

UNITED STATES DEPARTMENT OF COMMERCE

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U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

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NATIONAL ADVISORY COUNCIL ON
INNOVATION AND ENTREPRENEURSHIP (NACIE)

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MEETING

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FRIDAY
AUGUST 25, 2017

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The Advisory Council met in Room
72015, U.S. Department of Commerce, 1401
Constitution Avenue, N.W., Washington, D.C., at
9:00 a.m., Stephen Tang, Co-Chair, presiding.

PRESENT

STEPHEN TANG, University City Science Center,
Co-Chair
REBECCA BAGLEY, University of Pittsburgh*
ESTHER BALDWIN, Intel
TREY BOWLES III, The Dallas Innovation Alliance;
The Dallas Entrepreneur Center
SCOTT FREDERICK, New Enterprise Associates
RICHARD JOHNSON, Kentucky Science and Technology
Corporation
DAVID KENNEY, Oregon BEST
MIKE NEMETH, S3 Planning
MARIBEL PEREZ WADSWORTH, Gannett Company, Inc.
ANDREW REAMER, George Washington University
EMILY REICHERT, Greentown Labs

SUE GRIFFITH SMITH, Ivy Tech Community College
WHITNEY SMITH, JPMorgan Chase
TIFFANY STEVENSON, Sephora USA, Inc.*
ERIC TOONE, Duke University
TIFFANY WILSON, Global Center for Medical
Innovation*

ALSO PRESENT

CRAIG BUERSTATTE, Office of Innovation and
Entrepreneurship, Department of Commerce;
Designated Federal Official
ELLEN HERBST, Chief Financial Officer and
Assistant Secretary for Administration,
Department of Commerce
JENNIFER ANDBERG, Deputy Director, Office of
Business Liaison, Department of Commerce
HENRY CHILDS, Senior Advisor, Economic
Development Administration, Department of
Commerce
BARRETT HAGA, Economic Development
Administration, Department of Commerce
CAMILLE NELLANS, First Responder Network
Authority (FirstNet)
JENNIFER SHIEH, Small Business Administration
ERIC SMITH, Office of Innovation and
Entrepreneurship, Department of Commerce
PAUL ZIELINSKI, Executive Board Chair, Federal
Lab Consortium

*via teleconference

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

2 9:04 a.m.

3 MR. BUERSTATTE: All right, everyone.

4 Good morning, good morning, good morning. We
5 have the team in place.

6 You all know me, but for the record,
7 once again, I'm Craig Buerstatte, the Designated
8 Federal Officer for this council, and we are
9 beginning day two of our fourth quarterly meeting
10 as NACIE.

11 Thanks for coming. This was
12 definitely an exciting day yesterday, and it's
13 always fun to rehash that on day two. And as we
14 talked about yesterday, this is really an
15 opportunity to gel back together and discuss all
16 those brainstorm sessions yesterday, and we also
17 have a few guests with us too, to maybe provide
18 some firestarters, if you will, this morning.

19 One is very special. Ellen Herbst,
20 the current CFO for Commerce, but also performing
21 duties as the Assistant Secretary. Ellen has
22 been with Commerce for 12 years now, and in --

1 excuse me, as Deputy Secretary. Thank you,
2 Andrew. Twelve years in a number of different
3 roles, and fun fact, this is one of her favorite
4 councils, because during the dot com era, she was
5 an entrepreneur herself. So she comes from the
6 tech world. She gets it, she understands it.

7 Ellen, thanks for joining us.

8 MS. HERBST: Thanks, Craig. First of
9 all, thank you all for your service. I don't
10 mean to take you away from your agenda today, I
11 just wanted to spend a few minutes with you to
12 let you know how important what you do is.

13 As Craig said, I was -- I would say a
14 failed entrepreneur during the dot com --

15 MR. BUERSTATTE: Where you learn the
16 most.

17 MS. HERBST: We literally started up
18 after the bubble burst and were able to get
19 venture capital. And it was a tech idea. It
20 was, as it turned out, a little bit ahead of its
21 time, which was a key lesson for me.

22 And as Stephen -- we got to know one

1 another just a little bit this morning. We've
2 got a lot of educational history, at least,
3 together. I'm a proud Delawarean.

4 But I think, you know, we're here at
5 the beginning of an administration. I've had 12
6 years in federal service, and I don't know where
7 the time went. I spent 25 in the private sector.
8 I was going to come in and do my couple of years
9 of service to the country, and then 12 years
10 later, here I am. I worked on the Recovery Act,
11 and that's probably what kept me here.

12 But I know transition times are times
13 of change, they're times of uncertainty, but I
14 think it's gratifying to see that the
15 administration's agenda includes advanced
16 manufacturing, regulatory reform, STEM education,
17 the Office of American Innovation. So when I
18 look at the charter and the goals of this
19 council, and I did spend a little bit of time
20 refreshing my memory around your backgrounds, I
21 think it's a wonderful set of experiences to come
22 together.

1 I think, importantly, finding those
2 areas where this council can be most impactful is
3 what you're about in your meetings, and coming
4 together to identify those couple of things that
5 you want to put your firepower behind. And we're
6 looking forward to hearing what comes out of this
7 meeting.

8 I know you talked a little bit
9 yesterday about some areas. But those key areas,
10 as I looked at your agenda, and particularly in
11 the STEM area and in the -- how to go from those
12 ideas in the lab, that tech transfer idea, into
13 the marketplace, and then how to take it from a
14 start-up into a thriving business that creates
15 jobs. Those are very relevant to what Commerce
16 does, and it continues to be relevant to the
17 administration's agenda.

18 So I just wanted to say thank you, and
19 we're really counting on you and looking forward
20 to what this group is going to do over the next
21 year or two. I'm happy to take a question or
22 two, or I can close there.

1 MR. BUERSTATTE: We've got a little
2 bit of time, I think -- take it while you got
3 her. One or two questions?

4 MS. HERBST: Or not. I won't be
5 offended either way. Any questions? Yes?

6 MEMBER REICHERT: We have four pillar
7 priority areas, and I was wondering if you could
8 maybe comment or highlight any priorities you're
9 hearing from the Secretary?

10 MS. HERBST: Sure. So the Secretary
11 was not able to join you yesterday because he was
12 in Tennessee at the groundbreaking of the LG
13 kitchen appliance factory. I use that as an
14 example of, we continue many of the priorities
15 that Commerce has had for years. And that's not
16 surprising, because Commerce's mission is rooted
17 in its legislative authority.

18 So that is another example of bringing
19 together a workforce that has the capability, the
20 education, the capacity. So the university
21 systems, the tech lab systems, bringing together
22 the local economic regional authority, city,

1 state, regional authority, and working with
2 businesses. And part of what we do, I like to
3 say we're the concierge for businesses, in some
4 cases, to the federal government.

5 You bring that all together, and
6 that's all necessary to grow an economy locally.
7 So that's why I say -- and it's advanced
8 manufacturing. So I think in that one example of
9 celebrating a success for the American economy,
10 it brings all those things together. And I think
11 we recognize, and have for years, that you have
12 to coordinate and bring all that together to have
13 sustainable economic growth in a given region.

14 So certainly those areas continue to
15 be important for us. Regulatory reform, the
16 President tasked Commerce, as one of the lead
17 agencies, to lead other -- lead the federal
18 government into how we streamline permitting, how
19 we make it easier for businesses to expand, how
20 to work through issues with the federal
21 government. Those are very important.

22 I think, probably, he's been most

1 visible -- the Secretary has been most visible
2 around trade issues. So that level playing
3 field, making sure our U.S. companies are able to
4 compete on a level playing field with their
5 global competitors is something we're keenly,
6 keenly interested in.

7 So those are certainly areas. And
8 then, just for Commerce, operationally, we have a
9 few things going on. You heard from the FirstNet
10 president yesterday that being given that
11 responsibility to make sure that, this many years
12 after 9/11 we do finally deliver a nationwide,
13 broadband network to first responders is
14 something we are keenly aware of, the weight of
15 that responsibility, and focusing a lot on.

16 And then there's a little activity we
17 do every ten years called the decennial census
18 where we count every person in the United States,
19 where they live, and believe it or not that's
20 2020. But we are heavily involved in working on
21 that now.

22 So those are some of the key

1 priorities we're working on. But I think the
2 economic -- the direct economic development ones
3 are a continuation, really, of what you've seen
4 in the past.

5 MEMBER REAMER: In February, I think,
6 this council passed a recommendation to the
7 Secretary that the Secretary ask the Office of
8 Innovation and Entrepreneurship to prepare a
9 strategic plan regarding those activities within
10 Congress and beyond. Do you know the status of
11 that?

12 MS. HERBST: So I'm going to take the
13 lens out a little bit further. We are in the
14 process of updating our strategic plan writ large
15 for the Department, as are all the Cabinet
16 agencies. And we have -- we'll be publishing as
17 a federal government, or an executive branch of
18 the federal government, updated strategic plans
19 in February, along with the rollout of the next
20 year's President's budget request.

21 So I can tell you that what I've seen
22 thus far, which is still draft, includes quite a

1 bit around continuing to support the growth in
2 the economy. I will go back with your question
3 and find out specifically where we're at with
4 those specific activities, but there's quite a
5 bit, as you would expect from our department,
6 around continuing the sustained economic growth
7 for the economy.

8 CO-CHAIR TANG: Ellen, we appreciate
9 you being here. People from the small city of
10 Delaware meet at the most interesting places.

11 We were talking, Ellen and I probably
12 grew up five or ten miles away from each other in
13 little tiny Delaware. So small world.

14 You mentioned trade as a particular,
15 and that's not a topic that we have yet covered
16 here with NACIE, but I'm wondering if you have
17 some thoughts about how the Secretary's agenda on
18 trade might fit with our mission on innovation
19 and entrepreneurship.

20 MS. HERBST: Well, I have my own
21 thoughts, which are my own personal thoughts.
22 This is something that would be really

1 interesting to hear from the Council on. We've
2 done a lot of study around propensity to export
3 by size of business and by ownership of business,
4 and certainly small businesses and start-up
5 businesses play a key role in that.

6 So it's not just about helping the
7 very large, global companies export more. I
8 mentioned a level playing field, and we've always
9 been about that. I don't want to lead anybody to
10 believe we aren't also continuing our high level
11 of focus on promotion, helping companies learn
12 how to export more.

13 So if you're exporting one product to
14 one country, you've already broken a lot of the
15 barriers about how to do that. So how can you
16 grow on that and export to more countries? Or
17 export more products to a given country? That's
18 a big part of what we do as well, and we will
19 continue to do that.

20 So how that fits with innovative
21 companies, technology companies, it's not just
22 about goods. It's about services and technology.

1 And certainly the other part of that, that we
2 focus a lot on, is how to protect the
3 intellectual property that is embodied in those
4 services.

5 But I would love to hear your thoughts
6 on how that plays with your charter and your
7 system.

8 CO-CHAIR TANG: I'll start with one,
9 and I'm certain there are other members.

10 Start-up companies more and more these
11 days need to go global earlier in their
12 evolution. I'm speaking in particular for some
13 of the regulated industries, particularly in life
14 sciences, medical devices. It's much easier to
15 get the CE mark for the European market than it
16 is to get FDA approval. So that touches on the
17 deregulation portion, but also into the trade
18 portion.

19 And I'm just wondering if that
20 scenario, perhaps, that other people have
21 observed in the room here, but also a place where
22 we can interact better with the administration.

1 MS. HERBST: I'm going to take notes.

2 CO-CHAIR TANG: Okay. Wonderful.

3 MEMBER REICHERT: So I can add to
4 that. I run Greentown Labs, which is the largest
5 clean tech community in the country, and we work
6 a lot with companies who will eventually need to
7 take their products to markets in other areas.
8 Again, it's energy, it's a fairly regulated
9 industry.

10 MS. HERBST: Oh yes.

11 MEMBER REICHERT: We're also seeing a
12 lot of interest from around the work in coming to
13 the U.S. So we're looking at it from both
14 perspectives, of how do we help our companies to
15 access markets in other places, and how do other
16 companies come into the U.S. and build jobs and
17 companies here.

18 MS. HERBST: Right.

19 MEMBER REICHERT: So that's a very hot
20 area for us right now that we're thinking about.

21 MS. HERBST: And I'm going to tie back
22 to the strategic plan question. So I can tell

1 you that one of the things we're looking at is
2 how to tie even more tightly together the work we
3 do of attracting investment, either back into the
4 United States or into the United States, and how
5 that plays with the work in the field and on the
6 ground and our economic development regional
7 authorities and so forth.

8 And we think there's additional things
9 we can do to make that a more effective
10 partnership in support of businesses.

11 MEMBER REICHERT: For businesses
12 coming into the country, we've done quite a bit
13 of looking at this, in terms of how our state
14 handles start-up companies coming in. And
15 there's really not much infrastructure for that.
16 So if you're a big enough company that you have
17 revenues and you can get a tax incentive to
18 relocated, then the path is kind of clear,
19 there's a business development office for you.

20 But there's a real missing piece in
21 terms of bringing companies that are small, pre-
22 revenue companies, but with a large potential to

1 grow. In our state, but probably more broadly as
2 well, there just isn't a lot of infrastructure
3 for that.

4 MS. HERBST: Yes. I'm thinking
5 incubators, but incubators are more focused on
6 technology we're trying to grow.

7 MEMBER REICHERT: I run an incubator,
8 and we just don't have expertise on that basis.
9 We don't have expertise about, what are all the
10 business things that you need to think about if
11 you're relocating from another country.

12 MEMBER BALDWIN: Ireland does
13 something, they put together small office
14 complexes that are empty, because they know that
15 the time to get in and get started is really
16 important, and it differentiates them from other
17 European countries. So it's for small companies,
18 and they can go in and be part of this small
19 office park almost immediately. And they get
20 help with visas, they get help with the labor
21 law, it's similar to what I mentioned yesterday.

22 MR. BUERSTATTE: ITA piloted a program

1 called Start-Up Global about a year, a year and a
2 half ago. It got some traction, but there were
3 certainly some institutional lessons there. And
4 I think we can dig into that a little bit as a
5 council. It sounds like it might be really
6 meaningful for the Secretary.

7 So I'll follow up, Ellen, and we can
8 get some more information. It might be something
9 we can dive into over the next couple months.

10 But this is fantastic. Thank you for
11 coming, I really appreciate your time, Ellen.

12 MS. HERBST: Thank you. I wish I
13 could stay with you the entire day.
14 Unfortunately I can't, but thank you for letting
15 me take a few moments of your time. Thank you.

16 MR. BUERSTATTE: I appreciate it.
17 Well, that was really great to kick things off,
18 and I'll pass the ball over to Steve to
19 officially open us up now as a council.

20 CO-CHAIR TANG: Welcome, everybody.
21 I am happy to be here. I'm sorry to miss
22 yesterday, but I do like having a full set of

1 teeth, so I appreciate that.

2 I'm hoping that Craig's comment that
3 I was on drugs yesterday didn't make it into the
4 federal record here.

5 (Laughter.)

6 CO-CHAIR TANG: We'll see about that.

7 I understand you had a great day
8 yesterday, with some great discussion. Ellen may
9 have mentioned the four themes, deregulation,
10 apprenticeships, the first responder project, and
11 advanced manufacturing. And so I think we're
12 going to, as usual, hear our report out of that
13 discussion.

14 I think it has obviously taken some
15 time to get the kind of engagement that we want
16 with the administration to flesh out these
17 themes, but I liken it to reconnaissance. I'll
18 rely on the folks with actual military
19 experience, like Craig and Mike. But I have to
20 hand it to Craig and the OIE team of picking up
21 the weak signals and amplifying them into these
22 four themes, which took a lot of doing.

1 I think, as Melissa said yesterday,
2 this is the first time in which we've bridged
3 NACIE into a new administration. So some of the
4 issues of what we've done in the past, which
5 Andrew mentioned, and what we're going to do in
6 the future are just starting to come to light
7 here. But I think this meeting will ultimately
8 be viewed as a turning point, I think, for NACIE
9 and for OIE.

10 We appreciate your engagement, we
11 appreciate those of you that were here yesterday
12 and those of you that just joined today. Tiffany
13 and Rebecca, thanks for joining on the phone.

14 MR. BUERSTATTE: And one more thing
15 I'll add to the mix here. Henry, Henry, wave
16 real quick. Henry Childs, Senior Advisor to EDA,
17 new member of the team, been with us now for two
18 or three months, I think?

19 MR. CHILDS: Seven months.

20 MR. BUERSTATTE: Whew. Sorry about
21 that, time flies. Time flies. So Henry, he'll
22 be hanging out on the bench there. I wanted to

1 highlight you to say thanks. Henry has been a
2 strong champion for us behind the scenes to get
3 the engagement and the guidance for us so we can
4 continue our mission and drive forward.

5 There's been a lot of competition.
6 And with the administration still onboarding, you
7 can imagine everyone's fighting for mic time.
8 And again, I can't emphasize how great it was to
9 have Ellen here. I think it's a real indicator
10 of the good work that's happening. And thanks,
11 Henry. Please feel free to chat with him during
12 a break. He's been hustling behind the scenes
13 and knows a lot right now.

14 With that said, I'd like to open up,
15 finally, to our first presenter. We have Paul
16 Zielinski here. Paul is the chair of the Federal
17 Lab Commission, and Paul, you're in the corner
18 over there. Feel free to present however you're
19 most comfortable.

20 MR. ZIELINSKI: I'll come on up front.

21 MR. BUERSTATTE: Great.

22 MR. ZIELINSKI: Hello, and thank you

1 for the invitation today. I really very much
2 appreciate the chance to come out and speak to
3 everybody.

