

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE

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NATIONAL ADVISORY COUNCIL ON INNOVATION AND
ENTREPRENEURSHIP

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MEETING

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THURSDAY
FEBRUARY 1, 2018

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The Committee met in Room 38026 of the Hoover Building, United States Department of Commerce headquarters, located at 1401 Constitution Avenue, Northwest, Washington, D.C., at 10:00 p.m., Melissa Bradley, Chair, presiding.

PRESENT

MELISSA BRADLEY, Chair
REBECCA BAGLEY
ESTHER BALDWIN
SCOTT FREDERICK
MAX GOLDFINE, on behalf of Steve Tang
ORIN HERSKOWITZ (via telephone)
RICHARD JOHNSON
DAVID KENNEY
MIKE NEMETH
ANDREW REAMER, PhD
EMILY REICHERT, PhD, MBA
WHITNEY SMITH (via telephone)
TIFFANY STEVENSON (via telephone)
TIFFANY WILSON

ALSO PRESENT

**CRAIG BUERSTATTE, DOC EDA, Designated Federal
Official**

DAVID LANGDON, DOC Office of the Secretary

ERIC SMITH, DOC EDA

COMMENTERS

DOMINIQUE CARTER, AAAS S&T Policy Fellow, NSF

OLOLADE FATUNMBI, AAAS S&T Policy Fellow, NSF

HENRY SILENTMAN, Navajo Nation

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2 (1:34 p.m.)

3 MR. BUERSTATTE: All right, welcome
4 everyone. As the designated federal officer for
5 this amazing federal advisory council, I now
6 officially open our fifth public meeting today on
7 February the 1st. Welcome. Thanks for coming.

8 It is our fifth meeting so I can't
9 emphasize how much we appreciate you all making
10 the time in your very busy schedules to come here
11 and have some fun dialogue with us. I know it
12 takes a lot of effort, so thank you.

13 And for those of you on the phone,
14 thanks for joining us. For that sake -- for
15 those on the phone in fact, I'd like to go around
16 the horn real quick and just if you could
17 introduce yourself, name and organization, very
18 quickly so everyone knows who's on the phone and
19 then who is here in person. And Sue, did you
20 have something?

21 MEMBER S. SMITH: Yes. Andrew's
22 downstairs.

1 MR. BUERSTATTE: Great, great. So
2 real quick around the room, I think we know most
3 of each other but David --

4 MEMBER KENNEY: It's David Kenney from
5 Oregon BEST.

6 MR. GOLDFINE: Matt Goldfine from the
7 Science Center, here on behalf of Steve Tang.

8 MEMBER NEMETH: Mike Nemeth from
9 Emblem Athletic and that is a new company name at
10 the end of my name, which I can tell you about
11 later.

12 MEMBER WILSON: Tiffany Wilson with
13 Global Center for Medical Innovation.

14 MEMBER FREDERICK: Scott Frederick,
15 New Enterprise Associates.

16 CHAIR BRADLEY: Melissa Bradley,
17 Georgetown University.

18 MEMBER JOHNSON: Rick Johnson,
19 Kentucky Science and Technology Corporation.

20 MEMBER REICHERT: Emily Reichert,
21 Greentown Labs.

22 MEMBER S. SMITH: Sue Smith, Ivy Tech

1 Community College.

2 MEMBER BALDWIN: Esther Baldwin, Intel
3 Corporation.

4 MEMBER BAGLEY: Rebecca Bagley,
5 University of Pittsburgh.

6 MR. SMITH: Eric Smith with EDA.

7 MR. BUERSTATTE: Craig Buerstatte,
8 EDA. And on the line, who do we have?

9 MEMBER HERSKOWITZ: You've got Orin
10 Herskowitz from Columbia. Hi, folks.

11 MEMBER W. SMITH: Whitney Smith from
12 JP Morgan Chase.

13 UNIDENTIFIED FEMALE: Hey, Whitney.

14 MEMBER W. SMITH: Hi.

15 MEMBER STEVENSON: Hi. This Tiffany
16 Stevenson, Sephora.

17 MR. BUERSTATTE: Thank you.

18 CHAIR BRADLEY: Hey, Tiffany. We
19 heard you in the end. We heard you.

20 UNIDENTIFIED FEMALE: You were cut off
21 a little bit. We know it's you.

22 MR. BUERSTATTE: So Whitney, Tiffany

1 and Orin, as always, don't be shy if you're
2 having a hard time hearing any of us. We
3 appreciate you making the time despite your busy
4 day today. So -- and for those members of the
5 public that might be dialed in, I could -- if I
6 could identify -- we will have a public comment
7 period at 3:20. Please do keep yourselves on
8 mute until then where we'll provide an
9 opportunity for you to ask questions and engage
10 the council if you desire.

11 So our fifth meeting, we are pretty
12 good at this drill by now. Today's objectives
13 are pretty straightforward, catch up and have
14 some introductory remarks from myself and
15 Melissa.

16 Just outside -- we will not be
17 breaking but just outside, there is a water
18 fountain and restrooms and then a break room with
19 some snacks up on the fifth floor. Let us know
20 if you need to find that but we will drive
21 straight through today until 3:30. The agenda is
22 right in front of you.

1 And so talking about that in the
2 context of today, many of you might have been
3 surprised by the small pivot. We had some great
4 progress last time moving forward on, I think,
5 eight or so initiatives. Some old ones. Some
6 new ones. Many of which gained some interest by
7 Commerce leadership, as well as others.

8 You might recall we had some members
9 of the White House Domestic Policy Council.
10 We've been engaging with the White House Office
11 of Science and Technology and many others. But
12 before we can really push those to -- or through
13 I should say, to the finish line, it's important
14 that we identify how they align with some of the
15 administration's broader policy goals and agenda.

16 So I know Melissa, who has got a deep
17 experience with working in and around government
18 had some comments about that. So I'll --
19 Melissa, if you want to add some color.

20 CHAIR BRADLEY: That's what caused my
21 grey hair. So first let me thank everybody who's
22 here. I know our time is coming to an end so

1 it's good to see folks still hanging on and for
2 the folks on the phone, thank you.

3 So I guess I want to make sure we're
4 clear that I don't see it as a setback. I do see
5 it as a pivot. I think that hopefully people by
6 now, for better or for worse, realize that our
7 job as government representatives is to create a
8 framework by which great work gets done.

9 One of the things that was very clear
10 to me, in particular the Obama administration,
11 the government is not good and it should not be
12 our job to pick winners and I know that we have
13 great ideas and we know phenomenal programs, many
14 of them are sitting around the table, but to
15 really make sure that we're meeting the needs of
16 a broad swath, it's important that we create a
17 framework by which we can support programs,
18 initiatives, and grant programs.

19 So, I don't want us to feel like this
20 is putting everything on the back burner but I
21 would say using that as a guide post and say,
22 what is the right environment that can help

1 facilitate that which we know works in our
2 respective communities, in our respective areas
3 of entrepreneurship, work force development, R&D,
4 you name it?

5 So -- and I think I'm -- I've spoken
6 with a few of you. I'm excited only because this
7 to me is an opportunity to create a framework
8 that will be used beyond us. At this point, it's
9 unclear what NACIE 3.0 will look like, when it
10 will happen, but the idea that if in-between that
11 time, there isn't a sitting group, there is a
12 framework that others can carry on, much akin to
13 SBIR work that was done. With Tiffany and Steve
14 and others, we were able to pick that up and run
15 with it.

16 So I want us to look at this as not
17 just how do we capture some of the stuff we've
18 been talking about over the past four meetings
19 but how in our communities and our work, see
20 things coming down the pike that we can start
21 creating a place for as we move forward.

22 So I really want to thank everybody in

1 advance for their patience through this process.
2 It will be tedious because there are frameworks
3 and documents and ways they need to be detailed
4 but I ask that we start with a broad opportunity,
5 bringing that which you thinks works and
6 understanding more so, how it works, not what it
7 is and then be able to embed that in our
8 hopefully long living document thereafter, so
9 thank you.

10 MEMBER BAGLEY: How long until then?

11 CHAIR BRADLEY: I'm sorry. I should
12 know but I don't.

13 MR. BUERSTATTE: October.

14 MEMBER BAGLEY: October? Okay.

15 CHAIR BRADLEY: We've got time. We've
16 got time.

17 MEMBER BAGLEY: We do have time. Yes.
18 That's good.

19 Mr. BUERSTATTE: Plenty of time.
20 Plenty of time. So on the note of plenty of
21 documents and some of those details, Eric has
22 been lucky, I think, to contribute out a number

1 of policy developments over the last few months
2 and taking that knowledge and expertise and
3 helped us with some pretty great tools to build
4 off of today, so I don't think it will be too
5 complex. And he'll walk us through that in a
6 second, thanks to his framework really.

7 But any questions on -- before we get
8 -- you know, before we dive into things in
9 general?

10 MEMBER REICHERT: Maybe we could just
11 hear introductions from the rest of the group so
12 we know --

13 MR. BUERSTATTE: Yes.

14 MEMBER REICHERT: -- who else is here.

15 MR. BUERSTATTE: Absolutely.

16 Absolutely. Alex?

17 MS. BUDZ: Hi. My name is Alex Budz
18 and I'm a Presidential Management Fellow.

19 CHAIR BRADLEY: Lucky you.

20 MS. BUDZ: Where are you at Alex?

21 MS. CARTER: I'm at the Consumer
22 Financial Protection Bureau.

1 MR. BUERSTATTE: Pretty dynamic place
2 right now. Lola?

3 MS. FATUNMBI: Hi everybody. My name
4 is Lola Fatunmbi. I am a AAAS fellow supporting
5 National City's Foundation. I support the Civil
6 Mechanical Manufacturing Innovation division in
7 engineering.

8 MR. BUERSTATTE: All right, Lola or
9 Dominique, we're going to need a 30 second or
10 less, what is a AAAS fellow?

11 MS. CARTER: Sure. An AAAS fellow is
12 a science and technology policy fellowship
13 program. It's sponsored through AAAS, American
14 Association for the Advancement of Science. It's
15 a competitive fellowship much like the
16 presidential management fellowship program and
17 we're disbursed throughout the government areas,
18 legislative, executive and judicial branches.

19 CHAIR BRADLEY: And where are you
20 based at?

21 MS. CARTER: Oh yes. So my name is
22 Dominique Carter. I'm also at the National

1 Science Foundation. I'm in the office of
2 International Science and Engineering in the
3 office of the director.

4 MR. LANGDON: And hello again
5 everybody. I'm David Langdon, Secretary's Policy
6 Office here at Commerce.

7 MR. R. SMITH: I'm Ryan Smith. I'm
8 from EDA. I'm the Research and National
9 Technical Assistance coordinator for the
10 Performance National Program Divisions, which
11 shares this.

12 MR. BUERSTATTE: And we have our
13 transcriber/reporter but real quick, I'll also
14 call out that Lola and Dominique as fellows are -
15 - we connected through one of the AAAS groups, it
16 was the Entrepreneurship and Innovation AAAS, it
17 was affinity group -- So they're interested in
18 finding ways to support some of our work and how
19 it might align with some of NSF's work. So
20 hopefully we can find some ways to plug them in
21 today.

22 So with that said, I know we do have

1 Andrew Reamer coming up shortly. But again, any
2 other questions before we dive into things today?

3 CHAIR BRADLEY: I just want to thank
4 Matt and welcome you for joining us. You won't
5 replace Steve but we're glad you came for him.

6 MR. GOLDFINE: Thank you.

7 MR. BUERSTATTE: Eric, on to the
8 tedium.

9 MR. SMITH: On to the --

10 (Simultaneous speaking)

11 MR. SMITH: All right, so we, I think,
12 maybe three or four meetings ago, went through
13 kind of what -- how NACIE works, what NACIE does
14 and so this is going to be a little bit of a
15 rehash of that. So apologies if that's
16 duplication but I'm going to talk about again,
17 what NACIE does and how we're going to frame the
18 next two days to get to the product that we're
19 looking for.

20 So again, this is our goal. This is
21 NACIE'S goal. This is actually our office's
22 goal. This is what the statute tells us to do.

1 We really need to foster innovation and
2 commercialization and new technologies but
3 really, kind of our ultimate goal is economic
4 growth. And so our -- what we're trying to put
5 together here is a policy framework that aligns
6 innovation and entrepreneurship and related
7 workforce development that aims to grow the U.S.
8 economy.

9 And so what are some of the sub-goals
10 there that will lead to that economic growth and
11 this is certainly a noninclusive list. It's
12 something that we should be talking about
13 throughout today's session, throughout the work
14 group sessions later on, throughout tomorrow as
15 we're finalizing this document that we're putting
16 together but we do want to define the goals that
17 we're looking for so that we can figure out what
18 the policy principles are that are going to help
19 us achieve those goals, help us design policies,
20 design programs that result in economic growth.

21 MEMBER BALDWIN: So we can add to that
22 list?

1 MR. SMITH: Yes, absolutely.

2 MEMBER REICHERT: Will we receive
3 these later?

4 MR. SMITH: Yes, sure.

5 (Simultaneous speaking)

6 MR. SMITH: And just to -- it sounded
7 like we had one more just join. Who's that? Did
8 someone just join? All right, we'll carry on.

9 And so I guess one more thing that I
10 just want to highlight here is that our job --
11 that your job as the council is providing advice.
12 You know, as much as we'd like to design and
13 execute programs, I know that many of you all are
14 entrepreneurs are very much doers, we're in the
15 advice business here.

16 So that's -- some of this, I think, is
17 a struggle, even for Craig and I when we start to
18 put together principles like this because we're
19 pretty action-oriented. We want to execute but
20 that's not what our goal here is today. So we
21 really need to focus on the advice part.

