DEPARTMENT OF COMMERCE INDUSTRY & ANALYSIS OFFICE

UNITED STATES MANUFACTURING COUNCIL

ADVISORY COMMITTEE MEETING

Friday, October 23, 2015

Technology and Manufacturing Association
1651 Wilkening Road
Events Space
Schaumburg, Illinois 60194

The above-entitled matter came on for notice, at 9:28 a.m., before Susan Smyth, Chairman.
APPEARANCES:

SUSAN SMYTH, Chairman (General Motors)
CLAUDINE MARTINEZ, Vice-Chair (MCT Industries)
BILL YEARGIN (Correct Craft)
CODY FRIEDIN (Fluidic Energy)
HIROYUKI FUJITA (Quality Electrodynamics)
JOE SYLVESTRO (Pratt & Whitney)
ALBERT GREEN (Kent Displays)
RAY YEAGER (DMI Companies)
IRWIN SHUR (Snap-On)
ERIC KELLY (Overland Storage)
MARSHA SERLIN (United Scrap Metal)
DAWN GROVE (Karsten Manufacturing Corp.)
JAMES KEPPLER (Whirlpool)
SHANNON ROCHE (U.S. DOC)
CHANDRA BROWN, Deputy Asst. Secretary (U.S. DOC)
LARRY TURNER (Hannover Fairs USA, Inc.)
JENNY HOUSTON (Warwick Mills)
ROGER NIELSON (Daimler Trucks North America)
CRAIG FREEDMAN (Freedman Seating Company)
ROBERT DEGENEFF (Utility Systems Technologies)
BRAD CREW (NAFTA, CHN Industrial)
CAROL CRAIG (Craig Technologies)
JAN ALLMAN (Marinette Marine Corp.) ZACH
MOTTL (Atlas Tool & Die Works) SHIRISH
PAREEK (Hydraulex Global) CHRISTINE WONG
BARRETT (Mac Arthur Corp.) JEFF WILCOX
(Lockheed Martin)
TIM SHINBARA (Atlas Tool & Die Works)
FERNANDO ORTIZ, Board Chairman (TMA)
TRICIA VAN ORDEN (U.S. DOC)
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Welcome Remarks and Address</td>
<td>4</td>
</tr>
<tr>
<td>TMA Representatives</td>
<td></td>
</tr>
<tr>
<td>Chair Smyth</td>
<td>5</td>
</tr>
<tr>
<td>Vice-Chair Martinez</td>
<td>6</td>
</tr>
<tr>
<td>II. Department of Commerce Updates</td>
<td>7</td>
</tr>
<tr>
<td>Deputy Asst. Sec. Chandra Brown</td>
<td></td>
</tr>
<tr>
<td>Shannon Roche</td>
<td>38</td>
</tr>
<tr>
<td>III. Dialogue on Manufacturing Day</td>
<td>11</td>
</tr>
<tr>
<td>Deputy Asst. Sec. Chandra Brown</td>
<td></td>
</tr>
<tr>
<td>IV. Update on Hannover Messe</td>
<td>45</td>
</tr>
<tr>
<td>Larry Turner</td>
<td></td>
</tr>
<tr>
<td>V. Presentation of Draft Patent Quality Recommendation</td>
<td>57</td>
</tr>
<tr>
<td>IRD Subcommittee</td>
<td></td>
</tr>
<tr>
<td>VI. Subcommittee Updates</td>
<td></td>
</tr>
<tr>
<td>A. Trade, Tax Policy, and Export Growth</td>
<td>1</td>
</tr>
<tr>
<td>Subcommittee</td>
<td></td>
</tr>
<tr>
<td>B. Energy Subcommittee</td>
<td>68</td>
</tr>
<tr>
<td>C. Workforce Subcommittee</td>
<td>99</td>
</tr>
<tr>
<td>D. IRD Subcommittee</td>
<td>84</td>
</tr>
<tr>
<td>VII. Adjournment</td>
<td></td>
</tr>
</tbody>
</table>
Chair Smyth/Vice-Chair Martinez .... 131

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

(9:28 a.m.)

MR. SHINBARA: I=m Tim Shinbara, I=m staff to Zach Mottl, one of the Council members as well as the President of the TMA, the Association you=re here with. I=d just like to introduce the Chairman of my board to welcome you, Fernando Ortiz.

(Applause.)

MR. ORTIZ: Hi. I=m Fernando Ortiz, I=m Vice President and General Manager of Roberts Swiss, Inc., a local manufacturer. I also have the honor and privilege of being the Chairman of this year of the Technology and Manufacturing Association. On behalf of the Association, we want to welcome you to the TMA, welcome you to our facilities.

The TMA is a manufacturers association
representing about 1,000 companies, about 30,000 employees in the regional Illinois area. So, we're excited to have you guys here, and welcome!

(Applause.)

MR. SHINBARA: One other quick note. We just completed or mostly completed a new training center. We do training for 150 young people, Monday through Thursday, here at TMA. You're welcome during breaks to take a quick peak through our hands-on portion of the training. So, we're very, very proud of the fact that we do everything from blades to mills to five access training. We just have the first Swiss training starting that's been done in the Chicago area in the year. So, we're real proud of the work we do training and supporting, so help yourself peaking around if you want to look. If you have questions, somebody from TMA will confuse you. Thank you.

CHAIRMAN SMYTH: Thank you. Thank you very much. Okay, welcome and call to order. Okay, I would like to officially thank Mr. Ortiz.
and the TMA Association for hosting us this morning. We’re very grateful for this wonderful venue, and I think a lot of us will be taking the opportunity to do the quick tours during the morning.

So, I’m just going to quickly run through the agenda. Just a reminder, that it is perhaps a slightly more informal dialogue, and we have a possibility where we may finish a little earlier than scheduled. I know that there’s a number of people who have earlier flights and tight schedules, so we’ll try and keep it on track. If anything, actually that is a very good segue because I’m going to ask that as you speak, if you would please pull the microphone towards you because we need people to enunciate clearly. Everything is going to be transcribed.

With that, I would like to hand it over to the Vice-Chair, Claudine Martinez.

VICE-CHAIR MARTINEZ: Good morning, everyone. Let’s see, how close does this mic need
to be to have a good pickup? Is that about right? Okay. So, if everybody could just make sure that you do that, and as we have our interactive discussions today, if you could identify yourself for the record, we would be very appreciative.

I have the privilege today of introducing Deputy Assistant Secretary Chandra Brown. DAS Brown has been a very, very unique asset for us because she has been on both sides of the fence. For those of you who have not attended the meetings before, we are very privileged to have her because she served in my position. She is my predecessor as Vice-Chair on the Council and brings a small business perspective in particular to bear on the deliberations while she was Vice-Chair, and then took that into her duties as an appointed member of the administration.

We are very, very grateful for your leadership, DAS Brown, and on behalf of everyone on the Council, we welcome you today.

DAS BROWN: Thank you, Claudine, for
that lovely introduction. It is always a joy and a pleasure to be with the Manufacturing Council. As many of your know, this is one of my favorite tasks that I get to do. I have many tasks with this administration, but working with the Manufacturing Council, I don’t even consider it a task, I really consider it a joy. So, it’s great to be here again and great to see everyone.

I’m going to be fairly brief, but I am going to be talking a bit about Manufacturing Day and we are actually going to be soliciting some of your feedback on this as well. I also wanted to start out by thanking, you know, our Chair and our Co-Chair for their great leadership, as well as I was privileged to spend the morning with the committee chairs and co-chairs yesterday. I can just tell you that you have, you know, probably the most hardworking team that I’ve ever seen related to the Manufacturing Council. They had asked me to say a couple of overarching remarks that I wanted to make, and that is talking about what we are
expecting from the Department of Commerce and the U.S. Government, from the manufacturing as a whole, and how to date, you know, you have been exceeding our expectations.

But just as a quick review, obviously we are going to be talking today about some recommendation letters, and recommendation letters are critical. They're one of the main products of this Council. We take them very seriously, whether or not they are just related to the Secretary of Commerce or to our sister agencies, whether that be Agency or Labor or Education. We certainly disseminate those and make sure that information is made available across a united U.S. Government.

But in addition, sometimes we forget there's other great ways that this Council is contributing. One of those that we'll talk about related to what I'm going to be saying on the Manufacturing Day updates is things like white papers, things like lessons learned. When we talk
about Manufacturing Day, I’m going to give you some facts and statistics about what happened, and you know, I can start by thanking everyone here for the incredible efforts that the Manufacturing Council and many of you members have done, opening their doors, bringing in students, the community, writing blogs and posts. It’s been fantastic.

One of the things we are looking for is kind of constructive feedback. We always, you know, we always want to take things to the next level. So, for example, we might not need a letter of recommendation on we like Manufacturing Day. I hope that would be a recommendation of everyone here at the table. But you know, what may be more useful for us are what are the lessons learned, not just how great and wonderful everything is, but are there suggestions on how you take something to the next level.

As we all know, workforce is a huge issue. We are about, as we look forward to the future, there’s predictions, you know, millions of
worker shortage in manufacturing. So, you know, while Manufacturing Day has been great and I will talk a bit about the progress, the reality is we have to be taking it to the next level. So, that=s a lot of the feedback that we will be looking for from the Manufacturing Council which again could be in the form of a white paper.

I would say the third way that you all contribute, and by third doesn=t mean last because all three of these are incredibly critical, but it=s the outreach efforts that you do. You=re going to hear some briefings today on TPP from Shannon on Hannover Messe. If you remember, everyone here is a messenger and you are a multiplier for us. So, this isn=t about we always talk about any one company, any one industry. This is about you hopefully taking the information we=ll be providing today and disseminating it throughout all of your networks. So, your voice, your input, your spreading the word that we have is equally critical to the other work that you do. So, I want to thank
you and, you know, kind of talk about those are three of the areas where we so look forward to the contributions of the Council.

That being said, let me tell you a few fun statistics on Manufacturing Day 2015. Our last total was over 2,525 registered events. They were events in all 50 states. This is 50 percent more than last year, so it’s less for me about even what total numbers are. For me it’s about how are we progressing and where is the growth.

Nine states had over 100 events and I thought I would just call them out because there’s a lot of people here from them. Ohio, Michigan, Florida, and California each had over 150 events. So, kudos to those, and I know a lot of that is due to the Manufacturing Council in some of these areas. So, great kudos.

As we start to kick it off, too, for lessons learned, one of the things we were talking about even in the committee meeting yesterday with the chairs of the committees is how are we
outreaching more even than just opening our doors to the millions of students that we need to have come through in exposure. I want to just give you one specific example that I think is a great one. ALCOA, they basically hosted a virtual field trip, and 110,000 students, again from all 50 states, viewed the virtual field trip and, which I think is equally great, submitted 700 questions, because that’s what talks about engagement, that you’re going back and forth. A great way of, you know, outreaching. That event basically, I thought this is great, too, spurned over 16 million Twitter things which I think is really great.

Also, you know, we in the government, we want to always be pushing ourselves and testing. Another thing that I hope everyone here knows is that we are actually trying to see how this Manufacturing Day campaign works in terms of metrics. So, we have hired Deloitte Consulting and they are going to be administering a public perception survey, again to try to get data. We
want to make sure this is useful, this is getting
the measurements and the metrics that we want.

We are expecting probably the final
data in December, but I don’t want to hold us to any
data. But you know, we are hopefully going to get
that survey and information back so we can actually
measure the impacts of Manufacturing Day. Again,
that would be another thing, a call out I would have
to the members here. Any type of metrics and
statistics, you know, number of companies, you
know, when you send in your, the number of hits,
excuse me, number of students coming through your
facilities, those are all great metric numbers that
we would love to be able to share and to roll up
into the aggregate.