4 I'm very excited, actually, to come
5 out. This is the first time I think I've
6 actually addressed NACIE since the beginning of
7 the group, although several folks that I deal
8 with actually have on a regular basis. But I do
9 appreciate the chance to come out and talk to you
10 directly.

11 My name is Paul Zielinski, as was
12 said. I'm the chair of the Federal Laboratory
13 Consortium for Technology Transfer, which is a
14 mouthful, but I also -- my full time job is
15 actually the Director of the Technology
16 Partnerships Office at NIST.

17 And in fact I've actually operated the
18 technology transfer office within the federal
19 laboratory system. All the federal labs are
20 members of the Federal Lab Consortium, so it's
21 one of those things where you get to actually
22 practice what you're talking about and see how it

1 impacts you.

2 One of the things I wanted to actually
3 start with though, and again, it kind of gets
4 into a little bit of this in terms of roles, is
5 sort of laying a bit of the landscape of where
6 technology transfer sort of lives within the
7 federal government's system. And I know now some
8 of this might be a bit of a repeat for some of
9 you, maybe not, but putting it together isn't
10 always necessarily something that's incredibly
11 obvious to everybody. And so I want to just take
12 a couple minutes to sort of lay that out.

13 As most of you do know, there is a
14 NSTC sub-committee that deals with lab-to-market.
15 That is a term that was promoted generally within
16 the last administration, talking about tech
17 transfer, if you will, and it's not a lot
18 different in many ways. It was a bit of a
19 rebranding into that term. It's still the same
20 thing.

21 It's really a matter of how we take
22 this huge investment in research and development

1 that we have, \$130 billion a year. And that you
2 make products and things that reach out to
3 people, the taxpayers, the people that gave us
4 the money in the first place. We do that in a
5 lot of different ways.

6 Like I said, this subcommittee has
7 existed -- it really came about in about 2015.
8 We are currently chartered through mid-September
9 -- I'm sorry, mid-October. It's a little unclear
10 exactly what's going to happen with all of those
11 sub-committees at the moment. They have not re-
12 formed. I do know that there's a group that's
13 looking at how they're going to re-form all of
14 them, but it's not entirely clear what's going to
15 happen.

16 But just because that -- whatever
17 happens with that, there's actually quite a bit
18 of support that exists at the next level that has
19 been going on for quite some time and will
20 continue to happen, and really could use some of
21 the advice and experience that you have coming
22 from this committee. So we really would

1 appreciate your input.

2 So the NSTC is supported by, actually,
3 several different sub-groups, if you will. One
4 of them in there is an inter-agency work group
5 for technology transfer. Now this group isn't
6 something that you're going to find on a lot of
7 websites, mostly because it's one of these groups
8 that's not funded. It is actually the meeting of
9 all of the different heads of tech transfer from
10 the different federal agencies, so it's very much
11 an agency level work group. A lot of the
12 attorneys and everything, we talk about policy
13 issues and basically report out.

14 One of the big products that we
15 actually do, which I actually brought, I don't
16 know if you want me to pass it around. It'll
17 just be available, I'll leave them with Craig
18 here, because they're really heavy and I don't
19 want to bring them back. But we do actually an
20 annual report that we produce out of my office at
21 NIST, which is actually a summary report of all
22 the tech transfer that's happening across the

1 intramural part of the federal government.

2 So this looks at what comes out of
3 federal laboratories' R&D themselves, not the
4 money that we give out in grants. So it's what
5 we're doing internally.

6 A very nice summary report, it is --
7 it does say 2014. If you look, it was actually
8 produced in 2016. This is actually the latest
9 version. It takes a while to get these things
10 through draft and clearance and everything like
11 that. This is the latest report.

12 I would invite you to take a look at
13 this. It breaks down the different agencies and
14 the different levels of production and the
15 different ways that we're trying to communicate
16 out the results of our work. So it's very useful
17 in that regard.

18 It kind of breaks it down into some
19 different areas. And that's one of the biggest
20 thing we're trying to do, is demystify what's
21 actually going on in different laboratories. So
22 I'll leave those with you for however you

1 distribute things.

2 They're also available online, which
3 is much easier to carry. However, it looks very
4 nice with this beautiful picture on the cover, so
5 I'll promote the book itself. It's very handy to
6 just sort of flip through.

7 So on a different -- in addition to
8 the inter-agency work group on tech transfer, a
9 couple of years ago, we actually spun off a
10 group, because there's a lot of interest --
11 specifically intramural, but there's a lot of
12 interest actually on the extramural side of
13 things. And so from an extramural policy side,
14 we deal with, of course, the Bayh-Dole Act and
15 how we're implementing the Bayh-Dole Act.

16 And so we actually formed a specific
17 work group that talks about different things
18 around that whole area, things like reporting in
19 and how the agencies are dealing with some of the
20 policy back end, and what we're doing with
21 inventions and technology transfer from
22 extramural inventions.

1 And so we have another group that
2 deals with that. I will say both of these groups
3 are something that we coordinate actually through
4 the Department of Commerce, through NIST, and so
5 I actually convene these things from NIST on
6 behalf of the Department of Commerce for the
7 federal government.

8 So they're active groups. The inter-
9 agency work group's been around since 1987. It
10 results from an Executive Order from Ronald
11 Reagan that set up an equivalent to NSTC group,
12 and it just kept on going. We do actually
13 convene it under the authority of the Secretary
14 of Commerce to share best practices and
15 information. There was a nice piece in Statute,
16 and I won't quote you all of those, but it is
17 their role within Commerce to coordinate this
18 type of function for the federal government. So
19 we do look at policy, we look at reporting, we
20 look at actually how we do things across -- at
21 the agency level.

22 In a very tactical way, then, the

1 Federal Lab Consortium is its own special entity.
2 It was created by Congress. It's actually been
3 around, it formed up in about '74, informally.
4 In 1986 it actually was formally commissioned by
5 Congress, and so you can find a nice little piece
6 in the U.S. code that talks about the formation
7 of the Federal Lab Consortium.

8 What's nice about that group is it
9 actually has a budget, and it has a physical
10 presence -- it has a presence, I shouldn't say a
11 physical presence, but it has a website. So we
12 can communicate things. And so from a very
13 tactical way of communicating products out, we
14 actually use the Federal Lab Consortium a good
15 bit. That tends to be the spokesperson, if you
16 will, for the different efforts.

17 They do work together. And so, for
18 example, the NSTC, when you look at the different
19 projects that we've rolled out, we talked about
20 things like human capital, and of course, you've
21 seen I-Corps and some of those efforts, but it
22 also deals with how we deal with people and what

1 we're doing within the lab and entrepreneurship
2 issues.

3 We also deal with federal facilities
4 and partnerships and we do have a nice little
5 project, FLC Business, if you go -- if you either
6 go to FLC Business dot com, or you can find it in
7 our toolkit at Federal Lab dot org, you can find
8 a very nice search tool now which never existed
9 before, basically, that'll take you through all
10 of the different inventions from every federal
11 agency and laboratory, at least the ones that we
12 know of. But we do crawl the web and we pull
13 them all in.

14 We -- you have a search that talks
15 about the capabilities of the federal laboratory,
16 because if you're thinking about, as I was
17 describing -- if you're sitting in Baltimore and
18 you're wondering, and you have a small business,
19 you don't necessarily know the capabilities of a
20 laboratory in California. It's nice that maybe
21 NIST is down the road, but we may not be the
22 right laboratory. So how do you figure out who

1 does what?

2 And yes, you can Google things, and
3 you can work through that result, but we do have
4 a nice tool that talks about what the labs
5 actually do and where they're located and
6 hopefully can help people actually figure out
7 maybe who you want to partner with.

8 It also lists unique equipment and
9 facilities. So if you are trying to figure out
10 who might have some test capability that you're
11 looking for, we do have a lot of unique
12 facilities. We have some unique equipment, and
13 you can access that in the federal laboratories.
14 And so that's actually one of the things we've
15 promoted as well.

16 So we actually have this whole system.
17 There's actually a concierge service. If you
18 really don't know how to figure it out, you can
19 ask, and we have a very nice network across the
20 government because we have agency reps and we
21 have lab reps and we can actually reach out
22 relatively quickly. It's actually one of those

1 things in government that works very well for
2 communication, just to quickly push information
3 out and get information back, hopefully to help
4 somebody out.

5 A lot of support there for small
6 business growth, a lot of for large business
7 growth, any business growth, if you will. And
8 that's really the mission, as well as -- this is
9 where we get training for people, this is how we
10 educate people within the federal government how
11 to do their job. This is actually through our
12 meetings with the Federal Lab Consortium.

13 In addition to the inter-agency work
14 groups that I mentioned and the FLC, there is
15 also the SBIR Program Manager's work group. I
16 know you're all familiar with SBIR. Actually,
17 also, within NIST, SBIR falls into my office as
18 well, so I'm familiar with the program. We don't
19 run that part of it, that's run by SBA, but we do
20 coordinate. And this where it all comes together
21 at the moment under this lab-to-market banner.

22 So, if you will, that's all the

1 different groups that sort of exist. It's not
2 always clear necessarily which one does what, I
3 suppose, to folks, but we do talk to each other.
4 There's a lot of overlap between the groups and
5 they do have their special functions.

6 And I will invite you -- any
7 recommendations you have on this, we're very
8 interested in what you have to say. We also have
9 a lot of capability to try to make some of those
10 things happen. So anything that you've got that
11 you'd like to recommend through the committee,
12 we're very interested. I know we invite EDA, we
13 have people come in and sit in these different
14 groups as well.

15 So what kind of things do we do?
16 Well, like I said, we do technologies. We
17 certainly invent and we patent things and we do
18 license those things. It's a very interesting
19 area. This is one of those things that's kind of
20 fun, where you see some of those.

21 The more interesting ones tend to be
22 the ones that cross over. A great example is we

1 have a heart stent that came -- basically, Boston
2 Scientific commercialized it for billions of
3 dollars a year, but it came out of actually doing
4 non-corrosive stuff from the energy technology
5 laboratory. So they're working on fossil fuels,
6 but it ends up in a heart stent, which is kind of
7 a fun -- it's sort of a neat story, especially
8 one that's very profitable and ends up going into
9 worldwide distribution.

10 We do a lot similar things. One
11 example I often walk through how the process
12 works is actually a fry coating. So it's a
13 gluten-free fried coating for your fried chicken
14 and whatever else you'd like to, you know, your
15 chicken fry. It comes out of USDA, and they
16 actually had a group in Montgomery -- I'm sorry,
17 Howard Community College picked it up, and it was
18 a spinoff group.

19 We sort of walked through where they
20 regionally started getting a foothold in some
21 supermarkets in this region and expanded, and so
22 this lovely fry coating is available. And it's

1 all based on a USDA technology.

2 So we do a lot of different
3 technologies and we spin those things off. Like
4 I said, you can find all the different ones that
5 are available on the FLC website. We are trying
6 to work with a number of partners to push that
7 information out. It's not secret information.
8 We want people to take it. So if you run a
9 website and you want all of our information, we'd
10 be happy to give it to you.

11 We have a couple different efforts
12 going in that regard to try to work with some
13 private companies to do some push out. I do
14 talk, for example, Autumn, with a different
15 university, the group is trying to pick up. I
16 had a call, for example, with them this week,
17 about trying to push our data to them. They have
18 a database, we'd love to get our information
19 carried on their database. Like I said, it's not
20 secret. We're trying to promote this the best we
21 can.

22 A lot of different technologies are

1 available in many different fields, which kind of
2 brings up the main point of Federal Lab. It
3 really isn't necessarily just this, you know, we
4 sell technologies end. It's much more about the
5 partnerships, at least in my mind. We have a lot
6 of ways to partner, we have a lot of ways to push
7 out information, and we're very flexible in the
8 way we can partner. We do cooperative research
9 and development agreements, that's a very
10 flexible mechanism. We do an incredible lot of
11 things with those. We do many of them.

12 There's also other agreements, there's
13 SpaceX, different things. One of the things
14 you'll find on the FLC website is actually a
15 matrix for a way to search who has different
16 types of authorities, which is kind of an
17 interesting thing, because we don't all always
18 have the same authority at each federal agency.
19 So we depend on what Congress says we can do.

20 But they are an incredibly flexible
21 tool. We do a lot of different things with them.
22 I know Ellen just mentioned things like FirstNet

1 and the fact that they are going to distribute,
2 we're going to actually have this nationwide
3 system, communication system for first
4 responders.

5 You know, if you're a business and you
6 want to figure out whether or not your particular
7 technology might work within this national
8 system, how do you do that? Well, we actually
9 partnered with another group, NTIS, with -- oh,
10 I'm sorry, NTIA, within Commerce. Between this
11 and NTIA, we actually have a test bed where
12 people can come and test their technology, get an
13 evaluation. It's blinded, it's given to the
14 company, to basically give them an idea of how
15 their particular product interacts with the rest
16 of its system set up on a test bed algorithm in
17 Boulder, Colorado.

18 So it's a nice little way for people
19 just to figure out how things work and whether
20 they're going to be able to enter. I mean it's -
21 - hundreds of billions of dollars will be
22 invested in this system, so it's certainly a big

1 opportunity.

2 We do a lot of things. We can do --
3 at that level, we can do a lot of individual
4 agreements. We can do things -- it's funny.
5 People think we're this huge monster of a federal
6 government, but we actually can help small
7 businesses, just answering questions. And one of
8 the biggest things I will usually point out to
9 someone is, if you're trying to find the national
10 expert and they don't seem like they have the
11 time for you, find another person, because we
12 have a lot of expertise, and there's probably
13 someone else who is willing to talk to you.

14 I'm dealing with a small business
15 right now that was -- I won't get into their
16 product, it's proprietary, but you know, they had
17 questions about their product melting in fires,
18 and it's like, well, we've got expertise in that.
19 We can help you out. We don't have to do a
20 formal review, we can just answer some questions.
21 And so we actually can serve in that capacity as
22 well.

1 We're really trying to make sure that
2 we reach out to people and try to grow
3 businesses. So the idea is we bought these
4 federal laboratories, we invest in them every
5 year, we have expertise, how do we get it out
6 there and make a difference in the marketplace?

7 So where are we going with this whole
8 thing? You know, I don't know, I don't think
9 anybody does. Like I said, these work groups
10 will continue. They've existed, as I said, for
11 decades. I do see the NSTC is probably, as I
12 understand it, re-forming. I know, for example,
13 lab-to-market is going to -- is at least
14 chartered through mid-October. I don't know the
15 future after that.

16 We are engaged in other things though.
17 So whatever comes out of it -- a great example of
18 this is, actually, I've been involved in a
19 different NSTC work group on defense research and
20 development, defense and security research
21 facilities, and the whole idea is facility
22 infrastructure things.

1 What's interesting is they actually
2 are using some of the FLC tools, because it
3 answers some of their questions. So rather than
4 reinventing things, like I said, you can search
5 laboratories. Well, they wanted to come up with
6 a search of laboratories. Well, we have that.
7 Or a mechanisms department, we've got that.

8 So what's interesting is that we're
9 not reinventing the wheel, we're actually taking
10 advantage of these investments. But the idea,
11 the reason I bring it up, is it actually is one
12 of these things -- no matter what gets
13 reinvented, there still is this piece of
14 interest, I think, across the board, in how do we
15 commercialize? How do we benefit the public from
16 this investment we have in research and
17 development?

18 And so we'll still be plugging in
19 somewhere along the line, I'm sure of that. And
20 you can see, as Ellen said, every indication is
21 that there will be a home for this, there will be
22 -- it may not be the banner line, but we'll be

1 supporting it in any case.

2 So, you know, as Ellen said, thank you
3 very much. I greatly appreciate your efforts in
4 coming out and advising us and the rest of the
5 federal government. I really appreciate your
6 service in everything and I look forward to
7 answering whatever questions you have and working
8 with you to try to implement some of the
9 recommendations you have. Thank you.

10 MEMBER TOOLE: So I had a couple of
11 comments/questions. So over the years I've been
12 involved in this in sort of a bunch of different
13 perspectives, from inside the federal government,
14 as an academic, and then an entrepreneur, and now
15 in the private sector as an investor.

16 I agree with you a thousand percent
17 that there's an incredible capability in lab
18 resources inside the federal government. I would
19 say that entrepreneurs as a group don't know
20 about them. And figuring out how you get to that
21 group of people is really hard.

22 I would say that organizations like

1 Autumn are not the right place to do it. Those
2 are people that are involved in licensing.
3 They're not involved in entrepreneurship, in
4 spending things out of universities for the most
5 part.

6 I would say that almost every major
7 academic university today in America has an
8 innovation and entrepreneurship effort at some
9 level, right? And getting involved with that
10 group of people and figuring out how to make
11 materials available to the entrepreneurs I think
12 would be incredibly impactful.

13 People like Emily and David, there's
14 this huge group, a growing group of innovation
15 efforts that live outside the universities and
16 speak to a big community as well. And figuring
17 out how to design materials for that group of
18 people and get things to that group of people
19 could be incredibly impactful, because it's an
20 almost unbelievable resource that's massively
21 under-utilized, the capabilities inside the
22 federal government.

1 So that would be one. On the --

2 MR. ZIELINSKI: Can I talk about that
3 briefly?

4 MEMBER TOOLE: Sure. As long as I get
5 to get to the second one.

6 MR. ZIELINSKI: We are actually -- so
7 one of the things we're actually trying to invest
8 in this year, because we're not really great at
9 advertising the program, but we have these
10 resources. I talk about them constantly, all
11 over the place.

12 But that really -- you know, every
13 time I talk to a new audience, it's the first
14 time they've ever heard it. And I know that. So
15 I end up repeating it a lot.

