

U.S. DEPARTMENT OF COMMERCE

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U.S. MANUFACTURING COUNCIL

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MEETING

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WEDNESDAY,

AUGUST 3, 2016

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The Council met in the Indian Treaty  
Room, Eisenhower Executive Office Building,  
1650 Pennsylvania Avenue, N.W., Washington, D.C.,  
at 9:30 a.m., Susan Smyth, Chair, presiding.

## PRESENT:

SUSAN SMYTH, Chair; Director, Manufacturing  
Systems Research Lab, General Motors

CLAUDINE MARTINEZ, Vice Chair; President &  
General Counsel; MCT Industries

CHRISTIE WONG BARRETT, CEO, MacArthur  
Corporation

CRAIG FREEDMAN, President & CEO, Freedman  
Seating Company

CODY FRIESEN, Founder, Fluidic Energy

HIROYUKI FUJITA, Founder, President & CEO, QED

ALBERT GREEN, CEO, Kent Displays

DAWN GROVE, Corporate Counsel, Karsten  
Manufacturing Corporation

JENNY HOUSTON, Executive Vice President, Warmick  
Mills

JAMES F. KEPPLER, Vice President, Integrated  
Supply Chain & Quality, Whirlpool  
Corporation

KATHLEEN N. KINGSCOTT, Vice President, Strategic  
Partnerships, IBM Research, IBM  
Corporation

ZACHARY J. MOTT, Chief Alignment Officer, Atlas  
Tool and Die Works

SHIRISH PAREEK, Founder, President & CEO,  
Hydraulex Global

ANDRA RUSH, Chief Executive Officer, The Rush  
Group

MARSHA SERLIN, Founder & CEO, United Scrap Metal

JOSEPH A. SYLVESTRO, Vice President,

Manufacturing Operations, Pratt & Whitney

RAYMOND W. YEAGER, President & CEO, DMI

Companies

BILL YEARGIN, President & CEO, Correct Craft

**ALSO PRESENT:**

**PENNY PRITZKER, Secretary, U.S. Department of Commerce**

**JASON MILLER, Deputy Director, U.S. National Economic Council, The White House**

**DONNA F. DODSON, Associate Director and Chief Cyber Security Advisor and Director, National Cybersecurity Center of Excellence, National Institute of Standards and Technology (NIST), U.S. Department of Commerce**

**ARCHANA SAHGAL, Director, Office of Advisory Committees and Industry Outreach, U.S. Department of Commerce**

**PHILLIP SINGERMAN, Associate Director for Innovation & Industry Services, National Institute of Standards and Technology (NIST), U.S. Department of Commerce**

**ERIN SPARKS, Senior Advisor for Manufacturing Policy, Office of the Secretary, U.S. Department of Commerce**

**LAURA TAYLOR-KALE, Deputy Assistant Secretary for Manufacturing, International Trade Administration (ITA), U.S. Department of Commerce**

**ARUN VENKATARAMAN, Director of Policy, International Trade Administration (ITA), U.S. Department of Commerce**

**LI ZHOU, Deputy Director, Office of Advisory Committees and Industry Outreach, U.S. Department of Commerce**

**ANDREW COY, Senior Advisor, Office of Science and Technology Policy, The White House**

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

(9:39 a.m.)

1  
2  
3 CHAIR SMYTH: Good morning. I would  
4 like to call this meeting of the U.S.  
5 Manufacturing Council to order.

6 Welcome, Madam Secretary, to the final  
7 public meeting of this Manufacturing Council. We  
8 have taken our responsibilities seriously in  
9 recommending, within each of our four  
10 subcommittees, actionable tasks for the  
11 Department of Commerce, tasks to take in order to  
12 respond to the challenges facing the United  
13 States manufacturing industry.

14 We have within an abbreviated  
15 timeframe, which we comment on a lot, produced 13  
16 letters of recommendation which include two that  
17 are being processed today. We would like to  
18 personally thank you for your concise and clear  
19 guidance at the beginning of our term, and we  
20 have been very encouraged to see that many of  
21 these recommendations have already been  
22 implemented or are in the process of being

1 implemented.

2 As a Council, we will submit a handoff  
3 letter to you today with a high level executive  
4 summary of this material, and we will supplement  
5 this in the upcoming weeks with an information  
6 archive for our successors.

7 I would like to welcome you, Secretary  
8 Pritzker, to make your opening remarks.

9 SECRETARY PRITZKER: Thank you very  
10 much. Well, first of all, it is great to be here  
11 at this final meeting of the Manufacturing  
12 Council. I cannot thank each and every one of  
13 you enough for taking to heart the directives  
14 that we gave I think it was just less than 18  
15 months ago. And your contributions are already  
16 bearing fruit, and I hope you can see that and  
17 feel that and know the value of the work that you  
18 have put in.

19 And I want to particularly thank our  
20 Chair and our Vice Chair. Susan, Claudine, you  
21 all have been great leaders. You have done an  
22 extraordinary job of -- you've covered the

1 waterfront with your various committees. You've  
2 led with great organizational skills, dignity.  
3 And it's fantastic, I must comment, to have two  
4 strong women running a manufacturing --

5 (Laughter.)

6 SECRETARY PRITZKER: -- a first in  
7 Commerce Department history, so thank you for  
8 your great leadership.

9 CHAIR SMYTH: Thank you.

10 SECRETARY PRITZKER: Eight years ago,  
11 no one could have predicted the resurgence of  
12 manufacturing that we are seeing today in the  
13 United States. The jobs numbers really speak  
14 volumes. We have about 843,000 more  
15 manufacturing jobs today than we had just six  
16 years ago, and companies like yours are working  
17 to fill another over 350,000 jobs in  
18 manufacturing.

19 Our challenge and the challenge that  
20 you have been helping us with is to sustain that  
21 growth, particularly in the face of economic  
22 headwinds stemming from a strong dollar and from

1 weaker overseas demand.

2 At your first meeting last April, I  
3 asked you to provide us with actionable  
4 recommendations for maintaining America's  
5 manufacturing momentum, and you did just that and  
6 more, and I cannot thank you enough. You really  
7 have delivered. Each of the subcommittees has  
8 offered proposals to strengthen this -- the  
9 manufacturing sector and to ensure that we  
10 continue the kind of growth that we are seeing --  
11 now seeing.

12 So I thought I would highlight a few  
13 of your recommendations. Let me begin with the  
14 Innovation, Research and Development  
15 Subcommittee. You really helped us develop a  
16 process for selecting industry-driven open topics  
17 for the National Network of Manufacturing  
18 Innovation's next institute, which is really to  
19 the benefit of the Department of Commerce as well  
20 as to the benefit of the United States.

21 Your guidance helped us secure funding  
22 from Congress for the very first institute funded

1 by the Department of Commerce. And when this  
2 Council started, we had about five institutes in  
3 place. Today, we have nine that are up and  
4 running, five more that are in the competition  
5 phase, and each one is pursuing a unique and  
6 innovative field from additive manufacturing to  
7 next generation semiconductors.

8 We are seeing an unprecedented level  
9 of collaboration across the public and private  
10 sectors, including educational institutions. And  
11 this is really turning into promising  
12 discoveries, American-made products and American  
13 investment and jobs. So it's really -- these  
14 institutes are a game changer, and you all played  
15 a really important role in their development and  
16 the Department of Commerce's role within the  
17 NNMI's initiative. So thank you for that.

18 Second, turning to the Workforce  
19 Subcommittee, I want to thank you for making  
20 Manufacturing Day a success. When we started, I  
21 think we had 250 manufacturing plants that were  
22 open to a variety of students, and we began, as

1       you all mentioned to me I think in our very first  
2       meeting, you know, the image of manufacturing is  
3       still something of a 19th century assembly line  
4       with people -- that's what our young people and,  
5       frankly, their parents and their guidance  
6       counselors think.

7                   And you have played an extraordinary  
8       role in really transforming Manufacturing Day  
9       into last year we had over 400,000 people  
10      participate in 2,400 events nationwide, and this  
11      year our goal is 3,000 open houses. This level  
12      of success and the kind of engagement across the  
13      country is really due to your leadership, and I  
14      can't thank you enough for raising the awareness  
15      of not just Manufacturing Day but also of really  
16      what does 21st century manufacturing look like  
17      and what does a career in 21st century  
18      manufacturing feel like and can be for various  
19      Americans. So thank you for that.

20                   Our Trade Subcommittee -- you know,  
21      beyond preparing workers to compete globally,  
22      making sure that American businesses and job

1 creators have access to customers around the  
2 world has really been the role of the Trade  
3 Subcommittee. And last year you helped us with  
4 the renewal of the Export-Import Bank, securing  
5 trade promotion authority, and making it easier  
6 for us to complete the negotiation of the Trans-  
7 Pacific Partnership.

8 And each of you in this room is  
9 absolutely the best argument for getting TPP  
10 passed. You are the face of trade in our  
11 country. You are the job creators. You are the  
12 folks who are taking advantage of market access  
13 and the opportunity to export.

14 And I know that you remain committed  
15 to getting TPP passed. What I want you to know  
16 is our administration is all in on that effort,  
17 starting with the President himself. You heard  
18 him yesterday talk about it. You hear him raise  
19 the subject at every opportunity. I can tell you  
20 he is working both in front of the camera and  
21 behind the scenes to get this done. We have a  
22 very robust war room effort and great

1 coordination between the White House, the U.S.  
2 Trade Rep.

3 The Department of Commerce is kind of  
4 the leading effort -- leading this effort, but we  
5 have a whole administration push going on. I  
6 think we're -- I know we have at least 30 trade  
7 events that will happen just in the next 20, 25  
8 days. So there is a lot going on there, and  
9 thank you for your leadership.

10 Finally, the Energy Subcommittee,  
11 you've really helped us guide our efforts to  
12 elevate the role of manufacturing as it relates  
13 to the clean energy transformation that our  
14 country is going through. And you revitalized  
15 the Interagency Trade Promotion Coordinating  
16 Committee and the Working Group on Renewable  
17 Energy and Energy Efficiency.

18 That is really critical because those  
19 are the bowels of how government works to really  
20 do more to support public-private sector and  
21 cross-agency cooperation. So thank you for that  
22 work.

1           You recommended we create a trade-  
2 related clean energy portal, and we have  
3 committed to building it. I was on the phone  
4 with Erin this morning, "Okay. What's the  
5 timeframe? How are we going to get this done?"  
6 But your vision of an online hub for  
7 manufacturers to access information about trade  
8 missions, technology providers, export  
9 assistance, and other services is something that  
10 we -- it is our goal to get in place and finished  
11 before our administration is complete.

12           Also, you focused on financing  
13 obstacles that keep U.S. energy companies from  
14 competing overseas. That's why we led our trade  
15 mission -- renewable trade mission to Mexico, and  
16 we are planning three more in 2017.

17           If you step back for a minute, we at  
18 the Department of Commerce think about our role  
19 as trying to -- we don't create jobs; our job is  
20 to create the conditions so that American  
21 businesses, workers, and entrepreneurs, like you  
22 in this room, can succeed and grow. And you have

1 helped -- really helped to break down trade  
2 barriers, create regional hubs for innovation.  
3 This Council has really proven how important the  
4 public-private partnership can be to getting  
5 things done, both in government and in  
6 partnership with the private sector.

7           And we have an ambitious agenda, my  
8 team and I, for the remainder of our term at the  
9 Department of Commerce, very much guided by your  
10 recommendations, and so I cannot thank you  
11 enough. We are also very focused on setting up,  
12 so that there is -- the next Manufacturing  
13 Council can hit the ground running, and I really  
14 appreciate Claudine has produced a brief but -- a  
15 succinct but powerful document, not only about  
16 what you have accomplished but also about -- and  
17 who you are, but also, frankly, recommendations  
18 for the next Council. And that is extremely  
19 important.

20           I would say -- I would ask you to  
21 please remain engaged, so that manufacturing  
22 remains a top priority for the next

1 administration. You can do that by helping to  
2 continue to build out our National Network of  
3 Manufacturing Innovation, sign up to participate  
4 in Manufacturing Day on October 7th, which I know  
5 you all are doing more than signing up, and speak  
6 out and make sure your voices are heard on TPP.

7 On behalf of the President, I just  
8 want to say thank you. Thank you for your  
9 service. You've committed your most precious  
10 thing, which is your time, to help your country  
11 do a better job, so that we can grow  
12 manufacturing and manufacturing jobs in the  
13 United States. So thank you very much.

14 CHAIR SMYTH: Thank you very much,  
15 Secretary Pritzker.

16 In an effort to help you stay on  
17 schedule, Vice Chair Martinez and I will defer  
18 our comments, and we will move directly to  
19 comments from the co-chairs. We have four  
20 selected co-chairs from each one of the  
21 subcommittees, and you have one-and-a-half  
22 minutes. And I will hold you to it.

1 (Laughter.)

2 CHAIR SMYTH: I would like to first  
3 call upon Christie Wong Barrett who represents  
4 the Innovation, Research and Development  
5 Subcommittee. Christie?

6 MEMBER WONG BARRETT: Good morning,  
7 Madam Secretary. Thank you, again, for hosting  
8 us and allowing us to be part of this honorable  
9 group, delivering our public service for our  
10 sector and our country. Thank you.

11 I will mention we really appreciate  
12 your continued investment and focus on the  
13 National Network of Manufacturing Innovation. It  
14 is making a difference. It has made a  
15 difference. Several of the members of this  
16 Council and companies in our communities are  
17 active industry members of these institutes, and  
18 even members of future institutes that are soon  
19 to be announced. So we are engaged. We believe  
20 in it, we understand the value it will bring to  
21 our economy.

22 Thank you for mentioning the work that

1 was done previously in helping develop a process  
2 to launch and standup new institutes. Our  
3 subcommittee felt very confident about the  
4 success of the NNMIIs as a long-term asset for our  
5 country. So we went one step further, conducted  
6 several stakeholder interviews, spoke with every  
7 single institute director, in some cases the  
8 operations managers, met industry members that  
9 are participating institutes and industry members  
10 that are not participating institutes, to  
11 understand how do we not only launch the NNMIIs  
12 but, moving beyond that, scale them up and  
13 sustain them and bring continuous improvement to  
14 the network over time.

15 So to use that manufacturing analogy,  
16 the focus so far was on launch, and we have tried  
17 to take our letter that is coming for your review  
18 and for the Council's consideration to the next  
19 stages. So how do we scale up, sustain, and  
20 continuously improve the network?

21 So what we will be reviewing later in  
22 our Council review are recommendations that,

1 again, are meant to serve as best practice guides  
2 for the institutes, the network, that will create  
3 a compelling value proposition for industry to  
4 continue to participate, to double down on that  
5 participation, to sustain these new centers and  
6 the existing centers into the future.

7 The recommendation is a white paper,  
8 about a 12-page white paper that covers  
9 recommendations along organization and  
10 operations, which are how centers are structured  
11 and how they operate, recommendations on research  
12 portfolio definitions. So this is how projects  
13 are selected and carried out within those  
14 institutes, and also how future institutes are  
15 determined based on technology priorities for the  
16 country.

17 Thirdly, intellectual property, how  
18 centers should treat intellectual property. And,  
19 finally, sustainability, which covers funding  
20 considerations and standards to promote  
21 engagement for long-term success. So we hope  
22 that the Council will -- recommendations will be

1 accepted later in the day, and that you will be  
2 able to leverage these for the future success of  
3 the NNMI's.