22 This week we put together -- this was

1 part of the presentation a while ago. This is
2 kind of how the recommendations flow through the
3 process. I don't want to go through this again
4 but the point I want to make is that we've gone
5 through this process with a couple of
6 recommendations and one way to think about what
7 we're doing today is to provide a framework
8 within which those recommendations can be
9 evaluated.

10 So when Dave and the rest of his
11 policy shop and other parts of Commerce are
12 taking a look at the recommendations that you all
13 have, what are the ways that those
14 recommendations are going to be evaluated? So
15 we're kind of taking what we had done before with
16 respect to kind of pre-targeted recommendations
17 and abstracting that a level up.

18 What are the principles that we want
19 to achieve? What are the goals we want to
20 achieve? How do we evaluate the recommendations
21 that we're going to make so that we can make a --
22 Commerce can make a determination as to whether

1 or not they want to take them.

2 So in the spirit of kind of thinking
3 and being creative inside a box, it's going to
4 take a bit of a constrained approached to this,
5 which I think will help us get to the result
6 we're looking for in, you know, the next pretty
7 limited amount of time we have over today and
8 tomorrow morning.

9 And so we're going to put together
10 this principles document and Craig, if you want
11 to hand it out.

12 MR. BUERSTATTE: Yes.

13 MR. SMITH: There are -- we've got
14 some handouts here that you can all take a look
15 at but essentially what we're looking for is a
16 number of principles that take this form. I
17 think it's probably worth taking a look at the
18 example but really what we want to get to is --
19 for each of these high level principles, four to
20 six bullets that describe the principles around
21 which we're going to evaluate potential policies,
22 potential programs that this administration and

1 the department might want to deploy.

2 Sorry. And so what we're going to get
3 to at the end and we'll hand these out also for
4 you to look at -- Pass those down. So, you all
5 have seen a recommendation. We've sent a couple
6 of those up already. Essentially this is going
7 to be a letter so we're looking for some sort of
8 cover material. We're going to give some
9 context.

10 And what I'm handing around now, this
11 is a rough draft that I put together that I think
12 we should hack at over the next eight hours of
13 meeting time or so but really what we want to
14 focus on are the policy framework on the back
15 page of this, which is getting to these three
16 areas that we're focusing on; innovation,
17 entrepreneurship and work force development and
18 what are the, you know, what are the four, five,
19 six most important principles that this
20 administration should be looking at and the
21 Department of Commerce should be looking at when
22 it's taking into consideration what new programs

1 and policies it's going to put forward.

2 So I think we'll take a minute to look
3 at that and I guess the one thing I'll say is
4 that all parts of this are modifiable. Okay?
5 That -- this is coming out of my head alone and
6 what we want is for this to come out of all of
7 the council's, you know, combined brain power.

8 So take a minute to look at that but,
9 you know, I think it would be good now to have a
10 discussion about the approach, answer any
11 questions you all have about what we're going to
12 do over the next couple work group sessions and
13 how we're going to get to a final product on
14 Friday.

15 MR. BUERSTATTE: Adding a little bit
16 of background on tomorrow, similar to what we've
17 done before, today is kind of our roll up the
18 sleeves, let's work through some design and
19 framing ideas. Hopefully getting to a decent
20 rough draft and then tomorrow coming back as a
21 full council allowing all of us an opportunity to
22 collaborate and bring that rough draft to a final

1 draft by the end of the morning.

2 MR. SMITH: Yes, so I'm going to be
3 your scribe and synthesizer. We're going to take
4 tons of notes. Craig and I are going to be very
5 active listeners throughout these work group
6 sessions. We're going to be asking a lot of
7 questions to kind of get your thoughts and to
8 figure out how to exact -- get to the right level
9 of abstraction here and tonight and then tomorrow
10 at the midpoint of meeting, we'll be taking all
11 that feedback and kind of synthesizing it into a
12 draft that you all will be able to approve. Yes,
13 sorry. Melissa.

14 CHAIR BRADLEY: So I just wanted to
15 offer a frame and then ask a question around
16 process. So we have an hour about, so I just
17 recommended 20 minutes brainstorm because I don't
18 want us to feel constrained by I like this where
19 we have to be but I don't want us to start here
20 because I feel like people may just think too
21 narrowly.

22 MR. BUERSTATTE: Yes.

1 CHAIR BRADLEY: Depending on where
2 we're trying to go and then reverse engineer, do
3 examples, et cetera. I would send so 20, 20, 20
4 --

5 I would tends tomorrow use
6 wordsmithing or even some of you. The question
7 is when we switch, do you want the second group
8 to start from scratch or do you want us to
9 reflect upon what's up there because it says new
10 group discussion. Don't want to overread.

11 MR. SMITH: Sorry. Yes, reflect upon
12 what's up there.

13 CHAIR BRADLEY: There. Okay, got it.

14 MEMBER REAMER: I have a question and
15 then I brought some handouts that I've written
16 myself that relates to this. So I'll just pass
17 it out.

18 So you may have touched on this. I'm
19 sorry I'm late. Let's say, you know, we come up
20 with something. We're all really happy with it.
21 We vote. We approve it tomorrow and it goes to
22 the Secretary and the Secretary's going to say

1 wow, this is terrific. But what's the -- what's
2 the best case? Then what happens? What are
3 people doing?

4 MR. SMITH: So I think in the best
5 case that -- so the feedback that we got when we
6 provided some of the specific recommendations
7 were, these are great. We don't know necessarily
8 how they fit into the broader context of
9 innovation entrepreneurship policy. So what this
10 does is provide that context. So essentially
11 we're trying to provide a framework, instead of
12 principles that will allow more specific
13 recommendations, either from NACIE or from other
14 bodies to be evaluated in the broader context of
15 the administration policy.

16 MEMBER REAMER: So it sounds like the
17 purpose is not necessarily broader than NACIE, at
18 least initially, it's really to kind of grease
19 the -- to facilitate the consideration of more
20 focused recommendations from us because we're
21 giving you notes and context.

22 MR. SMITH: Yes. But I do think that

1 there's a broader utility for this type of
2 framework.

3 MEMBER REAMER: Right. Okay.

4 MEMBER STEVENSON: Can I ask a
5 question? This is Tiffany. I know that Heather
6 and Andrew and I think that was Andrew who was
7 just speaking, started to work on some of the
8 sort of, like what is our purpose and mandate.
9 Is there anything that we could leverage from
10 that, that might enable this work?

11 MEMBER REAMER: It's been a year but
12 my memory is that we really talked about process,
13 not substance.

14 MEMBER STEVENSON: Okay.

15 MEMBER REAMER: It was about how to
16 develop a strategy around innovation and
17 entrepreneurship.

18 MEMBER STEVENSON: Okay.

19 MR. BUERSTATTE: Tiffany, this is
20 Craig. I'll also add that we have the benefit
21 now of a year's worth of policy priorities and
22 executive orders and other actions by the

1 administration to better inform us.

2 MEMBER STEVENSON: Okay.

3 MR. BUERSTATTE: So that initiative or
4 process we started with our own ideas, taking and
5 including work from the prior council. I think
6 right now we want to and Melissa, you made this
7 point nicely, thinking about how we can frame
8 some of our ideas in a broader policy framework
9 while also, maybe most importantly touching and
10 hitting on the aspects that are clearly
11 priorities and the messaging coming from the
12 White House and coming from the Secretary. So
13 for the top down, while considering our own
14 personal expertise and knowledge and the prior
15 work.

16 MEMBER STEVENSON: Cool, thank you.

17 MEMBER REAMER: Can I hand out the --

18 CHAIR BRADLEY: Yes please.

19 MEMBER REAMER: Because my day job is
20 actually to think about this stuff and I've
21 written things so this, just for people's
22 reference. MIT has an Innovations journal and in

1 December, there was one on policy design --
2 innovation policy design so this is toward the
3 U.S. competitiveness strategy and my image is
4 that innovation, entrepreneurship and workforce
5 development are all in service to the ability of
6 U.S. based firms to compete and build the
7 markets. I mean that essentially what drives the
8 economy. So this is a seven page discussion of
9 how the federal government might organize itself
10 around competitiveness.

11 Then for the innovation -- Rob
12 Atkinson's group, the Information, Technology and
13 Innovation Foundation, it was like seven or eight
14 years ago I wrote a piece on innovation policy
15 called "The Eyes Have It" because there are like
16 institutions, individuals, innovation,
17 immigration, international markets and so forth
18 all play a role in innovation. So there's that.

19 CHAIR BRADLEY: Thank you.

20 MEMBER REAMER: And the -- in the
21 realm of workforce, I think I mentioned I'm on
22 the Workforce Information Advisory Council, which

1 is a congressionally mandated entity like NACIE
2 is, reporting to the Secretary of Labor around
3 the idea of the federal government seeing the
4 availability of information for people in labor
5 markets; workers, students, employers, educators,
6 so everyone can make better decisions about how
7 many -- what -- how many people are needed for
8 what kinds of training by location? What are
9 employers looking for? If you're 17 years old,
10 what careers that your interest and -- So we just
11 last Thursday approved the set of recommendations
12 to go to Secretary Acosta and I brought the short
13 version of that.

14 (Laughter)

15 CHAIR BRADLEY: So I would just
16 encourage us to use as resource documents --

17 MEMBER REAMER: Yes exactly.

18 CHAIR BRADLEY: -- opposed to carry-
19 overs. So for example, we should look at their
20 recommendations as a resource --

21 MEMBER REAMER: Oh, exactly.

22 CHAIR BRADLEY: -- of what's really --

1 MEMBER REAMER: Yes. No. Entirely.
2 It's not for you all to be adapting. It's just
3 FYI.

4 CHAIR BRADLEY: I didn't think you
5 were saying --

6 (Simultaneous speaking)

7 MEMBER REAMER: And there may be
8 synergies here on workforce. You can see what
9 the WIAC is up to and you may want to second
10 that.

11 CHAIR BRADLEY: You need a reading
12 list. You need like a pre-reading list --

13 MEMBER REAMER: Yes.

14 (Simultaneous speaking)

15 MEMBER REAMER: Okay. So there's
16 that. And then it -- so it turns out that
17 Secretary Acosta co-authored with Virginia Foxx
18 who is the house chair of The Committee on
19 Education and Workforce about the importance of
20 addressing what they call the career awareness
21 gap that people in high school don't know what
22 their options are because everyone's pushing them

1 to go to college. So that was an important piece
2 of context for the WIACs work and it's a one-
3 pager.

4 And then lastly, for the Lemelson --
5 The Lemelson Foundation is a foundation whose
6 mission is to promote invention and they
7 distinguish between invention and innovation.

8 CHAIR BRADLEY: Yes, they do.

9 MEMBER REAMER: And they want to
10 understand what are the factors that drive
11 invention. So they hired me to do a literature
12 review around the fact of the drive invention and
13 as part of that work, I developed a dashboard for
14 the U.S. regarding the factors that drive
15 invention and it's -- this is 27 -- Everything
16 else I handed out is short. This is 27 pages so
17 I just brought enough copies to sit wherever the
18 innovation group is going to sit. I'll just
19 leave them there.

20 (Simultaneous speaking)

21 CHAIR BRADLEY: You would be fined by
22 EPA for all this paperwork.

1 (Simultaneous speaking)

2 MEMBER REAMER: Thank you for
3 indulging me.

4 MEMBER BAGLEY: Yes, thanks. I think
5 maybe Melissa would be taking about the end of
6 mine. So it's like so -- I mean, thinking about
7 the use. I mean obviously thinking about our
8 recommendations and kind of like using it to put
9 evaluation on the recommendations but then I
10 think about is it the right way to think about it
11 or at least to fuel it to think about
12 government's work and what they do, right?

13 So the Trump administration will put
14 forward a budget. You would assume that there
15 would be some programs in there so it's how do we
16 best spend money when it comes to the categories
17 that we care about as NACIE, right? So like
18 thinking about -- I guess I'm trying to think
19 about like last time when we were with some of
20 the White House people, they were thinking well
21 what do we convene around, you know, and what are
22 some of the topical areas where we convene so

1 they have convening power. They have, you know,
2 power to at least invest programs.

3 CHAIR BRADLEY: I think it's looking
4 at it where our recommendations can be enabled by
5 --

6 MEMBER BAGLEY: Right.

7 CHAIR BRADLEY: -- the administration
8 at large but I like to think there's a budgetary
9 piece --

10 MEMBER BAGLEY: Yes.

11 CHAIR BRADLEY: -- recognizing it will
12 be user support, recommendations and outbound
13 programs. There's the convening piece. There
14 could be legislative pieces.

15 MEMBER BAGLEY: Right.

16 CHAIR BRADLEY: So yes, I think that's
17 a great way to look at it.

18 MEMBER BALDWIN: I really like this
19 framework that you've put together.

20 MEMBER BAGLEY: Yes.

21 MEMBER BALDWIN: It resonates, you
22 know, innovation. This will lead to this and you

1 know, we were about to say let's start
2 brainstorming and I immediately thought about why
3 isn't there a national stamped curriculum for
4 innovation as a science. And honestly, I've been
5 doing innovation since 2001 and I'm so tired of
6 people thinking innovation is creativity and only
7 using brainstorming.

8 I can give you a list of ten schools.
9 Brainstorming is not even on it or in that green
10 space. You know, these are scientific methods
11 that you can use to help how your brain works.
12 There's so many of them. Some of them even come
13 from lean manufacturing.

14 But how many people out there know
15 anything other than brainstorming because there
16 is no national framework or curriculum that says,
17 you know, you can follow this for an engineering
18 track. You can follow this for life sciences
19 track and these are the tools that overlap.

