

THE MANUFACTURING COUNCIL

DOC Building  
14th & Constitution Avenue, N.W.  
Washington, DC

Tuesday,  
January 14, 2014

The meeting was convened, pursuant to notice,  
at 8:33 a.m., MR. MICHAEL LASZKIEWICZ, Chair,  
presiding.

APPEARANCES:

MEMBERS OF THE COUNCIL:

MR. MICHAEL LASZKIEWICZ, COUNCIL CHAIR  
Vice President and General Manager  
Rockwell Automation

MS. MARY ISBISTER, COUNSEL VICE CHAIR  
President  
GenMet

MR. JOE ANDERSON  
President  
TAG Holdings

MS. CHRISTIE WONG BARRETT  
Chief Executive Officer  
Mac Arthur Corporation

MR. STEPHAN G. BRAIG  
President and Chief Executive Officer  
Trexel Incorporated

MR. JOE BURGESS  
President and Chief Executive Officer  
Aegion Corporation

MR. CARLOS CARDOSO  
Chairman, President and Chief  
Executive Officer  
Kennametal Incorporated

MR. MARK CHANDLER  
Senior Vice President, General Counsel  
and Secretary  
Cisco Systems, Inc.

MR. CODY FRIESEN  
President and Chief Technical Officer  
Fluidic Energy

MR. HIROYUKI FUJITA  
President and Chief Executive Officer  
Quality Electrodynamics, LLC

MR. DAVID HASTINGS  
President  
Mt. Vernon Mills

DR. ALBERT GREEN  
Chief Executive Officer  
Kent Displays Incorporated

MR. JOEL LORENTZEN  
Chief Executive Officer  
Genesis Systems Group

MS. CLAUDINE MARTINEZ  
President and General Counsel  
MCT Industries

MR. SHIRISH PAREEK  
Founder and Chief Executive Officer  
Hydraulex Global

MS. ANDRA RUSH  
Chief Executive Officer  
The Rush Group

MS. SUSAN SMYTH  
Chief Scientist for Global Manufacturing  
General Motors Company

MR. ROY SWEATMAN  
President  
Southern Manufacturing Technologies  
Incorporated

MR. JEFF WILCOX  
Vice President-Engineering  
Lockheed Martin Corporation

MS. BETH WILLIAMS  
President  
Roxbury Technology Corporation

MS. CAROL WILLIAMS  
Executive Vice President-Manufacturing and  
Engineering, Supply Chain and Environmental,  
Health and Safety Operations  
The Dow Chemical Company

MS. ANNE WHITAKER  
President of North American Pharmaceuticals  
Sanofi US

MR. BILL YEARGIN  
President and Chief Executive Officer  
Correct Craft

MR. BILL ZAHNER  
President and Chief Executive Officer  
A. Zahner Company

DEPARTMENT OF COMMERCE:

KEN HYATT  
Deputy Under Secretary  
U.S. Department of Commerce

MAUREEN SMITH  
Deputy Assistant Secretary for  
Industry and Analysis  
U.S. Department of Commerce

CHANDRA BROWN  
Deputy Assistant Secretary for  
Manufacturing  
U.S. Department of Commerce

MS. JENNIFER PILAT  
Director  
Office of Advisory Committees  
U.S. Department of Commerce

MS. ELIZABETH EMANUEL  
Deputy Director  
Office of Advisory Committees  
U.S. Department of Commerce

MS. KATE McADAMS  
U.S. Department of Commerce

MR. MATT ERSKINE  
U.S. Department of Commerce

ALSO PRESENT:

MR. JOHAN UVIN  
U.S. Department of Education

MS. NANCY NEGRON  
U.S. Department of Education

MS. MELISSA SMITH  
U.S. Department of Labor

MS. LIBBY WAYMAN  
U.S. Department of Energy

MS. JESSICA MILANO  
U.S. Department of Treasury

MR. MARK MAZUR  
U.S. Department of Treasury

MS. PATTIE COOK  
MR. DAVE LAVERY  
MR. DAVID ROJAS ROSARIO  
MS. MICHELLE MENDOZA  
MR. BEN ROBSON  
MS. SILU TANG  
MR. RYAN MILLEY  
MR. CAMERON THURMAN  
MR. JACOB COHEN  
MS. CHRISTINA RODI

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WELCOME AND INTRODUCTION OF NEW MEMBERS

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4 CHAIRMAN LASZKIEWICZ: I'd like to call the  
5 meeting to order. Welcome. Good to see everyone  
6 again.

7 Thanks to all of those who could make it to  
8 dinner last night. It was, as always, a very fun  
9 evening.

10 We have a very full agenda today. I will do a  
11 couple of things, but we have an addition to the  
12 agenda. In industry, most of do safety moments. This  
13 morning we're going to do a security moment. And  
14 before I review the agenda and introduce some of our  
15 guests, I'd like to recognize Jenna Pilat, who is going  
16 to give us a security moment.

17 MS. PILAT: Good morning, everybody. We  
18 received an e-mail this morning that we would have a  
19 drill in the next 30 days, a lockdown procedure for the  
20 department, because sometimes we get those notices and  
21 the drill happens that day. We thought it would be a  
22 timely opportunity to share with you our procedures for  
23 lockdown.

24 In the event of a lockdown, you will know it  
25 because you will hear a loud siren and there will be a

1 voice that comes over the loud speaker instructing you  
2 that we are having a drill for a lockdown. It  
3 hopefully will be a drill.

4 (Laughter)

5 MS. PILAT: In that event, we will lock the  
6 doors, turn off the lights, and try to shelter  
7 everybody.

8 So that is our procedure. Thank you, Mike.

9 CHAIRMAN LASZKIEWICZ: Thank you. So let me  
10 just quickly review the agenda and I'll take any  
11 questions if there are questions related to the agenda  
12 before I introduce our guest.

13 I'll first note that today representing  
14 Secretary Pritzker is Deputy Under Secretary Ken Hyatt,  
15 who is here, and I'll go through his bio here in just a  
16 second.

17 But thank you for representing the Secretary  
18 this morning, Ken. We are happy to have you.

19 He will give the first -- excuse me. We will  
20 do some introductions. Ken will give the update from  
21 Commerce and then our chairs and vice chairs from each  
22 of our subcommittees will provide a brief update as to  
23 where their subcommittees are in the process of  
24 preparing the recommendations for the Secretary of  
25 Commerce.

1           So I think each of you are aware that you'll  
2 be giving those updates. I've talked to most of you  
3 and in the meeting introductions, this is just a short  
4 update. And please be prepared to take questions from  
5 ex-officio members and other members of the  
6 Manufacturing Council.

7           After that, we do have an interesting morning.  
8 Many of you who participated at the Manufacturing  
9 Council meeting in Houston had a chance to meet some  
10 young people that are participating in FIRST Robotics,  
11 and we will have representatives from FIRST Robotics.  
12 We'll have students that participate in the program,  
13 current and alumni students that will be here  
14 presenting their robot, their work, and helping us to  
15 understand how First enables them to develop career  
16 pathways that we believe lead to manufacturing, in many  
17 cases.

18           This will be a bit of a challenge. I believe  
19 we'll have roughly 17 guests come in. These young  
20 people are very proud of the opportunity to present  
21 their work to us and equally proud were their parents  
22 who all wanted to be here with their children.

23           (Laughter)

24           CHAIRMAN LASZKIEWICZ: So that is really the  
25 key portion of the meeting; again, the updates from Ken



1 and from Chandra, which we always receive. And based  
2 on feedback from the committee, after Ken and Chandra's  
3 updates, really will become our main work, which is the  
4 update from the subcommittees. And then following our  
5 work, several of the ex-officio members will give  
6 updates from their departments, which we hope overlaps  
7 closely, I think -- what this committee is doing a very  
8 good job of is taking advantage of the ex-officio  
9 members and really engaging them in their work. So I  
10 think we'll have a good update that way.

11 So each of the teams will give their updates.  
12 We will end the meeting at lunch. There is a lunch  
13 that you are all invited to. And from a procedural  
14 perspective, our official work will end when the  
15 meeting ends at noon and we will have some time to meet  
16 with one another at lunch, and I believe we're going to  
17 be joined by a member of the White House staff. Jason  
18 Miller, correct?

19 So that's our agenda for today. Are there any  
20 questions on the agenda?

21 (No Response)

22 CHAIRMAN LASZKIEWICZ: Okay. Then, Mary, if  
23 you could -- as we've talked in past meetings, there's  
24 been a modification the Secretary has made to the  
25 Manufacturing Council, where companies that have

1 substantial business and infrastructure in the United  
2 States and are exporters themselves, but not U.S.  
3 companies, have asked -- and we have discussed this at  
4 previous meetings -- but new members have been added to  
5 the Council. Mary is going to introduce them, those  
6 companies and their leaders.

7 That is a change in the process. I think  
8 we'll find that these are companies that share many of  
9 the same challenges our subcommittees are working on.  
10 They are committed to global competitiveness here in  
11 the United States, and those members have been added to  
12 the subcommittee and Mary is going to introduce those.

13 Good morning, Mary.

14 VICE CHAIRMAN ISBISTER: Good morning. Thank  
15 you very much. Good morning, everyone.

16 Do we have someone on the phone? Good  
17 morning.

18 MS. WHITAKER: Yes. Anne Whitaker is on the  
19 phone.

20 VICE CHAIRMAN ISBISTER: Wonderful. Thank you  
21 and welcome, Anne.

22 Wow, talk about good timing. I have the  
23 opportunity to introduce the new members, and one of  
24 our very newest members, Beth Williams, as she makes  
25 her entry.

1 (Laughter)

2 MS. WILLIAMS: I apologize. Good morning,  
3 everyone.

4 VICE CHAIRMAN ISBISTER: Good morning. Beth  
5 is the President and CEO of Roxbury Technology. And,  
6 Beth, if you don't mind, sorry to put you on the spot,  
7 as you have just arrived, but could you give us a real  
8 brief introduction?

9 MS. WILLIAMS: Okay. Yes. Hi. I'm Beth  
10 Williams, and my company is Roxbury Technology. I'm  
11 from Boston, Mass., and I'm a second generation  
12 entrepreneur. We manufacture imaging supplies for  
13 Staples. I've been CEO for 11 years, took over after  
14 the sudden death of my father. We pretty much have the  
15 social mission of hiring inner city residents, ex-  
16 offenders, and so forth.

17 So thank you. I'm honored to be here.

18 VICE CHAIRMAN ISBISTER: Welcome. Next, I'd  
19 like to introduce Anne Whitaker, who is with us in  
20 spirit, if not in body, through the technology of the  
21 phone.

22 Anne is the President of the North American  
23 Pharmaceutical Division of Sanofi.

24 Anne, do you mind taking a moment to introduce  
25 yourself to the group?

1 MS. WHITAKER: That would be fine. First of  
2 all, thank you for allowing me to connect.

3 Anne Whitaker, President of Sanofi North  
4 America. Sanofi is a diversified health care company.  
5 We have products ranging from vaccines to  
6 pharmaceuticals to biologics to consumer health care  
7 products, over-the-counter. You may be familiar with  
8 some of our consumer health care products under the  
9 label of Chattem, things like Allegra and Icy Hot and  
10 Gold Bond lotion. And we also have an animal health  
11 business, as well.

12 So I run the North America operations for our  
13 pharmaceutical and consumer health care business. I'm  
14 very pleased to be part of this Council. I look  
15 forward to learning and contributing and, hopefully, at  
16 the next meeting, seeing you all in person. I'm  
17 actually out in San Francisco for the JPMorgan Chase  
18 meeting and needed to be here. So it has allowed me,  
19 via technology, to be in two places at once.

20 VICE CHIARMAN ISBISTER: Well, welcome. It is  
21 early for you. So welcome and thank you very much.

22 We have three other new members, and so I'd  
23 like to present them to you.

24 Harvey Hughes, President of Immediate Response  
25 Technologies, a Maryland-based manufacturer of

1 protective gear and equipment used in the U.S.  
2 military, law enforcement, first responders, and  
3 commercial contractors in response to manmade and  
4 natural disasters.

5 Avram Saunders, President and CEO of Lightning  
6 Eliminator and Consultants in Boulder, Colorado. Mr.  
7 Saunders' company manufactures equipment to protect  
8 sensitive facilities from lightning strikes and their  
9 related impacts.

10 Last, but not least, Ludwig Willisch,  
11 President and CEO of BMW North America, who currently  
12 is in Detroit at the auto show.

13 (Laughter)

14 VICE CHAIRMAN ISBISTER: Which you can't blame  
15 him for that.

16 But welcome to all of the new members and  
17 thank you very much in advance for your service.

18 CHAIRMAN LASZKIEWICZ: Thank you and welcome  
19 to the new members. I am anxious to meet all of our  
20 new members at our next meeting.

21 Before we end today, I just want to make a  
22 quick point. As this Council starts calendar year '14,  
23 one of the things we've discussed in the past is that  
24 our term ends near the end of this year, in November.  
25 So we're now on the home stretch of completion of our

1 recommendations.

2           So I think we'll see a little bit more urgency  
3 over the last couple of weeks. The progress has been  
4 tremendous. And I know that there is a great deal of  
5 interest from Commerce and the Administration to  
6 receive the recommendations from our subcommittees,  
7 whether it's to incorporate our comments into policy,  
8 into language in the State of the Union, in terms of  
9 conversations with Congress about legislation related  
10 to manufacturing, these are all key issues.

11           So I think representing Secretary Pritzker,  
12 Secretary Hyatt will be talking a bit about the  
13 department's focus. We're happy to have Ken here.

14           You are new to this position, but have many  
15 years of experience in the Commerce Department, and we  
16 thank you for being with us today. And you have the  
17 floor.

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1                   DEPARTMENT OF COMMERCE UPDATE

2                   Ken Hyatt, Under Secretary for the  
3                   International Trade Administration

4  
5                   UNDER SECRETARY HYATT: Thank you. Thank you.  
6                   Thanks for having me today. I was actually saying to  
7                   Chandra, as I began, I'm a long-time private sector  
8                   management consultant. I worked for Bain & Company for  
9                   a bunch of years. Some of you might know Bain &  
10                  Company. And at the end of my career, I was working in  
11                  the automotive business.

12                 Chrysler and Daimler were clients of mine. So  
13                 I was spending my time in places like Detroit Diesel,  
14                 which you probably know, looking across. But sort of  
15                 throughout my career, I've sort of worked on  
16                 manufacturing issues, and it's actually great to be  
17                 here in this role.

18                 I spent a fair amount of time, while at  
19                 Commerce, on the services side of issues, but it's nice  
20                 to be here on the Manufacturing Council. So thank you  
21                 for inviting me.

22                 Thanks to all of you for being here today. We  
23                 appreciate the work that you do.

24                 I am going to talk about the Secretary's  
25                 agenda and you'll hear how central manufacturing is to

1 that which we are now doing.

2 She announced -- I guess it's probably  
3 November -- an open for business agenda, and I should  
4 have brought my open for business buttons. Right? But  
5 we have been trying to communicate that America is open  
6 for business, that we in government need to move at the  
7 speed of business. This is, again, a central piece of  
8 that manufacturing agenda.

9 Thanks to the new members who have joined us.

10 And let me then describe for a little bit what  
11 that agenda is, and then I'm going to pick on two --  
12 I'm going to talk about two particular pieces of it.  
13 The agenda has four key components: trade and  
14 investment, obviously, because manufacturers need  
15 access to markets; innovation, because manufacturers  
16 need cutting-edge technology and a well trained  
17 workforce; the environment, and we have NOAA here at  
18 Commerce and one of the things we've been talking about  
19 is how do we take our environmental agenda and connect  
20 it to business, and the conversation has been how do we  
21 connect manufacturers to the information, product and  
22 services to prepare and prosper in a changing  
23 environment, and that is both how do you think about  
24 running your businesses in a changing environment and  
25 what are the opportunities that are created in a



1 changing environment.

2 The environment focus will change, but, of  
3 course, we're going to continue to provide  
4 extraordinary weather information, but we're also  
5 trying to connect it more deeply to the business  
6 community.

7 And then, finally, data and big data. It's a  
8 conversation that is around the business community now,  
9 meta data, big data, how do you analyze that data. And  
10 we at commerce have an extraordinary amount of  
11 information, Census data, NOAA data, et cetera, and the  
12 question on the table is how do we think about making  
13 more of that data accessible to the business community  
14 so people can innovate and, again, hopefully, drive  
15 better decision-making.

16 So four key components: trade and investment,  
17 innovation, the environment, and data. And I'm going  
18 to speak today, as I think it's most relevant, a little  
19 bit about trade and investment and then about  
20 innovation, and then I'll turn it to Chandra, put it  
21 back in her capable hands. I know she used to sit  
22 across the table here.

23 ASSISTANT SECRETARY BROWN: I'm on the lonely  
24 side now. I was on the other side.

25 (Laughter)

1           UNDER SECRETARY HYATT: That's right. So let  
2 me then talk a little bit about trade and investment.

3           The Secretary is spending a lot of her time on  
4 trade and investment, and I'm a little bit in the eye  
5 of the hurricane meeting her demands in trade and  
6 investment.

7           But the trade and investment has four key  
8 components, four planks, four pillars to the trade and  
9 investment agenda. One, open markets globally by  
10 leveling the playing field. All that great work we do  
11 to help companies and -- one of my colleagues talks  
12 about if there are barriers to people doing business  
13 internationally, we try to kick down that door if  
14 there's a barrier, whether it's a technical barrier,  
15 whether there are problems on government procurement.

16           What can we do to level the playing field,  
17 one.

18           Two, how do we broaden and deepen the U.S.  
19 exporter base? So if we are leveling the playing field  
20 and knocking down barriers, there remains a deep  
21 interest in broadening the exporter base, more  
22 companies exporting, deepening the exporter base,  
23 helping companies that do export export more either to  
24 the same country or help those innovative companies  
25 that have demonstrated experience in a couple of

1 markets move elsewhere.

2 Third, enforce our trade laws. And you know  
3 here at Commerce, we have an antidumping countervailing  
4 duty. I've slowly learned to say ADCVD. You have to  
5 say that like 100 times to be able to actually say it  
6 carefully.

7 But we do a lot of work enforcing trade laws,  
8 where there is a concern about dumping or  
9 subsidization. So a third plank on enforcing the trade  
10 laws.

11 Then the final -- and I don't want to say it's  
12 a new plank, but it's a greater emphasis on investment  
13 promotion, helping promote foreign direct investment.  
14 Again, we have been doing it for a while, but we have  
15 increased focus, increased attention, increased  
16 resources on the investment and promotion.

17 So the four pieces: open markets by leveling  
18 the playing field, broaden and deepen the exporter  
19 base, enforce our trade laws, and promote the U.S. as  
20 an investment destination.

21 With respect to the export piece of that, the  
22 first two, opening the market, broadening the exporter  
23 base, you're all very familiar with the National Export  
24 Initiative. Right? It started, I guess, in 2009. Its  
25 target end is the end of 2014. And, again, it

1 recognized that 95 percent of customers were outside of  
2 this world; that a lot of the projections of growth are  
3 outside this world.

4 And we continue to execute against the  
5 National Export Initiative and now are asking the  
6 question, again, in the management consultant way of  
7 looking at the world: What did we learn? What did we  
8 do well? What should we do more of? Can we connect  
9 certain activities to results? So that we think about  
10 what is next and we do it analytically.

11 So we are reaching out to customers and asking  
12 the question: How have we added value to you? What  
13 has changed in the way we've added value to you?  
14 Should we be providing services we're not?

15 We're taking a look at some of our trade  
16 tools, what results have been created, with a trade  
17 mission, with IBPs, international buyer programs.

18 So we're looking both at what our customers  
19 are telling us have helped and, also, what has worked  
20 and what has not worked.

21 Chandra, I hope I didn't just say what you  
22 were going to say. Sorry.

23 ASSISTANT SECRETARY BROWN: I'll have to make  
24 up new stuff.

25 UNDER SECRETARY HYATT: Good, good, good.

1 (Laughter)

2 UNDER SECRETARY HYATT: But the operating  
3 assumption is that there are still great, great  
4 opportunities. And as I've been talking about it and  
5 going back to my own experience, I ran a small services  
6 business before I got here and I have been arguing -- I  
7 still think we need to make the argument to companies  
8 on the strategic necessity to play globally.

9 People say, "Isn't it great, you've added  
10 sales to your business and you can mitigate risk if you  
11 have markets," I agree with all that good stuff. But  
12 if you're in a tradable sector and you don't compete  
13 internationally, then you're at risk, because there is  
14 some competitor out there -- and I know in my small  
15 business, I thought I was working for a big  
16 multinational.

17 It was actually Kraft Foods, another part of  
18 my manufacturing experience, and I was providing  
19 consulting advice and I thought we -- I was sort of the  
20 best firm in the world, providing all this great  
21 consulting advice to them, and I knew cold the  
22 competitors in the United States. I could  
23 differentiate myself against every single American  
24 competitor. And someone attacked me from Europe and  
25 attacked the European operation, persuaded London to do

1 business with them, and, before I know it, I was  
2 defending myself against an international competitor.

3 So part, for me, of the export trade piece is  
4 a competitive necessity to sort of forge your products  
5 internationally, sort of forge your products in the  
6 cauldron of competition.

7 So we will remain very focused on promoting  
8 exports. Again, if you guys have thoughts, we would --  
9 a separate sort of topic for me is feedback -- and we  
10 should organize this, if we could -- is feedback on  
11 what has worked, what has not worked on the export  
12 assistance that we hopefully provide to some of you,  
13 what we're doing there.

14 The second big piece of this that I want to  
15 talk about is investment promotion. We've had a  
16 history in the investment promotion side of promoting  
17 -- as I said, promoting direct investment, but over the  
18 last couple of years, we have dramatically heightened  
19 our focus on helping foreign companies, persuading  
20 foreign companies to invest in the United States.

21 Although it might seem obvious to people  
22 around the table, part of what we recognized was that  
23 there were many countries around the world which did  
24 not believe America welcomed their investment. As  
25 simple an issue as welcoming to investment, which,

1 again, seemed sort of odd to me. But I've spent a lot  
2 of time in the tourism space and there are lots of  
3 folks around the world who don't believe they're  
4 welcome here.