Another thing in terms of increase from
last year, there were a total of, you know, almost
8,000 new stories for Manufacturing Day which is
a 20 percent increase over the past year. So,
again on the press side, we’re making progress on
that as well when we reach out. The circulation
of the folks that supposedly saw the press was approximately 70 million which was 130 percent increase in terms of exposure to the press.

So, and of course, you know, I could go into lots of things about how many state governors introduced proclamations, how many counties and mayors. To tell you the truth, I think that’s an area where we really can’t, I was surprised, to be honest, that it wasn’t 50 governors who did announcements. It was actually 23, so we’re like only halfway there. So, again as you know, it’s something that everyone here could check, did your governor do a proclamation. We don’t have all 50 states represented in the Council but I think that’s something to look into.

The same with mayors, there were roughly 47, so a little under 50 city mayors who issued proclamations. In your small towns around the country, those of your folks and your memberships, did your mayors issue proclamations or talk about it, I think is another, you know, good
question and good metric.

So, that being said, I think again the overall from the government side, we’re incredibly pleased with Manufacturing Day 2015. We’ve seen increases where we wanted to see them across the board, some bigger than we thought. We’re now, as we said, doing a survey to measure the metrics and the outcome. As I said, the product and the feedback that we’re looking back from the Council, we’ll open it up, you know, on the floor here for you, too. I think, are we going to see a video?

CHAIRMAN SMYTH: It’s all queued up.

DAS BROWN: Okay. We made a, hopefully we see the video. Jan has done a great job and did a video. It actually mentions the Manufacturing Council and it was up on You Tube. It just, it’s a nice kickoff if we have it.

But I think what we’re really looking for is ultimately kind of a white paper type format on feedback, you know, and not just everything that went great. I always want to emphasize, there’s so
many great things that everyone has done in Manufacturing Day and kudos to that. But again if you’re going to reach millions and millions of students, you know, is there things that, you know, you would recommend or lessons you’ve learned or even something that didn’t work, you know, that’s absolutely fine as well. This is, you know, going to be kind of an open conversation and dialogue about Manufacturing Day, and then hopefully of course we’ll be capturing this, whether it be in a recommendation letter, in a white paper for the perceptions group.

So, with that, I don’t know if, Susan, you wanted to add anything? But I wanted to kind of open the floor up.

CHAIRMAN SMYTH: Yes, I think I do. I want to make a comment. The Workforce Development will be offering a white paper with respect to Manufacturing Day. Chair Shirish Pareek has volunteered to synthesize and collate information for all of the other subcommittees. As DAS Brown
said, you know, the Manufacturing Council has been a significant catalyst in this event. But if we’re two to two-and-a-half million people short in the year 2025 to having the skills to operate the processes at our manufacturing facilities, we need to talk to 25 million kids.

So, how do we take it from a momentum strategy to a viral strategy? That’s got to be a combination of face-to-face and virtual. I think it’s very important that we do as DAS Brown said, you know, we can capture lessons learned, best practices. We can put instruction sheets together to make it easy. I mean there’s a fabulous website and we can grow on it.

I do think there are opportunities for integration with parallel efforts. There are a number of efforts that I would say are complementary in our companies and in the United States as a whole such as the STEM activities, the women in manufacturing. How do we weave these together so that we don’t have a disparate,
scattered approach? How do we make a woven master plan? Hopefully, the Workforce Development Group will be able to pull the ideas together from the team and make a contribution.

So, I’m going to open the floor for a few comments on that, whether you want to share a best practice or, I think, you know, we have five or ten minutes. Then we will tee up Jan Allman who is kind enough to do a fabulous video, so we’ll end with that. So, or are you ready to go now?

MS. ALLMAN: I can explain what it is, too, if you like.

CHAIRMAN SMYTH: Right. Okay, so, would you like to do that first, Jan?

MS. ALLMAN: Sure. So, this is from --

CHAIRMAN SMYTH: Right, why don’t we do that?

MS. ALLMAN: Why don’t we do that?

She=s ready.

CHAIRMAN SMYTH: Yes.

MS. ALLMAN: This is from Wisconsin
Chamber. This was in celebration of Manufacturing Month. They did two-minute You Tube videos, there's a series. They asked me to participate in one of them, so here is Celebrating Manufacturing Month. They tied in the University of Madison, so here it is. But this is something that maybe we can multiply across.

(Video presentation.)

(Applause.)

CHAIRMAN SMYTH: Okay, I think that was excellent. You can see how much information you capture in two minutes. It was very vibrant, and thank you for mentioning the Council, Jan, it was fabulous.

Okay. So, I'm just going to open the floor for a few minutes. As DAS Brown said, excuse me, there was an incredible contribution from many people sitting around the table and their organizations and the states, and I would like to have some of that on record. Who would like to speak? Bill?
MR. YEARGIN: I'll start, Chairman.

We had, we did --

CHAIRMAN SMYTH: It's Bill Yeargin from Correct Craft.

MR. YEARGIN: I'm sorry. Yes, Bill Yeargin from Correct Craft. We did a few things. We had worked with our industry association, National Marine Manufacturers Association, and encouraged them to get behind Manufacturing Day. So, they started promoting it through their association, also contacted the publisher of Boating Industry Magazine which is their primary trade magazine. They did a couple of, they did a before article and an after article.

It was really pretty simple stuff. It frankly didn't take a lot of my time and effort to make the contacts and sort of get the ball rolling. So, it's really pretty simple to take it from one or two companies in our industry to all of us in the industry, industry focus.

Just in terms of the lesson learned, we
had a problem, actually our Manufacturing Day celebrations got moved back because the school district who was bringing the kids had a bus problem. So, you know, next year as we think ahead and we learn, a lesson learned is, you know, make sure the school district has thought all the way through in terms of what buses they are going to use to get the kids. I know it’s a really minor thing, but just in terms of a lesson learned that’s something that we experienced. So, thank you.

CHAIRMAN SMYTH: That’s really good. Would anyone else like to make a comment? Roger Nielson?

MR. NIELSON: Roger Nielson, Daimler Trucks North America. DAS Brown, Chairman Smyth and the Council, we really became motivated and energized by the encouragement of the Manufacturing Council in their, say sponsorship, along with the Department of Commerce on Manufacturing Day.

Lessons learned, as a member of the
Workforce Subcommittee, we are eagerly soliciting everybody=s input to put together a white paper on things that we have learned. As we all imagine, logistics are a big deal. In our company in North Carolina, we brought together three high schools for a full day event, visiting three different locations, our own plus two suppliers. The key was timing it minute by minute how we were doing it. We took responsibility for the transportation to take the school=s bureaucracy out of the program.

But our whole goal that day was to bring together 120 students and touch every single one of them with something. So, we tried to make the event attractive. We brought in movie props from the Transformers movie, because we built Optimus Prime for that. We brought in the first autonomous driving truck ever that was legal on the roads in the US, we brought that for them to look at.

We had Congresswoman Virginia Foxx join us. We had the mayor. We had lunch. But we let the kids come in, visit our facilities, and get a
feel for what it was to work in manufacturing.

So, some kids went away for the first time ever holding a welding torch. It’s the first time they’ve ever seen a robot work. The first time ever seen what an assembly floor looked like.

We culminated it with a lunch and then finally a town hall where 700 employees on the first shift surrounded them as they sat in the front row and listened to a short talk by Congresswoman Virginia Foxx who was very well prepared to deliver a message on Manufacturing Day. She kept on top of the topic. She was on task and then was available afterwards with everything else we put together for pictures and stuff.

When we sent the kids home after a full day so they can meet the closing bell, we wanted every kid to go home with something. So, we did photographs. We printed photographs with them, whatever they wanted for that day, and we hope that they remember that as they think about their career opportunities, that they remember that one full day
they spent learning about manufacturing. I think we were successful and we look forward to continuing this new tradition inside Daimler Trucks to sponsor Manufacturing Day.

CHAIRMAN SMYTH: Fantastic! Okay, any more comment? Joe?

MR. SYLVESTRO: Joe Sylvestro from Pratt & Whitney. So, our biggest Manufacturing Day ever, it’s really Manufacturing Month is what we turned it into. One of the things that we learned was, you know, it’s outreach but also our employees really resonated with the message as well. So, it became an internal and external kind of reach.

We utilized the support of our congressman, so we had them visit, shop tour, and so on which drew the press. Therefore, you know, a little bit of a broader conversation occurred, you know, with the reporters and so on. So, we were able to utilize that for the Manufacturing Day message.
We also brought the school classes in across various sites. For us it’s hard at times to bring people in from the outside into the factories, so it does take preparation and logistics. So, it’s just something that you have to think through carefully. But of course, you know, it can be done, so it’s just a matter of preparation.

One of the things that we learned and I wanted to share is our communications team really took to the social media, okay. So, you know, internally, we have internal website, you know, where we put our news, and they plan to hold one for different articles about people, about like what different groups are doing and so on. So, month to date six articles internally, 15,000 page views of those articles. All of them had a Manufacturing Day but also a theme, but also, you know, as I said, the topics inside.

But externally, four Facebook posts or, you know, articles or whatever you would call them,
I’m sorry. 48,000 impressions from those four Facebook, three linked in with 100,000 impressions, 19 tweets with 97,000 impressions, okay. So, in doing that, you know, the theme was U.S. Manufacturing, Manufacturing Day, and then of course, you know, Pratt & Whitney. So, we did not expect to see that kind of, you know, connection but it was a surprise and, you know, our communications team, you know, just did a fantastic job with that.

So, I think all of us can, you know, engage those media to, you know, benefit. So, just a suggestion for you the next go around. It was a lot of fun.

CHAIRMAN SMYTH: Thank you. Thank you for that, sir. Christy? Christine Wong-Barrett?

MS. WONG-BARRET: I’ll share some information about a regional event that was jointly coordinated by Susan Smyth, Andra Rush from DMS, I don’t know if she’s here right now, and myself from Mac Arthur Corporation. Each organization hosted
their own specific site visits, tours, et cetera, to open up their manufacturing organizations to the local community and students.

But in addition to that, a great deal of effort was put in place to assemble a regional neutral site and significant media day platform that would represent the broader manufacturing base for the region. We had three neutral, I’ll say industry neutral sites. We had a Rush factory tour which shows actual assembly of large body trucks which was provided for three, two students that are attending courtesy of the Henry Ford Museum. We had Focused Hope which is a Workforce Development organization in Detroit do tours. As well as the Museum of Science based in Detroit hosted about 60 inner city schoolchildren for a presentation. Because of the breadth and significance of so many companies participating in this regional event, we were able to draw in a speaker from White House to discuss the importance of manufacturing at a
national level, to announce some major new initiatives by the Federal Government that relate to manufacturing innovation called the MForesight initiative, if many of you have heard of that. They made the announcement at our event regarding that important strategic body that is going to be in place to help drive the direction of our future manufacturing innovation priorities.

Finally, we were also able to secure support from DOC with Assistant Secretary Jadotte made a presentation as well. So, we were able to leverage a larger event as a media platform to create a very big wave, while at the same time have individual events to give the exposure at a larger scale to several students.

I think some of the takeaways to that is as Manufacturing Day grows, there will be competition for eyeballs on the day, so what we need to think about is how do you scale it beyond just the day? Whether it is Manufacturing Month as others have mentioned, or if you can think about
it throughout the school year. In particular, the common core on several curriculum programs do have segments on manufacturing or on components of manufacturing such as where does supply come from, how do you buy products, where do they come from?