20 MR. BUERSTATTE: So let me translate
21 what I'm hearing to hopefully help the team work
22 through this quickly and set ourselves up for

1 deeper dives.

2 When I think about an innovative
3 mindset and enabling our workforce or students in
4 exactly what you described, I'm thinking about
5 21st century skills. I'm thinking about a
6 trainable workforce versus a trained workforce
7 and those are the types of principles that we
8 want to be talking about at a very, very high
9 level and I don't think that's exclusively
10 education, what you were talking about but I do
11 think education in general and those concepts if
12 we just quickly shared ideas should be
13 consideration in our workforce development
14 principles.

15 So for starters, maybe we could start
16 the conversation, about 20 minutes or so around
17 this workforce piece and both what are some of
18 the themes and principles that we think should be
19 considered and then getting to perhaps a good
20 point where we have some ideas to dive into
21 further in smaller groups afterwards.

22 CHAIR BRADLEY: But I will say

1 thinking, going back to the framework, you know,
2 if there's a budget, there's regulatory. There's
3 convening. There's guidance and standards. So I
4 think in the brainstorming, I'll stick with
5 Esther, that there needs to be a curriculum.

6 The reality is the government will
7 never do a curriculum. That's not its role but
8 it could create a grant program -- a competitive
9 grant program. It could come up with standards
10 informed by convening of those who hire to say
11 how do I reverse engineer? Who should be sitting
12 there? And there's a recommendation around
13 creating standards of curriculum that gets
14 disseminated.

15 So we've got some options there but I
16 want to make sure that in the end if you don't
17 see curriculum, there's no disappointment.
18 There's a recognition that, that's not what the
19 government does. But it can create the
20 environment through funding, through standards,
21 through convening executives to help them have a
22 partner in the community do that. Does that

1 help?

2 MEMBER BALDWIN: It does but I see it
3 as a huge gap.

4 CHAIR BRADLEY: Oh, I don't disagree
5 with you. I just -- but tomorrow, right, when
6 Eric's transcribing and he comes back and you go
7 -- not you, someone says where's my curriculum?
8 It will be there. It just won't say create a
9 curriculum.

10 MEMBER BALDWIN: So under innovation
11 fund, a study to identify the best innovation
12 practices --

13 CHAIR BRADLEY: Convene a group of --

14 MR. SMITH: I think that's initially
15 too narrow. So like we -- I think that's what
16 we've been doing and I think --

17 MEMBER BALDWIN: Right.

18 MR. SMITH: -- and I think what we
19 need to come up with is a set of principles or
20 targets where if somebody's looking at your
21 recommendation to somehow create a innovation
22 curriculum, how do I evaluate whether or not we

1 should put that in the budget or whether or not
2 we should create that program in Commerce. So
3 what are the -- what are we looking for with
4 respect to, you know, these three categories of
5 what the goal of economic growth broadly in mind?
6 What are we looking for that we can kind of score
7 that recommendation?

8 CHAIR BRADLEY: So carry that on to an
9 example here.

10 MR. SMITH: So --

11 MEMBER BALDWIN: So could I use
12 diversity and inclusion as an example because
13 you're not going to get innovation unless you put
14 a diverse group of people --

15 (Simultaneous speaking)

16 MR. SMITH: Yes. I -- you know,
17 here's one example but I think where this is one
18 principle, like resilient and so we're looking
19 further into entrepreneurial, innovative local
20 economies that capitalize on opportunities,
21 increase the participation of under-represented
22 groups. It's the same long-term goal.

1 So if I'm looking at your
2 recommendation to create innovation curriculum, I
3 can take a look at this principle and say, all
4 right well, if you're recommendation to create
5 that curriculum is going to, you know, result in
6 increased participation of under-represented
7 groups, then it's somehow going to help -- you
8 know, if you can make the case for this, then I'm
9 going to now be more likely to say yes, I want to
10 pursue that recommendation.

11 Or if it doesn't, I can say no, I
12 think that's unrealistic. It's not actually
13 going to reach any -- it's not going to hit any
14 of these goals. I don't think that's going to
15 be, you know, the needs of -- I don't think
16 that's going to reach our goals, so I'm going to
17 say no to that recommendation. It's like a many-
18 factored test, right? This is one example of one
19 principle.

20 MEMBER BAGLEY: I was thinking about
21 like, and I was trying to think through frame of
22 different programs and you know, other things and

1 I don't have exactly frame because you've spent a
2 lot more time thinking about it but when you
3 think about like entrepreneurship, let's say
4 programs, like one of the things that I think has
5 been challenging is the heavy burden that it puts
6 on the organizations like the government puts
7 through like all the detail of regulatory like
8 feedback, the reporting, you know, so it doesn't
9 allow for it to be so nimble so I'm not sure how
10 to state that fact in like a recommendation.

11 But as you're looking at things, you
12 know, looking at is there a path to kind of
13 reducing the burdens of government? I was
14 thinking about like these localities. Again, I'm
15 trying to figure out how to flip it to a
16 recommendation but does that make sense?

17 MR. SMITH: No and I think that like -
18 - that is a principle, right? Like low burden --

19 MEMBER BAGLEY: Yes.

20 MR. SMITH: Something like that.

21 That's a principle so --

22 MEMBER HERSKOWITZ: Yes. I know that

1 the CAE, I couldn't hear if somebody from CAE was
2 there --

3 MR. BUERSTATTE: Not today, Orin.

4 MEMBER HERSKOWITZ: Okay. So, but I
5 do know that one of things they're looking at
6 hard is the reducing barriers to accessing early
7 stage capital. They've been talking to the SEC
8 about this as well. So anything from the crowd
9 funding end on the early side to reduce new
10 regulatory burden for IPO filings on the later
11 end --

12 MR. BUERSTATTE: So I'm going to be --

13 MEMBER HERSKOWITZ: -- essentially
14 trying to get government out of the way.

15 MR. BUERSTATTE: I'm going to be the
16 bad cop and say that something as granular --
17 You're getting really warm. But something that's
18 granular as crowd funding regulations, that is
19 even too, almost too specific I think. But
20 you're both -- you and Rebecca are on to
21 something with respect to decreasing barriers and
22 regulations in general.

1 That is a high enough level and I love
2 what you said Rebecca, about it's clearly the
3 administration's priority already and with that
4 in mind, how can we embrace cutting the red tap
5 as they've said, decreasing barriers to markets
6 and so on and so forth and cover that idea or
7 concepts in a way that reflects pointing --
8 pointing at the example that Eric provided on the
9 local leadership, local commitments, something as
10 high and aspirational as that.

11 MEMBER KENNEY: So one thing I think
12 about workforce development and innovation is
13 that it feels like a lot of times there's this
14 huge lag; sometimes years, sometimes decades
15 between when the needs are starting to emerge for
16 new talent in a certain area and the sector who
17 needs it has the maturity to have a voice for
18 what those needs are.

19 The tech industry as a whole didn't
20 really have a presence here in Washington until a
21 few years ago, you know, but these are companies
22 that, you know, have been around for decades and

1 if I look at where the vast job growth today is
2 and over the next ten years, it's from companies
3 that don't really have the capacity without some
4 other organizing framework or somebody to kind of
5 extract it from them to participate and engage to
6 ensure that workforce development needs are --
7 and I would argue that is this cutting edge or --

8 (Simultaneous speaking)

9 MEMBER KENNEY: -- and tells that 50
10 year old company now, right? And their, you
11 know, their company's doing new energy technology
12 and new health technologies and you know, are the
13 ones that are creating the most jobs over the
14 next ten years and you know, they're not -- I
15 don't know that -- I don't know how to capture
16 that so I think that one of the principles might
17 be finding a way to sort of identify workforce
18 needs earlier.

19 MEMBER BALDWIN: It's happening right
20 now with artificial intelligence. If you look at
21 who is actually training people to deliver those
22 jobs globally, you'd probably be shocked at where

1 the boot camps are happening and where the
2 centers of excellence are happening.

3 All the groups that I belong to are
4 the majority of people that are taking Udacity,
5 Coursera, they're all in Southeast Asia,
6 Pakistan, India and the Middle East and the
7 students that are engaging on those boards and
8 helping each other, very few Americans.

9 CHAIR BRADLEY: So with that in mind,
10 do you have a sense of how many principles we
11 should go for? Because I think we're good at
12 programs. We're good at activities but you're
13 taking us up a level. So if they're to guide all
14 the things that we would love to see three, five,
15 ten.

16 MR. SMITH: Yes. I mean I think
17 roughly kind of in each category, three, four to
18 six. I mean, I think it is going to depend a lot
19 on the discussion but I think, you know, a
20 relatively small number for each category. I
21 think one of the things that we'll do in the
22 second session is identify where there's some

1 overlap.

2 MEMBER BAGLEY: Well I was going to
3 say, there's a possibility that there's some
4 guiding principles, right? And then there's some
5 category principles.

6 MR. SMITH: Yes.

7 MEMBER BAGLEY: Things that might be
8 overarching to all three or --

9 MR. SMITH: Absolutely.

10 MEMBER W. SMITH: This is Whitney. I
11 just wanted to chime in on the workforce
12 development principles. You know, obviously this
13 is like not a new topic about how, you know, how
14 the federal government should think about
15 investing in more courses and I feel like the
16 four principles that are most often talked about
17 are federal investments should be addressing a
18 market failure.

19 So we've heard a couple of examples
20 already about needing intermediary capacity,
21 which is often an unfunded kind of activity that
22 brings together employers and, you know, emerging

1 employment needs with the provider system.

2 The second is kind of related, you
3 know, that it's actually demand-driven.

4 The third is that it's addressing some
5 kind of racial and economic equity goals.

6 And the fourth is that you scale what
7 works, which means you need to have a system of,
8 you know, data and evaluation.

9 I guess I -- you know, we could
10 debate, there are probably others or you could
11 frame these differently but I'm a little stuck on
12 the exercise of, you know, there have been
13 several activities that have led to similar
14 principles to guide DOL over the years. Is this
15 -- again, I just want to make sure that I'm
16 thinking about this the right way.

17 If we narrow these principles on
18 workforce development, that will then guide any
19 recommendation that NACIE 3.0 or 4.0 puts forth.
20 They will kind of run it through the trap like do
21 these meet the core principles? And also the
22 actual administrators of these programs with

1 encumbers?

2 MR. BUERSTATTE: No. Not necessarily.
3 It certainly can be used a tool for NACIE 3.0 and
4 future councils, as well as the agency overall.
5 However, I wouldn't look at this as a
6 prescriptive framework but rather a guiding star.
7 Something that we can use as a tool, as well as
8 the Secretary, his team and hopefully others as
9 well, White House Domestic Policy Council and
10 others that are actively considering
11 entrepreneurship innovation policies.

12 This is really -- came about because
13 we had a hard time making a case of how our
14 specific proposals on programming or funding or
15 regulations were going to support the
16 administration's priorities. So while we want to
17 frame this with our own expertise and efforts and
18 mind, again this needs to be a framework that
19 embraces the priorities and initiatives that we
20 know of and are aware of from the administration
21 from Commerce.

22 MEMBER BALDWIN: So the word framework

1 keeps coming up and I don't know the answer to
2 this but has there been research that -- along
3 the lines of Carnegie-Mellon's Capability
4 Maturity framework that says in the United States
5 for innovation, entrepreneurship and workforce
6 development, you know this is where the ad hoc
7 picture is for managing, funding, building the
8 capability and measuring business value for
9 innovation, entrepreneurship, and workforce
10 development. This is -- we're ad hoc. This is
11 where we have systems in place. This is where we
12 are world class.

13 MEMBER BAGLEY: You went bigger than I
14 was going to go but I was kind of thinking about
15 a piece of that, which is, I mean, innovations
16 like this word that is so broadly defined and
17 also it goes back to kind of along what is it and
18 how do you get to it? Like in here, would it
19 make sense to say, you know, you need to make
20 sure that you're really following the definition
21 of innovation and tagging back to that as you're
22 looking at programs. Not just using it in this

1 like loose context. That's what -- you know --

2 MEMBER BALDWIN: A common definition.

3 MEMBER BAGLEY: Yes. Like the
4 definition of innovation is acts, you know, I've
5 used doing different things and doing the same
6 things differently. It's kind of basic but you
7 know, I mean so -- and everything should tag back
8 to that definition of innovation as a guidepost,
9 instead of just saying innovation because
10 everybody can define that in all different kinds
11 of ways but a lot of times it's not accurate.
12 It's overused. So that's just one subset I think
13 of what you're talking about but --

14 MEMBER BALDWIN: Yes. A common
15 language --

16 MEMBER BAGLEY: -- in lines to your
17 curriculum, I guess. Yes.

18 MEMBER BALDWIN: -- and a where are we
19 -- where does the United States take a gap
20 analysis? Where does the United States need to
21 move from ad hoc to world class?

22 MEMBER BAGLEY: Is it in here

1 somewhere?

2 MEMBER BALDWIN: No. I can share this

3 --

4 (Simultaneous speaking)

5 MR. BUERSTATTE: I think this might be
6 something that we could dig into in particular
7 work groups like, just because we are getting a
8 bit technical here and one concern though is that
9 let's remember the opportunity for this document
10 is to communicate to policy makers, leaders that
11 aren't necessarily experts in the innovation or
12 entrepreneurship field so -- which is another
13 value of staying at a high level, aspirational
14 idea and concept and then using those to steer
15 specific initiatives and programs.