16 But how do you reach out to a lot of
17 people? One of the things we've been trying to
18 do is actually partner with some private sector
19 companies through NTIS. They have this joint
20 venture authority, and this is brand new, it's
21 not even really out there yet. We put out a
22 solicitation. It's not all done yet. But we're

1 trying to actually partner up with some private
2 folks to take advantage of their systems and
3 networks as opposed to doing it as a
4 government/academic -- you know, the usual
5 method. Because it hasn't been effective.

6 MEMBER TOOLE: I'm thrilled to hear
7 you say that.

8 MR. ZIELINSKI: But we'd love to hear
9 recommendations along those lines. I mean, it's
10 brand new. It's just up and coming.

11 MEMBER REAMER: Tell people what NTIS
12 is.

13 MR. ZIELINSKI: Oh, I'm sorry.
14 National Technology Information System Service.
15 It's a partner -- it's actually part of Commerce
16 as well, we like to throw our T's and I's around
17 a lot, rearrange the letters.

18 But actually, so if you think about
19 how you -- the original mission actually is very
20 much, how do you get information out from the
21 federal government? And they actually, the
22 original group, pre-internet, particularly, they

1 produced information that you would get from the
2 federal government. I think about most of us
3 know about the crazy guy with the question marks.
4 You can get free information from the government?
5 But actually, they were the source of information
6 from the federal government. So all of the
7 different technical information came through
8 NTIS.

9 Now of course everybody now just looks
10 at the internet and uses a search engine, and so
11 even Congress has said, well, we don't need you
12 anymore, we're going to defund you. Most of
13 their funding doesn't come from appropriated
14 funds, you really can't defund them very easily.
15 But they do it with this special authority called
16 joint ventures, and so they will partner with
17 different agencies on data issues, data-related
18 issues.

19 We have data. We have a lot of data
20 that surrounds partnerships, and that's sort of
21 the kernel of this, is how do you then push that
22 out?

1 That's NTIS in a quick nutshell, and
2 I'm sure I did not do them justice, but they're
3 an information based agency.

4 MEMBER TOOLE: On the IP side of
5 things, when I was at RPT we used cooperative
6 research agreements as the funding mechanism, and
7 we specifically required private sector
8 involvement in investment. The piece of IP, as
9 you know, there's government rights that attach
10 to IP that's generated using government
11 resources. And some of those rights give private
12 sector partners serious heartburn. And in
13 particular, the march-in rights.

14 You know, if you're trying to get
15 DuPont -- small companies don't really care
16 because they'll do anything for money. But if
17 you're trying to get a DuPont or somebody like
18 that to put money into this, and they look at
19 this and say, wait, I'm putting money into this
20 and at the end of the day some bureaucrat in
21 Washington is going to decide that I'm not trying
22 hard enough and come in and take the IP? Yeah,

1 right.

2 And the march-in rights have never
3 been exercised by the federal government. And
4 you can tell people that, and the lawyers go, so
5 what? That doesn't mean it won't happen
6 tomorrow. And so anything that you can do to get
7 rid of those really odious provisions I think
8 would be incredibly helpful for getting
9 government funded IP out into the world.

10 MR. ZIELINSKI: So the actual
11 provisions themselves are Congress --

12 MEMBER TOOLE: But I think that
13 Congress would list -- recommendations from the
14 administration carry some amount of weight with
15 Congress, right? And so anything that you could
16 do to help get rid of especially the march-in
17 rights. The other parts of it aren't so bad, but
18 especially the march-in rights.

19 MR. ZIELINSKI: Yes. I think -- so a
20 couple things quickly.

21 As you noted, these have been around
22 since 1980, and we've never used them. There's

1 never been a case. Now, they've been petitioned
2 to be used multiple times, at least several
3 times, and generally there's been a pushback,
4 saying that's not really why we do march-in.
5 There's a very specific rationale when you do it.

6 So it's been pretty stable in terms of
7 the government position. I've seen things in
8 bills and legislation too, so I don't know -- I
9 mean, I can't speak for Congress, and I don't
10 necessarily believe that they're in a position
11 where they're going to change that right now,
12 from what I've seen.

13 MEMBER TOOLE: Well, anything you
14 could do, you should.

15 MR. ZIELINSKI: But if there's things
16 that we can do -- I mean, one of the things we do
17 is the regulations. Now, we did issue a update
18 to the Bayh-Dole regulation in 37 CFR 401. We
19 did the proposed rulemaking just before the end
20 of the last administration. It is still awaiting
21 clearance within the new administration. You
22 know, everything in a regulation -- of course

1 they want to cut back regulations, so that hasn't
2 made it out.

3 MEMBER TOOLE: Now's the time, now's
4 the time.

5 MR. ZIELINSKI: But we do have some
6 authority in terms of the regulatory aspect. We
7 can't change the law, but there are some pieces
8 that are in there to try to look at regulation,
9 and in fact, that's one of those places that
10 there's recommendations. We can implement those.
11 And again, those are something that I personally
12 am right now engaged in, that's something that is
13 delegated through NIST to put together. So we
14 write them, and we're very interested in what you
15 have, in terms of ideas for that.

16 We do have the proposed rulemaking,
17 like I said, that's still hanging. I'm not dying
18 to go through the rulemaking again all the time
19 on this, but we are able to do things. But we
20 can't overturn the basic premise of the
21 government use right and the march-in.

22 MEMBER BALDWIN: Can I ask a very

1 fundamental question? When you talk about the
2 lab network, are you talking about JPL, Lawrence-
3 Livermore, or is this a different lab?

4 MR. ZIELINSKI: So we have 300 federal
5 laboratories nationwide. We've got all the DOE
6 labs, all of the NASA labs, all -- so it's all
7 the actual federal intramural labs, government-
8 owned, government-operated, as well as the
9 contractor-operated. All the federally funded
10 research and develop centers, all of those are
11 lumped into this.

12 The way Congress defined federal
13 laboratory actually includes all government
14 funded laboratories and FFRDCs, so it's all that.

15 MEMBER REAMER: What's the total
16 budget been for the lab?

17 MR. ZIELINSKI: The total intramural
18 budget runs around the neighborhood of about 50
19 billion. So it's roughly a third, a third, a
20 third, if you look at federal -- it's a little
21 bit different than that, but 130, 140 billion
22 dollars, roughly, 40-50 billion in the federal

1 labs, 30 university, 30-40 industry. And that's
2 roughly how it breaks out if you look at the NSF
3 statistics where they break it down, and that's
4 really where I get my numbers from.

5 MEMBER REAMER: And the DOE labs
6 would be maybe half?

7 MR. ZIELINSKI: So DOE has 17
8 laboratories out of 300 --

9 MEMBER REAMER: But budget-wise?

10 MR. ZIELINSKI: Oh no, not even close.
11 DOD's about half.

12 MEMBER REAMER: Okay.

13 MR. ZIELINSKI: DOE's a very large
14 portion, a quarter maybe. NIH, particularly
15 extramural, is huge. But actually, even on the
16 intramural side, NIH may -- they may be huge
17 extramural, but they still have a very large
18 portion of intramural.

19 MEMBER REAMER: So what are the
20 couple top challenges that you're facing that the
21 Council might be able to give you a solution?

22 MR. ZIELINSKI: I think you hit right

1 on. Our biggest challenge is always, how do we
2 reach people? I mean, we -- my usual pitch is,
3 we don't make anything. We spend \$130 billion,
4 we don't make stuff.

5 Our products aren't going to reach the
6 public unless we have a partner. And the biggest
7 trick is, who's going to do that work? Who's
8 going to be that partner? Who's going to be the
9 entrepreneur that's actually going to produce,
10 make, sell, distribute this product?

11 And that's not an easy thing to do on
12 a national scale. We can produce products, we
13 have information, but how you actually connect to
14 people, we need a lot of partners to do that in
15 intermediate levels. And so we do work with
16 state test beds, we do work with -- I mean, we
17 work at many, many different levels, but anything
18 we can do to get that partner that's going to get
19 that product out there. And that gets to be
20 very, very individual. It's time-consuming and
21 it never ends.

22 MEMBER JOHNSON: Let me give you an

1 example. So the ISS is a national lab. The
2 space technology company that I'm working for
3 took a Boston company to do retinal implants
4 there and right now it's doing -- the Michael J.
5 Fox foundation is doing a Parkinson's disease
6 experiment.

7 And we actually get -- we have access
8 to the national lab. It's free. The Space Act
9 Agreement, we can get up access, down access, I
10 mean, they're wonderful people to work with. I
11 just wish I had agreements where I could access
12 more.

13 If your focus is commercialization and
14 then you can find somebody that you deal with,
15 for me, it's these start-ups, and then you have
16 this really, really rich resource, and you can
17 figure out how to navigate the bureaucracy, it's
18 fantastic.

19 MEMBER REAMER: So from your
20 organization's wish list, what would you like to
21 see? How could that be realized?

22 MEMBER JOHNSON: I need access. To

1 me, it's fragmented, so I'm going to follow up
2 with you. I need access, and we've already
3 talked about a couple of the labs. I need access
4 to people and technology there, because they
5 don't know how to commercialize it. And the more
6 exposure I have to just technology, if I can
7 match that with somebody that can commercialize
8 it, then everybody wins.

9 MEMBER FREDERICK: I really think
10 there's a huge opportunity with the universities
11 and also the venture community. I'm at NEA, and
12 I've done a fair amount of work with Lawrence
13 Livermore, and it's been a really up and down
14 relationship.

15 I'd say on the positive side, we have
16 a company Tri-Alpha. It's a nuclear fusion play
17 and it's raised hundreds of millions of dollars.

18 PARTICIPANT: Good luck.

19 (Laughter.)

20 MEMBER FREDERICK: When I reached out
21 to Lawrence Livermore, it was a complete fluke
22 that I met the person -- what they need is access

1 to supercomputer power. And they were actually
2 very receptive, and they set up a meeting, and it
3 was the headiest meeting I've ever been a part
4 of, no offense to this crew.

5 (Laughter.)

6 MEMBER FREDERICK: Everyone there was
7 a PhD nuclear physicist except for me. They
8 brought out all these scientists to help and it
9 was a really wonderful session.

10 But then we got bogged down in
11 bureaucracy. But through that, I then tried some
12 other things, because they were starting to hype
13 some of it -- and I shouldn't say hype, that
14 sounds wrong. They were starting to say, hey, we
15 have all these other innovations, would NEA be
16 interested?

17 And so I set up a meeting and I asked
18 them to bring, what are your five or six best?
19 But I gave simple asks that they couldn't follow
20 up with. I said, like, tell me in advance the
21 category so I can get the right general partner
22 there, and they switched it up at the last minute

1 and they brought like healthcare innovations
2 where I'd got the CTO of Sun Microsystems, who
3 was one of my partners, in the room and it was a
4 bloody waste of his time and theirs, because he
5 doesn't understand the drug discovery.

6 I'm sure it was cool, but I'm like,
7 guys.

8 MR. ZIELINSKI: One of the things you
9 will find, at least my experience with federal
10 labs is, we're really off with business. They're
11 not business people. You talk about the
12 scientists in the room. You get all the
13 scientists in the room and they're great, they're
14 incredibly smart and they can answer lots of
15 questions in their field. Don't ask them how to
16 run a business or what the best business -- I
17 mean, that's the trickiest part, is actually
18 defining these ideas.

19 There's some of them out there that
20 are very good, I mean, I don't mean to broad-
21 brush everybody. But for the most part, there's
22 a reason why they're where they are. They're

1 interested in the science. They're really into
2 it. They're not really into the business
3 discussion often.

4 So they'll come in, they'll talk about
5 their science, but they're really not -- they're
6 going to start to fade away in a lot of cases
7 when you start talking about the business side.

8 MEMBER FREDERICK: So I see
9 opportunities. We do a lot of work with Stanford
10 and Berkeley and all these schools, and I see so
11 many talented people who want to start businesses
12 and they don't have enough real-world experience
13 to know what the hell to do with it.

14 So if they could go see some of this
15 technology, I mean, you could almost just set up
16 programs where, let them try to do pitches. Dive
17 in. Figure out what's here. And I bet their
18 PowerPoints would be better than what I saw from
19 the lab folk who came in with a 70-page --

20 MR. ZIELINSKI: Yes, something like
21 that probably would be great. And things start
22 up like that. It's hard to -- their

1 sustainability tends to be the issue with those.
2 Because we start doing partnerships with business
3 schools here and there and it lasts a couple
4 years and then it goes away, you know.

5 It doesn't mean I'm trying to --

6 MEMBER FREDERICK: I don't mean to
7 trivialize it, but it shows how hard they were to
8 work with. After the meeting, there was one we
9 were interested in, and the deck was something
10 like a 70 MG file and they couldn't send it to
11 us, because it had all this unnecessary animation
12 and fancy graphics.

13 MR. ZIELINSKI: Well, I'll tell you,
14 the one cool thing I've seen in a couple
15 instances where these have been really successful
16 is that the people that actually pull the whole
17 thing together actually end up forming a
18 business, and then they go away, and then you
19 lose the steam. But they were really successful.
20 And that -- honestly, that tends to be one of the
21 bigger killers, I think, with some of these
22 programs. You really need a champion. And each

1 one, as soon as you get the champion, something
2 takes off.

3 MEMBER REAMER: We're running out of
4 time. Dave, we'll give you the last question.

5 MEMBER KENNEY: Thanks. First, I'd
6 like to second everything Eric said, and I --
7 I've come to interact with the labs on a few
8 commercialization efforts in the DOE lab network,
9 a few different labs, and the prior
10 administration sent out the memo specifically
11 targeting trying to increase the
12 commercialization output of the labs.

13 And I know they experimented with a
14 variety of things, but what I saw mostly were, in
15 fact, experiments that were run kind of like one-
16 time. DOE did America's Next Top Innovator.
17 It's the kind of thing that, over time, they --
18 people could have started to learn more if they'd
19 run it year after year after year.

20 The reality is, how do you get the
21 word out? You have to be consistent and get the
22 message out more than once. And I felt like

1 there was sort of an experiment and then they
2 moved on to something else.

3 And the other thing that I've noticed
4 that really comes back to the core of a lot of
5 these issues is the labs aren't measured on
6 commercialization output at their core. The DOE
7 labs, all but one of them, are a contract, a
8 very, very big contract awarded to a company to
9 run the lab, or a university, or a nonprofit.
10 And they -- if you look at what they're measured
11 on, it's like, 1/10th of one percent of their
12 metrics are tied to actually commercialization
13 output. And if I was running the lab, I wouldn't
14 worry too much about it either, if that's not
15 what my getting into the contract again the next
16 time around was based on.

17 So I think there's a fundamental,
18 systemic level that needs to be addressed there.

19 And sorry for that long little diatribe.

20 MR. ZIELINSKI: No, that's an issue,
21 I know, even that was tried -- way back even when
22 this whole lab-to-market thing was paying off,

1 that was actually one of the first issues was
2 having, I guess, how do you increase the
3 percentage? Look what happened. We made tons of
4 progress.

5 It's interesting, though, and you
6 mention these little flash in the pan projects,
7 and that has a little bit to do with the way
8 government works. We reinvent and then we
9 reinvent and then we reinvent and relabel. But
10 it is one of those reasons that I brought up
11 those work groups, is because that's actually
12 where some of the stability is. So we can get
13 those infused there, we can keep them going.

14 MEMBER KENNEY: Yes, so one of our
15 focus areas is deregulation, and I guess a
16 question I'll ask is, are there things that could
17 make a significant improvement in the tech
18 transfer and commercialization efforts at the
19 labs, broadly, that deregulation effort could
20 address?

21 And I know off the top of my head,
22 when we were working with one of the DOE labs at

1 ATL, as recently as four years ago they had to
2 get eight signatures on one piece of actual paper
3 from people in two different states, across the
4 country from each other, before they were allowed
5 to send a boilerplate NDA document out that was
6 blank to a company.

7 MR. ZIELINSKI: So the trick with that
8 is, there is nothing in regulation that says
9 they're required to do that. That is an agency
10 policy, that's not a regulatory effort.

11 MEMBER KENNEY: Okay. So are there
12 regulatory things that -- so they obviously can
13 then fix that themselves, but are there
14 regulatory things --

15 MR. ZIELINSKI: Well, if I'm going to
16 give my usual -- so, big picture, some of the big
17 problems that I always deal with. Software is a
18 huge issue for us, copyright. We can't
19 copyright. The federal government, 1908, you
20 can't copyright federal government works.

21 Well, they didn't really think about
22 software and apps at the time, and so how do you

1 transfer the rights to those things to a company
2 that might make and sell that product when you
3 don't own any copyright?

4 For that matter, how do you even do an
5 open license copyright? You can't, because you
6 can't copyright government works. That gets to
7 be -- that's a messy piece. I don't know if
8 that's deregulation, but --

9 MEMBER TOOLE: But when everybody
10 wants to talk about the deregulation, right, I
11 mean, some of it you don't need to go to Congress
12 for. Some of it, somebody just need to take a
13 damn weed-whacker to a bunch of stupid --

14 MR. ZIELINSKI: Well, and like your
15 NDA issue. If I look at a CRADA, at some
16 agencies, it takes 13 signatures. At mine, it
17 takes four signatures and one of them is the
18 partner's. You know, it depends on -- a lot of
19 that is policy. It is not regulation. And if
20 you look in the regulations, a lot of this
21 bureaucracy does not exist. It is self-inflicted
22 wounds, and cleaning that up actually would be a

1 huge area that we could use help with.

2 Entrepreneurship, though, is an issue
3 within -- like, from the federal lab side, you
4 talk about university spin-offs. We can't do
5 that. It's very difficult to do that from a
6 federal lab.