5 So we spent a fair amount of time -- and you  
6 have Aaron Brickman and Felicia, who are from Select  
7 USA, which they'll sort of talk about and if you  
8 haven't met them, you should meet them. But we sort of  
9 articulated we needed to welcome investors. We needed  
10 to articulate why America is a great investment  
11 destination. We believe there are lots of great  
12 reasons why it is. There are all these great studies  
13 around cost curves that are turning, energy costs, rule  
14 of law, et cetera.

15 We held a great summit a number of weeks ago,  
16 a Select USA summit, 1,300 people, 1,000 who couldn't  
17 get in, 650 investors from around the world. We had  
18 200 members of economic development organizations  
19 around the country, 70 or so Federal representatives.  
20 But really to try to sort of drive home this point, we  
21 welcome your investment, we think America is the best  
22 place in the world, in particular, in manufacturing to  
23 invest, and then what are we going to do to help.

24 So we will continue now working this issue  
25 with heightened focus.

1 Penny, who, I think you know, is a former  
2 businessperson, is very focused on investment, what are  
3 the economics of the investment, and is spending a lot  
4 of time on that issue.

5 So our trade investment agenda will remain and  
6 I would say we will heighten that.

7 Let me then turn to innovation for a couple of  
8 minutes and then go across and ask Chandra to continue  
9 it.

10 So we debated for a while how to even frame  
11 this innovation claim. What does that actually mean?  
12 And there are two parts that relate to manufacturing I  
13 want to talk about. One is the National Network for  
14 Manufacturing Innovation, and, secondly, the Investing  
15 in Manufacturing Communities Partnership.

16 Matt, I don't know if you want to comment --  
17 maybe you would comment on this. I assume -- my  
18 understanding is that Pat Gallagher, the acting Deputy  
19 Secretary, spoke with you in Houston. So let me just  
20 speak -- but I know there are some folks who were not  
21 at that meeting. So let me just be brief about it and  
22 talk about it.

23 It's a consortia of companies and universities  
24 focused on taking fundamental discoveries and  
25 inventions and transferring them into manufacturable



1 products, and it's this whole question of going as fast  
2 as possible from idea innovation to being able to do  
3 something in the marketplace. That's the big picture  
4 here.

5           When he announced the program, the President  
6 called for 15 institutes that would allow companies and  
7 researchers to work together to do this. In July of  
8 '13, he expanded that request, setting a goal of 45  
9 such institutes in the next 10 years.

10           In May, we announced -- the White House  
11 announced a competition for three new manufacturing  
12 innovation institutes, and let me just describe them to  
13 you, if you are not aware of them.

14           Department of Defense will lead two of three  
15 institutes, one focused on digital manufacturing and  
16 design innovation, one focused on lightweight and  
17 modern metals manufacturing.

18           The third institute will be led by the  
19 Department of Energy, a next generation power  
20 electronics manufacturing institute. Libby Wayman will  
21 describe this in more detail.

22           Along with this announcement, the President  
23 has committed \$200 million across five Federal agencies  
24 -- Commerce, Defense, Energy, NASA, and the National  
25 Science Foundation -- to build off the success of the

1 Youngstown pilot.

2 In terms of the Investing in Manufacturing  
3 Communities Partnership, in December, the Secretary  
4 announced the next phase in the Investing and  
5 Manufacturing Communities Partnership, IMCP.

6 It's a coalition of 10 Cabinet departments  
7 that support a bottom-up approach developing the best  
8 economic development plans in communities.  
9 Specifically, the communities must bring together key  
10 local stakeholders and make long-term plans and  
11 integrate all the key investments across the ecosystem.

12 This is part of a four-year effort to build  
13 clusters of excellence and to align multiple Federal  
14 agencies who all have different pieces to a puzzle, but  
15 were not always fully integrated -- were not always  
16 fully integrated in that effort, and this is sort of  
17 the next generation.

18 Some of us worked on the Task Force for the  
19 Advancement of Regional Innovation Clusters, TARIC,  
20 which was along this issue. But it's a basic idea that  
21 we need to do a better job coordinating our resources  
22 and then linking with the businesses in the  
23 communities, the academic universities, to make certain  
24 you have an integrated approach.

25 In December, a Federal Register notice went

1 out soliciting applications who want to be one of only  
2 12 nationwide to win the designation of manufacturing  
3 community, and these winning communities will get  
4 access to \$1.4 billion in grant programs across 10  
5 Cabinet agencies.

6 Again, we want to incentivize long-term  
7 investment, integrating workforce training, supplier  
8 networks, research and innovation, et cetera.

9 Finally, let me, again, thank you for that  
10 which you are doing. Part of the Secretary's open for  
11 business agenda is a continued and more systematic  
12 reaching out to the private sector to understand what  
13 is on the private sector's mind to help us set policy,  
14 but, as importantly, how do we partner with you to make  
15 the changes occur.

16 I think there are opportunities for us both to  
17 do a better job of understanding, but the moving to  
18 actual implementation is partnering with industry to  
19 make some of these changes happen.

20 So I want to, again, thank you for your  
21 service. This is an incredibly important issue. It's  
22 an incredibly important issue to the Administration.

23 On behalf of the Secretary, let me thank you  
24 for all the hard work you've done; for the new members,  
25 all the extraordinary work you will do; and, looking

1 forward to great recommendations as you sort of  
2 complete this year.

3 So thanks again for inviting me. I'm going to  
4 look forward to hearing the reports.

5 Let me turn it to Chandra.

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1 have data and information that you can take out to all  
2 your networks around the world, because I know we're  
3 all international now.

4           So starting with that, I'm going to give you a  
5 few stats. One billion of exports in U.S. goods and  
6 services -- well, some of this you already know --  
7 supports over 5,000 jobs. But in 2012, 9.8 million  
8 American jobs supported by U.S. exports, including --  
9 now, it gets to all my favorite stats -- 25 percent of  
10 all manufacturing jobs.

11           I think pretty much everyone here knows how we  
12 pay more -- trade supported jobs pay 13 to 18 percent  
13 higher than the national average. So a lot of these  
14 things I know some of you know, some of you don't.

15           United States' trade agreements with 20  
16 countries supporting 46 percent of the overall goods  
17 exported. Of that and, in fact, a third of the United  
18 States' growth -- a third of our growth since the  
19 second quarter of 2009, the start of the  
20 Administration, can be attributed to exports alone.  
21 That's why we care a lot about that.

22           Right now, many of you know we're working on a  
23 variety of trade agreements. We spend a lot of time  
24 here at ITA working on trade agreements. TTIP, TPP,  
25 they account, together, 65 percent of all the world's

1 goods, exports traded, and they are 69 percent of all  
2 of what we export, those two agreements.

3 So we are working hard on a variety of those.

4 I want to talk more about manufacturing, my  
5 favorite subject, of course. In 2013, manufacturing  
6 employment was 12 million, up 133,000 since 2009. So  
7 2013 is the third consecutive year of employment  
8 increases specifically in manufacturing. The low was  
9 in 2010 and prior to that, it had dropped each year  
10 since 1998.

11 So this is, again, some of the good news that  
12 -- I know we all talk about the myths of manufacturing  
13 and what doesn't get out here. This is a good news  
14 story.

15 Of these new hires, the ones in manufacturing,  
16 30 percent higher earnings than new hires -- than new  
17 hires in other areas. That's a huge statistic, 38  
18 percent. It's what the middle class is based on, we  
19 all know that, but I think it's important to reiterate  
20 it. And for every dollar spent, \$1.48, \$1.50 is added  
21 to the economy. So we also know it's a huge  
22 multiplier.

23 I think it's always good to start out with  
24 some of these numbers to set the stage for a lot of  
25 things that I know we already know here.

1           We accounted -- manufacturing accounted -- I  
2 still like to say "we" -- for 60 percent of the known  
3 export value in 2011, and we had 74,000 manufacturers  
4 exporting and they accounted for about 25 percent of  
5 all goods exported. And of these -- some of my other  
6 favorite status -- 97 percent SMEs. It's a huge stat.

7           So that kind of talks a little bit about all  
8 these great statistics. We have anything you need in  
9 terms of trade and analysis and policy work. We all  
10 work on all those things.

11           I'm going to talk about a few things that Ken  
12 didn't talk about in his, because these are very, very  
13 recent, late hitting.

14           Number one, trade promotion authority and the  
15 bipartisan Trade Priorities Act of 2014, commonly known  
16 as TPA, and, of course, there are six other acronyms  
17 that TPA also means in the U.S. Government. In this  
18 case, I'm talking Trade Promotion Authority, brand new.

19           Secretary Pritzker is incredibly supportive of  
20 this initiative. We've all been kind of waiting.  
21 Finally, Congress has, like, started to move on it.  
22 It's pretty exciting. It was introduced on Thursday.  
23 The U.S. House and the Senate both did this act.

24           So I would encourage those of you with an  
25 interest in the international trade agenda to be



1 looking closely at this. We are very committed to do  
2 anything we can to help move this forward in a good  
3 way.

4 It's really to have Congress be moving forward  
5 and giving the trade promotion authority to the  
6 President and to the Executive Branch and moving a lot  
7 of these issues and fast-tracking them, with, of  
8 course, all the caveats about level playing field and  
9 all the other important issues that have to go through  
10 it.

11 So that's just one I would put on everybody's  
12 radar. That's in the hands of Congress. So we won't  
13 comment on that, except you should pay attention to it.

14 Look South, another initiative, brand new,  
15 just rolled out. I know we have a big emphasis on  
16 Asia. A lot of people have talked about that. But the  
17 Secretary also knows how important it is to our friends  
18 in the south.

19 So we have a new initiative called Look South,  
20 and this is really looking at the Latin American  
21 opportunities. Fifty-eight percent of U.S. companies  
22 only export to one market, and we know that the kind of  
23 leader market, if you will, to get a lot of folks  
24 involved in exporting is Mexico and Canada.

25 So it makes sense, as we try to deepen and

1 broaden, as Ken has said, this exporter base and the  
2 Secretary's open for business agenda, that we try to  
3 make it as easy as possible and Latin America is one of  
4 the ways that we're hoping to push that agenda forward.

5 Commerce is going to lead a delegation to  
6 Trade Winds in Colombia. I think this is a great  
7 success story for trade agreements. We've seen double  
8 digit export growth in a positive way since the  
9 agreement, the new trade agreement with Colombia went  
10 into effect in 2012. So some good news on that front.

11 In addition, the Secretary is going on a  
12 mission to Mexico coming up, as well. So we just want  
13 everyone to know we really do try to be focused across  
14 the board. It isn't just Asia. It is also Latin  
15 America. So anyone that is interested in Look South  
16 and that initiative, again, just let us know and we're  
17 happy to put you in touch and make sure you're getting  
18 all that information.

19 Finally, on NEI, National Export Initiative  
20 2.0, Ken already touched on that. It is a new thing.  
21 We are in the process of moving that forward. So right  
22 now, just like you guys are doing with answering  
23 questions for the recommendations that you're going to  
24 be presenting to us here in a few minutes, we are doing  
25 the same thing about how can we broaden our base, how

1 can we help it, how can we make it better.

2 NEI 1.0, we think, was incredibly successful,  
3 but we are the government and we don't want to rest on  
4 laurels. There is still a lot of work to be done. So  
5 we are looking at a new NEI 2.0.

6 One of the things that I would reach out to  
7 everyone here on, again, specific requests back to the  
8 team here, is that we are gathering information and  
9 stories on NEI.1, on export successes, on things  
10 related to free trade agreements. And, again, knowing  
11 you represent a diverse population of other sectors, if  
12 you guys have success stories -- we all know the State  
13 of the Union is coming up soon -- I think that it would  
14 be great if you sent those to us. You can e-mail them  
15 to me or to anyone here and we're kind and we're kind  
16 of gathering that data and it will be shared, as well,  
17 probably with the Secretary and the White House.

18 So those are success stories, if you have  
19 anything that you would like to share or other folks  
20 that you know that have success stories, other  
21 manufacturing companies.

22 That being said, I want to get to the meat of  
23 this meeting. And, again, as you all know, I used to  
24 be on that side. Now, it's so fun, because I am  
25 sitting here with open arms awaiting your

1 recommendations so we could implement them. And I've  
2 already sat in on several of the committee meetings.  
3 So I know that you guys have -- and I know I can speak  
4 for Joe from previous Councils and Mike, I mean, the  
5 intellectual rigor of research that has been done by  
6 this current committee I just think is unparalleled and  
7 it's fantastic.

8           So I am eager to get all the data and the  
9 information that is in all of the heads here and the  
10 committee work. And I know we have one that we're  
11 going to discuss today in detail and hopefully approve,  
12 but I'm looking, too, to the other committees' work and  
13 getting those recommendations out, because I can assure  
14 you -- and I'm going to speak for everyone on -- well,  
15 most of us on this side of the table -- that we are  
16 here to implement those and we are looking. That's the  
17 whole point of this.

18           So with that being said, I add my thanks and  
19 we want to definitely get into the heart and any way  
20 that we can be helpful. I think you will find the  
21 folks particularly under Ken's leadership here -- we're  
22 not shy, so we will ask questions, we'll dialogue with  
23 you. If you have anything, again, that you need from  
24 us, we are here.

25           With that, thank you, Mike.

1 CHAIRMAN LASZKIEWICZ: Thank you, Chandra.

2 What I'll do now is introduce the committee  
3 chairs. I'll start -- Secretary Hyatt, you emphasized  
4 the key objectives of the open for business strategy.  
5 What you'll see here, I think, are recommendations and  
6 considerations for future change that are required to  
7 enable, I would say, the effectiveness of the open for  
8 business campaign.

9 Workforce is one of the top issues with  
10 manufacturers, quite frankly, not just in the United  
11 States, but in many parts of the developed world.

12 Carlos Cardoso and his subcommittee have been  
13 doing extensive work here. They worked throughout the  
14 holidays and they're nearing a point of  
15 recommendations. I asked Carlos to provide an update  
16 on the process and maybe even some thoughts on the  
17 timeline for the recommendations there.

18 VICE CHAIRMAN ISBISTER: If I could interrupt,  
19 Mike. I think it's important that this part of the  
20 process is an opportunity for the Council at large to  
21 ask questions of the subcommittees and provide input  
22 and suggestions to sort of reinforce the  
23 recommendations.

24 So don't be shy about making suggestions or  
25 additional comments.

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CHAIRMAN LASZKIEWICZ: This would be the  
interactive part of the meeting.

VICE CHAIRMAN ISBISTER: Exactly.

1                    WORKFORCE DEVELOPMENT AND PUBLIC PERCEPTION OF  
2                    MANUFACTURING SUBCOMMITTEE UPDATE

3                    Carlos Cardoso, Committee Chair

4  
5                    MR. CARDOSO: Thank you, Mike, and thank you,  
6 Mary.

7                    First of all, I have a great team, lots of  
8 ideas. I think our challenge is not about ideas. It's  
9 how we take those ideas into actionable plans.

10                   Before I go right into the Workforce  
11 Development and Public Perception, I just want to  
12 share, from my company's perspective, we are the last  
13 company that is publicly-traded in our industry in the  
14 U.S. So 20 years ago, there were 20 companies like us  
15 or more. We are the only ones left.

16                   Today we have 1,500 people in China in four  
17 facilities. And just to give you an idea, we are a 1-  
18 to-5 net exporter. In other words, for every \$1 we  
19 bring to the U.S., we sell \$5 from the U.S. in China.  
20 A very, very successful story.

21                   So why is that? Two reasons. One is  
22 technology. So our idea, before the Chinese came, so  
23 that there is no Chinese in the Western countries,  
24 because we went to China to attack them in China, our  
25 competition. So they have been defending for the last

1 12 years their territory in China.

2 So there are very little exports from China in  
3 our industry for this country.

4 The reason for that is really technology and  
5 skills. I think that Americans are the most productive  
6 workers in the world.

7 So the threat right now is the fact that we  
8 are struggling with skills. We have not only a  
9 shortage of skills for the current jobs, but any growth  
10 that we anticipate. The barrier is not technology and  
11 not anything else. It's just the skills at all levels.

12 The second one is the perception. People  
13 don't think of manufacturing as a good career, as  
14 something that has a future and so forth. And I could  
15 sit here and tell you that we are in 66 different  
16 countries around the world and we do metal exports into  
17 those. The reason we can do that is because we are  
18 there competing with our competitors there.

19 So our focus in this committee has been around  
20 addressing the skills gaps in this country. And we  
21 know that there are 46 Federal programs that are  
22 attempting to address that, and we know there is money.

23 So one of our tasks is how do we take what we  
24 have and make it -- first of all, understand what works  
25 and what doesn't work and how do we redirect and how do



1 you measure the effectiveness of these programs and how  
2 can we make these programs more effective so that we  
3 can address this major skills gap.

4 As an idea, there are 2.6 million workers that  
5 are going to retire in the next 10 years in our  
6 industry. So if we don't do anything, it's not only  
7 the challenge that we have today, it is the future.

8 If you look at our population in the U.S., our  
9 average age workforce is about 55 years old. If you  
10 look at our average population in China and India, it  
11 is in the 20s. And I think that profile is very common  
12 among manufacturers and international companies.

13 So we find ourselves now really questioning  
14 and challenged to have a technical job in the U.S.  
15 because of the availability. We have to then go and  
16 see can we do that job elsewhere. We have China and  
17 India. China is a big challenge because of  
18 intellectual property, but India is not.

19 So those are the decisions that manufacturers  
20 and their international companies are faced with.

21 By the way, that has a trickle-down effect,  
22 because we have 80,000 customers, we have about 100,000  
23 suppliers. So for every decision we make, there is a  
24 big impact. For every one worker in the U.S. that we  
25 have with the company, there are five jobs associated

1 with that worker, because we are a very high tech  
2 company.

3 So for every one job that we keep, we keep  
4 five other jobs. For every one job that we move, we  
5 lose five other jobs. So that's a real issue that we  
6 have.

7 So we want to work with the departments and we  
8 have been working with the departments to see which  
9 programs, what's the funding, how effective are those  
10 programs, and let's make that work before we go try to  
11 design and start something new.

12 The second part of our -- and by the way, we  
13 have the letter pretty much ready to go for the rest of  
14 the Council, I think, by the end of this meeting and we  
15 can pass that out.

16 So we had a lot of debate and I think we have  
17 finalized that just yesterday, the letter. So we're  
18 ready to go for evaluation and comment from the rest of  
19 the Council. So that's step one.

20 Step two is sort of how do we address the  
21 misperceptions and engage interest in the sector. So I  
22 think we need to spark a national conversation and a  
23 cohesive conversation and campaign about manufacturing  
24 and the role of manufacturing and what a good job  
25 manufacturing can be.

1           You're looking at a guy who started on the  
2 shop floor. My whole career has been in manufacturing  
3 and I've worked for companies like Honeywell in pretty  
4 leading positions and so forth, and I keep on telling  
5 parents and so forth that I still have all my limbs and  
6 no scars and it's okay.

7           (Laughter)

8           MR. CARDOSO: And that's kind of what we need  
9 to do. So we need to create jobs today for people that  
10 are unemployed, underemployed. We need to create a  
11 pipeline of young people that see manufacturing as a  
12 viable alternative for going to college and getting a  
13 degree and ending up with no job at the end.

14           So that's the second part and the team is  
15 going to work on this perception and put something  
16 together to present as sort of a second letter going  
17 forward.

18           So I will open it up. Anything that I missed,  
19 from the team?

20           MS. WILLIAMS: My only question, Carlos, on  
21 the first one is what is the recommendation. What is  
22 the --

23           MR. CARDOSO: Have we passed the letter? The  
24 letter has a number of really detailed recommendations.

25           CHAIRMAN LASZKIEWICZ: I guess we could

1 approach it this way. I'm not sure if we have a hard  
2 copy of the letter, but where this team is in their  
3 process is that, as all the teams have done, they have  
4 drafted their recommendations and the next step in  
5 their process is to vet those recommendations with the  
6 full committee for feedback. That is the process  
7 they're beginning now.

8 MR. CARDOSO: So you'll be getting a letter  
9 today and then you'll have an opportunity to look at  
10 the proposals and comment on those proposals so we can  
11 enhance the proposals.

12 CHAIRMAN LASZKIEWICZ: So our intention would  
13 be to distribute the letter before the end of this week  
14 to the full committee, and we will be asking for a  
15 teleconference meeting with the full Council to provide  
16 some critique and feedback specific to the  
17 recommendations and then move that process forward.

18 So I think in terms of explaining and  
19 highlighting the recommendations, they just finished  
20 their work and I'm not sure they're prepared in this  
21 meeting to do that.

22 Is that fair, Carlos?

23 MR. CARDOSO: Yes. I mean, we could talk on a  
24 broad base. A lot of the manufacturers, for example,  
25 have operations in Germany. So we're looking at models

1 that are working.

2 Every county in every state, there is a  
3 program that is a best-in-class program. And we talked  
4 to the Department of Education yesterday, we have an  
5 example of the example. So one of the things that we  
6 are recommending is how do we take those best practices  
7 of each state or every county and how do we summarize  
8 that and how do we match those with the 46 funded  
9 programs and go after those that are working.

10 I served in the manufacturing -- I led the  
11 manufacturing council for the State of Pennsylvania and  
12 even with the State of Pennsylvania, we had the same  
13 issue. Each county was getting money from either the  
14 Federal Government or state government and, in some  
15 cases, 20 percent of the time, it's being applied very  
16 effectively and very efficient, great results; 80  
17 percent of the time, most people didn't even know what  
18 happened to the money.

19 So we want to take the approach of what is  
20 working, do benchmarking. We've done a lot behind our  
21 recommendations about this type of a report, with all  
22 the best practices and so forth, so that we can take it  
23 and apply it.

24 CHAIRMAN LASZKIEWICZ: Can I make a comment  
25 there? So the previous Workforce Investment Council

1 made the same recommendation. What I have seen to this  
2 point is your committee has taken that recommendation  
3 and done the analysis of the 46 spends --

4 MR. CARDOSO: Yes.

5 CHAIRMAN LASZKIEWICZ: -- and have determined  
6 that some are more effective than others, or we want to  
7 make that determination.