4 SECRETARY PRITZKER: Terrific. Thank  
5 you.

6 MEMBER WONG BARRETT: Thank you.

7 CHAIR SMYTH: Thank you very much,  
8 Christie.

9 I'd like to now call on Ms. Andra  
10 Rush, who will speak on behalf of the Workforce  
11 Development Subcommittee and focus on  
12 Manufacturing Day.

13 MEMBER RUSH: Okay. Thank you, Madam  
14 Secretary. It's an honor to be here and work  
15 with everyone. This has been really an  
16 inspiration for me and for many. I want to  
17 highlight Michigan's Manufacturing Day  
18 specifically because we were number one last year  
19 with over 4,000 students in 178 locations. This  
20 year we want 6,000 students, 225, with the Henry  
21 Ford Museum being the anchor site.

22 Kids that aren't close to

1 manufacturing sites will be transported to the  
2 Henry Ford and see the Rouge operation, and they  
3 are funding -- public-private partnerships are  
4 funding that. The big invite has been to Vice  
5 President Joe Biden to help kick off this event  
6 for us, so we really hope that he will respond.  
7 And if he comes, we will even give him a free  
8 tour of Detroit manufacturing and golf at Oakland  
9 Hills.

10 (Laughter.)

11 SECRETARY PRITZKER: Thank you.

12 Terrific.

13 CHAIR SMYTH: Thank you very much,

14 Andra.

15 And I'd like to call upon Bill Yeargin  
16 on the TPP. Bill?

17 MEMBER YEARGIN: Good morning, Madam  
18 Secretary. Thank you for the opportunity to  
19 serve both you and our country in this manner.  
20 Our Innovation -- our Trade and Tax Committee  
21 submitted six letters with about a dozen  
22 recommendations, and I had to pick three of them

1 that we believe require the most focus. I'd say,  
2 first of all, the infrastructure. Infrastructure  
3 in our country is a significant issue, and we  
4 continue to be interested to know that, and I'd  
5 just encourage you to continue to focus on that.

6 Secondly is the TPP, and we appreciate  
7 the administration is all-in. As a CEO of a  
8 company with about 1,000 employee who manufacture  
9 in four states and operate in 70 countries, it  
10 would have a big impact on our industry, on our  
11 company. We directly create jobs, the TPP. And  
12 we strongly encourage and applaud what you're  
13 doing and appreciate the effort in that.

14 SECRETARY PRITZKER: Please make sure  
15 your voices are heard. It's critical between now  
16 and the end of the year. That's our window.

17 MEMBER YEARGIN: We are. And then the  
18 third thing is, you know, I think everyone on the  
19 Council here that I've spoken to have all been  
20 pleasantly pleased with the work the Department  
21 of Commerce is doing. And a lot of us could  
22 learn some things from what the Department of

1 Commerce is doing. We weren't aware. And so we  
2 strongly encourage you to, either through a chief  
3 marketing officer or some way, help get the word  
4 out because there is so much that DOC has to  
5 offer.

6 SECRETARY PRITZKER: That's an  
7 interesting idea.

8 MEMBER YEARGIN: Yes. And we stand  
9 ready to help you with any of those things if you  
10 need us to.

11 SECRETARY PRITZKER: Terrific. Thank  
12 you. That's a good idea.

13 CHAIR SMYTH: Finally, I would like to  
14 call Dr. Hiroyuki Fujita on behalf of the Energy  
15 Subcommittee.

16 MEMBER FUJITA: Thank you. Good  
17 morning, Madam Secretary and Madam Chair, Madam  
18 Vice Chair. On behalf of the Energy  
19 Subcommittee, I would like to present you a  
20 summary of what we have done.

21 On behalf of the Manufacturing  
22 Council, it is the Energy Subcommittee's goal to

1 promote great relationships in renewable energy  
2 while simultaneously increasing domestic  
3 production and export activity. The Energy  
4 Subcommittee's plan, we have promoted  
5 collaboration and the trade mission  
6 recommendation by letter by recommending a  
7 working group be formed in order to collaborate  
8 on the best path forward for developing and  
9 promoting renewable energy manufacturing in the  
10 U.S.

11 We are confident that the working  
12 group would best be able to identify both  
13 traditional and diverse trade mission  
14 opportunities in clean energy manufacturing.  
15 This trade mission would be useful and very  
16 attractive for SMEs, small or medium -- you know,  
17 small-medium enterprises, with limited resources.

18 We are pleased to have been able to  
19 contribute to such a successful and productive  
20 Council. In order to assist the future Council,  
21 the Energy Subcommittee has prepared a library,  
22 including the Energy Subcommittee's meeting

1 summary, the Energy Subcommittee Working Group  
2 contact information, a one-page response to the  
3 goals set forth by Secretary Pritzker.

4 And, lastly, we have included the  
5 talking points given at the Manufacturing Council  
6 meetings demonstrating the progress made, steps  
7 taken, and work accomplishment in the Energy  
8 Subcommittee. We've had the pleasure of working  
9 with all of you throughout this. Thank you very  
10 much for the opportunity.

11 SECRETARY PRITZKER: Thank you. Well,  
12 first of all, thank you for the summary. I  
13 appreciate it. It's very difficult in a couple  
14 of minutes to summarize what has been dozens and  
15 dozens and dozens of hours of work by a lot of  
16 people. So I thank you, and I thank your staffs  
17 for all of the work that they have done as well.

18 The priorities you outlined are ones  
19 that we are absolutely committed to. I want to  
20 take a minute before I leave and just say two  
21 things. First of all, personally, I have  
22 appreciated your work as someone whose family has

1       been in the manufacturing sector for my entire  
2       life.

3               I know how important this sector is,  
4       not just to our economy but to the strength and  
5       security of our country. So thank you for the  
6       work you do every day, but thank you for the work  
7       you do helping our government do a better job.

8               I would now like to ask your  
9       indulgence. I'd like to ask the staff of the  
10      different parts of the Department of Commerce to  
11      stand and for us to give them an applause.  
12      They're the folks who actually make it happen. I  
13      get to show up and talk to you, but they're the  
14      folks who day in and day out make it happen, and  
15      I think we owe them a round of applause for  
16      taking to heart the urgency of taking your ideas  
17      and putting them into action.

18              So, come on, guys, Donna --

19              (Applause.)

20              SECRETARY PRITZKER: But I want to say  
21      just thank you very much, and have a great  
22      meeting, and I look forward to receiving the

1 final copies of your recommendations.

2 CHAIR SMYTH: Thank you very much.

3 SECRETARY PRITZKER: Thank you.

4 (Applause.)

5 CHAIR SMYTH: Okay. So is everybody  
6 settled? Okay. I would like to introduce and  
7 turn the meeting over to Jason Miller, Deputy  
8 Assistant to the President, and Deputy Director  
9 of the National Economic Council. Welcome,  
10 Jason. Nice to see you.

11 MR. MILLER: Thank you for having me,  
12 Susan, Claudine, all of you who I have been able  
13 to spend time with over the years. For those I  
14 have not, I actually joined the administration in  
15 the spring of 2010 when the President decided  
16 coming on the back end of dealing with GM and  
17 Chrysler in 2009 that he wanted a dedicated and  
18 focused effort on the steps that we could take to  
19 build a more successful foundation for ongoing  
20 growth of the manufacturing sector.

21 I just want to emphasize a few of the  
22 things that Secretary Pritzker already covered

1 because, you know, we have experienced growth and  
2 recovery in manufacturing since 2010. But I  
3 don't think that people appreciate how profoundly  
4 different that period has been relative to last  
5 decade. All of you know the challenges that U.S.  
6 manufacturing faced the last decade.

7 My favorite statistic is there is no  
8 12-month period from 2000 to 2010 -- you can't  
9 find a single 12-month period from 2000 to 2010  
10 that the U.S. manufacturing sector added jobs.  
11 Not a single period. So that means from 2003 to  
12 2007, when the economy was growing at its fastest  
13 pace last decade, manufacturing lost over half a  
14 million jobs in that period, 2003 to 2007.

15 So the change in trajectory has been  
16 incredible despite some of the challenges that  
17 the Secretary noted over the last 18 months in  
18 terms of weaker export markets, lower capital  
19 investment, particularly from the energy sector,  
20 which has impacted a number of supply chains. So  
21 the change in trajectory has been dramatic, but I  
22 think the potential is in front of us.

1           The second thing I would say -- and  
2           this is incredibly important in this town -- is  
3           the change in the debate has changed profoundly  
4           as well. There was an economist in the previous  
5           administration who was quoted as saying,  
6           "Semiconductor chips, potato chips, who cares?"  
7           I think the connection between manufacturing and  
8           productivity growth through innovation is deeply  
9           important, something that this economic team has  
10          tried to focus the conversation on.

11           Manufacturing, of course, creates high  
12          quality jobs, not just in manufacturing but in  
13          all of the services sectors around manufacturing.  
14          But it's that connection between making,  
15          designing, and innovating that is critical to  
16          future growth, not just in manufacturing but  
17          across the entire economy.

18           And if we want policy done in the  
19          right way, that connection needs to be apparent,  
20          and it needs to be apparent to policymakers in  
21          this town. You know, the arguments were there is  
22          nothing different between manufacturing and any

1 other sector of the economy, one. Two, even if  
2 we were to do a lot of things, it's not going to  
3 make a difference.

4 And I think that if the debate around,  
5 one, there are still a few death throes for those  
6 who want to hang on to that, but it's  
7 dramatically -- it's in a very different place,  
8 and we need to keep the momentum on that. And,  
9 two, now the debate is focused on the right  
10 thing, which is one of the right things for us to  
11 do to support a stronger foundation for  
12 manufacturing going forward.

13 The third thing -- and I think this is  
14 particularly important for all of us to keep in  
15 mind, particularly in light of the challenges  
16 that manufacturing has faced over the last 18  
17 months -- is if you look at -- one, if you look  
18 at the performance over the last 18 months where  
19 everyone has been enormously concerned, in part  
20 because of weaker export growth and these other  
21 factors that have played out through various  
22 supply chains, that performance has basically

1       been equivalent to the best performance of the  
2       last decade.

3               So that's good, where we're in a  
4       position of concern it is at the higher end of  
5       where manufacturing as a sector performed last  
6       decade.

7               Two, and there is survey after survey  
8       showing this, the perception by business leaders  
9       operating in the United States relative to  
10      operating in other parts of the world is  
11      fundamentally different than it was a year --  
12      than it was 10 years ago.

13              So whether you look at the Boston  
14      Consulting Group surveys of U.S. manufacturing  
15      executives actively looking to move production  
16      back from China, whether you look at the recent  
17      Deloitte and Council on Competitiveness study  
18      that said that, you know, the U.S. in 2020,  
19      manufacturing executives from around the world  
20      see the U.S. as the single best place, most  
21      competitive place for manufacturing in the world  
22      in 2020; or whether you look at the A.T. Kearney

1 survey of global executives and where they want  
2 to invest, where is the best place for business  
3 investment, and the United States was number one.

4 That perception has changed. That is  
5 due to a number of important economic drivers,  
6 but it is also, you know, due to the actual  
7 performance of companies that continue making  
8 things here in the United States.

9 So building -- we need to build on  
10 that, both the substantive progress and the  
11 fundamental view of the role of manufacturing in  
12 our economy has changed for the better in the  
13 direction that it needs to be.

14 The Secretary talked about a number of  
15 areas where we have made -- where we have made a  
16 lot of progress. I'm not going to spend a lot of  
17 time going into that long list. I want to talk  
18 about what are we focused on over the next six  
19 months, and then how should we, as a collective  
20 who cares deeply about U.S. manufacturing, be  
21 thinking about the next five years.

22 We are -- and I was joking a little

1 bit with Christie and Susan at the beginning. I  
2 get the question a lot, which is, you know, there  
3 is less than six months left in the  
4 administration; are things slowing down? Are you  
5 finally sleeping?

6 (Laughter.)

7 MR. MILLER: And it's a little bit  
8 like, you know, you're on the final -- you're on  
9 the final curve of the track, and it is full  
10 sprint because there is a lot of things where we  
11 are executing, and the Secretary talked about a  
12 number of them, but things where we have set in  
13 motion a number of important initiatives or  
14 expanded important initiatives or really improved  
15 performance of underlying assets across the  
16 country. We have to execute all the way through  
17 the finish line.

18 At the same time that we're executing,  
19 that execution is linked in with what we call  
20 hardwiring. How do we hardwire the positive  
21 momentum that we have developed? The institutes  
22 are a perfect example of that. We are going to

1 have -- we have nine now. We are moving towards  
2 at least five more in place through existing  
3 competitions. We actually have all of the  
4 institute directors that Phil and the team at  
5 NIST are hosting here in D.C. on Thursday to talk  
6 about some of these issues in terms of the pieces  
7 we are putting in place to make sure that we have  
8 hardwired the elements we have built. That is  
9 particularly important for things like the  
10 apprenticeship effort that came out of  
11 conversations with so many of you about, how do  
12 we utilize tools that work in other countries  
13 that are dramatically underutilized in the United  
14 States. Hardwiring some of that in is critical.

15 And then of course in terms of  
16 remaining big ticket legislative items, we are --  
17 we are incredibly focused on TPP. If you haven't  
18 seen the President's remarks from yesterday, you  
19 should look at them, public remarks in a press  
20 conference about the importance and his  
21 commitment to getting TPP done. But at the same  
22 time that we're getting TPP done, the Department

1 of Commerce and other parts of the government are  
2 continuing to execute against trade enforcement,  
3 because those pieces have to go hand in hand. So  
4 our focus is, you know, execute and hardwire.

5 In terms of how should we think about  
6 some of the elements forward? I mean, where this  
7 group has logged innovation, workforce, trade,  
8 energy, really hits some of the areas where we  
9 know we need progress. In 2012, the President  
10 outlined a plan to significantly upgrade our  
11 nation's infrastructure, combined with business  
12 tax reform. That package makes sense. I think  
13 it could be getting -- it is unlikely that this  
14 Congress, in the next six months, is going to  
15 take that on, but something like that needs to  
16 get done for both reasons. I think the idea that  
17 American infrastructure is slowly becoming a  
18 liability is a fundamental problem that none of  
19 us should accept. That's an area of historic  
20 strength.

21 And, clearly, we have addressed some  
22 elements, but our business tax system isn't up to

1 competition with what we need right now. Pieces  
2 like the R&D tax credit being made permanent at  
3 the end of last year are meaningful, but they are  
4 just -- you know, they are forward steps. We  
5 need to reshape -- we need to reshape the overall  
6 structure.

7 The other piece that I think gets lost  
8 in the shuffle of D.C. debates is the idea that  
9 when you talk about the federal budget, right,  
10 it's a trillion dollars of discretionary money.  
11 That seems like an insane amount. There's got to  
12 be things that we can reduce out of that. It  
13 can't all be highly effective, highly productive.  
14 I come from the private sector. You can find 10  
15 percent to take out of anything.

16 At the same time, the problem that we  
17 have currently -- that we are currently facing is  
18 that we are, by every measure, underinvesting in  
19 federal research and development, which is the  
20 seed corn for innovation 10 years and 20 years  
21 down the line.

22 So until we get out of these absurd

1 budget debates, things like R&D will get  
2 underfunded. And while we won't feel the pain  
3 immediately, the pain is going to come. That  
4 means we have less capable young engineers and  
5 scientists because they're not able to get grants  
6 as graduate students. It means that our  
7 technology capabilities and assets are weaker  
8 than they otherwise would be. If you look at  
9 federal R&D as a share of GDP, it's at a historic  
10 low. It's at about 80 basis points of GDP.