7 MR. BUERSTATTE: What's nice about
8 that too is, I think, this idea can complement
9 nicely the Council's broader efforts on
10 deregulation. It'll fit very nicely with that
11 pillar, so clearly a lot of energy here.

12 MEMBER REICHERT: Can I make one more
13 comment? So the Department of Energy, I think
14 it's in the EERE, has a program called Small
15 Business Vouchers?

16 MR. ZIELINSKI: Yes.

17 MEMBER REICHERT: Which is all about
18 helping start-ups access resources within the
19 national labs. And I wonder if that's something
20 -- you mentioned that there are test beds at
21 many, many different national labs. As far as I
22 know, this is a pretty limited scope program, and

1 it seems like these resources should be made
2 available to entrepreneurs, they should be easily
3 accessible.

4 And these are often -- I mean, in the
5 energy sector, where everything is super
6 expensive to test, and you're not going to be --
7 an entrepreneur is not going to be paid for
8 creating their own test bed, I guess, how do we
9 get more access? How do we scale that program?

10 MR. ZIELINSKI: So I'm going to give
11 you one of the reasons it doesn't scale all that
12 particularly well with all the agencies.

13 It's a great -- I don't mean to
14 diminish anything that they've done. I think
15 that they've done a great job. One of the unique
16 things with the DOE labs was they brought out
17 that 16 of the 17 labs are GOCOs, contractor
18 operated. They do work according to their
19 contract. And so they actually have to give them
20 vouchers in order to justify spending money on
21 something other than mission for the Department
22 of Energy. So that voucher's important for the

1 way they operate.

2 If you look at a laboratory that's a
3 normal federal lab, I don't need a voucher
4 program. If my scientists want to do work, all
5 they need to do is find the scientist that's
6 doing work in that area that you're going to walk
7 along with, like it's on a journey. Walk with
8 the person that's going the same direction you
9 are.

10 There's no limit. As long as it's
11 within mission scope, they can do work. You can
12 do a CRADA. We can do -- we can spend, we have
13 people, we have facilities. We can't give the
14 other party money, but the DOE voucher program
15 never gives the other party money. They only say
16 what you can spend a certain amount at the lab.

17 We can do every bit of that now.
18 There is nothing that's off the table in that,
19 for CRADAs. It's just a matter of finding the
20 right partner, which goes back to your point.
21 How do you find the right partner? And that's
22 the hard part. But we can do every bit of that

1 now.

2 MR. BUERSTATTE: All right. Let's get
3 back to that one. Maybe we can get some more
4 time on the calendar with Paul for November. I
5 definitely want to get that into the mix in the
6 deregulation stuff. Thank you. Thank you, Paul.

7 So one thing we've talked about many
8 times is just providing you all some near-term
9 network opportunities to engage the government in
10 different ways, so less of policy opportunity
11 here, but more about ways that you all, and I
12 think your organizations and networks, might be
13 able to help us directly with an initiative that
14 Barrett Haga is working on.

15 Barrett, do you want to talk?

16 MR. HAGA: I apologize for my
17 casualness and my laughing when you talked about
18 chicken fried. That's my daughter's favorite
19 song, it's "Chicken Fry" by the Zac Brown Band.
20 She's a three year old, but she calls it chicken
21 fries. This afternoon I've got a daddy-daughter
22 date with her. We're going to go do her favorite

1 activity, which is looking at pickup trucks. So
2 she's -- she wears cowboy boots, the way I do, so
3 it's --

4 MR. BUERSTATTE: Barrett, you have
5 four minutes. Time to pick it up.

6 MR. HAGA: Sorry, sorry.

7 (Laughter.)

8 MR. HAGA: America's Competitiveness
9 Exchange on Innovation and Entrepreneurship is a
10 newer program that was designed in a bar in 2014,
11 like most ideas. Most great ideas start with
12 alcohol. And it is kind of a reverse type of a
13 trade mission, focusing on innovative networks
14 and nodes.

15 For many years, we've said foreign
16 ministers, commerce ministers, scientists, we're
17 going to take you to Boston, Austin, Silicon
18 Valley, and Minneapolis, or something along those
19 lines. Innovation occurs in multiple areas in
20 the United States. So what we do is we take 50
21 of the most powerful people in the hemisphere,
22 the venture capital director of Mexico, for

1 instance, the undersecretary of commerce in
2 Argentina, or these new start-ups like the
3 Mexican entrepreneur of the year, or the Time
4 Magazine, and bring them into a super-region of
5 a country, particularly one in the U.S. per year
6 and one foreign per year.

7 Each one started from Atlanta through
8 Charlotte. So we did GCMC in Atlanta, which is -
9 -

10 PARTICIPANT: Tiffany Wilson's team.

11 MR. HAGA: Yes, Tiffany's team. CU-
12 ICAR, Clemson University ICAR Complex in
13 Greenville. Epix Research Energy Lab in UNC
14 Charlotte. And these communities have one day to
15 move the economic needle with these 50
16 gatekeepers.

17 They have assets, you have assets.
18 Let's link them together to create new IP, new
19 technology, new processes.

20 Mexico was two, stage three was
21 Minneapolis to Chicago. Mayo Clinic, Argonne
22 Labs. But one of the small -- some of the

1 smallest communities, like Vernon County,
2 Wisconsin, 2,500 individuals, they've got an
3 incubator focusing on new agricultural companies.
4 In fact, they've got seven companies now that are
5 plugged into the Whole Foods food chain.
6 Kickapoo Coffee, Fizzy Pop soda all came out of
7 there. So bringing these people there allowed
8 new supply chains of coffee beans.

9 We went through Burnett County. The
10 export director for all of Bolivia was there.
11 They had an issue with getting coffee. He said,
12 we can give you 14 tons of coffee without an
13 issue immediately. She said, how? He goes, they
14 all run through me anyway. So we make that
15 linkage points.

16 Four was for Argentina, five was back
17 in the U.S. again, which was Arizona to
18 California. Arizona State, University of
19 Arizona, Imperial Valley, UC San Diego. Six was
20 in the Toronto-Waterloo corridor. Seven was
21 Austin.

22 Eight would have been foreign, but we

1 flipped it, because we wanted to end up with the
2 tenth version back in the U.S. to make it -- the
3 tenth is a good number for branding and
4 marketing. So we did seven in the Austin-San
5 Antonio corridor. Eight is going to be in North
6 Central Florida, December 3-9 of this year.

7 What we're asking of NACIE is we want
8 to get NACIE either involved in that as a host
9 site, either as speakers, or people communicating
10 with the foreign assets on the assets that you
11 have, like GW or the University Science Center,
12 or UC San Diego, et cetera, and say, we've got
13 these assets here. What are we looking for in
14 these labs and facilities?

15 And when we open up these labs and
16 facilities at the presidential levels, they're at
17 minister levels, they're at the gatekeeper
18 levels, and saying, here's my card. Here's
19 yours. Let's move the needle.

20 And that's kind of -- the benefits of
21 ACE, so in terms of IP, ACE 1, Conover, North
22 Carolina at the manufacturing solutions testing

1 center. It's a very rural testing center. It's
2 kind of like MythBusters on steroids in rural
3 North Carolina. It's great. They have linked up
4 with Techno Monterrey, and now they have a joint
5 patent on a new line of thread that they debuted
6 in the Milan Fashion Show last -- a couple months
7 ago.

8 They share the IP, they share the
9 thing. We just made the connections. That's all
10 we do at this.

11 Charter bus, foreign security vehicle
12 spread, and I'm speaking very fast because I'm
13 trying to catch up some speed -- some time here.
14 Craig's looking at me like, faster.

15 Madison, Wisconsin's got new research
16 partnerships with Argentina, in terms that'll
17 last for their research. We've got over 800
18 things that we're tracking out of ACE 7 in
19 Central Texas. We say if you're invited to go on
20 ACE and if you don't move the needle, you're not
21 invited back. So it is a very high pressure
22 situation.

1 Unless you're a vice-minister of a
2 rank of courtesy, like vice-minister, full
3 minister of a country, if you're a lab, and if
4 you go on ACE, the Dean of the Manufacturing
5 School of -- Techno Monterrey is where he's at.
6 He had to produce. And we don't care if it's
7 U.S. to U.S. or foreign to foreign, they just
8 have to document how they produce or at least
9 change their model.

10 We also have countries outside the
11 hemisphere, so we're bringing you access to the
12 chief scientists of Israel. That's a big deal.
13 They generally comes -- he generally comes on
14 ACE. The Director of Manufacturing for Germany
15 will be on ACE, he was on 6 and 7, coming on 8.

16 ACE in 2019 is supposed to be four
17 days in Germany, four days in Israel, opening at
18 the labs in the greater Munich area and then the
19 Tel Aviv area.

20 So that's what ACE is. Ready to show
21 the quick video?

22 MR. BUERSTATTE: Oh, that would be

1 great, yes.

2 MR. HAGA: I probably ought to --

3 MR. BUERSTATTE: If we can queue it
4 up.

5 MR. HAGA: There's a slight lag, so I
6 apologize.

7 MEMBER BALDWIN: And we'll get soft
8 copies of this too?

9 MR. BUERSTATTE: Yes. As always. And
10 those of you on the line, sorry about some of
11 these read-aheads. Didn't know they were coming.
12 But we'll get you soft copies and with the whole
13 wrap up after today's meeting.

14 MR. HAGA: What I'll do is I'll show
15 you the fully built out exchange, and I'll send
16 these out to you as well. This is the California
17 trip where we went through Tucson through San
18 Diego.

19 UC San Diego, we actually signed an
20 agreement transferred through the Organization of
21 American States at UC San Diego. But the
22 participants, to give you an idea, if we brought

1 this level to your facility's sites and labs,
2 these are the ones that control the economic
3 development and the research in Canada alone.

4 That will bring 50, it's max of 50.

5 So we generally get three foreign applications
6 from the world, we select the individuals.

7 Outside the hemisphere an administrative
8 innovation, number two in the world in terms of
9 IT production as a whole. So that's the fifth.

10 Let me show you the video to the
11 eighth coming up. One moment.

12 (Video played)

13 MR. HAGA: We're going to try to
14 invite you and some of your people to target you
15 for speakers on this. Fly in, fly out, start
16 taking, building part of this network of the ACE
17 events.

18 Sid Martin Biotech Institute is one
19 biotech research university that's worlds beyond
20 this. The --

21 MR. BUERSTATTE: Are there particular
22 questions or challenges right now with Florida

1 ACE that you want to pose to the team just to
2 think about?

3 MR. HAGA: I have a couple.

4 MR. BUERSTATTE: Yes, so on the agenda
5 and subjects in with that?

6 MR. HAGA: The thing we're looking at
7 most is from how NACIE can gauge is how can we
8 get more US based assets that are outside that
9 region and scope that compliment that region
10 itself and your facilities and the global program
11 itself as a whole.

12 So what I mean by that is CAMID,
13 Florida Institute of Technology, FIT has got a
14 new facility called the CAMID, Center for
15 Advanced Materials and Innovation Design. It's a
16 materials group, it's part of Harris Corporation.

17 FIT's a good school, but the assets
18 that you have here could compliment that to make
19 it an even better program that if both went
20 there. So how can we get NACIE into CAMID at the
21 same time as this group going so CAMID can be
22 kind of like a network and nodes built for IP

1 transfer, innovation and workforce programs, et
2 cetera and everybody wins instantaneously.

3 So what I would like to do is probably
4 send out the agenda and say hey, my lab guys in
5 my facility or my network that I have as assets
6 that can be plugged in at that time, at that site
7 with this group. We can all win at the same
8 time. So that's kind of the thing we're looking
9 for.

10 MEMBER REICHERT: So are these trips
11 industry focused?

12 MR. HAGA: It's gatekeeper focused.
13 So we define gatekeeper as somebody who can move
14 the economic needle. Now we do have what's
15 called the rank of courtesy, which is the Vice
16 Minister of Commerce, kind of our Dep Sec level
17 or higher.

18 But of the 50, about a third are
19 private sector and a third are public sector, and
20 a third are government. So we look at
21 gatekeepers. So when Brazil wasn't sending us a
22 government individual, we took the third richest

1 individual in the entire country of Brazil. And
2 he went to the ACE for -- because he runs a huge
3 tech company that's got fingers and nodes in
4 multiple other sectors.

5 MR. BUERSTATTE: Yes, but in Florida
6 for instance, don't you have a emphasis on
7 tourism and hospitality technology?

8 MR. HAGA: No, we look at whatever the
9 cluster is in the area that can either be
10 developed, is developing, or makes the grade. So
11 there is, to kind of lock the Florida agenda, the
12 first day in Florida is Disney World because
13 tourism is a soft day, if you miss the flight
14 you're ok.

15 But instead of folks into tourism, are
16 folks into simulation facilities and the IP
17 behind Disney making Disney. So when you open
18 the Seven Dwarves Mine Train and look at the
19 simulation technology as a lineage point.

20 The next day is, on the simulation
21 theme with Orlando is number one in the United
22 States for simulation. Lockheed Martin and VA

1 are opening up their simulation labs which is a
2 highly sensitive facility, but since we're going
3 to open up these facilities.

4 NASA, of course NASA, Gainesville with
5 biotech at the University of Florida Gainesville.
6 When you go to Tallahassee, the asset is the
7 National MagLab and innovation upgrade, the Palm
8 Coast. We were just talking about the Palm
9 Coast, there's no real labs there.

10 But their economic asset is their K
11 through 12 system that's shifted their five
12 elementary schools, five middle schools, five
13 high schools on the cluster to better developing
14 in their area, so they have devised an
15 engineering school at the elementary school
16 level, an advanced business school at the
17 elementary school level that's plugged into the
18 middle school and the high school.

19 MR. BUERSTATTE: So these are all very
20 different, and kind of dynamic exchanges. And
21 while we want to present this in person to you
22 all, throughout your term, and we're clearly

1 already planning for next year, for 2020.

2 So as opportunities and geographies
3 are identified, we just wanted you to be aware of
4 that. And so whether it's you individually, your
5 organization or network could help make the
6 exchange more robust, and to Barrett's point,
7 really peel back the system and network behind
8 Asus, pretty tight obviously.

9 So we got to get driving, but thanks
10 a lot, Barrett. So he's just down the hall, so
11 if you really want to catch up with him after, we
12 can take you down.

13 But so looking at the Agenda, we were
14 supposed to hear from Jennifer Andberg next on
15 the Global Entrepreneurship Summit. She will
16 come later. So we'll do a quick adjustment and
17 move to workgroup report-outs.

18 And on that right now we've got
19 advanced manufacturing lined up first, however
20 we've got Camille Osborne Nellans from FirstNet
21 here who's got a flight to catch. So I wanted to
22 dive into our FirstNet discussion first so we

1 would have an opportunity to engage her, or more
2 importantly maybe so she can just listen to some
3 of our ideas.

4 So she participated in the breakout
5 yesterday, but really hoping to kind of gel some
6 of the ideas and better define what we want to do
7 next or what our questions are. So those of you
8 that participated in the FirstNet discussion,
9 feel free to kick things off.

10 CO-CHAIR TANG: I thought Heather was
11 our liaison.

12 (Simultaneous speaking.)

13 MEMBER NEMETH: That's what I thought
14 too, but we'll platoon it as an appropriate
15 response. So we had a very lively discussion in
16 our meeting group yesterday, and we kind of broke
17 down the problem into both just first off
18 outreach and introducing the network to potential
19 partners and customers.

20 And frankly, I think the group
21 understood better by the end of the meeting that
22 some of those problems are frankly part of AT&T's

1 effort to introduce the system to potential
2 customers.

3 And so if we looked a little further
4 into where can NACIE add some extra value, it was
5 in helping them refine the process on launching
6 the app store and some pitfalls to avoid in just
7 simply introducing a marketplace that isn't
8 compatible with the purchase decisions of the
9 potential customers.

10 But we really spent, I think, most of
11 the time talking about how do you help develop
12 companies and how do you introduce companies with
13 existing products into this market. So on that
14 note, Heather did kind of walk I think all of us
15 through, you know, the different stages of trying
16 to avoid the challenges of a hackathon that
17 doesn't lead to results and how we can do a
18 better job by setting up some of these events for
19 this organization. Trey, do you have any other
20 pieces to add to the --

21 MEMBER BOWLES: Yes. Well, I thought
22 Scott made an interesting sort of prescriptive

1 approach to looking at this app store or at this
2 new network as an opportunity to take, to your
3 point, existing products or services that are
4 already in market that could be moved over here,
5 taking existing products or technology that are
6 in completely separate markets but that could
7 apply over here and move them over here.

8 Then third, how do we help develop new
9 products and whatnot. So I think there was an
10 idea on how can we help connect in the local
11 agencies that are making these purchase decisions
12 with new technologies and be available, and then
13 demonstrating how this would work and really
14 making sure that some of the pitfalls that could
15 exist from corporate involvement from lack of
16 ability to innovate is a more continuous process.

17 Specifically, Heather specifically
18 focused on the idea of it's not just about
19 creating, getting a product and getting it out
20 there, but taking it to that second level which
21 is how do we create that product to be an actual
22 company, and then that company to actually be

1 sustainable.

2 And so, you know, we talked about the
3 ability that NACIE would have to convene groups
4 around this and then specifically what are some
5 of the things that we could do on the front end
6 just with knowledge transfer and experience to
7 help support this makes sense.

8 So I know Rick and Scott had thoughts
9 as well.

10 MEMBER JOHNSON: No, I think it was
11 just important to make sure the launch of the app
12 store was successful, and even stage it a little
13 to have the brand in the marketplace be
14 successful. And there were lots of offers to
15 help, from Scott, from Heather.