8 MR. CARDOSO: We haven't determined that.

9 CHAIRMAN LASZKIEWICZ: Okay. We want to make  
10 the determination of which are more effective and be as  
11 specific as we can as to what the profile for a  
12 successful model looks like, and that's where I see  
13 this work going.

14 MS. SMYTH: Carlos, I have a question on the  
15 100,000. If you have a gap in workforce, these other  
16 tools, such as immigration, can you address that,  
17 because there is a spectrum of skills, whether it's a  
18 plant floor worker or whether it's a manufacturing  
19 technologist who impacts manufacturing. So has that  
20 been part of your charter?

21 MR. CARDOSO: What we tried to do was we tried  
22 to focus on what is available and what programs we  
23 have, because I think one of the things -- because  
24 there are so many programs and there are so many things  
25 that we can go after, that it could be overwhelming.

1           So what are the top 10 that have the most  
2 impact and, as a first step, addressing that?

3           MS. SMYTH: So would that be an immigration  
4 program, as well as an education program, or it's  
5 primarily --

6           MR. CARDOSO: Currently, we don't have an  
7 immigration program in this, in our plans, in our  
8 proposal. I think there are billions of dollars. We  
9 actually have to find a program and try to figure out  
10 how much dollars are at each program.

11           So there are billions of dollars being spent  
12 on skill development, and I think that everyone,  
13 including the Department of Education and Department of  
14 Labor, feels that there are opportunities in the  
15 efficiency and by which those programs are being used  
16 and how do we do that.

17           MS. McADAMS: Carlos, I have a question. My  
18 name is Kate McAdams, from the Office of the Secretary.

19           As you look at the kind of best-in-class  
20 programs, I wanted to clarify, you're looking at just  
21 Federally-funded programs, whether it's room for sure  
22 for improvement and --

23           MR. CARDOSO: Or state funding.

24           MS. McADAMS: -- and effectiveness, state  
25 funding, but not just private sector employer-funded,

1 because my understanding is employers spend -- well,  
2 the Federal Government spends lots of money on training  
3 and increased effectiveness, but employers spend even  
4 more money after all.

5 So I was wondering if you're looking at the  
6 best practices there for application.

7 MR. CARDOSO: Actually, it's a good question.  
8 When we look at the best-in-class programs, typically,  
9 one of the characteristics is that those programs are  
10 Federal funded, with education supporting and private  
11 sector involvement. So if you pick the top programs  
12 that are being most effective, basically, it tells you  
13 that.

14 Contrary, if you look at the least effective  
15 programs, it's only when the Federal or state  
16 government only alone are involved.

17 So it comes out naturally. One of the failure  
18 modes that I think you'll find in this Federal funding  
19 is that whenever there is no industry involved and/or  
20 education, those results are typically not good  
21 results.

22 VICE CHAIRMAN ISBISTER: So if I could  
23 reiterate what Mike said, the work of the previous  
24 Workforce Subcommittee outlined a number of specific  
25 criteria that said from our evaluation, we have



1 identified this criteria as being integral to a  
2 successful model.

3 I think what the current subcommittee is doing  
4 is taking that criteria and studying it, looking at  
5 current models that exist out in the public arena and  
6 saying these ones have that criteria and they're  
7 working, these ones have this additional criteria that  
8 really make it successful, and then building the set of  
9 principles that, if you think about making investments  
10 in workforce and talent development programs, your  
11 opportunities for success are heightened by ensuring  
12 that these criteria exist.

13 MR. CARDOSO: Exactly. We came into this --  
14 the team came into this and said there's a lot of work  
15 being done out there. Before we go start something  
16 new, let's take a look at what we have, including the  
17 previous subcommittee recommendations, and move forward  
18 so that we can -- we want to get some actionable stuff  
19 that we can actually put our arms around.

20 MR. ERSKINE: Carlos, did the committee look  
21 at the German skills model?

22 MR. CARDOSO: Yes. Yes. Again, our second  
23 largest population of employees is in Germany. So our  
24 model of best practices, obviously, are going to focus  
25 on the U.S. because of the Federal programs, but, also,

1 as we move down, we're going to look at the German  
2 program.

3 Now, one of the recommendations that we're  
4 going to make, by the way, is about the interagency  
5 working, between especially the top agencies,  
6 Departments of Labor, Commerce, and Education.

7 I think it's really important that -- and  
8 we've been working with all three right now. It's  
9 really important to get together around in the room and  
10 come up with what they're thinking, what we're  
11 thinking, and what are the best recommendations based  
12 on everyone, not just our committee, per se.

13 VICE CHAIRMAN ISBISTER: And I think the  
14 funding alignment, as well, right?

15 MR. CARDOSO: Yes.

16 VICE CHAIRMAN ISBISTER: Not different than  
17 what Ken had mentioned around how do you align all of  
18 these programs across multiple agencies that focus on  
19 the same outcome, but to make sure that they're all  
20 pulling the same direction. Even if ultimately they're  
21 going like this, it's much more impactful if they're  
22 moving parallel.

23 MR. CARDOSO: We want the strategy to be  
24 consistent and the deployment then is --

25 VICE CHAIRMAN ISBISTER: And the funding

1 actually spans all of those different agencies, right?

2 MR. CARDOSO: Exactly.

3 VICE CHAIRMAN ISBISTER: So you get economies  
4 of scale when you bring them together and make sure  
5 that they're focused on the same --

6 MR. CARDOSO: And we're talking billions of  
7 dollars. So I want to make sure -- even our committee  
8 was surprised when we said this is billions of dollars  
9 that we're talking about.

10 VICE CHAIRMAN ISBISTER: Wisconsin alone gets  
11 \$406 million from the Federal Government.

12 MR. CARDOSO: Yes.

13 ASSISTANT SECRETARY BROWN: Carlos, I have a  
14 question related to the second part of what you all are  
15 working on, which is the branding and the perception,  
16 which has been an issue across the board.

17 I think one of the things that we would look  
18 for, one, I would encourage you to -- even if you're  
19 not taking on immigration reform, it's still a huge  
20 issue. We're incredibly supportive of immigration  
21 reform. So any recommendations or things around that,  
22 I think, are helpful.

23 But in terms of the perception, we'll be  
24 really looking for your recommendations on how can the  
25 Federal Government -- I'm sure you're probably looking

1 at public/private models. We have strategic  
2 partnerships. I think this is definitely going to be  
3 private sector-led in terms of the branding and the  
4 importance of manufacturing.

5 We're looking at you to tell us how can we --  
6 how can the Secretary, how can myself -- how can we be  
7 helpful on uplifting and I would say correcting, if you  
8 will, the perception of manufacturing?

9 So I don't know if you've gotten to that level  
10 of detail in the recommendations, but I do believe that  
11 is an area where we on the Federal side can be helpful.

12 All of us are, in some sense, a bully pulpit for the  
13 good of the country.

14 So I would encourage you, too, on that. Let  
15 us know, make some specific recommendations on what you  
16 would like us to do in terms of the perception issue.

17 MR. CARDOSO: So we have gotten some help from  
18 an external third party to help us with and we had the  
19 first look as a team at a structure. And I think the  
20 consensus -- and anybody from the team, please step.

21 The consensus was that we have a good  
22 foundation for addressing that. There were a lot of  
23 questions. There is some more discovery and some more  
24 work to be done, but our priority has been to address  
25 the skills so that we would be in a position to support

1 and put this letter in before our next meeting. And  
2 now we're going to take all the effects into this  
3 perception.

4 I think I feel good about sort of the  
5 foundation that we have, and I think it's an approach  
6 that has been used in industry that has worked.

7 So the question is can we take it to the next  
8 level.

9 Any other comments from people?

10 MR. ANDERSON: As often is the case, there is  
11 a balancing act and a tension between these issues.  
12 And what we were struggling with and working with on  
13 the committee is the perception question of  
14 manufacturing versus the reality of a person who needs  
15 to make a living wage and is not concerned about a dark  
16 and dingy factory, they need a job.

17 So balancing that act between certain skill  
18 areas, to include people that are coming from outside  
19 of the country, the immigration scenario. How do you  
20 address those issues versus people that are unskilled  
21 or offenders who are not concerned about anything other  
22 than can I get a job and pay for my livelihood.

23 We're trying to work through those and reach  
24 the right balance.

25 MR. CARDOSO: So this is a challenge that -- I

1 mean, all the private sector does is to question do you  
2 do short-term or long-term.

3 I think the answer is that you need to do both  
4 and I think that is kind of what we're looking at, how  
5 do we address the current challenges that we have with  
6 underemployed and unemployed and how do we deal with  
7 growth and so forth.

8 One of the things that I'd point out is that  
9 Scholastic is one of the companies that has offered,  
10 and they came to Kennametal because we have a lot of  
11 programs and skill development. But they want to  
12 create a curriculum around the country based on the  
13 Kennametal model.

14 We said wait a minute, we're working on this  
15 Council, Manufacturing Council. Would you guys be  
16 interested, instead of Kennametal, can we work with the  
17 Council, and they have agreed to do that and they are  
18 putting a proposal together to address the high school,  
19 how do we get kids to think about manufacturing as a  
20 career, because quite honestly, one of the things that  
21 I found is 90 percent of the guidance counselors at  
22 high schools cannot describe manufacturing, cannot  
23 describe engineering, and, quite honestly, don't talk  
24 about that as a viable career.

25 So, again, this is the future and we need to

1 address both.

2 CHAIRMAN LASZKIEWICZ: So, Carlos, I need --  
3 maybe one more question or comment. Did you have a  
4 question?

5 MS. WILLIAMS: Yes. I was just going to sort  
6 of reiterate what Joe had said. And the 20 million  
7 people that are unemployed, many of whom got unemployed  
8 due to displacement of a lot of jobs being sent  
9 overseas, if there was a way to look at kind of solving  
10 maybe two solutions at once was retraining.

11 A lot of the focus is on young people,  
12 educating starting in high school and even middle  
13 school, which I think is terrific, because we really do  
14 need to look at what that education curriculum looks  
15 like to match the changing world that we live in today.

16 But on the same token, they have parents that  
17 are aged 35, say, 25, 35, 55, 65 that had manufacturing  
18 jobs, that know the four sets of manufacturing, how to  
19 read manufacturing instructions, quality control  
20 procedures, et cetera, but just need to be retrained,  
21 which could be a lot cheaper and that kind of thing.

22 So I think we do have a little bit more due  
23 diligence to do, but it would be great if we were able  
24 to look at ways to help unemployment as part of fixing  
25 the gap in employment and skill sets.

1           CHAIRMAN LASZKIEWICZ: Thank you. I think  
2 just to summarize, there is a lot of work to do here  
3 yet. I think the message of being an "and" equation  
4 program to help tactically with the unemployment  
5 challenge and programs and focus strategically to  
6 ensure the long-term competitiveness of U.S.  
7 manufacturing, they're both critical.

8           We do have serious problems and, quite  
9 frankly, without action, they're going to get worse as  
10 we move ahead. So the tactical piece, I think, as Joe  
11 described it, that natural tension of tactical versus  
12 strategic, is something, as businesspeople, we all deal  
13 with every day.

14           So this will just be another opportunity for  
15 us to apply our experience to this model.

16           So I appreciate your update. I think you'll  
17 get feedback once you distribute your letter. That is  
18 what it is intended to get. And we'll be talking  
19 before the next meeting, I think, via teleconference to  
20 provide more specific and group feedback.

21           So thank you very much.

22           UNDER SECRETARY HYATT: Can I just sort of add  
23 one thing? I think that this is very timely and part  
24 of the reason I think it's particularly timely now is  
25 that I think Secretary Pritzker has a greater interest



1 in workforce issues than, at least in my experience,  
2 other Commerce Secretaries. Not to say that they  
3 didn't worry about it, but in her listening tour, she  
4 went around and listened to businesses around the  
5 country and she came back and said, "I want to make  
6 workforce a critical commerce issue."

7 There were some who said, "But isn't that in  
8 someone else's lane?" And the answer was, "No. It's  
9 absolutely not."

10 So I do think it's a particularly important  
11 moment for us to hear these recommendations.

12 I also think that -- we have a new Labor  
13 Secretary and I've listened -- I don't know if you've  
14 heard him talk, but he sometimes talks about it has  
15 been his impression that the government sometimes or  
16 folks sometimes train and pray as opposed to, again,  
17 very, very specifically understanding what the business  
18 needs are and then making certain that we are being  
19 strategic about where is the demand, how do we  
20 integrate it.

21 Back to my experience before I came here, I  
22 remember sitting with folks at Daimler who described to  
23 me their workforce challenge four years ago and they  
24 literally -- they just walked in and said, "We are not  
25 finding the kind of skills we need."

1           So I just think it's a particularly timely  
2 part. It's a critical part of the innovation strategy  
3 here. So we're excited to hear -- and when do you  
4 expect you'll have them? Did I hear you say, like, in  
5 the next couple of months you'll have this letter?

6           MR. CARDOSO: Well, the letter will be  
7 available for comment this week to the full Council,  
8 the draft letter, and then we will have to set up a  
9 call. We're not going to wait until the next meeting  
10 to get approval from the Council for submission.

11           UNDER SECRETARY HYATT: Because I think it's  
12 just very timely.

13           CHAIRMAN LASZKIEWICZ: We will have approval.  
14 I think, Secretary Hyatt, what I've asked Carlos is  
15 we're targeting, roughly, March 31 to get approval. So  
16 we're back scheduling from that, which means with open  
17 meetings and the process controls we have to have in  
18 place, the telephone conference needs to be scheduled.

19           We'll have a preliminary meeting where we  
20 provide feedback. There may be follow-up meetings. But  
21 we're looking for a process by which Carlos and his  
22 team, with the input of the full Council and others,  
23 have their recommendations ready and present for  
24 approval before the 31st of March.

25           MR. CARDOSO: And this will be the first part,

1 which is the skills, and the perception will come after  
2 that.

3 VICE CHAIRMAN ISBISTER: Mike, may I make one  
4 more comment related to the workforce issue?

5 Mike and I happen to serve on the Wisconsin  
6 Council for Workforce Investment, but we switch chairs  
7 when we get in that room.

8 At the end of the day, after many discussions,  
9 we have determined -- and I hope I can speak for you,  
10 as well, Mike -- that the most effective programs are  
11 often at the state and regional level, because that's  
12 where the businesses reside that really have to do the  
13 hard lifting on the internal training or up-skilling  
14 their folks or finding people out in the community that  
15 they need to bring in and make appropriate for their  
16 businesses.

17 One of the things that we have determined -- I  
18 said that there were \$406 million that come into  
19 Wisconsin from the Federal Government for workforce  
20 programs across many agencies. The biggest, the  
21 National Association of State Workforce Agencies, a  
22 national committee, all of them together said one of  
23 the best things that the Federal Government could do to  
24 help with the workforce issue is to remove some of the  
25 constraints on how those dollars are spent.

1 MR. CARDOSO: Based on measurements.

2 VICE CHAIRMAN ISBISTER: Right.

3 MR. CARDOSO: We talked to the Department of  
4 Education yesterday. We have different measurements  
5 based on which department and it makes a great --

6 VICE CHAIRMAN ISBISTER: And the funding is  
7 constrained, right? It can only be used in certain  
8 buckets and for certain very specific activities that  
9 may or may not be regionally applicable.

10 So that's just another piece of feedback that,  
11 in the short-term, I think, if someone hears that --

12 MS. McADAMS: And not to kick the can, but  
13 that is a legislative issue. We talked about it in the  
14 working group with my education colleagues and you  
15 guys, and most of the funds would be through Labor.

16 CHAIRMAN LASZKIEWICZ: We hear that, but I  
17 think the important point to make is it's consistent  
18 with what the President is trying to do with  
19 manufacturing communities.

20 So localization, because of the unique cluster  
21 technology focus that exists in the United States, is  
22 important.

23 So I'm going to move us forward. A lot of  
24 work to do, short time to get there, but great  
25 leadership and an excellent team. So I know we're

1 going to get here.

2 So thank you.

3 Our next topic is one of equal importance. We  
4 are very fortunate in many ways. Our current  
5 manufacturing economy in the United States benefits  
6 from low energy costs.

7 We have a team here today led by Joel  
8 Lorentzen, who is going to provide an update on the  
9 work of our Energy Subcommittee.

10 Good morning.

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1                                    MANUFACTURING ENERGY POLICY

2                                    SUBCOMITTEE UPATE

3                                    Joel Lorentzen, Subcommittee Chair

4  
5                                    MR. LORENTZEN: Thank you, Mike. Good  
6 morning, Secretary Hyatt.

7                                    We met yesterday as a whole committee to  
8 collaborate on some work that we have done as kind of  
9 independent sub-teams, which were assembled to consider  
10 the different issues that we have with energy.

11                                    Right now, we have consensus on the subject  
12 matter recommendations from everybody who was present  
13 in our committee meeting yesterday, and we don't see  
14 significant roadblocks to moving those forward to full  
15 consensus.

16                                    We expect to complete our work now as a whole  
17 committee, so kind of bringing the work into the whole  
18 committee to prepare for the Council.

19                                    We have preliminary recommendations on three  
20 topics that we're now considering and revising as a  
21 whole committee. Each of these recommendations is at a  
22 somewhat different formative level, as you will hear,  
23 but we do expect to be able to offer these  
24 recommendations to the Council rather quickly. We  
25 think prior to the next meeting, we should be able to

1 forward a draft letter.

2 Tremendous effort has gone into understanding  
3 these topics. The thing about energy is there is no  
4 shortage of data. We have data out the yin-yang.  
5 Turning that data into information is quite  
6 interesting.

7 So there has been no shortage of that for  
8 doing this particularly, but not only a deep dive into  
9 the economics of natural gas pricing volatility and its  
10 effect on manufacturing in the U.S.

11 I'm planning to review kind of the subject  
12 matter of each of those recommendations, and I think I  
13 would like to highlight that the first and closest  
14 topic concerns the effects of exportation of shale gas.

15 The committee is considering that the  
16 Department of Commerce should sponsor a study that  
17 evaluates the implications of a strategy on jobs and  
18 economic growth with natural gas using U.S.  
19 manufacturing versus exportation.

20 We expect in our continuing work to provide a  
21 bit more specificity to the goals for that study. And  
22 then we did have the benefit of a review from Libby  
23 yesterday. But after that briefing, we will also  
24 consider whether that study could and should be  
25 coordinated with the Department of Energy study that is

1 intended to kind of cut across all energy sources as  
2 they relate to manufacturing.

3 So the first recommendation is going to be in  
4 that space and in support of that type of a DOC-  
5 sponsored study.

6 The next topic that we will recommend on  
7 concerns readying photovoltaic technology to be  
8 impactful in U.S.-based manufacturing. Right now, the  
9 committee is considering -- and we don't necessarily  
10 know how to get this done, which is kind of a work item  
11 -- that the Department of Commerce -- that NIST  
12 actually participate or explore mechanisms to expand or  
13 redirect resources to research the development of the  
14 basic material science and manufacturing challenges  
15 that will enable the U.S. to prosper from the next  
16 generation of PV.

17 I have a lot of detailed notes on this. There  
18 is a fair amount of industry-specific detail that  
19 informs the specific recommendation, which I'm happy to  
20 share if there are questions.

21 But the fact of the matter is that we think PV  
22 is the nearest alternative energy opportunity with real  
23 cost advantage to manufacturers in the U.S. and gives  
24 the U.S. manufacturing base an opportunity for world  
25 leadership and competitive advantage.



1           The third recommendation and kind of last one  
2 that we expect to address in this letter concerns  
3 realigning the Department of Energy EERE funding to  
4 redirect it more to R&D activities as opposed to  
5 commercialization and scale-up activities.

6           What we're really dealing with in the  
7 alternative energy space is a cost performance issue,  
8 not a willingness or an issue like that, and that we  
9 would like to get the EERE to focus more on the basic  
10 cost performance of the alternatives across all  
11 alternatives, not just PV. This one addresses all kind  
12 of alternatives.

13           And that until or unless the basic  
14 efficiencies of these alternatives can be demonstrated  
15 to be competitive with fossil and/or PV,  
16 commercialization and scale-up won't be self-  
17 sustaining.

18           So that's going to be kind of the subject  
19 matter of our third recommendation.

20           From this point forward, our work plan is to,  
21 first of all, on the first topic, to come to consensus  
22 on the wording for this recommendation for the DOC  
23 shale gas study and bring that to the full Council.

24           The second work plan is to -- we want to  
25 highlight the data that has focused on the committee on

1 photovoltaics, why we think that is such a ready  
2 alternative.

3 We intend to set up a meeting with a  
4 representative from NIST and then follow that up with  
5 wording for the recommendation consensus then to the  
6 full Council.

7 On the final topic, really it's coming up with  
8 the wording, working with DOE to make sure that the  
9 wording makes sense, and then bringing that to the full  
10 Council.

11 We expect to be able to embody that in at  
12 least a draft for the Council prior to the next Council  
13 meeting.

14 That's my update.

15 CHAIRMAN LASZKIEWICZ: Excellent.

16 Carol, did you want to add anything?

17 MS. WILLIAMS: I think we had a great meeting  
18 yesterday. We really moved forward to the  
19 recommendation space with all the analysis that has  
20 been done.

21 So it was a good, fun meeting and thanks to  
22 all the support. We have some follow-ups with DOE and  
23 with Ryan. But it was a good meeting.

24 MR. LORENTZEN: One thing I would like to  
25 highlight is DOE has been incredibly forthright in

1 providing access to their information, their programs.  
2 We've had several conference calls with DOE and Libby  
3 has made herself available at every meeting that we  
4 have had here. So we have appreciated that. Thank  
5 you.

6 CHAIRMAN LASZKIEWICZ: Libby, any comments,  
7 questions? And I have also heard that in addition to  
8 giving birth, you have done an unbelievable job  
9 supporting this team. So we are all very impressed.

10 MS. WAYMAN: Thank you. Oh, yes, my other  
11 manufacturing job.

12 (Laughter)

13 CHAIRMAN LASZKIEWICZ: We are happy to see you  
14 back.

15 MS. WAYMAN: It's good to be back, and we  
16 couldn't appreciate this Council taking on the topic of  
17 energy, how it relates to manufacturing -- we couldn't  
18 appreciate that more.