11 It is at a historic low, and that's  
12 something that we're going to need to address,  
13 but it's impossible to address it unless we get  
14 out of -- get out of some of these budget  
15 debates.

16 And then I think the last thing is --  
17 that I want to say about going forward, one area  
18 where we have -- and this group has placed  
19 increasing emphasis is on, how do we harness the  
20 ingenuity and excitement of young people and  
21 entrepreneurs through the Maker Movement and  
22 other tools?

1           You have Andrew Coy, who I will ask to  
2           say a couple of things in a minute, but this is  
3           an area that I think, you know, one of our  
4           fundamental strengths as a country is that  
5           entrepreneurial spirit. And through a  
6           combination of a movement and tools that are  
7           cheaper and easier to access, you have a unique  
8           opportunity to get young people excited about  
9           making things.

10           You have the unique opportunity to  
11           lower the cost, lower the barriers for  
12           entrepreneurs to start new companies and create  
13           new products, and you can do that anywhere in the  
14           country. And I think that is a unique  
15           combination of things and an area where I would  
16           encourage all of you, in your communities, with  
17           your -- through your companies and through your  
18           networks, something that we can really -- that we  
19           can really push on.

20           Andrew, if you -- if people will  
21           indulge me for a moment, I just want to introduce  
22           Andrew. And, Andrew, if you want to just say a

1 couple of minutes on what we're doing on Making  
2 and how everyone can get involved, and then we'll  
3 open for -- to the extent we still have time,  
4 open for Q&A for a couple.

5 MR. COY: Yes. Thank you so much. So  
6 a couple of things with the Maker Movement and  
7 the bottom line is that in the moment in time  
8 where there is this space to grow. One is you  
9 have an increasing cost of production, you know,  
10 for advanced manufacturing tools and techniques.  
11 As you all are well aware, this has been on --  
12 you know, a rapid decrease in the cost. And then  
13 you have a growing movement of individuals that  
14 are interested.

15 So if you are really looking for ---  
16 these are opportunities for individuals to kind  
17 of show off what they have done. Think of it as  
18 a natural evolution of the World's Fair, but now  
19 instead of a massive organization showing off you  
20 have individuals who have been empowered because  
21 of a platform that exists to create tools,  
22 whether it's apps or hardware that can rapidly

1 grow.

2           And then the third kind of moment or  
3 piece of the puzzle is with crowdfunding  
4 opportunities, whether it's the recent  
5 opportunities that are created through law or the  
6 ongoing Kickstarter, Indiegogo culture, where you  
7 have somebody who has an idea and creates a  
8 prototype of it, and then they look to crowdfund,  
9 you know, the launch of that and grow into a  
10 massive -- whether it's augmented or virtual  
11 reality. As we have seen recently, there are  
12 other examples.

13           But all of that to say that, you know,  
14 the next innovations, where are they come from?  
15 We are seeing that happen right now in Maker  
16 spaces and in labs and places all over the  
17 country. And so how do we elevate that and tell  
18 the stories, how do we support that, how do we  
19 build this pathway of people going from -- you  
20 know, to a career, and having opportunities to  
21 create -- not just consume the world around, you  
22 know, consume, but to make use of the world.

1           So there is a number of initiatives  
2           underway to help support that. The present  
3           station of Maker is one of those. I have worked  
4           with Megan and others to help build out, you  
5           know, a niche for Makers. You all are -- you  
6           know -- I know that Maker is a relatively new  
7           term for a really old thing. And however we can  
8           leverage the momentum of this grassroots, you  
9           know, connect them into the existing  
10          infrastructure, you know, I think would be really  
11          important.

12                 And perhaps I will leave these, so  
13          this is from Megan Smith, who was -- a few years  
14          longer but wanted to share some of the different  
15          initiatives that the OSTP White House is  
16          undertaking of its tech hire, of some -- project,  
17          Computer Science for All, in its outlines for  
18          some of those improvised means.

19                         MR. MILLER: Thanks, Andrew.

20                         CHAIR SMYTH: Thank you very much,  
21          Andrew. You are speaking to an extremely  
22          enthusiastic audience.

1                   Jason, thank you very much for  
2 speaking. We have a few moments. I would like  
3 to open the floor for questions for Mr. Jason  
4 Miller. We seem to have a particularly shy group  
5 today.

6                   MEMBER FRIESEN: Maybe just a comment,  
7 then.

8                   CHAIR SMYTH: Wonderful. Thank you,  
9 Cody.

10                  MEMBER FRIESEN: So I have just  
11 returned from a U.S. Trade mission to Southwest  
12 Asia, ASEAN region, for water infrastructure.  
13 And what I can say is that the U.S. manufacturers  
14 that were on that trip are enthusiastic, and  
15 really the momentum, the zeitgeist, has really  
16 shifted in terms of sort of the excitement around  
17 U.S. manufacturing exports, and the things that  
18 we can go do in parts of the world that are  
19 coming up very quickly, right? Vietnam,  
20 Philippines, Singapore.

21                  So the great service that ITA does,  
22 that Commerce does, in advancing U.S. exports of

1 U.S. manufacturers is just tremendous, and we  
2 should continue to advance that as we round the  
3 last corner of the track, as you said.

4 MR. MILLER: Yes. Yes. I mean, one  
5 of the -- one of the areas where, you know,  
6 exports have slowed in the last year, export  
7 growth has slowed in the last year, but we -- we  
8 have increased exports as a share of GDP by  
9 almost three percent over the last several years.  
10 Yet compared to other countries, we have a lot of  
11 head room for growth. It is -- you know, I think  
12 this is -- this is why we're so focused on TPP.  
13 It's a huge and growing market with a huge and  
14 booming middle class with high demand for the  
15 quality of American-made products.

16 MEMBER FRIESEN: And I'll just add  
17 that TPP was an off-topic of conversation while  
18 in ASEAN. Everybody is excited about getting all  
19 the new closure on both sides of the table.

20 CHAIR SMYTH: We have a question from  
21 Dr. Albert Green.

22 MEMBER GREEN: Yes. You made a

1 comment that from 2003 to 2010, I believe you  
2 said that there was no 12-month period that I  
3 think you said manufacturing jobs I believe or  
4 jobs grew. But what about 2010 to 2016, was  
5 there -- what was the comparison there? Sort of  
6 waiting and --

7 MR. MILLER: Yes. So 2010, from  
8 February 10th -- or from February 2010 to now, we  
9 have added 843,000 manufacturing jobs. Most of  
10 that growth was prior to 18 months ago where  
11 things have leveled off because of some of the  
12 weaknesses around export growth and impacts in  
13 sectors that were growing through investment in  
14 the energy sector.

15 So our weak period, that 18-month --  
16 the last 18 months, is comparable to the strong  
17 period from 2000 to 2010.

18 MEMBER GREEN: I see.

19 MR. MILLER: And I think, you know,  
20 Secretary Pritzker cited a jobs opening figure.  
21 The other figure is if you look at the number of  
22 hours for non-supervisory employees, we're at

1 near historic highs.

2 So a lot of manufacturers -- and maybe  
3 some of you have been experiencing this in your  
4 business as well because either a combination of  
5 inability to get young people with the skills  
6 that you need or uncertainty associated with  
7 prospects for continued growth have been  
8 increasing hours of existing workers and holding  
9 off hiring.

10 MEMBER GREEN: Thank you.

11 MR. MILLER: Yep.

12 MEMBER YEARGIN: Jason, you heard my  
13 presentation we very much support TPP. In recent  
14 political conventions, in both political -- both  
15 candidates, both parties, seem to be opposing it.  
16 There seems to be a lot of opposition to it  
17 through that process. Can you share with us  
18 anything that is going on here that maybe isn't  
19 as public -- that gives you optimism that we can  
20 get TPP approved before January 20th?

21 MR. MILLER: People said TPA was dead  
22 six times. If you go back and look, there were

1 six different times where the press declared TPA  
2 finally dead. Note this time, this is the third  
3 time, it's truly dead now, and we got it passed.  
4 We got it passed with a bipartisan group,  
5 majority Republicans but a bipartisan group, and  
6 that is the group that we are -- that we are  
7 focused on getting TPP over the finish line.

8 So there are some additional process  
9 steps that need to happen between now and a vote,  
10 but I think that is at the core of why we're  
11 optimistic. This is one of the reasons and why  
12 Secretary Pritzker was harping on this, having  
13 the business community out there now and out  
14 there aggressively, about the direct impact it  
15 has on your hiring decisions in the United States  
16 is really critical.

17 At the same time, if you look over the  
18 last couple of months, one of the things we have  
19 also been trying to make very clearly is the  
20 national security argument here. It is a  
21 powerful one. The entire national security  
22 community, from sort of the foreign policy to

1 defense security side, all strongly believe in  
2 the importance of this. So whether it be the  
3 economic argument or the security argument, we  
4 are making it and we need to make it loudly.

5 And the third thing I just want to say  
6 is, you know, the conventions are conventions, so  
7 they are doing their thing. But, you know, I  
8 think the President said this clearly, and I  
9 would encourage all of you to just look at the  
10 transcript or go back and said -- at one point he  
11 said, "Look" -- somebody asked him a similar  
12 question. He said, "Look, I understand where  
13 both candidates are. I'm the President of the  
14 United States. I support TPP." And then he gave  
15 his case for why it matters.

16 CHAIR SMYTH: Okay. I would like to  
17 apologize to anyone that has further questions,  
18 but we are running 15 minutes behind schedule.

19 Jason, Mr. Miller, I would like to  
20 thank you very much for speaking to the Council.

21 MR. MILLER: Thank you.

22 CHAIR SMYTH: Much appreciated.

1 MR. MILLER: Thank you. Thank you,  
2 everyone.

3 CHAIR SMYTH: Okay. I would like to  
4 turn the meeting over to Donna Dodson. Your time  
5 is up.

6 (Laughter.)

7 CHAIR SMYTH: Ms. Dodson is the  
8 Associate Director and Chief Cyber Security  
9 Advisor and Director of the National  
10 Cybersecurity Center of Excellence at NIST and  
11 the U.S. Department of Commerce. Thank you,  
12 Donna, and welcome.

13 DR. DODSON: Thank you very much for  
14 the opportunity to be here and to have an  
15 opportunity to talk with all of you. As I'm sure  
16 my friend and mentor, Dr. Singerman, has already  
17 talked with you a little bit about NIST, and NIST  
18 being, really, a metrology organization, and the  
19 importance of those sorts of metrics for  
20 everything that we do in our lives, and  
21 particularly in manufacturing.

22 And I'm going to focus my remarks a

1 little bit on cyber security, because these are  
2 really, really exciting times. We are seeing  
3 drastic changes throughout all aspects of our  
4 lives, particularly in areas like manufacturing  
5 where we are seeing technology become pervasive  
6 in all that we do.

7 And there are really some remarkable  
8 efficiencies and opportunities with this kind of  
9 technology, information technology, what we call  
10 operational technology in manufacturing, what we  
11 are seeing as cyber systems and physical systems  
12 are coming together in, you know, the buzz words  
13 of Internet of Things, great opportunities.

14 And what we focus on is how to help  
15 protect those environments from cybersecurity  
16 threats. So we at NIST are responsible for  
17 developing standards and guidelines, best  
18 practices in cybersecurity, that help you take  
19 advantage of the innovations that we're seeing in  
20 IT and cyber physical systems, and so that you  
21 can protect your own systems.

22 We have guidelines and standards and

1 best practices that can be used by people in your  
2 organization, technologists within your  
3 organization, but also for small and medium-sized  
4 businesses, when they are going out and they are  
5 working with people to bring those kinds of  
6 capabilities into their environments, to  
7 understand what some of the basic cybersecurity  
8 requirements would be, and what kinds of security  
9 controls you'd want to put in place, whether  
10 you're looking at protecting your workers' mobile  
11 devices or sensors in networks or if you're  
12 working and you're starting to take advantage of  
13 cloud technologies for storage and processing,  
14 all of these different areas. And that's just a  
15 quick overview.

16           And all of this is publicly available.  
17 We work with industry and academia and other  
18 agencies when we develop these guidelines and  
19 standards and best practices. And I want to talk  
20 a little bit about the way we do that. It's  
21 really based on a risk management approach.

22           And a couple of years ago we were

1 asked by the administration to work with industry  
2 and academia to come up with a framework for  
3 improving critical infrastructure, cybersecurity,  
4 based on standards and best practices. And we  
5 work with industry to come up with this framework  
6 that applies to critical infrastructure but is  
7 also being used in a number of other areas. The  
8 retail associations and the restaurant  
9 associations are some examples of people who have  
10 taken this framework and worked with their  
11 constituents to apply it within their  
12 organizations.

13           It is based on five high level  
14 principles to identify what your digital assets  
15 really are, whether it's intellectual property,  
16 whether it's operational technology that relies  
17 on a computer at the front end to protect or to  
18 manage some of the processes. And so you really  
19 have to be able to identify those capabilities,  
20 and it turns out that a lot of times IT kind of  
21 has filtered into organizations, and there is  
22 somebody in charge of that and it's not me, and

1 from a C-suite perspective, those are the folks  
2 that come back and ask me for more money to do  
3 things, and I'm never really sure what they do.

4 But the framework and the work that  
5 we're doing at NIST with industry is really to  
6 create that culture of cybersecurity to protect  
7 all of our assets across the nation. And it  
8 really starts at the appropriate high level, and  
9 that commitment from the C-suite all the way down  
10 to the bits and bytes folks. And let me tell  
11 you, I'm more comfortable with the bits and bytes  
12 folks, as Phil can tell you.

13 But really, that importance of  
14 understanding where you have these capabilities,  
15 and then protecting those capabilities,  
16 protecting those capabilities. What security  
17 controls do you want to have put in place and  
18 why? And how do you do that in a standardized  
19 fashion? And then to be able to detect if a bad  
20 actor or bad things are happening in that  
21 environment, to be able to respond and recover.

22 So in the world of cyber security, the

1 goal used to be to stop everything before it came  
2 into your environment. That has become a  
3 tremendous challenge. And just like anything  
4 else that you do in your organization, it is  
5 based on really that risk and based on  
6 resiliency. Storms happen and transportation  
7 goes down, and you have to be resilient in your  
8 manufacturing operations to account for that.

9 This is no different, but it's a tool  
10 to help you look at cybersecurity risk management  
11 and put it in context with your other business  
12 risk management.

13 So we have actually -- some of my  
14 colleagues at NIST have been working, and  
15 actually have a profile out that is in draft  
16 form, so we really appreciate your comments on  
17 this. But we have a profile out particularly for  
18 manufacturing, and it gives you a simple method  
19 to indicate the types of security controls that  
20 you have in place to protect your manufacturing  
21 system and resources, and that associated  
22 information.

1           It gives you the ability to evaluate  
2           your ability to operate the control environment  
3           at an acceptable risk level. And it's also a  
4           standardized approach to preparing cybersecurity  
5           plans for ongoing assurance of the manufacturer's  
6           system security. So not just where you are today  
7           but where you may want to be in the future.