16 So I don't know if I -- maybe I'm
17 misunderstanding a bit but I don't -- I'd be
18 concerned if we go down the road on technical
19 qualifications and --

20 MEMBER BALDWIN: It's more capture the
21 data of the state of the U.S. for these three
22 things. Where are we ad hock? Where are we

1 world class?

2 MEMBER REAMER: And you're suggesting
3 that, that's a principle of action that somebody
4 should do that?

5 MEMBER BALDIN: Yes, capture the data.

6 MEMBER BAGLEY: That is still a
7 recommendation, I guess is what you're saying.
8 Let's capture --

9 MEMBER REAMER: In a way --

10 MEMBER BAGLEY: -- instead of like how
11 do we research the data --

12 (Simultaneous speaking)

13 MEMBER REAMER: The principle is that
14 we should have the data.

15 MEMBER BALDWIN: Okay.

16 MEMBER REAMER: I mean the principle is
17 that the information should be there.

18 MEMBER BALDWIN: Okay. All right.

19 MEMBER REAMER: And then it's a
20 separate question of how you get it.

21 MR. BUERSTATTE: Right. Well, I was
22 going to say Whitney identified that. Sorry.

1 Whitney had a great point. Her fourth point on
2 the workforce, that all workforce initiatives or
3 fourth principle, you know, what works in making
4 sure it's data and evidence driven. So I think
5 we're now on the same page where as far as
6 innovation goes, ensuring that there is -- we are
7 prioritizing as a nation, data and evaluation and
8 comparison so we understand where the gaps are.

9 MEMBER REAMER: Right. A couple of
10 related points around the context in which we're
11 doing this. One thing that was really helpful in
12 doing this thing is that Secretary Acosta met
13 with us and so WIAC was in the same situation as
14 we're in. Right? We were all appointed by
15 Secretary Pritzker and WIAC was appointed by
16 Secretary Perez.

17 We're advising Secretary Acosta so we
18 had -- The Secretary came in and we asked him
19 what are his priorities around workforce
20 information. So that was really helpful. The
21 nice -- the WIAC is doing what NACIE is doing.
22 In some sense it's very non-political in that

1 there are certain principles that I think -- a
2 really positive role that both groups in play is
3 to really help the left and the right understand
4 the common principle. But it was helpful to hear
5 from Secretary Acosta around career awareness
6 gap.

7 We can change the recommendation but
8 we can fit it into his -- and there's a bit more
9 of a vacuum here. I feel like NACIE's been given
10 a blank slate to write -- so this is really just
11 a wish. Going forward, it would be great if we
12 engage with people and have a conversation so we
13 have a better sense of what their needs are
14 regarding -- And I know you guys are doing the
15 best you can to make that happen but it's just a
16 bit of a vacuum.

17 So the second point is what we come up
18 with can be NACIEs or it can be NACIEs and OIE so
19 the question is what's your guys role in this
20 process? Are you going to be part of the
21 brainstorming group here in that we're going to
22 come up with stuff that you can buy into too.

1 You have a sense of ownership.

2 This is OIE and NACIE because OIE has
3 lots of responsibilities that don't involve NACIE
4 or are you just silent strives? That we are --
5 this is a NACIE thing and whatever principles you
6 come up with, OIE can say, like ETA -- ETA is
7 saying these are the WIACs recommendations. Not
8 our recommendations. We're just here to
9 facilitate the process. So it's a question for
10 OIE, are you in, in this process --

11 UNIDENTIFIED FEMALE: Or are you out?

12 MEMBER REAMER: -- or are you still
13 out?

14 MR. SMITH: I think we're straddling
15 that line and so far it's going to be NACIEs
16 product. NACIE is going to be the owner but we
17 are there not just to write down what you're
18 thinking but also to kind of help you translate
19 it into, you know, what we know about the
20 priorities here.

21 MEMBER REAMER: Right. But that's
22 being -- that's your being a facilitator, which

1 is separate from your own opinion about what
2 should be in something.

3 MR. SMITH: And that's what we're
4 doing, I think.

5 MR. LANGDON: I've got to say, Craig
6 and your staff, I mean, I think this framework
7 and the document here, pretty accurately reflects
8 bias we received at a pretty high level
9 Secretary's office around framing principles that
10 would be useful to our Secretary in the White
11 House. These are based on feedback that they've
12 brought on what policy process is at both the
13 White House level and the Commonwealth. So I
14 think and this is not really going into a vacuum
15 kind of document and this actually reflects the
16 stated needs of the leadership we have and are
17 doing.

18 MEMBER BALDWIN: So let's try it.

19 MR. BUERSTATTE: Yes. I was just
20 going to offer that while your question on will
21 we have an opinion on it? Our opinion will
22 reflect -- will absolutely reflect what we've

1 learned from the leadership engaging last year.
2 So while we have yet to meet directly with
3 Secretary Ross, you know, I can assure that we've
4 got a library of knowledge and insight on what
5 they're working on and what they would like to
6 see.

7 So we will do our best to translate
8 that as efficiently and effectively as possible
9 because it is a very -- when you're operating at
10 this level, it is hard to capture specific
11 tangible ideas and going back to what Eric said
12 about a group full of action-oriented people,
13 well Craig how does this help us move this
14 funding program or break down this regulatory
15 barrier? It is a challenge to operate at this
16 kind of obtuse level but we'll certainly help
17 with the opinion of the administration and get
18 you guys through today.

19 CHAIR BRADLEY: I would also state
20 now, I guess we all have them in our email but I
21 felt like we did get some -- I don't want to say
22 -- call it guidance, but signals at the last

1 meeting --

2 MEMBER REICHERT: Plus we just had a
3 whole bunch of stuff to read too.

4 CHAIR BRADLEY: And we did -- right.
5 All those other pre-reading materials so I don't
6 -- I guess I just want to say because I think
7 there's lots of paper. I think -- I don't -- I
8 think you should have a line, but most
9 importantly your resources to us. I think it's
10 exciting to have a blank slate. I think -- and
11 also -- I mean, I'm with you. Like this stuff is
12 challenging because we all want to go and I defer
13 to whoever's facilitating each room, I'd like to
14 keep a list of all things we want and then
15 realize what's the framework that ultimately
16 those could fit in moving forward and not get
17 stuck on -- because I feel like a few times we
18 were trying to figure out like how do you get
19 innovation to be a principle or that definition,
20 which that's one of the things we want.

21 I think that's what we can count on
22 expertise to say these four things actually all

1 could be accomplished through this larger
2 principle but I don't want us to get so stuck at
3 a high level that we feel like anything we truly
4 believe in is left out if that makes sense but I
5 would also use all the documents you guys sent
6 because there was a lot of stuff.

7 MEMBER BAGLEY: So when you say, I
8 mean, Whitney laid out some very specific things
9 in workforce that sounded like to me like they
10 were principles

11 (Simultaneous speaking)

12 MEMBER BAGLEY: -- program's not so
13 maybe that might be a good place to start to see
14 if we agree that those are the principles and
15 where did they come from, Whitney?

16 MEMBER W. SMITH: I mean, I just kind
17 of listed them from my head but it's from many of
18 these similar type efforts --

19 MEMBER BAGLEY: Okay.

20 MEMBER W. SMITH: -- I feel like those
21 are the ones that kind of emerge and Andrew,
22 you've been in workforces, you know, longer than

1 me so feel free to weigh in and modify or add or
2 whatever.

3 MEMBER REAMER: You did great.

4 MEMBER BAGLEY: Well, and I was
5 thinking actually that's a good thing because I
6 wasn't sure if you were taking exact
7 recommendations from one thing but if it's
8 actually from your head and from your expertise,
9 then I think that's better.

10 MEMBER REAMER: The fact that Whitney
11 could just -- could enunciate them on the fly
12 suggests it's really developed as a consensus
13 among people working in this field.

14 MEMBER BAGLEY: Right. So there we
15 go. We have our workforce notes.

16 MR. BUERSTATTE: I think you're right.
17 I think they will evolve over the next couple of
18 hours but I think they're a great starting point
19 for that specific discussion. So perhaps it's
20 time to talk about innovation or
21 entrepreneurship. What are a few good starting
22 points for those verticals. Anyone want to offer

1 up? Take a --

2 MEMBER KENNEY: I'll say one thing,
3 which is, you know, thank you for the links in
4 advance to which went to dozens of articles and
5 documents to read. But one of the ones I found
6 helpful was the R&D priorities, which were --
7 helped give some idea of what, you know, what a
8 starting point would be and I think from an
9 innovation perspective, I think, you know, a lot
10 of innovation can be a natural extension of
11 research work and to commercialization of federal
12 R&D.

13 For example, there's one that's been a
14 priority of this administration, as well as the
15 prior administration and you know, it just makes
16 sense that if we're spending money on research,
17 we should try to help it see the light of day.
18 So that to me is a principle that would make
19 sense, whether it to be some federal effort to
20 ensure that --

21 MEMBER REICHART: Facilitates
22 translation.

1 MEMBER KENNEY: -- federal R&D is
2 exactly, you know, and that the current R&D
3 priorities are aligned with where innovation,
4 translation, commercialization activities are as
5 well.

6 MEMBER REICHERT: I'm sorry. Finish
7 your thought.

8 MEMBER KENNEY: No, go ahead.

9 MEMBER REICHERT: Just to add to that,
10 so what I read in the pre-reading was that R&D is
11 a focus but we want to leave it to the private
12 sector to do the commercialization. And so what
13 I see as a principle is the need to make a
14 connection across --

15 MS. CARTER: Public-private,
16 partnership.

17 MEMBER REICHERT: Yes. Public-
18 private, partnership to be able to connect the
19 private sector and the sources of innovation.

20 UNIDENTIFIED MALE: Yes. That's an
21 excellent point.

22 MEMBER HERZKOWITZ: Yes. You could

1 leverage the -- sort of the common framework that
2 I think the NSF and the NIH have adopted on
3 those. It's the general concept of helping, you
4 know, the most promising and transformative
5 opportunities across the valley of death.

6 So the general concept of trying to --
7 which encompasses, I think, both making those
8 connections but also more than just connecting.
9 It's providing that risk, say, early stage risk
10 capital. It's providing mentorship. It's
11 focusing people on solving real-world problems.
12 Getting customer product market fit. It's like
13 all that stuff that we all preach could be
14 captured that way.

15 UNIDENTIFIED FEMALE: This is not
16 necessarily building on that so if anybody -- So
17 I think it's along a similar vein but it's not --
18 I didn't mean it to connect exactly to that.

19 Like I've been thinking a lot about,
20 I'll call them 21st century models of doing
21 anything? You know, like I've just been thinking
22 a lot about as we move into our communications

1 work at the university, like what's a model that
2 like disrupts, right? So -- and part of that is
3 -- in that disruption and looking forward and
4 again, I'm not sure I'm going to come back to
5 exactly a recommendation but is, you know,
6 there's all of these multiple constituencies that
7 need to somehow be brought to the table, right?

8 And this goes back to your
9 brainstorming comment, you know, in a way that is
10 productively moving things forward and so maybe a
11 principle of something around, you know, that it
12 can't just have sort of one constituency group
13 involved or something. You know, that in order
14 to facilitate innovation, you need diversity and
15 I don't mean -- you know, I mean the biggest
16 definition of diversity possible, of stakeholders
17 coming to the table.

18 So something around that, you know, in
19 order to be disruptive, it can't just be. Not
20 normally -- I mean there's some cases but it
21 can't just be someone sitting in a box, you know,
22 I mean, it's that integration of things that

1 becomes disruptive.

2 MEMBER JOHNSON: So I think David's
3 comment, which is help these ideas see the light
4 of day, in my mind, that's the area to focus. So
5 on the SBIR awardees in Kentucky that we work
6 with, the type of person they are, they're most
7 likely not going to scale that technology so we
8 started educating them on what starting a
9 business is going to be like.

10 We're also focusing in to sort of get
11 more control on the investment side on ones that
12 we believe are scalable so we can come in and
13 really sort of exert a level of control that get
14 to an ownership position. But still, the -- I'm
15 not trying to push my ideas. I think just that
16 framework there, getting the existing spending
17 and the ideas that are out there, that are
18 already developed, helping them see the light of
19 day. I just think that's a wonderful point of
20 view to take.

21 MEMBER BALDWIN: So if we look at the
22 document that Andrew handed out on the George

1 Washington Indicators of Capacity for Invention,
2 patent policies is on there and I think that one
3 of the biggest barriers for adoption for
4 commercialization is the legal framework.

5 You know, we've had a lot of
6 relationships with different universities. We
7 have a lot of National Science Foundation grants
8 and we've ended up in lawsuits galore with
9 universities. And you know, just recently I went
10 to a university. It was my idea. It was a
11 problem that needs to be solved. That's where
12 the value is. Knowing what the problem is in
13 innovation and the university wanted me to pay
14 \$65,000 up-front and sign away the rights to the
15 IP that the student would own the IP and the
16 university would own the IP.

17 Those kind of barriers are barriers to
18 adoption and commercialization. So I think
19 patent policies and IP policies for getting the
20 government's -- they've paid for it, you know
21 getting access to commercialize that is a key
22 thing.

1 CHAIR BRADLEY: So I think going back
2 to a larger framework, right? The themes I'm
3 hearing are public-private partnership, diverse
4 stakeholders and there may be some e.g.'s we can
5 add and maybe not patent policy but barrier
6 reductions or reductions in barriers to entry but
7 framing it around those three, then gives us high
8 enough alternatives, we could think of, and
9 anything else that may come under that.

10 MEMBER REICHERT: Public-private
11 partnerships are very specific things.

12 CHAIR BRADLEY: Yes.

13 MEMBER REICHERT: Moving technology
14 that could be commercialized out of a lab and
15 into the private sector and I would argue there
16 are several models for that work for that but it
17 could be voted.

