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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. MOTTL, 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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1	P-R-O-C-E-E-D-I-N-G-S
2	(9:39 a.m.)
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

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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

waterfront with your various committees. You've
led with great organizational skills, dignity.
And it's fantastic, I must comment, to have two
strong women running a manufacturing
(Laughter.)
SECRETARY PRITZKER: a first in
Commerce Department history, so thank you for
your great leadership.
CHAIR SMYTH: Thank you.
SECRETARY PRITZKER: Eight years ago,
no one could have predicted the resurgence of
manufacturing that we are seeing today in the
United States. The jobs numbers really speak
volumes. We have about 843,000 more
manufacturing jobs today than we had just six
years ago, and companies like yours are working
to fill another over 350,000 jobs in
manufacturing.
Our challenge and the challenge that
you have been helping us with is to sustain that
growth, particularly in the face of economic
headwinds stemming from a strong dollar and from

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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

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

We are seeing an unprecedented level 8 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.

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

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

And you have played an extraordinary 7 role in really transforming Manufacturing Day 8 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 So thank you for that. Americans.

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

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

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

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

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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

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

7 And we have an ambitious agenda, my team and I, for the remainder of our term at the 8 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.

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

administration. You can do that by helping to 1 2 continue to build out our National Network of Manufacturing Innovation, sign up to participate 3 4 in Manufacturing Day on October 7th, which I know 5 you all are doing more than signing up, and speak out and make sure your voices are heard on TPP. 6 7 On behalf of the President, I just want to say thank you. Thank you for your 8 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 Thank you very much, CHAIR SMYTH: 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.

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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

was done previously in helping develop a process 1 2 to launch and standup new institutes. Our subcommittee felt very confident about the 3 4 success of the NNMIs as a long-term asset for our 5 So we went one step further, conducted country. several stakeholder interviews, spoke with every 6 7 single institute director, in some cases the operations managers, met industry members that 8 9 are participating institutes and industry members 10 that are not participating institutes, to 11 understand how do we not only launch the NNMIs 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 So how do we scale up, sustain, and stages. 20 continuously improve the network?

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

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

7 The recommendation is a white paper, about a 12-page white paper that covers 8 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

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accepted later in the day, and that you will be 1 2 able to leverage these for the future success of 3 the NNMIs. Terrific. 4 SECRETARY PRITZKER: Thank 5 you. MEMBER WONG BARRETT: 6 Thank you. 7 CHAIR SMYTH: Thank you very much, Christie. 8 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 It's an honor to be here and work 14 Secretary. 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. Kids that aren't close to 22

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

that we believe require the most focus. 1 I'd say, 2 first of all, the infrastructure. Infrastructure in our country is a significant issue, and we 3 continue to be interested to know that, and I'd 4 5 just encourage you to continue to focus on that. Secondly is the TPP, and we appreciate 6 7 the administration is all-in. As a CEO of a company with about 1,000 employee who manufacture 8 9 in four states and operate in 70 countries, it 10 would have a big impact on our industry, on our company. We directly create jobs, the TPP. 11 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

Commerce is doing. We weren't aware. And so we 1 2 strongly encourage you to, either through a chief marketing officer or some way, help get the word 3 out because there is so much that DOC has to 4 5 offer. SECRETARY PRITZKER: 6 That's an interesting idea. 7 MEMBER YEARGIN: Yes. And we stand 8 9 ready to help you with any of those things if you 10 need us to. Terrific. 11 SECRETARY PRITZKER: Thank 12 That's a good idea. you. 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

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

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

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

11 SECRETARY PRITZKER: Thank you. Well, 12 first of all, thank you for the summary. Ι 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 for all of the work that they have done as well. 17 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

appreciated your work as someone whose family has

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been in the manufacturing sector for my entire life.

I know how important this sector is, 3 4 not just to our economy but to the strength and 5 security of our country. So thank you for the work you do every day, but thank you for the work 6 7 you do helping our government do a better job. I would now like to ask your 8 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. Ι 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

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final copies of your recommendations. 1 2 CHAIR SMYTH: Thank you very much. SECRETARY PRITZKER: 3 Thank you. 4 (Applause.) 5 Okay. So is everybody CHAIR SMYTH: settled? Okay. I would like to introduce and 6 turn the meeting over to Jason Miller, Deputy 7 Assistant to the President, and Deputy Director 8 of the National Economic Council. 9 Welcome, 10 Jason. Nice to see you. 11 Thank you for having me, MR. MILLER: 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

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

My favorite statistic is there is no 7 12-month period from 2000 to 2010 -- you can't 8 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.