8           The tool of the framework and this  
9           kind of profile also helps you from a supply  
10          chain perspective understand the risk postures  
11          from a cyber security perspective of where you  
12          are in the supply chain and where organizations  
13          that you are depending on, and also for you to be  
14          able to demonstrate back to other organizations  
15          your cyber security posture. So it is a tool.  
16          It is all voluntary like NIST, like ITA, and  
17          other parts of the Department of Commerce, are  
18          non-regulatory. We really believe in that  
19          market-based approach, and this kind of guideline  
20          helps you as you are evaluating and reviewing  
21          what your own risk looks like.

22                 So I encourage you to take a look at

1 that, to provide us feedback, and your thoughts  
2 on it. It is there as a tool to help  
3 manufacturing, so we want to make sure that we've  
4 gotten it right. And I want to tell you, so all  
5 of our resources, again, are all publicly  
6 available to organizations.

7 And with this great group, I also want  
8 to tell you about something we are doing that we  
9 started about three years ago called a National  
10 Cybersecurity Center of Excellence. And at our  
11 center we are working with the different business  
12 sectors and the economy as they are trying to  
13 take these cybersecurity standards and best  
14 practices and be able to put them in place in  
15 their environment.

16 So I would be remiss in any one of my  
17 talks since I started in the crypto area, if you  
18 have a need for confidentiality in some of your  
19 information, and you decide you want to use  
20 cryptography, we have lots of standards and best  
21 practices to tell you how to do that, but it is  
22 still hard.

1           So what we do is work with different  
2 sectors like manufacturing, or right now we are  
3 working with healthcare, financial services,  
4 utilities, and retail as some examples, on what  
5 their business requirements are for cyber  
6 security, and then how to build out capabilities  
7 underneath of it based on standards and best  
8 practices.

9           We don't work one on one with a  
10 particular company, but it's really to  
11 demonstrate this out from a sector look, so that  
12 you can take that real-world worst example and be  
13 able to apply it easier in your own environment.

14           So that's another important resource,  
15 so our resources of standards and best practices  
16 on the kinds of requirements and things that you  
17 should be considering as you're using different  
18 technologies and how you get the security  
19 capabilities in place. A good place to get  
20 started on cyber security is using the framework  
21 and looking at that profile that has been  
22 tailored from the framework's big perspective to

1 manufacturing.

2 And then third is the Cybersecurity  
3 Center of Excellence and being able to bring your  
4 requirements and us work with you as  
5 manufacturing to take a look at these kinds of  
6 capabilities that you all need to put in place.

7 And, with that, I will stop with  
8 questions. I heard the bell, but that's a quick  
9 high level overview of some of the things --

10 CHAIR SMYTH: Thank you very much --

11 DR. DODSON: -- we have been working  
12 on.

13 CHAIR SMYTH: -- Dr. Dodson. I would  
14 like to thank you for speaking. I would also  
15 like to acknowledge the presence of Dr. Meagan  
16 Brewster. Meagan was kind enough to speak and  
17 address the Council at our session in Cleveland  
18 on this very issue. So thank you and welcome to  
19 the meeting.

20 I would now like to open the meeting  
21 for any questions. Christie Wong Barrett.

22 MEMBER WONG BARRETT: Yes. Thank you

1 very much, Ms. Dodson, for your efforts on cyber  
2 security. It's an area that I think is growing  
3 in visibility with our sector. I would like to  
4 make a couple of comments, just from my  
5 perspective as a small manufacturer as part of  
6 the supply chain.

7 First would be as a company owner and  
8 CEO, we are making decisions every day about  
9 where we put investments and where we invest  
10 ahead of where there is a need. There is clearly  
11 a need here, so I think something that could be  
12 helpful in accelerating adoptions are business  
13 metrics around why cybersecurity improvements are  
14 important.

15 So to the extent that NIST had  
16 information about the cost of recovery, the cost  
17 of risks when the risks do occur, what does it  
18 actually cost a company? And also, some ideas of  
19 what does it take in terms of a financial  
20 investment to make the improvements necessary to  
21 mitigate those risks or prevent them from  
22 happening in the first place?

1           It can give us the tools that we need  
2           to make the case to make those investments. So  
3           that would be helpful if you have access to that.

4           DR. DODSON: We actually have a small  
5           business guide related to the framework that we  
6           are finishing up now and should be out in the  
7           fall that gives you some ways to look at this and  
8           help with those calculations.

9           MEMBER WONG BARRETT: Great. Thank  
10          you. The second request is to my industry  
11          partners, my customers, the largest manufacturers  
12          in the room that have an active management of  
13          their supply chains. Everyone has supplier  
14          scorecards, audits that you require, capabilities  
15          that you try to instill in your supply chain. I  
16          am imagining cybersecurity is going to become a  
17          component of that in the new future if it's not  
18          already a part of it today.

19          What I would ask is that you work with  
20          your own internal quality organizations to help  
21          develop the scorecards in a way that your smaller  
22          supply chain partners can be successful. So how

1 do we tailor the scorecards, the metrics, to be  
2 appropriate for a smaller company, appropriate  
3 for managing the risk in that environment?

4 Because sometimes a one size fits all metric is  
5 put in place and it becomes very difficult and  
6 unreasonable, unnecessary even, to make some of  
7 those investments. And it increases the cost of  
8 your supply chain ultimately for no good reason.

9 So I think it's just as you all as  
10 manufacturing leaders can message that back to  
11 the quality representatives in your organization  
12 as they are thinking about, how do we actually  
13 roll this out in our supply chain in a pragmatic,  
14 productive, cost-efficient way?

15 Thank you.

16 CHAIR SMYTH: I'd like to welcome any  
17 more questions? Jenny Houston.

18 MEMBER HOUSTON: I'd just like to add  
19 a bit to Christie's comments, in that the  
20 government -- I'm very glad to hear about the  
21 small business guide specifically to that, and I  
22 had very similar concerns or interests that

1 Christie voiced.

2           And to add to that that the government  
3 or NIST doesn't give very specific  
4 recommendations, so you can't give specific  
5 software or specific items. And for a small  
6 business, very specific sort of "here is your  
7 recipe card for successes for certain things."

8           So then you have to spend a great deal  
9 of money to go and figure that out, a piece of  
10 that, as much as you can say, "Here are the  
11 current top 10 that might be on the list. There  
12 are others, but here are some." Then they can  
13 figure it out monetarily.

14           And to the second point of Christie,  
15 if the supply chain, where there are larger  
16 corporations who actually know exactly what to  
17 do, they can give direction, can say, "Here is  
18 exactly the simple recipe you could follow, and  
19 here is what you should do to do that." Because  
20 very small businesses do not have the funds to  
21 have the dedicated IT people to do that. And  
22 it's not that we don't want to; it's just that

1 nobody will give us the tea leaves or the recipe.

2 DR. DODSON: So, our National  
3 Cybersecurity Center of Excellence does provide  
4 that sort of recipe, if you will. And we  
5 actually work with industry collaborators from  
6 both the consumer and, in this case,  
7 manufacturing or small business manufacturing as  
8 well as the technology providers, so the  
9 technology providers come in with us and build  
10 out a sample. And so you can see that recipe of  
11 exactly what we did and why we did it, and that  
12 it really works.

13 And we are not saying by any means  
14 that this is the only way to do it, or these are  
15 the only companies you can work with to do it,  
16 because you can take that same architecture and  
17 put it in play in your environment.

18 I think one of the challenges -- I'll  
19 be quick -- one of the challenges for us is to  
20 make sure that we are really listening to the  
21 sectors in terms of what their requirements are.  
22 So when we worked with healthcare, for example,

1 their consortium had been very active in having,  
2 as part of their consortium, a small business rep  
3 who reminds us of the four- and five-person  
4 doctor offices as an example.

5 And we don't know that. That's not an  
6 area that we know, so we can go back and ask  
7 those questions and have those dialogues to make  
8 sure what we're doing addresses this particular  
9 area. So we recognize we understand and speak  
10 cybersecurity really well, but that's not  
11 helping. Cybersecurity people talking to  
12 cybersecurity people are not going to address the  
13 nation's challenges. It's got to be part of the  
14 business culture, and that for us definitely  
15 includes small businesses.

16 CHAIR SMYTH: Okay. Thank you very  
17 much, Dr. Dodson. We appreciate your insight in  
18 this area that is becoming of increasing  
19 importance to this Council and to the  
20 manufacturing community at large. Thank you,  
21 again.

22 Okay. I'd like to now hand the

1 meeting to Vice Chair Claudine Martinez.

2 VICE CHAIR MARTINEZ: Thank you, Ms.  
3 Smyth.

4 I just wanted to add, Ms. Dodson,  
5 really quickly, just so that you know, that the  
6 Council was formally we think, once they adopt  
7 the letter that we have coming up, it will be the  
8 third letter for consideration today, and in that  
9 is -- we're calling it sort of a hand-off letter.  
10 And there are two areas in particular that we are  
11 encouraging the next Council to be able to  
12 entertain the possibility of having different or  
13 additional subcommittee topics. Cybersecurity is  
14 one of them, as well as supply chain. So that  
15 really resonated with us, with Dr. Brewster's  
16 comments that we had in Cleveland, and we are  
17 taking that very, very seriously, and have put  
18 that in our briefing papers to the Secretary, who  
19 did discuss it this morning as well.

20 CHAIR SMYTH: Excellent.

21 VICE CHAIR MARTINEZ: So your points  
22 are well taken for the Council.

1           CHAIR SMYTH: And we would appreciate  
2 the opportunity to continue to be able to work  
3 with the next Council, because the investment  
4 that you all have made in manufacturing and being  
5 able to protect that means so much to our whole  
6 national economy.

7           VICE CHAIR MARTINEZ: Absolutely. One  
8 of the themes you'll hear for the remainder of  
9 the day is that we want to make sure that all of  
10 our work is used as a springboard to onboard the  
11 next Council as quickly as possible. And this  
12 would be one of the focus areas for those  
13 efforts. Thank you so much.

14           I'd like to introduce the next section  
15 of Commerce initiatives and partnerships through  
16 a variety of speakers now that we have, and I'm  
17 very honored to introduce my colleague to my left  
18 here. Mr. Phillip Singerman could not be a  
19 bigger advocate for the Manufacturing Council.  
20 We are very, very fortunate to have worked with  
21 him. I have now worked with him I think for  
22 about four years now, right?

1           So I had the opportunity to serve on  
2           the previous Council as well, and just the  
3           tangible hands-on advice that Mr. Singerman has  
4           given, I think several members of our Council as  
5           well have informed us on our laser  
6           recommendation, not just in this Council but in  
7           the previous Council. We thank you for that,  
8           sir.

9           DR. SINGERMAN: Thank you. And,  
10          Susan, you'll set off -- shut off your chime for  
11          me?

12          CHAIR SMYTH: I will, Phil. For you  
13          there is no time limit.

14          (Laughter.)

15          DR. SINGERMAN: I get extra penalty  
16          time.

17          (Laughter.)

18          DR. SINGERMAN: Thank you for inviting  
19          me. I really want to thank the Council for your  
20          extraordinary support and guidance of NIST's  
21          Advanced Manufacturing Program. The partnership  
22          program institutes the manufacturing extension

1 partnership. Your recommendations have been  
2 extraordinarily helpful to us as we have  
3 developed these programs over the last several  
4 years.

5 Both programs fall within the  
6 Innovation and Industry Services Directorate,  
7 which I'm responsible for. So what I want to do  
8 today is to provide a very brief status report on  
9 these activities.

10 VICE CHAIR MARTINEZ: May I just  
11 suggest to you that you tell us what's in the  
12 packet.

13 DR. SINGERMAN: I'm about to do that.

14 VICE CHAIR MARTINEZ: Okay. Great.

15 DR. SINGERMAN: So in your packet on  
16 the left-hand side are two PowerPoints that we  
17 have prepared and circulated. I'm not going to  
18 go through them. I'm going to refer to a couple  
19 of them as a guide to my remarks.

20 What I'm going to talk about first is  
21 the status of the Manufacturing Innovation  
22 Program, the institutes, the network, and future

1 plans. Then I'm going to describe recent  
2 activities by the Manufacturer Extension  
3 Partnership Program, small manufacturers with the  
4 resources of the institutes at DOE's national  
5 laboratories. And, finally, I'll have a comment  
6 about the discussion we've just had about supply  
7 chain, small companies, and cybersecurity.

8 So on your first PowerPoint, the one  
9 that looks like this page, if you would turn to  
10 page 3 and look at the map at Slide 4.

11 And so as Jason Miller indicated,  
12 starting in 12012 -- 2012, sorry -- the  
13 administration launched an ambitious plan to  
14 create a national network of Centers of Research  
15 Excellence in manufacturing technology. We used  
16 existing authority and existing appropriations at  
17 the Department of Defense and the Department of  
18 Energy, with some modest support from NIST and  
19 NASA, to fund to date nine institutes. And the  
20 nine institutes are depicted on the chart, on the  
21 map.

22 The two most recent institutes, the

1 one in the far upper right which is in Boston,  
2 and the far lower left which is in Los Angeles,  
3 were just awarded this spring. The plan is by  
4 next year we will basically double the program to  
5 as many as 15 institutes. So it's an  
6 extraordinary ramp up over a short period of  
7 time.

8 At that point, the federal government  
9 will have made a five-year -- a multi-year  
10 commitment of at least a billion dollars, which  
11 is being matched by non-federal sources of  
12 approximately \$1-1/2 to \$2 billion. So this is a  
13 major effort that Jason and -- Jason is not here,  
14 but Jason Miller and his colleagues, Jessica,  
15 J.J. Raynor, who I believe has spoken to this  
16 panel before, and Megan Brewster, have really  
17 been the lead on the administration side in  
18 bringing all of the agencies together to launch  
19 this really extraordinary effort.

20 In 2014, Congress passed the  
21 Revitalize American Manufacturing and Innovation  
22 Act. We call it the RAMI Act, which created a

1 program at the Department of Commerce headed by  
2 the Secretary, grandfathering in all of the  
3 existing institutes, establishing a network of  
4 the institutes, and creating at NIST a national  
5 program office to coordinate the network and  
6 authorize the DOC to fund institutes on its own.

7 Congress, for fiscal 2016, the year  
8 we're in now, appropriated \$25 million to oversee  
9 and coordinate the network and to fund one  
10 institute. The President has proposed, in the  
11 fiscal '17 budget, \$47 million, which would  
12 continue the management of the network and fund  
13 three institutes. So that's the funding we have  
14 this year, \$25 million, and what the President  
15 has proposed in fiscal '17.

16 We have a number of activities that we  
17 are advancing across the network to utilize best  
18 practices, help new institutes start up more  
19 rapidly, and coordinate the institutes in a way  
20 that makes them more transparent and accessible  
21 to the private sector.

22 As Jason mentioned, this week we are

1 meeting with -- the federal partners are meeting  
2 with all of the institute directors at the NIST  
3 campus in Gaithersburg to look at workforce  
4 development, branding and identity for the  
5 network program, and developing a governance  
6 structure for the program. So that is work that  
7 is ongoing as we speak.

8 Future plans, if you would turn to  
9 page 6, Slide 11. So underway are five  
10 solicitations to stand up new institutes, two by  
11 DoD -- those are the red boxes in the upper left  
12 of that slide, one in advanced tissue  
13 biofabrication, the other in robotics; two by the  
14 Department of Energy, one in modular chemical  
15 process intensification, and the second in  
16 sustainable manufacturing.