So, linking the curriculum actually to a field trip makes it part of the integrated learning experience which is part of the STEM program. So, building off of those platforms may offer us, as a broader community, the ability to reach more students throughout the year rather than only focusing on the day. The day could be by media push, but throughout the year thinking about opportunities to engage the students year round and tie it to their curriculum, tie it to field trips which are, you know, noticeably low in budget. So, if you’re able to offer a free field trip, the feedback I receive from students and teachers, this is the best field trip we’ve ever had and it didn’t cost us a cent, so thank you very much.

So, think about those as ways to engage
the students throughout the years. I also think, similar to what Susan was saying, how do we tie it in to existing platforms? Why not have a Girl Scouts badge for manufacturing? Or a Boy Scouts badge for manufacturing? So, tapping in to platforms that are already reaching, you know, the future talent base to extend it into the manufacturing world.

CHAIRMAN SMYTH: Thank you very much, Christy. So, I think we have a good representation, oh, Marsha?

MS. SERLIN: Yes. I did it a little different. We had Manufacturing Day with a recycle, and we brought Ronald McDonald to start the program. Ronald was able to, we were able to talk to the moms because mothers are really the influencers for their children, and we felt that so many moms feel that manufacturing is dirty, it isn’t a great place for their child, and not me, my children won’t be working in a factory.

So, we had 18 troops come in. We had
lunch by our vendors, and we had about 100 tours. We had 300 people participate from our company to give tours throughout the facility. They were on cranes. They were able to watch our manufacturing plant just operate. The mothers kept saying I didn’t know that it was so clean here, I didn’t know that manufacturing can be clean.

So, I think that was, we used a lot of younger children to understand what it is that recycling and what manufacturing is.

CHAIRMAN SMYTH: Great. Thank you very much, Marsha. So, I’m just, sorry?

VICE-CHAIR MARTINEZ: May I give one?

CHAIRMAN SMYTH: Yes, absolutely.

VICE-CHAIR MARTINEZ: I’m going to jump in here really quick as well. I’m going to echo a couple of concerns or a couple of ideas that were brought up. Leveraging programs that already exist, including the Job Corps for example, the nontraditional routes that are already out there and already funded I think are very important
mechanisms. We also did two different mechanisms. We invited the welding students from our local Job Corps program and realized that there was already an apprenticeship program in place that the Job Corps had funding for. So, now we are regularly circling through three and six-week internships for the students, and we've already hired one of the women that were interns.

   So, it's a very good mechanism for your company to increase talent as well and increase the pipeline.

   CHAIRMAN SMYTH: Thank you. Very good comment. Okay, Zach?

   MR. MOTTI: Thank you, Madam Chair. I'll be brief. I just want to highlight one difference. You know, we're SME, so a lot of SMEs don't always have the resources to put on the type of event some of the larger companies can. But a theme that I like to talk about is working together, and we partnered with our industry association here. In fact, where
we're at today, the Technology Manufacturing
Association had a career fair here for young
students for Manufacturing Day where the SMEs that
are members were able to bring parts and pieces,
and again talk about the exciting things that they
make and how they fit into the larger machines, the
larger, whether it's airplanes or ships or other
things. The students were really excited to see
how the piece fit into the whole.

I would echo the real issue that we had
was logistics with the high schools,
transportation in particular and funding for that.
Schools don't always have available funds, so we
tried to help out as much as we can. But that would
be a lesson learned to work on coordinating
logistics and funding for that. Thank you.

CHAIRMAN SMYTH: Okay. Yes, Craig?

MR. FREEDMAN: Just briefly. Thank
you for the opportunity. Craig Freedman from
Freedman Seating Company. We had a great day at
Manufacturing Day. We partnered with four local
high schools, a local training center, and the Chicago Metro Metal Consortium.

So, we had about 200 students come through. Half of them went through our factory in the morning, and half of them went to the training center, and then we reversed it. We were fortunate enough to have the Lieutenant Governor of Illinois, and she brought a proclamation with her from the governor of the state. We also had President Preckwinkle who is the Cook County President speak as well.

The kids really had a great day. They got to see really cool machines, I mean that=s what got them engaged into it and learn about things that they=ve never seen before.

But I want to reiterate what Marsha said because I think for next year, I think, and maybe not at the same day because the kids won=t want to do it, but we=ve got to engage the parents. Being on the Workforce Development Committee, it just seems to be crucial that the parents are kind of
the first line, and they’re the ones that are going to, you know, give the yea or nay to their kid whether they can get into manufacturing or not, or consider it.

So, it was a great day and looking for the next year. It was our first year and quite a success.

CHAIRMAN SMYTH: Excellent. Thank you very much, Craig. So, I just want to capture, oh, sorry. Last one, Dawn.

MS. GROVE: Sorry, last comment to make, Madam Chair.

CHAIRMAN SMYTH: One last comment.

MS. GROVE: Dawn Grove with Karsten Manufacturing. I just wanted to add that learned from prior Manufacturing Days that you cannot do all the tours on one day, so we have scheduled them out throughout the month. We have sub-zero going on today and a number of different ones with our declared Manufacturing Month.

The addition we made this year is that
we coordinated with our already happening annual Manufacturer of the Year Awards and Manufacturing Summit, a large trade show that the schools can bring the children to. So, we’ll have like our Ping inflatable set up so they can actually try out the golf clubs. It’s a very hands-on trade show, and that gives the students a chance to see all of the manufacturers in Arizona, or at least a large selection of them at once. I think that’s been a good addition for us.

CHAIRMAN SMYTH: Okay, thank you very much. So, I think we see a number of anchor themes expanding attendees beyond children. I think it’s a really key one. Leveraging existing programs such as the Job Corps and institutions and associations such as SME or AMT, the engagement of elected representatives, press, and social media. Phenomenal numbers from Pratt & Whitney. Logistics, funding, engaging people with respect to metrics, safety. Regional and company neutral events and extending the events beyond the day.
So, I would like to thank Shirish Pareek for volunteering with the rest of the subcommittee on Workforce Development and put this together. I would please ask you to put your comments in writing, any anecdotes, any suggestions and lessons learned. I’m sure that there’s more from people around the table.

MS. HOUSTON: Madam Chair, we were going to ask, the Workforce Committee, we were going to ask that perhaps we get out the Council to go ahead and do it in a Google Doc like we’ve done some other docs before so that it would be easy for everybody to see each other’s comments.

CHAIRMAN SMYTH: And build off it.

MS. HOUSTON: And the Workforce Committee is going to have the questions and create that format but make it easy for everybody to put their comments in.

CHAIRMAN SMYTH: Thank you very much, Jenny. Jenny Houston, Warwick Mills.

MS. HOUSTON: I apologize for not
saying my name.

    CHAIRMAN SMYTH: No problem, Jenny.
Okay, so I would like to introduce Ms. Shannon Roche from the U.S. Department of Commerce.

    MS. ROCHE: Thank you, Chair Smyth. As Susan said, I’m Shannon Roche. I’m the Director of the Office of Advisory Committees and Industry Outreach, and I will be very brief. But first, I want to just say, wearing my advisory committees hat, what a privilege and pleasure it is to work with all of you. This is, we work with a lot of advisory committees and this one is particularly engaged and committed, and we really, really appreciate all the hard work that you put into it and all the advice that you give the Department. So, thank you.

    Wearing my industry outreach hat, I wanted to tell you a little bit about the Trans-Pacific Partnership agreement that was just, I hope all of you saw it, has just closed. You should know that the White House and the Department
of Commerce are all in, as we like to say, on TPP, and that it is a critical element of the President’s trade agenda. The trade agenda of course is focused on growing the American economy and supporting middle class jobs at home. We really believe that this agreement furthers that goal. It is the highest standard trade agreement in our history.

Just for a little bit of context, you should know that more than 96 percent of the world’s consumers live outside of the U.S. borders, and in particular 32 billion middle class consumers are projected to live in the Asia Pacific region by 2030. So, we really do think that this is an enormous opportunity that we cannot afford to lose.

Very quickly, I just want to run through why we think this is the highest standard trade agreement in our history. There are five defining features, two of which are particularly interesting or I expect it to, which would be particularly interesting to this group. First and
foremost, it provides comprehensive market access
to these new markets. TPP eliminates over 18,000
taxes on Native American exports. Under TPP, 98
percent of industrial trade going to these new free
trade agreement partners will be duty free on the
first day, so I’m sure you can appreciate what a
difference that could make in your businesses.

Currently, in TPP countries, these
tariffs can increase prices by up to 59 percent for
U.S. machinery and up to 30 percent for health
products. I won’t go through every single
industry, but there are significant gains to be
made across industries.

For small businesses, for the first
time in any trade agreement, TPP includes a
dedicated chapter on small and medium-sized
enterprises. It addresses trade barriers that
propose disproportionate challenges to our small
businesses such as high tariffs, overly complex
trade paperwork, customs red tape, and
restrictions on internet data flows.
It is also the first multilateral agreement to address issues surrounding digital economy comprehensively. I won’t go through all of them, but it includes data legalization issues, data for restricting data flows, copyright protections, et cetera.

On the environment and labor, particularly interesting, in both instances TPP is the most robust, most enforceable trade agreement that we’ve seen in either of those areas to date. So, we really do believe that this addresses lots of different kinds of concerns.

We are working really hard. We will be working really hard to make sure that this agreement goes forward. We will need everybody’s help. As Chandra said, you are messengers and amplifiers, and you know, we will do whatever we can to support you, if you are supportive of the agreement.

In particular, I wanted to just call your attention, there are a few fact sheets that
are in your folders. We have a lot of tools like this. So, if there is anything, if there is any information or data that you want to learn about the agreement or that you think would be helpful in your understanding the agreement, please let us know. We have people who are crunching those numbers constantly, and we'll be happy to support you in whatever you might need.

Happy to answer any questions, but I know we're, I want to be mindful of time. So, I just wanted to say thank you.

CHAIRMAN SMYTH: Okay.

DAS BROWN: Can I add one more thing to that, too? Besides all these sheets, and we do have them based on every, you know, state right now that we're going and to the city level even on how it benefits, but also a bunch of us are traveling all the time. So, if you're having groups that are interested, you know, pro or con, and same with congressional folks, you know, there are ways if you contact, and Shannon has all the information.
The websites are on there. So, if you’re interested also in having actual people come out to talk about it, that is another option as well. I just wanted to add.

CHAIRMAN SMYTH: Okay. Thank you, DAS Brown. As Ms. Roche stated, there are some polarized positions regarding TPP, and I think we’ve got a range from enthusiasm to concern. So, I am mindful of time but I would like to request comment from the Manufacturing Council if anybody has anything they would like to share at this time. Ray Yeager?

MR. YEAGER: Ray Yeager, DMI Companies. My question would be, as I look at this and it says reach out to us at info.whatever, doc, if we want to have someone from DOC come and speak to a group, for example, I’m chairman of the board over a number of different organizations, can we just contact you, Shannon? Okay.

MS. ROCHE: Yes. Yes, contact me. We have a team of people who are coordinating all of
the Department of Commerce officials= trade travel. 
So, if you are looking for someone to come speak, 
just let me know and I’ll put you in touch with the 
right people. 

CHAIRMAN SMYTH: Great. Thank you, 
Ray. Any other comment or question at this time? 
Okay. I would like to thank DAS Brown and also Ms. 
Roche for their participation and for their 
comments. I would like to introduce Mr. Larry 
Turner of Hannover Fairs USA, Incorporated. 
Welcome. 

MR. TURNER: Thank you, Chairman 
Smyth. I’m Larry Turner, CEO for Hannover Fairs 
USA, the U.S. organization of Deutsche Investment 
that organizes Hannover Messe every year in April. 
The reason why we’re here today is the importance 
revolving around partner country. So, for the 
first time, the United States was named partner 
country for Hannover Messe next year. 