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

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

And I think that if the debate around, 4 5 one, there are still a few death throes for those who want to hang on to that, but it's 6 7 dramatically -- it's in a very different place, and we need to keep the momentum on that. And, 8 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

been equivalent to the best performance of the 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

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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

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bit with Christie and Susan at the beginning. 1 Ι 2 get the question a lot, which is, you know, there is less than six months left in the 3 4 administration; are things slowing down? Are you 5 finally sleeping? (Laughter.) 6 7 MR. MILLER: And it's a little bit like, you know, you're on the final -- you're on 8 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

have -- we have nine now. We are moving towards 1 2 at least five more in place through existing competitions. We actually have all of the 3 institute directors that Phil and the team at 4 5 NIST are hosting here in D.C. on Thursday to talk about some of these issues in terms of the pieces 6 we are putting in place to make sure that we have 7 hardwired the elements we have built. 8 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 Hardwiring some of that in is critical. States. 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

of Commerce and other parts of the government are continuing to execute against trade enforcement, because those pieces have to go hand in hand. So our focus is, you know, execute and hardwire. In terms of how should we think about some of the elements forward? I mean, where this group has logged innovation, workforce, trade, energy, really hits some of the areas where we know we need progress. In 2012, the President outlined a plan to significantly upgrade our nation's infrastructure, combined with business That package makes sense. I think tax reform. it could be getting -- it is unlikely that this Congress, in the next six months, is going to take that on, but something like that needs to get done for both reasons. I think the idea that American infrastructure is slowly becoming a liability is a fundamental problem that none of

19 us should accept. That's an area of historic 20 strength.

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

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

7 The other piece that I think gets lost in the shuffle of D.C. debates is the idea that 8 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.

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

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So until we get out of these absurd

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

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

Andrew. And, Andrew, if you want to just say a

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indulge me for a moment, I just want to introduce

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

5 Thank you so much. MR. COY: Yes. So a couple of things with the Maker Movement and 6 7 the bottom line is that in the moment in time where there is this space to grow. One is you 8 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 instead of a massive organization showing off you 19 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

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grow.

2 And then the third kind of moment or piece of the puzzle is with crowdfunding 3 4 opportunities, whether it's the recent 5 opportunities that are created through law or the ongoing Kickstarter, Indiegogo culture, where you 6 have somebody who has an idea and creates a 7 prototype of it, and then they look to crowdfund, 8 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

create -- not just consume the world around, you
know, consume, but to make use of the world.

So there is a number of initiatives 1 2 underway to help support that. The present station of Maker is one of those. I have worked 3 4 with Megan and others to help build out, you 5 know, a niche for Makers. You all are -- you know -- I know that Maker is a relatively new 6 7 term for a really old thing. And however we can leverage the momentum of this grassroots, you 8 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, You are speaking to an extremely 21 Andrew. 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

U.S. manufacturers is just tremendous, and we 1 2 should continue to advance that as we round the last corner of the track, as you said. 3 4 MR. MILLER: Yes. Yes. I mean, one 5 of the -- one of the areas where, you know, exports have slowed in the last year, export 6 7 growth has slowed in the last year, but we -- we have increased exports as a share of GDP by 8 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. MEMBER FRIESEN: 16 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

comment that from 2003 to 2010, I believe you 1 2 said that there was no 12-month period that I think you said manufacturing jobs I believe or 3 4 But what about 2010 to 2016, was jobs grew. 5 there -- what was the comparison there? Sort of waiting and --6 7 MR. MILLER: Yes. So 2010, from February 10th -- or from February 2010 to now, we 8 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

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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

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

So there are some additional process 8 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 This is one of the reasons and why optimistic. 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

defense security side, all strongly believe in 1 2 the importance of this. So whether it be the economic argument or the security argument, we 3 4 are making it and we need to make it loudly. And the third thing I just want to say 5 is, you know, the conventions are conventions, so 6 7 they are doing their thing. But, you know, I think the President said this clearly, and I 8 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. I would like to 16 CHAIR SMYTH: Okay. 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

little bit on cyber security, because these are really, really exciting times. We are seeing drastic changes throughout all aspects of our lives, particularly in areas like manufacturing where we are seeing technology become pervasive 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 So we at NIST are responsible for 16 threats. developing standards and guidelines, best 17 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.