17 And at the Department of Commerce, an  
18 open topic competition, which you wrote about,  
19 gave us very helpful guidance in your first  
20 letter about how to conduct that competition.  
21 And we have followed that guidance. It has been  
22 very helpful to us in identifying concerns and

1 interests of the private sector that were  
2 translated into operational activities.

3 So if we turn the page to Slide 13,  
4 one of your instructions to us was to do very  
5 aggressive outreach to the broadest manufacturing  
6 community to ensure that we would have as wide  
7 and diverse a group of proposals that we could  
8 easily achieve.

9 In contrast to the DoD and DOE  
10 programs, which the institutes had to be aligned  
11 with the missions of those agencies, the law  
12 prescribes for DOC that we are conducting open  
13 topic competitions. So we are accepting all  
14 proposals in any technology area and are  
15 evaluating them.

16 We began the process this year. We  
17 have received a robust number of proposals in a  
18 diverse array of technology areas. Our goal is  
19 to complete our review process this fall and make  
20 one or more awards by January 2017.

21 Part of your guidance to us was to  
22 keep the barrier to entry low for proposals. And

1 so in furtherance of that, we adopted a two-stage  
2 process, a simplified pre-application, so that  
3 good ideas can come forth without the really  
4 million dollars of expense that is required for a  
5 full application.

6 We down selected from those, and then  
7 we invited those finalists to submit full  
8 applications. So that guidance was extremely  
9 helpful.

10 Let me turn to the complete set of  
11 slides, which I'm sorry are smaller. And these  
12 will be posted online, as many of the staff know.  
13 We'll make them available. We can send them to  
14 you electronically, so you can have easy access  
15 to them.

16 So what I want to briefly talk about  
17 is the recent activities of MEP to support the  
18 institutes and DOE national laboratories. Part  
19 of our statutory requirement is to connect small  
20 businesses, small manufacturers, to the resources  
21 of federal laboratories, in NIST's laboratories,  
22 the entire federal intramural research program,

1 which is approximately \$50 billion on the white  
2 side -- not on the dark side of the budget but on  
3 the white side of the budget.

4 This of course is a major problem that  
5 people have been grappling with for at least a  
6 half a century, how to make these very complex  
7 technologies accessible and usable to small  
8 manufacturers who lack time, resources, technical  
9 breadth, in order to translate those into  
10 commercial activities. That is part of our  
11 mission focusing on the small manufacturers, and  
12 we have returned to that mission in the last few  
13 years as part of our nationwide reform of the MEP  
14 program.

15 I'm not going to review the program.  
16 I know you were briefed on this in -- at your  
17 meeting in Cleveland, which gave folks an  
18 opportunity to bring you up to date on those  
19 general activities.

20 A couple of points that are helping us  
21 do this. One is MEP is uniquely and specifically  
22 mentioned in the RAMI legislation. As an entity

1 whose resources should be used to connect the  
2 institutes to the small manufacturing centers,  
3 and no other federal program is so mentored. And  
4 so we take that directive very seriously.

5 In order to advance that, we have  
6 entered into a memorandum of understanding with  
7 the Department of Defense and the Department of  
8 Energy. So there is a formal structure for us to  
9 engage with those institutes, which don't fall  
10 within the Department of Commerce's programs but  
11 are external to that.

12 And to advance those initiatives, we  
13 have committed \$7 million, soliciting joint  
14 proposals from the institutes and MEP centers to  
15 provide mechanisms for reaching out to the small  
16 manufacturing community across the country. And  
17 we are in the process of reviewing those  
18 proposals and plan to make an announcement before  
19 the end of this fiscal year.

20 This program is based upon a  
21 successful model in New Mexico where the MEP  
22 center is -- center staff are embedded in Sandia

1 and Los Alamos, so they provide -- navigate, if  
2 you will, to the resources of the labs to the  
3 communities, to the companies, and also help the  
4 lab scientists work more closely with small  
5 companies.

6 And this has been an amazingly  
7 successful program. It requires of course elbow  
8 grease. You know, you just can't do it by email,  
9 you can't throw things over the fence, and you  
10 have to have people who are knowledgeable about  
11 the companies, who are knowledgeable about the  
12 lab resources, and can function effectively as  
13 intermediaries to bring those resources to bear  
14 on the needs of the company.

15 So that was the bell, I take it.

16 CHAIR SMYTH: It was, Phil.

17 DR. SINGERMAN: Okay. So let me  
18 conclude with a comment about cyber security and  
19 supply chain. So NIST, and in particular MEP,  
20 has been the Commerce Department lead on supply  
21 chain issues. We've been working on this for a  
22 couple of years. I think it has enormous

1 potential and importance in this issue, and I am  
2 anticipating and hopeful that in the future this  
3 will be raised to a signature level within the  
4 Department.

5 Specifically, with regard to cyber  
6 security, we are building upon that work so far  
7 with supply chain to infuse information into the  
8 MEP national network about cyber security  
9 standards, so that small companies can be smarter  
10 about it. And the MEP centers are not federal  
11 employees, so we are not -- they are not limited  
12 in their ability to provide specific guidance.  
13 This is what they do all the time as part of  
14 their technical assistance program, and we're  
15 putting money behind that. In addition to that -

16 -

17 CHAIR SMYTH: That's great.

18 DR. SINGERMAN: -- the Boulders  
19 National Quality Program, which is also -- and  
20 some of you may be familiar with that -- has a  
21 special partnership now with Donna's group to  
22 develop a cyber security framework for small

1 companies. So a set of standards that the  
2 companies can apply, and the MEP is funding that  
3 as well. So we're trying to -- we've heard what  
4 people have been saying over the last several  
5 years, and we are going to provide technical  
6 assistance to the small manufacturing community  
7 to deal with this enormous cyber security  
8 problem.

9 CHAIR SMYTH: With that, I think we  
10 have time for just one question. Please.

11 MEMBER PAREEK: Mr. Singerman, I  
12 represent Hydraulex Global, which is a company I  
13 formed. We have become the largest  
14 remanufacturer of hydraulic pumps and motors that  
15 go into plastics, mining, construction. So I am  
16 delighted to see that recycling and  
17 remanufacturing is one of the topics that is  
18 selected here.

19 How do you recommend as a way to get  
20 involved into that network?

21 DR. SINGERMAN: So that's one of the  
22 issues that the institute network is dealing

1 with. Each of the institutes were stood up on  
2 their own, their own special requirements and  
3 special construction, but we really need to make  
4 it -- and you've commented on this -- transparent  
5 to businesses, small and large, so that if they  
6 deal with one institute they can deal with all of  
7 the institutes. What we have found -- and so  
8 there has been some movement in that direction.

9 One way is some of the institutes have  
10 tiered memberships, so that it's inexpensive for  
11 small companies to participate in the program.  
12 The new energy institute in UCLA was developed in  
13 close coordination with our MEP center there, and  
14 part of that program is that any small business  
15 with fewer than 100 employees can be a member of  
16 the institute without paying a membership fee.

17 So we are looking at ways of getting  
18 -- and the final point I will make is that once  
19 an institute is selected, it becomes really a  
20 gravitational center, so other companies and  
21 other organizations that may have competed for a  
22 particular area, they join. And so the growth in

1 the institutes from the time they announce until  
2 a year or two or three later is really quite  
3 geometric in terms of the membership.

4 So I would be glad to provide -- if  
5 there is a particular institute that you are  
6 interested in, I would be glad to provide you  
7 with contact information.

8 MEMBER PAREEK: That's great. Thank  
9 you.

10 VICE CHAIR MARTINEZ: Mr. Singerman,  
11 thank you so much. We could have a whole other  
12 hour on all of these topics and invite everyone  
13 to interface with you after the meeting. And,  
14 really, thank you for your time and your efforts,  
15 your patriotism.

16 DR. SINGERMAN: Thank you.

17 VICE CHAIR MARTINEZ: And especially  
18 the support of the Council. Thank you so much.

19 DR. SINGERMAN: Absolutely.

20 VICE CHAIR MARTINEZ: Now I would like  
21 to turn it over to Erin Sparks. But before I do,  
22 I'd like to say a word of gratitude on behalf of

1 Susan and myself, as well as the rest of the  
2 Council. You know, every time we have a call, we  
3 have an issue that comes up, you take our call  
4 all of the time. We realize how busy you are  
5 being one of the main Secretary advisors,  
6 certainly one of the main ones that we have with  
7 the ear of the Secretary for the Council, and we  
8 just really want to thank you from the bottom of  
9 our hearts. We realize how busy you are.

10 Archana has stepped out of the room.  
11 I hope she'll come back in, so we can sing her  
12 praises as well. But since you are part of the  
13 program, I thought I'd say thank you.

14 MS. SPARKS: Thank you. Thank you.  
15 And I want to also say thanks. Every time I have  
16 called you all, you have responded, and that has  
17 been such a wonderful resource for me to have, to  
18 know that this incredible group of manufacturers  
19 is not just there for me to ask questions and to  
20 make sure what we're doing resonates with you  
21 all, but is so responsive.

22 And just a recent example, I sent you

1 all an email saying, "Please help us. Please  
2 participate in this survey to help us with the  
3 NNMI identity." And within five minutes I had  
4 email responses saying, "Got it. We're on it."  
5 Just knowing that you all are there to support us  
6 in those really specific ways has been a huge  
7 help, and we have really appreciated it.

8 This committee in particular I think  
9 has been such a great example of how a private  
10 sector advisory committee should work, and you  
11 all should be so proud of everything that we have  
12 done. And we can't thank you enough, so thank  
13 you, and I think especially thank you to Susan  
14 and Claudine and to each of the subcommittee co-  
15 chairs for the work you have put into making this  
16 Council successful. It has been a real learning  
17 experience for me to see your leadership in  
18 action, so I appreciate that.

19 VICE CHAIR MARTINEZ: Thank you.

20 MS. SPARKS: I want to just provide a  
21 really brief update to you all specifically on  
22 the Workforce Subcommittee letters, and

1 specifically the one on the manufacturing image  
2 campaign. And I think this is an ongoing  
3 conversation that we have had, and we continue to  
4 have. And I think what we appreciated about your  
5 most recent letter is how specific it was and  
6 that you really got into some very detailed  
7 recommendations about how we can make this  
8 happen.

9 I think we are ready to move forward  
10 with you all. We want to be your partners. I  
11 think the things that I want to emphasize is,  
12 first, your leadership remains key. I think this  
13 broader, bigger image campaign will only move  
14 forward if the private sector is in the driver's  
15 seat. And so we're there to be supportive, we're  
16 there to make connections, we're there to help  
17 you. But you all really need to drive it.

18 Second, I would say the letter sets  
19 out a very ambitious, audacious goal. We totally  
20 support that. We want to aim high. We should.  
21 I think just for thinking practically it may make  
22 sense to find a way to start small, start with a

1 pilot project, find a way we can bring the right  
2 partners together, get an early easy win, and  
3 have the conversation sort of moving forward into  
4 something bigger.

5 And so that's something I have put  
6 some thought into, have started to do some  
7 research on what some options could be for that  
8 kind of smaller scale pilot project that I would  
9 love to continue to have a conversation with the  
10 Workforce Subcommittee about how we might be able  
11 to just continue to move this ball forward. You  
12 know, please hear that we want to be engaged in  
13 this in the rest of the time that we have left.  
14 So thank you.

15 And then, of course I want to mention  
16 Manufacturing Day as well. And you all, as the  
17 Secretary mentioned, have helped us make it  
18 incredible as it has evolved. You have really  
19 helped us turn this into a national movement. So  
20 we hope that not only will you state this here,  
21 as I know you all will, but going forward that  
22 you will continue to over the next years make

1 this part of what your company does, to share the  
2 strengths of manufacturing in the U.S.

3 So let me give you two things. One,  
4 our goals and plans for this year; and then,  
5 second, if you haven't gotten it already, some  
6 formal results from last year, which I think are  
7 great to have at hand. So we are running full  
8 speed ahead to get ready for October 7th,  
9 Manufacturing Day. It's in about two months.

10 Our goal is to see 3,000 events this  
11 year across the country. We can use your help  
12 getting there, I think. But what I want to share  
13 with you is that just your letter of  
14 recommendation has already helped us in getting  
15 to that goal. You recommended that we work with  
16 other federal agencies in our planning. That is  
17 something that we have done in the past, but we  
18 have really expanded that work this year.

19 And I am so thrilled that we have  
20 really good engagement from the Departments of  
21 Energy, Education, Agriculture, and Defense,  
22 among others. They are helping with outreach to

1 companies that they work with and stakeholders.  
2 Some are even considering hosting their own  
3 events and trying to pull that together.

4 I am thrilled that NIST is going to be  
5 hosting an event this year for the first time.  
6 They are going to be opening up some of their  
7 labs to show local school children some things as  
8 well.

9 And we are also using your  
10 recommendation to encourage company-neutral  
11 events. We are doing outreach at a regional  
12 level to mayors' offices, governors' offices,  
13 chambers of commerce, to get them to help  
14 spearhead these company-neutral efforts that  
15 really take it to a regional scale. And we are  
16 using the examples of you all winning the way in  
17 Detroit and in Dayton. So thank you for doing  
18 that. Thank you for leading the way and giving  
19 us good examples and for your recommendation that  
20 we expand that work.

21 So looking forward, there are  
22 opportunities for you all to be involved with us

1 this year beyond just hosting events. I know  
2 last year you all were a wonderful resource for  
3 us when we wanted to spotlight some company  
4 stories on the Commerce Department blog.

5 So this year we are going to be doing  
6 a couple of fun social media campaigns, and we'd  
7 love to have some of your companies participate  
8 in those. We are still kind of working on the  
9 package of materials to get companies up to speed  
10 on that, so I will share those when it's ready  
11 and look for ways for you guys to partner with us  
12 on that.

13 And, finally, I included in your  
14 packets this Manufacturing Day at a Glance, the  
15 results from last year. So we were able to work  
16 with Deloitte last year and conducted interviews  
17 of participants during Manufacturing Day. And  
18 our goal was really to provide an external  
19 evaluation. The events were not, you know, just  
20 kind of fun and a feel good kind of thing, but  
21 they are producing the results we want to see in  
22 terms of changing the perception around careers

1 in manufacturing.

2 And so as you can see from this flyer,  
3 we see 81 percent were more convinced that  
4 manufacturing provides careers that are  
5 interesting and rewarding from the student  
6 perspective; 62 percent were more motivated  
7 towards a career in manufacturing.

8 We also, you know, surveyed the  
9 companies that participated and overwhelmingly  
10 they found value in hosting these events. The  
11 educators became more aware of manufacturing  
12 jobs, were themselves more convinced about the  
13 importance of manufacturing careers.

14 So take a minute to look at it. We  
15 will be repeating this work this year, and I  
16 think it is a really good way to showcase not  
17 only what we're achieving through manufacturing,  
18 but through our work together. And thank you,  
19 again, for your partnership and your work with  
20 us.

21 VICE CHAIR MARTINEZ: Thank you so  
22 much. We really appreciate that.

1           And if I could call on you, Li, and  
2           just confirm that we can have all of these  
3           materials digitally sent to all the Council  
4           members, right? Everything we've got in our  
5           packet?

6           And then, also, I wanted to make a  
7           comment and let you know that the participation  
8           rate by the Manufacturing Council in the last  
9           Manufacturing Day was really amazing. It ranged  
10          everywhere from number one example in the country  
11          here with all the Michigan folks that we have  
12          here represented at the time, to the little guy.