19 I think I've got a little bit of time to give  
20 an update on our side, but there's so much that your  
21 recommendations can inform. So I'll leave my comments.

22 CHAIRMAN LASZKIEWICZ: I guess just before I  
23 open it up for other questions, just a reminder, I  
24 believe most reports about the consumption of energy in  
25 the United States puts manufacturing if not at the top,

1 near the top in terms of consumers of electrical power.

2 So when you look at energy, it's a significant  
3 component of our global competitiveness. So your work  
4 is critically important.

5 I should also note that -- what was it --  
6 three years ago, China surpassed the United States as  
7 the number one consumer of electricity in the world.  
8 So there may be some opportunity for us as  
9 manufacturers there, also, especially if this PV  
10 equation can be solved in the U.S.

11 MR. LORENTZEN: It's the perspective of the  
12 committee that our energy situation gives us a  
13 potential competitive advantage against the rest of the  
14 world. We don't want to miss it.

15 CHAIRMAN LASZKIEWICZ: Comments? Questions?

16 MS. WAYMAN: I will actually say one thing.  
17 The topic of and thinking about natural gas resources  
18 and how that could have an effect on our  
19 competitiveness in manufacturing, we're very interested  
20 in taking on and look forward to partnering with  
21 Commerce on that. We've started some early  
22 discussions.

23 Then, also, the issue of the focus of R&D I  
24 think is something that we're thinking really hard  
25 about and would really ask the Council, and maybe

1 especially with the help of the R&D group on the  
2 Council, to think hard about where Federal dollars can  
3 be best spent, in only early stage R&D or if there are  
4 some innovations that are important, taking  
5 technologies kind of out of the lab and into a more  
6 commercial base.

7 Not necessarily to provide the capital to  
8 scale up, but to provide the technical and financial  
9 resources to do the technical development, to bring  
10 those technologies from a small kind of one-off scale  
11 to a larger and more automated scale.

12 So we are kind of really thinking hard about  
13 if it's a proper role of Federal investment in that  
14 spectrum, and would really appreciate the thoughts of  
15 this Council.

16 CHAIRMAN LASZKIEWICZ: Thank you.

17 DR. GREEN: I've got a question.

18 CHAIRMAN LASZKIEWICZ: Please.

19 DR. GREEN: This question is for Joel and,  
20 also, for Cody. I'm very anxious to hear your comments  
21 about the photovoltaics.

22 Of course, there's been a lot of work for a  
23 lot of years and on TV. So I'm really anxious to hear  
24 your conclusions on that. We'd be happy to comment  
25 certainly from the IR&D.

1           MR. FRIESEN: We look forward to providing the  
2 full Council with the final draft.

3           I think something that's important to  
4 recognize is that photovoltaics were invented in this  
5 country 61 years ago and after billions of dollars in  
6 investment and the buildup of the industry in the U.S.,  
7 we abdicated our leadership role just recently.

8           So the question is how do we bring that back,  
9 and I think we have some specific recommendations on  
10 that.

11           CHAIRMAN LASZKIEWICZ: Very good. If there  
12 are no more questions for Joel, I'd like to move to the  
13 next topic.

14           Again, innovation, research and development is  
15 also critical. I think as we've talked about timing,  
16 this is another area of really excellent timing.

17           As you look at work being done by research  
18 universities around the country who have an expertise  
19 in the relationship between innovation research and  
20 development and manufacturing, a new thinking or a  
21 rethinking is taking place that you cannot have a level  
22 of innovation which we aspire to have in this country  
23 without a strong manufacturing sector.

24           They are linked. They benefit from one  
25 another. And our Innovation, Research and Development

1 team, led by Dr. Green, is going to provide an update  
2 today. So thank you.

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1                   INNOVATION, RESEARCH AND DEVELOPMENT

2                                   SUBCOMMITTEE UPDATE

3                   Albert M. Green, Subcommittee Chair

4  
5                   DR. GREEN: Thanks, Mike. Good morning,  
6 Secretary Hyatt.

7                   The Innovation, Research and Development  
8 Subcommittee has conducted an extensive discovery  
9 process. So this discovery process began shortly after  
10 the Council was formed in March 2013.

11                   I want to highlight a bit of the process,  
12 because we did a fair amount of work in that, a lot of  
13 activities, a lot of conference calls, in-depth  
14 discussions, and we talked to a number of subject  
15 matter experts, because essentially a lot of work has  
16 been done in this area and, of course, we could not  
17 reinvent the wheel.

18                   So out of this came what we would like to call  
19 our bucket list. Essentially, we would like to comment  
20 on three areas. It's built around creating the bucket,  
21 optimizing the bucket, and expanding the bucket.

22                   In this case, when we talk about a bucket,  
23 what we're talking about is the collection of Federal  
24 R&D programs focused on manufacturing innovation.

25                   So today what we want to do is to provide



1 preliminary recommendations on the first two bucket  
2 items, that is, creating the bucket and optimizing the  
3 bucket, and then we'll come back later and make some  
4 more specific comments on how one might look to expand  
5 the bucket.

6           So in the first item, which is on the question  
7 of creating the bucket, when we looked around, there's  
8 a collection of outstanding Federal programs supporting  
9 manufacturing R&D distributed all over. And one of the  
10 challenges, even for those of us that may be a little  
11 bit more familiar with the innovation, R&D space, it  
12 was a challenge to essentially sort out what was what,  
13 where you could find various things.

14           Again, I highlight the fact that there is a  
15 lot of great stuff going on. It was just a real  
16 challenge to figure out what was going on and where it  
17 was going on.

18           So our first recommendation is to create a  
19 cross-agency manufacturing innovation initiative. So  
20 this initiative will designate Federal manufacturing  
21 innovation programs as a "cross-agency" initiative.  
22 The initiative will coordinate U.S. Government efforts  
23 across the multiple departments and agencies used to  
24 accelerate discovery, development, and deployment of  
25 manufacturing innovation to serve the national

1 interest.

2 It will create central visibility of all  
3 programs that support manufacturing innovation.  
4 Provide a foundation to identify gaps, improve  
5 coordination and collaboration, and eliminate cost of  
6 duplication. That is one of the most important things.  
7 We saw some duplication in a lot of different areas.

8 Efficiently allow the discovery, the  
9 navigation, the interaction between manufacturing  
10 companies, Federal, state and local governments, and to  
11 ensure highly visible public outreach and communication  
12 on manufacturing innovation's impact, goals and status.

13 And you don't have to write it down, because this will  
14 be in our formal letter that's going to come.

15 A possible structure for this, we discussed  
16 that one potential location to house this initiative  
17 would be within the National Science and Technology  
18 Council, NSTC, which is, of course, a Cabinet level  
19 council by which the President coordinates science and  
20 technology policy across the Federal Government.

21 We also recommend to establish a coordination  
22 office as a primary point of contact for the  
23 manufacturing innovation initiative.

24 Again, the whole driver behind this was, in  
25 essence, one-stop shopping, so that people could be

1 aware of -- and particularly for small and medium sized  
2 companies which may not be as adept at navigating all  
3 the different departments and agencies in the  
4 government.

5 So just to say a few things about our future  
6 activities in this area. Our recommendation is built  
7 around manufacturing innovation strategies  
8 specifically. That's what we were looking at.

9 However, one may also consider expanding this  
10 proposal to encompass manufacturing in general. We may  
11 come back and make some specific statements about that  
12 in the future.

13 One of the things that we are going to do to  
14 investigate this a little bit further is to -- we have  
15 a series of regional roundtables that we're planning  
16 where we want to bounce this specific idea off of  
17 manufacturers. We're actually having the first meeting  
18 in Orlando, thanks to Bill Yeargin at Correct Craft.

19 This is going to be done -- this is going to  
20 be discussed with the Manufacturing Association of  
21 Central Florida. That's the first item.

22 So the second item, as I talk about that, we  
23 said create the bucket and optimize the bucket and then  
24 expand the bucket. So the second item is really built  
25 on optimizing the bucket.

1           Again, I come back to the fact that -- to  
2           reiterate the fact that there are lots of fine programs  
3           out there and, of course, one would like to at ways to  
4           optimize it, and we felt that our biggest value-added  
5           would be to focus our attention on the National Network  
6           for Manufacturing Innovation, which you've talked  
7           about, the NNMI.

8           The statement there is that we agree certainly  
9           with the general mission of the President's NMMI  
10          initiative. However, we do have some recommendations  
11          on how to optimize its effectiveness.

12          In looking at that, we established a set of  
13          guideposts, and that was the following. One is that  
14          commercialization is the key to creating economic  
15          benefit from innovation. So you have to be focused on  
16          commercialization from the very beginning.

17          The second guidepost is that fundamental R&D  
18          is required in manufacturing to exploit innovations in  
19          materials and create saleable products, and I think  
20          that is something that oftentimes is not recognized,  
21          the fact that R&D is not just about developing fancy  
22          materials, it's developing the manufacturing processes  
23          that go along with utilizing those materials.

24          The third guidepost is just to take advantage  
25          of the new materials and products, there must be equal

1 levels of innovation in the enabling manufacturing  
2 technologies.

3 That was the lens in which we looked at the  
4 NNMI. And so we would encourage you to, when  
5 evaluating -- we visited the NNMI Institute, just as a  
6 backdrop, and discussed two questions with them.

7 We would encourage you that in evaluating the  
8 proposals for future focus areas and so on, that one  
9 specific goal should be to identify disruptive  
10 technologies. So we've talked about moon shops, we've  
11 talked about game-changers, that should certainly be a  
12 goal.

13 IN terms of how it should be executed, there  
14 has been a tremendous amount of discussion around this  
15 topic. Some of the things that we were really able to  
16 focus in on is to create concise commercialization  
17 criteria that articulates a pathway to a saleable end  
18 product in a reasonable timeframe.

19 We've talked about off-ramps of areas where,  
20 even as you're going for the game-changer areas, off-  
21 ramps where one might utilize the technology for, say,  
22 near-term opportunities. That would be particularly  
23 true in the additive manufacturing area.

24 The other area -- the other item in terms of  
25 how it should be executed is a really stable and robust

1 funding mechanism. And one can talk about the levels  
2 of funding, what is the right level, we've had a lot of  
3 specific discussions on that. I don't think we're  
4 ready to put that formal recommendation in place about  
5 the level of funding. But what we can say is that you  
6 have to have stable and robust funding for these things  
7 to really prosper.

8 So the final item, again, is in this expanding  
9 the bucket, which is the third item. That, I think, we  
10 are going to try to table for future discussions.

11 Really, the reason is that we want to take  
12 some of these -- we feel that to put actionable and  
13 specific recommendations for the committee, we need to  
14 get a little bit out and talk to the average Joe  
15 Manufacturer and see what they say.

16 But the things that we want to look at, we  
17 will examine opportunities that address the main gaps  
18 of manufacturing innovation, level and uncertainty of  
19 funding, overcoming the valley of death. I know that  
20 certainly NNMI is after that.

21 Are there other ways that one can do that?  
22 We've talked about creating a catapult-like mechanism  
23 to enable integrative manufacturing R&D initiatives,  
24 the issues of IT funding, supply chain developments,  
25 certainly, shortage of talent, I know that that's being

1 addressed by the workforce group.

2 The other area that we will come and say more  
3 things about is enabling connections. One of the  
4 things that we've found is that, again, when you look  
5 at the vast collection of manufacturers, particularly  
6 in SMEs, there's lots of statements about not knowing  
7 what's really out there, not knowing where the  
8 expertise and the skill sets base might be.

9 We've talked about is there room for creating  
10 a real-time -- what we call a manufacturing technology  
11 capability Rolodex, almost a linked-in like structure  
12 for manufacturers.

13 We will also look at the evolving role of  
14 other agencies and bodies and how they might  
15 participate in this initiative. Certainly, a lot of  
16 fantastic work goes on in DOE and how best one might be  
17 able to leverage that in some of these initiatives.

18 So I think I'll pause for now. That's our  
19 report.

20 CHAIRMAN LASZKIEWICZ: Al, I appreciate it. I  
21 guess to just open up the comments and questions.  
22 Using my company as an example, when we make a decision  
23 to incrementally design, develop, innovate, invent --  
24 design, develop, industrialize a new product, that's a  
25 significant job creator.

1           It's not just bringing in additional skills of  
2 what you already have, but oftentimes it's adding  
3 skills requirements to the pool that you may not have  
4 had before.

5           So there really is a linkage to job creation  
6 here, also. So success here, I think, will be measured  
7 in additional jobs.

8           I guess with that, I'd like to open it up to  
9 the Council. Do you have a comment on your timeline?

10          DR. GREEN: Yes. We decided to not break out  
11 the specific recommendations. I think one is very  
12 mature. The second is very close to being fully  
13 mature. The third one we want to do a little bit more  
14 work. But the subcommittee would like to keep all the  
15 recommendations in one letter.

16          We believe we'll be ready around the end of  
17 March, beginning of April, before the next Council. So  
18 it will be circulating before that Council.

19          CHAIRMAN LASZKIEWICZ: So the possibility is  
20 you will be putting forward your letter for approval at  
21 the next Council meeting.

22          DR. GREEN: At the next Council meeting.

23          CHAIRMAN LASZKIEWICZ: Comments? Questions?

24          MR. CARDOSO: I would continue to emphasize  
25 that technology is a key depreciator for us. Again,



1 Kennametal has a goal of 40 percent of our sales come  
2 from new products every year. We've been doing that  
3 for 11 years now, and I think that is the number one  
4 driver, besides the skills, that has kept foreign  
5 competition in this country or low cost competition in  
6 this country.

7 So to the extent that we focus on R&D, it is  
8 critical for exports, it is critical for us to begin to  
9 have an edge over our competition abroad.

10 MS. SMYTH: It is not a common understanding  
11 that there is fundamental R&D and manufacture and sale.  
12 So it's extremely important that we, as a country, fund  
13 manufacturing R&D to exploit the billions of dollars  
14 that we're investing in product and material R&D.

15 CHAIRMAN LASZKIEWICZ: Susan, I always make a  
16 comment that you might even sub-optimize. If you limit  
17 your capability to your current manufacturing  
18 capability and a new design comes up and you don't have  
19 the capability to manufacture that design, you have  
20 underachieved, as opposed to the model your team is  
21 presenting, which is challenge us with the most complex  
22 innovative designs and the manufacturing process part  
23 of the organization will use basic research and any  
24 means possible to develop a capability to produce the  
25 product.

1 MS. SMYTH: I'm going to be parochial and talk  
2 about an automotive example, but we've basically  
3 reinvented the automobile in the last 10 years. So if  
4 we had stayed in one place with regard to manufacturing  
5 R&D that focused on conventional seal joining and an IT  
6 engine, we wouldn't have the electric vehicles and the  
7 hybrids, and we had to invent the basic R&D to exploit  
8 all of the research that we put in for decades, to kind  
9 of echo what Cody had said, in battery development,  
10 chemical development, material development, because if  
11 we don't do that last bit, which is the manufacturing  
12 R&D, you don't make the new product, you don't make  
13 money.

14 MR. FRIESEN: To key off of that point, so as  
15 this full Council gets closer to our recommendation of  
16 making the R&D tax credit permanent, and we spoke about  
17 this a little bit in Houston around expanding the  
18 definition of R&D, making some recommendations around  
19 expanding the definition of R&D so we can maximize the  
20 impact of that, I think that's an important use and  
21 something that we have to take on in a serious way  
22 after this letter is issued.

23 CHAIRMAN LASZKIEWICZ: We're going to talk  
24 about this to some degree in a few minutes here. So  
25 very good.

1 Any other comments or questions? Yes, Libby?

2 MS. WAYMAN: I just have one question about  
3 creating your bucket. Have you looked at the Advanced  
4 Manufacturing National Program Office that's housed at  
5 NIST, here in Commerce, and if that might be a good  
6 vehicle to kind of create the bucket and if there are  
7 specific functions that need to be expanded in that  
8 office to kind of carry out the vision?

9 DR. GREEN: We did, and, certainly, Christie,  
10 who is on our subcommittee, will give an update, I  
11 believe, a little bit later on AMP. So that was part  
12 of our discovery process. We did do that.

13 MS. WAYMAN: Great.

14 CHAIRMAN LASZKIEWICZ: Okay. I'm going to  
15 move us into our next topic.

16 UNDER SECRETARY HYATT: Can I just make one  
17 quick --

18 CHAIRMAN LASZKIEWICZ: I'm sorry.

19 UNDER SECRETARY HYATT: What I want to ask is  
20 are you going to integrate how the private sector will  
21 stay integrated with the interagency in your proposal?  
22 Because, again, if I understood what you were saying,  
23 there's sort of this notion that there will be a  
24 benefit to this interagency conversation.

25 DR. GREEN: Correct.

1           UNDER SECRETARY HYATT: And then immediately I  
2 then ask how does the private sector stay integrated  
3 with such interagency process so, again, it's not a  
4 bunch of us chatting.

5           So if you could just -- and maybe you were  
6 going to do this anyway, but just make certain there's  
7 an explicit -- how does that interagency connect with,  
8 learn from the private sector, I think it will just  
9 make it a more powerful piece.

10          DR. GREEN: Certainly. And I'd certainly  
11 invite anyone else from the subcommittee to comment on  
12 that point.

13          MS. SMYTH: I think to consolidate them is  
14 about the agency kind of getting their act together and  
15 it would be easier for navigation and penetration on  
16 the system, getting the right people to find the right  
17 money and getting rid of the holes.

18          The second step is absolutely what you're  
19 saying Ken. It's about how do you weave it together  
20 for the larger OEMs and the small and midsize companies  
21 and suppliers, and we've had a lot of discussion about  
22 that. The great thing about this group is the spectrum  
23 of sites on the group.

24          How do you have a forum where the government  
25 or someone takes like a general contractor role and you

1 get someone who is the architect, someone who wants to  
2 buy the commercial off-the-shelf, but you're bringing  
3 all the drywall guys and the painters together at the  
4 same time.

5 So it's all about the network, how do you  
6 enable the network.

7 CHAIRMAN LASZKIEWICZ: But I think, Susan,  
8 another part of the question, as I think about it, Ken,  
9 is that the discussion around the research required to  
10 invent manufacturing process is one where the industry  
11 is very ahead of some of the government agencies from a  
12 thought process perspective.

13 I heard the request that can we connect  
14 ourselves more closely to stay closer to the same page  
15 as these things develop -- maybe I was wrong.

16 UNDER SECRETARY HYATT: No. But just, again,  
17 the perspective of the -- if, again, part of the idea  
18 is to help you navigate and help us prioritize, then  
19 you can provide fantastic information to help us help  
20 you navigate and help us prioritize.

21 If not, then it ends up becoming like an  
22 internal chat and the internal chat is less value  
23 creative than a chat driven by industry, and that's the  
24 interest I have.

25 MS. MARTINEZ: If I may, Mr. Secretary. I

1 also serve on the subcommittee. And the direct answer  
2 to that is that one of the roundtables we'll be hosting  
3 will be in Albuquerque, New Mexico.

4 What we're going to do is -- we've got two  
5 national laboratories there, we've got two Air Force  
6 bases, we've got several large corporations, you've got  
7 your Intel, you've got your large corporations,  
8 Lockheed Martins and so forth, and then we also have  
9 several different SMEs that are various levels of  
10 technology innovation and so forth.

11 So what we're going to do is we're going to  
12 bring all of those individuals together, whereas in  
13 Florida, our focus is more on manufacturing base and  
14 the association.

15 What we're going to do is get the universities  
16 and everyone involved so there is that dialogue so that  
17 they hear directly from us.

18 I'm very happy to hear you say that, because  
19 as a small business, what I find is I may have a very  
20 good relationship -- I do vehicles, ground support  
21 systems for DOD and DOE, and I may have very good  
22 relationships with one directorate of Sandia, but I can  
23 do other manufacturing work even just within Sandia,  
24 but how do I penetrate those markets.

25 And then you go across to the Department of

1 Energy and the other lab, then you do the same  
2 correlation for the Army.

3 Say I've got a great relationship in Detroit  
4 with TACOM, but how do I then build projects across the  
5 board and make those services available. And in the  
6 age of the digital age that we have right now, I think  
7 at a very low cost, expanding some of the main issues  
8 that we have to do as manufacturers anyway, this idea  
9 of this Rolodex or this linked-in process will give you  
10 the ability to know what's out there in the private  
11 sector and us the ability to link in.

12 We've done that, say, with the MET program and  
13 we'll have MET representatives there, as well. So  
14 we're really trying to make an effort to coalesce all  
15 the background data that we've done and get all these  
16 different voices in the same room so that we can inform  
17 that.

18 I really appreciate you valuing that  
19 perspective, because it's true, then we'll all just  
20 sort of sit around and talk about it at the 30,000-foot  
21 level, and we want to get down to the action items.

22 UNDER SECRETARY HYATT: Great.

23 CHAIRMAN LASZKIEWICZ: Great example. Thank  
24 you.

25 So we're going to move in to a part of the

1 meeting where we review and I will ask for Council  
2 approval of a letter of recommendations.

3 Now, the way this process works, for those of  
4 you who haven't participated in it before, Mark  
5 Chandler, the Chairman of the Tax Subcommittee, will  
6 walk us through the highlights of his recommendation.

7 We all should have a copy of the letter. We  
8 all have a copy of the letter in the folder. We can  
9 take minor tweaks at this point and approve based on  
10 very minor changes. But for the most part, input has  
11 been received. We've done our best to circulate this  
12 letter of recommendation.

13 I think one of the outcomes of this exercise  
14 is that a decision has been made that while we try to  
15 cover all tax entities in this letter, Mary Isbister  
16 will lead a process, she'll describe specifically  
17 developing a letter for small businesses.

18 So in addition to the tax letter we're looking  
19 for approval today, there is an additional subcommittee  
20 that will be established to write a letter directly  
21 related to the concerns of small tax businesses and  
22 current tax legislation and tax policy.

23 So that's where we're at. Any questions  
24 before I had this over to Mark?

25 (No Response)



1           CHAIRMAN LASZKIEWICZ: So after Mark takes us  
2 through this, I will ask for a motion to approve and,  
3 of course, then a second for his letter of  
4 recommendation, assuming there are no unforeseen events  
5 here.