You know, while you might think of it 
just as a trade show, it spans much more than just
a trade fair. It's export opportunities, it's inbound investment, and it's also a political venue.

So, to give you some context of that, every year Chancellor Merkel opens up the trade show the night before with typically the head of state with the partner country. The next morning, there's typically a walk-through by the head of state as well as Chancellor Merkel to give visibility to the event as well as lead into some other conversations typically between those two and government.

To also give you some scope on how important the United States is as a partner country, we signed a memorandum of understanding a couple of weeks before this last show. Normally, the announcements go out a few months after the trade show in respect of the current partner country. This year's partner country was India, and Modi was there and opened the show and did the walk-through, while the press in Europe, the two
weeks leading up to the event and during the event, there was so much press about the United States as partner country.

In fact, leading up to the trade show, there was more press about the United States than there was about India. So, there is a huge opportunity for U.S. organizations from a visibility standpoint to increase what they’re doing in Europe and worldwide in a venue that really is a worldwide trade show.

So, with that as a background, I’ve got a short video that we’ll show, and it’s got a lot of information in it. We have two files that we’ll distribute after the meeting, the video and the presentation, and I’m not going to go through the whole presentation, it’s in the video, but it gives you some details that you can take back with you.

(Video presentation.)

MR. TURNER: So, the interesting piece on this, too, is the Workforce Development aspect of it. They mentioned Work Tech to you.
Basically, they bused in over 7,000 students during the course of the week, about 1,500 per day, get them exposed to industry, get them to start thinking about it. These are high school age kids. This year, we are working on a university recruitment aspect with Department of Commerce that we're going to drop into that area so that hopefully we can get some of those students that are interested in attending U.S. universities.

So, we're spending a lot of time right now on the regional events, trying to get the word out, which is why I'm here today is to hopefully leverage your networks to get the message about partner country, about the visibility opportunities. I've got a couple of slides I'm going to show in a minute, but you know, we've got a number of regional events. We just had one last night in Bartlett which is the next community over and, you know, it went well. But if you're interested in spreading the news, you can also get a list of the next events coming up through the end
of November at hannovermesse.events, and it=s two
N=s in Hannover. So, it gives a list of where
they=re at and we got some in the East Coast, New
Jersey, Pittsburgh, primarily right now the upper
Midwest area, most of the activity has been.

So, if we could go to, keep going. I
want to get to the slide with the fairground. That
one right there.

So, this is a good way to take a look
at those five different, they call them fairs.
It=s really topics within the show. All the way at
the top, Hall No. 2, that=s research and technology.
So, those are research organizations, universities
looking to commercialize their technology.
Historically, that=s been one of our tougher
categories to fill from the United States. So, if
you=ve got contacts in that community, we would
definitely appreciate getting the word out on that.
We are also, to make it a little more cost
effective, we are looking for sponsorships so that
we can help subsidize that area for those
organizations.

Right next to that is Hall No. 3. To give you some idea of size of the fairground, from Hall 2 to the lower left, Hall 13, is about a one-mile walk. It’s a huge fairground. There’s about five million square feet of exhibit space under cover, another five million square feet in open air. We go through, this year with the even year, we’ve got a couple of topics that are not included but we fill more than half, probably three-quarters of the fairground.

Hall 3 is where the U.S. pavilion, the investment pavilion is going to be, and that’s where commerce and EDOs will be represented for foreign direct investment.

The next three halls, 4, 5 and 6, that is industrial supply. It’s subcontracting. It’s lightweight construction. We find many of the SMEs that are interested like that area because they want to be subcontractors to large European and international manufacturers. So, for
instance, Akron EDO, they came a couple of years ago. They had a pavilion, and instead of being in the investment pavilion, they are in Hall 6 because of the companies they brought with them wanted to be in that area to start recruiting or building some business as subcontractors. It was very effective.

The next area which is the fastest growing area because of Industry 4.0, industrial internet of things, advanced manufacturing is digital factory. So, we’ve got companies there, like Microsoft exhibited on there with this last show for the first time in a pretty good, big way, about 800 square meters, approximately 8,000 square feet. They have re-signed for this year with 2,000 square meters. So, they see definitely a lot of value of getting in front of those companies on the factory floor. They’re bringing their partners in. I believe Rockwell is in the booth. I believe IBM is a part of that booth. So, that’s where you get kind of the factory and
production IT technology companies.

That transitions directly into industrial automation. So, between industrial automation and digital factory, those are two of probably the fastest growing sectors because of all the integration of technology under the platform.

In the far left, lower left, is energy. Energy is such a key component in the manufacturing process that it just is a really good fit. That=\textit{s} everything from storage batteries, Mobilitech is an infrastructure and subsystems for EV. Then within the whole show, the other interesting aspect is most trade shows you go to and you look forward to the foot traffic and companies coming that are attendees, there=\textit{a} lot of that with 200,000 attendees and most of those are decision makers. But even more important than that, there is a community at the trade show where there=\textit{a} lot of business done between exhibitors, because you=\textit{ve} got for the most case the entire breadth of manufacturing represented, so there=\textit{a} lot of
business done just within the trade show.

So, we counsel our companies that come
in to say, you know, look at the exhibitor list,
set up meetings with the other exhibitors, and set
those meetings prior to the show, develop those
partnerships, those relationships, and the foot
traffic becomes extra on top of that. So, it=s very
unique. It=s not like any trade show that you=ve
been to in the US. If you haven=t been to a German
trade show, it=s very interesting because it=s
organized.

You know, if you go to a big trade show,
I know it=s cliche, too, but if you go to a big trade
show in the United States, and I=ll use CES as an
example, very good trade show, very strong show.
But you might want to see three or four companies
that are managing one technology and you want to
evaluate those three or four companies, depending
on when they registered, they may be in totally
different parts of Las Vegas. They may not even
all be in the convention center. Here, they=re
going to be structured within probably the same hall.

So, it=s very easy to find and it=s all geared towards the attendee, what=s the attendee looking for. While the trade fair is big, very few attendees come to walk the whole show. It=s guys like me that have to be there that ends up walking five miles a day. You know, they=re looking at where are the companies that I want to see. They=re going to that hall, maybe adjoining halls, but they=re very focused.

The other piece that we=re looking to increase exposure on this year is attendance from the United States. The exhibitors are very important, increasing our footprint is very important, but getting attendees from the United States there is very important. High level of expectation by the international exhibitors that we have on site, and there=s things, I=ve been going to Hannover now since early 90's, between this and our technology trade show see that. You tend to
see things at these shows before they get to the United States.

So, one of my roles, I was in product management and I used these trips as a shopping trip to see what products I can see that weren’t being distributed yet in the United States and set up distribution agreements. Typically, a lot of the technology you don’t see for a year or two years. Bring your engineering staffs, bring your technology staffs, your management. Let them walk the halls. They’ll see things there in a different perspective than what you’ll see here in trade shows.

The other interesting dynamic with pretty much all of the German trade shows is the owners, some of these are privately held companies and they’re huge, but the owners, the senior management, they’re typically at the show the whole five days of the show. They have engineers on the show floor, and it’s very well expected that those engineers are going to be talking about not only
the application of their products but details about
the design of their products because the attendees
that are going want to know everything that they
need to do to integrate either into their factory
or into their end product.

So, it=s not just a bunch of sales guys
standing at the edge of the booth. They= are really
focused on delivering that content that the
attendees are expecting at these events.

So, with that, you=ll get this whole
slide presentation. If anybody wants more
information, Shannon knows how to get a hold of me.
You know, if there=s any questions, I= d be willing
to handle those.

CHAIRMAN SMYTH: Okay. Thank you, Mr.
Turner. I think we have a mix at the table, a
number of companies who regularly send attendees
to Hannover, and some who this maybe be new to. So,
I would like to open for any quick questions or
comments for Mr. Turner. Shirish Pareek?

MR. PAREEK: Shirish Pareek from
Hydralex Global. We've been attending Hannover Messe for several years now. Quick question while I have you here. Would we still stay, we make hydraulic products, would we still stay in the hydraulic section and power motion control or be in the U.S. pavilion?

MR. TURNER: So, what we've done for SMEs is we've set up pavilions, USA pavilions in all the technology areas. Typically, the enterprise organizations have standalone booths. Fluid power is a part of our motion drive and automation topic, and that is formally at the event on odd years. In even years, we do have good representation of motion drive and automation companies, and they are usually aligned with Halls 16 and 17. So, there will be a contingent of motion drive companies and I believe we do have a pavilion there if you're interested in the U.S. pavilion or standalone position.

CHAIRMAN SMYTH: Do we have any other questions from the floor? Okay, Mr. Turner, I
would like to thank you very much for coming and
giving us a presentation. I’m sure you’ll have
lots of questions. Thank you very much.

MR. TURNER: Thank you for having me.

CHAIRMAN SMYTH: Okay. At this point
in time, I would like to introduce Christy
Wong-Barrett. The Innovation Research and
Development team is going to present a draft of the
patent quality letter and we will be voting on it.

MS. WONG-BARRETT: Thank you, Madam
Chair. Christy Wong-Barrett from Mac Arthur
Corporation, I have the privilege of serving as
co-chair for the Innovation Research and
Development Subcommittee. A very talented group
of your peers have been working diligently to
prepare a first letter for your consideration. I’m
going to hand over shortly to one of our
subcommittee members, a full Council member, Irwin
Shur, to actually present the letter.

As you all may know, we distributed a
previous draft fully to the Council for
consideration, questions and commentary several weeks ago. We have had an opportunity to review all the comments from the Council. Thank you very much, first, to everyone who had an opportunity to review and also provide commentary. We have reviewed all of the comments and addressed all of them.

So, I will let, with no further ado, my colleague Irwin Shur give you a rundown of the feedback that we received from Council. We will then also review the full letter in its new iteration which is included in your packets this morning, and then also address, have some time for any further questions from Council before we move to hopefully adopt the letter formally. So, Irwin?

MR. SHUR: Thanks, Christy. I thought it would be helpful to, as a preamble, to sort of describe the committee=s thoughts on what we were going to try to do because they did morph over time as we started thinking about the issue. In our
mind, the issue originally was what can we do to make the patent system better. Everyone was concerned about the existence of what polite people call non-practicing entities and what impolite people call patent trolls who are going out through the various technologies and landscape and causing issues, and also just generally the problems and expense caused by disputes over patents.

Our original focus was on the new pieces of legislation, at the time new, that are still bouncing around in both the House and the Senate. As we thought about it some more and talked about it, we realized that that probably was not a good approach for the committee to take because, in our view, there were too many differing opinions and there were pieces of the two bills which were diametrically opposed to one another. There are pieces of industry, large and small, that have differing opinions on the legislation. In fact, one of the comments that we’ve received about the prior draft addressed that exact issue, namely,
that some smaller companies and inventors are actually opposed to both of those.

So, as we started thinking about all of that, we thought maybe we should shift our focus to fixing more things on the front end as opposed to the back end. The legislation for the most part, both of them are trying to deal with the aftermath of what happens after you've got a patent that's causing some sort of a problem. So, our view was let's take a look back at the beginning of the process, what can we do to make the patent grant process better? What can we do, what recommendations can we make to get people focused on getting better patents issued from the USPTO, patents that would be clearer, easier to define, and hopefully eliminate up front the need for companies to have big arguments about them down the road, big expensive arguments down the road.

So, that's how we came up with the approach that we took, which essentially talks more about things like: focusing on the training of the
examiners; focusing on metrics so that we have a better idea of the quality and not just the quantity of what=s coming out of the USPTO; and focusing more on evaluation as well of the examiners, who is doing a good job and who isn=t, and focusing on improving those who are not. Finally, a little bit about crowd sourcing. So, that=s how the letter developed the way it did.