13          I represent the little guy, MCT  
14          Industries. We took it upon ourselves to do an  
15          event with the Job Corps, and we're very proud of  
16          that. I'm very proud that I have my father here  
17          today, the first generation of MCT over there.

18          And so one of the things that we  
19          encourage everybody to do is not think of  
20          Manufacturing Day as a day but as a practice.  
21          And so what we've done in our own business is  
22          instead of having just Manufacturing Day, which

1 is what it started with, my father launched a Job  
2 Corps apprenticeship program in which we have  
3 already hired four welders, two of them female,  
4 for example, and we have an ongoing  
5 apprenticeship program that enables the Job Corps  
6 students to come in and get real-time work  
7 experience, so that when they apply for the real  
8 job they have not only the Job Corps training  
9 behind them but the actual on-the-job training  
10 experience.

11 So that really is invaluable to these  
12 younger kids that are coming out and doing  
13 things. So I encourage you, in your own  
14 companies and in your networks, to think of ways  
15 where you can make it an ongoing experience, so  
16 we can take it from Manufacturing Day on to a  
17 yearly program. So one of the ideas.

18 With that, we probably have time for  
19 one other comment or question. Anybody else like  
20 to jump in? Ms. Sparks?

21 MEMBER RUSH: I would.

22 VICE CHAIR MARTINEZ: Please.

1           MEMBER RUSH: I would just add that  
2           some states are making it Manufacturing Month,  
3           not just the day.

4           VICE CHAIR MARTINEZ: There you go.

5           MEMBER RUSH: And so the second week,  
6           October 9th through the 14th, is Apprentice Week.

7           VICE CHAIR MARTINEZ: Nice.

8           MEMBER RUSH: And I think that you  
9           could leverage that along with Manufacturing Day.  
10          And I think that we started marketing with the  
11          community and various media outlets five months  
12          in advance. And so it's -- the last seven weeks  
13          we will playing daily on various channels. I  
14          think that is going to have a huge impact.

15          VICE CHAIR MARTINEZ: Absolutely. I  
16          couldn't agree more. Thank you so much for that  
17          comment, Andra. Appreciate it.

18          Now I am going to turn to our Deputy  
19          Assistant Secretary for Manufacturing, Laura  
20          Taylor-Kale. And before you get started in your  
21          remarks, we would also like to thank you for  
22          coming and traveling all the way to our last

1 Manufacturing Council meeting in Cleveland. It  
2 was really, really appreciated that you were  
3 there, and appreciate all of your support. So  
4 thank you so much. Welcome.

5 MS. TAYLOR-KALE: Thank you. Thank  
6 you very much. I will be brief. It's nice to  
7 see you all, and I have been on the job more than  
8 five days.

9 (Laughter.)

10 VICE CHAIR MARTINEZ: You're an old  
11 pro now.

12 MS. TAYLOR-KALE: I especially would  
13 like to thank Susan and Claudine, co-chairs, and  
14 actually all of you for your time and commitment  
15 to this Council. I have been extremely impressed  
16 by the amount of work that you all have been able  
17 to accomplish over the last 18 months, just the  
18 number of recommendations, and really the depths  
19 of them and how actionable they are. So I want  
20 to say thank you all for that.

21 A couple of things I will mention. I  
22 will talk a little bit about our top markets

1 reports, and then I will follow up a little bit  
2 on what Cody talked about in our trade missions.

3 So if you look into your packet, we  
4 included a couple of brief flyers on the top  
5 markets reports. This was an initiative that we  
6 launched last year, and we received a lot of  
7 positive feedback on it. And Secretary Pritzker  
8 announced the most recent set of reports in May,  
9 and these are basically 19 reports that rank  
10 future export markets within different industries  
11 and provide in-depth commentary on key  
12 opportunities, trends, and the challenges that  
13 U.S. companies are facing in looking to expand  
14 globally into many markets.

15 There are a number of different  
16 sectors and industries that are represented here.  
17 I won't go into all of them. I am particularly  
18 proud of them in part because it is my team that  
19 works on a good number of them, so I'm a little  
20 bit biased obviously. But I do think they're  
21 incredibly useful reports with a lot of  
22 information that will be helpful for you all.

1 I will also note on the trade  
2 missions, as Cody mentioned -- and I know you all  
3 have talked about this before -- the work that  
4 the Commerce Department does in organizing these  
5 trade missions, particularly in different markets  
6 overseas, we have had a number of them that have  
7 related to manufacturing sector, water  
8 infrastructure mission that Cody was just on. We  
9 had a renewables trade mission to Mexico in March  
10 I want to say as well.

11 Coming up in October the Deputy  
12 Secretary will be going to China on a health care  
13 trade mission. That one is -- we are still  
14 recruiting for people, for companies that go on  
15 that one, until I want to say Friday. But these  
16 are incredibly useful opportunities for companies  
17 because we are able to open the doors for you all  
18 with high level government officials, with  
19 potential partners in some of these markets.

20 So if you are interested in going on  
21 these trade missions, a lot of them my team works  
22 on, absolutely feel free to reach out. I will

1 make sure to put you in direct touch with the  
2 folks that are organizing them. We think they  
3 are very important.

4 I also want to note coming from my own  
5 background in energy and development finance --  
6 was listed in the recommendation that you all had  
7 on renewables and trade missions, and so I wanted  
8 to note that in 2017, at some point in time,  
9 there will be a renewable energy trade mission to  
10 Canada that my team will also be working on. It  
11 will focus on utility scale and distributed  
12 energy resources and renewable energy.

13 But I just wanted to note that as we  
14 go about planning these trade missions, we go  
15 through the calendar, and we are very responsive  
16 to the recommendations that come from industry.  
17 And so this is one that it just so happened that  
18 it came up as an idea, and we also said, you  
19 know, there is a lot of real genuine interest on  
20 this, and there is, in fact, a recommendation  
21 that just came out from the Manufacturing  
22 Council.

1           So with that, again, I want to thank  
2           you all for your work and happy to answer any  
3           questions and, again, put you in touch with folks  
4           as we plan missions and top markets reports.

5           VICE CHAIR MARTINEZ: Thank you very  
6           much. Appreciate that. Any questions?

7           MEMBER FRIESEN: So I just wanted to  
8           make a comment about the gold key service. One  
9           of the things that I think that Commerce and ITA  
10          could do a better job of is utilizing trade  
11          missions to highlight what the gold key service  
12          does and really market that piece of it, because  
13          the trade missions are sort of rifle shots in the  
14          sense that you have sort of a topic to a very  
15          small number of countries.

16          But I think gold key service is in 72  
17          countries. Is that approximately the right  
18          number? And probably very few manufacturers even  
19          know what gold key service is. And that is the  
20          one that anybody can plug into at any moment in  
21          any of those 72 countries and go, you know, for I  
22          think \$700 or something, have somebody basically

1 doing business development for you in a country  
2 that is fully knowledgeable, right?

3 So getting better at highlighting what  
4 they do and utilizing trade missions to sort of  
5 catalyze that, right? I think that would be a  
6 big deal.

7 CHAIR SMYTH: I'm just going to echo  
8 what Bill said earlier. This is a classic  
9 example of some of the fantastic products and  
10 services that are being provided by the  
11 Department of Commerce that are, to a great  
12 extent, not known by the manufacturing community  
13 inside the United States, and we strongly  
14 recommend that you have someone that would -- who  
15 would proactively market it as opposed to doing a  
16 passive drop online. So I think that's a great  
17 example, Bill, unless you want to comment on  
18 that.

19 MEMBER YEARGIN: Yes. I'd just say  
20 briefly that we have used it in our company  
21 multiple times.

22 MEMBER GREEN: So have we.

1                   MEMBER YEARGIN: And it's a great  
2 program, just very few people know about it.

3                   MEMBER FRIESEN: And it's a gem, you  
4 know? It's a gem, and the world should know, and  
5 it's a -- it's just such a great thing that you  
6 guys do. And the commercial service officers  
7 specifically that are out in the field, I mean,  
8 just doing amazing things, that's your  
9 background, right? And so the world should know,  
10 and it's something that -- you know, to Bill's  
11 point earlier, having somebody who is charged  
12 with marketing for Commerce would be probably a  
13 valuable member.

14                  VICE CHAIR MARTINEZ: I believe that  
15 is particularly true for small and medium-sized  
16 businesses. So anything, particularly with the  
17 MEPS and other synergies that we can do to get  
18 the word out there, I think that would be very,  
19 very useful. So thank you, everyone, for your  
20 comments.

21                   Unfortunately, we are running under  
22 time, so I'm going to move on in the schedule

1 here. Last colleague from Department of Commerce  
2 is Arun Venkataraman. I practiced that, so I'm  
3 really proud.

4 (Laughter.)

5 VICE CHAIR MARTINEZ: He is the  
6 Director of Policy for the International Trade  
7 Administration, and we welcome your remarks.  
8 Thank you so much for coming, sir.

9 MR. VENKATARAMAN: Very good. Thank  
10 you for allowing me to spend a few minutes here  
11 with you this morning.

12 I'm here to follow up on Secretary  
13 Pritzker and Jason Miller's points that they  
14 made, just to point out -- apologies to Mark  
15 Twain -- I mean, the rumors of TPP's death are  
16 greatly exaggerated.

17 (Laughter.)

18 MR. VENKATARAMAN: I want to be  
19 absolutely clear that the loudest voices are not  
20 necessarily the majority voices, and are  
21 certainly not necessarily the correct voices.  
22 And what we across the administration are doing,

1 we are still, in a whole of government effort,  
2 pedal to the metal in terms of moving forward on  
3 TPP. We are 110 percent committed to moving this  
4 forward with this Congress at the earliest  
5 opportunity.

6 I think Jason pointed to -- and I'm  
7 just going to as well -- the President's remarks  
8 yesterday to the Singaporean Prime Minister were  
9 not scripted and could not have been scripted  
10 better. It was spot on in terms of answering the  
11 questions about TPP and highlighting and standing  
12 behind fully the full power of the White House,  
13 the economic case behind TPP. That is not  
14 something we are shying away from.

15 In the context of the Singaporean  
16 Prime Minister, which is sort of a strategic  
17 case, it is incredibly important. There is a lot  
18 to say about that, but we are 100 percent behind  
19 the economic agreement. We believe it is a  
20 strong economic agreement, and that is what we  
21 are putting forward to the Congress and to the  
22 American people.

1           So what we have done is through this  
2 whole of government approach, a couple of -- a  
3 couple of things. First is we have taken on  
4 board seriously some of the concerns that have  
5 been expressed. We have worked with industry on  
6 issues like data localization to find a  
7 constructive path forward, and we are happy to  
8 report that we are making progress on trying to  
9 be better equipped to address the data  
10 localization issue, particularly with respect to  
11 financial services.

12           We have been engaging members of  
13 Congress and business leaders, including  
14 yourselves, around the country. Secretary  
15 Pritzker seems to be on the phone, you know, it  
16 seems like once an hour, calls that she has with  
17 someone where the topic is, how are we moving TPP  
18 forward, whether it's someone on the Hill or  
19 business leaders around the country.

20           And what we have also done is we have  
21 fanned out across the country, sending our folks  
22 to help make the case to our colleagues, to our

1 fellow citizens, to business leaders, to help  
2 them understand the benefits of the agreement,  
3 but also, more broadly, the benefits of trade.  
4 We have had over 120 events across the country,  
5 just in the Department of Commerce, with our  
6 team.

7 Secretary Pritzker I believe mentioned  
8 this morning there would be an additional 30  
9 events just in the next few weeks that we will  
10 all be supporting. And it's about trying to make  
11 sure, in addition to this travel, these events  
12 that we have where we're getting the message out  
13 there, we are also doing our own work.

14 One of the things we pointed to is in  
15 the trade promotions case. This agreement really  
16 doesn't matter if folks don't use it. If -- you  
17 know, no one cares about a trade agreement on  
18 paper. That's not the point. A 38 percent  
19 tariff that goes to zero is only a savings if you  
20 actually export that product into that country.

21 So our job -- and what we're already  
22 starting to do is to work with businesses, to

1 work with customers, both exporters and potential  
2 exporters, to help them understand the  
3 opportunities that are in this agreement, and to  
4 help them be able to maximize that, take  
5 advantage of that, on day one.

6 And to that end, I should mention one  
7 of the things we are doing right now, in the  
8 course of the next several weeks, is a number of  
9 webinars, country-specific webinars, so we are  
10 looking at the TPP from a country-specific  
11 perspective. So what does TPP do in Peru? What  
12 does TPP do in Vietnam?

13 We are doing these weekly webinars.  
14 Look on trade.gov for that information. We would  
15 also be happy to circulate it -- the fact sheet  
16 that identifies when these webinars are taking  
17 place. These webinars are open to the public and  
18 provide an initial entree into how we can start  
19 thinking -- preparing ourselves to take advantage  
20 of TPP.

21 Of course, all of this is completely  
22 academic if TPP doesn't pass Congress. And so

1 one of the things that we need to do, and where  
2 we continue to need your help with, telling our  
3 fellow citizens the story about trade. Secretary  
4 Pritzker I know is calling for help. All of you  
5 have responded, and we thank you for that. And  
6 of course, since no good deed goes unpunished, we  
7 are asking for your help even more. And the  
8 situation we are in right now is, you know,  
9 you've all seen the convention and we've talked  
10 about, you know, these agreements, the ether out  
11 there.

12 We have an uphill battle telling a  
13 story that we all know to be true, which is that  
14 trade agreements -- I mean, TPP in particular --  
15 will bring benefits to our economy. But the  
16 story that we need to flesh out a little bit more  
17 is not the macro benefits of trade or even TPP to  
18 the economy, but really taking it down to a level  
19 where it actually happens. And this is where you  
20 guys matter more than all of us combined, but no  
21 one wants to hear anything from me because I  
22 don't know. You guys actually do the work, you

1 create the jobs, you are the ones exporting, and  
2 those exports support jobs in your companies.

3 I can say that intellectually and  
4 academically, but you guys say it with a concrete  
5 reality and back it up, and you can say it with a  
6 passion that is genuine. Helping our fellow  
7 citizens understand that the TPP is not some  
8 weird big document out there; the TPP is about  
9 jobs in your companies, that link which, again,  
10 we all know it to be true and some think it may  
11 be self-evident. It's completely not only lost  
12 in the current debate, but it's denied. And the  
13 story that you guys can tell is just so  
14 invaluable.

15 One of the things that we forget is  
16 that trade is not an end in and of itself. Trade  
17 is a means to an end. We don't just trade  
18 because we trade. We trade because it increases  
19 consumer choice. We trade because it improves  
20 our economy, creates jobs for this country.  
21 Trade is a means to an end. And if our folks  
22 don't understand that, then they do view it as

1 something that is for big corporate interest,  
2 which is not of course what it's about.

3 I know you had mentioned earlier that  
4 even on the trade mission you heard about the  
5 excitement around U.S. manufacturing exports. I  
6 think that is incredibly powerful. One of the  
7 routine narratives that we are confronting is  
8 U.S. manufacturing is on the decline. It's all  
9 because of these trade agreements. Trade  
10 agreements are killing U.S. manufacturing.

11 There is such an inherent negativity  
12 around the word "trade." For me, I think not  
13 just in terms of substance about how trade has to  
14 work, but I think folks understand the positivity  
15 behind that message. That excitement and  
16 positivity is something that you guys could get  
17 out there so powerfully.