18 CHAIR BRADLEY: Yes.

19 MEMBER KENNEY: And I think there's a
20 principle about recognizing the differences by
21 technology and by sector that it's easy to sort
22 of lump that capital continuum or the

1 commercialization process into a set of
2 activities and the reality is, you know, software
3 is very different from bioscience, which is very
4 different than medical devices, which is
5 different than agricultural technology, which is
6 different than energy. I mean, there's so many
7 unique differences, depending on the type of
8 hardware involved, the regulatory regime, the
9 markets that they're going into and I think
10 recognizing the uniqueness of those paths.
11 There's not a path. There's a bunch of paths and
12 I think there's a principle around that.

13 UNIDENTIFIED FEMALE: Complexity
14 maybe.

15 MEMBER KENNEY: Yes.

16 CHAIR BRADLEY: So that's like
17 appropriate alignment based on sector, geography,
18 anything else you can come up with.

19 MEMBER KENNEY: Yes.

20 CHAIR BRADLEY: I'm just trying to
21 offer suggestions from a higher level, then all
22 of that would come in --

1 MEMBER KENNEY: Yes. No. I think
2 that's good. Right.

3 CHAIR BRADLEY: -- because I think
4 it's -- there's sectors of all different
5 geography. I think about the conversation we had
6 rural versus urban.

7 MEMBER KENNEY: Yes.

8 CHAIR BRADLEY: Certainly based on
9 what capital is available.

10 MEMBER KENNEY: Right.

11 CHAIR BRADLEY: We've had big
12 conversation around venture capital, not venture
13 capital.

14 MEMBER KENNEY: Yes. The duration
15 right there. The amount of time it takes to
16 commercialize a lot of these things is a big
17 driver as it relates to capital and then the
18 regulatory environment as well.

19 MEMBER REAMER: So I'm thinking of a
20 principle about principle-making. As I listen to
21 you, I realize I like what I'm hearing and the
22 thread I think is if you can think about like

1 what, who and how? Right? You know, so what are
2 the ingredients that are needed for innovation,
3 forefront innovation? And who -- so for
4 diversity, what are the barriers to diversity and
5 then who's going to do anything about it and
6 then, what are they going to -- like what's the
7 how there?

8 So I like staying at the what level.
9 We're not -- you know, it's like so what are the
10 things that are necessary for innovation? Access
11 to capital is another one, you know, IP and all
12 that stuff. So I'm just saying I'm comfortable
13 keeping it at the what level.

14 CHAIR BRADLEY: I'm not harassing you,
15 but I want to make sure that the details are
16 captured in some framework.

17 MEMBER BALDWIN: This looks like a
18 what to me, and I'm willing to try it, the what
19 and then the who and then the how.

20 MEMBER BAGLEY: So like on that --
21 Sorry. I was just thinking about what you were
22 saying and I wrote down does the program or

1 policy consider market drivers and barriers, you
2 know, that are industry-specific, I guess. And
3 so, like something like that or the policy
4 should, you know ... and so that sort of seems to
5 me like it might hit that what level.

6 UNIDENTIFIED MALE: Yes. I
7 think so.

8 MEMBER JOHNSON: So, I don't think of
9 things as urban and rural. I think of them more
10 as big well-funded and small not well funded. A
11 lot of ideas though don't know a path to scale
12 and many of those are not government funded.
13 They're privately funded and so if you want to
14 talk about bringing innovation to the
15 marketplace, how do you help those ideas find the
16 light of day but again, back to what you said
17 David, that's why I like the framework. It's
18 sort of a simple framework here that we're trying
19 to do.

20 CHAIR BRADLEY: But it will have to
21 have an element of a recommendation.

22 MEMBER JOHNSON: Sure and I gave one

1 to you actually.

2 CHAIR BRADLEY: I know you did. I
3 look forward to the group you'll join. What group
4 is that going to be? I'm just kidding.

5 MR. BUERSTATTE: One kind of
6 innovation that Rick, you kind of talked about a
7 little bit with teaching people or education or
8 around business and entrepreneurial mindset and
9 Esther, we had earlier discussion about education
10 and our virtual intelligence even.

11 And then going back to some of the
12 documents we've seen from the administration,
13 whether it's the STEM education principle and the
14 principle but, I guess paragraph in the R&D memo
15 and the executive order around STEM education and
16 just other priorities in modernizing our
17 education process, in particularly around STEM.

18 I wonder if -- with respect to
19 innovation, I wonder if there might be an
20 opportunity to include education around STEM or
21 is that more related to the workforce side?
22 Maybe don't have to argue about it now but wanted

1 to present it since I know it's come up many
2 times around innovation, particularly with our
3 labs and teaching people entrepreneurial mindset
4 and many other discussions around this education
5 piece.

6 MEMBER BALDWIN: I think we're
7 entering a mind blot.

8 CHAIR BRADLEY: It's some, what we
9 started talking about downstairs in terms of the
10 role of educators understanding what are they
11 training for and meeting that need in the
12 marketplace. I don't have a crafting for it but
13 I think it's something that you're correct Craig,
14 will translate across all of these for sure.

15 MEMBER BALDWIN: I think it's a
16 virtuous circle that's, you know, innovation
17 plays a role in entrepreneurship and workforce
18 development.

19 MR. BUERSTATTE: Do we have a general
20 principle then with innovation or is this just --
21 do you feel it's a tie throughout the document
22 and maybe this is something we address tomorrow

1 once we have more players on the board.

2 MEMBER BALDWIN: The way that we talk
3 about innovation is that it's horizontal and it
4 goes across all of the verticals. It's like
5 safety. It's like quality and so it's almost a
6 discipline that you can measure, you can manage
7 and it goes horizontally across every part of the
8 company from supply chain to shipping.

9 And it's unfortunately that Heather's
10 not here because the IDEO model for innovation is
11 excellent and then if you look at Larry Keeley's
12 research, where you get the highest ROI from
13 innovation, he's defined ten types and people
14 tend to focus on product and they invest mostly
15 on product and it has the lowest return. The
16 highest return is in financial innovation or user
17 experience and so, you know, the -- I see
18 innovation as being horizontal but it's within
19 entrepreneurship. It's within workforce
20 development that it can support both of those.

21 MEMBER BAGLEY: I totally agree but I
22 think like when we're thinking about federal

1 government, I think we miss an opportunity if we
2 don't pull it out and define some what's around
3 it because I just think that there's a very lack
4 of understanding of it and so if you just embed
5 it into other things, I think you miss an
6 opportunity.

7 MEMBER BALDWIN: I agree. It's like
8 when you start a new culture. Like when we
9 started the culture of quality, it takes the
10 President, the CEO and a lot of resources and
11 then over time it becomes part of the culture and
12 you can ramp down those resources and it becomes
13 embedded. So yes, I think having a focus on it
14 in the beginning is good.

15 MR. BUERSTATTE: My guess is we'll be
16 able to have a more fruitful discussion tomorrow
17 on this and on those ties and similarities,
18 what's coalescing the entire document and it will
19 be easier once we have a better understanding of
20 what's out there and how we can bring it all
21 together.

22 So on innovation though, I want to

1 validate that we've got a number of bullets,
2 concepts, ideas. Let me know what I'm missing
3 because I think we should again agree on some
4 starting blocks for this discussion heading into
5 later in the afternoon.

6 So innovation, talking about public-
7 private partnerships and the importance of that,
8 both in -- not just capital side, as well as the
9 commercialization side.

10 Diversity, very broadly there. Legal
11 frameworks, barriers, IP, there's a lot to unpack
12 there.

13 The capital continuum. How do we
14 unlock efficient paths to commercialization in
15 different regions, different types of investment
16 markets, different stages? What am I missing?

17 MR. GOLDFINE: I would just throw out,
18 I think the public-private partnership by having
19 a larger kind of principle of collaboration that
20 might go beyond just the public and private into
21 a principle evaluating cross-sector, cross-
22 vertical collaboration and just a larger

1 collaborative principle is key.

2 MEMBER BALDWIN: I agree because once
3 you get a cross-sector, you've got the diversity
4 that you need to make breakthroughs.

5 MEMBER BAGLEY: One thing that I'll
6 say about what -- about the sort of consider --
7 well, I've been in programs and policies I
8 consider market drivers and barriers and I think
9 you framed it a little bit differently, which is
10 totally fine but I think that -- I'm not sure
11 whether that's an innovation or an
12 entrepreneurship so at some point, we might want
13 to decide. I mean it could be with large
14 companies so I was debating in my own head about
15 that but I think there's an entrepreneurship
16 principle too when you're actually like moving
17 through start companies.

18 MEMBER BALDWIN: Have any of you read
19 the book, Blueprint to a Billion by David
20 Thomson? So he did research on the companies
21 that have made it to a billion and he put a
22 blueprint of framework together that said, these

1 -- this is what the ingredients were for the
2 companies that were successful and I've only been
3 involved other than my first job, I've only been
4 involved in entrepreneurship within Intel and I
5 looked at that framework that he put together and
6 every single failure that I was part of was
7 missing an ingredient from his blueprint. And it
8 might be worthwhile looking at that for the
9 entrepreneurship section. Like is there anything
10 in that framework that could be utilized?

11 MR. BUERSTATTE: That's true.

12 MEMBER BALDWIN: Blueprint to a
13 Billion, Dave Thomson, without a pay.

14 MEMBER REAMER: A couple thoughts.
15 One is that I don't think people saw it, there
16 was an Equality of Opportunity project that has
17 been right out of Harvard, but the people at
18 Stanford are really actively involved in it and
19 there's this quote. I don't know who said it but
20 it's a great quote about, How many Einsteins
21 we're not producing in this country because of
22 the lack of diversity of access to the resources

1 needed to be innovative.

2 And they're starting to quantify how many
3 Einsteins we have but we're not creating. So I'm
4 just -- it's not for the reports, it's just the
5 context.

6 In terms of a couple principles I
7 think tie some of this together; one is
8 synergies. I really like the view about the
9 collaborative stuff so it's like how can you make
10 $2+2=8$? How can you bring people -- how can you
11 reduce the barrier so that people from different
12 parts of the economy, private-private
13 partnerships, let's just say, can get together
14 and then the synergies develop and that's part of
15 your world at your university.

16 And then the other -- the flip side of
17 that is reducing transaction costs. That once
18 you have ideas through the synergies, that you're
19 not stymied and bringing it to market because
20 you're getting sued or because he can't get
21 access to capital.

22 MEMBER BALDWIN: And you know, the

1 patent law, the recent change for first to file,
2 that's a big game changer for the United States
3 and I'm not sure how that translates to, you
4 know, our competitiveness as a nation but I think
5 that it would be good to have a discussion around
6 getting people help to be the first to file
7 faster because there's engine's ramping up around
8 the world that are aware of that.

9 And then the other thing that, you
10 know, you pointed us to the research and
11 development link and our philosophy is that
12 anyone can innovate and that if you give them the
13 tools and the curriculum, anyone can do this and
14 the people that are most resistant to that are
15 the incumbent innovators.

16 They are the research and development
17 departments. They are the people that have PhD's
18 that are already innovating and so I think it
19 would be very powerful if we could, as part of
20 the inclusion, look at which of the universities
21 and they are out there, there's some of the --
22 which of the universities are doing research at

1 the undergraduate level and they're helping their
2 undergraduates differentiate themselves in the
3 job market because they are doing that.

4 It's too bad that our friend, Mr.
5 Womack is not here because some of the
6 traditionally black colleges are doing this to
7 differentiate their students.

8 And so the incumbent innovators don't
9 want everybody to innovate. You know, this is
10 how they differentiate themselves. And support
11 of research at the undergraduate level will help
12 university students get jobs and especially
13 American students because many American students
14 cannot afford to go to graduate school.

15 Our graduate schools are full of
16 foreign students. So they come out with a
17 master's degree and they're able to differentiate
18 themselves because they have a master's degree
19 and the bachelor's kids don't but if those
20 bachelor's kids have research in their
21 curriculum, they have a better chance of getting
22 the jobs.

1 CHAIR BRADLEY: So what is the role of
2 government now? Only because I heard you talk
3 about Chad, but he is not engaged them in
4 privately funded, so I'm curious.

5 MEMBER BALDWIN: So right now, we tend
6 to give grants to graduate level programs. How
7 do we get research into the undergraduate and
8 even into community colleges? If you believe
9 that anyone can innovate, but it's not the
10 incumbent innovators --

11 CHAIR BRADLEY: Got you.

12 MEMBER BALDWIN: -- then you can
13 spread that.

14 CHAIR BRADLEY: So a principle may be
15 -- tell me if I'm wrong, it could versify funding
16 or support grant programs across K-18 or multiple
17 grade levels or something like that. So I'm
18 thinking about some of the stuff you've talked
19 about, going all the way back to elementary,
20 junior high and high school. But I want to be --
21 but I want to check it if that's --

22 MEMBER BALDWIN: You can't get a high

1 school degree in Costa Rica unless you've
2 completed --

3 (Simultaneous speaking)

4 CHAIR BRADLEY: I just want to make
5 sure I'm framing it --

6 (Simultaneous speaking)

7 MEMBER REAMER: I think that's too
8 detailed for this process.

9 CHAIR BRADLEY: That's why -- that's
10 what I'm -- so what would you recommend in
11 response to that?

12 MR. SMITH: Yes. So I think like how
13 can we abstract it up so you know, something
14 about enabling people throughout, you know,
15 throughout the economy to innovate.