I suppose we should address the comments that came in first. Thanks to everybody who managed to get through the letter without dozing off. For those of you who made comments, I think that I am supposed to actually address each of them in turn, and so I will do that. There is a new draft of the letter in the materials that you have, and I will point you to the pieces that we have changed as I go through the comments.

The first one regarding the number of the House Bill, and the one we have in there, HR 9 is the correct number. It used to have a different number.
There was a comment that was stated as follows: My understanding is that both of these proposed legislative bills were actually quite controversial from the viewpoint of small business and inventors with a significant number of challenges based on these bills, largely favoring large and multinational corporations who, through use of greater financial resources, are thereby able to significantly curtail if not suppress small business innovation and inventors. It may be worth acknowledging this controversy head on by identifying how these bills are seen as beneficial, particularly to innovation and small manufacturing firms.

That sort of goes to what I’ve just spoken about a minute ago. We are not trying to take a position on either of these bills or any of the facets of the bills. But when we went back to the letter yesterday in our meeting, we realized we probably could make a small change in an area that looked like, by implication, might be some
sort of tacit endorsement.

So, if you look at the third paragraph, the second line used to say, *ARecent pending legislative efforts are important steps to help address the issues.* What we’ve done is we’ve changed that to read that these efforts demonstrate Congress’ desire to help address the issues. We thought that that should address the concern by taking out any implication that we think this legislation is helpful or unhelpful in any way.

So, we felt we dealt with that one pretty well. Again, we’re not endorsing, intending to endorse either bill. Our focus is on the front end of the process.

The next comment that we had was asking us to provide citations to some of the executive orders and USPTO policies and regs that we addressed. So, we’ve added those references in Note 3 which is in the middle of the footnotes on page 3 after the signature block.

We fixed the bullet numbers because
somehow they all turned into ones as they made their way across the ethernet somehow. One other minor but very helpful change was to replace in point 3 on the bottom of page 2, let=s see, fifth line down, the word Aproducing@ has been taken out and Aawarding@ has been added. This is what happens when non-patent lawyers try to write technical language, so awarding is exactly the correct word so we fixed that as well.

The final comment that we had gotten was as follows: While the letter is well drafted and can stand on its own, its focus seems to be entirely on patent process with form, and yet there is no mention whatsoever of the direct correlation with either the strength of IP protection or changes in the patent laws with the manufacturing industry specifically. This last paragraph is the first time the U.S.manufacturers were even mentioned. Just wondering if perhaps language could be added that speaks to the impact of IP treatment and protection on U.S.manufacturing in particular.
It's a good comment, and we agree that manufacturing is very much affected. So, what we did do was, in the very first paragraph of the letter, we added the second sentence which specifically points out that the vast majority of patents in the U.S. are in fact granted to companies that have significant manufacturing operations. In fact, several of them are represented around or near this table. So, even some of the higher tech companies that you think of in terms of maybe software patents in fact are involved in manufacturing.

So, the IBMs of the world, the Microsofts of the world who are some of the leaders in terms of the number of utility patents that are granted to them over the years, they're also manufacturers. In fact, if you look at, we looked yesterday at some of the statistics, and if you look at the top 20 or 25 over the last ten years companies in terms of the number of patents issued, almost all of them have at least some manufacturing.
Very, very few are pure service or software type companies. So, I hope that last one addresses the final comment sufficiently.

I don’t really have any other comments about the letter. We appreciate everyone, as I said, who has looked through it.

CHAIRMAN SMYTH: Okay. I would like to thank Mr. Irwin Shur from Snap-On, Incorporated, for going through the quality letter and addressing the concerns that have been communicated very well. I would like to open the floor to the Council for any comments or deliberation at this time.

Okay. I’m taking silence as indication that everybody is extremely comfortable. I think the Innovation Research and Development team have done a great job outreaching over the last few months to the individuals sitting around the table. So, I think obviously all of the comments and concerns have been addressed. Okay.

MR. SHUR: Madam Chair, I did forget one thing which is, in case anyone is curious and
doesn’t know, we did in fact reach out to the USPTO and had a lengthy conference call sharing with them one of our prior drafts and getting some comments from them which were very helpful.

CHAIRMAN SMYTH: Excellent, and our thanks to them. So, okay, hearing no objections, I proclaim the recommendation adopted by the Manufacturing Council. We have to vote? Yes. Should we go around the table?

Okay. So, I don’t see any comments. So, we will do ayes around the table.

MR. YEARGIN: I’ll make a motion that we adopt the letter, this final letter as presented by the Innovation Research and Development Committee.

CHAIRMAN SMYTH: Thank you, Bill.

MR. FRIESIN: I’ll second.

CHAIRMAN SMYTH: Second. All those in favor?

(Chorus of ayes.)

CHAIRMAN SMYTH: All those in
objection?

(No response.)

CHAIRMAN SMYTH: Any abstentions?

(No response.)

CHAIRMAN SMYTH: Okay, the recommendation is adopted formally by the Manufacturing Council. Okay. Are you ready?

VICE-CHAIR MARTINEZ: Yes.

Excellent, we will turn our discussions now to the updates that we have from our various subcommittees. Due to some flight constraints for Hiro, I’d like to welcome Hiro to the floor now to give us the Energy Subcommittee update.

MR. FUJITA: Thank you very much, Madam Vice-Chair. Madam Chair, Madam Vice-Chair and ladies and gentlemen, it’s a pleasure to be with all of you today.

As you all know, the Energy Subcommittee’s role is to promote trade relationships in renewable energy while simultaneously increasing domestic production and
export activity per Secretary Pritzker. To accomplish this goal, the Energy Subcommittee has drafted a trade mission recommendation letter to Secretary Pritzker focusing on trade in the renewable energy sector to promote U.S. clean energy manufacturing.

To date, we have had telephone conferences with Deputy Assistant Secretary Chandra Brown, Senior International Trade Specialist and Renewable Energy Industry Analyst Drew Bennett, and the Renewable Energy and Energy Efficiency Advisory Committee to discuss the direction of our recommendations. Deputy Assistant Secretary Brown recommended we get in touch with the Director of the Office of Energy and Environmental Industries of ITA, Adam O’Malley. Another recommendation that came from our conversation with the Deputy Assistant Secretary was to familiarize ourselves with the work being done by other committees in this sector, like the RE&EEAC which I just described, and the Office of

Per the Deputy Assistant Secretary=s recommendations, we reached out to the Director of the Office of Energy and Environmental Industries, Adam O=Malley, who provided us with a summary of recommendations of the RE&EEAC to the Secretary of Commerce for Charter I 2011-2013 and Charter II 2012-2014 as well as specific feedback on the recommendation letter. Director O=Malley=s primary recommendation for the Energy Subcommittee was to shift the focus to recommend that the Office of Energy and the Environrmental Industries evaluate these markets and sectors for trade missions as part of its 2016 renewable energy markets report rather than simply recommending these sectors and markets to the Secretary for trade missions. Director O=Malley also recommended to further build a case for specific technologies which we have incorporated into the draft.

On October 8th, we telephone
conferenced with Senior International Trade Specialist and Renewable Energy Industry Analyst Drew Bennett who invited the Energy Subcommittee to participate in the RE&EEAC telephone conference in order to become more familiar with the goals and mission of the RE&EEAC which took place on October 15th. The Senior International Trade Specialist and Renewable Energy Industry Analyst agreed that communication and cooperation between committees will be helpful to further develop future projects. Drew put us in touch with the chair of RE&EEAC and the president of the Stella Group, Scott Sklar, to enhance communication between committees. After much deliberation, several meetings, and all of the excellent feedback we received, the Energy Subcommittee has incorporated the following into the final draft of the letter:

* Consideration for ambassador trade missions;
* The creation of a working group between the ITA, DOE, the Office of EERE and the
OEEI; and

* Recommendation that OEEI in collaboration with the working group mentioned above evaluates which countries are ideal for trade missions in renewable energy and clean energy manufacturing.

We also acknowledged the challenges faced in establishing trade with certain countries and supporting information on the specific technology recommended. You will have a copy for review next Monday. It has been unanimously approved by the Energy Subcommittee. We are eager to hear any suggestions you might have regarding the direction and the scope of our recommendation. We would like to submit our letter for the Manufacturing Council=s approval by the end of October.

Now, I would like to ask my co-Chair, Dr. Cody Friesin, to give some highlights of the draft letter we have prepared.
MR. FRIESIN: Thank you, Hiro. I think you’ve covered it very well, but I’ll just comment that, you know, trade missions are America’s best kept secret I would say for manufacturers who either already do or who want to make the export. Yet even though they are America’s best kept secret for manufacturers who want to export, they are highly competed. So, it is our studied view that there should be a substantial expansion both in terms of number and in scope of trade missions.

So, as Hiro mentioned, the subcommittee yesterday unanimously approved a letter around that expansion of trade missions, specifically focused on renewable energy manufacturers, and both traditional trade missions where organizations can apply for and then go on trade missions to specific countries around specific focus areas and nontraditional trade missions such as reverse trade missions which benefits SMEs, organizations that couldn’t otherwise afford to
take a one-off trip to a country or a couple countries on an expeditionary effort to build a business in that region. So, beyond that, we have, as Hiro mentioned, developed a thought process around creating a cross-departmental working group between DOE and DOC to determine the best countries and focus areas for trade missions, specifically where the DOE has made substantial taxpayer investments around renewable energy where there is a budding industry within the U.S., of U.S. manufacturers and where there are many opportunities in those countries that that working group determines would be an ideal place to go.

We have identified focus areas around wind, solar, storage, buildings, energy efficiency, and automotive. In each of those areas, the DOE has made substantial investments and there=s lots of groundwork already laid. This is, we=re not cutting new ground in that respect in any way. In fact, what we=re saying is that the U.S.government is already doing a really great job
with trade missions and renewable energy. Let’s go and make sure that we can get that out to the field and really enhance export through ITA.

So, as Hiro also mentioned, you know, we spent a lot of time and outreach discussing between, both formally and informally, between Department of Commerce and Department of Energy folks. I think we have broad buy-in from those people that we’ve spoken to.

We look forward to the entire Council’s feedback to the letter. We think it has a few really nice features for where we stand at this date which is it’s very focused, it can be executed entirely within commerce. Secretary Pritzker can choose to take our recommendation and go and do it immediately without a substantial new burden given that trade missions are funded largely by the companies that go on them.

So, we look forward to all of your comments. Please, when you have the letter and you have a moment, we look forward to all of your
feedback. Thank you.

VICE-CHAIR MARTINEZ: I’d like to take a pause here and just really comment on the value that we have for the in-person discussions that we have, both formally at the table right now during the formal Council meetings as well as in our networking sessions. We owe a tremendous amount to all of our gracious hosts including Zach who did the spearheading of the logistics that brought us here to Chicago today. For the record, I’d like it to be said that the Manufacturing Council, both last term and this term, has done an exceptional job of going out into the communities and making sure that we are staying out of the beltway when it comes to getting into the national policy considerations and how they affect geographic diversity, sector diversity, as well as SMEs and large businesses.

So, I think Irwin has just given us a tremendous example with Christy on the due diligence that is done on these letters to get them
to the point where they are really for you all to review them. You can see from Irwin=s diligent review of all of your comments, all of your comments are taken into due consideration. Please take them very seriously and please try to get them to the appropriate subcommittee chairs as quickly as possible.

We are going to be running fast and furious, not that we haven=t already, we just passed our third letter. But as you know, we=re going to have very active all Manufacturing Council calls on the off ones when we don=t have actual meetings. We will be sending out some save-the-date notices for future meetings. We=re targeting probably February for our next meeting in DC, and then perhaps May and location is to be decided.

