they were here.

16 And having had the privilege to work
17 in administration and see both sides, I get and
18 really want to honor and thank Craig and Eric and
19 the entire OIE team, because transitions are not
20 easy.

21 And I certainly want to thank each and
22 every one of you for coming back, certainly

1 recognizing we had some tentativeness of whether
2 we're meeting or not.

3 And, really, I'm walking away in deep
4 gratitude for what I see is a real commitment to
5 this work irrespective of the group, and then the
6 opportunity of leverage, the privilege we have in
7 setting these positions.

8 So, I look forward to working more
9 with each of you one on one, and certainly look
10 forward to wherever we are in August, wherever
11 that may be.

12 Whether in Appalachia, or Philly, or
13 Indianapolis, I'm looking forward to having fun.
14 But, again, thank you all very much.

15 MR. BUERSTATTE: I'll second that and
16 just add that I am happy that OIE was much
17 quieter this session. And it's a testament to
18 you all starting to understand how we work.

19 The workgroups were fantastic
20 yesterday. I think the team engagement is really
21 there and it's really where we want it to be.

22 Heather's product here, this

1 framework, you know, I wish we had it during the
2 first meeting, but, yes, I sense you all hit your
3 stride.

4 And the less talking that we do and
5 the more engagement that you have is really where
6 we want to be.

7 So, I thank you for showing up. Thank
8 you for your patience and engaging us. And, as
9 always, if you have any questions, don't hesitate
10 to reach out either later after the meeting today
11 or virtually.

12 And speaking of questions, we have one
13 from Andrew. Yes.

14 MEMBER REAMER: To the question I
15 raised earlier --

16 MR. BUERSTATTE: Yes, politicals.

17 MEMBER REAMER: -- an update of the
18 new politicals in the building. I know there's a
19 lot of open positions, so what's likely to be
20 filled in the coming time and the implications
21 for OIE and NACIE.

22 MR. BUERSTATTE: I don't have stats on

1 what's been filled and what hasn't. They are
2 coming in.

3 It is a longer process, I think, than
4 some people anticipated, but -- and as far as
5 implications for OIE, we have gotten some early
6 engagement from senior policy staff.

7 Unfortunately, it hasn't been enough
8 yet to provide concrete policy guidance to you
9 all just yet. I am hopeful that we will receive
10 that soon.

11 I think we saw some key positions
12 filled just within the last month and change.
13 So, as those members settle in, we'll have more
14 opportunity to engage.

15 As a reminder, Commerce has 13
16 different offices and bureaus and we have over
17 48,000 employees.

18 So, as these leaders step in, they've
19 got a lot to learn and a lot of stakeholders to
20 engage with.

21 So, we are certainly pushing and
22 advocating to engage as soon as we can, but at

1 this time I don't have any more concrete --

2 MEMBER REAMER: Thank you. And a
3 specific question. People might remember from
4 our first meeting, Josh Mandel was from the
5 Secretary's Office. He was the innovation guy.

6 And is there someone who has taken his
7 place in the new administration?

8 MR. BUERSTATTE: To my knowledge, no,
9 not yet.

10 MEMBER REAMER: Okay.

11 MR. BUERSTATTE: All right. Any other
12 questions?

13 (Pause.)

14 MR. BUERSTATTE: So, again, thanks for
15 coming. I'm wishing you all a safe trip back to
16 your respective communities and don't be
17 strangers.

18 At this time as the designated federal
19 officer, I officially conclude our third
20 quarterly NACIE meeting. Thank you.

21 (Whereupon, the above-entitled matter
22 went off the record at 11:46 a.m.)

A

a.m 1:13 4:2 110:16,17
170:22
abilities 14:19
ability 50:22 89:3 90:20
able 8:14 18:4,6 22:4
23:17 32:17 37:10
40:14 41:9 45:13
50:22 51:2 53:13 54:5
54:6,8 57:14 58:1
62:6 71:13 83:20 91:1
97:18 98:3 106:21
107:22 123:4,10
159:4 162:22 163:8
163:12
above-entitled 110:15
170:21
abreast 10:9
absolutely 11:6 163:21
abused 19:12
academia 96:17
academic 106:9
Academy 105:13
acceleration 131:2
135:13
accelerator 20:8 38:20
47:3 99:19 101:1,12
102:1 103:11 104:18
104:20 125:5 127:8
127:16 131:9,21
132:8 133:12 134:22
136:2
accelerators 100:17
102:16 106:12,14
127:17 132:20 133:17
133:22
accepted 72:22 113:4
135:16
access 25:3 82:18 88:1
92:5 145:17 147:2
148:1,13
accommodated 16:18
accomplish 3:10
account 33:13
acronyms 112:11
across-the-country
53:19
act 56:12
action 112:21 118:4
157:19
actionable 82:5
actions 113:5 118:4
active 80:14 91:2
163:12
activities 102:14 135:8
actors 159:17
actual 28:17 72:7
103:20

add 23:3 31:14 66:3,8
82:11 86:10 88:14
91:4 96:12 98:8 99:14
109:20 134:15 151:2
167:16
addiction 19:13
addition 47:6 49:19
51:8 156:20
additional 55:12,20,22
59:12
address 22:10,15 56:15
77:6 97:19
addressed 68:11 76:19
83:8
addressing 113:15
Adjourn 3:12
admin 103:13 160:16
administer 147:4
administering 147:2,13
administration 1:3
79:13 105:1 108:10
115:18 136:16 139:18
142:13 166:17 170:7
administrative 163:3
adoption 147:11,15,20
148:10
adult 120:5
advance 11:3 12:10
68:10 154:8
advanced 53:5,8,15
121:6 152:16 159:11
advising 139:21
advisor 140:2
Advisors 140:11 142:4
advisory 1:5 4:6 140:10
142:7 146:21,22
147:9 162:11
advocacy 145:15
advocate 41:12 155:16
advocating 169:22
affect 40:16
ag 46:6,10
age 95:22 98:1
agencies 59:5 70:16
71:5 74:7,17 78:5,14
79:11 90:6 121:17
122:2,10 140:15
142:6
agency 65:8,17 121:8
121:22 139:19 146:2
146:16
agenda 9:5 29:12 39:1
39:2 52:12 83:5
agendas 4:17
aggregation 127:14
ago 33:8 54:22 57:10
66:9 67:11
agree 33:6,7 41:9 73:13

73:17 93:13 130:6
151:15 157:9
agreed 33:1 65:21
111:6 118:4
agreements 102:22
agricultural 44:2 51:9
agriculture 44:5
ahead 31:7 42:5 45:13
46:8 48:14 50:20
51:12 68:9 83:20
90:21 97:15 139:5
155:14 158:16
Airbnb 76:18 77:8,9
Airport 44:9
airports 34:4
Alabama 47:16
Alexander 42:8 47:7
align 5:19 75:22
aligned 150:22
aligning 124:12
alignment 153:20
Alliance 1:19 35:6 37:2
allow 71:5,20 73:4 75:4
75:8 88:1,11
allowing 82:3
alongside 78:5
amalgamate 90:11
amazing 45:5 57:10
155:22
America 13:22 26:19
98:21
America's 53:10
American 33:17
amount 14:12 50:15
57:13 58:8 62:17
72:21 73:10 77:5
amplify 87:15,20 88:6
113:8,18
anchor 48:6
Andrew 2:5 56:3 80:4
84:6 90:3 91:16 110:5
137:4 139:7 153:9,12
153:15,18 154:12
158:12,22 168:13
Andrew's 91:6 116:7
Angeles 25:18
announced 35:14
another's 68:1
answer 12:6 94:8 96:11
141:2 151:20
answers 6:15
anticipated 169:4
anybody 117:18 139:1
155:8
anymore 116:13 119:15
anyway 100:8 106:6
125:14 128:15
apologize 8:5 32:16

Appalachia 42:20,21
44:19 47:13,15 48:13
50:5,11,14 51:2,9,16
148:21 167:12
Appalachian 47:10
apparent 83:4
applaud 86:13,17 89:22
Applause 7:5 16:22
30:13 41:20 49:2
86:20 108:22
applied 71:16 101:17
123:2
apply 11:14 72:13,16
96:9 133:3 165:6,7
applying 70:15
appointed 142:11
appreciate 12:20
160:14 161:1
appreciation 99:4
apprenticeship 61:7,19
apprenticeship's 57:2
apprenticeships 60:18
approach 93:10
approached 163:5
appropriate 72:20 80:2
136:20
approved 76:22 114:19
123:5
apps 91:10
area 23:13 29:9,15 37:8
43:20 47:5 51:8 64:8
114:16
areas 45:10 65:15
71:15 82:14
arm 41:18
array 51:15
art 14:18
article 105:12 106:5
132:12
articles 161:2
articulate 123:10
arts 33:18
aside 26:2 138:19
asked 85:8 113:10
117:22 125:10 136:20
asking 149:13
aspect 142:1
aspects 79:14
assembled 58:2
assign 84:18
assigned 154:6
assignments 163:5
assimilation 127:13
assistance 165:2
Associate 1:21
associated 44:5
Associates 1:20 145:6
association 54:3 56:20

97:11 130:16
assuming 33:22
assure 48:17 157:16
AT&T 37:7 38:15
Atlanta 20:12,13
attack 54:16
attempt 57:17
attend 22:4 161:8
attendees 83:6
attention 138:18
attorney 102:20
attorneys 133:1,5,12
AU 1:16
August 3:10 59:20
 74:14 108:9 153:5,6
 154:12 159:3 160:6
 163:22 167:10
Austin 22:3 25:9 32:1
Australia 71:9
authorizing 164:14
available 15:4 32:21
 65:7 104:15 105:16
 119:19 127:22 129:1
Avenue 1:12
avoid 77:21
avoided 9:7
aw 111:10
awaiting 142:16
award 7:3 48:4 165:6
award-winning 49:10
awards 165:5
aware 61:9 142:21
 155:11 164:10
awareness 164:9
awesome 153:7
Azafran 19:22 21:7

B

back 6:21 7:3 20:12
 23:1 28:13 39:12 53:6
 69:17 91:5 96:7
 110:13 124:10 125:13
 154:19 166:22 170:15
background 22:6 26:16
 48:6 55:20 93:17
 138:14
backgrounds 95:20
bad 85:13 95:11
BAGLEY 1:18
Bahrain 71:10
bake 107:22
bakery 133:4,13
balance 43:3 159:14,22
BALDWIN 1:18 91:4
 149:4,19
ballot 24:22
ballots 51:19
Bank 34:20 36:3

banks 75:8
banner 35:11
barbecue 40:22 41:1
Barrios 111:12
Barry 19:7 23:5
base 107:21 133:22
based 11:1 28:16,16
 58:8 78:17 101:17
 114:1 153:19,19,20
 156:5 158:11,22
baselines 72:18
bases 75:9
basically 21:14 75:21
 77:22 100:18 101:14
 103:13 104:18
battery 104:20,22
beautiful 17:21 45:5,6
beers 126:3
beginning 93:20
Behavioral 2:2
beholding 146:3
believe 5:9 37:18 53:9
 67:1 81:2 82:1,14
 94:16 95:7 143:9
beneficial 62:7 158:13
 159:13
benefit 72:19 98:8,14
 99:7
benefits 64:3
benefitting 64:4
best 2:3 9:19 10:4
 37:16 57:15 67:2
 70:20 74:16 75:3
 87:11 102:19 106:12
 119:12 121:20 126:1
 131:12 132:15,16
 135:16,20 136:1
 140:21 164:3
better 20:14 24:10 33:6
 58:20 108:9 134:16
 135:7 142:21 144:1,8
 144:13 152:3 160:13
 165:13
beverage 99:16
beyond 66:22 88:4
 125:18 137:15 153:6
big 10:2 11:21 19:17
 20:16 27:12 51:6
 165:11
bigger 33:6 99:4
biggest 27:5 93:4
bill 74:6 79:15
BioCrossroads 13:9,10
biohazard 45:12
biomedical 20:19
 100:20
biotech 68:18
bit 4:19 12:3 40:7 43:14

43:15 50:8 52:13 53:7
 72:11 76:9 86:22 97:1
 97:5 98:21 111:22
 112:5 116:16 135:11
 135:15 139:5,12
 145:20,22 147:19
 149:14
bite 63:2
Blackstone 38:11
blanket 14:5
blindness 28:8
block 30:7
blowback 77:5
blue-skies 102:5
BlueCross 38:5
BlueShield 38:5
board 140:11 142:4
 163:17
boats 14:13
body 90:10
Boesch 1:19 3:9 69:21
 77:16 80:4,7 111:5
 116:9,20 117:2,10,21
 118:8,21 119:20
 120:4 121:13 122:14
 124:8 141:7
bombarded 160:21
Book 39:7
booking 104:2
boots 18:19
bottom 35:10 48:14,16
 58:7
Bowles 1:19 3:5 5:11
 32:7,10,12 33:4 80:13
 84:2 93:12 126:22
 134:6 135:2 136:12
 151:9 155:15
box 9:6 48:14,16
Bradley 1:13,16 7:2,6
 78:16 88:13 109:18
 150:9 151:15,21
 152:13 156:22 158:7
 160:1 161:16 162:1,5
 166:12
brain 6:17
brainstormed 104:11
branch 139:19 146:3,4
brand 62:19 90:15
break 3:7 6:21 8:6
 52:19 99:22 107:19
 108:19 110:7,19
 125:4,19
breakfast 125:13
breakout 7:21
breaks 6:22
Brian 111:7 115:11
bridge 93:7
brief 29:11

briefly 50:5 153:10
bring 5:5 23:1 32:17
 41:9 56:6 79:4 82:16
 85:17 86:2 97:18
 155:1 156:10 157:6
bringing 19:19 21:22
 56:13 61:16 65:22
 103:7 108:20 121:7
brings 39:11,12 55:16
brining 121:9
broad 51:15 80:22
 83:20 156:13
broad-reaching 11:21
broadband 51:4 144:10
 147:2,20 148:1,10
broaden 105:10
broader 6:6,12 10:1
 52:20 71:17 73:17
 89:19 92:20 124:1
broadly 98:21 146:15
Broadmark 2:6
Brook 101:10
Brookhaven 101:10
brought 54:21 117:20
 155:19,21
browser 30:20
BTOP 147:2 148:2
bucket 15:16
buckets 96:15 122:22
bucks 157:11
budget 26:2
BUERSTATTE 2:11 4:3
 8:10,17 10:20 11:6
 12:15,17 17:1 18:3
 23:3 24:14 30:14
 31:13 51:18,22 62:2
 69:13,16 80:9 99:9,12
 107:17 108:17 110:6
 110:18 116:18 120:19
 123:14 124:21 125:1
 130:1 134:3,13 135:3
 137:3 139:4 142:3,19
 143:5 144:16 150:1
 159:9 162:6 165:20
 166:9 167:15 168:16
 168:22 170:8,11,14
build 95:1 124:1
builders 24:3
building 4:13 20:19
 85:19 96:3,4 101:8
 156:5 158:4 168:18
buildings 17:20
bump 164:16
bunch 41:10 67:12
 113:11 117:13
Burcham 18:18
Burcham's 25:7
bureaus 169:16

burn 77:3
Bush 32:21,21 36:5,13
 39:20
business 2:2 8:7 17:12
 45:2 71:21 90:16 94:7
 97:2,3 120:13 130:15
 130:19 136:4 145:4
businesses 44:15 47:5
 49:19 95:2 142:2
 144:2
busy 138:1