6           VICE CHAIRMAN ISBISTER: Mike, it seems, from  
7 a process standpoint, we should end with that, that  
8 approval of the letter. So if we could just take two  
9 seconds to talk about the SME perspective.

10          CHAIRMAN LASZKIEWICZ: Sure.

11          VICE CHAIRMAN ISBISTER: I think it's a  
12 subgroup of a subcommittee, but, in particular, dealing  
13 with tax ramifications to pass through or S corp or LLC  
14 type entities that have some slightly different  
15 concerns than large C corporations.

16                 So there is a group of us that represent the  
17 smaller business entities and we'll discuss what  
18 specifics things from a tax policy standpoint could be  
19 done to help smaller and medium sized businesses, with  
20 the view that, at the end of the day, it's to drive  
21 economic development.

22                 So if more money stays in our businesses,  
23 hopefully that's an opportunity to encourage us to hire  
24 more people, pay higher wages, make more capital  
25 investments, and grow our businesses.

1           So all of our recommendations will hopefully  
2 be tied to some very specific -- what we would see as  
3 specific outcomes to that tax policy change.

4           So that's the bull. We're in the early days.  
5 We began our discussions at dinner last night, which  
6 was a great way to start, and we will, however, over  
7 the next couple of weeks, move that forward.

8           Hopefully, it seems like we're going to have a  
9 lot of recommendations to consider at the end of March.  
10 We will shoot for that timeline, as well.

11           CHAIRMAN LASZKIEWICZ: Is Mark Mazur here? So  
12 Mark is here, Assistant Secretary for Tax Policy at the  
13 Treasury Department -- I'm assuming you've read the  
14 recommendation -- and his here for our final approval  
15 process.

16           So, Mark, thank you and your team. You guys  
17 have done yeoman's work to be the first subcommittee to  
18 present your letter of recommendation, and I know how  
19 many hours and the effort that's gone into this.

20           So thank you, and you have the floor.

21  
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23  
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1                   TAX POLICY EXPORT GROWTH SUBCOMMITTEE UPDATE  
2                                   AND LETTER OF RECOMMENDATION

3                   Mark Chandler, Subcommittee Chair

4  
5                   MR. CHANDLER: Thanks, Mike. Thanks, Mary.  
6                   You refer to this as my recommendation. That couldn't  
7                   be more wrong, from my perspective.

8                   CHAIRMAN LASZKIEWICZ: My apologies.

9                   MR. CHANDLER: The subcommittee really came  
10                  together from very diverse perspectives in reaching a  
11                  consensus view of where we might go with this and try  
12                  to establish some basic principals in what is an  
13                  extremely complex issue with many different points of  
14                  view, as is acknowledged early in the letter.

15                  I'm very grateful to Jenna and Liz for their  
16                  help in circulating to all of us on the Council in late  
17                  November and early December so that we could get  
18                  comments in across the board and try to address those,  
19                  as well.

20                  I can't emphasize enough, as well, the help  
21                  that Assistant Secretary Mazur provided, meeting with  
22                  Steve and with me in late August and helping us to  
23                  understand what some of the dynamics were in this  
24                  process to try to bring us to a point of the art of the  
25                  possible, as well as the aspirational goal of what we

1 would all like to have that might go beyond the art of  
2 the possible at this point.

3           There are four basic principals covered in the  
4 letter that's in front of you. The first is to try to  
5 make our tax system competitive relative to other  
6 countries, and that means having rates that are  
7 competitive. Our 35 percent rate makes us a huge  
8 outlier among OECD countries. Average is about 25  
9 percent, today going to 24 percent, with planned rate  
10 reductions that are already in process in those  
11 countries.

12           That and the U.S. system that treats  
13 international earned income very different or creates,  
14 I should say, disincentives for countries that are  
15 operating internationally to return money to the United  
16 States for reinvestment here.

17           Those two factors put our companies and our  
18 country at a huge disadvantage relative to our peers.

19           So the first recommendation there is to bring  
20 the rate down, and we've proposed a rate of 25 percent  
21 or lower, and I know that's within the range of  
22 current, today, Mark, between different proposals that  
23 are out there -- bring rates down to 25 percent or  
24 remove the disincentives that exist for having income  
25 earned around the world reinvested in this country.

1           Number two is to recognize -- and we tried to  
2 be mindful of the fact that this is an age of enormous  
3 deficits. There's not a lot of extra deficit increase  
4 to go around, to say the last, but being mindful of the  
5 need to have some kind of revenue neutrality.

6           We still recognize there are several  
7 provisions of the tax code that are essential for our  
8 manufacturing efforts, and one is some form of  
9 accelerated write-off for equipment investments that  
10 are related to manufacturing, again, taking into  
11 account the overall revenue need, recognizing the  
12 importance of that.

13           Second, the domestic production deduction,  
14 which is something called section 199 of the code,  
15 provides a benefit when goods are manufactured in the  
16 United States. And we felt that those were important  
17 enough to the manufacturing sector that they should be  
18 culled out even within a framework of lower overall  
19 rate and a goal of revenue neutrality.

20           At the same time, we also culled out a  
21 particular benefit that serves small and medium  
22 businesses, and that's a benefit called IC-DISC that  
23 provides export tax incentives to help companies,  
24 smaller companies, with their export efforts. We felt  
25 that that was a very important principal to include

1 here, as well, a provision that should be culled out.

2 The fourth and final point is to recognize  
3 that small and medium enterprises, particularly those  
4 organized and taxed as S corporations or organized as  
5 LLCs, have very different needs in the tax system than  
6 do larger companies, and it's important that be  
7 recognized.

8 Just a couple of examples. The IC-DISC  
9 program that I mentioned, to the extent taxation rate  
10 of dividends increases, applied even to individual,  
11 that has a significant effect, as Bill has pointed out,  
12 on the effectiveness of the IC-DISC program.

13 There are tremendous complications in the way  
14 the R&D tax credit is -- and I should have mentioned  
15 this is another one that we culled out, as well. I  
16 skipped it, unfortunately -- significant complications  
17 in the way the R&D tax credit is calculated that  
18 differentially benefits more established, larger  
19 companies that have been having large R&D expenditures  
20 for a long period of time and hurts smaller companies.

21 We strongly support moving to a simplification  
22 of the R&D tax credit. There are a number of proposals  
23 on the table to cover that, ranging from  
24 transferability of the credit to going to what's called  
25 a simplified model that exists already for some

1 taxpayers, and a variety of other SME-related  
2 provisions, including transfer on death and so forth,  
3 that are going to be very relevant to that sector where  
4 a huge portion of manufacturing occurs.

5 That's why, Mary, you're going to be leading  
6 this effort going forward to address those issues  
7 particularly, and we acknowledge that in this letter.

8 So the letter in front of you covers those  
9 points and acknowledges the need for special  
10 consideration of SMEs, and I hope we can move forward  
11 to move this letter forward and deliver it to the  
12 Secretary.

13 CHAIRMAN LASZKIEWICZ: Steve Braig, Vice  
14 Chairman, do you have any additional comments?

15 MR. BRAIG: Yes. Thank you, Mike. First of  
16 all, I just would like to reiterate the importance of  
17 these points here.

18 As Secretary Hyatt said at the beginning, some  
19 of the strategic initiatives of Secretary Pritzker are  
20 to level the playing field for U.S. manufacturers, and  
21 I think these well thought out recommendations here  
22 provide a more level playing field for U.S.  
23 manufacturers.

24 I would also like to cite one example and  
25 maybe personalize it a little bit, and that's making

1 permanent the R&D tax credit. It seems that everybody  
2 is in agreement of the benefits of the R&D tax credit.  
3 Yet, it has lapsed again. Over the last 30 years, I  
4 think we've had, what, 14 temporary extensions.

5 The R&D tax credit comes at a significant  
6 cost, and I think for that cost, we also need to see a  
7 benefit.

8 From personal experience, R&D activity is a  
9 long-term initiative, not a short-term, not a quarter-  
10 by-quarter initiative. So in order to incentivize U.S.  
11 companies to have R&D activities domestically, I think  
12 there needs to be a certainty from a tax credit  
13 standpoint.

14 In my own business, we have the choice of  
15 conducting R&D in the U.S. or in Germany, where we can  
16 obtain very generous grants from the government.  
17 Again, the fact that it needs to be extended almost  
18 yearly does not allow us or any business for long-term  
19 planning of R&D activity.

20 I think the interdependency between  
21 manufacturing activity and R&D activity is very well  
22 documented. They go hand-in-hand.

23 So from a personal standpoint, I think our  
24 subcommittee knows that. I mean, this is one of my  
25 personal pet peeves. I really hope that we can move



1 the needle here and make a very strong recommendation  
2 of looking at this and making it permanent.

3 So that's what I what I wanted to add to our  
4 recommendations.

5 CHAIRMAN LASZKIEWICZ: I really appreciate  
6 those comments. And before I open it for questions, I  
7 do want to know that Steve did facilitate a discussion  
8 we had several months ago. We met with a group of  
9 Congressional Democrats led by Steny Hoyer, and, quite  
10 frankly, at that time, the recommendations were very  
11 close to where we're at right now.

12 So I think one of our jobs as a Council is to  
13 be advocates for our recommendations, and this team has  
14 certainly done a good job.

15 Before I open it up to the full Council, do  
16 any other members of the subcommittee want to add  
17 comments?

18 (No Response)

19 CHAIRMAN LASZKIEWICZ: Okay. I guess to the  
20 full Council -- excuse me. Mark, do you want to make  
21 any comments?

22 ASSISTANT SECRETARY MAZUR: I appreciate the  
23 effort that you all have put in putting this letter  
24 together. I think, Mark, you've captured it well by  
25 saying that some of these are well within the scope of

1 the possible and some are aspirational. Folks who have  
2 worked on tax policy and tax reform issues for a long  
3 time know that there are a bunch of tradeoffs here.

4 So it is helpful to get a sense from the  
5 manufacturing community what are the top priorities.  
6 So when the tradeoffs occur, we need to have a sense of  
7 knowing these are the most important things, and really  
8 think that should be maintained.

9 On the R&D credit, I couldn't agree more with  
10 the idea that that should be made permanent, frankly.  
11 When you're making long-term investments like R&D, you  
12 should know what the rules are going to be, and you  
13 propose making it permanent.

14 We're as frustrated as anybody else by the  
15 fact that it has not been extended.

16 CHAIRMAN LASZKIEWICZ: I'd now like to open  
17 this up for any further discussion, comments.

18 MR. CARDOSO: I want to emphasize the focus on  
19 the tax for small businesses, for LLCs and so forth,  
20 because it's really nice, speaking for a larger  
21 company, for us to be addressing, but the reality is  
22 for my company, our biggest customers are small  
23 companies, LLCs and so forth.

24 So we feel that if they have a tax advantage,  
25 they're going to spend more, they're going to grow, and

1 we're going to sell more products.

2 So I think that it's very, very important for  
3 us to understand and recognize that those -- and by the  
4 way, 70 percent of manufacturing activity is done by  
5 small business, by those LLCs. So we can't lose focus  
6 of that, as well.

7 So I think that is critical. The concern that  
8 I have is in any circle that I hear tax reform, very  
9 seldom people -- I think people generally don't  
10 understand the LLCs and so forth and the tax. So we  
11 need to make sure that we educate, as well as make sure  
12 that that is in the forefront.

13 The other one, I can't say enough about the  
14 permanent tax, because we have the same option. We can  
15 do R&D in about eight different countries. We try to  
16 do it here, but there comes a time that you have to  
17 make the wrong decision, from a patriot type of point  
18 of view, and make the right decision for the business.

19 CHAIRMAN LASZKIEWICZ: I just want to add to  
20 Carlos' comment. I think manufacturing really is an  
21 ecosystem where small businesses and large businesses  
22 depend upon one another, and they are both well  
23 represented here, and the way in which small businesses  
24 and large businesses in manufacturing are working  
25 together on this Council and in the economy today I

1 think is really notable in the successes that we have.

2 So representing small businesses, Mary is a  
3 small business and if we're worried about expertise, I  
4 think those who have volunteered -- and this is still  
5 open for additional volunteers -- but these are all  
6 experts in understanding how they're entities are taxed  
7 and where the opportunities are, with some change, for  
8 them to be more competitive and to increase the  
9 investment in their own businesses.

10 So I think the two letters together will make  
11 a very strong statement from this Council on tax  
12 policy.

13 MR. CARDOSO: I also would add that the small  
14 customers or the small companies are more loyal to U.S.  
15 manufacturing than the large companies.

16 From my experience, when I look at 80,000  
17 active customers, when I look, 70 percent of those are  
18 small businesses. When I look at the U.S., those  
19 companies are more likely to buy product from us  
20 because we are a U.S. company than a large company that  
21 really has to meet financial obligations and they're  
22 looking for whatever best deal they can get.

23 So I would say that that is part of the  
24 ecosystem and I think it's part of growth.

25 ASSISTANT SECRETARY BROWN: If I could have

1 one comment on that.

2 CHAIRMAN LASZKIEWICZ: Please.

3 ASSISTANT SECRETARY BROWN: Because I just  
4 want to give kudos -- I will call them out -- Christie  
5 and Bill, who I was sitting next to at dinner last  
6 night and they were talking about this specific issue.

7 Christie, I thought, had a really great idea,  
8 too, about bringing together like their tax accountants  
9 and stuff of the small businesses, like getting the  
10 experts that are actually doing and filling it out and  
11 know some of the minutia of what needs to be done from  
12 some really specific recommendations, and I just  
13 thought it was a really great idea that they were  
14 discussing, as well, to help out.

15 So I just wanted to pass that along.

16 CHAIRMAN LASZKIEWICZ: Any other comments on  
17 the contents of our recommendation letter? I got it  
18 right that time, Mark, "our" recommendations.

19 (No Response)

20 CHAIRMAN LASZKIEWICZ: I guess with that, do I  
21 hear a motion for approval?

22 (Motion moved and seconded.)

23 CHAIRMAN LASZKIEWICZ: Our letter is approved.  
24 Congratulations. Nice job.

25 (Applause)

1           CHAIRMAN LASZKIEWICZ: I need a little help,  
2 Jenna, on the agenda. Are we going to move right into  
3 the project for discussion?

4           I know that you're on a tight schedule, Ken.  
5 Do you want to make any comments before you leave? We  
6 really did appreciate your time here, your comments.  
7 Any last words of wisdom?

8           UNDER SECRETARY HYATT: I don't know if  
9 they'll be words of -- in that case, I can't answer the  
10 question, words of wisdom.

11           (Laughter)

12           UNDER SECRETARY HYATT: Just a final couple of  
13 thoughts, though. Thanks for the relevance, the  
14 thoughtfulness, and what appears to be the  
15 actionability, which I assume is a word, of -- don't  
16 really know if it's a word -- but of what you've been  
17 talking about. I'm going to have a request, which is -  
18 - and I don't know if it's to the Tax Policy and Export  
19 Growth Subcommittee, but we could use concrete thoughts  
20 on what's next on the exporting side.

21           We'll sort of frame the question for you, but,  
22 again, if we are in the process now of looking at what  
23 an NEI, National Export Initiative 2.0 looks like, this  
24 group, I think, would have fantastic ideas, what has  
25 worked, what has not worked, et cetera, et cetera. So

1 sort of comment one.

2 CHAIRMAN LASZKIEWICZ: Excuse me, Ken, real  
3 quick.

4 Jeff, do you want to make a quick comment on  
5 export or not?

6 MR. WILCOX: Well, we spent more than half our  
7 meeting yesterday talking about export and the path  
8 forward. We had a great briefing from Jenna on the  
9 four thrusts of the Secretary, and we'll be starting to  
10 organize some action items around those four thrusts.

11 We have an additional letter that will have  
12 some recommendations related to each of those  
13 categories, and that's where we stopped.

14 CHAIRMAN LASZKIEWICZ: Great.

15 MR. ROSARIO: Mike, just to elaborate on  
16 Jeff's comment. The discussion was quite detailed,  
17 ranging from ways that Ex-Im could do a better job  
18 educating banks who are providing financing for a lot  
19 of companies on how to mitigate the payment risk  
20 overseas and use that as a training mechanism.

21 Two issues that we have, our government is  
22 making it unnecessarily difficult to export, to  
23 regulatory means, to steps we would like to see in the  
24 current European and Trans-Pacific negotiations that  
25 would be very relevant.

1           Just to be direct, on a comment you made  
2 earlier about leveling the playing field, there was  
3 quite a bit discussion about whether action will follow  
4 words on some of the currency manipulation issues that  
5 are out there.

6           UNDER SECRETARY HYATT: I'll defer to my  
7 colleague at Treasury on that issue. Well, thank you.

8           So as soon as it is practicable, looking very  
9 much forward to, again -- and, again, how you would  
10 sort of prioritize it for us, because part of the theme  
11 of the next three years with Secretary Pritzker is how  
12 do we prioritize, how do we get stuff done, and that,  
13 therefore, means we can't do 100 different things.

14           So as much as you can sort of look at it from  
15 your perspective and say here are the priorities, here  
16 is what we think you should really try to drive in the  
17 next couple of years. Now, there might be some long-  
18 term things, as well. So that's sort of comment one.

19           Really looking forward to the workforce piece,  
20 as it is so connected. I was delighted to hear about a  
21 focus on R&D in manufacturing process, because this has  
22 been sort of a strategic issue for this country for a  
23 long time, that others out-execute us in terms of  
24 looking at the innovations in manufacturing process.

25           On the Energy Committee, which is all gone,



1 Joel is gone, there is also -- Joel, we should connect  
2 you to some of the consulting firms that have been  
3 looking at this issue, because I have seen very  
4 interesting forward-looking analysis at competitive,  
5 cost advantage, how energy contributes to competitive  
6 advantage, looking out in the distance.

7 There is some very interesting stuff and we'll  
8 just make certain that connection gets made.

9 So, again, thank you for what looks to be a  
10 set of very interesting, useful work. And, again, as  
11 you go forward here, coming back, again, to this issue,  
12 how do we get stuff done. We have this window now and  
13 there is this tremendous focus, and I think this is  
14 something where Secretary Pritzker is this  
15 extraordinary strategist and person who goes from  
16 strategy to how do we get it done, who has to do what  
17 when, and keeping both pieces, which sounds like you're  
18 doing, would be helpful, but both parts are  
19 interesting, some of the broader strategy things you're  
20 doing and, also, what can we do to get it done.

21 So, again, thank you. I'll try to come to the  
22 next one, if I get invited.

23 CHAIRMAN LASZKIEWICZ: You will. Thank you  
24 very much.

25 UNDER SECRETARY HYATT: Thank you very much.

1           CHAIRMAN LASZKIEWICZ: Roy Sweatman just  
2 pointed out a technicality and Liz tried very hard to  
3 coach me on the management of the meeting and the  
4 Robert's Rules of Order.

5           (Laughter)

6           CHAIRMAN LASZKIEWICZ: We had a second, but I  
7 did not actually ask for the voice vote.

8           Thank you. Thank you.

9           All those in favor of approval of our tax  
10 recommendations letter, please say aye?

11           (A Chorus of Ayes)

12           CHAIRMAN LASZKIEWICZ: Any opposed?

13           (No Response)

14           CHAIRMAN LASZKIEWICZ: The letter is now  
15 officially and formally approved. Thank you very much.  
16 Thank you very much, Ken.

17           Now, I'm not sure -- it sure would be nice if  
18 we could take our break while the project people come  
19 in the room. Is that a possibility or not?

20           I think we should allow people to take a break  
21 and then we'll come back as quickly as we can. Then  
22 our visitors will be here with their parents and other  
23 guest educators and project staff.

24           So I think we need to take a break. Thank  
25 you.

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(Whereupon, at 10:37 a.m., a recess was  
taken.)



1           VICE CHAIRMAN ISBISTER: Well, you know, this  
2 is where the big, heavy-handed corporation --

3           (Laughter)

4           VICE CHAIRMAN ISBISTER: But I will have you  
5 know that GenMet, which sits in the shadow of Rockwell,  
6 but literally a mile away, also participates in the  
7 FIRST program and Project Lead the Way. And I am happy  
8 to report that the Cedarburg High School FIRST Robotics  
9 robot had GenMet's name above Rockwell's name, just so  
10 you know.

11          (Laughter)

12          VICE CHAIRMAN ISBISTER: But I wanted to kind  
13 of highlight what is important certainly to our  
14 organization and I believe Rockwell's, as well, and any  
15 of you who are not FIRST supporters and why you should  
16 be.

17                 FIRST is what we call a pendant program. It's  
18 something that gets added on to your educational  
19 experience. So if you are in high school, you can  
20 participate in a lot of after school activities. FIRST  
21 is one of those pendant programs.

22                 But what is kind of unique about it is that it  
23 is an excellent example of education partnering with  
24 the private industry. So FIRST pulls in mentors from  
25 local businesses and also reaches out to local

1 businesses.

2 In addition to the money we might donate to  
3 support the program at GenMet, we actually laser parts,  
4 foreign parts; we actually provide parts for the robot.  
5 And what we actually require is that the students come  
6 in and they have to look at the CAD drawing. They have  
7 to see it being lasered, and they have to actually  
8 witness it being fabricated before it goes on their  
9 robot, so that they get an introduction to  
10 manufacturing at its foundational level.

11 The other part that's exciting about FIRST is  
12 that it offers a very powerful applied learning model.  
13 I don't know about the rest of the people here, but I  
14 learn best when I actually do. Math and science means  
15 a whole lot more to me if I have a way to apply it.  
16 And the great thing about the FIRST program is it's  
17 really applying what these kids are learning in class  
18 and it makes them way more excited to get back to  
19 geometry and trigonometry and all of their other  
20 classes, because they can use what they're learning and  
21 see it translate to a real life activity.

22 It also teaches them a lot of those soft  
23 skills that, as employers, we really worry about and  
24 care about. Team building -- these young people have  
25 to act as a team and it's hard.

1           Problem solving, active in-process problem  
2 solving, when that robot doesn't work either in the  
3 construction process or when they get it to the  
4 competition, there's some real-time problem solving  
5 that has to go on.