But the reason that I bring that up is we are trying to do the lion=s share of the letters of recommendation work by the February time frame. In order to do that and get letters passed in our all Manufacturing Council calls, it is essentially
that you heed the call of Hiro and Cody for example
today on the input that you have on the letters.

    So, with that, we know that you’ve not
seen the letter yet from them, but if you have any
general comments for them on energy policy or
specifically the trade mission idea that they have,
we’d like to welcome those at this time.

    All right. I guess you’re on the right
track, gentlemen. With that, I’ll turn it back
over to the Chair.

    CHAIRMAN SMYTH: Thank you. We have a
last minute addition to the agenda. I would like
to introduce Mr. Joe Sylvestro of Pratt & Whitney.
Joe serves on the Energy Subcommittee. He also
attended the White House roundtable on the supply
chain. So, Joe is going to lead a very brief
discussion on the topic.

    Supply chain discussions have emerged
in a number of the subcommittees and we thought this
was a good opportunity face to face to have just
a little high level dialogue across talk in the
Council. I’m also going to call on Ms. Christy Wong-Barrett from the Innovation Research and Development Subcommittee who also attended the White House event to engage in the dialogue. Joe, the floor is yours.

MR. SYLVESTRO: Yes, thank you, Susan. So, good morning everybody. This topic is meant to be an informal discussion. It most likely is not new in terms of your thinking, but I think that we as a committee do have maybe some decisions to make in terms of how to proceed in the supply chain arena. So, please take my comments as, you know, just comments for us to kind of form up in terms of a direction.

So, as part of the mandate, we believe that the supply chain was one of the areas that we were asked to look at. So, as an energy subcommittee, we have that as one of our challenge areas and have been trying to develop what we call gap closure. So, where are there gaps in the supply chain? Then how can we make
recommendations that Department of Commerce, the U.S. government can provide support for renewable energy manufacturing in the US?

Then it occurs to us though and based on conversations, informal and also support from our chairs, that other subcommittees most likely are having the same conversation. So, I think the question for us is along the lines of do we continue on kind of separate paths, separate initiatives? Or do we have maybe a little bit more integrated approach in terms of how we would think about and undertake potential recommendations? Or something else which maybe you all have been thinking about.

I mean, very clearly, we have to integrate somehow, you know, and what is the best way to do that? Additional to that, do we, you know, press the stick forward and accelerate to try to produce something this year or prior to February? Or do we try to do the very best that we can with the actions that we have in place in
closeout, get to February and then turn our
attentions, you know, to the second year and really
trying to lay a foundation for the next Council,
you know, in this arena?

Okay. So, I wouldn’t say that we, you
know, are potted to any one idea but we do feel
responsible in regards to addressing the topic.
We do think that it is an important topic and an
appropriate topic for the Manufacturing Council to
consider.

CHAIRMAN SMYTH: Okay. I just want to
comment. Thank you very much, Joe, for starting
us. Just to remind everybody, one of the comments
that was made by Secretary Pritzker when she gave
us the charge when we met with her back in the April
time frame was that she was looking to this Council
to provide input, where there are gaps in
information flow, and what mechanisms exist to help
adopt new technology and upgrade capabilities in
the supply chain. So, that definitely is part of
our charter and until now it=s been woven implicitly
through the charters in each one of the individual subcommittees.

So, just to remind you, this is not going off base thank you. Claudine?

VICE-CHAIR MARTINEZ: I also like to give some background before we call on Christy for her thoughts and perspective. We just want to take you back to the previous Council and how these committees were formed originally. So, there was a very extensive survey that was conducted by the Department of Commerce staff asking us to prioritize what we felt as representatives throughout the country of what the Manufacturing Council's mission should be, and specifically what topic areas we should focus in on.

As we all know, the topic of manufacturing policy for America is such a general and robust topic. You have to sort of prioritize down. The four subcommittees that we have represented the top four concerns for the last term of the Council. I believe it was in the best
interest as decided by Department of Commerce to continue the work that had been started in the previous Council because as we're seeing, as busy as all of us have been doing all of our due diligence and working very, very long hours on our letters and so forth, our various efforts with outreach, Manufacturing Day, et cetera, time passes by very, very quickly.

So, this particular Council, because we have a change of administrations, will be looked to to provide an archive of information that we can hand over to the next Council and say hit the ground running, here is your library of information with which you can proceed on. We are very hopeful that the next administration will continue the work of the Council. At that particular time, they may decide to have other subcommittees or structure themselves differently. But right now, our charter this particular term has been told to focus on the four areas.

Now, what happened in the last term is
organically we created an ad hoc subcommittee for tax on SME issues because there were several Council members that organically had a very pressing issue with respect to tax issues. That happened after the first draft or the first tax letter came out, largely focused on large C corporations. I see this as in parallel. We see a lot of growth and a lot of interest both in the administration, the White House meeting and other efforts that have been ongoing on supply chain efforts, so both Energy and IRD have taken it upon themselves to kind of look at those issues. In fact, as our Chair has mentioned, the Secretary has specifically asked us for that.

Both Susan and I feel very strongly that this Council should be prepared to answer the call of what comes up during our term. We see this as an opportunity to be responsive. So, I would invite the members of the Council to think about what your input might be, and Christy will address us next, but what we’ll be looking for in the near
term is input and people that would be interested in serving, I’m going to call it for lack of a better frame of reference, an ad hoc committee that might discuss these issues.

So, with that, I’ll turn it over to Christy.

MS. WONG-BARRETT: Thank you, Madam Vice-Chair. I’ll speak on behalf of the Innovation Research and Development Subcommittee, not just my own work but our broader subcommittee has been looking at this topic. I think we felt that we were tasked with it, so it’s actually great to hear that the broader Council are on the hook for it and we’re happy to be a coordinating point if that’s helpful, or we’re happy to be a partner in crime, whichever way makes the most sense to develop strong points of view and recommendation.

Our interpretation of the specific request from Secretary Pritzker outlined three very specific asks for information from Manufacturing Council regarding gaps in
information flow in supply chains, mechanisms that exist to help manufacturers adopt new technologies, and practices that we have seen that help small manufacturers upgrade their capabilities. My interpretation and our subcommittee=s interpretation of that specific ask is more of a collection and synthesis of information, and that could present itself in the format of a white paper or a best practices or a >we have reached out to our constituency, this is what we found.= That would provide a complementary additive piece of information to supplement what=s already going on through the White House supply chain innovation initiative.

Our goal I think as a full Council should not be to replicate or reproduce all of the great work that is being convened through the White House National Economic Council, but I think we can supplement it with points of view from this Council and our constituency. So, one suggestion to the Energy Subcommittee would be that we collectively
develop a survey tool that we could utilize to get the full Council=s input on those three specific questions from Secretary Pritzker as a no-brainer. Obviously, we could answer them on behalf of our organizations, our industries, as well as your trade associations where you have a natural network of additional subject matter experts on the topic.

As a second point, I think if there are possible recommendations that come out of that initial survey, it would make sense for the subcommittees or individuals from the subcommittees that are working on those topics and the subcommittee could actually coalesce on possible recommendations, but I think the first step is, it seems like it may more be the outreach and survey information coming in.

As an update to this group, the Innovation Subcommittee, we actually did a roundtable on this topic several months ago. It was in our first in-person meeting in Chicago. So, we have already started to gather some information.
Jeff Wilcox who is the co-chair of the subcommittee as well as myself were also present with Joe. So, we were able to listen in to what several large manufacturers and small manufacturers are doing to address supply chain innovation. It is a significant topic for the National Economic Council, a significant challenge for the manufacturing sector overall.

So, I think it’s a two-part, probably a two-part solution for our Manufacturing Council. Again, the first piece is perhaps some outreach, data gathering and synthesis to address the specific request of Secretary Pritzker. We have been giving the feedback back to the National Economic Council informally, so we are in dialogue with Sue Helper and Vikrum Aiyer who are leading this initiative on a pretty much monthly basis about what we’ve learned and providing feedback. So, I think what’s been asked of us, we have been doing it live, but we can certainly I think formalize it and go more broad in our outreach to
get more input.

Then, as I said, the part two of it would be if we do fill out our specific recommendations for Commerce that Commerce can act on, that would improve the overall likelihood for the supply chain to innovate. We can address that as a second point.

The final thing I’ll mention is the NEC who are leading this initiative did ask for our support several weeks ago. We made a recommendation to them informally that the White House roundtable was a wonderful way to create visibility of the challenge that we face in our manufacturing sector with the hollowed out supply chain, and the ability to reverse that is going to be based on large manufacturers’ awareness of the challenge, and then a call to action to address those gaps. That White House roundtable was very successful as a starting point, but we felt that further awareness building sessions and roundtables would be necessary to continue to
spread the word of the importance of this issue at a national scale.

So, our feedback from the NEC was that they would like to look into 2016 for additional opportunities to host or convene an opportunity to talk about the importance of the supply chain to manufacturing, the importance of the industry taking a lead in solving this problem. It is not a federal problem, it is an industry market failure. The industry needs to take an active role in solving it.

So, we have actually asked full Council, or we had put a survey out several weeks ago where we asked for your input to identify what are key trade associations or industry meetings that are significant opportunities for, for example someone from the Department of Commerce, from the National Economic Council, to host a keynote, convene best practice sharing, raise the importance of the issue, and perhaps stimulate further catalytic action by industries on this
topic. So, if you could take a look back, I'll ask the Archana perhaps after this to resubmit the survey to full Council. We are waiting for your feedback. We've been giving it live to NEC, but we'd like, we are limited by our own industry knowledge so we really want to have the breadth of the Council's industry expertise, and the specific ask there is where else should this message be taken to start the best practice sharing.

CHAIRMAN SMYTH: I'd like any comments from the floor on commerce. I have Albert Green.

MR. GREEN: This is Albert Green from Kent Displays. One comment I would make, I think what you said is really interesting. I mean everyone sees this as an issue, and I think just two comments that I'll make. The first comment is that I think from a coordination standpoint, I think it would be just a real challenge for the whole Council to coalesce on it, I mean it could be done but just, you know, the logistics of putting it together. Also, it seems like the best ideas
usually come out when it=s just extensive dialogue
and discussion and so on and so forth.

What we have done inside the IRD
Subcommittee as Christy has pointed out is that in
every question that comes to us, we sort of boil
it down to so what is the innovation research and
development piece in this? So, we try to attack
it from that side in all of the questions. So, one
possible approach is that, as it being such a broad
question, you know, you kind of address it in the
context of your area.

In our case, we started to look at,
well, what is the innovation piece that we can
comment on, or the R&D piece. That may be one way
to kind of attack it because it seems that it can
be done efficiently in sort of the small five or
six-person groups. That=s my two comments.

CHAIRMAN SMYTH: Thank you, Al, for the
comment. Cody Friesin?

MR. FRIESIN: Thank you, Madam Chair.

So, I think the, I appreciate your comments, Al.
But one of the challenges is that, at least I have a great deal of concern that out of each of the subcommittees, the relevant supply chain recommendations will have a great of overlap and they'll be lost within the broader letters. So, I think Department of Commerce would be far better served by, even if the source of these recommendations will be out of the subcommittees, but in ad hoc subcommittee form to take all of those pieces make themselves consistent and provide one recommendation to Commerce that is specifically addressing Secretary Pritzker's ask.

So, this is really in support of the concept that Claudine laid out around an ad hoc subcommittee focused on supply chain.