C

C1 38:6
cabinet 45:14
Cafe 39:9
call 24:3 101:2 104:1
 143:7 160:11 164:1,5
called 26:19 33:8 38:6
 38:12,19 41:4 63:4
 66:13 101:12 145:11
 149:6
calling 37:8
calls 68:8 152:22 162:9
campaign 33:8
campus 14:7,8 26:14
campuses 14:6
Canada 71:9
cancer 102:5,6
canvas 97:4
capabilities 9:2 44:22
 84:21
capacities 154:5
capacity 81:5 82:17
 96:4
capital 1:16 2:6 13:11
 50:16 63:19 81:5
 82:18 145:8
captive 128:9
captured 87:3
cards 120:14
care 20:5 26:7 110:5
 119:15
career 93:1,8
Carolina 79:19
carpet 18:19
carry 156:20
carrying 108:16
Casa 19:21 21:6
case 8:1 63:13 65:10
 128:14
cases 41:17
cast 35:6
categories 81:3
category 95:21
cats 86:16
cause 108:16
causing 77:4

Celgene 102:4
cell 119:12
center 1:16,17,20 2:8
 13:9,10,14 21:13 26:3
 26:10 28:10 35:3
centers 14:11 134:10
 135:2,3
central 83:13
centralized 127:10
centrally 34:7
CEO 134:2
CEOs 54:21 55:5
certain 27:10 73:7 79:5
 136:3,4
certainly 5:21 17:7
 48:19 60:14 76:9
 140:20 141:2,3 152:8
 166:21,22 167:9
 169:21
cetera 58:17
chads 9:8
Chadwick 134:4
chains 63:22
chair 10:7
chairs 60:16
challenge 42:21 56:15
 97:7 119:22 120:4
 142:2
challenges 27:3 45:1
 47:22 48:12 52:22
 77:15 98:22 149:3
Chamber 13:1
champions 41:4 164:18
chance 94:18 119:5
 151:6
chancellor 1:21 47:8
change 32:4,4 49:22
 98:3 116:13 134:20
 152:7 169:12
changes 134:7 155:17
changing 116:11
channel 109:8 110:4
 115:7,8 116:10,15
 119:11 150:21 157:2
 160:19
channels 109:11,21
 151:11 152:2
characteristics 24:1
Chase 2:7
cheaper 103:1
check 8:12,21 48:14,16
chef 39:10
Chicago 22:4,5,7,10
 23:10,13 25:9 32:2
Chicagoland's 2:3
chicken 45:11 46:12
chief 79:21 84:18
 136:14 139:16

childhood 28:7
Children's 28:2
chime 8:12 64:15
choices 24:22 30:11
choose 73:6 154:14
circular 119:22
cities 22:2 25:17 37:7
 38:3 83:1 89:11,17
citizens 37:16
city 1:17 5:15 15:10
 22:22 26:9,10 27:1,2
 27:5,10,12,15,22 30:1
 30:2 34:6 35:7,7,8,9
 37:4,14,15 85:11
 101:19 129:4 155:7
civic 37:21 38:2
clarifying 121:1
clarity 71:12 116:6
 159:5
class 93:20,22 94:1
classes 93:19
classic 165:4
classroom 22:20
clean 64:12 101:13,15
 105:2
clear 19:13 23:7 73:22
 75:18 88:14 136:7
 150:2 154:1,20
clearer 23:21
clearly 42:1 52:9 79:13
 136:18 149:5 162:19
clicker 100:2
client 73:17
close 27:13 60:5 137:7
 148:5
closely 143:15,16
closer 97:5 135:15
 148:14
closest 119:3
closing 3:11 145:17
 147:21 166:11
cluster 63:14 136:4
clusters 62:18 63:10,12
 63:19 64:6,6 102:12
 107:15 116:12,13
 132:15
Co-Chair 1:16,17 7:2,6
 7:19 24:17 30:16
 31:11 60:15 62:1
 76:13 78:16 88:13
 92:7 108:5 109:18
 150:9 151:15,21
 152:13 156:22 158:7
 160:1 161:16 162:1,5
 166:12
co-chairs 1:13 7:1
coaches 98:12,14
coaching 81:4 82:17
 84:13,21 98:9
coal 42:17,17 43:21
 46:14
coal- 42:17
coal-affected 43:4
coasts 69:4,6
cocktails 16:14
coffee 108:20 110:13
cofounder 145:10
cohort 72:14
coin 120:1,4,8
cold 99:16
collaborate 150:6
collaborated 143:8
collaborative 78:12
 142:6
collaboratively 67:16
collect 120:13
collected 37:13 58:9
collection 63:15
collective 99:8
college 2:2,6 13:3 14:1
 14:3 40:10 45:16 47:2
 47:8 48:5 51:5,6
colleges 45:17,18 47:1
 51:1,13 85:1
Columbia 2:1,1 100:12
 100:16 103:5,7,11
Comcast 29:4,8
come 4:11 15:4 18:5
 31:8 32:18 35:2,8
 36:11,20 39:6,8,16,20
 40:10 41:2 57:19 61:1
 63:7 83:15 84:18
 92:10 125:13 136:20
 139:10 141:8 150:19
 153:13 158:20 159:13
 163:17 164:22
comeback 28:14
comes 122:16 138:12
 154:19 165:17
coming 22:12 58:21
 64:4 87:13 105:12
 106:6 138:3 147:17
 150:2 154:13 166:22
 168:20 169:2 170:15
commend 7:12 152:22
comment 152:12 158:8
 165:22 166:6,10
comments 42:3 59:13
 66:5 99:9 116:19
 118:20 130:4 166:4,5
Commerce 1:1,12 13:1
 56:7,17,19 57:5,12
 59:4 70:22 74:10,19
 79:10,11 80:1 111:19
 112:15 113:1 114:3
 115:17 119:9 123:13

139:20 140:14,17
164:19 169:15
commercial 146:7,11
commercializing 70:9
commission 47:10
50:12,13
commit 86:7 154:13
commitment 40:11
167:4
committed 15:22
committee 119:13
common 63:22 65:6
103:10,13 104:6
comms 8:12,21
communicate 11:10
81:15 151:7
communicating 135:20
communication 111:10
communities 21:2,10
22:8 27:20 42:13,18
44:20 45:17,20 46:19
48:1,7,13 51:10 57:8
82:22 83:2,10 90:8
92:21 145:16 148:3
148:21 170:16
community 2:2,6 5:5,6
10:13 11:15 14:1,3
17:12 18:10 19:5,20
20:1,3 21:4 22:12
23:15 24:6,9 29:3
40:10,17 41:6,10,11
41:19 42:16,17 43:5
44:3 45:2,16,16,17
47:1,2,8 48:5 51:1,5,6
51:12 83:21 85:1
89:15 92:14,17 136:3
157:17 164:20
companies 28:4 33:13
40:20 73:12 75:17
76:6,16 78:9 85:12
95:5,7 98:11 99:3
129:5
company 2:4 28:6 96:5
compendium 105:19
competing 67:13
competitive 76:6
122:15
complement 11:15
complements 10:3
completed 20:17
completely 122:5 136:3
compliance 71:7,12
complicated 117:7
component 38:11 85:2
103:6 155:20 156:6
components 37:20
144:13
comprises 50:14

computer 147:15
concept 63:9 65:21
77:15 93:13 133:6
concepts 144:5
concerns 65:6
conclude 170:19
concrete 62:3 169:8
170:1
conditions 72:3
conduct 75:17 163:20
conference 106:8 107:9
126:15 155:8,16
157:9 160:8 161:8
162:8
conferences 161:4
confidence 81:4 82:18
91:19 96:3
confused 109:10
confusing 111:17
confusion 90:16
congratulations 7:3
Congress 8:7 74:6
79:16 138:5 164:14
Congressman 138:3
connect 138:16
connected 38:11
connecting 41:11
149:15
connection 54:9 137:1
144:11
connections 17:11
137:20 162:19
connectivity 148:1,12
148:15 149:16
considerations 9:21
10:8
consistent 70:14
consolidate 81:13
consolidation 91:6
consortia 75:4
Consortium 75:6
Constitution 1:12
constructive 59:17
consumable 126:19,20
consumer 72:19
contact 76:11
contained 122:19
content 106:2 127:9
151:18
CONTENTS 3:1
context 73:2 100:11
continual 108:6
continue 115:1 123:4
150:3 153:13 158:17
159:20 163:7
continued 66:12
continues 80:4
continuing 53:1

contract 19:17
contrast 62:16
contribute 8:14 86:5
92:17 163:9
contributing 132:17,17
132:19
contribution 143:12
convene 25:8 65:12
74:16 75:10 81:7
110:8,13 113:7,18
121:16 157:7
convener 74:10 97:14
convenience 52:10
convening 66:19 68:4
81:21 82:15 83:4,11
87:14 88:4 97:19
121:16 123:8
convenings 121:11
conversation 31:8
36:17 61:4 62:20
63:11 64:18 99:18
105:10 108:1 136:7
137:11 150:4
conversations 7:11
97:2 100:10 123:21
153:22 154:10 156:16
COO 56:21
cookies 30:18
coordinate 162:17
coordinated 104:13
coordinating 104:3
core 104:19
Cornell 101:11
corner 38:22
Cornyn 39:15
corporate 37:21 38:4
93:5 98:5,20 119:19
145:5
Corporation 149:5
corporations 33:14
84:14,17
Correct 135:4
correspondence 5:1
cosmetics 105:4
Coulter 100:20 101:12
101:15
council 1:5,12 4:6 5:5
9:18,19 18:9,11 24:10
90:10 92:3 142:5
162:22
councils 142:7 143:7
162:11
counsel 102:20,22
country 7:7 27:2 28:11
34:3,8 37:3 41:14
43:21 63:7,16 64:3
67:20 69:2,8 81:1
82:6 127:3 130:8

156:11
country's 26:11,18
county 27:12
couple 40:19 46:3,17
49:6,7,9 83:15 97:21
99:21 124:15 126:5,7
130:3 133:10 136:22
163:3
courage 94:19
course 9:18 13:2,22
15:8 16:16 17:5 28:9
29:16 56:2 58:3 68:5
77:8 83:14 87:1
159:21
cover 11:16 19:2 76:14
covered 66:7
coworking 134:21
135:12
Craig 2:11 24:17 45:3
109:1 117:16 166:18
create 37:14 41:22
87:22 89:12,13 90:12
92:12,13 93:7 97:16
109:19,21 129:6
created 64:11 68:4 84:7
85:12 117:13 126:15
127:2 151:11
creates 27:9
creating 37:16 94:20
103:10
creation 68:13 138:12
138:22
creative 46:2,5,15
credit 12:21 31:4
credits 79:7
criteria 10:21 11:4
critical 53:9 68:11
159:18
critically 73:8 138:11
cross-country 34:11
cross-reference 152:2
152:8
cross-verticals 102:13
Crossroads 13:22
crystallize 108:11
Cs 81:4 95:17
CTSA 102:2
Cuban 32:18
culinary 14:12,18
culture 23:8 24:4,5,8
49:21 98:3
cumbersome 61:14
Cummins 17:19
CUNY 101:10,20
cure 28:7
curiosity 143:6
curious 60:17 122:11
143:11

currency 120:17
current 134:9,9 142:11
 147:14
currently 54:7,8,9
 115:3 118:1 142:17
curve 118:15
custom 119:17
customer 29:9 75:9
customers 38:6 73:9,14
cut 125:1 136:10
cutting 49:14
cybersecurity 105:4
 128:11,11

D

D.C. 1:13 125:15 153:6
 154:17 159:6
Dallas 1:19,20 3:5
 32:14,19 33:2,12,21
 34:12,13,14 35:2,3,5
 35:7 36:16,21 37:1,8
 38:10,13,21 39:14
 40:5,20
data 37:12 127:14
 151:14
date 114:13
Dave 66:7
David 2:3 56:18 62:14
 79:4 99:17 154:22
day 4:5 19:10 20:4
 89:10,13 108:2
 110:19
days 29:19 36:12 68:10
deal 56:7 61:18 79:14
 138:8
Dealey 39:3
dealing 97:9
DEBA 142:4,8
DEC 35:3,13 36:19 38:2
decade 53:22
December 114:14
 118:2
decide 41:15 151:18
decision 9:15 10:11,12
 11:5
deep 17:4 167:3
Defense 68:21
defined 61:8
definitely 40:22 87:3
 95:16 112:6
definitions 63:12
delinquents 39:12
delivering 135:8
democratizing 92:5
densities 28:11
Department 1:1,12 56:7
 56:19 57:1,5 61:2
 64:11 65:10 66:10