6           And certainly last, but not least, it has that  
7 sort of competitive edge that makes it fun. So that  
8 the whole goal in the very short period of time that  
9 they have to create this robot to do a specific  
10 function, they're going to go and compete with it and,  
11 hopefully, do better than somebody else. And there's a  
12 lot of positive that happens in competing better,  
13 smarter, faster.

14           So it's a fantastic program and as both Mike  
15 and I would suggest, if you aren't familiar or you're  
16 not currently a supporter, your organization would do  
17 very well to become involved with them.

18           So with that, I'd like to hand it over to  
19 Pattie Cook.

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25

1                                    FIRST ROBOTICS PRESENTATION

2                    MS. COOK: Well, thank you. And I would like  
3 you to join our speaker's bureau. I was just  
4 discussing that with David. I'll see you afterwards.

5                    Thank you so much, Council members and guests,  
6 for inviting us here today to be part of your meeting  
7 and giving us the opportunity to share FIRST, although  
8 you did such a great job, we are one element. And it's  
9 nice to know there are so many friends out there and  
10 that you get it and you understand it, because  
11 sometimes it's a lot of storytelling and a lot of  
12 messaging. But you basically know why you need them.

13                    We've got them. It's a partnership, you're  
14 right. We can't do it without this kind of a  
15 partnership.

16                    FIRST is a very exciting organization. You're  
17 going to hear from the young people, you're going to  
18 hear from my partner Dave, I'll introduce him in a  
19 moment. But really we have an array or, I should say,  
20 a progression of age appropriate programs that gives  
21 kids skills, builds them as they move up the ladder and  
22 try to make them ready and prepare them for the  
23 technologically advanced workforce of the future.

24                    So that is the really short of it and, as you  
25 mentioned, soft skills, hard skills, team building,



1 project management, time management, you'll hear all  
2 about it from the young people who are in the game.  
3 But ultimately it's about giving kids an opportunity.

4 So thank you very much for letting us be here  
5 to share with you. I want you to hear more from them,  
6 so I don't want to take up much time.

7 I'm going to introduce you to one of our  
8 founding partners and one of the largest partners we  
9 have from NASA headquarters and we're best friends.  
10 Dave has been a mentor, a parent to students, a team  
11 mentor, an advocate. He's been on hand to the  
12 microphone to MC. He's always going to do anything to  
13 help this work, get this message out, and for us to be  
14 successful.

15 So Dr. David Lavery is the Program Executive  
16 for Solar System Exploration from NASA headquarters.

17 (Applause)

18 MR. LAVERY: Thank you. Just to start, for  
19 those who don't know the program and are not familiar  
20 with it, you're probably still sitting there asking,  
21 "What is it?" So we've got a very short three-minute  
22 video that I'd like to just use to intro the FIRST  
23 program and then we'll go from there.

24 (Video Presentation)

25 MR. LAVERY: Okay. That's a real fast four-

1 minute overview of what FIRST is all about. But this  
2 is a classic case of something that just barely  
3 scratches the surface and the reality of the program.

4 As Pattie mentioned, I'm actually from NASA,  
5 I'm not from FIRST. NASA has been involved with the  
6 program almost since the very beginning.

7 We are currently and have been for quite a  
8 while the largest sponsor of teams in the FIRST  
9 program. FRC, the high school level program, which  
10 currently has just over 3,000 teams this year, we  
11 sponsor about 320 of them, so about 10 percent of them  
12 overall.

13 One of the very valid questions to ask is "Why  
14 is NASA involved with this at all?" One of the things  
15 you have heard mentioned is the idea that this is  
16 supposed to be a partnership between the teams, the  
17 high schools and businesses.

18 Well, we actually had sort of an interesting  
19 start to the entire process. I've been involved for 19  
20 years now and the way that I got involved is about two  
21 decades ago, I was running the robotics research  
22 organization for the entire NASA agency. And one of  
23 the things I noticed is every spring, as we would  
24 review proposals for next year's work, I kept seeing  
25 the same faces coming back year after year, the same

1 guys, male, white, aging, had nobody behind them in the  
2 pipeline.

3           And we were recognizing that we had a real  
4 issue regarding development of future robotics  
5 technologies, the spacecraft that we wanted to fly.  
6 Right about the same time that that was sort of dawning  
7 on us, I had three kids from my neighborhood who  
8 watched a little segment on *20/20* one evening about  
9 this robotics competition, came down the street to me  
10 and my next door neighbor, Dave Miller, looked at the  
11 two of us and said, "You guys build robots, you work  
12 for NASA. We saw this thing about this robot  
13 competition. Would you come and help us get started,  
14 just for one year?"

15           We didn't know any better, so we said yes.

16           (Laughter)

17           MR. LAVERY: That was 19 years ago. The kids  
18 are long gone. I'm still there.

19           In the spirit of full disclosure, I will say  
20 right up front, for anyone who has the thought that  
21 they might want to get involved in this, FIRST is worse  
22 than a freaking mafia. There is no exit strategy.

23           (Laughter)

24           MR. LAVERY: Once you get in, you're in for  
25 life. You will not get out. Just be aware of that up

1 front.

2 Why do we really get involved? As I said, we  
3 were looking for the next generation of talent to help  
4 us work on robotics technologies for next generation  
5 spacecraft that we plan on flying 20 years, 30 years,  
6 40 years into the future.

7 We saw FIRST, we got hooked immediately and  
8 recognized this is where our talent pool lies. In  
9 particular, we started out, because of my background  
10 and the program I was working, looking for robotics  
11 engineers. We realized it was so much more, but the  
12 thought process was very simple.

13 If we could help fund and create a supply of  
14 high school students who are interested in science and  
15 technology, engineering, math, in particular, robotics,  
16 and we basically supported 10,000 to 20,000 students a  
17 year on teams, and if only one percent of them went all  
18 the way through and got a graduate degree in robotics,  
19 that's still 100 to 200 kids per year with a robotics  
20 Ph.D. that we could then go out and hire.

21 And at that time, there was only one robotics  
22 Ph.D. program in the entire country, which was at  
23 Carnegie Mellon, and they were graduating 10 per year,  
24 not 200. We needed every single one of them and we  
25 couldn't get them. So the idea was to basically stuff

1 the supply chain as much as we could.

2 We took a look at the programs that were out  
3 there at the time. At that particular moment in time,  
4 there were 84 different robotics-related competition  
5 programs in the United States available to high school  
6 and undergraduate students. Eighty-three of them were  
7 fundamentally the same thing -- they were science  
8 fairs. You took a problem, you took a bunch of kids,  
9 you gave them parts, you gave them a timeline and threw  
10 them off in a corner, said go solve it, come back in  
11 three months and we'll compete.

12 One was different -- FIRST. Basically, they  
13 said take a bunch of kids, take a problem statement,  
14 take the timeline, take the kit of parts, throw them  
15 off in a corner, have them build a solution. Oh, one  
16 minor twist. There's this thing called mentoring  
17 associated with it. That was different.

18 You'll hear the mentoring theme a lot from the  
19 students when they start talking. But basically, what  
20 FIRST did that was unique at the time, they are more of  
21 them now, but at the time, they were the only one who  
22 said we're going to take students and not make them  
23 rely just on their own knowledge that they've gathered  
24 in the classroom, but we're going to sit them down  
25 side-by-side and have them work with peers that happen

1 to be professional engineers, scientists and  
2 technologists. And they're going to work together as a  
3 team using and utilizing the education and experiences  
4 of the professionals, in addition to their own, to  
5 understand how to problem solve, how to go through the  
6 engineering design life cycle, how to do manufacturing  
7 and fabrication of a device in six weeks. You will go  
8 from a blank sheet of paper to the complete total robot  
9 in one and a half months and compete.

10 That was the thing that got us interested. A  
11 lot of people can write checks. We can write checks,  
12 too. But the thing that we could bring with us is some  
13 engineering expertise to sit down and mentor these kids  
14 as they go through the process. That's also a unique  
15 capability that all of you have. That was what got us  
16 hooked.

17 The other thing we saw is that the teams that  
18 are out there basically have the capability of  
19 organizing themselves as best they can from the  
20 resources they have.

21 What most of these teams will do, and I think  
22 it's something that you'll resonate with, in  
23 particular, is most of these teams tend to organize  
24 themselves as small companies. A typical team, by the  
25 time you add in the students, the mentors, the

1 teachers, the parents that help, things like that, are  
2 somewhere between three to five dozen people.

3 So it's a good sized, reasonable organization  
4 that they've got to budget and they're from all over  
5 the place. But budgets will typically range anywhere  
6 from \$15,000 up to \$100,000 for the activity for the  
7 year.

8 The team, the students organize all of that.  
9 They run the finances. They run all the ancillary  
10 activities in addition to manufacturing a robot. That  
11 skill set that they were experiencing got us intrigued,  
12 and so we started looking at this.

13 The end result, 20 years later, is that NASA  
14 is the largest sponsor of teams in the organization.  
15 We continue to be really excited about it. We've had  
16 that as a standard line item in the overall agency  
17 budget at this point on out into the future and we plan  
18 on continuing it.

19 The students that we looked at that first  
20 year, those first three students did go through and  
21 graduated. Actually, two of the three went and got  
22 their Ph.D.s, one in astronomy and one in engineering.  
23 We've hired several of the students who have come  
24 through the entire process.

25 Realistically -- and I can talk a lot more

1 about this if you want to follow-up with questions  
2 afterwards. Realistically, we have found that, in  
3 addition to a lot of other things, it is the single  
4 most cost-effective recruiting tool we have ever had  
5 for our organization.

6 For the cost of the equivalent of recruiting  
7 about 10 students, in total, through normal procedures,  
8 I've piped 20,000 high school kids through the process.  
9 And they learn who we are, we learn who they are very  
10 early on. We get to pick out the rising stars very  
11 early on. We track them all the way through college  
12 and we bring them in-house both as interns during their  
13 college years and do new hires as quick as we can grab  
14 them.

15 By the time we get to the point where they've  
16 graduated and we can hire them, we already know their  
17 skill set. The entire process of selecting who you  
18 want is very simple, because we actually figured it out  
19 four years beforehand.

20 There's a lot more that goes along with it.  
21 It's also one of the most cost-effective in-house  
22 training programs for new management we've ever had.  
23 We basically take someone who wants to be a project  
24 manager, the first thing we do is we stick them in  
25 charge of one of our FIRST teams.



1           They're basically given a problem that is  
2 underfunded, overscheduled. The problem statement is  
3 too difficult, has a set of restrictions you wouldn't  
4 believe, and basically say if you can get the entire  
5 process done in six weeks, go from blank piece of paper  
6 to a shipped robot in six weeks, the thing that we  
7 know, as your prospective employers, as a manager, is  
8 you've figured out how to tell all the differences  
9 between the really good stuff and the crap they teach  
10 you in management school.

11           (Laughter)

12           MR. LAVERY: So there's a lot more that we  
13 could fire hose you with, but I'm going to get out of  
14 the way right now and actually introduce you to the  
15 students that are here, as well, so you can hear from  
16 them, because they've got some really valuable  
17 information.

18           MR. ROSARIO: Hello, everyone. My name is  
19 David Rojas Rosario from Woodrow Wilson Senior High  
20 School. I'm a senior at Woodrow Wilson Senior High  
21 School.

22           The reason I joined the robotics team, I  
23 wanted to pursue a career in mechanical engineering and  
24 I thought the best way to get a head start on that  
25 would be to joining the robotics team and getting the

1 hands-on experience. So when I go to college, I'll be  
2 ahead of my peers.

3 MS. MENDOZA: I'm Michelle Mendoza. I'm from  
4 McKinley Technology High School, I'm a senior. And  
5 the reason why I got involved in FIRST was because when  
6 I looked into engineering, I didn't see women in there.  
7 I thought, growing up, that only boys get to play with  
8 robots and stuff. So I just wanted to get more  
9 involved in all that.

10 CHAIRMAN LASZKIEWICZ: If you could, let us  
11 know where you are thinking about going to college and  
12 what you want to study.

13 MS. MENDOZA: I want to go to Carnegie Mellon.

14 CHAIRMAN LASZKIEWICZ: And what do you want to  
15 study?

16 MS. MENDOZA: Robotics.

17 CHAIRMAN LASZKIEWICZ: Very good.

18 MR. ROSARIO: I applied at Purdue. So I'm  
19 waiting for a response.

20 (Laughter)

21 CHAIRMAN LASZKIEWICZ: If they know or they  
22 have a preference. I'm sorry.

23 MR. ROBSON: My name is Ben Robson. I am a  
24 senior at Battlefield High school in Haymarket,  
25 Virginia. I have stayed involved with FIRST -- well, I

1 joined the FIRST team in my high school sophomore year  
2 and I was immediately hooked. I have stayed in the  
3 program because it really teaches me real life skills,  
4 like project management and time management, that kind  
5 of stuff.

6 MS. TANG: Good morning. Thank you for having  
7 us. My name is Silu, and I'm a senior from Battlefield  
8 High School. Well, I joined robotics last year because  
9 I got bored with school. I mean, to be honest, I took  
10 a lot of programming classes in school and it wasn't  
11 enough. So I said let me go into a robotics team and I  
12 poured all of my blood and sweat and tears into it and  
13 I enjoyed it tremendously because I got to apply a lot  
14 of knowledge I learned in the classroom, and I'm coming  
15 back. And I will be attending Stanford University in  
16 the fall.

17 CHAIRMAN LASZKIEWICZ: What's your --

18 MS. TANG: Computer science. My bad.

19 MR. MILLEY: My name is Ryan Milley. I am  
20 currently a senior at Pasadena High School in Pasadena,  
21 Maryland. This is my fourth year on my FIRST robotics  
22 team. I joined my FIRST team for many reasons. First  
23 of all, it's fun. How many high school students can  
24 say they build robots? That's how you do school work.  
25 And it teaches you so much.

1 I learned how to wire a robot, and that's  
2 pretty cool, too, but the soft skills are equally as  
3 important. My confidence talking in public boosted.  
4 So it taught me a lot.

5 CHAIRMAN LASZKIEWICZ: And where do you want  
6 to go to school?

7 MR. MILLEY: I would like to go to RIT up in  
8 Rochester and I plan to pursue a major in electrical  
9 engineering.

10 MR. THURMAN: I'm Cameron Thurman, I guess I'm  
11 the first of the alums here. I'm a senior in  
12 mechanical engineering at Virginia Tech. I actually  
13 got involved in FIRST back in fourth grade with the  
14 Lego League. I brought it up through robotics in high  
15 school.

16 I guess one sort of great thing about FIRST is  
17 I didn't letter in lacrosse, I didn't letter in  
18 football, but I did letter in robotics.

19 (Applause)

20 MR. THURMAN: But with that, I guess, I landed  
21 an internship after my freshmen year with Rolls Royce  
22 in their flagship manufacturing facility, partially due  
23 to my previous experiences with FIRST, being able to  
24 talk about that and interface with the mentors. I  
25 followed-up in my sophomore year with an internship,

1 again, with Rolls Royce in England and then, again,  
2 following a third one in Indianapolis.

3 I've accepted a job in engineering at GE for  
4 their Rotational Edison program in oil and gas down in  
5 Houston.

6 MR. COHEN: Hi. I'm Jacob Cohen. This is my  
7 seventh year with FIRST. I am currently a senior at  
8 George Mason University, studying computer engineering.  
9 I'm graduated from Battlefield High School, did three  
10 years there, and it's my fourth year as an alumni.  
11 FIRST is fun, like Dave said. I'm still hooked. I  
12 know what difference it makes. I know who I am because  
13 of FIRST, and I've seen students learn who they are.  
14 And you can't leave. It's so much fun watching people  
15 grow and helping people grow and just making a  
16 difference.

17 MS. RODI: Hi. I'm Christina Rodi. I thought  
18 that I had been here the longest in Virginia, but,  
19 obviously, Dave, with 19 years. I started 15 years ago  
20 when I was a freshman in high school on one of the  
21 first FIRST teams in Virginia. And we competed with  
22 Dave's NASA Knights Team 122, and that was a lot of  
23 fun.

24 But how I got involved with FIRST, I was  
25 originally planning to be a lawyer or a doctor when I

1 was in school. However, my dad was a mentor for one of  
2 these first FIRST teams and he said, "You've got to  
3 come out to this, we're building robots, it's so cool."

4 I was thinking, "Whatever, Dad. I don't  
5 know." So he said, "I've been working on this really  
6 hard. Do you want to come to the competition? Would  
7 you mind taking photographs for us?" I said, "Oh,  
8 yeah, I'd love to." I was into photography. I said,  
9 "Oh, yeah, I'd love to come out, take some pictures."

10 Instantly hooked. The team just grabbed me in  
11 and they said, "You've got to come to Nationals with  
12 us." Just a wonderful experience.

13 So then I joined the FIRST team myself the  
14 next year. Back then, there weren't very many in my  
15 community. So I had to drive about 45 minutes. After  
16 that year, we got together with some of the students  
17 and said, "We've got to start a team closer to us so we  
18 can manage our school work." We started a team at the  
19 high school that we all attended and had a lot of  
20 support from the community.

21 I went on to college at BCU where I got a full  
22 scholarship, full FIRST scholarship to go to school.  
23 So my parents were very proud. From there, I interned  
24 at various companies and took a job full-time at  
25 Dominion.

1           Now, let me go back to my high school  
2 experience real quick. I was not the one -- I was the  
3 one helping to build, but I was more the one who was  
4 interested in strategy. I loved the competition, the  
5 strategy on the field, the strategy to design the  
6 robot. That was more of what my strength was and I  
7 realized that then.

8           So I went to engineering school at BCU and  
9 then when I graduated, I took a job with Dominion. And  
10 currently I'm a fuel planner with them. I've worked in  
11 the engineering field, but right now I'm doing fuel  
12 planning. So it's all logistics, strategy, on a day-  
13 to-day basis, more strategy than I ever thought I had  
14 wanted.

15           FIRST has really made a difference in my life.  
16 Back when I was in ninth grade, we didn't know about  
17 FIRST. And to be able to go through that program in  
18 high school, I really learned a lot of values. Kids  
19 here, they talk about improving their speaking.

20           I was the project manager on my senior team.  
21 It was an experience that really prepared me for what I  
22 was going to for college, working with the team, and  
23 now it's prepared me for where I'm at in my career.  
24 And I've been with Dominion for nine years now working  
25 for them, and I can tell you it really works for real

1 world.

2 Thank you guys for your time. And Dave is  
3 also -- we talk about celebrities. Dave is a celebrity  
4 in the FIRST world.

5 MR. LAVERY: I had a history with what's  
6 called the game design in GEC. I was one of the people  
7 who actually created the game and teach it. The game  
8 is different every single year and I achieved a little  
9 bit of notoriety because I worked for 10 years creating  
10 some of these games.

11 And just one quick anecdote I'll mention is  
12 the game is a big secret. It's set to unveil the first  
13 weekend in January for the entire FIRST community. And  
14 there's always a lot of angst about what the game will  
15 be each year before it is unveiled. And we've even  
16 gotten the point of actually once it became known that  
17 I was one of the game designers, I've had team members  
18 from teams throughout Northern Virginia occasionally  
19 out on my street corner leafing through my trashcan  
20 looking for clues.

21 (Laughter)

22 CHAIRMAN LASZKIEWICZ: Could I ask one of the  
23 students to describe the game last year and how the  
24 robot was designed to win the game last year?

25 MR. ROSARIO: The game last year was, in a



1 sense, ultimate Frisbee, where we had -- so it was  
2 ultimate Frisbee, Our robot was meant for a defensive  
3 robot. We were fast. We had a three-gear chain where  
4 we can change speed very quickly. It was pneumatic.

5 And we were able to play heavy defense against  
6 the other teams. That's why we were able to make it to  
7 the National's.

8 MR. ROBSON: Going back to the actual  
9 challenge, teams had 100 Frisbees or so that they were  
10 allowed to play with, and, basically, there's driver  
11 stations on either side of the field and on the  
12 opposite side of the driver stations, there were three  
13 level goals that you could shoot Frisbees into. And  
14 then in the center field, on either side, there were  
15 two pyramids that the robots could climb up for points.

16 Yes. That was the extent of the game.

17 CHAIRMAN LASZKIEWICZ: So what were some of  
18 the key technologies you designed into your robot to  
19 win the game? What was unique?

20 MR. ROSARIO: For us, it was a targeting  
21 system. We had a little camera that could locate --

22 CHAIRMAN LASZKIEWICZ: Adaptive targeting?

23 MR. ROSARIO: Yes.

24 MS. TANG: Right. Our team had that, as well.  
25 So around the goals that we were going to shoot the

1 Frisbees into, there was reflective tape. So we had a  
2 connect on our robot that would detect the blobs of  
3 binary large objects and then it would communicate with  
4 the robot, say you need to move this way and then this  
5 way to shoot the Frisbee.

6 MS. SMYTH: I have one question. How  
7 important is it to get the technology right, weighed  
8 against alliances?

9 MR. ROSARIO: It's very important, because you  
10 have to be flexible. You don't know who you're going  
11 to have, if you're going to have a defensive robot or  
12 an offensive robot. If you have all -- if all your  
13 robots are defensive, then you really don't have  
14 anything to play with. So you have to be very flexible  
15 with the technology you use.

16 MS. SMYTH: So you would say creating  
17 alliances of technologists is one of the fundamentals  
18 of success. That's what we're trying to do around this  
19 table.

20 (Laughter)

21 MR. COHEN: The games are structured so that  
22 -- in the FRC, we talk a lot about it where there's  
23 these size robots, but FIRST have multiple divisions.  
24 In FRC, you come to the field and six robots play at a  
25 time. These are six teams who you may not have met

1 before. So it's three robots and three robots are  
2 paired together and you have to, within five minutes  
3 before you go out and play this match that may  
4 determine where you stand in the finals, work together,  
5 set up a strategy. Not just your strategy, the  
6 alliance. And this prepares students for that like  
7 nothing.

8 MS. RODI: You had asked the question about  
9 the game last year and these kids did a great job  
10 explaining what their robots did. Something I saw that  
11 -- I'm a strategy person, I like to think of  
12 everything, and I saw a lot of robots would come to  
13 their side of the field, shoot the Frisbee in on their  
14 side of the field.