16 MEMBER FREDERICK: Yes, one of the
17 things, I mean, ways that we can help, I think
18 one of the most important things, if we're trying
19 to get information from the field, is to do that
20 effectively.

21 I threw out some examples of, like,
22 what DHS and DoD do with their SVIO or their DIUX

1 program. And what those do is they basically
2 pull together a problem set to let industry know
3 whether or not it's been venture capital firms or
4 universities or the entrepreneurial ecosystem.

5 One of the high level problems that
6 need to be solved, and then there was that
7 discussion where people threw out, you know, the
8 oxygen sensors. I think that's a perfect example
9 of how do you surface that problem so that the
10 right people can try to tackle it.

11 So that was kind of one angle. There
12 was a lot of tactical stuff on just if you're
13 going to set up an app store, you know, stock the
14 end on the front end and identify some companies
15 that you want on that platform, and kind of, you
16 know, prewire some sales so that you're up and
17 running with a positive proof point.

18 The other thing that I think needs to
19 be thought of were, especially because you're
20 potentially dealing with a niche audience. I'm
21 not saying that it's all going to be niche, but
22 the first responders, you know, it's not like a

1 cloud platform.

2 You need me to worry about overall
3 market size. So anything you can do to kind of
4 change the risk/reward math for a company
5 thinking about building an app for that platform.

6 One thing I was thinking about last
7 night, and I don't think it will be something
8 new. But through other work I've been doing I've
9 learned about a FEMA deductible program where
10 FEMA's issue is they want states and
11 municipalities to do some work on their own, and
12 not just to show off when the shit hits the fan
13 and say we need FEMA's help.

14 So my understanding is that there is
15 a deductible program, one that will make this app
16 store a huge win. I don't know if it's even
17 possible, but I'm trying to help some of our
18 companies figure out how to qualify a FEMA
19 deductible.

20 If there was a way to make anything in
21 the app store qualify for the FEMA deductible,
22 you just solved your problem of what do you offer

1 to companies to come on to the app store because
2 bang, you suddenly made the math from the
3 purchasing side make a heck of a lot of sense.

4 And so that may be something from a
5 policy perspective that --

6 MR. BUERSTATTE: Yes, I agree, Scott.
7 Yes, that's what today's all about, new ideas and
8 improving what we discussed yesterday. So I'll
9 offer on Trey's point on convening my three
10 pillars of what we tend to do best around
11 government, you know, regulate, fund, and convene
12 and amplify, those three things.

13 So I think that really helps us
14 operate at the level at which we should. And I
15 thought it could be interesting, and FirstNet is
16 still digesting a lot of this feedback. But it
17 could be interesting for NACIE to serve as a
18 strategic advisor in there for mean of their
19 launch plan.

20 They're already underway towards the
21 app store. But thinking okay, what's next and
22 how do we do, there was some strong feelings

1 around, you know, the hackathons and whatnot.
2 And I think we're all in agreement on the risks
3 there.

4 But making sure that the actions, the
5 discussion, what I heard was essentially making
6 sure that whatever actions are taken are
7 deliberate and are building toward a broader
8 regional and the national strategy.

9 So I think we could form a nice
10 working group around that. And just, we could
11 incorporate Scott's point, talking about capital
12 there.

13 MEMBER BOWLES: I think one of the
14 things that was also demonstrated is the idea of
15 when you're creating any ecosystem, it takes a
16 bunch of different stakeholders.

17 And if we can effectively identify who
18 some of those stakeholders are and then ensure
19 that those stakeholders are doing the things that
20 they're best fit to do, i.e. AT&T is not the best
21 to innovate early stage technology, so let's not
22 ask them to do that.

1 However, I think they would come
2 alongside some of the funding that FirstNet has
3 available to do this to match grants, match
4 challenge related things.

5 So I think that's something that we
6 could help too is help identify, as we did
7 yesterday, some of these key aggregators that are
8 already out finding these companies and vetting
9 these companies, whether it be incubators,
10 accelerators, or whoever it may be so that we
11 make sure that when we're getting to the point of
12 the challenge or an app store or whatever the
13 case may be that we're not relying on FirstNet,
14 we're not relying on AT&T, we're not relying on
15 the wrong people to help determine the viability
16 of a company or an idea or product.

17 So yes, I agree. I think there was a
18 lot of excitement in the room, and when you're
19 able to build this, you know, nationwide, new
20 nationwide network there's a lot of opportunity
21 that we've got to prove to these entrepreneurs
22 that there's a market and that market is large

1 enough and sustainable enough to merit their
2 time.

3 MS. NELLANS: Well, I just want to
4 thank you all. This was hugely helpful for us.
5 As Rich pointed out, and I think we talked about
6 yesterday, we have a lot of first responders that
7 work at FirstNet, but not many people from
8 entrepreneur or innovation community.

9 So just getting your ideas, and we're
10 not building the strategy within a vacuum. A lot
11 of things we haven't thought of in terms of this
12 aspect were, you know, really provided a lot of
13 insight and direction down paths we were already
14 going down that we may not have been headed down.

15 So I think that we'll not only to
16 continue to call on you as a group, but perhaps
17 as we move forward as individuals. You brought
18 up yesterday, you have a company that is working
19 on ex-access issues?

20 MEMBER FREDERICK: Yes, NextNet.

21 MS. NELLANS: That is the number one
22 issue for firefighters.

1 (Simultaneous speaking.)

2 MEMBER FREDERICK: Yes, and I know
3 they're in discussions with AT&T and it's been
4 going on for years.

5 MS. NELLANS: Well, we might be able
6 to help.

7 MEMBER FREDERICK: Yes, that would be
8 great.

9 MS. NELLANS: I mean, that would be a
10 perfect example. When we got back yesterday we
11 were like we didn't realize that that is the
12 problem that we're trying to solve on firefighter
13 side.

14 MEMBER FREDERICK: Yes.

15 MS. NELLANS: So as you guys, you
16 know, go back home, look through your portfolio
17 of things you already have because as we talked
18 about stocking the pond, you know, we may need to
19 work with AT&T to kind of make sure that our
20 roll-out on the app store is more thoughtful and
21 maybe a little bit slower than we were originally
22 anticipating.

1 But you know, on that same front, if
2 we've already got technologies that are out
3 there, then as Trey said, you know, you guys have
4 already vetted. Let's work together on that and
5 make sure that, you know, they're getting to you.

6 **MEMBER FREDERICK:** NextNet had one
7 concern. I mean, they're perfect. And again, I
8 made the joke not to negotiate against our
9 portfolio.

10 But I would tell them if you're going
11 to do a deal with them, that they've got to go to
12 the app store and that's the way you stock the
13 pond. You can kind of pre-wire it with two, you
14 know, these are both very substantial companies
15 and they have raised fifty plus million dollars
16 probably in each instance. They would be good
17 fits, and they could execute at that scale.

18 **MS. NELLANS:** You know, that's great.
19 And what you -- T.J. appreciated your offer about
20 the foundation and also the chance for UCSD. So
21 we will be following up on that individually.

22 **MEMBER FREDERICK:** That resiliency

1 group is good. I just came across them a month
2 ago.

3 MR. BUERSTATTE: And Camille, we can
4 definitely, no, there's a lot of follow ups in
5 here and I would like to build out a list and
6 follow up with the team so everyone's aware of
7 what's what, and might spark some new ideas.

8 But any other thoughts, you know, kind
9 of final feedback or questions generated?

10 (No response.)

11 MR. BUERSTATTE: Cool. And thank you,
12 Camille, for helping us coordinate with T.J. and
13 getting the team and really came in full force
14 yesterday to have a robust conversation. And she
15 flew all the way from Austin. So thank you for
16 coming, Camille. Thank you, appreciate it.

17 MEMBER FREDERICK: Craig, just real
18 quick. One other thing. Camille, I mentioned
19 SoftWorks yesterday. They're backed by something
20 called the Doolittle Institute. It's a horrible
21 name. But aside from that, I think it's a really
22 neat model.

1 Their tagline is assembling and
2 leading collaborative efforts that result in
3 rapid innovation and problem solving for the
4 Department of Defense's most challenging
5 problems.

6 So it's a very tailored, go out to the
7 community, figure out what the problems are, and
8 how do you communicate it to the appropriate, you
9 know, venture community, entrepreneur community,
10 universities.

11 But they do good marketing, and
12 they've engaged I think the right folks. It
13 would be a pretty easy model to knock off. Just
14 don't call it the Doolittle --

15 (Simultaneous speaking.)

16 MEMBER FREDERICK: Call it something
17 else.

18 MR. BUERSTATTE: Sure, sure. Great.
19 All right, well I think that's it for our
20 FirstNet discussion. A lot of great ideas and
21 do-outs. We'll follow up.

22 At this time I would like to switch

1 over to advanced manufacturing. And similarly,
2 anyone want to open up the conversation on what
3 we discussed yesterday?

4 MEMBER REICHERT: I can do that, and
5 then colleagues can add in as they see fit or as
6 I've left anything out.

7 So just to back up a little bit,
8 advanced manufacturing workgroup has really
9 focused on this topic because of experiences that
10 we've had, Sue at the community college level and
11 trying to incorporate a workforce, next
12 generation workforce to address manufacturing
13 needs in Indiana.

14 For me, it's been about helping
15 connect entrepreneurs to advanced manufacturing
16 resources in Massachusetts, and realizing through
17 that process just how big the gap of workers is
18 that needs to fill these jobs.

19 And so from our perspective, this is
20 very important to supporting our entire
21 innovation economy in the United States with
22 building hardware.

1 So that's kind of how NACIE has come
2 to the topic. Our current status as a workgroup
3 is that we have a set of draft recommendations,
4 and I think that we will be doing more work on
5 those between the next, this meeting and the next
6 meeting.

7 During the workgroup session
8 yesterday, we heard from a variety of different
9 folks, Phil Singerman from NIST, David Langdon
10 participated from Department of Commerce, Drew
11 Siderwall from DOE and Doug Lynott from EDA.

12 And all of those folks really were
13 able to share different perspectives about where
14 the administration is going and thinking about
15 advanced manufacturing and workforce in the
16 context of very specific programs that are
17 already in existence and perhaps ways that NACIE
18 might be involved or think about incorporating
19 these programs into our recommendations.

20 So the ICMP, sorry --

21 MR. BUERSTATTE: ICMP.

22 MEMBER REICHERT: ICMP?

1 MR. BUERSTATTE: Investigating
2 Manufacturing Communities Partnership.

3 MEMBER REICHERT: That one. We talked
4 about the importance of that program in terms of
5 setting up an ecosystem where ideas can be
6 shared.

7 That program does not involve
8 particular funding, but it does enable an
9 ecosystem of people who are all involved in
10 developing manufacturing resources and workforce
11 to communicate with one another.

12 And we heard how that program has been
13 perceived to be very successful, and that that's
14 something perhaps NACIE can think about, how do
15 we continue that or grow that program.

16 We also heard about manufacturing day.
17 A common theme which is pretty much universal in
18 manufacturing is that it has a reputation as
19 being a dirty and old feel. People have an idea
20 of assembly lines in the 1950s, and that is the
21 projection that parents have when they send their
22 kids out to be doctors and lawyers rather than

1 manufacturers.

2 And so we heard from, let's see, I
3 think we talked about that. Mike Molnar talked
4 about manufacturing day. And the impetus there
5 is to get students and other folks who might be
6 interested in manufacturing out into what the
7 modern manufacturing plant looks like so that you
8 can interest more students.

9 And I guess the thinking around that
10 is, you know, is one day a year enough. Are
11 there other things that we could be doing on more
12 of an ongoing basis, and what stakeholders need
13 to be involved, what can the public sector
14 contribute to that effort going forward.

15 We also talked a lot about the
16 Manufacturing USA network, and specifically what
17 that network is doing around workforce. And
18 Whitney shared some experience she had about
19 reaching out to the different centers and hearing
20 from them.

21 Maybe workforce is still a topic
22 underdevelopment. And so are there some

1 recommendations or some review that NACIE could
2 do with these different centers and help
3 influence them towards having workforce more of a
4 primary focus area.

5 In terms of next steps for this group,
6 I think we are going to have a follow up call to
7 review recommendations that were reported out at
8 the last NACIE gathering and, you know, kind of
9 incorporate what we've heard during this
10 particular workgroup meeting into those
11 recommendations.

12 So at this point I'll ask any
13 colleagues who are in the room to add anything I
14 might have missed, or add a different
15 perspective.

16 MEMBER S. SMITH: So one of the things
17 that was discussed was sort of a request or a
18 recommendation to hold a forum of sorts where
19 everyone could come in and share best practices.

20 So I'm not sure, you know, if that
21 will be part of our recommendation, but certainly
22 something that we would consider.

1 MR. BUERSTATTE: Best practices around
2 building manufacturing communities?

3 MEMBER S. SMITH: Right.

4 MR. BUERSTATTE: Okay.

5 MEMBER S. SMITH: Building
6 manufacturing workforce, communities, different
7 programs and projects that are going on that are
8 considered best practices.

9 MR. BUERSTATTE: So last year we held
10 a couple IMCP summits, the Investigative
11 Manufacturing Communities Partnership program,
12 IMCP. This is the one where it's really about
13 building a network in the system. And there's no
14 funding behind it, it's a designation.

15 And two of them now, and they were
16 both extremely well received as far as interest.
17 And it's just unfortunate where we didn't quite
18 have a ton of robust resources behind it. But I
19 know from that proof of concept that it would be
20 really valuable.

21 And something that we can think about
22 in the coming weeks and months is figuring out

1 how to wrap that in a way where maybe there's
2 some longevity. Like, there is an entity, what
3 body should own that because one of the bigger
4 lessons is we learn once you do that, people
5 become reliant.

6 The network is very robust but they
7 become reliant on that type of engagement, in a
8 good way. And you want to keep that momentum
9 moving.

10 So what agency or foundation or
11 public/private partnership, there's just a couple
12 different strategies there and, Whitney, a couple
13 ideas. But longevity I guess is what I'm getting
14 at, how do do that with institutional --

15 MEMBER BAGLEY: Craig?

16 MR. BUERSTATTE: Yes.

17 MEMBER BAGLEY: It's Rebecca.

18 MR. BUERSTATTE: Hey, Rebecca.

19 MEMBER BAGLEY: Would this be a good
20 time to speak?

21 MR. BUERSTATTE: Yes.

22 MEMBER BAGLEY: Okay. So one of the

1 things we might want to consider out of the
2 longevity case is SSCI has been doing, you know,
3 those interest group convening in conjunction
4 with their conference. It has been, you know,
5 partner with MEP and the manufacturing community
6 for a while, so that's one just option that I'll
7 throw on the table.

8 The other thing is it would be
9 interesting, I have been slightly less close to
10 it recently but I would be interested in IMCP and
11 kind of how it's been assessed and the feedback
12 because I think that it probably varies community
13 to community, the effectiveness of the program.

14 I mean, one of the goals of the
15 program was to get, what's the right word, better
16 access to federal funding and have a conduit, you
17 know, to be able to while you organize apply for
18 federal funding in a more robust way.

19 And I wonder if that could use some
20 sharpening of focus for these communities so that
21 they could, you know, get some of their work
22 funded an a more robust way.

1 MR. BUERSTATTE: Yes, that's correct.
2 And do you think, are you saying that that was a
3 missed opportunity or that was good and you would
4 like to see more of it, or was it just a general
5 comment?

6 MEMBER BAGLEY: I would think that my
7 impression, which I would like to validate a
8 little bit more is that it's a opportunity that
9 was not as well organized as it should have been
10 to be able to take advantage of it.

11 MR. BUERSTATTE: Okay.

12 MEMBER KENNEY: If I could just
13 piggyback on that. My organization's a part of
14 one of the IMCP communities. And the reason we
15 organized was the promise of, right, it didn't
16 come with money but the designation was sort of
17 this idea that we were going to get preferential
18 treatment for dozens or hundreds of solicitations
19 across the federal government that had to do with
20 manufacturing.

21 And there were billions and billions
22 of dollars. And this was all written into the

1 document to use I don't remember how many
2 billions of dollars. And we would be
3 specifically doing preferential treatment for all
4 of these solicitations.

5 And this was obviously kind of part of
6 the prior administration's kind of vision
7 forming, you know, putting a big exclamation
8 point on manufacturing.

9 And I think, you know, there has been,
10 and it's been noted that a lot of the communities
11 got value from it, just from organizing and being
12 together. But the reason that they got together,
13 you know, kind of asked observes, you know, do we
14 want to keep meeting, keep doing stuff together
15 as a community.

16 And I think it's still the potential
17 promise of federal funding that keeps those
18 groups organized in my mind. And so I think
19 there's still a big opportunity, you know, if the
20 current administration wants to carry that notion
21 forward in, you know, under the same or a
22 different name that this idea of recognizing hey,

1 these groups have organized and those dollars
2 will be more efficiently used in the communities
3 in a more coordinated fashion.

4 And so I would think that there's
5 still a big opportunity to try to deliver on that
6 promise.

7 MR. CHILDS: I'll comment on that. I
8 don't know if you're aware about this currently,
9 Congress to codify IMCP. So you'll probably see
10 something about that in the next month. But
11 Congress may take it up but there's definitely
12 talks about doing that.

13 MEMBER KENNEY: That's great. Yes,
14 and there have been some solicitations, you know,
15 that included that language about preferential
16 treatment or, you know, it's encouraged or
17 something like that.

18 So I mean, it's not like the promise
19 wasn't delivered on at all, but I don't think it
20 was quite as much as folks had envisioned. So
21 that would be great to see that.

22 MR. BUERSTATTE: Henry, do you think

1 there would be an opportunity, or I don't know
2 how flexible the guidance will be. Do you think
3 it will be fairly prescriptive on what needs to
4 take place or might there be an opportunity for
5 NACIE to help influence what an IMCP 2.0 would
6 look like? There's a lot of lessons learned.