68:20 70:21 74:9,19
 79:22 111:18 112:15
 113:1 114:3 121:10
 139:19 140:14,17
 164:19
departments 84:5
depending 45:12
Depository 39:7
deregulation 78:20
description 122:12
design 74:17 119:1
designated 2:12 4:8
 170:18
designers 111:11
desire 91:18,19
despite 162:11
destinations 15:17
determine 81:17 85:15
determined 30:4
determined-looking
 119:8
develop 74:8,13 89:15
 163:7,15
developed 31:21 85:21
 136:7 163:20
developing 10:1 97:3
 122:15
development 1:3 19:15
 20:16 21:5 22:9 29:1
 43:16 50:17 51:14
 78:2 93:1 99:2,6
 122:9,10,22 138:22
 140:5,22 145:5,5
devices 100:21 101:9
 107:8
diagnostics 100:21
dialed 5:9 8:11
dialog 82:17 107:21
 164:3
difference 113:21
different 4:19 21:10,21
 25:1 35:11 37:12 41:5
 46:4,17 48:20 49:6
 56:1 57:11 58:11
 63:12 70:6 81:3,10,22
 82:22,22 84:5 86:2
 94:13 97:22 104:11
 108:16 120:6 133:5
 150:11 154:4 163:8
 163:16 169:16
difficult 61:13
digital 140:4,8,9,10,11
 141:6 142:4 143:2,17
 143:20,22 144:2,10
 144:14 145:18 147:11
 147:15,20,21,22
 148:5,8 149:10
dimensions 25:2

dinner 7:18,22 16:1,5
 30:4
direction 108:9 115:16
directly 29:8 105:7
 159:16
director 39:17
disclosures 73:22
discounted 133:1,2
discounts 106:4
discuss 21:22 137:9
discussed 60:19
 114:21 141:9
discussing 22:21
 142:22
discussion 3:8 52:18
 60:2 62:3 66:2 80:15
 92:8 102:12 105:20
 108:5,6 110:8,22
 111:3 115:3,8 125:3
 164:7
discussions 23:2
 123:18
dismayed 5:20
disruptive 76:14
distinction 77:17 78:17
 92:10,15 145:21
distributed 9:4
distributes 146:10
district 33:18 37:9,19
 38:1,8 40:10
dive 8:15 82:4 110:10
diverse 23:15 90:22
 165:13
diversity 95:20,21
divide 145:18 147:21
 147:22 148:17
divides 148:5
DOC 112:11 113:17
 121:9
doctor 54:13
document 110:10,22
 116:7 117:12 118:13
 122:17
documents 31:2
DOE 121:9
doers 31:17
doing 8:8 11:2 15:7
 20:13 22:10 25:2
 32:10 33:11 36:20
 40:5 41:12 44:11
 49:21 56:12 57:12
 59:8 67:8,10 73:16
 85:3 95:12 102:5,15
 103:4,12 104:12
 105:10 112:8,20
 124:17 127:5 129:3
 131:9 132:4,18 152:3
 152:15 155:22 156:17

DOL 61:7
domestically 70:10
donated 16:4
donors 105:7
donuts 108:21
door 123:9
dotted 139:20
dovetail 44:10
downtown 16:9,11,14
 17:20 33:19 34:1
dozen 54:21
Dr 48:3
draft 112:6
drafts 76:12
drew 20:22 159:10
Drexel 28:2
drill 4:16 6:20
drink 32:14
drinks 153:10
drive 23:12 32:4 44:9
 49:21 50:15
drives 15:12
driving 7:7 69:18
dual 98:20 99:7
DuckDuckGo 30:15,16
 30:21
Dulles 44:9
duration 73:8 76:2
 118:15
dwell 100:12

E

eagle 119:8,9,10,11
earlier 12:4 38:18 41:8
 69:22 133:8 168:15
early 9:22 29:18 39:3
 99:13 164:22 169:5
earned 61:12
easier 90:12
easiest 42:22 48:15
easily 34:1
Eastern 2:2
easy 114:7 151:20
 165:9 166:20
EC 21:13
echo 24:18 82:13 122:5
economic 1:3 43:16
 50:17 51:14 129:20
 138:22 140:5,22
economies 45:21 46:2
 46:5
economist 79:21 80:1
 136:14 139:16
economists 143:17
economy 25:13 46:4
 53:11 76:17 137:18
 138:12,20 140:8,9,10
 140:11 141:6 142:4

143:10,17,20,22
144:2,10,14
ecosystem 24:3
ecosystems 22:2 63:19
EDA 20:18 63:17 65:14
112:11 134:15
EDA's 57:6,7
editing 106:3
Eds 26:9 28:11
educate 25:16
education 20:4 85:2
93:18 96:6,7,8,13,15
98:20 99:8 149:8
educational 21:19
educator 96:13
educators 149:9,10,17
effect 87:18
effectively 103:18
efficiencies 37:14
efficiently 103:18
efforts 63:18,20
eight 51:1
EIR 106:16 128:18
129:7,15
either 63:18 68:9 71:11
96:6 106:11 107:13
132:11 133:16 153:4
163:20 168:10
elected 19:8 137:20,21
138:7,17
Electric 66:13
element 66:20
elements 26:8
elevate 6:12
elevator 124:6
elitist 128:14
emails 4:22
emerged 62:19 76:17
emergency 18:5
emerging 28:4
Emily 2:5 59:21 62:10
62:20 63:3 64:15 66:3
122:5
Emily's 64:13
emphasize 6:5
employees 169:17
employers 44:13 45:8,8
encourage 48:13 58:4
74:7 77:20 152:19
156:15 157:2 161:10
encouragement 138:18
encouraging 122:21
encrypted 30:17
endemic 27:13
energy 64:11,12 65:11
66:10 67:4 70:12
101:5,7,12,13,16
105:3

energy-related 129:5
enforcement 73:7
engage 27:18 162:14
164:18 169:14,20,22
engaged 9:20
engagement 167:20
168:5 169:6
engaging 168:8
engineering 28:8
100:21
enjoy 110:12
enlarge 94:15,17
ensuring 148:7 149:15
enterprise 1:20 39:10
145:6
entertain 159:3
entertainment 12:13,14
16:19 29:13
entire 25:7 65:3 166:19
entirely 72:8
entre 157:5
entrepreneur 1:20
21:13 35:3 48:5 92:16
94:5,17,19 95:10
98:16,18 134:10
135:2,3
entrepreneur- 71:1
entrepreneur-friendly
70:14
entrepreneurial 28:17
78:1 91:14 92:14 93:9
93:10,14,15 94:10
97:9,16
entrepreneurs 36:21
44:16 71:6 80:22
90:13 93:3,21 94:1
97:17 98:4 99:1,6
128:8 150:14 156:3
entrepreneurship 1:5
2:12,13 5:4 19:1,16
23:8 24:3 25:4 36:17
40:8 43:13 46:20
51:13 80:11 81:10
83:10 90:7 91:17 92:6
93:11 96:14,15 98:1
109:15 113:3 122:20
124:13 129:6 136:19
137:13 141:16,19
144:3,11,15 155:20
156:12 161:21
Entrepreneurship's 4:7
entry 89:14
environment 71:22
98:5
envisioned 67:1
EPA 70:18
EPRI 66:13
equip 94:22

equivalent 130:17
Eric 2:13 8:22 57:3,4
62:20 63:5 65:21
113:11 117:16,22
118:16 150:5 152:10
163:4 165:18 166:18
Eric's 166:9
Ericsson's 33:16
ESA 143:9,15,19
EShip 152:18 155:7
157:6
especially 7:20 11:16
29:15 134:20
essentially 102:15
104:12 147:9
established 31:21 93:8
establishes 72:18
establishing 72:20
ESTHER 1:18
estimated 53:20
et 58:16
ethnic 95:22
evaluating 58:16
event 16:2 25:11 33:1
42:7 106:10 157:4
events 31:20 104:3
161:4
everybody 7:16 12:10
42:5 92:4,21 129:12
151:5 154:18 160:16
EveryLibrary 85:9
evolve 115:6,17
evolved 123:22
exactly 60:4 64:9
example 19:4 20:15
21:21 51:4 66:17
70:18 73:16 75:6
85:20 88:8 89:4,10
99:13 127:7,20
146:17 154:20
examples 34:9 40:19
76:21 78:18 113:11
114:4
excellent 56:5 143:1
exchange 25:15 73:12
excited 5:12,22 13:3
16:20 32:12,13,15
34:14 36:14 41:1
42:10 52:17 87:4
exciting 28:3 40:4,17
41:16 54:12
excuse 8:18
executive 39:17 139:19
146:3
executives 103:2 133:8
exemptions 70:16 72:7
75:16
exercise 124:9

exist 30:20 35:16 40:20
79:2 81:10 84:4 87:21
126:7
existing 91:15
exists 44:19 158:16
exit 74:1
expanded 68:15
Expansive 44:21
expect 153:3 164:22
expected 6:2
expense 17:7
expenses 26:5
experience 11:12 18:9
18:14 21:20 24:20
25:7,8,9 46:17 55:17
71:2 85:19 95:14
129:13 165:8
experiences 20:12 25:6
48:21,22
expert 121:14
expertise 85:19
experts 23:16 56:1
133:19
explain 138:19
explaining 96:4
Explore 30:2
explored 144:5
exploring 63:6
export 74:21
exposed 49:17 72:6
exposure 11:11 72:5
98:6
Extension 58:14
extent 57:18 125:16
143:3 146:18
extra 99:15,21 137:4

F

facilitate 65:15 148:9
152:21 153:14
facilitated 89:16 155:4
155:5
facilitating 143:4
147:22
facilitation 88:20
facilities 17:8
fact 6:3,15 62:5 65:2
68:4 69:9 77:21 92:22
124:4 130:20
factors 10:6
factory 55:3
facts 13:5
faculty 104:19
fail 95:6,10
failure 85:15 96:5
fair 62:17 150:17
fairly 73:15
Falcons 20:17

fall 35:12 79:16 113:5
 157:9
falls 96:18,22 131:6
Fame 19:9
familiar 4:21 141:12
 143:14 146:9,19
 147:6,12 149:2
 155:11 164:11
family 161:21
famous 16:14
fantastic 86:19 167:19
far 56:9 66:22 89:22
 129:13 169:4
farm 47:4
farmers 44:14 46:11
farming 14:21
farms 19:11 44:6 46:7
fascinating 20:7 36:9
 46:12 159:8
fashion 105:5
FCC 145:15,21 146:2,9
FCC's 146:5
federal 2:12 4:8 32:5
 34:20 36:3 39:16 65:8
 65:17 79:1 88:21 90:6
 135:14 145:5 146:20
 147:10 154:5 165:9
 170:18
feds 162:14
feedback 55:22 58:1
 59:17,18 62:8
feel 43:8 52:10 76:11
 119:12 121:15 132:12
 150:10 154:17
feels 61:20 126:9
feet 29:6
fellow's 129:15
felt 18:13 55:19
FFA 49:12
field 22:19
fifth 27:1
figure 53:1 54:4 60:6
 67:8 80:16 86:4
 127:19
figured 100:22
figuring 106:14
fill 54:6 55:4
filled 148:17 168:20
 169:1,12
fills 37:8
filtered 112:22
final 10:10 69:14 99:9
 108:4 124:21 160:10
 160:17 164:7
finally 48:3 101:22
financial 70:11 79:17
 141:13 145:8
find 4:11 44:17 45:19

54:8 84:17 86:3 93:17
 157:1 159:21 160:19
 162:20
finding 102:15 132:1
fine 6:4
finished 99:12
fintech 71:10 72:12
 75:7
firm 145:8
firms 72:13,22 106:4
first 8:6 9:3 13:5 18:16
 25:10 26:18 38:7 42:4
 56:2,11 58:10 92:7
 95:5 96:16,21 105:12
 111:21 120:11,22
 121:18 123:4,4 133:9
 150:9,21 166:5 168:2
 170:4
firsthand 22:11 27:14
FirstNet 147:5
fit 77:15 93:10 107:5
 121:11,13,15 122:12
 163:10
five 9:10,11 27:6 58:11
 60:11 62:11 88:22
 93:22 100:2 148:14
 158:20
fixed 133:2
flag 156:20
flagship 14:7
flesh 60:10
flights 63:2
floating 100:3
floor 62:13 166:3
flow 112:12
FluidReview 104:2
fly 34:4
flying 77:13
focus 17:14 25:2 26:13
 30:6 79:1 130:21
 132:7
focused 18:22 32:6
 65:3 120:20 131:12
 131:14,16 140:8,16
 141:15 143:21 144:14
 147:21
fold 107:15
folks 13:21 14:20 15:5
 43:2 44:14 50:11
 55:15 57:4 61:3 82:16
 121:8 145:20 155:6
 158:19 159:1
follow 72:2
follow-on 125:3
font 56:3
food 20:8 21:7
Foods 19:18
for-profit 41:22

foremost 56:2
forget 163:18
formal 112:17 114:18
formation 63:20
former 32:20
forms 28:7
formulating 159:18
forth 135:13
Fortune 33:12 40:20
forum 67:10
forward 7:18 12:12
 19:13 57:15,20 59:2
 59:18 65:14 66:1
 89:21 110:1 114:2
 137:5 142:13 147:4
 150:4,20 154:18
 167:8,10,13
forwarding 156:17
found 20:6 67:15 71:11
 102:7 114:6 129:7,18
 131:11 161:3
foundation 47:20
 100:20
founded 21:14
founder 92:16,22
founders 26:20 92:12
 95:20
Foundry 38:15
four 34:21 52:16 81:3,4
 82:14 88:22 95:17
 100:17 102:18 109:11
 148:14 156:19
frame 11:5 116:2 160:9
framework 3:8 110:8
 111:2 120:20 168:1
Fran 111:12
Francisco 25:18
frankly 82:20
FREDERICK 1:20 109:1
 109:22 145:2,4
 151:16
free 52:10 76:11 105:19
 121:15 127:22 132:12
freezing 71:15
Friday 16:16 30:5
friendly 71:2
friends 84:9
front 4:17 25:20 111:2
 123:9 148:19
FTE 103:20
full-time 10:16
fully 146:2
fun 5:7 7:8,17 21:18
 40:21 167:13
function 112:7
functional 99:5
functions 159:6
fund 38:20 75:16

104:21 113:7,17
fundamental 95:1
funded 20:18 38:20
 134:15
funding 47:21 67:14,17
 79:7 92:1 105:6 148:4
 165:3
funds 63:18 104:7
further 139:1
future 2:3 78:15 117:4
 149:7,20