15 Well, one of the robots was an offensive  
16 robot, would hang out on the other side of the field  
17 where he had to load these Frisbees in.

18 They could shoot across the entire field and  
19 make it in, so they had shortened their time. They  
20 could get more distance in without having to travel  
21 back and forth and while you're in that zone, nobody  
22 could touch you. So it's a genius idea, You could  
23 just see genius ideas out there.

24 VICE CHAIRMAN ISBISTER: So I have a question.  
25 You guys, something about the program, whether it was

1 a person in your life who introduced you to it, whether  
2 it was you were looking for another challenge. Each of  
3 you has a reason why you became involved.

4 What would you recommend for anymore students  
5 involved? How are you going to reach out or how could  
6 we help you reach out to a wider group of students in  
7 your high schools?

8 MR. MILLEY: If I were to encourage students  
9 to join the FIRST program, I would start off by saying  
10 it's fun, and then say you could join other clubs in  
11 your school, but how many clubs, with no budget, have  
12 built a robot that plays basketball or Frisbee or hangs  
13 two, and it's incredible.

14 MR. COHEN: Can I add real quick? FIRST is  
15 about more than -- my best friend to this day knows  
16 nothing about what's going on in this program. She's a  
17 national debater and we recruited her in to do judgment  
18 and things like this.

19 It's about more than this. Having someone  
20 want your company's team, who may not understand what's  
21 going on, but can explain this to people, is a huge --

22 (Laughter)

23 MR. COHEN: Getting them interested in STEM  
24 does not necessarily mean you have to know it.

25 MR. ANDERSON: Can we get her name for the

1 workforce development program?

2 (Laughter)

3 MS. RODI: One more to add onto that, as well.  
4 You said what can we do. Really make it a part of the  
5 school, because right now, at least what I've seen, is  
6 there's some disconnect between the school being okay  
7 with you participating in FIRST and you actually doing  
8 it. I could take field trips.

9 Have these kids come out to these events, much  
10 like what I did. I didn't think I would be interested  
11 in FIRST until I saw it and then I knew that's what I  
12 wanted to do. So really, I would say, help the schools  
13 and push them to get these kids more interested.

14 CHAIRMAN LASZKIEWICZ: Can I make a comment on  
15 that? I'm sorry, Al, and then I'll give you the floor.  
16 This is really a big deal.

17 With the pressure school districts are under  
18 for funding around the country, they have not  
19 necessarily always been as open to these programs as  
20 possible. And typically, it doesn't require a lot, but  
21 at least floor space, and the programs are most  
22 effective when there is a faculty participant on the  
23 teams, although the mentors come from private -- come  
24 from businesses, for the most part.

25 But I have, in three cases over the last two

1 years, either went and lobbied the superintendant of  
2 school districts or school boards to allow this type of  
3 activity to take place. And I'll tell you what, it's  
4 one of the most frustrating tasks, as a business  
5 leader, you'll ever take on, because this is  
6 intuitively obvious to us, how important this is to the  
7 future of our U.S. economy, let alone our businesses,  
8 but you cannot assume that it's obvious to everyone.

9 So I'm glad you raised that point. I didn't  
10 know it was visible at your level.

11 MS. RODI: We ran into having issues with  
12 having kids being able to take off time to go to  
13 competitions. That's a problem.

14 MR. ROSARIO: Just to add on what she's  
15 saying. In our school -- I'm going to be clear and  
16 real quick. In our school, most of our peers don't  
17 really know that we had a robotics team for a few  
18 years. It was very sad. Only the engineering classes  
19 would be in the robotics team.

20 So a way that we changed that, we had -- those  
21 guys, they have some sort of world in the computer and  
22 then you can just walk around.

23 So we took that during lunchtime and took it  
24 outside so everybody could just use it and everybody  
25 was super excited. And also, every time we'd finish

1 our robot in time, we'd just bring it out to the  
2 cafeteria so they can drive it around and have a feel  
3 for what we do and how fun it is. That's a way we  
4 recruit and, also, that's a way we can get the word  
5 about FIRST and robotics out there.

6 MR. THURMAN: Kind of real quick, on the  
7 lobby, I know last week, there are a couple of people  
8 in this room who actually were speaking at the House of  
9 Representatives, a committee of the House of  
10 Representatives, looking for the similar support that a  
11 high school basketball and football coach would get.  
12 Giving that same sort of support, as you said, to the  
13 facilitator of these teams, you have to put in up to  
14 five hours of additional work after their workday ends.

15 CHAIRMAN LASZKIEWICZ: Al, if you want.

16 DR. GREEN: Just a quick question, kind of a  
17 logistic question. I'm from small town Ohio and I've  
18 never heard of this, but it's fascinating. How does  
19 this start? Is your school a sponsor or can you join a  
20 competition in another?

21 MR. LAVERY: The other tagline for FIRST is  
22 it's the best kept secret in the world, unfortunately.  
23 Realistically, it is a program that has been around.  
24 It's been active for over 20 years. It is now across  
25 3,000 high schools in the United States.

1 This particular -- There is actual

2 DR. GREEN: So it's high school centric.

3 MR. LAVERY: Well, this particular -- there  
4 are actually multiple different programs within FIRST  
5 overall that reach all the way down to elementary  
6 school level with things like what is called Junior  
7 FIRST Lego League, FIRST Tech Challenge and an FRC that  
8 provides challenges to high schools/professional level.

9 One of the things that the program has been  
10 struggling with since the beginning is awareness. And  
11 through a lot of different mechanisms, we are  
12 constantly trying to increase awareness and  
13 understanding across the country about what's been  
14 going on.

15 At one level, we have a lot of people who  
16 literally have never heard of it, have no idea it's  
17 even out there. If they knew about it, they'd jump all  
18 over it, but they just have never received the  
19 information.

20 Yet, on the other hand, the organization has  
21 been pushing as hard as they can. There have been ABC  
22 TV specials that have been put in place. Will.i.am  
23 from the Black Eyed Peas has held benefit concerts for  
24 the program. It's been out -- actually, it has  
25 partnered with Project Lead the Way, amongst others,



1 for some of these different activities that are going  
2 on.

3 So there is a very concentrated push to  
4 increase awareness overall in the general population  
5 and general public as much as we can, but the reality  
6 is it's not there at a culturally aware level yet,  
7 something we are still working on, and it's through  
8 opportunities such as this we just keep trying to get  
9 the word out.

10 But one thing I'll add to this, just to go  
11 back to one of the prior questions for just a second,  
12 in terms of what it takes to put a team together.

13 There is no standard definition of a FIRST  
14 team. It is very much driven by what are the resources  
15 that each team has in terms of space, people involved,  
16 mentors, money and everything else. FIRST is organized  
17 -- the headquarters on Manchester, New Hampshire. They  
18 don't mandate what a team should look like. Rather  
19 they say if you're interested, if you want to be  
20 involved, we'll help you get there, pull together what  
21 you can to make it happen.

22 As I said, some teams are as small as a dozen  
23 people and they're all working on the robot and that's  
24 all they do. Other teams can have 100 people. There's  
25 one team, one of favorites, from New Jersey, that every

1 time that they would sit there and they would go down  
2 to a national competition, they would show up in four  
3 yellow school busses full of people.

4 CHAIRMAN LASZKIEWICZ: I'm going to need to --  
5 we've got one last question. Al, to give you an idea,  
6 this was the largest group of people I ever spoke in  
7 front of, 15,000 people, was at a FIRST event.

8 Last question. We'll try and get two quick  
9 ones, please.

10 MS. WILLIAMS: I just was going to make a  
11 comment, because this sounds really similar to NFTE,  
12 the National Foundation for Teaching Entrepreneurship,  
13 and that actually has become a part of curriculum at  
14 high schools nationally.

15 The students are able to get credits and so  
16 forth for it and it may be something -- I'm not sure if  
17 you are actually affiliated and the students get credit  
18 for this, but it sounds very, very similar. If not, it  
19 may be something that you look into kind of partnering  
20 with. Now, it's gone globally. They compete with  
21 Ernst & Young as a strong supporter of them.

22 So I'm not sure if that's what it is. It  
23 sounds like this is separate from the school, it's just  
24 an outside club. But NFTE, the National Foundation for  
25 Teaching Entrepreneurship, may be something that could

1 be sort of modeled, at least the school concept and  
2 getting more funding and more knowledge about it, that  
3 it could be modeled after, because that's a great  
4 program, too.

5 MS. TANG: I have a comment about that. So at  
6 our school, for our county, our team had actively  
7 pushed to incorporate FIRST robotics into the  
8 curriculum. So now at every school in our county,  
9 students can take two different levels of engineering  
10 classes and participate in FIRST robotics. It doesn't  
11 have to be tied to a class, but students have the  
12 option to do so and since it's in the curriculum, the  
13 participation of people in a FIRST team has increased a  
14 lot.

15 CHAIRMAN LASZKIEWICZ: Very good. I  
16 apologize. We have one last question and then we're  
17 going to have to move on.

18 MR. PAREEK: As somebody who studied  
19 mechanical engineering and went to Carnegie Mellon, I  
20 really admire what you are doing and very excited for  
21 you guys.

22 I have two questions for the group. One is,  
23 how are your teams viewed by other peer students in  
24 your schools? And then second is, amongst all of your  
25 friends and fellow students, what's the view or

1 perception of going into engineering education or going  
2 into manufacturing or working for manufacturing  
3 businesses?

4 MS. TANG: Personally, I joined FIRST robotics  
5 because I heard about it from my friend, who was in  
6 robotics at the time. After I joined robotics, I tried  
7 to recruit other people and I noticed that there is  
8 this massive perception that people think that doing  
9 robotics is a huge commitment.

10 And I think sometimes they refrain from  
11 joining because they don't think they have the time for  
12 it. And I guess they haven't been exposed to how  
13 really exciting it is and how much it is worth the  
14 time.

15 MR. ROSARIO: We were viewed as nerds. We  
16 actually like that.

17 (Laughter)

18 MR. ROSARIO: We sell our shirts that say "I'm  
19 a Nerd" on the bottom with a tiger and some geeky  
20 glasses on. And every time they say that, it's  
21 actually a plus for us, we think, if everybody says  
22 we're a nerd, then we're smart and they already notice.

23 (Applause)

24 VICE CHAIRMAN ISBISTER: I guess as a follow-  
25 up question, the sense of do you see yourselves having

1 careers in manufacturing and do you think your fellow  
2 students, whether they're in FIRST or not, see  
3 themselves as potentially having careers in  
4 manufacturing?

5 MS. TANG: I definitely see myself having a  
6 career in engineering or computer science, either way.

7 But I think there's definitely a lack of  
8 interest in pursuing any future academic or career  
9 paths in STEM, especially engineering.

10 MR. MILLEY: I see myself in a manufacturing  
11 career, as do many people on the robotics team. I see  
12 them, as well. But people don't see the manufacturing  
13 world as being cool. I know a lot of people at my  
14 school, "I want to do sports when I grow up" or stuff  
15 like that, and they don't know engineering is where  
16 it's at.

17 VICE CHAIRMAN ISBISTER: Do you think it's  
18 because they don't understand what manufacturing is or  
19 they have consciously decided against it?

20 MR. MILLEY: I think there's a stereotype to  
21 manufacturing. You have an old view where it's dirty.  
22 But now you have a new view where it's clean, it's  
23 robotic, it's industrial. And I think promoting out  
24 that view would help.

25 MS. RODI: I work with -- I'm a mentor of a

1 team and I've been a mentor since I graduated from high  
2 school and I work with students. So I kind of have it  
3 on the other end where -- I think Dave made a good  
4 point about saying you push 200 people and if you get  
5 two percent of them to come out and be great robotic  
6 engineers, that's kind of how FIRST is.

7 You're going to have some kids who are  
8 interested in engineering. There are also children  
9 that are interested in finance or in management. But  
10 the excitement about engineering and about  
11 manufacturing and about design is there, and that's  
12 what FIRST does, it creates that excitement about it.

13 CHAIRMAN LASZKIEWICZ: I'm going to need to  
14 have you close out in about the next 30 seconds here.

15 MR. LAVERY: Hard numbers in response to that  
16 question.

17 CHAIRMAN LASZKIEWICZ: Thirty seconds.

18 MR. LAVERY: We went back and we looked at  
19 what the national averages were. According to the  
20 Bureau of Labor Statistics, 3.78 percent of the working  
21 adult population in this country of 137 million people  
22 are involved in science, technology, engineering, math  
23 or architecture-based careers.

24 We basically said if this program could have  
25 some effect and increase over the alumnis that are in

1 this program, an increase that was substantial over the  
2 national standard of 3.78 percent, it would be worth  
3 it.

4 We went and looked at students who were  
5 involved in the program 10 years ago or more, have been  
6 out in the academic environment, then out in the  
7 workforce for at least a decade after being on a FIRST  
8 team, and we wanted to see if there was a significant  
9 multiplier over the national average.

10 We said if it was two, maybe three times that  
11 3.78 percent, that would be statistically meaningful  
12 and we were prepared for it. We were prepared for the  
13 results we found.

14 Ten years after being in a FIRST program, if  
15 you do a survey of the alumni who were on a team a  
16 decade or more ago, the percentage of people who are  
17 out working in science, technology, engineering, math,  
18 or architecture-based career, 63 percent.

19 Now, I'm not going to argue with that  
20 causation or correlation, but at the very least, this  
21 is a way to identify the people who are going to be  
22 going into those careers that's better than any we've  
23 ever found.

24 I will end with that. Thanks.

25 (Applause)

1 MS. PILAT: You have a FIRST robotics brochure  
2 in your folder. And Liz and I were fortunate enough to  
3 have our first experience driving and operating a robot  
4 as a team at Rockwell Automation Fair in November.

5 We are both thinking about career changes,  
6 although our skill sets mean we might be stuck here.

7 (Laughter)

8 MS. PILAT: So thank you very much. If you  
9 need anything, if you have questions for us about the  
10 Council's work, about how we can be a resource to you,  
11 please do not hesitate to let us know.

12 MS. RODI: And we're available for questions,  
13 too. We're going to hang out here. So if you guys  
14 have any questions, please come ask a mentor, the  
15 alumni or celebrity Dave.

16 MR. ROSARIO: If you are also looking for a  
17 team to sponsor, great opportunity.

18 (Laughter)

19 MS. COOK: Please tell everybody to go home  
20 and see a robotics competition in your backyard. I've  
21 got the schedule with me or I could work with Jen and  
22 we can get the schedule out to you.

23 CHAIRMAN LASZKIEWICZ: Thank you all again for  
24 coming in today.

25 (Applause)



1           CHAIRMAN LASZKIEWICZ: All right. We need to  
2 go on to the home stretch here. That was great.

3           I know we're going to have a little  
4 shuffling around here, but we have a couple of quick  
5 updates.

6           We're going to start with Christie. As many  
7 of you may recall, there is a parallel committee, the  
8 Advanced Manufacturing Partnership, and two of our  
9 members are on that committee.

10          Christie is going to take just a couple of  
11 minutes and give us an update as to their work and, I  
12 think, solicit a little bit of support.

13          Jenna, there may be a follow-up item -- I'll  
14 get her later. There may be a follow-up item where we  
15 need some help soliciting another of our members to  
16 participate on it.

17          Christie, you have the floor.

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1 actually align on the scope and deliverables of the  
2 second session.

3 So there are five working teams in AMP. The  
4 AMP Steering Committee is comprised of CEOs and  
5 presidents of major universities, CEOs from large  
6 corporations, small corporations, and presidents of  
7 universities.

8 But the working teams are staffed by subject  
9 matter experts on each of the topics, as well as  
10 Steering Committee members and staff and outside  
11 groups. It is a working group. So there is a lot of  
12 activity going on in terms of discovery, but real  
13 action, as well.

14 The five working teams, I will give you a  
15 little overview of what they're doing and their scope.  
16 And what I'll try to do is encourage the subcommittees  
17 here that have a very strong linkage with some of these  
18 working teams to start the dialogue. I'm happy to do  
19 introductions.

20 Again, the topic that they're leading is, I'd  
21 say, not totally overlapping our scope, but there are  
22 some very strong connections. So it'll be great to  
23 share knowledge and expertise.

24 The first team is called Transformative  
25 Manufacturing Technologies. The goal of this team is

1 very specific. Their goal is to launch public-private  
2 initiatives to advance transformative manufacturing  
3 technologies.

4           So they are looking at manufacturing  
5 innovation, in particular. There are a number of  
6 specific technology areas that have been identified as  
7 potential opportunities for U.S. investment. And the  
8 initial goal of this team is to articulate and define  
9 the criteria that will prioritize the highest potential  
10 manufacturing technology areas for the U.S. economy.

11           They are not picking winners or losers.  
12 They are advising on specific criteria that will enable  
13 the U.S. to set up the right levels of investment and  
14 identify priority areas.

15           For those selected technology areas, they will  
16 help organize events with subject matter experts along  
17 those areas to begin to develop technology strategy and  
18 roadmaps, but also include supply chain and downstream  
19 commercialization.

20           So they are looking at some of the same things  
21 that we've thought about and applying those known gaps  
22 to technologies that are in the pipeline for us to  
23 consider investing in.

24           The second team is called Demand-Driven  
25 Workforce Development, and I'll tie this particular

1 team to our Workforce Development Subcommittee here.

2 Their particular goal is to scale best in  
3 class, demand-driven workforce solutions to develop  
4 technical skills. So, again, their focus may be a  
5 little bit more on the technical side, the white collar  
6 engineering technical side, but they're also looking at  
7 skilled workforce, as well, so the production that  
8 you're going to need to actually manufacture some of  
9 these new items.

10 They are looking at four specific action items  
11 and they are working on these. They're not creating a  
12 policy paper. They're working jointly with government  
13 to progress some of these items, both on the public  
14 side and the private side.

15 The first item is to increase the career  
16 pathways and dual credit opportunities across education  
17 that will increase the number of qualified technical  
18 employees in advanced manufacturing. So I think what  
19 that means is articulating where there are career  
20 pathways. If you take a particular set of courses, how  
21 can that create options in engineering, in trade  
22 schools, in skilled workforce?

23 The second piece is they are working on a  
24 nationally portable, stackable credentialing system  
25 through certifications and work-based learning

1 elements.

2 So rather than having states with their own  
3 credentialing system, having something that is  
4 nationally portable to allow workforce development in  
5 one area to translate across the U.S. economy.

6 The third is establishing internship and  
7 apprenticeship models with industry, trade unions,  
8 government and high schools or community colleges that  
9 can be implemented in regions across the U.S. And  
10 finally, they are developing practical competency-based  
11 bridging modules to transition veterans, focused on  
12 private sector manufacturing skill certification and  
13 apprenticeships with Department of Labor and GI Bill  
14 finding and support.

15 So they're looking at an underemployed or  
16 unemployed segment of the economy and moving them  
17 directly into manufacturing opportunities.

18 So I think there will be a benefit to connect  
19 perhaps the chair of our Workforce Development  
20 Subcommittee here with some of the work that's going on  
21 so that there is a lot of transparency between what  
22 they're learning.

23 Again, it's not a complete overlap, but I  
24 think they are working on some things that might be  
25 informative to your team and, also, you are working on

1 things that may actually be very beneficial for them to  
2 hear about and I'm sure they will be.

3 The third working team is focused on the  
4 National Network for Manufacturing Innovation. It has  
5 not started its work yet, I think they're waiting for  
6 budget confirmation of the extension of that program.  
7 But once that is completed, the goal of that specific  
8 subcommittee will be to support implementation of NNMI,  
9 ensure that the institutes and network are  
10 appropriately geared toward industry needs, and address  
11 core implementation and commercialization issues.

12 So I think the IRD Subcommittee on our side  
13 can closely link with that particular working team on  
14 what we've found, what we've identified. They may even  
15 have more resources to dig deeper into some of the  
16 areas that we identified as certain gaps. So it could  
17 be a good resource and team.

18 The fourth working team is called Scale-Up  
19 Policy and I actually lead that committee. Its goal is  
20 to identify the strengths that can be leveraged and  
21 solutions to the key barriers to accelerate and amplify  
22 the value of technology commercialization. So we have  
23 great technology. How do we actually make it get into  
24 market more quickly, but also have the value of that  
25 being far greater?

1           The team has identified three critical  
2 barriers that we're developing policy solutions  
3 against. The first is supply chain development, the  
4 second is technology diffusion, and the third is  
5 capital sources and access, in particular, focused on  
6 small and mid-sized companies, both Main Street and  
7 startups.

8           This committee will be working on that  
9 particular issue and coming up with policy  
10 recommendations to address that big concern.

11           The fifth working team is focused on the image  
12 of manufacturing. I will tie this one back to the  
13 workforce group, as well, because I know you've got a  
14 lot on your plate. And they are working towards the  
15 goal -- their specific goal is to implement the  
16 recommendations in the President's report on the  
17 outreach work stream.

18           So they prepared a report about a year ago of  
19 recommendations to the President and they are now in  
20 implementation mode. So they are -- the specific scope  
21 for the next six to eight months is going to be to  
22 develop a new image for advanced manufacturing, develop  
23 an outreach program to support this image campaign --  
24 so they're working on some type of advertising campaign  
25 -- and to set up and utilize a series of regional and



1 national meetings, where they can not only broadcast  
2 this image, but also get input on how to continue to  
3 refine it and evolve it.

4 So I think there is activity going on. So to  
5 the extent that the workforce development, an image --  
6 a group here can feed in your expertise, your findings,  
7 I think it will be a great benefit to this group.

8 The other piece I will mention is the AMP 2.0  
9 Steering Committee does have a short timeline. It's  
10 not a continuing council like the Manufacturing  
11 Council. There is no known -- the current end date is  
12 expected to be July or August of this year. So there's  
13 a lot of activity now. So now is the time to get the  
14 ideas and to share the learnings and really cross-  
15 pollinate, because there is no guarantee that this  
16 committee of a number of people and a number of  
17 resources will be around for an extended period or  
18 continued period.

19 So I'll just encourage the working groups here  
20 to connect with those folks in AMP while they are still  
21 around.