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We have guidelines and standards and

best practices that can be used by people in your 1 2 organization, technologists within your organization, but also for small and medium-sized 3 4 businesses, when they are going out and they are 5 working with people to bring those kinds of capabilities into their environments, to 6 7 understand what some of the basic cybersecurity requirements would be, and what kinds of security 8 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, all of these different areas. And that's just a 14 15 quick overview.

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

asked by the administration to work with industry 1 2 and academia to come up with a framework for improving critical infrastructure, cybersecurity, 3 based on standards and best practices. 4 And we 5 work with industry to come up with this framework that applies to critical infrastructure but is 6 7 also being used in a number of other areas. The retail associations and the restaurant 8 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 And how do you do that in a standardized why? 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

goal used to be to stop everything before it came 1 2 into your environment. That has become a tremendous challenge. And just like anything 3 4 else that you do in your organization, it is 5 based on really that risk and based on Storms happen and transportation 6 resiliency. 7 goes down, and you have to be resilient in your manufacturing operations to account for that. 8 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 information. 22

It gives you the ability to evaluate 1 2 your ability to operate the control environment at an acceptable risk level. And it's also a 3 4 standardized approach to preparing cybersecurity 5 plans for ongoing assurance of the manufacturer's system security. So not just where you are today 6 7 but where you may want to be in the future. The tool of the framework and this 8 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.

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So I encourage you to take a look at

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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 to tell you about something we are doing that we 8 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.

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

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

manufacturing.

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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

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

First would be as a company owner and 7 CEO, we are making decisions every day about 8 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?

It can give us the tools that we need 1 2 to make the case to make those investments. So that would be helpful if you have access to that. 3 4 DR. DODSON: We actually have a small 5 business guide related to the framework that we are finishing up now and should be out in the 6 7 fall that gives you some ways to look at this and help with those calculations. 8 9 MEMBER WONG BARRETT: Great. Thank 10 The second request is to my industry you. 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. Τ 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

do we tailor the scorecards, the metrics, to be 1 2 appropriate for a smaller company, appropriate for managing the risk in that environment? 3 Because sometimes a one size fits all metric is 4 5 put in place and it becomes very difficult and unreasonable, unnecessary even, to make some of 6 7 those investments. And it increases the cost of your supply chain ultimately for no good reason. 8 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

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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

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nobody will give us the tea leaves or the recipe. 1 2 DR. DODSON: So, our National Cybersecurity Center of Excellence does provide 3 4 that sort of recipe, if you will. And we 5 actually work with industry collaborators from both the consumer and, in this case, 6 7 manufacturing or small business manufacturing as well as the technology providers, so the 8 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.

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

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

their consortium had been very active in having, 1 2 as part of their consortium, a small business rep who reminds us of the four- and five-person 3 4 doctor offices as an example. 5 And we don't know that. That's not an area that we know, so we can go back and ask 6 7 those questions and have those dialogues to make sure what we're doing addresses this particular 8 9 So we recognize we understand and speak area. 10 cybersecurity really well, but that's not helping. Cybersecurity people talking to 11 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.

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Okay. I'd like to now hand the

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meeting to Vice Chair Claudine Martinez.

VICE CHAIR MARTINEZ: Thank you, Ms.
Smyth.

4 I just wanted to add, Ms. Dodson, 5 really quickly, just so that you know, that the Council was formally we think, once they adopt 6 7 the letter that we have coming up, it will be the third letter for consideration today, and in that 8 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 that in our briefing papers to the Secretary, who 18 19 did discuss it this morning as well. 20 CHAIR SMYTH: Excellent. 21 VICE CHAIR MARTINEZ: So your points

are well taken for the Council.