VICE-CHAIR MARTINEZ: I would just add for everyone's reference, just to refresh your recollection, the Commerce team has been kind enough to give us the letter that Susan and I sent you all out that summarized all the asks to the subcommittees. You'll see on the first page under
IRD, that's what we're referencing when Christy was commenting on sending out a survey to ask where you all stand, both with respect to your individual companies and your associations and so forth. Those last three bullets is basically what we'll pool.

So, what we will take the responsibility task to do, Shannon, if you could help me connect with Archana, not only will we send the survey that you've already sent out but we will set up the survey mechanism to coalesce the data for these three points as well. So, that is well taken. I appreciate that very much, both of you. Other comments from the floor?

MR. MOTTLE: Yes.

VICE-CHAIR MARTINEZ: Please, Zach.

MR. MOTTLE: This is Zach Mottl with Atlas Tool & Die Works. I certainly appreciate the attention to the issue from the administration and from the Secretary and from the subcommittees. I support the idea of an ad hoc committee. I think
that just like the food chain feeds our bodies, the
supply chain feeds our industry. If we don’t have
a healthy supply chain, if we don’t have a healthy
diet, we don’t have a healthy body, we don’t have
a healthy industry.

As an SME, I recognize how I fit into
that food chain and it’s so important to foster a
good relationship between the large companies and
the small companies. In order for companies like
mine to innovate, I need a healthy business from
my larger customers to allow me to invest in the
technology and the team members to innovate and
support the growth that my large customers expect
and want us to be able to provide.

So, I would volunteer myself. I’d love
to be on the ad hoc committee if that’s the direction
that we go. I think it’s one of the most important
issues that we can talk about here. Thank you.

CHAIRMAN SMYTH: Okay. Thank you very
much, Zach. Irwin Shur?

MR. SHUR: Yes, just very quick and
probably a very obvious one. But I think a synthesis of some of the ideas that Al and Joe have had can be done by the simple expedient of making sure there is at least one member of each subcommittee on the ad hoc committee, and that they are thinking about it from the point of view of the specific application to the tasks of that particular subcommittee. That should address, I would think, some of Al's appropriate concerns about the tasks of the subcommittees and melding them together. And Cody, it also addresses your concern which is you eliminate the sort of scattered nature that could be there.

CHAIRMAN SMYTH: Good comment, Irwin. Okay. Joe, I would like to thank you for bringing this up. I'd ask for any last comments on this point from you.

MR. SYLVESTRO: Thank you for that. You know, I think an integrated approach in however it makes most sense to operate within this kind of a forum I think will serve us from the standpoint
of allowing focus on the initiatives that are already underway as well as not leaving something that I think we’ve been asked to consider. So, whatever is the right format, you know, I’d be willing to support.

CHAIRMAN SMYTH: Okay. So, I think we have a good momentum. A comment from DAS Brown?

DAS BROWN: Yes, coming from Commerce. So, I think what we are looking for is an integrated letter. So, you know, I appreciate the interest that’s being shown to the supply chain here and I think we would be very supportive of the creation of an ad hoc committee. If people would like to serve their time, whether one for each or, you know, build on the great work that’s already been done, I think if people are willing to do that, that would be great. We would look forward for an integrated letter from a supply chain ad hoc committee for example.

I would also say again, you know, we do need to be careful, I guess NEC has things they
would like to task us to do, but our number one priority to be clear is not the White House, it is the Secretary of Commerce in answering that question. We love our friends, Vikrum and Sue, but I do want to put that in there, and that also, we have other supply chain advisory committees as well within Commerce.

So, I think this is a big topic. There are many pieces and layers that you could look at. We would really look forward to seeing, you know, what comes out and what develops from that, you know, across the board. So, that would be some of the feedback from Commerce.

CHAIRMAN SMYTH: Thank you very much, DAS Brown.

MS. WONG-BARRETT: Madam Chair? So, just in support of the breakout of an ad hoc subcommittee, I would also, or ad hoc committee on this, the Innovation Research and Development Subcommittee have done some work but we are still in our discovery stage. So, we would have no issue
whsoever being part of a broader initiative. So, there is no, we don’t need to keep our hands completely on the ball, but we would be happy to be part of the broader Manufacturing Council initiative.

I would suggest that for whatever ad hoc committee does develop, that we have someone appointed as a chair of that to help call us to various ideas because there is a lot of program management required to bring together the thoughts, the discovery process, the recommendations. So, that may be something to think about for the Chair and Vice-Chair is for someone that --

CHAIRMAN SMYTH: That will make a lot of good dialogue. Any other comments from the floor? So, the Chair and Vice-Chair will take as an action item to assign a chair for this ad hoc subcommittee. I like Irwin’s idea of representation from each one of the subcommittees. I think some people have already nominated and we
do have two organic centers of gravity on this, and
I will be taking the dialogue off line. I thank
everybody. Back to the Vice-Chair.

VICE-CHAIR MARTINEZ: With that,
unless there is any other comment, I'd like to
transition. No other comment? I'd like to
transition to Mr. Shirish Pareek from the Workforce
Development Subcommittee who will give us the
briefing on Workforce.

MR. PAREEK: Good morning, DAS Brown
and Chair Smyth and Vice-Chair Martinez. It's my
great honor to be reporting on the progress of
workforce and perceptions of the committee on
behalf of my whole subcommittee.

Before I get started, I want to thank
the work that our subcommittee is doing and really
excellent participation and effort on the part of
all, and introduce the members. I'll start with
Roger Nielson, Jenny Houston, Craig Freedman, Ray
Yeager. Also regrets from three of our members who
for different pressing reasons could not be here
today, but their contributions are significant and valuable, Tim O=Mara, and Vice-Chair with me Andra Rush, and Eric Kelly who could not be here today.

Also, before I go into the work that this current subcommittee is doing, I=mn really delighted to see the work that we did in the last subcommittee on workforce and perception and the traction it is receiving. I was invited to be at an event in Detroit where President Obama and Dr. Jill Biden were announcing the real emphasis on community colleges and how community colleges can be used as a nucleus for really transforming skills amongst young people. That was, if you recall, that was our big recommendation really, using community colleges as a mechanism to drive trade skill development.

Other big recommendations we had made in our last, and I only share this as a way to encourage and talk about some of how the recommendations that are being made here are really followed through. Other big recommendations we
had made was driving a national level grant competition, bringing industry and community colleges and high schools to work together and really create these multiple nucleuses where skill development happen. There was a program like that announced in last December and actually I had a chance to also participate with Macomb County Community College which was one of the recipients of that grant money.

So, with that, I'll get into the work we are doing right now. Really, at this point, our subcommittee is working on three parallel sort of work products or deliverables. First one is career, technical and manufacturing education in middle and high school, including internship programs and apprenticeship programs. I'll go more into details of that in a few minutes.

Second one is perception campaign. We've talked about it for quite some time but I think we feel we are at a point where we have a clear path and we will be reporting back more on that in coming
meetings. But really, taking the work that is happening and the report out that DAS Brown gave on Manufacturing Day, how we can work Manufacturing Day from a day into an ongoing campaign and change some of the perceptions that even, Marsha, you mentioned about how mothers feel manufacturing has a certain perception out there. So, really thinking through a framework of how we launch our perception campaign, so more to come on that as well.

The third piece which is really documenting, and I was delighted to hear the report out from various Manufacturing Council members on learnings and new nifty techniques and approaches we all use for Manufacturing Day and really collecting all of that and can work that into, that’s a specific ask from Department of Commerce, so converting that into a white paper. While I have the floor, you all will be receiving a very specific request, as Jenny mentioned, a specific framework in which we want that information, but
please do, we are really looking forward to everybody=s input there and some amusing stories that I heard today as well.

So, with that, I=ll go into more of sort of details on middle and high school, some of the work that we=ve already done and it=’s still a work in progress. We still have some more research to be done and to make our letter of recommendation much more specific. But I=ll talk about sort of where our current thinking is on behalf of my whole subcommittee.

With regards to middle and high school, we recommend establishing a public-private partnership with Department of Labor and Department of Education to achieve the following objectives. First is establish a nationwide educational curriculum change for middle and high schools. Second one is create workforce development programs in public and charter schools to really teach students about the manufacturing industry, providing students with hands-on project
opportunities, as well as virtual or in-person field trips.

Third objective for us is to see more cooperation between schools, manufacturers and the Federal Government. I can safely say on behalf of the Manufacturing Council that we don’t believe that this work is all just the role of Department of Education or Department of Commerce. Industry certainly has a big role to play in the skills and workforce development issue. Third one is really focusing on establishing a national initiative for career and technology development. Finally, promoting national career readiness certificates which are stacked and transferable that high school students from high school to community colleges all the way to universities as well as industry.

So, just some key points on middle school. Really our focus is for education in middle school, we recommend a model that is developed by Scholastic, a leading publication of research-based instruction material to really
teach about, like citing jobs that are out there in the manufacturing environment.

For high school, our subcommittee proposes two approaches. One is career, technical education, and second is apprenticeship programs. Really, for apprenticeship programs, we are looking at partnerships between public school as well as the manufacturing industry to play a vital role in finding what is the best fit for both the students as well as for the industry.

On the stacked and transferable accreditations, manufacturers require a base level of skills for entry level jobs in the industry. But the opportunity to get these skills is limited and is provided mostly by the manufacturers themselves. We will be focusing about how career readiness can be promoted.

So, in summary, we would be recommending authorization of Carl D. Perkins Career and Technology Education Act of 2006 to make sure CTE continues to get the support and continues
to be promoted. Then again coming back to middle school, high school, as well as apprenticeship programs. So, as you see the next letter from us, there will be a lot more specificity on these topics. But given we were all together, I wanted to make sure we keep talking about where our subcommittee is headed.

I’ll stop at this point and transfer it back to you.

VICE-CHAIR MARTINEZ: Excellent. Thank you very much for that briefing. We really appreciate that, Shirish. I’d like to open up the floor for any discussion topics on workforce in general, things you think that the subcommittee should be addressing, expounding on what Shirish has just briefed us on. Anything? Please, Ray.

MR. YEAGER: Ray Yeager, DMI Companies. So, everyone in this room I believe is committed to the Manufacturing Council, and I can tell you that as part of this subcommittee, we are passionate about what we want to have happen with
the youth of this country. The Department of Commerce brought up earlier the concept in 2025, that there are going to be two-and-a-half-million jobs empty or needed to be filled in manufacturing.

That’s one of the things that I think we are so committed to try to move forward. We’re just trying to start it, but our goal is really so that in 2025 we don’t have that issue, that we have children coming up through middle school and high school that will be ready to move into manufacturing.

VICE-CHAIR MARTINEZ: Excellent comment, Ray. Thank you so much. DAS Brown?

DAS BROWN: Yes, if I can make a comment? I think this is such a critical topic and I so appreciate, we know the huge amount the Workforce Committee has done. There’s so much legislation, there are so many things happening in real time that it’s a huge topic to take on.

The few points, I want to commend you on looking at, you know, middle schools and the
younger age because there hasn’t been as much attention and focus on the government side. So, kudos on that, I think that’s great.

I would say on things like apprenticeship, you know, you mentioned that, and again knowing how much work needs to be done has some advice like on focus. As you probably know, we’ve put, this administration has put a huge amount of money into apprenticeship programs and have started up some new ones. So, we don’t need to necessarily reinvent at this point.

You know, I would be very interested in feedback on existing things like very specific. Is it working? Are there any gaps? You know, apprenticeship is a good one where we have been refocusing, and refocusing actual resources on. So, you know, specific feedback, are they working, are they not, you know, the good things about it. Those are some of the things where it doesn’t need to be new, but feedback on existing, newer performance measures I think would be very helpful.
from the government standpoint. Thank you.