G

gain 88:1 159:4
gained 11:11
gambling 14:13
game 36:2
gaming 49:15
GAN 127:16
Gannett 2:4
gap 91:6
gathered 55:22
gathering 57:9 91:3
gatherings 121:16
gender 95:22
gene 28:5
general 50:6 59:16
 76:14 99:1 161:5
generalist 98:17
generalizable 102:9
generally 129:7
generated 52:21
generations 27:21
genetic 28:8
gentleman 85:9
gentrified 21:3
geographic 63:20 64:6
 95:22
geographies 44:21
George 2:5 32:21 36:5
 36:13
Georgia 20:18
getting 7:17 12:13 26:6
 86:6 124:3 150:22
 159:15 165:2
gift 120:10
give 8:12,20 43:15
 51:14 53:4 76:21
 104:10 111:10 120:17
 144:21 149:19 151:6
given 72:7 90:3 122:9
gives 19:12 84:7
giving 166:9
glad 7:4 8:8
glamor 27:17
Glaxo- 28:20
glitz 27:17
Global 2:8 127:16

glue 163:2
goals 65:12 123:9
Goodwin 107:1
GOONEWARDENE
 1:21
gotten 64:17 169:5
government 56:4 59:6
 84:5 88:21 89:7 90:6
 111:17 116:21 120:6
 154:5 159:17 162:9
governmental 84:11
 159:6
governor 15:7 47:9
grab 139:11
grabbed 63:2
graduate 30:22
grant 66:10 67:14,17
 75:17 100:19 101:7
 101:18 127:8,12
 134:16 164:11
grants 147:2,5 148:2,4
 165:9
grassy 39:4
gratitude 167:4
grease 129:10
greater 25:13,14 159:4
greatest 15:14
Greentown 2:5
GRIFFITH 2:6
grit 98:1
ground 36:22
GroundFloor 38:19
group 6:6,12 16:6 30:4
 32:9,11 42:1 52:20
 62:5,14 64:21 68:5
 73:21 81:7 90:5 101:6
 105:20 118:9,12
 124:19 128:15 140:10
 140:19 142:11 143:2
 151:2 153:16 154:7
 154:21 155:2 162:3
 163:5,8 167:5
grouped 114:17
groups 6:7 7:13,21 64:3
 84:3 102:18 113:5
 127:1 128:1 129:1
 130:14 152:15,22
 153:21
grow 21:11
growing 20:1 53:10
growth 34:17 99:2
GSK 28:20
Guarantee 57:7
guardrails 150:15
guess 18:16 22:17 60:1
 136:13
guest 15:2
guests 30:1 153:13

guidance 9:19 70:22
 73:1 169:8
guideposts 67:7

H

half 29:5 44:9 69:9
 138:6
hall 19:9 21:16
Hamilton 42:8 47:7
hand 52:1,2 116:7
handling 104:1
handouts 12:12 48:9
hands 30:3
hands-on 106:15
happen 74:13 80:19
 88:17 108:7 157:9
happened 100:18 116:3
happening 152:16
happens 29:20 68:1
 128:14 150:13
happy 8:4 17:8,15
 59:14 104:14 105:15
 105:18 107:14 115:5
 125:18 126:12,16,20
 129:22 139:2 141:1,3
 144:12,15 149:19
 151:1 164:8 167:16
hard 12:10 109:6 110:3
 131:15,17 135:21
 148:18 151:17
hashtag 119:11
hashtags 152:4
head 52:1 56:20 111:8
 145:4
headcounts 51:19
headed 19:21
headquarters 17:20
 33:15,17
heads 6:11 121:2 162:1
headway 62:4
health 13:20
healthcare 70:11
hear 5:8 6:1,2,7 7:21
 40:6 48:3 50:11,18
 59:14 137:6 139:6
 161:5
heard 7:22 33:5 46:22
 145:14
hearing 50:9 159:16
heart 42:17
Heather 1:19 3:9 7:13
 69:20 76:13 108:20
 110:9,20 111:4 117:8
 120:21 123:17 124:3
 137:2 154:21
Heather's 110:13
 167:22
heavily-regulated

70:10
help 11:5,10 17:15
 19:22 20:3 25:12
 32:15 35:8 37:13
 49:21 57:3 67:22
 75:17 77:21 79:8
 81:13 94:6 95:13,18
 96:1 99:1 101:18
 106:13 127:7 133:9
 140:19,21 141:18
 145:19 149:9 152:21
 154:8,8 163:1
helped 31:1 65:12
 89:13
helpful 17:10 18:8 58:1
 60:6 114:10 116:4
 121:1 124:1,19 143:3
 145:20
helping 23:12 65:14
 135:15
helps 39:13 99:3 151:6
 154:9
herding 86:16
HERSKOWITZ 2:1
 100:1,16 125:6 128:2
 131:4,14 132:10
 134:1,5 159:7 160:18
 161:18
hesitate 168:9
hey 105:21 127:21
 160:12 162:22
heyday 28:18
Hi 120:21 139:14
high 28:16 72:19
high-tech 55:7
highest 27:6 28:10
 132:16
Highlands 3:5 42:6,11
 42:19 43:8,21
highlight 9:13 22:1
highlights 46:5
highly 157:2
highly- 70:16
highly-regulated 78:13
Hill 141:21
hindsight 76:19
hire 102:19
hired 25:11
hires 133:10
hiring 133:12
historically 27:21
history 30:19 39:5,6
 77:2
hit 6:9 40:22 168:2
hold 107:9 158:5
holders 146:12
holding 119:10,11
holds 146:9

home 7:7 26:17 28:1
homeless 145:17
honest 150:22
honor 166:18
hope 5:21 6:15 7:6
 16:20 68:14 148:19
hopeful 5:17 10:10 11:9
 52:17 169:9
hopefully 9:8 52:13
 106:10 108:8 114:9
 116:4 154:3 157:10
 165:1
hopes 151:10
hoping 15:3 117:3
Hopkins 128:17
Hospital 28:2
hospitality 18:2 21:8
 77:11
host 5:15 13:4 17:8,22
 26:3 42:7 52:6 105:18
 127:9
hosted 22:5 35:1
hosting 42:8 66:16
 154:19
hotel 17:7 21:7
hotels 77:10
hour-and-a- 44:8
hours 109:5
House 54:22 139:21
household 144:7
households 148:14
HR 133:8
huge 44:12,13 85:14
 134:20 142:1,1
 166:13
humongous 34:16
hundred 27:8 29:3
hurdles 75:19
husband 15:20
Hwang 155:21

I

ice 52:19
idea 9:16 27:16 53:12
 63:17 64:2 65:14 80:8
 83:16 87:14,15 89:12
 95:11 97:14 98:16
 109:3 115:6 121:7
 132:15,22 137:2
 139:13 144:4 162:8
ideas 10:2 11:14 21:22
 52:20 55:12 57:19
 95:11 99:16 102:19
 108:11 109:5,11
 163:6
identification 83:16
identified 31:17 70:8
 91:7

- identify** 65:17 81:16
 84:8 153:16 154:7
 160:7
identifying 135:19
 148:4
IDEO 1:19
III 1:19
imagine 144:22
imagined 67:18
imaging 100:22
immediate 32:4 157:19
immersive 11:12
immigration 20:4
impact 12:4 19:16
 46:20 115:20 144:1
impacted 137:12
impactful 138:21
impacts 31:18
implement 85:5 113:6
implementation 86:8
implementing 82:7,8
implications 168:20
 169:5
importance 138:20
important 31:14 52:9
 77:17 137:18 138:8
 138:11 140:6 159:17
 165:7
importantly 139:18
impose 78:21
improve 149:9
InBIA 130:20 131:11
 132:18 134:2,16
 135:4
incentive 129:21,22
incentives 79:7
incentivize 75:5,13
 127:9
incentivizing 128:1
include 126:14
included 114:14,15
includes 46:6 83:1
including 34:18 57:5
inclusion 25:3 92:20
income 46:9
increase 95:6,19 96:1
 98:3
increasingly 55:8
incredible 57:13 67:9
incredibly 20:6 140:6
Incubatenergy 63:5
 66:4,8,21 132:2
incubation 131:2,17
 134:17
incubator 20:7 49:13
 63:15 64:12 131:22
 134:22
incubators 44:13 67:4
 68:5,17 130:16
 133:21 134:10
independent 66:11,12
 146:2
Indiana 13:5,7 14:6
 55:16
Indianapolis 3:4 13:14
 14:7 15:8,9,15 17:5
 18:2 167:13
individual 10:12 11:9
 40:16 44:14 73:1
 107:13 112:20
individually 137:16
 138:4 154:4
individuals 112:14
 125:9 137:16
industrial 20:9
industries 45:21 68:15
 69:1 70:10,17 71:17
 75:5 76:7 77:11 78:13
 79:13
industry 17:17 61:9,22
 63:21 64:7 65:3 68:8
 71:10 75:7 140:21,21
 146:15 147:8
industry-specific 102:8
 103:15
Indy 16:10,21 17:21
Indy500 15:14
IndyStar 17:6
infected 28:9
influence 115:18
influx 27:6
info 149:20
informal 6:2
information 11:7 13:2
 57:13 58:8 63:3 79:12
 130:7 131:1,20
 133:15 135:10 136:15
 139:17 144:20 151:3
 151:10 155:13 160:22
infrastructure 105:1
infuse 97:15 98:1
infused 23:7 95:17
initiative 40:11 41:16
 51:5 61:17 82:5 92:4
 121:7 130:6
initiatives 44:1 46:15
 47:21 116:6 140:7
 145:6 156:4 163:21
inject 136:11
innately 138:13
innovation 1:5,16,19,21
 2:8,11,13 4:6 13:15
 15:13 19:1 20:19 25:3
 26:9 29:4 35:6 36:17
 37:1,9,19,20,21,22
 38:1,2,2,4,6,11,16,20
 46:10,21 53:10 69:4
 70:2 71:4,15 74:17
 76:1,20 84:18 90:8
 113:2 122:19 136:19
 137:13 138:20 140:5
 141:17,18 144:11
 156:12 164:12 170:5
innovations 70:9 71:6
innovative 15:1 57:6
input 27:18 66:1 119:15
inputs 9:14
inserting 9:7
inside 37:14 38:7 134:7
insider 120:16
insight 23:1 163:8,16
insights 64:19
insignificant 50:15
inspired 54:10
instance 146:8
instill 97:15
instilling 94:20
Institute 36:13 54:2
 56:21 66:14
Institutes 58:19
institution 45:15
 107:13 128:19
institutions 48:7
 101:21 102:5 106:20
 120:7
instrumental 47:20
insurance 133:6
integrating 21:4
integrator 88:11
Intel 1:18 149:5
intended 83:17
intent 157:13
intentional 83:18
interagency 59:9 121:8
interest 14:10 36:2 65:9
 156:16 161:5
interested 15:6 79:11
 107:12,20 123:3
 136:18 140:12 142:5
 142:12 163:1
interesting 14:9 16:8
 17:14 19:14 20:2
 28:22 39:10 70:3,7,20
 74:11 76:4 99:18
 102:10 136:8 161:2
international 15:9,10
 15:13 34:4 130:15,22
 138:9
internationally 76:5
internet 44:22 140:3
 141:17 146:21 147:15
 148:8
internet- 139:21
internship 129:16
interpret 73:2 78:6
intersection 20:2
 112:18 145:15
interviewed 56:4
introduce 136:13
 139:11 145:1
introduced 74:6 79:16
introducing 28:8
Inventors 105:14
invest 98:11
Investing 57:7
investment 1:21 71:15
investments 165:14
investors 73:21
invitation 21:16
invite 40:9 126:15
invited 83:22
involved 65:17 144:15
IP 101:3 102:20 133:12
irrelevant 117:17
irrespective 167:5
issue 53:16 73:7 77:7,9
 79:2 113:17 138:10
issues 5:19 9:9 10:4
 11:15,17 22:15 45:12
 61:18 65:6 138:9,15
 139:22 140:3 143:18
ITA 57:5
items 118:5 119:12
 121:19 157:20 163:4
iteration 143:8
Ivy 2:6 14:1 55:13
 128:16
-
- J**
- J.P** 22:13
jazz 29:15
jealous 21:18
job 86:15,19 138:12,22
 146:16 152:3
jobs 10:16 28:15,18
 53:17,21 54:6,14 55:3
 55:9,15 96:10
Joe 2:6 3:5 5:11 7:12
 50:1 80:11 82:9 88:17
 137:8 145:9 154:2
Joe's 12:13
Johns 128:17
Johnson 5:9
joined 101:20
JOSEPH 2:2
Josh 170:4
Journal 105:13
JPMorgan 2:7
judges 104:4
judging 104:2 105:21
Julia 79:22 136:14
 139:10,15 142:3

144:21 149:4 150:2
159:13
Julia's 25:8
Julie 1:21 85:20
June 10:11 142:10,17
150:5 155:7 157:11
juvenile 39:11

K

K 109:17
Kansas 85:11 155:7
Kapp 2:2 3:5 5:11 30:22
31:7 42:4,10 49:5
50:3,10 82:10 86:12
86:21 90:2 96:12
145:9,9 148:20 149:2
158:8
Kauffman 155:8,17
161:7
keen 78:22
keep 4:14 10:9,16 69:18
76:6 107:18 109:7
114:5 115:9 116:1
133:16 137:5 151:6
152:14 154:20 161:19
keeping 86:16 103:15
KENNEY 2:3 62:15
117:1,8,11 118:6,9
Kentucky 51:6
key 22:15 85:1 169:11
kick 6:22 53:2
kicking 4:9
kinds 125:11
kitchen 20:9
knoll 39:4
knowledge 56:4 103:15
133:22 170:8
knows 85:15 134:2
Kool-Aid 32:14
Kristie 134:3