16 CHAIR BRADLEY: Right.

17 MR. SMITH: I mean something very
18 broad like that, which encompasses teaching
19 innovation.

20 CHAIR BRADLEY: If we do that though,
21 I'm trying to figure out and I don't mean to put
22 you on the spot, is it everyone having access or

1 is it -- is there the correlation of access while
2 you're in school? So then, instead of saying
3 everybody, is it every student?

4 MEMBER S. SMITH: I think those are
5 two very different things --

6 (Simultaneous speaking)

7 MEMBER S. SMITH: -- and I think that
8 the administration will draw those out in two
9 very different ways.

10 CHAIR BRADLEY: Right, so tell me
11 which one you're -- does it matter? Like you
12 kept talking about a school anchor. So I'm
13 trying to figure out is there something for
14 students versus something for everybody? I'm
15 deferring to you.

16 MEMBER BALDWIN: Yes. I don't know
17 the answer to that.

18 CHAIR BRADLEY: Okay. That's fair.

19 MEMBER BALDWIN: I don't know the
20 answer to that because well if you look at who's
21 going to the boot camps that are preparing them
22 for jobs. They're not going through traditional

1 schools. They're going through Coursera, Udacity
2 and some of those others -- Experfy.

3 MEMBER REAMER: Melissa, I want to
4 respond to your idea. My thought is that I think
5 the principle should identify what we're trying
6 to achieve and not what problem we're trying to
7 solve. Do you know what I mean? So that we say
8 the aspiration is diversity or access to
9 resources and so forth, I think that greater
10 access to funding is a problem solving approach
11 that could come down the line.

12 So I want to throw out a little
13 principle around tools that the government has
14 and we can get your feedback around this it's
15 used for -- just forget about it but -- right?
16 The government basically has five things it can
17 do. Right? It can give away money or it can
18 give tax credits. It can basically say we'll
19 give you money or you don't have to pay any
20 money.

21 It can regulate. It can provide
22 information. It can facilitate, which means

1 bringing people together who might not get
2 together and Secretary can say, I want these
3 people to come into this room and come out with a
4 problem -- come out with a solution.

5 And then the fifth is the government
6 can make it, itself, which is like the military.
7 All right? So, make it, itself is doing -- we
8 have four things. Now money is expensive, right?
9 So the way I approach stuff is that money is the
10 tool, the last resort. For government, money
11 became the tool first resort with the Great
12 Society and it's kind of continued.

13 So in my mind, information and
14 facilitation are really, really cheap and a
15 principle is how can the government get markets
16 to work better? Let's take Whitney's point.
17 Okay, the government is supposed to address
18 market failures but in a lot of instances like
19 with workforce, the issue is people don't have
20 good information to make choices and information
21 is probably a hundredth of the cost of grants.

22 So to me, say the principle is that

1 you look at solution in terms of information and
2 facilitation and then you go to the heavy stuff
3 with grants and regulation if you need to.

4 MEMBER JOHNSON: So Andrew, two
5 comments on the first and the second what Esther
6 was talking about. So on the SBIR awards that we
7 give in Kentucky based on federal awards, it
8 follows the same process. There's a peer review.
9 So there's no way anyone other than a graduate
10 student is going to receive those grants. That's
11 just -- it's sort of a self-fulfilling prophecy.
12 So the change there would have to be -- now you
13 said this is the worst thing, money, would have
14 to be something like to allocate money that's
15 reviewed. There's a different process that will
16 allow it to go down in age.

17 On the second part when you're talking
18 about what things are inexpensive. So I spent
19 the last year in sort of a workforce study in
20 Kentucky because it's a huge mess and it's a 1.3
21 billion dollar mess in our little state and
22 there's about 40 agencies that get funding and

1 there's no coordination.

2 You come into me and I'm teaching
3 people how to weld or you know, fill in the blank
4 and you say what should I do? I'm a laid off
5 coal miner or you'd fill in the blank, they'll
6 say learn to weld. Learn to code, you know? And
7 that's wrong because if the individual -- if it's
8 not something they're interested in and can
9 develop a skill, even if they get a job, they'll
10 quit the job.

11 So the very first thing that has to
12 happen and the thing that's dirt cheap is just
13 cross-train everybody. There's 40 agencies.
14 They should understand what the other 39 are
15 doing and when someone says can you help me?
16 They'll say yes and maybe a majority of the time,
17 they'll refer him to someone else, you know?

18 The problem is their metrics would
19 have to get changed because now they get -- they
20 just want bodies coming through the door.

21 MEMBER REAMER: Well I think it goes
22 back to the motion of collaboration in this realm

1 about partnership.

2 MEMBER JOHNSON: Yes, but that's get
3 to your second point. You can do something that
4 will have benefits that will cost next to
5 nothing.

6 MEMBER REAMER: Yes. That's right.
7 That's right.

8 MR. BUERSTATTE: I'll comment on
9 Andrew's point on facilitation and information
10 being the most cost effective way for government
11 to act. I think those are important themes that
12 we should consider in all the principles
13 actually. Mostly because the Trump
14 administration has been very clear on
15 prioritizing decreasing government spending.

16 So I don't think it's wise to have
17 anything in these probably that would be too
18 tactical anyway around new spending programs, but
19 rather an aspirational idea is how can we
20 facilitate and share information to better enable
21 the private sector, better enable state, local,
22 communities to take a more active role.

1 MEMBER REAMER: Great.

2 MEMBER BALDWIN: Which goes back to
3 that conversation we had in one of our very first
4 meetings that, you know, people like Andrew are
5 few and far between. People don't know what they
6 don't know and there's so many government
7 programs out there that having a map, a portal,
8 something that says you're starting here, you can
9 go here, here and here.

10 MR. BUERSTATTE: So I actually want to
11 take this opportunity to pivot into
12 entrepreneurship. So I think we have a -- we got
13 a little sidetracked a bit, good conversation. I
14 think it was important in understanding access
15 and facilitating and information and we have
16 talked about how to better consolidate and
17 communicate government entrepreneurship services
18 and programs and we've talked about the menu of
19 offerings over at SBA, USDA, Treasury, Commerce
20 and so on and so forth.

21 So when I think about entrepreneurship
22 and pathways and access, is there something -- is

1 there an aspirational principle that could
2 communicate some objectives around access
3 information and awareness? Whether it's about
4 programming, funding, resources, technical
5 assistance, anything there?

6 MEMBER REAMER: Yes. I want to as a
7 bridge to your comment about tools, I am very
8 comfortable in talking about return with them.
9 So if the government puts up money for better
10 information, what's their return on investment?
11 And I think whether you can quantify it in a way
12 that Scott quantify it when he does his work, is
13 a separate question but you can get in the
14 ballpark. So I would encourage, you have to
15 demonstrate that there's a return on the
16 government's investment, if they have money even
17 just to bring people here.

18 With entrepreneurship, I think, you
19 know the statement of principle, that
20 entrepreneurship is critical to the vitality and
21 growth of the American economy. It's clear from
22 the research that Eric cites here, John

1 Halthiwanger's stuff, that's it's really young,
2 new firms -- young firms that are the best job
3 generators. So that having a -- I would just as
4 a preface almost reiterate that.

5 And the -- I guess the second point is
6 because OIE was created as a government agency to
7 look across the government, not just to Commerce
8 about entrepreneurship programs. So that it's
9 important for government efforts to be
10 coordinated, I guess is the point.

11 MEMBER BALDWIN: On the topic of ROI
12 and I don't know the answer to this, is -- I know
13 that many -- 90 percent of CIOs do an ROI
14 analysis before they invest, before they fund.
15 Ten percent followup afterwards and do -- revisit
16 to say did this project get the ROI that it said
17 -- that they said it would do? And so I've asked
18 the same question. Is there something we can add
19 that puts accountability into the government
20 funding processes. So you if you said you would
21 get this much ROI, how much did you actually get
22 in order to inform future investment?

1 MR. BUERSTATTE: I hear data and
2 evidence-based when I hear that --- makes a
3 better workforce, right? So I think we're on to
4 something there.

5 MEMBER BALDWIN: Yes.

6 MEMBER JOHNSON: So the problem I've
7 always had on ROI with actual government and I'm
8 talking about a state on entrepreneurial
9 developing and entrepreneurial ecosystem is it
10 takes a long time. My investment today might not
11 pay me back for ten or 15 years. So the very
12 first thing I did going back in time as far as I
13 could so I could show the current administration
14 because we were doing that work and you find the
15 companies that are scaling and hiring people and
16 if you take a long-term view, you can come up
17 with excellent ROI numbers.

18 There's two reasons why the government
19 hates it in Kentucky but probably everywhere is
20 they tend to not believe those numbers because
21 they're not sure who really gets credit for it,
22 number one.

1 Number two, there's never any big
2 headlines because when you go the entrepreneurial
3 route, your headlines are a decade away and let's
4 say that company's already big, you know, so
5 you're creating jobs one at a time, two at a
6 time. The aggregate is large but again, there's
7 no headlines and they love the headlines, the
8 appearance of success as opposed to actual
9 success. So I don't know how you -- I'm just
10 stating that is a problem I've had -- I face day
11 in and day out.

12 MEMBER BALDWIN: So when you say
13 creating jobs one at a time, in your ROI index --

14 MEMBER JOHNSON: Yes.

15 MEMBER BALDWIN: -- does it include
16 job creation patents filed or is it purely
17 financial?

18 MEMBER JOHNSON: So we count -- what
19 the state wants is job creative average salary
20 per job so that's what I give them. I collect
21 lots of other data. They don't care about that.
22 The simple headline is how many jobs did we

1 create? Bu they want to go and see a building --
2 a big building filled with people. That's what
3 they want to see, you know, and then have their
4 picture taken and photo op.

5 We get that some but it's smaller
6 scale. It's a dozen people, 20 people, whatever
7 so -- and those headlines don't -- you know, it's
8 like so what?

9 CHAIR BRADLEY: But the beauty is we
10 don't have to be overly prescriptive just to ROI.
11 you keep getting me brought back to some
12 assessment of impact --

13 MEMBER BALDWIN: Right.

14 CHAIR BRADLEY: -- and leave it up to
15 the local -- or something that doesn't say yes or
16 no.

17 MEMBER BALDWIN: Yes.

18 CHAIR BRADLEY: That you hit or you
19 didn't. I would also say I've been thinking this
20 space is still -- the carryover power
21 partnerships still a carryover -- I mean I hear
22 from you and Steven in reduction in barriers and

1 regulation, particularly if you're trying
2 something medical or bio and certainly if you're
3 trying to go international. I feel like we hear
4 that every meeting.

5 MEMBER BAGLEY: You know it's
6 interesting. I'm not sure this is actually --
7 but like how Whitney was just able to rattle off
8 principles of policy, it strikes me that we
9 haven't been working on entrepreneurship quite as
10 long probably as we've been working on workforce
11 development as a nation --

12 MEMBER BALDWIN: That's true.

13 MEMBER BAGLEY: You know, so I think
14 it's kind of exciting that if we can come up with
15 something that, you know, we can rattle off.
16 Like I'm almost embarrassed as -- for working as
17 long as I have that I can't just like rattle off
18 principles of, you know, what makes this -- or
19 like what are these guiding policies? Like it's
20 kind of interesting, you know and so --

21 CHAIR BRADLEY: I was going to say we
22 don't have the same -- I was going to say we

1 probably don't have the same ecosystem that
2 workforce development does.

3 MEMBER BAGLEY: Absolutely.

4 CHAIR BRADLEY: A big part of that is
5 around -- so --

6 MEMBER BAGLEY: Absolutely. Yes.

7 CHAIR BRADLEY: -- I agree but I think
8 there's enough overlap but I think the
9 interrogation of sector and geography and money
10 in terms of what your capital access trajectory -
11 - and we will probably have. It just may be very
12 --

13 MEMBER BAGLEY: Well, no. I'm saying
14 it's kind of cool that we --

15 CHAIR BRADLEY: Yes.

16 MEMBER BAGLEY: -- can come up with
17 them because I think that -- I mean, it is one of
18 the -- you know, I bet, you know, manufacturing
19 could come up one of the policy drivers because
20 you'd have that machine network for a long time,
21 that was out in the woods for a long time and so
22 there's this idea of like having these

1 conversations of how to make that network better
2 is one of the reasons, you know, SSTI advocates
3 for the regional innovation program was to create
4 networks. You know, across that, we saw with the
5 clusters initiative, you know --

6 (Simultaneous speaking)

7 MEMBER BAGLEY: Yes, I mean so --

8 (Simultaneous speaking)

9 MEMBER BAGLEY: -- it's really
10 interesting that -- yes.

11 MEMBER JOHNSON: It's really -- I
12 think it's kind of a waste of time to try to
13 define it but I guess maybe we're going to have
14 to but I pitch New York City transit in 2000,
15 what you would call today an app that would go on
16 their smart card, okay, on the metro card --

17 MR. BUERSTATTE: I'm sorry, Rick.
18 What are you trying to define?

19 MEMBER BAGLEY: Yes. I didn't say
20 anything about defining.

21 CHAIR BRADLEY: Keep going. What was
22 the definition?

1 MEMBER JOHNSON: To me, I'm just -- I
2 -- whatever your dream is, I want to help you
3 achieve it. Set up a system and I'm not going to
4 judge. I think it's really important and when
5 you start writing things down, you're judging,
6 okay? In Kentucky, what they're going to switch
7 to now is they want high tech scalable. It's
8 like really? And you're going to figure out what
9 that is, I mean the government? That means you
10 think you can predict the future. It's asinine
11 and I guess I wouldn't want to see us get -- we
12 have to tread, I think, very carefully --

13 CHAIR BRADLEY: So language is going
14 to be important. I meant that's going to be your
15 principles because they will be far enough away
16 to not be overly perspective. I think the point
17 is because of some of that going too deep, we can
18 all say what is the principles in our sector?
19 Now is an opportunity to say, if you're talking
20 about entrepreneurship in large, irrespective of
21 biomanufacturing or environment, what are the
22 commonalities that can fuel that? Now, there may

1 still be some frustration but hopefully we won't
2 use things like highly scalable because that's
3 not a principle. That's an outcome.