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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.

Absolutely. 7 VICE CHAIR MARTINEZ: One of the themes you'll hear for the remainder of 8 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 Mr. Phillip Singerman could not be a here. 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?

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So I had the opportunity to serve on 1 2 the previous Council as well, and just the tangible hands-on advice that Mr. Singerman has 3 given, I think several members of our Council as 4 5 well have informed us on our laser recommendation, not just in this Council but in 6 the previous Council. We thank you for that, 7 sir. 8 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 I really want to thank the Council for your me. 20 extraordinary support and guidance of NIST's 21 Advanced Manufacturing Program. The partnership 22 program institutes the manufacturing extension

partnership. Your recommendations have been 1 2 extraordinarily helpful to us as we have developed these programs over the last several 3 4 years. 5 Both programs fall within the Innovation and Industry Services Directorate, 6 7 which I'm responsible for. So what I want to do today is to provide a very brief status report on 8 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: Okav. 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

Then I'm going to describe recent 1 plans. 2 activities by the Manufacturer Extension Partnership Program, small manufacturers with the 3 resources of the institutes at DOE's national 4 5 laboratories. And, finally, I'll have a comment about the discussion we've just had about supply 6 7 chain, small companies, and cybersecurity. So on your first PowerPoint, the one 8 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 create a national network of Centers of Research 14 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.

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The two most recent institutes, the

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

At that point, the federal government 8 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 this really extraordinary effort. 19

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

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

7 Congress, for fiscal 2016, the year we're in now, appropriated \$25 million to oversee 8 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.

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

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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.

Future plans, if you would turn to 8 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.

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

interests of the private sector that were 1 2 translated into operational activities. So if we turn the page to Slide 13, 3 4 one of your instructions to us was to do very 5 aggressive outreach to the broadest manufacturing community to ensure that we would have as wide 6 7 and diverse a group of proposals that we could easily achieve. 8 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 prescribes for DOC that we are conducting open 12 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 have received a robust number of proposals in a 17 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

so in furtherance of that, we adopted a two-stage 1 2 process, a simplified pre-application, so that good ideas can come forth without the really 3 4 million dollars of expense that is required for a 5 full application. We down selected from those, and then 6 7 we invited those finalists to submit full applications. So that guidance was extremely 8 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. We'll make them available. We can send them to 13 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, the entire federal intramural research program, 22

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

This of course is a major problem that 4 5 people have been grappling with for at least a half a century, how to make these very complex 6 7 technologies accessible and usable to small manufacturers who lack time, resources, technical 8 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.

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

whose resources should be used to connect the 1 2 institutes to the small manufacturing centers, and no other federal program is so mentored. 3 And 4 so we take that directive very seriously. In order to advance that, we have 5 entered into a memorandum of understanding with 6 7 the Department of Defense and the Department of So there is a formal structure for us to 8 Energy. 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

22 center is -- center staff are embedded in Sandia

successful model in New Mexico where the MEP

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

And this has been an amazingly 6 7 successful program. It requires of course elbow grease. You know, you just can't do it by email, 8 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

17 DR. DINCHAMM. ORAY. BO 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

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

5 Specifically, with regard to cyber security, we are building upon that work so far 6 7 with supply chain to infuse information into the MEP national network about cyber security 8 9 standards, so that small companies can be smarter 10 And the MEP centers are not federal about it. 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

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special partnership now with Donna's group to

develop a cyber security framework for small

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companies. So a set of standards that the 1 2 companies can apply, and the MEP is funding that So we're trying to -- we've heard what 3 as well. 4 people have been saying over the last several 5 years, and we are going to provide technical assistance to the small manufacturing community 6 7 to deal with this enormous cyber security problem. 8 9 CHAIR SMYTH: With that, I think we 10 have time for just one question. Please. 11 MEMBER PAREEK: Mr. Singerman, I represent Hydraulex Global, which is a company I 12 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