18 And let me stop here. Thank you.

19 VICE CHAIR MARTINEZ: We have time for  
20 just one quick question. Would anybody like to  
21 join in?

22 MEMBER PAREEK: Arun, great to see you

1 again. So I spend a lot of time in the Midwest  
2 with my customers and suppliers, and the concern  
3 there is, look, NAFTA moved -- NAFTA caused so  
4 many manufacturing plants to move down in Mexico  
5 and Canada, and this TPP will cause the same  
6 thing. It is going to, instead of jobs moving,  
7 it will make jobs move because we will become a  
8 dumping ground for 36 countries now dumping into  
9 U.S. How do you answer to that question?

10 MR. VENKATARAMAN: Sure. The first  
11 point that we have to question is this idea that,  
12 oh my gosh, because of this agreement we are  
13 opening up our market, and all of this traffic is  
14 going to come in, and if we have to compete with  
15 them we'll lose. We are the world's largest and  
16 most open economy already. All this stuff is  
17 coming in already. We already do this stuff  
18 today. What is not happening is we are not given  
19 a fair chance to compete over there.

20 So this is not about opening ourselves  
21 up to competition with countries that we are not  
22 competing with. We have been doing that for

1 decades. This is -- there is no doubt that we  
2 have the lowest tariffs, the lowest non-tariff  
3 barriers, everything is getting in here already.  
4 It is our stuff that is not getting in over  
5 there.

6 So I think the answer to your question  
7 is it's hard with NAFTA, and there's a lot of  
8 frustrations with NAFTA. The other point that we  
9 would make is that one of the key aspects of TPP  
10 and our modern trade agreements agenda, unlike  
11 NAFTA, is that we have taken labor and  
12 environmental issues to heart and put them in the  
13 center of the agreement.

14 And what does that mean? What that  
15 means is that all of you here complied with the  
16 world's highest labor and environmental standard.  
17 You absorbed those costs, and we all pay for  
18 that. You do that very well. It is our  
19 competitors overseas that tend not to have to do  
20 that.

21 What we do with our trade agreements,  
22 by raising those labor and environmental

1 standards, and by holding those trading partners  
2 accountable to those standards, we make sure they  
3 include -- not live up to the same standards that  
4 you guys have to, but at least live up to higher  
5 standards than what they would have to otherwise,  
6 about there is not a competitive advantage  
7 conferred by virtue of low labor and  
8 environmental standards because you're not going  
9 to get that without TPP.

10 TPP is the only way we are going to  
11 make sure some of these countries have anything  
12 near the types of labor and environmental  
13 standards that any modern society should have, or  
14 that we would expect them to have.

15 VICE CHAIR MARTINEZ: That's  
16 excellent.

17 Very, very quickly, Bill.

18 MEMBER YEARGIN: Yes. I'd just like  
19 to confirm what you said, because in our business  
20 -- we're in the voting business. We deal with  
21 this every single day. We compete in Asia and,  
22 you know, in five to 100 percent tariffs, no

1 tariffs coming up this way. So it's a really --  
2 I think it's a really important point for us to  
3 all continue to make is we are not giving them  
4 more access; we are giving us more access.

5 VICE CHAIR MARTINEZ: Absolutely.

6 Well, as we close our governmental section with  
7 your presentation, I really want to thank you,  
8 sir, so much for your leadership. These are all  
9 essential issues to all the Council members.

10 And as we close this section from our  
11 government colleagues, I would just like to  
12 stress upon my fellow Manufacturing Council  
13 members that I hope that you see that your voices  
14 have been heard. We have heard many, many  
15 instances of how the specific recommendations  
16 that you gave, actionable recommendations, have  
17 been acted upon. And so you should all feel  
18 very, very proud about your service this  
19 particular term.

20 So I want to thank all the  
21 Manufacturing Council members and thank all of  
22 our government colleagues to educate us on

1 exactly what the progress has been. So thank you  
2 so much.

3 With that, I will turn it over to  
4 Chair Smyth.

5 CHAIR SMYTH: Okay. Thank you very  
6 much. Much appreciated. Very informative  
7 session. I really appreciate you making the time  
8 to be here.

9 Christie, I am going to call upon you  
10 to make a presentation on two of your letters,  
11 supply chain innovation and national network for  
12 manufacturing innovation recommendations. I am  
13 going to request -- you have the two letters. We  
14 originally said 15 minutes each. If there is any  
15 possibility of holding it to 15 total, that would  
16 be amazing and much appreciated.

17 MEMBER WONG BARRETT: I think we can  
18 do that. We were able to do some of the briefing  
19 earlier.

20 CHAIR SMYTH: I will set a timer on,  
21 but if you feel the need to ignore it, that's  
22 fine. Thank you.

1           Oh. And just -- I think I need to  
2 explain. Christie will be providing context for  
3 the letter. She will not be necessarily reading  
4 it verbatim, but giving an overview of the key  
5 points, and specifically reviews with feedback  
6 that was provided from the Council members and  
7 comments on whether or not it was adopted and, if  
8 not, why not.

9           Thank you.

10           MEMBER WONG BARRETT: Thank you, Madam  
11 Chair. First, I want to recognize the  
12 subcommittee on IRD, Innovation, Research and  
13 Development members that are here today. They  
14 rolled up their sleeves, wrote their hearts out  
15 with passion and dug into these very complex  
16 issues to cover a waterfront of innovation,  
17 research and development. So thank you to Dawn  
18 Grove, Al Green, and Kathy Kingscott, who are  
19 here with us today; Irwin Shur, who could not be  
20 here today; and my fearless and highly  
21 intelligent co-chair who keeps me in line, Jeff  
22 Wilcox, who could also not be here.

1           We certainly had a stellar team.  
2           Everybody was engaged and we couldn't be here  
3           with these letters for recommendation without  
4           their support. So thank you for that indulgence.

5           First, I think on the agenda is the  
6           supply chain innovation letter. This actually  
7           came out of a request from Secretary at the  
8           beginning of our term. She gave us three topics  
9           of interest that she wanted us to engage in, and  
10          one was supply chain innovation. It's a broad  
11          topic with deep tendrils for actions required by  
12          industry, government, and academia or education  
13          to solve it. It's a long-term marathon issue  
14          that we will have to work on as a collective.

15          So what we tried to accomplish in this  
16          term was to investigate the issue and summarize  
17          what we have learned to date. By no means is  
18          this a final recommendation, but we think it's a  
19          starting point that Commerce can utilize to build  
20          on, and also a starting point for industry  
21          members here today that we can utilize as a  
22          private sector on our own to make real change and

1 improvements, even without government action. So  
2 it's a call to action for all of us.

3 To summarize, the letter really  
4 highlights opportunities to advance U.S. supply  
5 chain innovation. We summarize, as a reference  
6 for government, as a reference for manufacturers,  
7 and as a reference for the MEP centers who aid  
8 small manufacturers, effective practices that  
9 will help U.S. small manufacturers upgrade their  
10 capabilities. So it highlights opportunities and  
11 areas that they can -- they need to improve,  
12 which could be future services and current  
13 services the MEP centers provide, as well as  
14 areas for companies to look themselves in the  
15 mirror and identify what they need to do to  
16 improve and be ready for the future.

17 Secondly, we summarize enabling  
18 conditions that improve smaller suppliers'  
19 ability to innovate and adopt new technologies.  
20 Not every company is ready to adopt new  
21 technology, to integrate it into their  
22 manufacturing operations.

1           So understanding that certain levels  
2 of capability will be required to even enter the  
3 game is important so that we identify those  
4 suppliers that are in your base already that can  
5 be further strengthened, those that need to be  
6 tooled up on some basics before they take the  
7 next jump.

8           And, thirdly, where we get into  
9 specific recommendations for Commerce, our  
10 opportunities to advance the supply chain  
11 innovation in the U.S., we focus on I think five  
12 or six areas. One is expanding awareness of the  
13 challenge and benefits of supply chain innovation  
14 to our country, providing a strategy that we can  
15 use as a beacon, as industry participants, to  
16 guide our investments and our own strategies.

17           Thirdly, providing transparency on  
18 assets and resources, both in the private sector  
19 and public sector, I think we have talked about  
20 it in several contexts. There are so many  
21 wonderful assets and services and tools that many  
22 of us just don't know about. So, again, helping

1 provide that transparency and access.

2 Reinforcing inclusion, and what we  
3 mean by "inclusion" is all players in the supply  
4 chain from large to small because teaming is how  
5 we are going to be successful in the future. We  
6 are no longer an integrated single value chain.  
7 We are a highly networked ecosystem.

8 Fourthly, expanding connectivity. So  
9 that is really around connecting to  
10 intermediaries, the knowledge of the resources  
11 that are available to the supply chain,  
12 leveraging those intermediary services to connect  
13 those resources and assets to the individual  
14 supply chain members.

15 And, finally, improving the business  
16 climate. So these are areas that will help us be  
17 more competitive on the global stage, supporting  
18 all manufacturers in the United States.

19 There were some specific points of  
20 feedback that we received during the full Council  
21 review, so thank you all so much. We have a lot  
22 of techie people writing these recommendations,

1 so we appreciate your grammar guidance, your  
2 wording guidance, catching us on some  
3 misspellings here and there.

4 But there was also a specific comment  
5 around the timeline for the long-term strategy;  
6 we had put in 2050 as a suggested timeline. It  
7 had a nice ring to it. But that was not that  
8 pragmatic for many business owners and  
9 manufacturers. So we scaled that back to be more  
10 of a 20- to 25-year timeline. That's reflected  
11 in the document that you have today in front of  
12 you as well as all of the grammar and punctuation  
13 changes. Everything should be in there.

14 We did identify a few more after we  
15 submitted the letter, so we hope to be able to  
16 clean those up in the final version. So all  
17 comments were fully integrated into the letter as  
18 you see it today.

19 So I will pause there and hand it over  
20 to Madam Chair for the next step.

21 CHAIR SMYTH: Do you want to read both  
22 of them together or have a discussion on this

1 one? Okay. We will open the floor for any  
2 comment, discussion, or request for edits, any  
3 objections to the scope or content of this  
4 letter.

5 VICE CHAIR MARTINEZ: I have a  
6 comment, if I can jump in. I just wanted to say  
7 that -- and I'll turn to my Commerce colleagues  
8 who work with the other Councils and other  
9 information sessions that you have with other  
10 experts and people in the industry in various  
11 sectors.

12 I think it's a real testament to the  
13 Manufacturing Council that we are going out with  
14 our last meeting of this term, going out with  
15 potentially three letters of recommendation. I  
16 think that hats are off not only to the  
17 Innovation, Research and Development Subcommittee  
18 that has brought these two letters that Christie  
19 is presenting, but to all of the Manufacturing  
20 Council members, because you all had a hand in  
21 writing the handoff letter that will be presented  
22 after Christie's presentation.

1           So I just really want to say and  
2 stress to you all that you could have checked  
3 out, you could have not come in, you could have  
4 said, "Okay. Well, we're in the cycle right now  
5 where nobody is going to listen to our  
6 recommendations." And as you can see and hear  
7 from our Commerce colleagues, they are sprinting  
8 to the finish, and everything that you all  
9 provide -- are providing are really, really well  
10 taken.

11           So I just wanted to say thank you on  
12 behalf of Chair Smyth and myself for your  
13 diligence right to the very end. So thank you  
14 very much, Christie.

15           CHAIR SMYTH: Thank you for that  
16 comment.

17           Okay. Hearing no objections, this  
18 letter is adopted by the Manufacturing Council.  
19 Thank you.

20           MEMBER WONG BARRETT: Thank you.

21           CHAIR SMYTH: You are doing well on  
22 schedule. Next letter.

1 (Laughter.)

2 MEMBER WONG BARRETT: The second  
3 topic, we have already done a short briefing on  
4 it. When Madam Secretary was here, there was a  
5 request to give a sneak preview on our NNMI  
6 second letter.

7 Again, to give a bit of context, we  
8 had been asked to provide input on the process to  
9 identify and run a selection process for the  
10 Department of Commerce institutes, which was  
11 presented in January of this year. And a lot of  
12 the emphasis of the Manufacturing Council and the  
13 administration and DOC has been on launching this  
14 brand-new concept in the U.S. manufacturing  
15 ecosystem.

16 So our letter that we are presenting  
17 today for adoption really focuses on how do we  
18 sustain the great work, the launch of this  
19 successful -- it's not an experiment anymore. It  
20 is -- it's here. It's making an impact. And if  
21 you look around the table, I'd say more than half  
22 of the manufacturers present in this room are a

1 member of an institute or will be a member of an  
2 institute. There are people that joined this  
3 Council in the beginning that had not heard of  
4 NNMI that are now active participants of NNMI's.  
5 So it is happening. It is a real catalyst for  
6 our industry.

7 So that being said, our Council and  
8 our subcommittee had a wonderful access  
9 opportunity to engage with every single  
10 institute, institute directors, heads of their  
11 operations, several members of institutes from  
12 the industry side, and even companies that aren't  
13 participating in NNMI's to understand, how do we  
14 sustain this going forward, not only the existing  
15 centers but future centers that we expect to be  
16 stood up and integrated into the network?

17 So this letter tries to summarize  
18 industry best practices to sustain the network  
19 into the future, so that it's not just a launch  
20 that fizzles out, but it's a launch that will  
21 continue to expand, grow, and continues to  
22 improve.

1           So the white paper provides these  
2       recommendations regarding best practices and  
3       lessons learned. Our focus, again, is on the  
4       sustainable and scalable program, ensuring that  
5       there will be enduring support of the network's  
6       support by industry partners, making sure there  
7       is a clear articulation of the value to industry  
8       to sustain that long-term support.

9           Recommendations are covered. I won't  
10      go through the 12 pages of the white paper, but  
11      they cover several areas, including organization  
12      and operations, which is how we run and organize  
13      to make sure that things are smooth and continue  
14      to be scalable, research portfolio definition,  
15      which is, what are the institutes working on and  
16      what are some best practices to help ensure the  
17      institutes are working on topics that support the  
18      mission?

19           Fourth, IT management, best practices  
20      around how to share these valuable assets and  
21      stimulate cooperation and collaboration. And,  
22      finally, sustainability, which really looks at,

1       how do you finance these and institute standards  
2       around engaging those partners?

3               So I will pause there. I appreciate  
4       everyone's review of the letter. It was a very  
5       meaty letter. And, again, thank you to the  
6       subcommittee for rolling up sleeves and putting  
7       it all down on paper.

8               You know, and also thank you to the  
9       committee members for taking the time to review  
10      it and provide your inputs. The comments back  
11      were primarily, I'd say, some structural around  
12      where to put certain topics, some punctuation.  
13      Again, thank you. We are a lot of techies and  
14      engineers, so we appreciate the communications  
15      support, and all of those have been incorporated  
16      into the letter. So every single recommendation  
17      from the Council has been integrated.

18              I'll hand it over now.

19              CHAIR SMYTH: And I'd like to echo  
20      Christie's comments and personally thank the IRD  
21      team for their amazing contribution and getting a  
22      couple more letters in at the last moment under

1 the wire. So that was just fantastic.

2 Okay. I would like to open the floor  
3 for any questions, comments, or requested edits?  
4 Dr. Al Green.

5 MEMBER GREEN: Yes, really meaty. I  
6 mean, certainly, I was on that subcommittee. One  
7 of the ones I think that was really important is  
8 that I heard you mention, Phil, the tiered  
9 membership. You know, that was one of our  
10 discoveries. I mean, particularly for smaller  
11 companies having a low entry level is just super  
12 important. I mean, otherwise, you just get the  
13 usual suspects, and I think that was one of the  
14 ones I just wanted to call out as -- I think as  
15 especially important.