7 MR. CHILDS: I think if Congress
8 decides to act on it, then obviously this
9 administration is going to follow up on it. And
10 that's when NACIE would probably look to do
11 something.

12 MR. BUERSTATTE: Okay, great.

13 MEMBER REAMER: How does the promotion
14 of IMCP fit with in the administration's request
15 for Congress to eliminate EDA?

16 MR. CHILDS: What do you mean?

17 MEMBER REAMER: Well, the FY '18
18 budget from the President zeros out EDA, it says
19 it shouldn't exist anymore. And that's, I assume
20 that's going to be in the '19 budget too.

21 MR. CHILDS: So your question, concern
22 is that what --

1 MEMBER REAMER: Well, it's great that
2 IMCP is going to be codified. But if there's no,
3 the administration is asking for EDA to be
4 eliminated. And so --

5 MR. CHILDS: We'll have to see what
6 Congress does with EDA too. They put the House
7 and Senate have put out their lines we'll have to
8 see what happens.

9 MEMBER TOOLE: The administration, to
10 be fair, has asked Congress to zero out a whole
11 bunch of things that I don't think is going to
12 happen.

13 MEMBER REAMER: I understand that.
14 But it's, like, administration policy is what I'm
15 interested.

16 MR. BUERSTATTE: Yes, I think we're
17 going to get some much better signals pretty soon
18 on what next steps are going to be. So it's, you
19 know, like Ellen emphasized, it's changeover
20 takes time.

21 We'll have, we've continued to get a
22 lot more clarity this summer. Clearly the last

1 few days were I think a real nice turning point
2 for us and made some real concrete progress and
3 some guidance.

4 So we'll keep everyone in the loop on
5 this. But it would -- Whitney, do you have
6 something?

7 MEMBER W. SMITH: Can I make a comment
8 about the manufacture breakup? First of all, you
9 did a great job summarizing as usual. I have two
10 observations about the work of the manufacturing
11 workgroup.

12 One I was just thinking about last
13 night which is I know we're about to talk about
14 apprenticeship. But in both the case of the
15 FirstNet responder broadband work and the
16 apprenticeship new authority for Commerce, there
17 is something very tangible for us to advise on,
18 to strengthen and generate ideas.

19 And I think in the manufacturing work,
20 you have significant work happening through the
21 Department of Manufacturing. But for the most
22 part, you know, the centers are going on, MEP

1 isn't a good place. So we can kind of comment
2 around the margins about strengthening, like my
3 comment about trying to reach out to the
4 workforce advisors.

5 But there's not a clear kind of meaty
6 thing for us to be advising. So we've ended up
7 being like well maybe we could do a forum. And I
8 don't think we have the bandwidth, personally,
9 people have the energy to do this all for them.
10 But to be, like, pulling together a conference as
11 an advisory, I think we should be advising.

12 So maybe we have to get through the
13 congressional piece. But maybe ICMP is the thing
14 --

15 MR. BUERSTATTE: The concrete piece,
16 sure.

17 MEMBER W. SMITH: -- that we can
18 really strengthen. I think we need to find that
19 thing for the manufacturing group. I have one
20 other thought, but if you want to react --

21 MR. BUERSTATTE: No. Go ahead.

22 MEMBER W. SMITH: -- specifically to

1 that?

2 MEMBER REAMER: No, I just want to
3 follow on to that. But go ahead.

4 MEMBER W. SMITH: Well, at the end of
5 the meeting, Phil made a comment that I thought -
6 made a comment kind of toward the end quietly but
7 I very much noted it, which is just reminding us
8 that Commerce does not have workforce at the
9 heart of its mission, that's Department of
10 Labor's mission.

11 But as we know, economic growth is so
12 often hindered by the lack of skilled talent. So
13 it has become a focus of NACIE and in other
14 programs that you do, but that we should always
15 lead our recommendations to the secretary on
16 manufacturing with a clear statement that the
17 reason we are focusing on workforce and
18 manufacturing is because we interact with
19 manufacturers all the time and, you know, that
20 talent really isn't, it's not the top barrier to
21 growth, one of the top barriers of growth.

22 Just kind of consistently reinforcing

1 that the department should continue to make that
2 connection.

3 MR. BUERSTATTE: Yes. He might use
4 the words Department of Commerce is America's
5 voice for business. And that's where that led.
6 So we as a council can act as a voice for
7 manufacturers to communicate their trials.

8 So I think that's a good point. And
9 on the thoughts around kind of I guess the
10 generalization of manufacturing right now, and
11 maybe using IMCP as a specific target
12 opportunity, I agree.

13 And I think that's a smart way to look
14 at it, but also as the administration clearly has
15 prioritized manufacturing, we want to consider
16 other strategies and ideas so we can be that
17 fresh voice.

18 And whether it's next week or in two
19 months, we'll start to get more direct
20 engagement. And I think, you know, Steve and I
21 have talked about we just want to position the
22 Council as having a few offerings on the menu.

1 MEMBER REAMER: Yesterday I offered
2 three ideas. One was to identify that the US
3 Chamber of Commerce has the Talent Pipeline
4 Management Initiative which is an effort funded
5 by the Strata Foundation to --

6 MEMBER W. SMITH: And JP Morgan Chase.

7 MEMBER REAMER: What's that? Oh, and
8 you guys too?

9 MEMBER W. SMITH: Yes.

10 MEMBER REAMER: Great, great. So help
11 me with this, to create regional collaboratives
12 of employers that are self-organized. And so
13 employers in manufacturing could organize
14 themselves to create a more effective talent
15 pipeline, talent supply chain.

16 And the idea is to apply the
17 principles of supply chain management to human
18 resource management at a regional level. So the
19 Chamber is running workshops, the TPM Academy,
20 Talent Pipeline Management Academy in which they
21 are funding now, I think they fund 40
22 collaboratives around the country.

1 And the aim is by 2019 I think to fund
2 100. So I would, one recommendation NACIE could
3 make to the Secretary is to, for the Secretary to
4 encourage or direct the manufacturing efforts of
5 NIST to engage with the Talent Pipeline
6 Management project to see if they can be useful
7 both through MEP and through the Manufacturing
8 USA.

9 So this is an existing structure, I
10 think, that Commerce can leverage through the
11 private sector. That's number one.

12 Number two, as I mentioned, a big
13 issue around manufacturing workforce is
14 information market failure. And Emily eluded to
15 one aspect of it, that people have a
16 misconception of what manufacturing work is.

17 But educators don't have a full sense
18 of what employers' demands are in terms of the
19 numbers, the skills that are needed. And
20 Congress directed the Labor Department, the
21 Secretary of Labor to create a nationwide
22 workforce and labor market information system

1 that would provide the data needed by employers,
2 by educators, by workers, and by students in
3 labor market, having to make decisions so that
4 people can make better decisions, so students
5 don't go to a four year college when that's not
6 really the best path for them, and then get stuck
7 with \$25,000 in debt.

8 So I'm a member of the Workforce
9 Information Advisory Council which is set up by
10 Congress to advise the Secretary of Labor on how
11 to create this workforce labor market institution
12 system.

13 The aim of the system is to get the
14 federal statistical agencies who are producing
15 data and information on jobs and employment and
16 occupations, Department of Labor, I mean there
17 are labor statistics, the Employment Training
18 Administration, NBENS and Congress, the Census
19 Bureau is a huge player in this. And the
20 National Science Foundation.

21 And so we are trying to herd cats and
22 get these folks to talk to each other. I would

1 ask NACIE to ask the Secretary to direct the
2 Census Bureau to cooperate and participate in
3 this effort, and which they show every indication
4 of doing.

5 What I want to do is elevate this
6 notion of the importance of information for
7 efficient labor markets to the Secretary's office
8 so we can ensure that the Census Bureau gets the
9 funding it needs to provide the kind of data that
10 people can use so that manufacturers get the
11 employees they need.

12 And then the third thing, with this
13 idea of a convening --- I had suggested kind of a
14 near term, I agree with Whitney. You know, I
15 want to be an advisory council, I don't want to
16 run things.

17 And so I would ask staff to spend a
18 day, look, and talk to Whitney, talk to people
19 who Whitney recommends about what are some
20 examples out there of really good projects that
21 we can just pass around and look.

22 So I don't think we need a convening

1 to do best practices. People know that stuff.
2 And so let's put together a list of ten local
3 efforts around manufacturing employment and
4 workforce development, and educate ourselves, but
5 get staff to do it.

6 MEMBER KENNEY: I really like Andrew's
7 first suggestion. Phil talked about 250,000
8 manufacturing firms in the US, most of which are
9 small and medium companies. And it's hard for
10 them to engage around workforce issues without
11 some kind of a structure to participate in.

12 They can't self-organize easily. So
13 if there's a tool available that's already out
14 there with a goal to grow to increase the number
15 of organized groups, it feels like there's a real
16 opportunity in the low hanging fruit category to
17 extend some of that to manufacturing communities.

18 And both MEPS that are in touch with
19 a lot of those firms, or the IMCP community, you
20 know, could both be vehicles for which so that
21 organization could have that Commerce authority
22 over it.

1 MEMBER REAMER: I would be happy to
2 set up, to bring the guy who runs the town
3 management project on a conference call with him.

4 MR. BUERSTATTE: Real quick, a
5 clarification. On the forum piece, I don't
6 think, Sue, you were talking about pulling a
7 forum together to identify best practices, but is
8 more about connecting and elevating this type of
9 work, and the community overall very similar to
10 what the IMCP is doing, correct?

11 MEMBER S. SMITH: Yes, that's what the
12 discussion was around.

13 MR. BUERSTATTE: Yes, okay. And it's
14 a quick feedback operational, but yes, the
15 Council is absolutely not going to do that, but
16 rather I think what would be interesting is the
17 Council's advice on what strategy should Commerce
18 take in executing that.

19 What organizations, what channels,
20 what foundations, universities, et cetera, how
21 would you build out that event and what would
22 some specific outcomes be which would have long

1 term, sustainable impacts.

2 So there's, to your point, Whitney,
3 yes I agree. Just the last five minutes makes it
4 clear that there's some uncertainty around what
5 we should be focusing on. So you know, Emily and
6 Sue, I think we've got a lot of questions that we
7 can follow up on and further vet out what we want
8 to prioritize in the manufacturing group.

9 And I hate to leave it at such an open
10 end right there, but we do have a time schedule.
11 But any final thoughts from either of you on
12 this?

13 MEMBER REICHERT: Well, we didn't
14 really delve too much into it in the group
15 meeting yesterday, but I think there's actually a
16 lot of opportunity to innovate around the MEP
17 model as well.

18 And there's some very specific things
19 I know from working very closely with ARS,
20 different people in different states have very
21 different experiences in terms of quality level
22 and how engaging those organizations are. So I

1 think there's a very specific opportunity to
2 provide recommendations to make the MEP system
3 stronger and more open to useful interaction with
4 the people that it represents and the innovation
5 community.

6 MEMBER S. SMITH: I would agree.

7 MR. BUERSTATTE: Well, we're a little
8 bit behind. We will get to this break very
9 shortly, but we have Jennifer Andberg, Team
10 Director for the Office of Business Liaison here
11 with us to talk to us about the global
12 entrepreneurship summit.

13 Jennifer, they're getting your handout
14 right now, passing it out. Thanks for joining
15 me.

16 MS. ANDBERG: Thank you for allowing
17 me a few minutes to talk to you guys. I know
18 that you are getting ready for a break. I just
19 want to make sure that you are aware of and would
20 love any support or input that you might have for
21 the global entrepreneurship summit which will be
22 happening this year in Hyderabad, India at the

1 end of November, so November 28th through the
2 30th.

3 This is the eighth year that the
4 summit is occurring. This summit was launched by
5 the Obama administration. The first conference
6 was held in Washington, D.C. and subsequently was
7 held in several different countries around the
8 world.

9 Last year the administration wrapped
10 up with a summit in Silicon Valley, and now India
11 is going to be our co-host for the summit. This
12 year's theme is women first, prosperity for all.

13 And unlike previous years, they are
14 making an effort to concentrate on several
15 specific sectors so that the programming at the
16 summit can be more targeted. And these sectors
17 are energy and infrastructure, healthcare and
18 life sciences.

19 It's actually on the sheet on the
20 front page. And then I think in the first
21 paragraph, so healthcare and life sciences,
22 fintech and digital economy, and then media and

1 entertainment.

2 As of today, and one of the reasons
3 why I wanted to come and talk to all of you, the
4 application for participants for both the
5 entrepreneurs and then the investors and
6 ecosystem supporters is open.

7 And we are looking for interest from
8 any of you who might want to participate in GES
9 as well as if you do have suggestions of either
10 investors and ecosystem supporters or
11 entrepreneurs that you think that would be good
12 candidates, we would love to work with you so
13 that you could send an application link out to
14 these individuals and then provide those lists to
15 us.

16 This year it is a very condensed
17 period of time that we're putting together a very
18 large summit. It's 1,500 participants. So we
19 are doing a nominated, closed application
20 process.

21 Last year, for example, was open.
22 There were somewhere over 9,000 applicants for

1 just the entrepreneurs that participated for 800
2 slots. So this year we're trying to manage that
3 process. There will be 1,200 slots for
4 entrepreneurs from around the world.

5 The target is for 400 Indian
6 entrepreneurs, 400 US entrepreneurs, and then 400
7 representing the rest of the world. And then on
8 the investor ecosystem side it's about a third, a
9 third, a third for the hundred, the 300 investor
10 and ecosystem participants.

11 So on the sheet that I passed out, it
12 does have a little bit of information in terms of
13 the criteria that we're looking for. Obviously
14 we would love to have candidates who are in our
15 target sectors because this is a focused summit,
16 and just a couple of other items that obviously
17 make sense when you're recruiting and trying to
18 make an audience that is the best suited for the
19 content that we have.

20 MR. BUERSTATTE: And we'll of course
21 follow up with a soft copy here and some links
22 which are in the document I think. Any quick

1 questions from the team?

2 MS. ANDBERG: Yes.

3 MEMBER KENNEY: So you're looking for
4 400. And this refers to nominations for up to 15
5 American entrepreneurs and 500 investors or
6 ecosystem. Is that, like, per nominator?

7 MS. ANDBERG: Yes, per nominator.

8 MEMBER KENNEY: So each one of us can
9 nominate 15?

10 MS. ANDBERG: Absolutely.

11 MEMBER KENNEY: Okay.

12 MS. ANDBERG: And the reason that we
13 did limit that is because there are a number of
14 different trusted organizations that the
15 Department of Commerce and this whole business
16 administration, the State Department and USAID
17 are working with so that we don't, again, have
18 9,000 applications to potentially look through.
19 But somewhere, you know, in the several thousand
20 to get down toward --

21 MEMBER KENNEY: We send them the link,
22 how do we let you know that that's one of our 15

1 that we nominated?

2 MS. ANDBERG: So I will follow up with
3 an email to Craig so he can send it all to you.
4 I have a template spreadsheet that is very easy.
5 You just insert the information and get that back
6 to me.

7 MEMBER BALDWIN: And does that include
8 nominating Indian entrepreneurs?

9 MS. ANDBERG: So that is actually a
10 very good question. The Indian entrepreneurs and
11 the Indian investor ecosystem supporters, that
12 process is being managed by the Indians. They
13 are the ones that have set up a separate
14 application portal.

15 But in our discussions with them, they
16 have said that they are welcome to suggestions.
17 So if you do have suggestions for stellar
18 entrepreneurs or investors or ecosystem
19 supporters of India, please do share that with me
20 as well, and I'm happy to pass that on to the
21 Indians.

22 If you could do it in a separate

1 spreadsheet so that it's very easy to pass that
2 on to the Indians, I would appreciate that. But
3 I think that we certainly can do that.

4 MR. BUERSTATTE: Sorry to cut you off,
5 David. But I just want to keep us on time and
6 break. Jennifer, if you don't mind staying
7 around for a couple minutes --

8 MS. ANDBERG: No, that's fine.

9 MR. BUERSTATTE: -- for anyone who's
10 got follow on questions. I know we've got a
11 couple people that actually need to head out and
12 grab a flight.

13 But at this time, I'm going to break
14 for ten minutes. So if you could get back around
15 11:07, seated, we'll get going and we'll whip
16 through our final two workgroups and close out.
17 So thanks --

18 MS. ANDBERG: And I can stay here, we
19 can go in the hall. However you guys want to do
20 it, continue asking questions, I'm open. And
21 Emily, we met just a few months ago, so I had
22 already sent some of that information to you. I

1 got your message and it didn't make the
2 connection that would be actually in this room
3 with me today. But I've already sent you the
4 applications as well.

5 (Whereupon, the above-entitled matter
6 went off the record at 10:58 a.m. and resumed at
7 11:10 a.m.)

8 MR. BUERSTATTE: All right, so we've
9 got a couple big things to get through still in
10 this last hour. Number one is wrapping up our
11 workgroup report outs, and next up is
12 deregulation and the STEM apprenticeship program.

13 Let's start with deregulation, as we
14 did before. Any passionate team members there
15 want to brief out the rest of us? I know
16 deregulation is really exciting.

17 MEMBER KENNEY: Heather was the one
18 who had kind of been screening a lot of things.
19 And Andrew was there and I was there, and I can't
20 remember who else.

21 PARTICIPANT: Esther, were you --

22 MEMBER KENNEY: We were in the same

1 room for about a second. I'm blending together
2 who was in each one. But I think we, the
3 regulatory sandbox topic came up again which is
4 something that Heather's brought up in the past
5 which is this idea of creating some kind of a
6 place for, you know, especially in highly
7 regulated industry, the number of companies
8 participating in a way where they can kind of
9 experiment with some oversight, you know, some
10 different regulatory model that allows some
11 experiment.