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

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

the institutes from the time they announce until 1 2 a year or two or three later is really quite geometric in terms of the membership. 3 4 So I would be glad to provide -- if 5 there is a particular institute that you are interested in, I would be glad to provide you 6 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

all an email saying, "Please help us. 1 Please 2 participate in this survey to help us with the NNMI identity." And within five minutes I had 3 4 email responses saying, "Got it. We're on it." 5 Just knowing that you all are there to support us in those really specific ways has been a huge 6 7 help, and we have really appreciated it. This committee in particular I think 8 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 And we can't thank you enough, so thank done. 13 you, and I think especially thank you to Susan and Claudine and to each of the subcommittee co-14 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

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

out a very ambitious, audacious goal. We totally
support that. We want to aim high. We should.
I think just for thinking practically it may make
sense to find a way to start small, start with a

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

5 And so that's something I have put some thought into, have started to do some 6 research on what some options could be for that 7 kind of smaller scale pilot project that I would 8 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

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this part of what your company does, to share the 1 2 strengths of manufacturing in the U.S. So let me give you two things. 3 One, 4 our goals and plans for this year; and then, 5 second, if you haven't gotten it already, some formal results from last year, which I think are 6 7 great to have at hand. So we are running full speed ahead to get ready for October 7th, 8 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,

among others. They are helping with outreach to

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companies that they work with and stakeholders. 1 2 Some are even considering hosting their own events and trying to pull that together. 3 4 I am thrilled that NIST is going to be 5 hosting an event this year for the first time. They are going to be opening up some of their 6 labs to show local school children some things as 7 well. 8 9 And we are also using your 10 recommendation to encourage company-neutral 11 We are doing outreach at a regional events. level to mayors' offices, governors' offices, 12 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 Thank you for leading the way and giving that. 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

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

5 So this year we are going to be doing a couple of fun social media campaigns, and we'd 6 love to have some of your companies participate 7 in those. We are still kind of working on the 8 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

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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.

And if I could call on you, Li, and 1 2 just confirm that we can have all of these materials digitally sent to all the Council 3 members, right? Everything we've got in our 4 5 packet? And then, also, I wanted to make a 6 7 comment and let you know that the participation rate by the Manufacturing Council in the last 8 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 here represented at the time, to the little guy. 12 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 encourage everybody to do is not think of 19 20 Manufacturing Day as a day but as a practice. And so what we've done in our own business is 21 22 instead of having just Manufacturing Day, which

is what it started with, my father launched a Job 1 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 students to come in and get real-time work 6 7 experience, so that when they apply for the real job they have not only the Job Corps training 8 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

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.

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

VICE CHAIR MARTINEZ: There you go. 4 MEMBER RUSH: And so the second week, 5 October 9th through the 14th, is Apprentice Week. 6 7 VICE CHAIR MARTINEZ: Nice. And I think that you 8 MEMBER RUSH: 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 in advance. And so it's -- the last seven weeks 12 13 we will playing daily on various channels. Ι 14 think that is going to have a huge impact.

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

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

Manufacturing Council meeting in Cleveland. 1 It 2 was really, really appreciated that you were there, and appreciate all of your support. 3 So 4 thank you so much. Welcome. MS. TAYLOR-KALE: Thank you. 5 Thank I will be brief. It's nice to 6 you very much. 7 see you all, and I have been on the job more than five days. 8 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 of them and how actionable they are. So I want 19 20 to say thank you all for that. 21 A couple of things I will mention. Ι will talk a little bit about our top markets 22

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reports, and then I will follow up a little bit 1 2 on what Cody talked about in our trade missions. So if you look into your packet, we 3 4 included a couple of brief flyers on the top This was an initiative that we 5 markets reports. launched last year, and we received a lot of 6 7 positive feedback on it. And Secretary Pritzker announced the most recent set of reports in May, 8 9 and these are basically 19 reports that rank 10 future export markets within different industries 11 and provide in-depth commentary on key opportunities, trends, and the challenges that 12 13 U.S. companies are facing in looking to expand 14 globally into many markets. 15 There are a number of different sectors and industries that are represented here. 16 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

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information that will be helpful for you all.

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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

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

4 I also want to note coming from my own 5 background in energy and development finance -was listed in the recommendation that you all had 6 7 on renewables and trade missions, and so I wanted to note that in 2017, at some point in time, 8 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 it came up as an idea, and we also said, you 18 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.