4 MEMBER REAMER: What do people think
5 is the overlap between the realm of innovation
6 and the realm of entrepreneurship? I ask because
7 I want -- because if we think there is a lot of
8 overlap, like are we interested in entrepreneurs
9 who are starting businesses that are innovative,
10 that the principles around innovation are going
11 to apply to the principles of entrepreneurship
12 around access to capital, partnership.

13 MEMBER WILSON: The big one I see is
14 capital and the transition from publicly funded
15 innovation and how that translates into the
16 private sector investment and what makes a
17 successful company in a given region or
18 ecosystem.

19 MEMBER BALDWIN: And I'd say that
20 where you put that capital is hugely important in
21 the innovation continuum. Are you only putting
22 it into products? Because if you're putting it

1 into a business model innovation, you're going to
2 get a higher ROI. If you're putting it into a
3 financial innovation, you're going to get a
4 higher ROI. The data --

5 MEMBER WILSON: It depends on the --
6 there's lots of investors in the world with lots
7 of different thesis and personal objectives and
8 so it is diversified. So if the highest ROI is
9 in finance and the whole world invested in
10 finance, it probably wouldn't be that attractive
11 anymore. You know, it's not enough deal to go
12 around.

13 MEMBER NEMETH: There is -- what's
14 overlapping it? To me, like it's easy to go way
15 down the field that we're all comfortable with in
16 the science and commercial entities and perhaps
17 come up with some principles that don't -- they
18 all address Main Street's laundromat or franchise
19 that does create a lot of jobs and you know, I
20 think that's something we should think about.

21 MEMBER WILSON: But when I think about
22 Fintech, when I think about life sciences

1 broadly, biotech devices, therapeutic, when I
2 think about energy, the issues are still the same
3 for any kind of advanced technology or truly
4 innovative product or process or business model.
5 It's -- if it is born out of some type of public
6 funding or even kind of private philanthropy in
7 certain issues in a grant type situation, making
8 sure that the transition is efficient across to
9 the private sector and then that sets up the
10 whole the entrepreneur ecosystem and what makes
11 that successful?

12 Then we start to get into entrepreneur
13 principles; the frameworks and the teams and that
14 broader startup ecosystem. I want to be -- I
15 think we're somewhat aligned. I want to be
16 careful when you start merging those two because
17 then the people I serve get locked out. Right?
18 You don't hear innovation --

19 (Simultaneous speaking)

20 CHAIR BRADLEY: So I think this group
21 can intellectualize that but the reality is we've
22 got construction, we've got professional

1 services, they're creating jobs. They're five
2 million dollar plus companies. They probably
3 would hit the radar screen of innovation but I
4 think that's relative because if they're east of
5 the river, that's already innovative here in D.C.
6 Let's be clear. So I just want to say, some of
7 these, I think that second go round will be
8 making sure not only the right principle, but
9 does it apply to multiple context as we try to
10 solve for different communities.

11 MEMBER WILSON: And I think that, you
12 know, the question was kind of innovate like --
13 innovation, grant funding, that kind of stuff
14 where that overlaps or meets entrepreneurship. I
15 completely agree with you if you think broad, all
16 industries, you know we can start to frame out
17 what are the key characteristics and needs in
18 true entrepreneurial sectors like this,
19 fundamental things that have to be in place
20 regardless of industry, sector to enable success.

21 MEMBER REAMER: What do you think of
22 this? I am happy to get it chopped down, which

1 is -- for innovation, the notion of innovation,
2 we can have it be a bit narrow, like you've got
3 innovative laundromat but I don't think that's
4 the charge of this committee.

5 CHAIR BRADLEY: No. And I think --
6 (Simultaneous speaking)

7 MEMBER REAMER: But for
8 entrepreneurship, we're taking broad.

9 CHAIR BRADLEY: Yes.

10 MEMBER REAMER: So there is some
11 overlap between the realm of innovation that --

12 CHAIR BRADLEY: All innovators could
13 be entrepreneurs but not all entrepreneurs are
14 going to be innovators.

15 MEMBER WILSON: Which I think then you
16 start to get back to -- and when we saw this when
17 we visited Nashville where entrepreneurship and
18 workforce start to come together regardless of
19 whether we were, you know, kind of in a music
20 type situation or food truck business model, you
21 know in the Latino community there but preparing
22 regardless of -- doesn't have to be a advanced

1 manufacturing. You know, looking at a community
2 where those strengths are and that community is
3 developing entrepreneurial framework and
4 workforce that come together to live that.

5 CHAIR BRADLEY: And I think that's --
6 I mean, personally, I think that's going to be
7 important counterbalance because in reading the
8 memos, there was a lot of stuff focused on
9 hightech and deep R&D and to your point, kids can
10 smell that. I mean kids who graduate from D.C.
11 and they can't read. So I think we have to be
12 careful but what is the opportunity of this group
13 to be able to totally support innovation but
14 recognize to date there's a relatively large pool
15 where there's going to be a pathway for them to
16 get there and how do you create that opportunity
17 to potentially, to entrepreneurship?

18 (Simultaneous speaking)

19 MEMBER WILSON: And I think that's sent
20 back to the broadness. You know, keeping the
21 lighting principles, broaden us. So if you look
22 at, you know, the budget memos and the language

1 in here, that they're saying to all the agencies,
2 any kind of grant funding, it has to kind of
3 capture these things. If we can align the
4 principles where those, you know, anyone could
5 use those -- that language in there and be
6 successful, it opens up broader opportunities.

7 MEMBER REAMER: I'm really comfortable
8 with how you just described innovation in
9 relation to entrepreneurship and that leaves me
10 to wonder the order in which we're going to lay
11 this out. Shouldn't entrepreneurship go first?

12 CHAIR BRADLEY: Well, we're going to
13 break up into groups and then I think --

14 MEMBER REAMER: No, no. I mean in
15 terms of this document --

16 MEMBER FREDERICK: I don't want to get
17 too much into semantics but I'm not sure I bought
18 the way --

19 (Simultaneous speaking)

20 CHAIR BRADLEY: I didn't make it an
21 absolute.

22 MEMBER FREDERICK: Okay.

1 CHAIR BRADLEY: I didn't make it an
2 absolute.

3 MEMBER FREDERICK: Well, I don't think
4 it's necessarily a subset of the other.

5 CHAIR BRADLEY: Right. I didn't make
6 it an absolute. Innovators can be entrepreneurs
7 but not all entrepreneurs are going to be
8 innovators.

9 MEMBER FREDERICK: Yes.

10 CHAIR BRADLEY: I had you in my
11 corner.

12 (Simultaneous speaking)

13 CHAIR BRADLEY: So Andrew , I'm sorry.
14 You were talking about cadence.

15 MEMBER REAMER: I was wondering about
16 the order, right? This is -- the order has
17 always been innovation and entrepreneurship but
18 I'm -- are we comfortable with that or -- because
19 they do have a relationship with each other, is
20 that the order that we want and I'm raising the
21 question --

22 CHAIR BRADLEY: I will admit I'm not -

1 -

2 (Simultaneous speaking)

3 MEMBER REAMER: It's laid out
4 innovation entrepreneurship. It could be
5 entrepreneurship innovation.

6 CHAIR BRADLEY: Oh, I see. Oh, you
7 mean literal. I just figured that was air from
8 the --

9 (Simultaneous speaking)

10 MEMBER REAMER: So forget profession.
11 Let's move on.

12 CHAIR BRADLEY: Maybe it's arbitrary,
13 alphabetical.

14 MEMBER REAMER: I think you can teach
15 anybody to innovate. Being an entrepreneur is
16 something completely different. I mean --

17 (Simultaneous speaking)

18 MEMBER REAMER: Many people don't have
19 the character, the it, you know to be an
20 entrepreneur and they should not be. Do you feel
21 the two are equal in terms of their importance or
22 does one lead the other?

1 MEMBER JOHNSON: So developing
2 entrepreneurs, so I personally try to start with
3 as many people as possible and work with them.
4 Only a few will really be successful. They will
5 drive huge benefit to a community. Huge.
6 There's a big multiplier. The innovators --
7 innovators had to be teamed up. They have to be
8 innovating in the right areas. But you could
9 teach anybody to innovate. So I can't really
10 answer that question. It's -- I think it's more
11 valuable for me personally, one person, to try to
12 find entrepreneurs that can excel and work with
13 them very closely and then I could teach other
14 people to teach people how to innovate better.

15 MEMBER BALDWIN: You know, you can
16 actually teach -- there's innovation tools where
17 you can teach people how to predict the future,
18 especially where --

19 (Simultaneous speaking)

20 CHAIR BRADLEY: Can you use it right
21 now so we know what --

22 (Simultaneous speaking)

1 MEMBER JOHNSON: So that scares me a
2 little bit too.

3 MEMBER BALDWIN: It should because
4 I've sat across the table from people in R&D and
5 I said, oh well, are you using this for your car
6 lighting and the guy's hair stood on end. He
7 thinks there's a leak. And I'm like, oh no.
8 Nobody's talked to me. I can just predict based
9 on the evolution of innovations, what you're
10 going to be producing next.

11 CHAIR BRADLEY: But so I don't know
12 why Andrew, but what Rick just talked about
13 helped me give an answer to your questions,
14 whether or not it's relevant. So I think if
15 there is a method to how we present these and I
16 think where is the greatest opportunity first, I
17 would say that innovation would go first because
18 I look at Esther and I think, innovation happens
19 to large companies. Innovation happens to small
20 companies. The velocity potential is a whole lot
21 faster than entrepreneurship, particularly if
22 we're starting with the base of folks who don't

1 even know what it is. I'm just thinking getting
2 to whatever that arbitrary end goal is,
3 innovation's a lot more stakeholders and
4 opportunities.

5 MEMBER REAMER: That's great because
6 now we don't have to change the letterhead.

7 (Laughter)

8 MEMBER BALDWIN: And if you look at
9 the companies that, you know, I think it's
10 something like 50 percent of the Fortune 500
11 companies, 15 years ago, are no longer in
12 business --

13 CHAIR BRADLEY: Well look at GE.

14 MEMBER BALDWIN: -- because of
15 commercial -- lack of commercialization, you only
16 have to look at Xerox to see all of the amazing
17 innovations that they have but they weren't
18 commercialized first. So entrepreneurship is
19 needed in big companies as much as it is with
20 small companies.

21 MEMBER JOHNSON: It is. I don't know
22 that it will happen. Our latest big company,

1 Lexmark by the Chinese, they had such wonderful
2 microfluidics technology. They could only
3 imagine that being in a medical device. They
4 thought it was ten years to go to market. They
5 killed the technology and it's like, are you just
6 nuts, except we're cut \$27 million. They sold it
7 so easily.

8 MR. BUERSTATTE: We've got a couple
9 minutes left. Entrepreneurship and coming back
10 to Rebecca's point, there seems to be a nebulous
11 -- you know, it's vertical for us right now.
12 I've got a couple notes but I'd rather hear from
13 someone in the crowd. How do you think, heading
14 into small group sessions, how can we summarize
15 some productive starting blocks?

16 MEMBER REAMER: I think a really
17 important element of entrepreneurship is hope.
18 That you need to have people who believe that
19 something is possible and so you want to create
20 the conditions where people can imagine something
21 that's not real at the moment but they have the
22 ability to make it real and that's part of an

1 entrepreneurial ecosystem.

2 MR. BUERSTATTE: Are you referring to
3 more so the individual or trying to elevate this
4 to a government lens. Like we need to enable all
5 citizens with the opportunity to create, build
6 and so forth?

7 MEMBER REAMER: To help citizens
8 believe they have the opportunity to.

9 MEMBER JOHNSON: And it's more likely
10 to happen if it starts at like zero, or one or
11 two.

12 MEMBER BAGLEY: I think you have your,
13 like metrics and rigor. What was that data on
14 Metrics 1?

15 MR. BUERSTATTE: Data-driven evidence,
16 yes, so.

17 MEMBER BAGLEY: Yes and is there -- To
18 Rick's point, is there like -- I mean how would
19 you summarize your frustration around that stuff
20 in a more positive statement? Would it be that,
21 you know, we need to think about, like the
22 market-driven aspects that actually are aligned

1 with, you know, the strengths of the regions? I
2 mean it kind of gets back to some of that local
3 commitment and I think this one is probably a
4 good one for entrepreneurship.

5 But I was just thinking about like,
6 you don't want too prescriptive. You don't want
7 to pick winners but how do you -- you know,
8 what's a defining principle is that's it's, you
9 know, driven towards a market that can be at
10 least well identified even if it doesn't exist
11 yet, you know, that there's some path -- I mean,
12 something like that I was thinking when he was
13 talking about frustration of saying, we're going
14 to pick this or we're going to pick that, you
15 know?

16 MEMBER S. SMITH: One other thing that
17 we've all talked about was this communication
18 piece and kind of ensuring that the resources
19 were accessible and understood. You know, where
20 do you get those and -- so I think that was one
21 thing that I heard you all talking about was
22 about that. How do you ensure that, you know,

1 the resources that are available are accessible
2 and communicated?