L

lab 37:7 38:3,6 101:19
labor 60:21 61:2 121:10
129:21
Labor's 57:1
labs 2:5 14:9 38:16
lack 54:9 95:13
lacking 6:16
landscape 46:21 98:15
134:21
Langdon 56:18
language 108:13
122:20
large 27:1 33:15 45:9
51:8 96:14 135:5
largely 45:20
larger 89:2 92:13

largest 14:3,8 27:1,4
33:16,18 34:2 145:7
laser 49:14
lasting 87:17
late 10:11 25:19
Latino 20:1,3
Laughter 12:16 31:6,12
33:3 42:9 51:21 80:6
100:15 116:8,22
161:22
Launch 38:12
launched 37:6 38:12
66:17
launching 38:5
law 20:4 106:4
laws 137:12
lawyer 54:13
lead 35:4 62:10 110:21
leader 55:13 57:2
leaders 17:13,18 25:16
30:1,2 41:11 67:6,20
169:18
leadership 25:15
127:20 163:17
League 25:13 34:18,19
89:11,17 128:16
lean 97:3
learn 21:11 50:5 55:19
57:11 67:8 94:14
169:19
learned 22:20 25:6,21
94:4,6 101:9,15
105:14
learning 24:19 49:13,14
118:15 132:5 137:17
159:15,16
leave 8:6 52:4 108:15
152:11
leaving 63:1
led 22:3 154:21
left 69:17 107:8
legal 77:4
legislative 141:12
146:4
lessons 11:11 25:5
105:14
let's 6:11,12 69:18
81:16,16,17 107:21
110:12 123:13 137:5
159:9
letter 142:14
letters 73:7
level 5:6 32:5,6 36:22
75:22 77:1 79:1,9
84:20 93:18 110:3
164:20
leverage 87:11 88:10
152:20 157:7 167:6

leveraging 6:17 47:1
135:6
LGBT 145:11,15,17
liability 73:9
library 1:12 4:11 36:5,7
licenses 146:11
licensing 142:1
lieu 18:7 32:17
life 129:4
lift 10:15 130:10 162:16
165:9
light 18:12 34:2,6
Lilly 13:20
limit 73:9
limitations 72:4
limited 44:21 72:6
line 58:7 123:5 124:3
139:20
link 157:1
LinkedIn 103:22
links 161:20
list 15:16 90:3 115:11
118:2 126:14 150:18
150:19 158:12,19
162:18
listed 124:11
listen 137:10
listserv 131:1
literacy 148:6,8 149:10
littering 33:9
little 4:19 7:17 12:3
19:8 21:17 40:7 43:14
43:15 50:8 52:13 53:7
72:11 76:9 86:22 97:1
97:4 98:21 108:9
112:5 124:18 125:2
126:8 135:15 139:5
145:20,22 150:14
163:2
live 34:10 37:17 71:14
71:22
lives 132:9 154:22
Living 38:3
LLC 2:2,6
Loan 57:7
local 25:16 32:5 79:9
148:3
locally 79:3
located 26:11 34:7
42:19
location 9:17 33:16
127:10
locations 35:12,14
locker 21:17
lodging 26:6
Logistics 6:20
logo 119:7,10
logos 28:20

long 5:18 70:4 162:18
longer 169:3
look 7:18 9:5 16:9
20:19 29:11 34:8
35:10 39:1 46:19 47:3
51:11 52:7 59:17 60:8
61:17 67:7 75:1 80:21
83:9 84:22 91:17
96:18 104:20 112:13
119:9 123:19 154:18
160:3 167:8,9
looked 117:18
looking 8:22 12:12 15:2
29:21 34:16 45:15
46:14 47:18 52:12
53:8 76:5 87:6 118:18
142:17 143:22 150:4
156:13 157:18 167:13
looks 82:19 83:5
119:21 139:8 166:5
loop 50:20,22 51:12
Los 25:18
lose 151:13
losing 151:10
lot 7:14 14:14,20 15:10
15:17 16:11 18:1
21:12 28:22 32:22
39:6 43:17,21 44:4
46:22 48:20 55:17
56:10 62:12 64:14
68:1,3,12,13,22 69:7
72:3 75:20 86:14 89:9
90:15 96:18 100:22
102:8 106:18 121:1
123:7 124:11 128:3
130:11 135:18 140:20
148:11 149:3 150:12
155:17 156:18 157:14
161:12,18 162:14
165:8 168:19 169:19
169:19
lots 112:15
love 30:12 36:19 38:8
40:9 62:5 107:2 109:9
115:15 137:5 142:20
160:13 161:5 162:14
162:21 164:17 165:1
165:2
low-level 70:15 75:16
lunch 30:3,7 62:21
141:21
Lynch 2:3 22:5

M

machinery 129:11
magical 122:6
mailing 126:14
main 14:11 18:16 58:7

maintain 110:3 129:11
 130:11 131:5,7
maintained 73:11
major 33:14 34:18
 84:17 113:5 146:5
 148:16
making 57:16 58:15
 62:4 72:19 121:19
 129:1 150:16 156:4
manage 85:5 105:22
 146:13,17,19
managed 127:11
manager 35:7
manages 146:10
managing 104:4 127:13
Mandel 170:4
manual 129:21
manufacturer 45:9
manufacturers 47:5
 54:3 55:7 56:20
manufacturing 11:3
 13:8 19:19 45:14,14
 53:5,8,15 54:2,10,21
 55:15 56:8,21 57:6,8
 57:12 58:13,19 59:6
 59:13 62:3 121:6
 152:17 159:11
manufacturing-orient...
 13:18
manure 46:13
map 34:8 109:10
 115:12
March 37:7
MARIBEL 2:4
Marie 2:3 22:5
Marie's 25:9
Mark 32:18
marketing 96:19
markets 78:20
mass 152:6
master 102:21
matching 115:9
material 132:12,17,19
materials 13:2 32:18
 109:16 128:22 129:17
matrix 11:14
matter 23:16 110:15
 132:9 170:21
mayor 15:8 19:6 23:4
 35:7 39:8 101:18
McHenry 79:19,22
 136:14 139:14,15
 141:10 142:9 143:1
 143:13 146:1 149:1
 149:12,21
mean 46:11 82:10
 86:18 94:12 109:12
 112:19 118:21 125:7

126:16 130:9 158:13
 159:1 160:3
meaningful 23:2 82:17
 90:11 91:2 135:8
means 45:1 103:17
 163:9
meant 77:19 113:10
measure 85:6,9
measurement 143:2,20
 143:21
measuring 140:9 144:9
 144:13
media 101:19 103:22
medical 2:8 100:21
 101:9
Meds 26:9 28:11
medtech 68:19
meet 45:7 49:3,5,8,11
 52:16 68:6 102:18
 120:13 124:20
meeting 1:7 3:10 4:7
 5:3,7 16:6,18 30:3
 56:10 59:20 62:19
 63:1 85:2 111:6
 114:22 119:7 125:13
 136:22 142:10,18
 150:11 153:1,2
 154:15,20 158:9
 159:4 164:1 167:2
 168:2,10 170:4,20
meetings 17:6,9 36:13
 68:7 117:6 153:14
meets 128:15
Megan 19:7
Melissa 1:13,16 125:12
 150:8 166:11
members 4:12 31:22
 69:10 111:1 117:12
 144:19 157:15 169:13
mentioned 36:19 39:19
 47:11 50:4 57:3 79:15
 80:17 81:3 107:3
 128:4,6 130:14
mentor 40:8 101:4
 109:17
mentors 103:2 106:16
 128:20
mentorship 85:5
merge 124:16 128:18
merged 128:13 151:12
merging 103:13 128:5,6
mess 33:9
message 124:1
met 1:12 56:18,19 57:1
 57:4
meta 32:5 62:18 78:19
 102:11,11 107:15
 132:15 133:16

metal 120:7
metrics 58:16
metroplex 23:13
mic 59:12 139:11
 152:12
Michael 18:17 21:14
 25:7
microphone 118:20
 145:3
Microsoft 33:16
mics 60:16
mid- 84:19 98:10
middle 16:3 34:7 69:8
Midwestern 69:10
migration 152:6
Mike 2:4 15:3 84:15
 138:2
mile 35:17
millennials 27:6,8
million 29:5 34:17
 53:21 100:19 101:6
 101:11 149:8 164:15
million-dollar 164:16
mind 10:17 49:9 115:1
mindful 43:2 89:1
minds 54:18 99:14,15
mindsets 97:10,16
minimum 153:5 157:4
Minor 34:19
minute 64:16
minutes 69:17 99:13,21
 110:12
missed 158:2
missing 84:1
mission 112:9 122:16
MIT 128:17
mix 60:22 134:22
mobile 44:22
model 19:15 63:6 66:20
 68:14 98:9 101:21
models 71:21
modify 115:22
Moleskine 119:18
moment 73:5 107:19
 136:21
momentum 39:9
 150:12
money 78:10 104:21
 138:7
month 5:4,15 54:22
 55:21 105:13 169:12
month-old 110:4
months 41:7
Morgan 22:13
morning 4:4 29:22 30:5
 32:8,9,19 33:4 40:7
 53:3 108:21
Motor 15:16

move 31:13 46:8 57:15
 57:20 65:14 150:7
moved 27:9 38:10
movement 134:11
moving 89:21 137:5
 142:13 150:20
muddy 145:22
museum 16:7 39:7
music 18:19 19:9 21:16
 23:8 29:15
musical 60:15

N

N.W 1:12
NACIE 1:5 3:8 8:8 19:3
 20:11 25:6,8 30:3
 31:22 40:1 41:22
 60:19 62:22 80:20
 82:6 87:8,12,19 88:5
 88:11,21 90:4,9,10,20
 97:18 100:9 103:5
 105:8 107:5,14 111:9
 111:20 116:20 117:12
 117:14 118:7,14
 119:7 122:12,13,17
 125:9 126:9,11
 135:18 137:15 138:4
 143:7,8 144:19 154:3
 154:9 156:8,20
 157:14 160:15 164:18
 168:21 170:20
NACIE's 88:19
name 139:15 145:9
names 116:11
narrow 151:17
nascent 65:21
Nashville 18:10,17 19:9
 20:1 21:1 23:5,7 32:1
nation 54:19 56:15
national 1:5 4:6 5:3
 32:5 46:21 54:3 56:19
 64:12 79:12 89:11,16
 105:11,13 106:4
 110:2 113:1 136:15
 138:8 139:17
nationally 64:4 89:14
nature 94:11
naval 31:3
navigate 92:1
navy 26:11,12 28:12,13
 28:16,18 30:7
NBIA 130:20
NEA 145:6
nearing 164:21
nearly 48:8
necessarily 43:12,17
 44:16 63:13 73:3
 113:9

necessary 94:21
need 6:22 10:11 25:21
 54:4 70:13 75:18 81:1
 84:16 85:17 91:8,10
 95:15 99:4 103:20
 104:21 107:11,18
 109:13 112:17 116:5
 133:11 149:16,17
 150:7 151:12 152:11
 152:17 157:21 159:14
 162:2
needed 55:20 60:1
 108:2 116:1 129:20
 129:21
needle 46:8
needs 70:9 84:10 108:6
 111:14 118:22 134:9
 156:3
negotiate 102:21
negotiated 133:2
neighborhood 20:20
neighborhoods 23:13
NEMETH 2:4 119:2
 120:2
network 41:4 63:4,5
 64:12 66:4,9,17,22
 67:17 68:17,22 69:2,6
 69:12 85:6 101:4
 103:11 104:4,18
 125:5 127:16 129:2
 132:2 133:17
networking 104:3
networks 40:8 105:22
 106:16 128:8 129:7
 165:16
never 93:5
new 1:20 17:19 20:16
 34:6 47:15 62:19 75:4
 101:6,18,19 106:14
 109:19,21 129:4,4
 142:13 145:6 151:13
 155:19 163:8,16
 168:18 170:7
nice 44:7
nicely 123:17
night 7:7 21:15 99:18
NIH 68:16 102:1
Nikesh 100:5 107:4
nine 18:20 35:14
NIST 57:5
nonprofit 145:10,11
noodling 81:6
north 33:17 35:17 79:19
northern 13:11
not-for-profit 19:11
notable 30:1
note 23:4 121:18
 150:17

notebooks 119:18
notes 65:22 124:22
 150:16
notion 93:10
November 3:3 5:3,3,14
 5:14 10:14 13:4 16:21
 29:16,19 35:22 70:1
 147:17
novices 116:21
NTIA 79:21 80:1 136:16
 136:18 137:1 139:12
 139:16,16 141:3
 143:15 145:21 159:2
NTIA's 146:16
number 9:18 43:22
 48:19 49:11 53:17
 57:4 61:5 72:5 74:5
 74:12 94:15,17 95:5,6
 95:19 96:1 101:20
 125:9 146:1 150:2
 158:4,18
numbers 44:12,13
NYSERDA 101:5
NYU 101:10,20

O

o'clock 8:2
observation 128:7
obtaining 70:15
obvious 27:1
obviously 21:13 26:20
 84:6 140:5,13 152:14
 152:15
occurs 137:11
October 147:17
offense 117:7
offer 17:4 25:1,20 26:1
 119:15 129:10,18
 136:5 139:7 163:8
offered 17:19,21 101:6
offering 129:11
offers 129:19
office 2:11,13 34:21
 36:4 38:22 39:18
 128:17 142:15 148:3
 159:11 170:5
officer 4:8 84:18 170:19
offices 34:22 162:9,12
 162:18 169:16
official 2:12 164:2
officially 4:9 170:19
officials 137:20,22
 138:17
offline 52:6 107:22
 139:2 151:6
offsite 3:3 5:3,7,21
oftentimes 98:14
OIE 84:9 111:19 142:19
 150:5 156:20 166:19
 167:16 168:21 169:5
OIE's 158:6 164:10
oldest 26:12 28:13
onboard 117:4
onboarding 90:12
once 4:10 27:4 62:9
 74:3 115:7 126:20
 128:15 129:9
one-on-ones 166:14
one-third 135:4
ones 11:19,20 92:1
 109:19
online 18:4 89:14
 105:20 120:16 166:4
 166:7,10
onsite 17:8
open 14:22 29:4,21
 66:4 76:9 165:16
 166:3 168:19
opening 62:13 78:20
 133:4
openings 55:2
ophthalmologist
 106:18
ophthalmology 106:19
opportunistic 126:3
opportunities 13:15
 21:11 27:2 37:15 48:1
 82:4 142:6 150:3
opportunity 6:6 12:20
 13:4 19:22 32:3 43:6
 45:3,7 46:3,7 48:18
 48:18 49:11,20 52:10
 57:11 61:10 83:12
 87:20 89:2 91:18,21
 91:21 93:18 97:18
 104:16 105:8,11
 123:15 136:9 153:11
 158:16 165:3 167:6
 169:14
opposed 78:20
ops 103:13
opt 147:5
option 15:7
options 9:10 108:14
order 67:7 98:2 148:8
 165:6
Oregon 2:3
organically 100:18
organization 5:15
 19:11 28:9 35:4 41:4
 56:22 63:14 64:13,13
 66:13,16 84:19
 116:16 130:10 134:8
 136:2 145:11
organizationally 110:1
organizations 35:2