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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

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doing business development for you in a country 1 2 that is fully knowledgeable, right? So getting better at highlighting what 3 4 they do and utilizing trade missions to sort of 5 catalyze that, right? I think that would be a big deal. 6 7 CHAIR SMYTH: I'm just going to echo what Bill said earlier. This is a classic 8 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

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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,

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

I think Jason pointed to -- and I'm 6 just going to as well -- the President's remarks 7 yesterday to the Singaporean Prime Minister were 8 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.

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

fellow citizens, to business leaders, to help them understand the benefits of the agreement, but also, more broadly, the benefits of trade. We have had over 120 events across the country, just in the Department of Commerce, with our 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 That's not the point. A 38 percent paper. 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

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work with customers, both exporters and potential
 exporters, to help them understand the
 opportunities that are in this agreement, and to
 help them be able to maximize that, take
 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

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

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

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

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something that is for big corporate interest, 1 2 which is not of course what it's about. I know you had mentioned earlier that 3 even on the trade mission you heard about the 4 5 excitement around U.S. manufacturing exports. Ι think that is incredibly powerful. One of the 6 7 routine narratives that we are confronting is U.S. manufacturing is on the decline. 8 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

So I spend a lot of time in the Midwest 1 again. 2 with my customers and suppliers, and the concern there is, look, NAFTA moved -- NAFTA caused so 3 4 many manufacturing plants to move down in Mexico 5 and Canada, and this TPP will cause the same It is going to, instead of jobs moving, 6 thing. 7 it will make jobs move because we will become a dumping ground for 36 countries now dumping into 8 9 How do you answer to that question? U.S. 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 What is not happening is we are not given today. 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

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

So I think the answer to your question 6 7 is it's hard with NAFTA, and there's a lot of frustrations with NAFTA. The other point that we 8 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.

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

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

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standards, and by holding those trading partners 1 2 accountable to those standards, we make sure they include -- not live up to the same standards that 3 4 you guys have to, but at least live up to higher 5 standards than what they would have to otherwise, about there is not a competitive advantage 6 7 conferred by virtue of low labor and environmental standards because you're not going 8 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 this every single day. We compete in Asia and, 21 22 you know, in five to 100 percent tariffs, no

tariffs coming up this way. So it's a really --1 2 I think it's a really important point for us to all continue to make is we are not giving them 3 more access; we are giving us more access. 4 VICE CHAIR MARTINEZ: 5 Absolutely. Well, as we close our governmental section with 6 7 your presentation, I really want to thank you, sir, so much for your leadership. These are all 8 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

exactly what the progress has been. So thank you 1 2 so much. With that, I will turn it over to 3 4 Chair Smyth. 5 CHAIR SMYTH: Okay. Thank you very Much appreciated. Very informative 6 much. 7 session. I really appreciate you making the time to be here. 8 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.

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

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We certainly had a stellar team. 1 2 Everybody was engaged and we couldn't be here with these letters for recommendation without 3 4 their support. So thank you for that indulgence. 5 First, I think on the agenda is the supply chain innovation letter. This actually 6 7 came out of a request from Secretary at the beginning of our term. She gave us three topics 8 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 starting point that Commerce can utilize to build 19 20 on, and also a starting point for industry 21 members here today that we can utilize as a

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private sector on our own to make real change and

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

To summarize, the letter really 3 highlights opportunities to advance U.S. supply 4 5 chain innovation. We summarize, as a reference for government, as a reference for manufacturers, 6 7 and as a reference for the MEP centers who aid small manufacturers, effective practices that 8 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.

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

And, thirdly, where we get into 8 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

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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,

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

4 But there was also a specific comment 5 around the timeline for the long-term strategy; we had put in 2050 as a suggested timeline. 6 It 7 had a nice ring to it. But that was not that pragmatic for many business owners and 8 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 you as well as all of the grammar and punctuation 12 13 changes. Everything should be in there.

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

So I will pause there and hand it overto 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

Okay. We will open the floor for any 1 one? 2 comment, discussion, or request for edits, any objections to the scope or content of this 3 4 letter. VICE CHAIR MARTINEZ: I have a 5 comment, if I can jump in. I just wanted to say 6 7 that -- and I'll turn to my Commerce colleagues who work with the other Councils and other 8 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 our last meeting of this term, going out with 14 15 potentially three letters of recommendation. Τ 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.