16 MEMBER HOUSTON: And I would second  
17 that. Working with a fellow right now, and one  
18 of our Board members, there is only two tiers,  
19 and there isn't a third tier. And we are  
20 struggling with participation at such a high  
21 second-tier fee. We are considering and going  
22 forward with it, but we are under 100 people in

1 our corporation.

2 And being asked to do 30,000 is kind  
3 of a step up, so but -- and the other comment  
4 would be this read so well and is so on point,  
5 every single one, and it was so polished but also  
6 the content was so relevant, down through IP to  
7 these tiers to structuring the actual projects.  
8 I hope the institutes take it to heart, but also  
9 I am sure that the new ones coming up will be so  
10 grateful and wish that the other ones could have  
11 had such insight the first time. It's tremendous  
12 work.

13 CHAIR SMYTH: Any more comments,  
14 questions, or requested edits for the letter?  
15 Hearing none, I proclaim the recommendation is  
16 adopted by the Manufacturing Council. Thank you,  
17 again, the IRD. Much appreciated.

18 Okay. So I think we need to  
19 transition to handoff. In the spirit of fairness  
20 --

21 VICE CHAIR MARTINEZ: She is going to  
22 time herself.

1 CHAIR SMYTH: -- I am going to time  
2 myself.

3 VICE CHAIR MARTINEZ: Because she  
4 knows I will if she won't.

5 (Laughter.)

6 CHAIR SMYTH: Never let it be said.

7 VICE CHAIR MARTINEZ: And in the  
8 interest of fairness, she is going to present the  
9 next letter, and then I'm going to spearhead a  
10 discussion, so there is no conflict of interest.

11 CHAIR SMYTH: Right. I'm going to do  
12 it in seven. Okay. To begin, I would like to  
13 thank all of the Council members, both present  
14 and absent, for their valuable input in both  
15 content and format of the handoff letter. All of  
16 the edits and comments have been included in the  
17 final document, insofar as was in keeping with  
18 the format as a high level summary.

19 There were one or two requests in for  
20 additional details. We felt that that was not  
21 appropriate, given the high level description of  
22 documentation that was going forward. But we

1 made sure that all of those points were  
2 accommodated and incorporated into the specific  
3 detailed letters of recommendation.

4 The handoff letter reads as follows,  
5 partially. "Dear Madam Secretary, the United  
6 States Manufacturing Council members are honored  
7 to support the Department of Commerce. This  
8 Council has taken its responsibility very  
9 seriously and invested countless hours in  
10 identifying and recommending the ways that the  
11 federal government should, and can, respond to  
12 the challenges facing the United States  
13 manufacturing industry sectors to ensure our  
14 nation's competitiveness at home and abroad."  
15 And I think we have had great discussion on that  
16 level.

17 "The size, geographic diversity, and  
18 business sector diversity of this Council has  
19 enabled it to develop and submit a total of 13  
20 actionable, measurable recommendations in an  
21 abbreviated period of 16 months. We are very  
22 encouraged to see that many of the

1 recommendations have already been implemented and  
2 are in the process of implementation."

3 I'm now going to segue. Okay. As the  
4 objective of this discussion is to publicly  
5 ratify the overall contents and structure of the  
6 handoff letter, which has been previously  
7 distributed and discussed by all of the members  
8 around this table, including those not present,  
9 and not to dwell on highlighted examples of  
10 proposed actions, I will not now read through the  
11 specifics of any recommended actions at this  
12 time.

13 I do, however, remind all present that  
14 this is an executive summary, which will  
15 accompany the detailed documentation of said  
16 actionable recommendations.

17 So moving on to the suggested  
18 priorities for the next Council, in addition to  
19 the recommendations submitted, the Council has  
20 also discussed and examined several other topics  
21 and recognized that some of those topics, such as  
22 supply chain and cyber security, are critical for

1 U.S. manufacturing sectors. Due to their  
2 significance and breadth, we recommend them for  
3 further consideration as areas of focus or  
4 priorities for the next Council term.

5 I will now comment on the information  
6 archive for the next Council. Throughout this  
7 Council term, we have had the privilege to work  
8 with many subject matter experts from various  
9 government branches, academia, and institutes.  
10 We have collected a series of articles, reports,  
11 and presentations on a variety of subjects and  
12 topics. The solicited feedback was outside the  
13 beltway, in the communities of our country.

14 During our own work, the Council has  
15 also gained valuable lessons learned and best  
16 practices on how to get members more engaged and  
17 to make the Council's work more efficient and  
18 more productive. We have no doubt that a record  
19 of all the subject matter expert networking,  
20 existing documentation, and best practices will  
21 help to productively launch the next Council.

22 Therefore, we will work with the DOC

1 staff to assemble an information archive  
2 consisting of the following items: subject  
3 matter expert rolodex; up to date content;  
4 reference materials, including articles, reports,  
5 presentations, et cetera, provided by the subject  
6 matter experts; research, working notes, really,  
7 really critical, working notes, and white papers;  
8 and best practices, and among the best practices  
9 we list the Council's subcommittee structures.

10 And will say the co-chair structure  
11 for the subcommittee has been a phenomenal  
12 success, that we're going to be including in the  
13 best practices. A checklist for organizing  
14 community outreach events and a great deal of  
15 information to support and propagate  
16 Manufacturing Day events.

17 Furthermore, to complement this online  
18 archive we are strongly recommending the creation  
19 of an alumni forum, which we feel will be a  
20 critical success factor in improving the  
21 continuity and collective memory of the  
22 Manufacturing Council. This informal body could

1 play a significant support role in the onboarding  
2 of new councils, consulting and mentoring, per  
3 the future Council's request, providing access to  
4 ever-changing corporate networks.

5 And, finally, participating in and  
6 propagating community outreach events and  
7 roundtable discussions for Department of Commerce  
8 initiatives.

9 We would like to acknowledge that one  
10 of the key enablers of the Council's success was  
11 the concise and unambiguous articulation of the  
12 challenges that face the DOC and the  
13 administration as a whole within the context of  
14 manufacturing. It provided an anchor for each  
15 subcommittee to establish the time architecture  
16 of deliverables was essential given the volume of  
17 work to be completed.

18 Finally, we would like to formally  
19 acknowledge and thank the dedicated and collegial  
20 DOC staff that supported this Council, their  
21 valuable contributions, and level of  
22 professionalism for critical components of our

1 joint success.

2 I would now like to hand the meeting  
3 to Vice Chair Martinez, who will facilitate the  
4 Q&A session for the handoff letter.

5 VICE CHAIR MARTINEZ: Absolutely. So  
6 I would like to encourage discussion. Anyone  
7 like to comment or have any clarifying questions  
8 for the draft of the letter?

9 (Laughter.)

10 CHAIR SMYTH: Seven minutes on the  
11 button.

12 VICE CHAIR MARTINEZ: Okay. Any  
13 discussion points? Are we all set?

14 CHAIR SMYTH: We have one.

15 MEMBER WONG BARRETT: Just a thank you  
16 to our co-chairs I think going above and beyond  
17 the call of duty for a handoff letter in not only  
18 framing what was done, which is a wonderful thing  
19 to do, to summarize as a whole, but also thinking  
20 forward into the next -- into the future and  
21 highlighting areas that perhaps surfaced that we  
22 weren't able to fully engage in, not losing that

1 content and sharing it for future leaders to come  
2 or future Councils to come.

3 I think that you have taken the remit  
4 of the Council to a completely new level and into  
5 the future. So thank you for your insight and  
6 energy put into them.

7 VICE CHAIR MARTINEZ: Thank you very  
8 much. That is very appreciated. Very  
9 appreciated.

10 Any other discussion points? As there  
11 are not any objections to adopting the new  
12 recommendation, and hearing none, the  
13 recommendation is adopted by the Manufacturing  
14 Council. Okay? So we are set with the last one,  
15 so I think we are on to concluding remarks. Is  
16 that correct?

17 CHAIR SMYTH: Okay. We're on the last  
18 furlong, so --

19 (Laughter.)

20 VICE CHAIR MARTINEZ: We are just  
21 going to close real quick. We need to be done  
22 here in seven minutes, so I'm just going to give

1 some concluding thoughts, and I wanted to start,  
2 obviously, with thanking the Secretary. As you  
3 heard from her directly, you know, we have very,  
4 very specific support not only from her but from  
5 her exceptional team. And I feel that we would  
6 be remiss if we left anybody out.

7 So as the Secretary pointed out, we  
8 put together this briefing, and it's in your  
9 packets. We've got everybody here in our diverse  
10 sectors that we all represent, which I think is  
11 very telling and important. We also have a  
12 summary of everything, including the three  
13 letters that we just adopted, is summarized in  
14 the middle section here.

15 And then the final section is really  
16 aimed at setting the bar very high for the next  
17 Council and giving them some recommendations.  
18 Susan has gone through several of those now in  
19 the handoff letter.

20 One of the things that I want to do is  
21 encourage the Secretary, whoever it might be in  
22 the next administration, to continue to appoint

1 small, medium, and large-sized businesses  
2 throughout the country in very, very diverse  
3 sectors. I think everyone here would attest to  
4 the fact that that is one of the key ingredients  
5 for our success. So I think we should continue  
6 in doing that.

7 I also would like to personally thank  
8 several members of the Commerce staff and  
9 government staff. I am probably going to be  
10 remiss in forgetting someone, but what I want to  
11 do is set the stage for the next Council to  
12 personally engage with the Commerce and other  
13 departmental staff.

14 And perfect timing -- Ms. Archana  
15 Sahgal has walked in on cue. She received my ESP  
16 message, so that's good to know, my ESP is  
17 working.

18 And so, with that, I'd like to  
19 personally recognize Secretary Penny Pritzker,  
20 Deputy Assistant Secretary Laura Taylor-Kale,  
21 also former Deputy Assistant Secretary Chandra  
22 Brown. I have to take a little bit of a pause

1 here, because our former DAS, as you know, served  
2 on the Council and got her start in Commerce  
3 because she was in my position.

4 So I get to fulfill her shoes as Vice  
5 Chair a couple of Councils ago, and then she went  
6 on to do an exceptional job worldwide  
7 representing the United States of America. And  
8 we are really indebted to her for all of her  
9 collaboration and leadership. I did invite her  
10 to attend the meeting today. She did try, but  
11 she wasn't able to accommodate it into her  
12 schedule. But she said, "Please look everyone in  
13 the eye across the table and let them know how  
14 much we appreciate their patriotic service." So  
15 on behalf of her and all of us, thank you so, so  
16 much for that.

17 I would also like to recognize Erin  
18 Sparks, as we mentioned before; Li, as well, to  
19 our right there.

20 And also, Ms. Archana Sahgal, if you  
21 could please stand up, ma'am, for just one  
22 indulgence. Ms. Sahgal has been given a

1 promotion and she is starting at the White House  
2 next Monday, at the Office of Public Engagement,  
3 and she technically was eligible to do that  
4 earlier but has stayed on to shepherd us all the  
5 way through this meeting. She has been in and  
6 out of this meeting because she is already  
7 attending her preliminary retreat.

8 So technically she is on the job for  
9 OPE as we speak but is still making it a  
10 priority. I got the last email from her last  
11 night at 1:00 in the morning, and I got the first  
12 one I think at 5:30. So her tireless service is  
13 exceptional. She has been our boots-on-the-  
14 ground lead, and I think you deserve a round of  
15 applause.

16 (Applause.)

17 VICE CHAIR MARTINEZ: I would also  
18 like to recognize some previous members that  
19 helped us in particular in the last Council as  
20 well as the beginning of this particular Council  
21 -- Shannon Roche, Jenna Pilat, and then also  
22 Archana's predecessor, Liz Emanuel, in the

1 previous Council was tremendous.

2 And, as you know, she took the time  
3 to host us at the DMDII over in Chicago, and so  
4 that continued service and continued carry  
5 forward, level of responsibility that you see in  
6 people that have now exited but have offered  
7 their services, that's going to be the theme that  
8 I leave you with.

9 We have created a legacy here, the  
10 latest chapter in the legacy that was created  
11 before us, and I really invite you to continue to  
12 be active participants in that legacy. Two  
13 different mechanisms you can do that.

14 In our private meeting that we had  
15 with the Secretary, Chair Smyth and I were told  
16 by the Secretary that though she does not feel  
17 it's appropriate for her to appoint the next  
18 Council members or institute the next Council  
19 formally, she does feel it is appropriate to add  
20 to our endeavors to try to jumpstart the  
21 onboarding process for the new administration as  
22 quick as possible. So she has asked us to relate

1 to you that if you have an interest in continuing  
2 to serve on the Council, they would like to know  
3 that.

4 I understand that in the last quarter  
5 of this year they will be publishing a Federal  
6 Register Notice of Information where you can put  
7 your name in, so that that will be put forward to  
8 the next administration, so that not only do they  
9 have the archive and all of the letters of  
10 recommendation, but they have a cadre of people  
11 that will be able to serve.

12 If you are not able to serve, time  
13 commitments, and so forth, if you could still  
14 please be very engaged in the alumni network that  
15 Susan has outlined.

16 And so with that, on a personal note,  
17 thank you, all of you, for mentoring me, for your  
18 friendship, for your guidance, for your  
19 leadership. You are an inspiration to me, each  
20 and every one of you. So thank you so much.

21 (Applause.)

22 CHAIR SMYTH: In the last one-plus

1 years, we as a Council have been able to make a  
2 significant contribution to our country. I would  
3 like to acknowledge and thank the Manufacturing  
4 Council members sitting around this table, and  
5 our members who are not present due to business  
6 constraints and travel commitments, and very  
7 importantly I would like to recognize and thank  
8 our executive support staff whose hard work and  
9 diligence drove these results, and many who sit  
10 around the outside of this room. And I would  
11 like to thank them right now.

12 (Applause.)

13 CHAIR SMYTH: As the Manufacturing  
14 Council, we have all had the opportunity to work  
15 with people of amazing talent and dedication,  
16 from very different and diverse manufacturing  
17 walks of life, and I am personally thankful and  
18 grateful for this opportunity.

19 From its inception, the Manufacturing  
20 Councils have delivered value, primarily the  
21 delivery of tactical fixes and defensive plays.  
22 But potentially the greater benefit as we move

1 into a new era is the role of the Manufacturing  
2 Council as a catalyst for making connections in  
3 manufacturing communities in the United States of  
4 America, propagating networks and driving an  
5 enthusiasm for manufacturing to viral levels in  
6 our country, and this is a journey well started.

7 We have said it before: manufacturing  
8 is a team sport, and everyone wants to be on a  
9 winning team. So on behalf of the Manufacturing  
10 Council, I would like to thank the DOC for  
11 allowing us all to play in this inning and wish  
12 you good fortune for the future.

13 This meeting is closed.

14 (Whereupon, the foregoing matter went  
15 off the record at 12:01 p.m.)

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18  
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<b>a.m</b> 1:21 5:2	<b>actions</b> 112:11 127:10 127:11	<b>agree</b> 90:16	<b>application</b> 72:5
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**9:30** 1:21**9:39** 5:2**9th** 90:6

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: US Manufacturing Council

Before: US Department of Commerce

Date: 08-03-16

Place: Washington, DC

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

  
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Court Reporter

**NEAL R. GROSS**

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