12 And we didn't get real specific about
13 what that would look like. And then kind of went
14 off on some other things about regulations as
15 they relate to the Paperwork Reduction Act in
16 federal agencies that work with organizations
17 like a lot of ours from the programs that
18 Commerce already has jurisdiction over.

19 And then the Economic Development and
20 Innovation Office folks, part of their role is to
21 actually look at a lot of these programs across
22 the federal government, not just within Commerce,

1 to I believe it was touching economic development
2 or cluster oriented programs and looking for
3 efficiencies and ways that we could work together
4 more effectively.

5 And a component of that could be
6 regulatory challenges that either create
7 redundancies or prevent better cooperation. So
8 there was some talk about whether there might be
9 a home for a project within an EDI group that
10 could be something.

11 On the Paperwork Reduction Act front,
12 I think that the thought was could there be an
13 experiment just, like, within Commerce where it's
14 more of an internal benefit, efficiency as
15 proposed to directly helping businesses, you
16 know, some number of forms or processes be
17 changed or approved.

18 Eric was taking notes, I think, on
19 some of this. I don't know if you had anything
20 else, or if anybody else from our group. I know
21 we came away with a lot of specific
22 recommendations. Andrew had some, I think some

1 more casual ideas.

2 MEMBER REAMER: Yes. To add to what
3 you're saying, we talked about regulation kind of
4 in two big buckets. One is federal rules about,
5 that regulate firm behavior. They think about
6 the Securities Exchange Commission.

7 And then there are the regulations
8 that govern the management of grant programs, the
9 forms that, and contracting, the forms that
10 companies have to fill out to qualify, the audits
11 that happen at the back end, and all the stuff
12 around, you know, government giving out money in
13 one form or another and the rules and regulations
14 attached to that.

15 So this is for people who are not
16 familiar with the Paperwork Reduction Act was an
17 Act passed by Congress that, in the Reagan years
18 that was intended to reduce the paperwork burden
19 on the public because a lot of federal agencies,
20 federal agencies were unbound in terms of their
21 ability to write grants, write surveys and ask
22 businesses to fill them out.

1 And businesses were overwhelmed.

2 Well, Congress said that every federal data
3 collection could be like an application to work
4 at EDA, right, has to go through this paperwork
5 reduction process which is a long process.

6 There are two public comment periods,
7 there has to be a notice in the Federal Register.
8 And I'm talking for everything. Right? The form
9 that Eric and Craig filled out to get their jobs
10 had to go through a Federal Register, you know,
11 before it was approved, has an OMB control number
12 at the bottom.

13 A Federal Record notice, the public
14 was invited to comment on this 60 day notice,
15 then a 30 day notice, then OMB blesses it. And
16 then they have to do it again in three years.
17 Every three years.

18 So it's a huge burden on the
19 agencies, plus it makes, to the extent you're
20 trying to align the data collection efforts of
21 individual agencies, it just makes it much more
22 difficult to do that.

1 So David, I actually think reducing
2 the burden on the government staff will actually
3 reduce burden, has potential to reduce burden if
4 the forms can be improved.

5 So my thought was can there be a
6 regulatory sandbox for the Paperwork Reduction
7 Act that would give some room for folks in
8 Commerce to create these forms and processes that
9 would reduce the burden eventually on themselves
10 and the people filling out the forms.

11 MR. BUERSTATTE: I think that's a good
12 way to case, or I think we need some
13 categorization, some pillars within this because
14 it is a lofty subject. So if it's firm
15 regulation versus the regulatory operational,
16 like, government operation regulation, those are
17 two different areas and do, does the Council see
18 concrete, meaty enough opportunity in both of
19 those near term? Any thoughts there?

20 MEMBER REAMER: Craig, I would say it
21 would be very helpful to get a declaration of
22 priority from the government in terms of what's

1 important. I mean, we can have our own ideas
2 that one might be useful. But we talked about a
3 lot, so what does the Commerce Department care
4 about?

5 MR. BUERSTATTE: Sure, yes.

6 MEMBER BALDWIN: There was a lot of
7 discussion around elimination of bureaucracy in
8 addition to the regulation. You know, the fact
9 that people don't know what the rules are until
10 they break them, then ends up with a \$10,000
11 fine.

12 And for entrepreneurs, that's just
13 punitive. You know, John Williams had a lot of
14 good discussion, good ideas of things that could
15 be done there. And we had some look into is
16 there a role for expert systems to actually mine
17 what are the mistakes that everybody has made,
18 and how can we guide people through the process
19 to eliminate the mistakes, or prompt them before
20 it's a problem.

21 So you failed to file, you made zero
22 money on this but you failed to file that you

1 made zero money on it. It's not intuitive that
2 you should because you made zero, but you're
3 going to pay \$10,000. And so there's an
4 opportunity for technology to perhaps help.

5 MEMBER JOHNSON: So, in Kentucky we
6 turned it around. Instead of trying to think
7 what that is, we just told the people what really
8 annoys you and then you just look where that
9 question spikes, in what areas.

10 You say wow, there's the problem,
11 let's fix it. And so that works really well.
12 It's just what's trending now.

13 MEMBER FREDERICK: So I wasn't in this
14 --

15 MEMBER BALDWIN: How did you capture
16 that?

17 MEMBER JOHNSON: We have a website.
18 We have a website. We would say if there's
19 anything you don't like about government, respond
20 here. And then they follow a format. And it
21 works really well. It's been in place about a
22 year now, works really well.

1 Like, wow that's really stupid, let's
2 change that. It just happens over and over
3 again. It's easy to do. We're just a little
4 state, right? It's really easy, there's like six
5 people around the state. It's not like the
6 federal government. But it works really well.

7 MEMBER REICHERT: What are some of the
8 things that they suggest?

9 MEMBER JOHNSON: Things just like
10 that. You know, we had to file these things even
11 though it's not obvious we should file them. We
12 shouldn't have to file it. Oh, okay. You don't
13 have to file it.

14 I can get you a detailed list of
15 what's happened over the last year. But the key
16 is not what's happened, it's just how we
17 prioritize it. We didn't try to decide what the
18 issue was, we let them tell us. It's like wow,
19 that was really easy.

20 MEMBER JOHNSON: But what I would like
21 to do is get ahead of that curve. What we're
22 saying is you came across this problem, it was a

1 problem.

2 MEMBER JOHNSON: That's because you're
3 really smart and I'm not. And so I just tell him
4 what am I doing that annoys you. And it's like
5 okay. Now --

6 MEMBER REICHERT: I think it's
7 interesting you get responses back because --

8 MEMBER JOHNSON: Oh, yes.

9 MEMBER REICHERT: -- when we ask our
10 entrepreneurs that, we often get back there's
11 nothing bothering us.

12 MEMBER JOHNSON: In Kentucky, nobody
13 talks to people out in rural Kentucky. And you
14 just give them an open-ended question, how much
15 time do you have.

16 (Simultaneous speaking.)

17 MEMBER REICHERT: You sit down in a
18 room with a politician and you ask about this
19 question and there's just blank stares.

20 MEMBER FREDERICK: So I wasn't in the
21 session so I'm reluctant to speak. But I wanted
22 to give a little bit of administrative color, and

1 I don't want to over play. You know, I don't
2 really know what they're thinking.

3 But one thread that is now being
4 talked about a lot is around open data and the
5 Open Data Act and the Australian Initiatives.
6 And any discussion I've had with folks from the
7 administration, they get really excited.

8 And the Data Foundation is right here
9 in DC. They did a big piece with PWC that looked
10 at what Australia did. And Australia saved a
11 billion dollars in year one. And the idea is
12 basically any form that a business needs to
13 submit that's standard, you know, just like
14 registering an employee and stuff like that.

15 They've made it an open data standard
16 that's machine readable. I'm happy, I don't even
17 know who on the group would be interested, but I
18 just met with them and it hits on Trump's key
19 language. It leverages technology to streamline
20 safe costs, get bureaucracy out.

21 PARTICIPANT: Sounds like it would be
22 a great topic.

1 MEMBER REICHERT: Yes.

2 MEMBER FREDERICK: I mean, and these
3 people have done a lot of work. I saw a
4 presentation on the Australian system and it is,
5 it's slick.

6 MEMBER REAMER: Now, is this Daniel
7 Castro, is he the guy that, you say David
8 Foundation.

9 MEMBER FREDERICK: No, Hudson
10 Hollister --

11 MEMBER REAMER: Yes, Dave Coalition.

12 MEMBER FREDERICK: Dave Coalition.

13 And yes.

14 MEMBER REAMER: Oh really, they did
15 that? Okay, cool.

16 MEMBER FREDERICK: Yes. And they've
17 got a lot of congressional support. Like, Will
18 Hurd has been pretty big behind it.

19 MEMBER REAMER: And so this is a
20 great, I know Hudson. Hudson's really effective.
21 Hudson used to work for Issa in the House.

22 MEMBER FREDERICK: Yes.

1 MEMBER REAMER: And he knows how to
2 work the outside/inside. He would be a cool
3 person to --

4 MEMBER FREDERICK: I'm a big fan. And
5 I just met with him and told him that this had
6 appeared on our agenda, and he got all excited
7 and sent me these.

8 MEMBER REAMER: Okay.

9 MEMBER FREDERICK: So if anybody would
10 like these.

11 MEMBER REAMER: Let me see, I might
12 even have it from Hudson. He just sent it to me
13 Monday.

14 PARTICIPANT: This gets at something
15 that could be actionable.

16 MEMBER BALDWIN: There was some
17 discussion about that. How do you help somebody,
18 either by not requiring the rules and regulations
19 for a short time or by putting them into a
20 sandbox environment where it's going to be up to
21 the experts. Get them their licensing, guide
22 them.

1 And I mentioned the network across
2 China where they actually do that. And I had
3 forgotten about what the idea, that's their
4 external development where this is internal
5 organization. Can we capture some best practices
6 globally, like this Australia one sounds like a
7 great idea. Let's copy what works.

8 MR. BUERSTATTE: So in general, this
9 one sounds to me, not in any order here, but it
10 sounds like this is a little bit less defined and
11 developed than others, and that's fine. And I
12 respect what you said, Andrew, and I agree.

13 You know, we need a little bit tighter
14 guidelines from Bob, and we're working that. But
15 I think we wanted to have a more deliberate
16 conversation yesterday and today because we know
17 this is a priority. We wanted to be able to
18 strike should we have the opportunity to affect
19 some of the deregulation activities here.

20 But one specific question then, who,
21 and a show of hands, could we pull together over
22 the coming weeks to one or two conference calls

1 to try to work through this a little bit more so
2 we can head into our future conversations with
3 more definition. Esther?

4 MEMBER REAMER: I can do it. And I'm
5 going to suggest that I really like this idea of
6 the Australia thing. It's concrete. We can get
7 Hudson to work for us. I mean, and so it's,
8 there's a platform to actually do something that
9 I think would resonate with the administration.

10 MEMBER KENNEY: I was just reading the
11 first page. It sounds like there's an issue
12 recommendation in here.

13 MEMBER FREDERICK: Oh, yes. They have
14 done all the heavy lift. Can I ask just a really
15 stupid question? Like, when we get the agenda
16 and I saw that that was on it, it's okay for me
17 to tell --

18 MR. BUERSTATTE: Yes, please.

19 MEMBER FREDERICK: Okay.

20 MR. BUERSTATTE: Please.

21 MEMBER FREDERICK: I just don't want
22 to --

1 MR. BUERSTATTE: No, that's why we
2 need you to seek out the organizations and the
3 networks. So no, this type of resource is
4 fantastic.

5 MEMBER REAMER: And we could get
6 Hudson on the phone.

7 MEMBER FREDERICK: Oh, yes. He would
8 come in. He would come and meet with us. I
9 mean, this is --

10 PARTICIPANT: He wants to see it.

11 MR. BUERSTATTE: Yes, let's dig into
12 it offline, let's all group --

13 MEMBER FREDERICK: I'm going to
14 forward everybody what he forwarded me because he
15 had an electronic copy of it.

16 MEMBER KENNEY: So an example, by the
17 way, specifically that's used on the first page
18 of the executive summary talks about the \$2
19 trillion that manufacturers alone are sort of
20 carry as a cost associated with regulatory
21 compliance in the US.

22 MEMBER REAMER: This is important. So

1 let me just give a minute on the background of
2 Hudson and his organization. As I said, Hudson
3 worked for Darrell Issa who was I think at a
4 point the chair of government oversight four or
5 five years ago.

6 The passion of ISA and of Hudson were
7 the transparency around government spending and
8 financial stuff. So Hudson left Congress to
9 start this foundation and work from the outside
10 to revamp the federal act around the transparency
11 of federal spending.

12 And he put together a coalition of
13 ISA, Portman from Ohio, and democrat Warner from
14 Virginia. And they got a bill through Congress a
15 few years ago called the Data Act that was passed
16 unanimously. And another thing, that he is also
17 into financial, Scott, into the financial
18 transparency.

19 PARTICIPANT: So that's how I met him
20 is through Treasury. I worked closely with him
21 on that treasury release because we were using
22 similar tech companies.

1 MEMBER BALDWIN: One of us asked, I
2 think it was John Williams, what the top issues
3 were. Remind me, were these the two that he
4 replied, restoring the supply chains and cyber
5 security? Does anyone recall that?

6 MR. BUERSTATTE: What was the program?

7 MEMBER BALDWIN: What are the two top
8 issues, we asked that question. And I think he
9 said restoring the supply chains that getting
10 qualified suppliers into the system is a barrier
11 to entry --

12 (Simultaneous speaking.)

13 MR. BUERSTATTE: The manufacturing
14 supply chain?

15 MEMBER BALDWIN: Manufacturing came up
16 a lot in the deregulation discussion. I don't
17 know if it was because Drew was there. And then
18 the other one was cyber security, and the
19 Baldrige assessment was mentioned, that many
20 small manufacturers have to meet requirements
21 that even large corporations --

22 MR. BUERSTATTE: Right.

1 MEMBER BALDWIN: -- have difficulty
2 with entire departments, you know, dedicated to -
3 - and what was the rule with the states and those
4 economic development strategies?

5 MR. BUERSTATTE: All right, so again,
6 I think we've got some good questions to dive
7 into. Let's pull the team together, Andrew,
8 Esther, Rick, David, Scott, and we'll massage
9 this to a more finite question and opportunity.

10 Switching gears a bit, and I know it's
11 been a long eight hours together in conference
12 rooms and whatnot. But this last one I'll offer
13 up some anecdotes that I was told this is a
14 surprise, I'm not sure what we can do here, or
15 this intrigues me by a number of people.

16 And then we walked away with a lot of
17 wows and this is a really big opportunity. It's
18 still a very big challenge. I don't think the
19 group defined exactly the direction we want to
20 go. But nonetheless, the STEM apprenticeship
21 group, feel free, what do you think about
22 yesterday?

1 MEMBER W. SMITH: Does someone want to
2 volunteer to do the --

3 MEMBER REICHERT: I think you just
4 did.

5 MEMBER W. SMITH: So in the pre-read,
6 you saw that there now, Commerce has some
7 authority to get involved in STEM apprenticeships
8 and has grant making authority. No appropriation
9 yet, but potentially funding that could be
10 pulled. That's kind of a question on the table.

11 So we brain stormed what could the
12 department do that would be value add to the
13 Department of Labor's huge, you know, almost, I
14 can't recall what their budget figure is now but
15 they're putting, you know, \$100 million into
16 apprenticeship that is more geared to specific
17 sectors and meeting employer needs and building
18 competency pathways.

19 You know, so what could we do that
20 would be additive to that. And I think maybe you
21 made the comment, Rich, that got us really
22 thinking about doing an apprenticeship around

1 entrepreneurship skills and teaching kind of
2 adaptability and problem solving and those kinds
3 of really critical skills that could cut across
4 businesses, but could also meet the talent needs
5 of some of the stirred up or second stage
6 companies that are having trouble.

7 They don't know how to work, first of
8 all, in system works and need talent. So there
9 were ideas from now that we kind of flipped back
10 and said we have to be clearer about what problem
11 we're actually trying to solve.

12 And I think my take away from that is
13 we would have to build, lean on those of you who
14 are in, you know, regularly communicating with
15 small businesses, whether they're start-ups again
16 or a little bit further down in their growth and
17 really understand what the talent that's needed,
18 what we're trying to solve.

19 But I think we got excited about kind
20 of taking a new idea and expanding the
21 apprenticeship notion of work and learn to men
22 more around this space. And then I just had

1 coffee in the break with David Langdon who's kind
2 of a workforce expert within the department.

3 And he had to go to another meeting,
4 but he said he really felt like we were on to
5 something. And then this morning when we were
6 talking about the federal labs and the disconnect
7 between, like, the scientists and then figuring
8 out how to turn it into a business, there are
9 lots of pathway problems and we would just have
10 to zero in on what we were exactly trying to fix.
11 But to him that reinforced the general direction
12 we were on.

13 MEMBER JOHNSON: So to build on that,
14 I have very selfish motives on startup community
15 and to create this sort of matchmaking service.
16 But what we talked about was with a slush fund
17 that Craig has. Some freedom with the money,
18 there may be some, the way startups work, maybe
19 you could prototype several different types of
20 systems --

21 PARTICIPANT: A challenge.

22 MEMBER JOHNSON: -- that work in this

1 area, in this area. So and then see if they ever
2 take the one or ones that were more successful
3 and build those out.