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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

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

So that being said, our Council and 7 our subcommittee had a wonderful access 8 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 NNMIs 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.

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

how do you finance these and institute standards
 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.

You know, and also thank you to the 8 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 where to put certain topics, some punctuation. 12 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.

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

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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

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

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

The handoff letter reads as follows, 4 5 partially. "Dear Madam Secretary, the United States Manufacturing Council members are honored 6 7 to support the Department of Commerce. This Council has taken its responsibility very 8 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

recommendations have already been implemented and 1 2 are in the process of implementation." I'm now going to segue. Okay. As the 3 4 objective of this discussion is to publicly 5 ratify the overall contents and structure of the handoff letter, which has been previously 6 distributed and discussed by all of the members 7 around this table, including those not present, 8 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 time. 12 13 I do, however, remind all present that 14 this is an executive summary, which will 15 accompany the detailed documentation of said actionable recommendations. 16 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

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

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I will now comment on the information 5 archive for the next Council. Throughout this 6 Council term, we have had the privilege to work 7 with many subject matter experts from various 8 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

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

play a significant support role in the onboarding 1 2 of new councils, consulting and mentoring, per the future Council's request, providing access to 3 ever-changing corporate networks. 4 And, finally, participating in and 5 propagating community outreach events and 6 7 roundtable discussions for Department of Commerce initiatives. 8 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

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

content and sharing it for future leaders to come 1 2 or future Councils to come. I think that you have taken the remit 3 4 of the Council to a completely new level and into 5 the future. So thank you for your insight and energy put into them. 6 VICE CHAIR MARTINEZ: 7 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 recommendation, and hearing none, the 12 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

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

7 So as the Secretary pointed out, we put together this briefing, and it's in your 8 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.

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

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small, medium, and large-sized businesses 1 2 throughout the country in very, very diverse I think everyone here would attest to 3 sectors. 4 the fact that that is one of the key ingredients 5 for our success. So I think we should continue in doing that. 6 I also would like to personally thank 7 several members of the Commerce staff and 8 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 I have to take a little bit of a pause Brown.

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

So I get to fulfill her shoes as Vice 4 5 Chair a couple of Councils ago, and then she went on to do an exceptional job worldwide 6 7 representing the United States of America. And we are really indebted to her for all of her 8 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 schedule. But she said, "Please look everyone in 12 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.

I would also like to recognize Erin
Sparks, as we mentioned before; Li, as well, to
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

promotion and she is starting at the White House 1 2 next Monday, at the Office of Public Engagement, and she technically was eligible to do that 3 earlier but has stayed on to shepherd us all the 4 5 way through this meeting. She has been in and out of this meeting because she is already 6 7 attending her preliminary retreat. So technically she is on the job for 8 9 OPE as we speak but is still making it a 10 I got the last email from her last priority. 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

Archana's predecessor, Liz Emanuel, in the

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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

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

4 I understand that in the last quarter 5 of this year they will be publishing a Federal Register Notice of Information where you can put 6 your name in, so that that will be put forward to 7 the next administration, so that not only do they 8 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.

And so with that, on a personal note, thank you, all of you, for mentoring me, for your friendship, for your guidance, for your leadership. You are an inspiration to me, each and every one of you. So thank you so much. (Applause.) CHAIR SMYTH: In the last one-plus

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years, we as a Council have been able to make a 1 2 significant contribution to our country. I would like to acknowledge and thank the Manufacturing 3 4 Council members sitting around this table, and 5 our members who are not present due to business constraints and travel commitments, and very 6 7 importantly I would like to recognize and thank our executive support staff whose hard work and 8 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 grateful for this opportunity. 18 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

into a new era is the role of the Manufacturing 1 2 Council as a catalyst for making connections in 3 manufacturing communities in the United States of America, propagating networks and driving an 4 5 enthusiasm for manufacturing to viral levels in our country, and this is a journey well started. 6 We have said it before: manufacturing 7 is a team sport, and everyone wants to be on a 8 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.) 16 17 18 19 20 21 22

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CERTIFICATE

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

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