3 UNIDENTIFIED FEMALE: Is there a way
4 to get started?

5 MEMBER S. SMITH: Yes. People know
6 where to get started and how.

7 MEMBER REAMER: So like resources are
8 available and accessible. They could be
9 available but if you don't know they're there --

10 MEMBER S. SMITH: Right. That there's
11 --

12 CHAIR BRADLEY: Is that resources
13 information, money --

14 MEMBER S. SMITH: Everything.

15 MEMBER REAMER: All of the above.

16 MEMBER FREDERICK: And maybe mention
17 a point not understood too. And I keep trying to
18 stretch myself to get out of my narrow tech lens
19 and when I think about entrepreneurs, I know that
20 have done things like restaurants and other
21 businesses, one common refrain is most people
22 start off about six months in the hole because

1 they completely underestimate the regulation
2 time and so they come up with a business plan
3 that works and then they're just sitting for six
4 months on city approvals and health inspectors
5 and that will slaughter most business models.

6 And you see all over D.C., you know,
7 buildings just -- you know, they're built out and
8 they're just waiting. You know, it's an enormous
9 cost to them. You know, there aren't many
10 businesses that can have six months of zero
11 income but all your expenses still coming in. So
12 I think there's that. Just some concept around
13 friction, understanding what you need and all the
14 steps so there's an understanding and there's a
15 reduction of friction. If you can do that, I
16 think you can go great things for
17 entrepreneurship.

18 CHAIR BRADLEY: Right. I agree.
19 There are several restaurants that can't open
20 right now because of that. They do think they
21 are two separate things.

22 MEMBER BALDWIN: So if I think about

1 earlier discussions where I shared what the
2 Chinese are doing with their incubation centers,
3 it's almost like you need to break that apart
4 completely so that it's -- because you're not
5 going to put all the restaurants in one center
6 and all -- but you could have that fast track for
7 the service that they provide but virtualize it
8 and a get out of jail card free when you forget
9 to file a form that says I didn't make any money.
10 It was zero taxes but -- so I didn't think I had
11 to file that form but I've now got a \$16,000 fine
12 because I didn't file that I made nothing.

13 MEMBER FREDERICK: Australia has taken
14 awesome steps in this direction where they've
15 kind of been consolidated in one place all that
16 needs to be done and they've done it all
17 electronically and it's all in machine-readable
18 format so it can get shared with all the
19 agencies. I mean it's a lot easier for them
20 because they're younger and smaller but I think
21 that message would resonate.

22 I mean, I know Chris Liddell used to

1 be on the board of the company that did a lot of
2 that tech work. He had to resign but he's very
3 aware of that initiative and likes it. And I
4 tell you, it makes a ton of sense to the extent
5 you can put everything up online, make it
6 machine-readable and just hit buttons. I mean
7 it's a glorious vision. I don't know how we get
8 from here to there but if you can articulate it
9 as a principle to move in that direction.

10 MEMBER BALDWIN: Some kind of fast
11 track.

12 MR. BUERSTATTE: I think, just for
13 what it's worth and I'm going back to Andrew's
14 point on the administration and the feedback and
15 what not, once again on this, I've very
16 supportive of it. I think it's right in line
17 with the President's goal of you cut restrictive
18 regulations, bureaucratic processes to open the
19 markets and enable the private sectors. So
20 definitely something here we should dig into that
21 more in the group session. Anything else?

22 MEMBER NEMETH: I have a -- what seems

1 like a minor question but it's part of the grand
2 scheme that I'm looking at. This adjective, is
3 that a firm, fixed thing?

4 MR. SMITH: No. We can replace it.

5 MEMBER NEMETH: Okay. All right
6 because I --

7 CHAIR BRADLEY: You're seeing his
8 legal skills coming out.

9 (Laughter)

10 MEMBER NEMETH: I've been taking some
11 notes and obviously there have been times where
12 we've said, you know, we get into the nitty
13 gritty outlets. Let's take the example that
14 you've got up there. We can spend time to create
15 and craft the words but resilient could be
16 interchanged with any other words so I've got
17 some mnemonic device action going on with our
18 principles so that -- let's be honest, if we can
19 make things memorable, there's a chance the work
20 actually --

21 MR. BUERSTATTE: And really if we're
22 going for truth, we had another acronym that came

1 out of this.

2 (Laughter)

3 MEMBER NEMETH: It's not an acronym.
4 I've got a full couple options here.

5 MEMBER REICHERT: I'd like to make a
6 follow on point about the regulation comment. So
7 I'd say we have the opposite experience. Most of
8 our very early stage entrepreneurs don't seem to
9 have any regulations that are stopping them but
10 they do want to actually be involved in creating
11 regulations. So for example, let's just say the
12 EPA, using that as example, I have a company that
13 is trying to change the way aircrafts are de-iced
14 on runways. They want to electrify that process,
15 rather than having a whole bunch of stuff
16 squirted and ending up in the ground water. So
17 it would be helpful to them if they had some say
18 in the process or maybe the regulation actually
19 got tightened so that you could no longer, you
20 know, have this stuff just going into the ground
21 water.

22 The problem is that unless you have a

1 lot of money to do lobbying around regulations,
2 if you're an entrepreneur, a single entrepreneur,
3 you don't know how this works. How do we get
4 entrepreneurs at the table when regulations are
5 getting made that are potentially going to create
6 new markets.

7 MEMBER FREDERICK: In innovative
8 areas, I mean when the next biotech drones, we
9 see this in space, where no one quite knows what
10 the regulations are.

11 CHAIR BRADLEY: There's change every
12 day, depending on where they land.

13 MEMBER REICHERT: To have
14 entrepreneurs at the table, when these decisions
15 are made and not just very big businesses with
16 deep pockets.

17 MEMBER FREDERICK: And to help the
18 agencies that create the regulations, know what's
19 coming down the pike so they're not reacting
20 several years late once business models have been
21 solidified and capital invested. There's a -- I
22 can send this around to folks but I think I made

1 this introduction to Craig. The Data Foundation
2 did a piece on standard business, reporting open
3 date to cut compliance costs and it's all about
4 the Australia initiative, which is pretty
5 impressive.

6 MR. BUERSTATTE: Yes. We talked about
7 that last time. Yes. That's right. You missed
8 the last one. We had Hudson Hollister, yes.

9 MEMBER FREDERICK: Oops.

10 MEMBER REAMER: Oh, we actually had
11 him?

12 MR. BUERSTATTE: Yes. He was here.
13 He was here.

14 MEMBER REAMER: We had Hudson and John
15 Deere in this thing at least.

16 MR. BUERSTATTE: So I think we've got
17 a number of good starting points now on
18 entrepreneurship and we're near the end of the
19 hour. So in effort to close properly, at this
20 point, I'd like to open the line for any public
21 comments. So any members of the public, please
22 introduce yourself and provide a comment if you'd

1 like. Again, one more call. Any members of the
2 public that are on the line at this point or in
3 the room and want to make a comment, please at
4 this time introduce yourself.

5 MS. CARTER: I have a couple comments.

6 MR. SILENTMAN: Hello?

7 MR. BUERSTATTE: Yes. Who's that on
8 the line?

9 MR. SILENTMAN: Good afternoon. Hello
10 from New Mexico. My name is Henry Silentman. I
11 work in economic development for the Navajo
12 Nation. We're one of the largest Native American
13 tribes in the Southwest. So I wanted to say
14 thank you to the council and the OIE for, you
15 know, all your efforts and your work you do on
16 behalf of our businesses and entrepreneurs.

17 MR. BUERSTATTE: Thanks so much,
18 Henry, for your interest and I hope you have our
19 email, NACIE@EDA.gov. That is N-A-C-I-E@EDA.gov.
20 If you've got any questions or want to dig a
21 little deeper on any of Department of Commerce's
22 resources or programs, we'd love to collaborate,

1 especially given your work there and the economic
2 development field. So thanks for your interest.
3 Dominique?

4 MS. CARTER: Sure. So my comments
5 stem from a couple of things that several of the
6 panelists said. So the first one with the cross-
7 training to better prepare a more innovative
8 workforce, this actually aligns with one of the
9 broader strategic goals of the NSF called
10 convergence training or training of convergence.
11 So enter disciplinary training, you know, with
12 regards to reforming undergraduate and graduate
13 education.

14 So one example would be, you know,
15 there's a big push to cross-train biologists and
16 other scientists for data science because we have
17 a shortage in data sciences and that's something
18 that I'm actually doing personally throughout the
19 duration of my fellowship.

20 And then the second thing was with
21 regards to entrepreneurship. So NSF also just
22 released science and engineering indicators

1 report that they release annually and they just
2 released one in 2018. And so in that, you know,
3 it demonstrates, you know, specifically for the
4 U.S. demonstrating, you know, where we are with
5 regards to science and engineering
6 entrepreneurship and innovation will just cross
7 all areas.

8 And one measure of innovation that
9 they look at is patents granted. And so while
10 the U.S. still has the greatest number of patents
11 being granted, there's a significant increase in
12 the Asian countries including China and Japan,
13 that the increase was once, you know, less than 1
14 percent and in a year's time, it's increased by 6
15 percent for China, 1.5 percent for Japan and then
16 other countries. So that's one thing that, you
17 know, we also have to pay attention to with
18 regards to innovation.

19 And then also venture capital funding.
20 So that report also showed that, you know, while
21 again U.S. is still like the highest in terms of
22 the amount of venture capital with the amount

1 being funded in terms of actual increase from
2 year to year, we actually decreased from last
3 year in terms of science and engineering, I guess
4 startups where, you know, there's a 5 percent
5 decrease in U.S. money of these type of companies
6 but there's a 30 percent increase -- 30 percent
7 from China, when it was like overall flat before.
8 And so these are just trends that we, you know,
9 should pay attention to maybe when we have these
10 type of discussions.

11 And then one last point was regarding
12 funding access at the undergraduate level. You
13 know, so access to information and resources and
14 also funding to better prepare people with
15 Bachelor's degrees for the workforce and make
16 them more competitive.

17 So one program at the NSF that, you
18 know, kind of encompasses this is something
19 called EPSCOR and it's for undergraduate and
20 graduate institutions but it's specifically
21 focused on creating a more -- a stronger STEM
22 workforce with greater STEM capacity in

1 underserved and rural areas. It's mostly rural
2 areas so areas that maybe don't have like a local
3 hospital. People have to drive almost two hours
4 out of the way to go be seen by a doctor if they
5 have an ailment or something and just kind of
6 building workforces in these type of areas. But
7 that's a program that can be modeled for this
8 type of thing with regards to, you know, policy
9 for this.

10 MEMBER BALDWIN: Can you share the
11 link to that report that came out?

12 MS. CARTER: Oh sure. Absolutely.

13 MS. FATUNMBI: And so Dominique and I
14 are both --- were selected last year as Global
15 Innovation Fellows, where they brought together
16 50 American entrepreneurs and 50 Chinese
17 entrepreneurs to China to help to forge new
18 connections and bring together entrepreneurship
19 because China is really trying to change the way
20 that they view entrepreneurship. They were
21 always called as Copy to China but they are
22 really -- are trying to change that type of

1 connotation and become leaders in innovation as
2 well.

3 They showed us a lot of statistics
4 where they showed us things like they, within a
5 span from 2012 to 2016, they were able to
6 decrease the amount of poverty by 60 percent and
7 they're on track to decreasing and wipe out
8 poverty completely by 2022 solely based on their
9 reports.

10 And so we have -- so at this point as
11 fellows in National Science Foundation, we've
12 been working to figure out how are we doing in
13 terms of science and technology. One of the
14 biggest topics is big data there. Right now,
15 they're really getting good data and what are
16 they leading in next? What are they trying to
17 bypass us and when you look at STEM, even in the
18 workforce, in education, most of the students in
19 there are foreign students and they're learning
20 these technologies. They're learning this
21 innovation and they're taking it back home so we
22 must be concerned with those type of things that

1 we're already creating ourselves.

2 And I want to say, handle the point
3 about diversity, I think that's it's important
4 when we talk about how we want to increase
5 diversity is that we show examples of how
6 diversity will help everybody and not just say,
7 oh we want to have more people of color somewhere
8 and exclude other people out. Now we're saying
9 that we want everybody to be a part of this
10 conversation and show the data, show the samples
11 where there is a diverse workforce that helps
12 make a bigger impact in bringing the
13 entrepreneurs.

14 MR. BUERSTATTE: Thank you. A quick
15 response to one of those that I think is
16 important to call out that I didn't think we
17 addressed or brought up today was on the venture
18 and trends in that market and capital deployment
19 in general. As we know, trade has been a big
20 priority for the administration and when we're
21 talking about trade, we're also talking about
22 FDI.

1 We've had prior discussions around
2 entrepreneurial FDI. So whether it's in the
3 entrepreneurship discussion or innovation
4 discussion, I think it's worth maybe coming back
5 to that and seeing how capital -- foreign capital
6 and for entrepreneurials can play a part of our
7 growth here. I think that's an important
8 priority we acknowledge.

9 MEMBER REAMER: In a way, that's
10 another form of partnership.

11 MR. BUERSTATTE: Absolutely. Good
12 point. Any final questions or thoughts from the
13 group? Melissa, closing thoughts or questions?

14 CHAIR BRADLEY: I hope this was
15 helpful. I look forward to tomorrow.

16 MR. BUERSTATTE: All right, at this
17 point, this concludes our Day 1 public meeting.
18 We will reconvene tomorrow. We always start time
19 at 9:00 a.m. Eastern. For those present in the
20 room, we will be in a different room. OIE will
21 escort you. We'll be up on the seventh floor.
22 We've been in there before. You will recognize

1 it but it will be on the seventh floor. It's on
2 your agenda, 9:00 a.m. tomorrow morning. Thank
3 you.

4 (Whereupon, the above-entitled matter
5 was concluded at 3:37 p.m.)

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