4 MR. BUERSTATTE: My first response to
5 that, and after just hearing your point, Whitney,
6 it's interesting because we talked about maybe
7 some themes that we would like to hit in a
8 challenge where looking for apprenticeship
9 programs with respect to X industry, with respect
10 to this type of geography, with respect to
11 federal labs perhaps.

12 And maybe, and just off the cuff I
13 think I had mentioned piloting eight or awarding
14 eight grants, prizes, and if you got two of each
15 perhaps. And not trying to over engineer it and
16 get into the tactics but I think, and then we had
17 discussed using that then and the lessons gleaned
18 from a pilot program that you would have a better
19 idea how to deploy those more long term.

20 MEMBER JOHNSON: So I took, I created
21 a document and sent it to the people I can
22 remember that were in that meeting yesterday and

1 tried to sort of frame the problem a little bit
2 and then give an example.

3 I always like, so I gave a very
4 specific example. But to me, what I'm excited
5 about this, I like to think of a very, very
6 specific area that's going to involve startups
7 and it's going to involve getting women into
8 startups.

9 I have a lot of people that say I have
10 an investor, she's invested in 33 or 35 women-
11 owned, you know, women CEO startups. I don't
12 know where to find them, I don't know how to
13 create one, I don't know how to do that.

14 This is a way. It's like the light
15 went on. I could take college graduates that I
16 don't care what their degree is, they're going to
17 have interest, personal interest.

18 And when I find out what those are, I
19 can match them with a startup and see if it
20 works, and then coach them along the way what it
21 is. So it's two phased, there's an educational
22 component but it's not the traditional high

1 school or university education. It's sort of
2 more the school of hard knocks.

3 And then for real life experience,
4 it's not a safe experience, you're going to be an
5 intern at a big company and empty garbage cans.
6 It's going to be you're in the mix with these
7 people that you only have a certain amount of
8 runway, you know, for all these problems.

9 MR. BUERSTATTE: The things that
10 happen, I can see it's hard to engage some of the
11 workforce ports. So the traditional plans, we
12 talked about that and the questions that we would
13 want to figure out, what types of organizations.

14 And since we haven't defined the real
15 problem that we're trying to address with this
16 yet, but after that, you know, what type of
17 organizations would we want to target to solicit
18 from. Who do we want to tackle it so the
19 traditional --

20 MEMBER TOOLE: Remember, at least the
21 way it was written down, this was about STEM
22 apprenticeship, right?

1 MR. BUERSTATTE: Yes, yes.

2 MEMBER TOOLE: Dumping the modern
3 grant program and do policies to spur more
4 apprenticeship programs in old and new STEM
5 industries. And so I think that the point is
6 what is it that we're trying to do.

7 Are we trying to create entrepreneurs
8 for the STEM field, are we trying to create, you
9 know, STEM workers that can work an
10 entrepreneurship, are we trying to encourage more
11 people to consider careers? What is it that
12 we're trying to do? I think you need to be
13 really clear on that before you start trying to
14 design programs.

15 MEMBER REAMER: And who proposed the
16 topic in the first place? Where did the STEM
17 apprenticeship topic come from?

18 MEMBER TOOLE: Don't know.

19 MR. BUERSTATTE: So it's been
20 apprenticeships are a priority for the
21 administration.

22 MEMBER REAMER: I know, but I mean --

1 okay, go ahead.

2 MR. BUERSTATTE: So this was Commerce
3 driven, not within the Council. So this came
4 down and there's some interest internally for it.
5 So I wanted the Council to --

6 CO-CHAIR TANG: And there was NACIE
7 2.0 work on this also.

8 MR. BUERSTATTE: Yes.

9 MEMBER BALDWIN: I love the idea of
10 when the apprenticeship, that it's --
11 entrepreneurship apprenticeship. I love that
12 idea because it addresses a common theme that
13 I've heard that people don't know where to go,
14 they don't know what the rules are, they break
15 them.

16 They don't know what the one stop shop
17 is, they don't know what the forms are. You
18 know, even if there are four forms that have to
19 be filled out. I really like the idea of, I
20 mean, it's not a technical apprenticeship but
21 it's a very commerce and business related
22 apprenticeship.

1 MR. BUERSTATTE: And to be cognizant
2 of Eric's point on STEM apprenticeships though,
3 yes so I think you could frame, especially given
4 the rise of technology and every business is a
5 tech business as they sometimes say now, right,
6 STEM is applicable in so many industries. But we
7 would have to work through --

8 MEMBER BALDWIN: Well, maybe the
9 recommendation is that there's an
10 entrepreneurship module that must be included in
11 all STEM apprenticeships.

12 MEMBER TOOLE: Well, so maybe. And if
13 you're going to go down that road, the fact that
14 you're going to do entrepreneurship in STEM,
15 however that's defined or configured, you also
16 definitely, definitely, definitely need to do
17 this with I-Corps and in conjunction with I-
18 Corps.

19 There's this huge part federal
20 government already set up to do entrepreneurship
21 in the sciences. Started at NSF, now NIH, DOE,
22 all over the place. And so what the last thing

1 you want to do is go off and reinvent the wheel.

2 MEMBER BALDWIN: Reinvent the wheel.

3 CO-CHAIR TANG: I just have, Esther,
4 to your point, the science center has been
5 working on this. We already have STEM programs
6 for K through 8 students and K through 12
7 students, really focusing on middle school and
8 high school.

9 Our approach is to let the
10 entrepreneurs be the mentors in that program. So
11 the bridge to entrepreneurship apprenticeships to
12 us is the next likely step.

13 But I think some of the challenges in
14 general STEM education programs is the work and
15 the mentoring is not done by entrepreneurs, it's
16 done by other folks in STEM careers, which is
17 fine. But it doesn't bridge into the
18 entrepreneur world as easily.

19 So maybe the pivot point is around
20 more the innovation side, right? So mentoring by
21 folks that are in research and development or
22 have some sort of knowledge in commercialization

1 then leads more likely I think into
2 entrepreneurship and apprenticeships along that
3 path.

4 MEMBER JOHNSON: So I agree with it,
5 but there's an immediate problem that getting to
6 elementary school and middle and high school kids
7 doesn't solve.

8 We have a term we use called million
9 dollar babies. Those are companies that have a
10 million dollars in revenue that have received a
11 million dollars in funding. And they might have
12 a staff of seven let's say.

13 And they're starting to scale up, and
14 they're going to hire seven more people. That's
15 a very, very dangerous time for them. And so
16 it's hard enough to find the right person, but
17 then the expectations have to be right.

18 So back to your final statement there,
19 just preparing the person that's going to go in
20 there on what life's going to be like there.
21 Okay, and sort of so otherwise they're going to,
22 you know, jump out the window on day three or

1 they'll get fired. You know, the organism will
2 reject them.

3 And so to me there are groups, if
4 they're in Kentucky they got to be everywhere,
5 that will work with people like that. The non-
6 profits, they exist that sort of work in that
7 space.

8 MEMBER REICHERT: Yes, there's one in
9 Boston. I think it's Boston based called Startup
10 Institute where they train people how to think
11 entrepreneurially and join startup companies.

12 MR. BUERSTATTE: One thing that hasn't
13 been mentioned, just going back to Eric's point
14 on I-Corps, EDA does have some nice flexibility
15 in receiving funds as acting as the economic
16 development integration, or integrator role that
17 we play.

18 So we're allowed, in a pretty flexible
19 manner, to collaborate with agencies. And
20 something to keep in mind as we work through this
21 conversation, is there an opportunity to augment,
22 update, modernize some of the I-Corps NSF work

1 through a program and using some of their funding
2 and combining it with ours. Not sure.

3 MEMBER TOOLE: Well, I-Corps is under
4 a lot of pressure, as you know, from Congress to
5 demonstrate efficacy. And I think they would be
6 very willing to play.

7 MEMBER REICHERT: On that topic, you
8 may have already mentioned this, Eric, but
9 conducting the I-Corps output to incubators and
10 accelerator program would be really effective
11 because we've hosted I-Corps programs related to
12 energy. So we've had a lot of touch actually
13 with the I-Corps program.

14 But I can't say that one I-Corps
15 company has ever ended up in Greentown Labs. And
16 it's kind of surprising to me. So where are
17 those companies going? Are they dissolving?
18 Like, what happens to them. Does anyone know?
19 Who's tracking that and is there a funnel for
20 them to continue to grow after the business model
21 campus is done?

22 MS. SHIEH: I wanted to say, somebody,

1 or VentureWell is tracking that kind of
2 information. And then the other thing to note is
3 that I-Corps at the different agencies actually
4 is different, it's a little different.

5 So I-Corps and the SBIR, NIH is
6 actually already --- it's Phase I SKR awarded
7 companies as opposed to original NSF program
8 which is concrete company based. But VentureWell
9 is tracking that kind of data.

10 PARTICIPANT: NSF also has a bunch of
11 data too they've been tracking. And I would
12 probably reach out back to Steve on this, because
13 he's got a lot of data as well.

14 MEMBER TOOLE: It's not very useful
15 data. It's how much money have they raised, it's
16 how many patents have they filed, it's that sort
17 of stuff. It doesn't tell you anything because
18 you don't know what they would have done in the
19 absence of attorneys. There's no control of it,
20 though. It's not useful data.

21 MR. BUERSTATTE: Again, questions for
22 us to dig into. Show of hands, who can we pull

1 together to help define this next couple weeks?

2 Thanks. All right. I'm making sure I got all
3 these. That's Emily, Eric, Steve, who else was -
4 - thanks, Rick. Whitney, Emily, Steve, Sue,
5 Rick. Anyone else?

6 CO-CHAIR TANG: Anybody else on the
7 phone?

8 MEMBER STEVENSON: Tiffany.

9 MR. BUERSTATTE: Hey, Tiffany, thanks
10 so much. Great, all right. That concludes our
11 workgroup sessions. Getting into our offsite
12 discussion, we had targeted November for an
13 offsite meeting.

14 The objective was to take the Council,
15 the organizations you represent, expertise, your
16 networks, move our discussion outside of D.C.
17 while also engaging with that local community.

18 I'll tell you that we had a vote
19 earlier in the spring, and Indianapolis and
20 Dallas were the favorites, and which I think
21 we'll talk about it in a sec. But Steve, you had
22 some thoughts on that?

1 CO-CHAIR TANG: Yes. The reason for
2 doing this, I think, is still a very valid
3 reason. I think what we're moving towards is a
4 model that postpones these visits until a little
5 bit later.

6 The reason is really about the
7 evolution of engagement with the administration.
8 In November we're likely to have I think a better
9 sense of how these four initiatives relate to the
10 agenda of the administration.

11 I think we have, for the good work of
12 Craig and his team, better ties to both the
13 career folks and the political folks that are
14 gathering in the administration here. I think it
15 would be a missed opportunity not to be in
16 Washington in November for entrepreneurship
17 month.

18 And so therefore, I would ask the
19 Council's input, but also understanding that this
20 aspect of visits to regions is important. But I
21 think owing to the fact that we have, it's been
22 slower to get the engagement with the

1 administration up to now, we should probably look
2 for a later meeting to do that.

3 So with all due respect to Sue and to
4 Trey and the great work that you've done into
5 planning for your communities, I think that we
6 should probably wait until a later meeting to do
7 that.

8 MR. BUERSTATTE: Does anyone want to
9 visit Indianapolis in February?

10 (Laughter.)

11 MR. BUERSTATTE: So I think we'll be,
12 as Steve said -- and very soon will have a better
13 definition of not only what we're interested
14 within these four verticals but also what the
15 leadership wants us to dive into. And that could
16 better inform the execution of those visits and
17 who we engage, the organizations, and whatnot.

18 But real quick, you know, Trey had to
19 leave and catch a flight. But Sue, we talked
20 offline a little bit about this. But given what
21 we talked about today on those four priorities
22 and just the progression of the Council, any new

1 thoughts about Indianapolis, your community and
2 what we might want to think about leading up to
3 that in the coming six, nine months?

4 MEMBER S. SMITH: Sure. I think that,
5 you know, Indianapolis would be a really good
6 place to visit. There's a lot of things going
7 on, and there's a lot of things going on around
8 those four areas.

9 I mean, we have a lot of, even in
10 manufacturing I think in looking at best
11 practices, I think we could talk to a lot of
12 folks about different best practices in
13 manufacturing, and certainly in apprenticeships
14 and in addressing those four areas.

15 I think we would have a tremendous
16 amount. We've talked about, I've talked to a lot
17 of different agencies and in bringing them in.
18 So, you know, as we get closer and closer, maybe
19 we could just have a little more focus on who you
20 want to talk to.

21 MEMBER REICHERT: In terms of engaging
22 with the administration, Vice President Pence is

1 from there and has done a lot of work in
2 manufacturing in that state.

3 MEMBER S. SMITH: Absolutely.

4 MR. BUERSTATTE: Yes, it makes sense,
5 that kind of thing. It could help us get a
6 little more support for maybe even a broader
7 effort than what we had before. My hope is we
8 can bring in other federal partners with us, not
9 just Commerce but our friends at SBA and others
10 who might want to join.

11 And this gives us a lead time to
12 really prepare and think about the opportunity.
13 So we'll defer to a little bit later. So what
14 that said -- Jennifer mentioned it briefly, yes.
15 And we've got enough lead time where we could do
16 that. And we just heard from Paul Zielinski this
17 morning, the outgoing FLC chair. And the
18 incoming chair is also is from Indiana.

19 So we talked about federal labs. And
20 clearly on the deregulation piece, there should
21 be some interesting activities there. So it's
22 shaping up pretty nicely actually. I like that,

1 thanks for offering.

2 PARTICIPANT: Yes, I mean, I know in
3 the past during the term one of the Obama
4 administration there was some coordinated
5 activities at that time. So just trying to say
6 hey, we did this in the past; let's run this
7 again.

8 MR. BUERSTATTE: Yes, yes, great. Any
9 final thoughts on that? All right. I'm sorry
10 that we didn't hear from as many folks on the
11 phone today, but I think we have both Tiffanys on
12 the line, Tiffany Wilson and Tiffany Stevenson.
13 And Rebecca, thanks for joining us earlier.

14 Did anyone on the line have any
15 thoughts before we wrap up?

16 MEMBER BAGLEY: No, I think I've
17 commented online. This is Rebecca.

18 MR. BUERSTATTE: Yes, thanks, Rebecca.

19 MEMBER STEVENSON: Yes, me as well.

20 MR. BUERSTATTE: Thanks, Tiffany.

21 Yes, I just wanted to make sure you guys had an
22 opportunity. I know it's hard sometimes to butt

1 in virtually, especially you've got a bunch of
2 Type As around the table.

3 So at this point really I would like
4 to open it up to public comment. So Operator,
5 could you signal the public comment portion?

6 (No response)

7 MR. BUERSTATTE: One more time.
8 Operator, could you please open the line for
9 public comment?

10 OPERATOR: Yes, thank you. We will
11 now begin the question and answer session. If
12 you would like to ask a question, please press
13 star one, unmute your phone, and record your name
14 clearly. Your name is required to introduce your
15 question.

16 If you need to withdraw your question,
17 please press star two. Again, to ask a question,
18 please press star one. It will take a few
19 moments for the questions to come through.
20 Please stand by.

21 MR. BUERSTATTE: Thank you. We'll go
22 into internal public comment, if anyone here on

1 the bench wants to comment.

2 (No response)

3 MR. BUERSTATTE: All right, Operator,
4 no takers?

5 OPERATOR: We show no questions in the
6 queue at this time.

7 MR. BUERSTATTE: Thank you very much.
8 Anyone in the bench? All right, great. Thanks
9 so much. Steve?

10 CO-CHAIR TANG: Thanks, everybody, for
11 making it out, and those who are on the phone. I
12 think we have turned the corner in terms of
13 engagement. I think we have much to look forward
14 to.

15 Craig, thanks again to you and your
16 team, thanks for organizing the next steps. And
17 for those of you that volunteer to participate in
18 the four areas, we look forward to further work.
19 So thanks for your patience, thanks for your
20 persistence and your diligence. Much appreciated
21 here.

22 And those that couldn't make the

1 meeting, we'll make sure that they're briefed as
2 well. So safe travel, everybody. Enjoy the rest
3 of your summer.

4 MEMBER REAMER: Question. Are the
5 dates for November 2nd?

6 CO-CHAIR TANG: Second and third, I
7 believe.

8 MR. BUERSTATTE: Correct, yes. The
9 2nd and 3rd. There should be a save the date
10 out. If not, we'll get that out immediately.
11 But 2nd and 3rd look like our typical run of
12 show, a Thursday afternoon, Friday morning.

13 The only way I could foresee that
14 changing is if we needed to adjust for the
15 Secretary's schedule. We certainly want to
16 prioritize that as this momentum builds.

17 And on that logistics item, I'll
18 emphasize OIE will certainly follow up. A lot of
19 do-outs, a lot of readings and ideas generated,
20 the papers distributed and whatnot. We'll
21 compile all that, and just give us until Monday
22 or Tuesday to distribute everything cleanly with

1 some notes and some thoughts on today's
2 discussion.

3 And of course, as always, please do
4 reach out with questions or ideas. Scott, your
5 question was great. You absolutely can bring in
6 your network if you think they would help us
7 think through some ideas.

8 And I can't emphasize it enough,
9 that's why we have this crazy, diverse team here.
10 So you all have such a neat background --

11 MEMBER FREDERICK: The question would
12 have been better if I asked it on the front end
13 of doing it.

14 MR. BUERSTATTE: No, it's great. A
15 true entrepreneur. So we'll hang out for a little
16 bit if you've got any follow-on questions. But
17 everyone, safe travels and thank you so much.

18 (Whereupon, the above-entitled matter
19 went off the record at 11:53 a.m.)
20
21
22

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