37:4 38:4 43:10 67:12
 68:18 75:11 78:12
 84:4,11,20 120:6
 127:3 131:2 132:4
 134:18 135:9 165:5
organize 109:7 133:15
organized 60:21 121:4
 123:18
organizer 25:12
organizing 112:7
original 115:10 122:16
 123:18
originally 67:1 148:2
Orin 2:1 39:22 91:9
 99:17 107:18,21
 124:5 125:2 130:3
 154:19,22
Orthopedic 13:11
OSTP 89:11
other's 68:2
outcomes 81:18,20,21
 83:6,17 89:20 98:4
 134:17 135:8
Outfitters 28:20
outlawed 77:1
output 31:19
outputs 134:17
outset 67:19
outside 121:21
outstanding 30:11
overall 21:5 26:15 29:3
 60:22 77:15 81:19
overarching 87:22
overhead 105:7
overlooked 86:22
overnight 165:10
overview 19:8 29:22

P

P-R-O-C-E-E-D-I-N-G-S
 4:1
PA 3:4
packaged 129:17
packaging 128:22
Pad 38:12
page 57:20 113:10
 121:19 123:17
pages 111:21
pagoda 16:3
pamphlet 9:6
panel 17:12
paper 121:3
parameters 73:14
 150:14
parents 54:11
parked 115:4
part 13:12 26:10 39:5
 41:3 42:6 54:2 55:14

63:4 64:10,14,17 65:1
 68:7 88:4 90:19 98:9
 102:2 107:14 125:8
 137:17
participants 66:2 83:19
 83:21
participate 5:13,20 39:9
 60:13 65:19 75:12
 89:3 90:10 96:10
 142:20
participating 86:7
participation 91:1
particular 46:9 50:10
 64:7,7,8 65:9 67:22
particularly 88:16
 122:9 143:16,22
parties 65:18
partly 97:11
partner 66:18 68:17,21
 78:2
partnered 101:9
partnering 102:4
partners 65:18 95:18
partnership 57:8
 145:12 160:11
partnerships 22:15
 23:12,19 31:21 37:3
 58:14
parts 56:7 59:4,5
pass 52:11 59:12
passing 149:10
Patent 34:21 36:4 39:17
paths 92:2 93:8
pathway 19:13 93:1,9
patience 4:10 7:10
 168:8
patients 28:9
Patrick 79:18
pause 8:16 10:19 69:15
 99:11 157:20 162:4
 165:19 166:8 170:13
pay 106:5 138:18
PayPal 141:21
pedagogy 96:18
peer 130:1
Pence 15:3
Pennsylvania 28:1 31:1
Penny 142:12
people 15:17 22:1
 32:13 34:12,13 39:6
 41:10 43:17 45:6 54:5
 55:3 56:10,13 67:3,21
 69:3 71:20 72:5 75:8
 84:12 85:17 86:3,15
 88:1 89:13,14 91:22
 92:13 94:16,17 97:19
 98:5,20 105:21
 106:10 107:10,11,12

117:4 120:12,17
 127:9 129:8 133:3
 138:1,6 148:12,13
 152:7 154:3 155:10
 155:11,21 156:10
 157:7,21 160:6,20
 161:2,3,11,12,13,19
 166:14 169:4 170:3
perceived 61:12
percent 27:13 93:20,22
 103:10 148:11,14
PEREZ 2:4 17:3
perfect 110:7
period 68:5 158:14
perseverance 98:2
persistence 94:21
person 62:6 68:6 80:2
 103:21 155:5 164:4
personal 154:22
personalities 24:9
personality 23:22 24:8
personally 58:5 114:6
 123:3 154:8 161:5
perspective 17:13
 43:16 77:4 80:22
 135:14
perspectives 97:22
phase 78:4
phases 10:1
Philadelphia 3:4 8:2
 24:15 25:13,14,17
 26:4,8,15,17 27:9
 28:3 30:10 76:22 77:1
Phillies 29:18
Philly 167:12
phone 67:21 68:8
 119:12,15,21
phonetic 100:5
physical 85:2 104:3
 106:8,11
pick 26:4 30:10 67:21
 89:8 153:17
picture 10:2 11:21
piece 82:15 83:4,11
 90:14 91:20 94:9
 95:14 96:13,21,22
 97:6,8,14,20 153:8
 154:15 155:6 159:18
pieces 82:15 104:7
pigs 49:10
pilot 71:6,14,18 74:20
piloting 77:18
pitch 4:20 5:2 42:1 48:8
 124:6,10 125:5
itches 3:3 9:3 11:8
 24:8
itching 5:10 11:10
Pittsburgh 1:18

pivoted 76:8
place 14:2 30:4 37:16
 67:2 84:7 130:11
 170:7
places 23:6 42:22 46:4
 74:5 121:14
plan 80:20 124:14
 126:5
planner 33:1 42:7
planning 2:4 19:18
 165:11
plans 97:3
plant 45:11
platform 86:1 88:9
 91:11 106:2 143:9
platforms 85:4 87:21
 88:7 141:18
play 22:21 29:18 37:17
 48:7 74:10 83:13 85:3
 86:4 90:20
played 120:5 147:1
playing 29:17 35:22
 40:12 43:6 48:12 86:7
 139:13 140:2,4
Plaza 39:3
please 52:1,8 62:14
 76:10 163:9,9
pledge 89:17
plenty 55:2
plug 8:7 89:15 96:7
 109:21
plus 128:17 135:6
pockets 130:7
point 31:15 41:8 57:14
 59:11,15 84:15 85:1
 89:14 123:14 124:7
 137:19 141:6 154:1
 160:1
pointing 91:5
points 79:7
Pokemon 120:5
policies 137:22
policy 5:19 9:20 10:2,8
 11:14 23:2 113:8,21
 121:20 145:16 146:22
 147:9 169:6,8
polish 163:19
politicals 158:4 168:16
 168:18
poll 155:10
poor 27:21
poorest 27:12
popping 154:21
popular 77:10
population 34:17 144:7
 147:14
populations 44:18
portrait 40:1

position 108:8
positioning 108:13
positions 167:7 168:19
 169:11
positive 8:20 130:1
possibility 50:19
 148:15
possible 10:4 37:16
 71:16
possibly 12:1
posting 152:5 161:19
potential 46:13 47:6
 52:6 65:18 69:1
potentially 54:6 59:9
 62:11 103:6 105:8
 117:3 122:12 158:18
Potomac 3:5 42:6,11,19
 43:8,21
poverty 22:9 27:13
power 6:17 66:14 68:12
 69:7 82:16
powered 37:7
powerful 69:12
PowerPoint 89:20
 111:7
practice 70:20 89:16
 136:1
practices 67:3 74:16
 75:3 102:19 106:13
 121:21 135:16,20
practitioner 96:13
pre-draft 105:15
precursor 43:14 157:8
predefined 72:3
preempt 31:8
preference 9:12,14,17
 133:18
prepare 10:13
prepared 87:8
prescription 29:12
presence 90:9
present 1:15 2:10 42:11
presentation 23:4 30:5
 95:4
presents 110:22
president 2:6 32:20,20
 36:8,11 39:16,20 40:9
 48:5 54:20 55:5
President's 120:10
presidential 36:5,7
presiding 1:13
pressure 130:2
pretest 73:18
pretty 4:17 47:15 52:14
 62:3 66:7 125:18
 138:1 157:12,13
preview 119:14
previously 49:16

primary 82:15
prime 126:18
primer 111:22
printing 49:14
prior 118:9 143:7 160:6
priorities 109:20 113:2
 115:10,13 156:4
prioritize 160:4
priority 122:22
Pritzker 142:12
private 23:12 75:2,3,10
 89:8 146:11
privilege 154:16 166:16
 167:6
probably 14:9 39:15
 83:3,12 88:21 89:19
 104:13 119:2 126:1
 127:3 130:7,14
 133:13 145:13
problem 53:19 95:19
 110:2 165:4
problem- 94:11
problems 9:8
process 7:10 9:15
 10:10 57:19 70:14
 90:12 91:2,14 95:8
 103:7 113:13 169:3
processing 45:11 57:14
Proctors 107:1
product 135:18 167:22
productive 80:14
 149:18
products 71:13,21 74:2
professional 25:11
 163:13
professionally 155:1
professionals 25:22
program 15:1 19:3
 25:15 39:12 40:13
 57:2,7 58:14,16 61:13
 61:14 66:17 71:4
 81:19 121:20 129:15
 129:16 131:21 149:6
 164:11,13,22
programming 32:1
programs 55:14 63:7
 63:15 68:2 75:17
 102:2 113:6,22
 124:13 128:18 131:10
 132:8 158:21 162:12
 164:19
progress 7:15 153:1
progressive 13:17
project 50:20 119:3
projects 11:1 40:6
 46:12 50:16,16,17
 84:19 104:22 106:19
 112:4 120:7 123:2

promised 119:6
promote 65:11 68:2
 74:16 75:3 87:16,21
 88:6 113:8,18
promoter 88:11
promoting 53:10
proportion 76:1
proposal 58:6 59:14,19
 69:22 113:14
proposals 101:3 104:1
 113:15 115:21
propose 115:4
proposed 14:17 39:2
 101:8 105:17
proposing 40:16
proposition 61:8
prototype 73:4
provide 70:22 73:22
 75:15 84:20 99:5
 106:4 162:13 163:2
 169:8
providers 133:7
providing 23:16 81:9
proximity 11:4 153:19
public 165:22 166:4,5,6
 166:10
public- 23:11
public-private 22:14
 23:18 37:2
publicly 75:13
pull 21:1 81:17 126:5
pulled 18:18 59:2
pulling 98:15
purpose 122:8
purview 74:21 121:21
pushed 79:6
pushing 169:21
put 12:22 19:3 34:9
 57:17 58:9 91:15 92:3
 108:3 110:9 112:9
 113:20 114:2,11
 115:11 116:9 118:12
 119:7 123:6 125:17
 151:18 152:7 157:1
 158:12,22
putting 59:18 82:1
 99:14 104:1 106:7
 121:3 151:3

Q

qualified 55:3
quality 72:19
quarterly 4:7 170:20
question 6:10 12:6 17:4
 50:2 85:13 88:18 94:9
 96:11 109:2 117:1,8
 121:5 122:7 143:6
 162:6 168:14 170:3

questions 10:17 17:2
 30:14 49:1 52:7 64:20
 66:5 69:14 80:10
 116:19 118:11 120:20
 122:5 141:2 144:17
 168:9,12 170:12
quick 8:10 9:5 10:18
 17:1 63:2 69:14 78:18
 109:2 124:17 144:17
 158:8
QuickBooks 96:19
quicker 12:5
quickly 52:14
quiet 8:3
quieter 167:17
quite 10:15 16:1,11
 66:11 125:22 126:18
 147:19 149:14

R

R3 75:6
racing 15:15
radar 77:13 161:9
radio 146:18
rail 34:2,6
raise 52:2 104:6,21
 105:6
raised 160:2 168:15
raises 49:10
raising 138:7
range 83:21
rank 9:11
rate 27:13 39:14 133:2
reach 153:16 158:18
 160:12 162:17 168:10
reached 47:7
reaching 47:9
react 77:11
ready 6:3 24:15 30:9
 108:10 125:22 126:18
 153:4 163:19 164:7
real 8:10 9:5 10:1,18
 17:1 19:13 41:18
 115:19 144:17 167:4
realize 68:10 81:18
 88:20
Reamer 2:5 30:15 41:21
 56:3 79:10 136:13
 139:9 144:18 145:3
 158:2 168:14,17
 170:2,10
reapplied 101:15
reason 8:3 51:7 86:11
reasons 54:13
REBECCA 1:18
rebranding 123:20
receive 169:9
received 27:5 57:21
 59:16
reception 14:18
recidivism 39:13
recognize 28:19
recognizing 167:1
recommend 102:21
 122:1
recommendation 74:14
 114:2,8
recommendations
 56:16 57:16,18 58:10
 58:12,22 59:3,10
 60:11 62:12 76:10
 112:17 114:15,19
 117:13 121:20 158:5
 159:19 160:10
reconcile 116:15
reconvenes 110:19
record 42:3 110:16
 170:22
recurring 106:10
red 18:19
redid 112:1,3
reduce 39:13 95:5
reference 110:9 114:5
referred 24:4 133:2
referring 118:3
reflect 130:20
regarding 79:16 137:2
regardless 36:8 88:17
regards 43:13
region 35:17 63:21 88:2
 88:12
regional 34:22 47:10
 50:12 129:6 164:12
regionally-focused
 63:18
register 61:13,14
regroup 60:8
regularly 102:18
regulated 70:17
regulation 70:1 71:4
 75:22 77:6 78:21 79:8
 79:14,17 140:19
 146:14
regulations 74:21
 76:18 138:21
regulator 78:1
regulator's 72:9
regulators 73:1
regulatory 70:16 71:5,7
 71:12 72:2 74:20
 75:19 78:5 79:5
 136:17 137:2 140:18
 146:5,6 147:8
REICHERT 2:5 49:3
 50:1,4 51:17 53:3
 66:6 120:21 122:3

130:3 131:6,16
133:20
reinvent 123:16
related 70:8 139:22
146:14,18 163:13
relationship 15:13
78:12 144:9 158:6
163:2
relationships 15:11
31:20
relaxed 7:17
release 164:21
relevant 73:2 118:17
134:9 157:15
reliance 45:21
relying 23:15
remain 53:17
remarks 3:2,11 108:4
166:2,11
remember 85:8 117:15
117:16 170:3
remind 53:6
reminder 169:15
reminders 120:17
renaissance 26:13
renamed 124:16 151:12
rendering 46:13
repeatedly 129:14
report 125:4 143:10,12
report- 62:16
report-out 53:4
report-outs 3:6 6:1
52:14
reporting 87:1
repository 130:22
represent 45:16 48:1
81:8 83:20 119:13
148:20 156:11
representation 156:8
representative 43:9
47:19
representatives 90:7
90:21
represented 69:7,8
158:19
representing 42:12
43:10
represents 46:15
reprioritization 123:20
Republican 79:19
reputation 61:12
request 119:20
requesting 90:9
requests 90:5
require 55:8
requirements 72:2
research 38:15 64:8
66:14 70:21 74:15