22 Now, are there any questions for me about AMP?

23 CHAIRMAN LASZKIEWICZ: I guess the ask would  
24 be, as you see specific opportunities to connect our  
25 subcommittees with AMP activities or vice versa, we

1 would really appreciate it if you would help to  
2 facilitate that.

3 MS. BARRETT: My pleasure.

4 MS. SMYTH: Do you see any national forums  
5 right now?

6 MS. BARRETT: There is one that has just been  
7 announced at Georgia Tech. It will be February the 3rd  
8 and there will be regional discussions along all five  
9 of these topics. It is an open forum and so that may  
10 be an opportunity for all the working teams to send a  
11 representative to participate in the discussion. But  
12 that's the first one.

13 I know they're planning one in either June or  
14 July in Detroit, at COBO, in conjunction with the  
15 national manufacturing -- there's a national  
16 manufacturing conference there. So there is discussion  
17 of that one.

18 Those are the only two that I can remember  
19 offhand. But February 3 could be a good opportunity --  
20 maybe I'll circulate the agenda to Liz and Jenna and  
21 then we can see if others would like -- that way people  
22 have transparency and can participate.

23 CHAIRMAN LASZKIEWICZ: Very good. Thank you  
24 very much. So in the home stretch here, we are going  
25 to go through updates from the ex-officio members and I

1 believe Matt has left us. Is someone here to represent  
2 Matt or are we going to move onto Treasury?

3 So joining us is Jessica Millano. Thank you  
4 very much and we look forward to your Treasury update.  
5 Thank you.

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1                                   EX-OFFICIO UPDATES

2                                   TREASURY DEPARTMENT UPDATE

3                                   Jessica Millano

4                                   MS. MILLANO: Thank you. I am Senior Advisor  
5 to Don Graves, who is the Deputy Assistant Secretary.

6                                   CHAIRMAN LASZKIEWICZ: We know Don well.

7                                   MS. MILLANO: Everyone here knows Don well and  
8 he wanted me to extend his regrets. He very much  
9 wanted to be a part of this meeting today. But as many  
10 of you probably also know, as well, he has been  
11 appointed the Administration's Special Coordinator for  
12 Detroit and they are having a rather big event this  
13 week with a number of Cabinet officials and our Vice  
14 President. So he has been busy attending to the  
15 Detroit Auto Show this week.

16                                   Very briefly, because I know we're short on  
17 time, and I believe he last updated this group in July,  
18 I just wanted to give you a quick update on four  
19 priority initiatives from our office, and I also have a  
20 cheat sheet in front of me for the numbers.

21                                   As Christie mentioned, the Administration --  
22 manufacturing is one of those cross-cutting policy  
23 areas. And so the Administration's support for  
24 manufacturing focuses on a broad range of competitive  
25 measures that include access to capital, business tax

1 reform -- I know Mark Mazur was here earlier to talk a  
2 little bit about the tax reform piece -- workforce  
3 skills and export promotion.

4 In our office at Treasury, we focus primarily  
5 on the access to capital piece. Two programs which we  
6 are responsible for, which were sort of new programs  
7 created from the Small Business Jobs Act of 2010, the  
8 small business lending fund and the state small  
9 business credit initiative, and I'm sure Don has  
10 briefed you on these before.

11 I'll just give you a quick update on where  
12 those programs are. Through the small business lending  
13 fund, Treasury invested over \$4 billion in 332  
14 community banks and community development loan funds to  
15 encourage Main Street banks and Main Street businesses  
16 to work together; to make sure the small businesses  
17 that were creditworthy, but not getting the access to  
18 capital they needed after the recession, were getting  
19 loans.

20 Through the end of fiscal year 2013, these  
21 institutions participating in SBLF have increased their  
22 small business lending by \$11.2 billion over pre-  
23 program baseline levels, representing an estimated  
24 51,000 new loans to small businesses at the program  
25 start.

1           Small businesses in a wide array of industries  
2 benefit from that, but in the manufacturing sector  
3 specifically, about 10 percent of those loans are about  
4 5,200 businesses, manufacturing businesses, have  
5 received loans through the program.

6           The state small business credit initiative was  
7 funded with \$1.5 billion from the Small Business Jobs  
8 Act, and it works a little bit differently, provides  
9 capital directly to state economic development agencies  
10 that work with small businesses and small manufacturers  
11 to make sure they're getting capital. There's a wide--  
12 there's a huge amount of flexibility in the program  
13 from loan support programs, capital access programs,  
14 venture capital programs. States are really allowed to  
15 sort of set up whatever type of program they feel their  
16 local economy and local small business and  
17 manufacturers need to succeed.

18           So it's very flexible. In the first two years  
19 of that program, through the end of calendar year 2012,  
20 states have drawn about 64 percent of their allocations  
21 from the original funding amount and these programs  
22 have supported over \$2 billion in loans or investments  
23 to 5,000 businesses, creating or retaining an estimated  
24 53,000 jobs.

25           Our 2013 calendar year just closed for us, so

1 we're hoping to have updated versions of those numbers  
2 in the spring, I would say March, April. It takes a  
3 while for them to come in from the states and for us to  
4 sort of work through that data and clean it and release  
5 it. But hopefully, by the next Manufacturing Council  
6 meeting, we'll have 2013 numbers for you guys.

7 And then, significantly, SSBCI has really  
8 supported manufacturing, by far the largest share of  
9 total dollar amounts of that \$2 billion have gone to  
10 the manufacturing sector firms and manufacturing  
11 sector, and that's roughly a third of investments or  
12 loans supported by SSBCI. So that is really helping  
13 small manufacturers around the country with access to  
14 capital.

15 Two other things I'm just going to sort of  
16 mention quickly, because I know we're short on time.  
17 Treasury has also helped to develop something called a  
18 proposal of the Administration printout last year  
19 called the manufacturing communities tax credit, which  
20 was modeled on another program that we run in our  
21 office, the new market tax credit, many of you may have  
22 heard of.

23 The new market tax credit was established in  
24 2000 to spur investment in small businesses and real  
25 estate development in low and moderate income

1 communities. And in the first -- I think through 2012,  
2 there has been more than \$33 billion in new market tax  
3 credits awarded. So it's a very successful program  
4 that the CDFI funds and our office manages.

5 The manufacturing communities tax credit is  
6 designed to be similar operational structure, but  
7 targeted on manufacturing communities. And it's a  
8 proposal -- it wasn't enacted, unfortunately, with the  
9 budget issues that went on last year, but we're working  
10 on trying to get it into next year's budget. It's  
11 still a proposal but it's something that we're working  
12 on in our office that could benefit manufacturing  
13 communities and we're excited about.

14 And then lastly, Don has given a lot of his  
15 time to another interagency manufacturing initiative,  
16 the Manufacturing Communities Partnership -- I'm sorry  
17 -- the Investing in Manufacturing Communities  
18 partnership.

19 There are way too many of these acronyms  
20 floating around.

21 The IMCP, and I just wanted to briefly give  
22 you an update on that. The IMCP is a challenge grant  
23 competition to designate up to 12 communities across  
24 the nation as manufacturing communities, making them  
25 eligible for a coordinated Federal pool of economic



1 development investments of over \$1.3 billion available  
2 across Federal agencies.

3 I believe this September, they made planning  
4 grants awards to something like 44 or 45 communities  
5 and they're now moving into the second round to sort of  
6 select the final 12 for this funding next year.

7 Don's role in our office is really to work on,  
8 in addition to sort of access to capital, also,  
9 community development. So he has contributed a lot to  
10 developing the framework for the IMCP challenge  
11 competition as a model for locally-driven development  
12 strategies that would benefit manufacturing.

13 So that is really quickly what we're doing.

14 CHAIRMAN LASZKIEWICZ: Very good. Thank you.

15 Any questions? Libby?  
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1                   EX-OFFICIO UPDATES (continued)

2                   DEPARTMENT OF ENERGY UPDATE

3                   Libby Wayman

4                   MS. WAYMAN: Thanks. We had a great  
5 conversation with the Energy Subcommittee yesterday,  
6 where I had the opportunity to give an extensive  
7 update. I'll just mention a few highlights here.

8                   First, a quick look at kind of the year of  
9 2013 in review. In March, we launched the Clean Energy  
10 Manufacturing initiative, and that is actually  
11 summarized in a handout that Liz and her team were very  
12 helpful in distributing.

13                   The initiative has really two focus areas.  
14 The first focus area is how we become more competitive  
15 in the U.S. at producing clean energy technologies and  
16 products, how we really retain the manufacturing here,  
17 the innovation that we put into the front end of  
18 developing these technologies.

19                   The second focus that dovetails also really  
20 well with some of the issues that this Council is  
21 looking at is how our energy resources impact  
22 manufacturing competitiveness broadly. And we started  
23 this initiative in the Office of Energy Efficiency and  
24 Renewable Energy, so the applied energy office within  
25 DOE that works on developing new energy technologies.

1 And we focused on kind of three main things there.

2 First is building out the President's National  
3 Network for Manufacturing Innovation, and we released  
4 our first solicitation for the first full-fledged  
5 institute last year.

6 The second channel that we worked through is  
7 in R&D and developing some of the resources that could  
8 support R&D in manufacturing processes related to clean  
9 energy technologies.

10 The third channel is through technical  
11 assistance, where we work with manufacturers to  
12 implement energy efficiency and energy saving practices  
13 to become more competitive by reducing their energy  
14 costs. Also, throughout the last year, we held a  
15 couple of events where we sought input from the  
16 community on how we could refine our set of resources  
17 to help manufacturing in those two kind of objectives  
18 that I mentioned at the beginning.

19 A look ahead for 2014, we're planning to  
20 continue engagement on this topic and continue refining  
21 our resources and continue building out the National  
22 Network for Manufacturing, developing R&D resources.

23 A couple of new things that we're doing or  
24 that we're looking to develop. One is a fellowship  
25 that will improve access between national labs and the

1 private sector, and another is the development of  
2 public-private partnerships in advancing our early  
3 stage technologies into commercial products and  
4 commercial scale. So those public-private partnerships  
5 are not really funding, but just how government can  
6 help be the connective tissue between innovation and  
7 scale.

8 The last thing I'll mention is that this  
9 initiative has been selected by the Secretary of Energy  
10 to be expanded across the Department of Energy. So we  
11 are now working with our colleagues in the Office of  
12 Fossil, Nuclear, Office of Science, ARPA-E, and the  
13 loan program and other offices within DOE. So we can  
14 now really start to think about manufacturing  
15 competitiveness throughout many assets and facets of  
16 energy.

17 That is what is on the slate for the next  
18 year. And I am happy to take any questions, if there  
19 are any.

20 CHAIRMAN LASZKIEWICZ: No questions?

21 (No Response)

22 CHAIRMAN LASZKIEWICZ: Again, Libby, thanks  
23 for your work supporting our energy team, and welcome  
24 back.

25 MS. WAYMAN: Thank you.

1                   CHAIRMAN LASZKIEWICZ: Next is our update from  
2 the Department of Education. Johan Uvin will be giving  
3 the update. Welcome back.

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1                   EX-OFFICIO UPDATES (continued)

2                   DEPARTMENT OF EDUCATION UPDATE

3                   Johan Uvin

4                   MR. UVIN: Thanks for the opportunity to give  
5 you a quick update. I'll keep it really short. We are  
6 staying the course in terms of focusing our secondary  
7 and post-secondary career in technical education  
8 investments on sectors that matter to our economy, and  
9 manufacturing most certainly is a very critical one.

10                  We continue to work on the foundational skills  
11 issues that many of our workers have through our adult  
12 education investments. And we continue to support, at  
13 the post-secondary level, all kinds of training through  
14 our various financial aid programs that we have  
15 available.

16                  I want to comment quickly that we identify  
17 what the two main issues that the Workforce Committee  
18 had identified. The perception issue is one that we  
19 deal with in our work on a daily basis. So we totally  
20 identify with that point. And secondly, we most  
21 certainly concur with the need to really get -- we need  
22 to take a closer look at the skills issue.

23                  So in response to that, I want to continue to  
24 offer that we want to coordinate with the Workforce  
25 Committee. I think we're ready to actually get more

1 actively involved in seeing how we can work together to  
2 address some of these issues.

3 In terms of our work, we are now not thinking  
4 about these issues of skills any longer. Just as a  
5 Department of Education, it has become a four-way  
6 partnership between the Department of Labor, the  
7 Department of Health and Human Services, the Department  
8 of Commerce, and the Department of Education. And in  
9 the next few months, there will be lots of information  
10 -- you'll hear about some initiatives that we'll be  
11 pursuing jointly to further improve the skills system  
12 in our country.

13 I wanted to mention a particular effort, an  
14 opportunity that might be relevant for the Council.  
15 One is that there are -- we anticipate in the next 18  
16 to 36 months three opportunities for reauthorizations  
17 of bills, where some of the ideas that the committees  
18 have generated might be worthy of consideration.

19 One is the reauthorization of the Workforce  
20 Investment Act. The second one is the reauthorization  
21 of the Perkins Act, which authorizes spending on career  
22 and technical education. And the third one is the  
23 Higher Education Opportunity Act.

24 So there are three opportunities for this  
25 Council to weigh in on those processes as they unfold.

1           The second specific thing I want to mention is  
2 when OECD released the results of the international  
3 program for the assessment of adult competencies in  
4 October, it became very clear that the skills story in  
5 the adult population in the U.S. is not a pretty story.  
6 And we -- and by we, I mean, again, the Department of  
7 Labor, Department of Health and Human Services,  
8 Commerce and Education, we are currently engaged in a  
9 national process, where we are trying to get ideas from  
10 both the private and the public sectors, people at all  
11 levels of government and from all kinds of walks of  
12 life around what are some of the national actions we  
13 could take to avoid having so many adults with low  
14 skills in our country in the future.

15           We are looking for champions in industry who  
16 will help us drive and define that plan, and we're  
17 specifically interested in hearing from business  
18 owners, large and small business owners, in terms of  
19 how we at the Federal level could facilitate ways of  
20 businesses getting more involved in the skills issues.

21           CHAIRMAN LASZKIEWICZ: I think Carlos has  
22 left, but I think with some urgency, we need to make  
23 sure that we do have alignment between our Workforce  
24 Development Subcommittee, Department of Labor,  
25 Department of Education and the AMP Subcommittee.



1           It's too big of an opportunity to get some  
2 alignment around the activities, because what you're  
3 asking for is what we're doing. So we have to get  
4 there. I think what is new in what you're talking  
5 about today from a year, year-and-a-half ago is that  
6 the agencies within the government that need to be  
7 engaged with this, Education and Labor among them, are  
8 collaborating with Commerce, but we need to accelerate  
9 that into some action.

10           So I would ask that we do that.

11           MR. CARDOSO: It was a specific topic of  
12 discussion yesterday and we -- that is a two-way. In  
13 other words, for Department of Education to know what  
14 we're doing, but for us to know what they're doing, and  
15 how do we link those.

16           CHAIRMAN LASZKIEWICZ: Okay. Thank you. And  
17 then our last update is from Melissa Smith, who is  
18 representing the Department of Labor. Welcome.

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1                   EX-OFFICIO UPDATES (continued)

2                   DEPARTMENT OF LABOR UPDATE

3                   Melissa Smith

4                   MS. SMITH: Hi. We are collaborating so  
5 closely that Johan actually stole all of my topics.  
6 But I did want to reiterate that now is the time, the  
7 timeliness comment that was raised by Deputy Under  
8 Secretary Hyatt.

9                   We are really digging in under our new  
10 Secretary, Tom Perez, on a lot of the things that you  
11 have talked about and especially a lot of things I've  
12 heard reported out of the Workforce Subcommittee.

13                   Throughout all of our investments, he's  
14 looking for alignment with data-driven, demand-driven,  
15 making sure we understand sector strategies and career  
16 pathways and accelerated credentialing, and that in  
17 everything we do, these things are written in and  
18 they're prioritized within our work.

19                   And so I think that everything you all are  
20 talking about, even without the collaboration that has  
21 been happening, not necessarily as much here, that it  
22 is happening on its own, and I can't wait for us to  
23 start really working together on that.

24                   The sector-driven investment I think is going  
25 to be a place that we're really going to have some

1 chances to discuss. We know that a focus is going to  
2 be advanced manufacturing and advanced manufacturing  
3 IT. We love to hear of other very specific -- the  
4 right words -- very specific areas to focus when we  
5 start to look at sectors.

6 I was not a FIRST Robotics candidate in high  
7 school. So when I start hearing things like  
8 mechatronics and others, I really do have to turn to the  
9 experts to figure out where it is that we should be  
10 focusing some of the investments. But we do have the  
11 flexibility to do that sort of focusing.

12 It's really interesting to hear you talk about  
13 your experience and the really legislative constraints  
14 around some of these funds.

15 We do have other areas where we can start to  
16 look at flexibilities and our new Secretary is  
17 incredibly interested in administrative flexibilities  
18 and making sure that we can focus those. I was really  
19 excited to see FIRST Robotics here, I love that  
20 program. I love that they drove home the messaging  
21 again and again about mentoring.

22 We have an open solicitation on the street  
23 right now where we're trying to get the exact kind of  
24 things that you want to see into high schools, more  
25 formalized into high school, working very closely with

1 Johan on a -- it's called Youth Career Connect, and  
2 something that we really will be focusing on in there  
3 is private sector and employer-driven mentoring.

4 We think it's critical for the career  
5 development that you all need and the workers that you  
6 need. So I hope to see some of you and some of your  
7 industries partnering closely with these grantees once  
8 they're awarded later this year.

9 CHAIRMAN LASZKIEWICZ: Melissa, I'm sure  
10 others could make similar comments, but when we look at  
11 the programs like you have described, I know you're  
12 ticking them off here and you're doing your best to  
13 leverage best practices, but some of these programs  
14 that are best in class are developed locally.

15 Please take a look at the My Life, My Plan  
16 initiative, where mentors are developed to help young  
17 people develop career path strategies for themselves.

18 So there's a lot of these programs out here.  
19 I'm sure we could raise five or six of them. The  
20 challenge will be if you come in and you're advocating  
21 one and it's brand new and it's starting from scratch  
22 when others have traction, it's not efficient. So we  
23 need to really work together on those things.

24 MS. SMITH: Completely agree. And one thing  
25 that we have moved to, again, under the previous

1 Secretary and even more so under our current Secretary,  
2 is investing in what works, finding ways, and  
3 especially with this Administration, to look at these  
4 models that are working and ways that we can scale  
5 them.

6 So very interesting, and I love for this to be  
7 an opportunity for us to hear about more of the locally  
8 successful models.

9 And I think that the only other thing I really  
10 want to hit on, and you're exactly right, with the  
11 right players at the table, Workforce Subcommittee, you  
12 guys took a look at the programs that are out there and  
13 you were immediately able to tell what works.

14 And what works is education, economic  
15 development, labor, and employers all at the table.  
16 It's the most efficient and effective way for us to be  
17 using our Federal resources.

18 So very impressive that you all have caught  
19 onto that so quickly in the work that you're doing.

20 And lastly, I am just personally really  
21 interested in seeing the outreach material and the  
22 outreach work that you're doing as far as messaging  
23 manufacturing. We do have investments out there that  
24 are focused on worker training in manufacturing, yet we  
25 constantly hear that recruitment is an issue. And I'm

1 not sure that our grantees are having the best luck  
2 selling the kind of stable career that you can have in  
3 manufacturing and recruiting. So we really just want  
4 to see what we can do with that.

5 CHAIRMAN LASZKIEWICZ: Good. Any questions  
6 for Melissa?

7 (No Response)

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1 notification. That is our intent.

2 Liz will be sending out schedule opportunities  
3 for meetings the end of April or May. So we'll be  
4 interested in your availability. That's always a  
5 challenge, but we'll be doing our best to get that  
6 schedule. In-person meeting currently scheduled for  
7 Washington, DC, and I believe we are then -- pardon me?  
8 What did we say the window for the next meeting was  
9 after that?

10 MS. EMANUEL: Late October.

11 CHAIRMAN LASZKIEWICZ: So really the end  
12 meeting -- the end of this work will be end of October.  
13 And we could have teleconferences between spring and  
14 October. But at that October meeting, what we would  
15 like to try to do a little bit different with this  
16 Council than past is that -- I think a couple of good  
17 things have happened.

18 We have some new membership kind of mid-term,  
19 which will be high focused target candidates for the  
20 next Council. You all are representing yourselves well  
21 and will be considered for leadership positions. But  
22 in addition to just the understanding of the candidate  
23 pool for the next Council, we really want to make it as  
24 easy as possible for us to hand off our work to the  
25 next Council.



1           One of the uniquenesses -- and Christie and I  
2 talked about this before, there are a lot of parallel  
3 committees, but AMP started, stopped, and there's no  
4 guarantee that it will continue. This is a Senate-  
5 sponsored and supported subcommittee advising the  
6 Secretary of Commerce and it has operated continuously  
7 since, I think, the middle of the second Bush  
8 Administration.

9           So this is a continuous and ongoing process.  
10 So we ask that we have a good run at it here between  
11 now and the end of our term, which will be the end of  
12 October. In that last meeting, we'll be doing report-  
13 outs that are really summaries of our work and really  
14 some guidance to the next committee so that they have  
15 some documentation to pick up where we leave off, and  
16 many here will be on that committee.

17           Jenna, any comments on that?

18           MS. PILAT: No.  
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PUBLIC COMMENT AND CLOSING

CHAIRMAN LASZKIEWICZ: With that, the last formal, official business before we adjourn is that we do open up this meeting, which is an open meeting, to any public comment. I'm not aware of any public comment, but I have to ask.

Are there any public comments or anyone that would like to speak in the room?

(No Response)

CHAIRMAN LASZKIEWICZ: Okay. I don't think we have to vote on this. I only need a motion to adjourn.

(Moved and seconded.)

CHAIRMAN LASZKIEWICZ: We are adjourned.

(Whereupon, at 12:10 p.m., the meeting was concluded.)

## C E R T I F I C A T E

This is to certify that the foregoing proceedings of a meeting of The Manufacturing Council, held on January 14, 2014, were transcribed as herein appears, and this is the original transcript thereof.

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ANTHONY DENNIS,

Court Reporter