75:2 101:6 102:6
134:16 135:5 156:5
research-driven 156:2
Reserve 34:20 36:3
39:16
residents 103:2 128:8
resonated 91:5
resource 131:12 162:13
resources 64:1,5 65:6
81:8,9 86:3 88:6
103:19 109:6 123:8
125:11,17 132:1
153:11
respect 147:11
respectful 10:16
respectfully 152:1
respective 170:16
respects 42:12 43:11
44:10 97:7,9
RESPONSE 32:9,11
responsibility 73:11
responsible 26:5 82:6,7
rest 26:7 40:12 41:14
restaurant 29:14
restaurants 14:22
restore 73:18
restroom 6:20
result 39:14 45:22
resumed 110:16
resumes 93:3
rev 111:10
revenue 37:15
review 93:3 152:17
reviewed 83:8
reviews 101:3
revitalization 31:2
revived 69:22
Rick 5:9,10 8:12,18,18
18:4,7
ride 16:7
rights 151:2
rising 38:14
risk 72:5,21
robotics 68:21
robust 16:11
rock 4:15
role 60:20 74:11 80:20
83:13 85:3 86:4,7
88:19 90:19 93:16
100:9 140:2 143:11
146:5,22 147:1,8,9,10
roles 103:13
roll 4:15 62:6
roll-out 86:8
rolled 18:18
room 56:8 81:17 82:2
85:18 86:11 88:15
166:4,5,6

rooms 104:2
roots 17:5
Ross 10:7
Ross' 9:19
rough 5:14
rules 71:20 73:2,7 78:6
run 52:15 66:13 71:18
92:18 101:1,19
104:22 105:5 106:10
129:15,15 131:21,22
155:20
running 44:15 55:14
67:3 150:19
runs 47:15 100:17
rural 43:15 44:20 45:2
45:17,20 46:2,5,10,19
47:3 48:1,7,12 83:1
148:20
Ryan 165:22

S

S3 2:4
safe 170:15
sale 120:9
SalesForce 13:13
San 25:17
sandbox 71:4 72:13
74:20 77:15 136:17
137:2
sandboxes 70:2 74:18
75:12 140:17 141:5
Sandy 51:6
sauce 16:15
saw 20:22 119:21
169:11
saying 77:12 81:16
113:19 127:21 133:20
says 114:1
SBA 89:11 127:8,12
scale 71:14 76:1 78:7
scene 26:15 29:14,15
30:6
scenery 45:5
schedule 4:14 14:16
139:5
scheduled 142:10
154:12 165:21
SCHOCKEN 2:6 137:10
school 22:19 31:1
schools 149:15,15
science 1:17 26:2,10
28:10 131:15,17
sciences 13:20 129:4
scope 11:17 12:3
score 33:19
Scott 1:20 88:8 91:11
110:6 128:4 144:21
Scott's 123:14

screen 77:13
search 120:15
second 4:5 28:12 33:15
35:5 71:3 88:4 95:6
96:22 115:2 121:19
143:6 159:7 167:15
secret 21:16
Secretary 9:18 10:7
56:16 57:16 114:21
115:18
Secretary's 142:15
170:5
section 71:17 90:22
sector 63:22 64:7 75:2
75:3,11 89:8 146:7
security 4:10
seeing 44:4 123:1
150:5 161:20
seen 4:22 64:14 90:3
134:20
sees 9:19 66:18
segue 119:3
sells 42:1
Senator 39:15
senators 48:2
send 155:13 157:1
161:2,8
senior 169:6
sense 51:14 102:12
104:10 156:18 168:2
sensitivity 108:12
sent 4:22 142:14
sentence 144:21
sentiment 23:9,11
separate 62:11
separated 81:2
separately 60:20
Sephora 2:7
September 74:7
seriously 86:18
serve 65:2
service 21:7 29:8,9
78:2 102:22 103:14
141:16
services 20:3 70:11
74:2
session 62:6 164:2
167:17
set 26:2 54:15 64:8 65:5
66:9 68:8 71:20 87:9
89:19 112:22 115:2,3
122:13 125:13 165:13
sets 58:11
setting 55:18 69:2
167:7
settle 169:13
seven 15:21 51:1
seven-school 40:13

- sexy** 48:9
Shannon 52:2,2,3,11
share 18:8,12 25:10
 52:19 58:1,6 63:22
 65:7 67:2 76:12 89:4
 102:18 103:1,19
 106:12,13,16,19
 109:16 122:1 125:18
 126:6,21 127:5 129:8
 129:8,18,19 161:11
 161:12,13,17
shared 24:18 64:19
 65:5 68:14 70:19
 103:14 104:5,14
 129:17 130:8 133:22
 161:14
shares 129:12
sharing 63:3 64:5 76:17
 106:1 129:9
sharper 123:11
sheet 123:5
ship 31:3
shipbuilding 28:18
shipyard 31:3
shop 120:11
short 125:2 158:14
shortly 119:17
shot 41:18
show 14:19 27:16 34:10
 34:14 36:15 37:11,11
 38:8 52:15 111:22
showcase 41:13
showcasing 82:3
showing 35:18 168:7
shrimp 16:13
shutdowns 93:4
shuttered 28:13
side 21:4 27:11 77:8
 112:21 140:19 141:13
 141:13,17 144:7,7
 146:17,20
sides 166:17
sidestep 78:10
sign 153:4
signed 19:17 114:20
significant 28:14
similar 68:18 69:2
 101:21 124:12 125:15
 128:5 132:5
similarly 63:8
simple 94:11
simply 9:11 59:7
Simultaneous 120:3
Singapore 71:9
single 41:6 45:21,21
sir 158:1
sit 111:19 112:11,18,20
 115:13
- site** 10:3
sitting 114:18
situations 77:22
six 8:2 34:18 41:6
six- 110:3
six-floor 39:7
sized/large-sized 98:11
skills 2:3 49:13 55:7,9
 96:20 99:5
skillset 93:15 95:1
skillsets 93:14 94:6,10
 94:13 97:10
skipping 166:1
Slack 109:8 110:4
 115:7 116:10,15
 119:11 150:21 155:4
 157:1 160:19
slash 77:3
slated 147:17
sleeves 62:7
slide 103:6 104:8 111:7
 112:2,3 114:11
slides 13:7 100:13
 104:15 125:10 126:6
slow 107:7
small 8:7 45:8 78:4
 118:12 119:3,14
 142:2 144:2
small-world 79:20
smaller 6:7 11:18 84:20
smart 35:8 37:7 38:3
 99:14,15
SMEs 143:2
Smith 2:6,7,13 3:4 5:9
 8:19,19,22 12:19
 17:16 54:15 55:13
 59:21 61:1 62:20
Smith's 57:3
SmithKline 28:21
smoother 78:15
snapshot 19:4 27:22
 39:10 103:22 157:4
software 104:2 105:22
solicit 91:1
solid 83:16
solution 61:21
solutions 60:22
solve 95:18 109:13
solving 94:12
somebody 86:6 96:4
 155:19
someone's 132:13
Sonsinis 106:22
soon 10:12 163:14
 164:22 169:10,22
sooner 165:12
sophisticated 73:20
- sorry** 8:18 108:15
 134:14 136:10
sort 15:12 21:8 35:16
 39:1 47:21 51:15
 80:19,21 81:6 84:9
 87:6,10,22 88:3,9
 90:11 91:2 92:11 93:4
 93:8 96:20 98:19
 100:22 102:11 103:9
 103:15 105:20 106:15
 128:16 129:6 132:14
 133:16 135:22 140:2
 141:5 142:15,16
 146:21 155:19 156:1
 156:19
sorts 46:14 49:15 83:19
 85:16 90:17 97:4 98:2
sound 95:1
sounds 107:4
south 43:22
southern 18:2 69:11
southwest 69:11
space 29:6 38:7 96:19
 135:12,20 140:4,13
 144:19 149:6
spaces 134:21
spanning 51:8
spans 47:12
Spark 28:5
sparse 44:18
speak 36:12 43:11,12
 58:5 86:12
speakers 15:2 17:11
 47:6
speaking 100:5 120:3
 142:3 161:10 168:12
special 16:15
specific 6:3,10 11:13
 58:21 59:3 63:20,21
 65:11 125:7 131:9,20
 132:19 165:15 170:3
specifically 72:11
 77:18 88:5 127:13
specificity 65:1
spectacle 15:14
spectacular 7:22
spectrum 135:9 146:11
 146:17,18
Speedway 15:16,22
 16:1,4,5
spend 52:5
spending 138:6
spent 21:12,15
spinoff 41:22
spoke 87:15,17 91:9
sponsor 79:18
sponsorship 106:22
sports 29:17 35:20,21
- spot** 108:3
sprawling 33:21
spur 83:10
square 29:5
stadium 20:17
staff 12:22 150:6
 152:20 169:6
stage 77:19 91:13
 160:22
stages 81:10
stakeholder 82:7
stakeholders 81:8,16
 81:22 82:2 84:4,11,12
 88:22 135:6 156:13
 165:13 169:19
stand 33:10
standard 4:18
standardization 135:22
standardized 135:11
Stanford 128:17
stars 38:14
start 3:2 4:20 9:2 10:18
 12:17 43:18 45:2
 56:14 76:12 79:2 84:8
 88:10 89:7,13 90:16
 94:19 96:7 104:20
 110:19 123:6 132:17
 141:4,5 151:3,12
started 8:17 19:6 21:14
 39:10 67:11 102:17
 102:18 145:10 154:10
starting 23:5 124:7,15
 167:18
startup 26:18 37:20
 38:1 41:4 63:19 65:4
 89:10 93:6 97:2,4
 102:20,22 132:22
startups 68:1 95:10
 103:1 107:2 128:11
 128:19
state 13:8,12,18,18
 14:5,14 15:6 30:2
 44:3 55:16 73:18
 76:22 79:6 90:17
 129:5
statement 112:10
states 1:1 14:4 26:19
 36:4 42:13 43:7 44:20
 45:18 50:7,14 53:13
 53:14,18 55:2 67:4
 69:10 76:7 83:11 90:8
 90:22 147:5
stats 168:22
status 142:8 158:6
STEM 149:7
step 169:18
Stephen 1:13,17
stepped 166:14

steps 3:10 16:17 60:7
 60:12 139:6 142:16
 150:8 162:7
Steve 3:4 5:11 7:3
 24:16 31:14 108:3,18
 152:21
Steve's 41:8 108:2
STEVENSON 2:7 10:21
 12:9 24:13 87:2 98:7
 122:4
stir 32:15
Stony 101:10
stop 134:14
stories 39:5 79:21
strangers 170:17
strategic 1:21 124:14
 165:11
strategies 74:1 164:12
strategy 35:8 78:19
 87:7,22 88:6 89:19
streamlined 124:18
strength 87:12
stride 168:3
strike 159:14
striking 43:3
strong 22:14
struck 87:5 109:4
structured 64:5
struggled 42:14 118:10
students 14:5,18 49:4,7
 49:12,12,17 93:21
 149:11
study 20:17 135:5
stuff 12:4 32:22 35:19
 39:21 44:6,11 86:1
 101:1 103:10 104:5
 126:17 148:9 156:21
 160:16 161:16
subcategories 131:20
subject 23:16 72:3
 124:22
submit 165:10
subset 133:21
substantially 39:13
suburban 26:14
succeed 95:7
success 85:6 98:4
successful 20:22 64:22
 71:18 74:4 81:1 94:21
 96:1
Sue 2:6 3:4 5:8 8:18 9:3
 10:18 12:18,18 17:2
 54:15 55:13 59:12
 62:9
suggest 107:17
suggested 39:22 55:1
 63:5 100:6 133:8
 153:15,17

suggestion 58:10
suggestions 56:5 65:13
 76:10
summer 165:1
super 5:12
supervision 72:9
supply 63:22
support 23:17 31:22
 55:6 63:19 65:4,8
 79:8 82:4 99:1,5
 106:15 135:15 142:20
 150:6
supporters 24:4
supporting 136:6
supports 149:7
surprise 148:11
surrounding 21:2
survey 144:6 147:14,14
surveys 144:6
sustainable 66:18
swag 119:19
swath 47:17 156:13
switch 5:4
symbols 152:4
synopsis 158:21
synthesis 124:17
system 1:22 14:4 34:3
 34:6 47:8 85:22 89:12

T

table 6:18 43:3 55:17
 58:4 59:13 83:18 86:3
 118:1
tabs 109:7
tackle 55:11 122:10
tactical 11:19 152:9
tag 124:3
tail 62:22
takeaway 18:21 87:10
taken 115:10 170:6
takes 94:19 165:11
talent 42:2 64:1
talents 14:19
talk 15:3 19:7 27:14
 32:13 40:11 50:8 51:2
 61:2 80:2 97:13 99:20
 107:11 125:10 135:17
 137:12 138:10 139:1
 140:15 159:9 160:16
talked 14:17 36:3 60:9
 60:10 61:2,5,6 63:10
 70:5 89:9 90:15
 114:12 121:5 123:7
 125:19 135:19 136:16
 150:17 153:9 157:3
talking 23:14 33:10
 38:17,18 52:5 59:7
 61:16 97:21 98:10

100:4 105:9 106:7
 122:8 127:1 129:3
 133:7 137:15 138:2
 141:22 157:14 168:4
Tang 1:13,17 3:4 5:11
 7:19 24:16,17 30:16
 31:11 60:15 62:1
 76:13 92:7 108:5
tap 128:19 153:11
target 92:12,13
Tastykake 28:21
Tastykakes 28:22
taught 96:17
tax 79:7
taxation 77:9
teach 14:14 97:10
 119:1 149:7,20
teaching 93:13 94:10
team 10:5 34:19 60:8
 69:14 108:4 119:19
 155:21 166:19 167:20
teams 29:17 34:18,19
 35:22 69:19
tech 2:6 14:1 20:18
 26:15 28:16 29:2,3
 30:6 55:13 128:16
 131:15,17
technical 2:2 96:20
technologies 57:6 64:9
 75:9
technology 2:1 13:16
 49:15 76:15 85:4
 100:17 133:11,17
 145:11
technology-based
 132:20
Techstars 127:17
telecommunication
 146:15
telecommunications
 79:12 136:15 139:17
 140:3 144:20 145:16
 146:22
telecommunications-...
 139:22
teleconference 160:8
tell 13:6 32:13 109:9
 121:15 132:13 139:12
telling 54:11 104:19
templates 105:19
 106:13
tempt 28:21
ten 67:13 132:4
ten-minute 158:20,21
tendency 78:8
tens 33:14,14
tentativeness 167:1
term 163:18

terms 10:22 17:11 20:3
 22:8 25:16 35:19
 38:14 46:8 77:6 79:10
 99:8 126:19 139:21
 140:22 141:16 143:3
 146:6 147:22 148:3,4
 149:14 150:11 157:18
 159:5
Terrell 48:4
test 71:6,13,21 73:3,8
 73:17,19 75:8 76:2
testament 167:17
tested 76:2
testimony 8:6
testing 72:8 73:5,13
 74:22 75:4 77:18 78:4
tests 74:3 75:18
Texas 1:22 33:6,9 35:15
 35:17 38:13 41:1
 85:22 127:18
texters 152:1
thank 7:9 12:10,19
 16:21 24:11,17 30:12
 41:19 48:22 51:17
 57:3 62:1,9 87:1
 108:14,17,19 111:12
 122:3 139:9 144:16
 149:22 150:10 151:5
 153:12 162:20 166:13
 166:18,21 167:14
 168:7,7 170:2,20
thanks 4:9 12:8 59:21
 59:22 69:20 88:20
 108:20 110:14 137:3
 137:6 150:1 162:5
 170:14
theme 23:21 89:6
theoretically 12:2
therapeutics 28:5
 102:1
therapy 28:6,7
things 4:19,20 5:4 6:22
 8:15 13:6 16:10,12
 19:2 22:10 33:10
 36:14,18 37:12,18
 40:3,5,15 44:5 46:14
 46:18 48:19 49:16,16
 51:3,15 57:12 58:5
 60:9 61:5,6 63:10,22
 64:1 74:20 75:4,21
 77:19 78:15 79:6
 82:12,21 83:7,19
 85:16 87:8 90:4,18
 91:15 92:18 94:12,12
 97:4 98:2 103:2
 104:11 105:9,17
 106:5 107:18 109:4
 112:8,14,15,20 113:7

113:7,13 114:12,15
 115:2,4,5,19 116:5,11
 117:17 118:1 123:6,7
 123:12 125:1 127:6
 132:5 140:20 144:13
 150:18,20 153:4
 154:21 155:22 163:15
third 4:7 10:7 97:6,8
 115:3 143:8 170:19
Thistle 19:10
thought 5:6 18:7 70:6
 87:15 89:5 109:3
 111:15 122:19
thoughts 113:20
 123:11 137:9 160:15
thousand 27:8 29:3
 135:6
thread 24:5
three 9:14,20 10:6 26:8
 37:19 60:11 66:9
 67:11 85:12 91:10
 96:14 153:18,19,21
 156:19 160:7
throw 78:9
throwing 121:2
thumbs 166:10
Thursday 29:22
Tier 88:14
ties 88:9
Tiff 24:18 38:18
Tiffany 2:7,8 12:7 18:8
 18:12 24:11 81:12
 86:10,15 113:18
 133:8
Tiffany's 88:20
tightened 126:8
timing 5:13,19
titled 143:10
titles 115:6
today 4:18 6:4 7:18
 11:10 28:16 31:18
 52:1 87:21 100:13
 168:10
today's 55:7
tool 151:4
top 9:17 16:10 114:18
 115:12
topic 53:7,16 54:16
 55:10,13,19 60:17
 62:18,19 65:9 67:22
 68:11 76:14 87:16
 114:5 133:19 163:12
topics 19:2 123:21
Toronto 25:18
touch 107:21 157:17
Touche 31:11
touched 31:14 153:9
tour 19:10 42:6,8 47:2,4

47:4,11,12
tourism 14:13 46:6
tours 22:22 42:1
Tower 29:5
town 39:21
toying 6:10
Toyota 38:10
track 16:7 86:16 107:18
tracks 70:6
trade 120:12
Trademark 34:21 36:4
 39:18
traditional 77:10 96:16
 97:2
traditionally 140:18
trailer 87:18
train 8:2,3
trained 149:8
training 55:6,15 118:22
 149:17
transfer 128:16
transformational 41:18
transitioning 74:2
 156:2
transitions 166:19
transparent 73:13
transportation 70:11
travel 10:3 34:11
 154:17
treat 73:14
tremendous 14:12
 24:19 77:4 109:4
 153:10
Trey 1:19 3:5 5:11 7:12
 31:14 80:11 88:17
 134:1,13 136:10
 151:8 155:14
trickling 4:13
tried 58:9 81:13 113:20
tries 130:16
trip 30:6 33:1 170:15
trips 22:19
trouble 29:7 132:1
trucks 20:8
true 23:9
truly 53:9
Trump 54:20,20 55:5,6
try 25:5 39:19 74:7,13
 83:15 96:7,9 126:10
 129:2 140:15 159:21
trying 6:10,11 46:7
 55:10 61:17 65:2,11
 75:15,22 78:21 80:16
 92:19 94:15 98:10
 109:10 111:8 117:15
 125:14 127:18 134:7
 134:8 156:10
turn 99:3

turning 130:21
turnover 157:16
turns 132:15
tweak 4:18
twice 68:6
Twitter 103:22
two 29:5 35:1 42:14
 45:9 53:21 54:21,22
 55:21 57:10 61:3,18
 69:4,6 70:6,8 99:15
 101:17 105:9 111:14
 111:21 114:18 117:6
 119:12 121:14,18
 147:16 153:17,19,21
 155:18 160:7
two- 164:15
two-hour 44:8,8
two-step 95:8
two-year 163:18
TX 3:5
type 11:11 131:17
 136:3,4
types 47:21 135:7
typically 29:16 164:6

U

U.S 1:3
Uber 76:17,22 77:3
UChicago 128:18
UK's 72:12
ultimately 37:15 83:5
 86:6 94:22
umbrella 126:11
unable 166:1
undercutting 77:12
undergoing 26:12
underlie 98:22
underneath 9:4 35:12
 155:22
underrepresented
 92:20
underscore 82:13
underscores 110:2
underserved 22:8
 27:20
understand 24:10 47:3
 48:6,10,11 57:15
 108:6,12 110:21
 117:6 134:16 135:7
 137:14 144:1 145:19
 167:18
understanding 23:22
 43:4,5 47:19,22 58:20
 59:7 84:3 135:11
 156:3
understood 99:17
unfilled 53:17,21 54:15
Unfortunately 169:7

Union 106:1
unique 14:2 16:2 19:20
 21:21 22:2,10 23:17
 23:20 98:22 127:4
uniquely 87:8 162:22
United 1:1 14:4 26:19
 36:4 38:21 42:13 43:7
 45:18 53:12,14,18
 55:2 67:4 76:7 83:11
 90:8,22
universities 128:7
university 1:17,18,22
 2:1,5 26:9 27:15,22
 28:1,2 30:2 31:1
 38:13,15 85:22
 103:14 128:9
unpacked 70:5 111:14
update 115:5 123:13
 158:3 168:17
updated 116:1
updating 58:16 116:11
Urban 28:20
urged 55:5
USA 2:7 58:19
use 30:20 96:9 97:17
 105:20 106:1,2
 125:17 132:16 147:15
 148:8 157:5
useful 133:13
usually 16:4 39:20

V

valuable 18:13 24:9
 65:16 69:5 132:3
 154:2,3 162:10
value 11:13 61:8 64:14
 64:16 66:15,19,21
 68:4,13 69:1 112:19
 130:12 132:9 133:21
variable 99:15
variety 23:6 50:6 55:22
 59:1 140:7
various 59:4,5 116:6
 134:17
vary 11:17
ventures 2:1 28:17
verbiage 121:1
versa 128:12
version 59:19 100:8
versus 12:4 32:5 54:12
 160:21
vertical 14:21 103:16
 103:21 106:11
verticals 104:6
viable 61:21
vibrancy 27:10
vibrant 29:14,14
vice 1:21 128:12

Victor 155:21
video 106:3 160:8
 161:17
videos 161:19,20,21,21
vie 32:19
view 141:6
Virginia 31:9 43:18,19
 44:3 47:9,12
virtual 164:1,2
virtually 5:11 124:20
 168:11
visit 10:14 18:10 23:5
 159:14
visited 18:9 23:6
visits 23:20
vistas 45:6
visual 110:10 116:2
visualization 104:17
visualize 112:10
visualized 116:5
vocation 93:16
vocational 55:6
vocations 96:10
Vogel 165:22
voice 8:14 9:1 86:11
voices 43:12
vote 10:7 160:16
 163:20 164:7
votes 6:4
voting 9:6 18:17

W

W 32:20,21 36:5
WADSWORTH 2:4 17:3
wait 109:17 116:2
waiver/modify 73:6
wake 76:19
walk 33:22 37:10 46:16
walkability 33:19
walked 23:21
walking 167:3
wall 6:9
wanted 4:14 22:1 57:20
 109:16 125:4,8 136:5
 136:11 137:9
wanting 160:21
wants 60:13 105:16
 126:10 139:1
warn 18:5
Washington 1:13 2:5
WashU 128:17
wasn't 18:4,6,22 22:4
 117:18 125:7
waste 128:12
waterway 26:14
way 4:11,14 22:22
 24:21 36:1 38:21
 44:18 47:15,16 48:15

60:4 65:17 67:15
 72:10 74:22 86:4
 90:11 91:2 95:17
 100:11 104:8,12,15
 115:7 121:4 126:11
 127:19 132:11 135:5
 135:16 152:2,8 157:5
 157:6 162:20
ways 23:17 42:14 74:12
 75:13 141:4 144:1,8
 160:6
ways/strategies 54:5
web 30:19,20 131:1
WebEx 5:10
website 30:17 129:17
websites 103:22
WEDNESDAY 1:9
week 125:14
weeks 57:10 83:15
 126:5,7
weigh 81:12
weight 9:16 12:1,2
welcome 4:5 7:2 30:9
 60:14
Welcoming 3:2
well-known 26:20
went 43:7 56:3 104:10
 109:8 110:16 120:11
 170:22
weren't 88:15
west 21:4 31:9 43:18,19
 44:3 47:9,12
westside 20:16
wheelhouse 163:13
whiskey 21:17
White 54:22 139:21
Whitney 2:7 8:11,19,19
 22:13
wife 79:21
willing 75:11 94:18
 127:5,21 130:10
Wilson 2:8 18:8,15
 106:22
win 78:18
winner 48:4
wish 7:20 151:19 168:1
wishing 170:15
WNBA 34:18
women 19:12
won 18:17 101:11
wonderful 39:4 45:6
 110:22
wondering 8:1 76:13
 77:14 92:9,11 132:7
 141:8 158:12,15
 159:2 160:5
word 165:2,7,12,16
words 30:19 136:22

139:12
work 5:14 6:12 11:1
 12:11 17:15 27:19
 29:9 30:18 36:20 37:5
 37:17 40:15 41:12,13
 43:10 45:22 46:1
 49:21 59:6,9 61:22
 62:17 67:16 71:7 92:8
 92:14,19 95:9 96:5
 99:19 107:2 108:14
 111:9,17 112:12
 120:22 128:22 140:15
 140:20 141:1 143:17
 144:19 145:14 146:14
 148:18 149:4 153:20
 154:4 156:17 157:8
 159:15 166:16 167:5
 167:18
workaround 77:20
worked 6:7 11:17,20
 12:4 52:21 93:5 98:16
 143:15
workers 19:19 29:4
 39:11
workforce 19:15 22:9
 53:8,16,18 58:20
 59:14 64:1 121:6
 122:8,10,15,21
workforce-oriented
 22:6
workforce-related
 23:10
workgroup 3:6 53:5
 57:22 58:2 80:12
 154:9
workgroups 52:16
 162:2 167:19
working 4:10 10:5 28:6
 28:7 37:12 40:6 46:2
 46:11 47:4 51:3,13
 58:20 77:2 78:4 80:19
 85:7,10 97:11 111:1,9
 114:16 116:12 119:4
 120:18 123:16 124:19
 135:12,13 146:7
 151:2 152:15 167:8
works 37:3 72:10,13
 80:1 143:15 148:3
world 13:11 107:1
 149:9
world's 28:13 145:7
worry 163:14
worth 63:6 118:18
would-be 93:3
wow 7:8
wrap 6:11
wrap-up 16:17
wraps 62:2

wrestling 151:19
write 31:2 65:21 76:12
 147:19
written 127:12
wrong 24:21 73:19
 136:3
WV 2:2 3:5

X

X 163:1

Y

Y 163:1
yard 26:11,12 28:12,13
 28:16,18 30:7 31:3
yards 18:20
year 5:18 15:19,20 68:6
 106:9 128:15 155:18
 164:15
yearly 25:14
years 27:7 29:5 33:8
 66:9 67:11 85:12
 134:20 147:16
yesterday 7:8,11,20
 11:20 52:16,18 57:21
 59:17 60:10 63:11
 64:18 70:3 76:9 78:17
 80:15,17 81:4,11 83:4
 84:16 85:8,20 89:5,10
 90:1 107:4 119:6
 141:21 153:9,15
 158:3 167:20
yesterday's 57:22 60:2
York 47:15 101:6,18,19
 129:4,5
young 97:22
youth 145:17

Z

Z 163:1

0

1

10 16:10 101:6,11
10.5 34:17
10:30 6:21
10:34 110:16
10:45 110:13
10:52 110:17
11:30 139:6
11:46 170:22
110 3:7
111 3:9
12 3:4
13 169:15
139 3:10
14 109:17

1401 1:12
17 127:17 164:15
170 3:11,12
170,000 14:5
1776 106:1
1978 140:1
1987 15:19
199 157:11
1990s 28:14
1994 147:13

2

2 9:18 110:19
2.0 25:6 60:19 118:7
 135:18 143:7,8
2.50 34:5
2016 48:4
2017 1:10 147:17
2018 5:21
2040 34:17
21 33:12
21st 157:10
23 37:4
23rd 157:11
25 3:4 69:17
26 27:13

3

3 1:10
30 69:17
32 3:5
3D 49:13

4

4 3:2
40 75:7 149:8
40,000-square-foot
 38:7
42 3:5
45 85:11
48 109:5
48,000 169:17

5

5 100:19
50 127:3
500 33:12 40:20
52 3:6

6

60 72:17
62 15:21

7

77 23:12

8

8:45 1:13

8:53 4:2
80 103:9 148:11

9

90 15:19
9200-square- 35:16
95 93:20
97 33:20

C E R T I F I C A T E

This is to certify that the foregoing transcript

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

Before: US DOC/EDA

Date: 05-03-17

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.

Neal R Gross

Court Reporter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701