MR. MOTTLE: Madam Chair?

VICE-CHAIR MARTINEZ: Please, Zach.

MR. MOTTLE: This is Zach Mottl with Atlas Tool & Die Works. I'd just like to highlight that you are in a live apprentice training facility here. During the break, please check out the facility and ask questions. We will have our Director of Education here from the Technology and Manufacturing Association. The Association has an over 80-year history in apprentice training programs and is one of the best that I've seen nationwide. So, please, I encourage you all to find out and learn about what is working here and how we can work together for more of it. Thank you.

VICE-CHAIR MARTINEZ: Very well put. Anyone else? All set on Workforce? Shirish?

MR. PAREEK: Thank you.

VICE-CHAIR MARTINEZ: Okay, thank you. Now, I'd like to turn it over to Jan Allman and Bill Yeargin for an update on our Trade, Tax Policy, and
Energy Growth Subcommittee. Jan?

    MS. ALLMAN: Good morning. Deputy Assistant Secretary Brown and Madam Chair, we are a work in progress. So, we have been in our discovery stage. We've been talking to subject matter experts. We developed a standard communication package. We went out and we received input both in our region and our areas, you know, from our local manufacturers. We had a standard communication package, we kept track of who we were talking to so that, you know, when asked how many people did we talk to, we actually developed a standardized survey to try to get even additional input in case somebody didn't want to raise their hand.

    So, we have been storming and forming and trying to get as much information as possible. We met this week, gathered a lot of that information to try to prioritize as the challenges that have been, so what are we doing moving forward. So, as you know, we already, we had some really emergent
urgent issues to address.

We did do two letters of recommendation. We have boiled it down that we have five actionable immediate items that we are going to be putting forth, that we're going to be working on to put forth before February. We have one white paper that we'll be submitting. Then we'll be focusing on longer term actions, advice and summary type things that we'll be pulling together for the next coming Manufacturing Council.

So, that=s kind of what our work efforts that we'll be focusing on as we proceed forward. So, that=s kind of a very short and brief summary of what we've been doing for the Tax and Trade Subcommittee. Five minutes or less.

VICE-CHAIR MARTINEZ: Thank you, Jan. Thank you.

DAS BROWN: Could you maybe just mention what your five topics are for the group even in general?

MS. ALLMAN: I don't have them with me.
We did not copy them because we had them in a huge matrix. I had asked to try to pull them together and they thought that would be too challenging, so we did not pull them. But they were ones that we felt that we can do very quickly by November was our challenge.

DAS BROWN: And I would say good work like on one of the specifics, like one of the specific questions that we had at the Department of Commerce for example was feedback on top market reports. So, that=s very specific in an area where, you know, we were looking for feedback and you have done a great job like outreaching and finding the good or bad about where those fit. So, as an example, I think that=s, you know, a really great thing and got very specific actionable items that --

MS. ALLMAN: We=re going to do a white paper on that one for sure. That=s the --

DAS BROWN: I just wanted to --

MS. ALLMAN: Yes. So, that one --
DAS BROWN: Because input from everyone here is valuable on that.

MS. ALLMAN: We'll be doing the white paper on it. Go ahead.

MR. YEARGIN: I think one of the most helpful things, this is Bill Yeargin of Correct Craft. I think one of the most helpful things for our group is we've got a tremendous amount of outside input. Every Monday we had an expert speaker, you know, our group went out to our business communities and universities and got input and did SurveyMonkey survey. So, a tremendous amount of outside input that's really been beneficial for us.

VICE-CHAIR MARTINEZ: Excellent. Any more from Jan? Did you want to --

MS. ALLMAN: No, I'm good.

VICE-CHAIR MARTINEZ: Okay, good. Thank you, DAS Brown, appreciate that input. Would anyone like to comment on that? On the data that's been gotten from those surveys so far from
the committee? Anyone else on general issues for the subcommittee?

All right. Are people getting hungry? Go ahead, Shirish.

MR. PAREEK: I really look forward to recommendations from the Tax Subcommittee. One of the things, and this is more of a general comment from me, there are certain companies that I come in contact with and more and more I’m seeing a trend where they’re taking the most profitable part of their business and taking it offshore. I see that trend in several large OEMs in my own industry where they make money enough to market parts which is the industry I play in and they don’t make as much money on the equipment, the big giant pieces of equipment, and they outsource the complete parts business overseas, the moneymaking operation.

Again, this is a general input from me, as we think about tax, what can and how can some of those things be kept in our own nation?

VICE-CHAIR MARTINEZ: Excellent.
Very good comment. Anyone else? All right. Well, seeing no other comment on that area, thank you very much, Jan and Bill. I'll turn it back over to Christy for the update from the Innovation Research and Development Subcommittee.

MS. WONG-BARRETT: Thank you, Madam Vice-Chair, and thank you, DAS Brown, for the attention and support today. You've heard a lot from our subcommittees, so probably a briefer update on what you haven't heard already is what follows.

Most recently, I just want to thank our subcommittee members, Dawn Grove, Albert Green, Irwin Shur, Jeff Wilcox, and also a special advisor on innovation policy who has been supporting our group, Kathleen Kingscott who is in the back there. Without her advice, we probably wouldn't have all the i's dotted and t's crossed and proper references and thoughts around building on existing platforms. So, thank you very much for your support and your advice.
As you know, our subcommittee had been focused primarily incorporating the feedback from full Council and USPTO as we brought forward our letter for adoption from the Council. So, thank you very much for your involvement and your wonderful commentary and review of that letter. We are very pleased to have it adopted today and able to button down one topic and move on to the next.

We have several other topics that are in our focus and we have been unpackaging those through discovery process over the past months. The three remaining topics we were looking at were:

The NNMI which is the National Network for Manufacturing Innovation. It’s a significant priority for Commerce as well as the administration to move that new vehicle for transference of technology into commercialization forward in our country out of pilot stage and into something that’s sustainable over the long term.

The second topic that we were focused
on is ICANN which is the Internet Corporation for Assigned Names and Numbers.

The third topic we were looking at was supply chain innovation which I’m grateful to hear that there is momentum more broadly outside of our subcommittee on that and that there will be able to be some focused attention on it because I feel we haven’t been able to put as much as we would like into that particular topic.

So, now I’ll provide a brief update on NNMI and ICANN since I think I’ve already briefed the full Council on the other two topics today.

For NNMI, we have spoken to all institute directors as part of our discovery process and actually several of the operational leads within those institutes as well. The directors obviously play a role to guide at a strategic level, but the operational leads have a lot of insight on what are best practices, what are things they would have liked to have seen done differently, what is the value they could see from
central support, from network governance. So, we've learned quite a lot about successes and opportunities for improvement in standing out the five existing institutes that are at some level of maturity.

We have also spoken to the NIS Deputy Director, the Advanced National Manufacturing National Program Office Director Mike Mulnar, and toured the DMDII as part of our initial meetings as a subcommittee. We've spoken to the agencies that have funded the initial institutes that were stood up, so the DOE Director of Advanced Manufacturing. We are working on a call with DOD, so Adele Ratcliff, you know, on our hit list for a phone conference, but she was very busy obviously setting up the new Flex Hybrid Institute, so we appreciate the attention on that.

We have also spoken to the Advanced Manufacturing Partnership, one of the co-chairs that let the NNMI work stream. There is still more work to be done to review some of those
recommendations and bring it in to our work. Then we’ve also spoken to several industry participants. We are still missing a few inputs but we are in the process of gathering those through setting up interviews and discussions. I’m really thankful, DOC had been wonderful at making connections and opening up the dialogue and helping us get access to individuals that we need to speak to.

We will be actually splitting our work on NNMI into two sections. The reason for that is there is a specific topic that Secretary Pritzker was interested in our feedback on regarding the open topic selection process. It was highlighted by Secretary Pritzker as an area of interest, and there is some time sensitivity to this as well. So, we have brought forward that particular component of our work on NNMI and we’ll be working on a very, I’d say a short and sweet focused letter within the next eight weeks that provides commentary on the process for open topic selection as well as how to attract the appropriate
individuals and to do the review and selection of
the institute. That, as I said, we’re expecting to
produce within the next eight weeks as our short
time frame.

The secondary investigation would be
what we’ve learned from the broader discussions on
institute network best practices. So, that will
be coming forth in a formal letter, we’re hoping for
February. It’s a little bit less time sensitive
and we’ll have the time we need to coalesce on some
recommendations and also speak to all the agencies
that are involved and all the stakeholders to make
sure we’re building on the work that they’ve already
done.

Finally, on ICANN, we are currently
developing recommendations letter regarding the
continued oversight by the Department of Commerce
with ICANN which is the Internet Corporation for
Assigned Names and Numbers. For those of you that
are not as familiar with it such as I, I’m learning
about it as well, it’s the technical body that
ensures the stable internet and oversees the issuance of internet names including top level domains such as .com, .gov, but also branded names such as .cocacola, .boeing, .hydraulexglobal for example, so manufacturers= brand names.

There are specific ideas that we’ll be developing for reforming ICANN structure to improve accountability and transparency to better protect manufacturers not only today but in the future. I think many of you are familiar with the topic of distributed manufacturing and the potential in the future to be manufacturing things in multiple locations as close as your customer’s doorstep, and your domain name may be the channel through which that manufacturing happens. So, understanding how the future of manufacturing can be impacted by a lack of control and accountability over domain names is very important for our Council to be thinking about.

So, we’ve spoken to outside legal experts in the field, Paul McGrady as well as the
Department of Commerce=s NTIA which are the representatives that are responsible for ICANN within DOC. We are still finalizing recommendations, we=re expecting a February timing for that as well.

On the other topics, supply chain innovation, I think we=ve already briefed so I=ll pause there and open up the floor for any questions.

VICE-CHAIR MARTINEZ: Any questions or input for Innovation Research and Development? Anyone else? All right, I am going to, please, DAS Brown.

DAS BROWN: So, if I can just make a comment that I think the level, depth and breadth of what you=ve done, particularly in the NNMI, is something that we in Commerce are, you know, really excited about hearing about. I really appreciate, you know, the huge amount. I think a common theme you=ve seen from everyone, whether it=s energy, talking with DOE and the other folks to talking with all the institutes, the Department of Defense, the
Department of Energy who are doing the NNMI's currently, it's so critical to do that outreach, you know, across agencies, whether it's Labor, Education, Energy.

But in particular on that, what I think is great as well and I just want to add, whether it's recommendation letters, you know, specific recommendations, that there is so much thought process and work and background information that you've done during this discovery process. I just want to make sure that everyone is capturing that, that not everything, you know, will be in a recommendation letter. We don't want necessarily 20-page recommendation letters with, you know, all the great information you've discovered, whether it's annexes, whether it's notes, whether it's white papers. You know, there's just been such a huge amount of effort done particularly in this NNMI effort.

So, you know, be commended for that and I hope that, you know, there's ways that we can take
that work, it doesn’t even have to be in a formal recommendation within that time frame. I also think that will be another one of the, as a kind of concluding remark, another one of the areas where you want to make sure it is keyed up for the next. The NNMI s are going to continue, there will be governance issues that are going to continue. You know, we believe there will be expansion of more, so this is a continuing, you know, theme and topic.

So, as you also look towards transitioning, I think it’s important that, you know, that’s captured in your prioritization for the next folks coming will be really helpful. So, thank you.

VICE-CHAIR MARTINEZ: Yes. You sort of took the words right out of my mouth, DAS Brown, because I wanted to make sure everyone on the Council knows how diligently the co-chairs are working on this particular term of the Council. We have been told several times by the Commerce staff,
by DAS Brown and others, that we are very fortunate to have the leadership that we have. You all don’t see a lot of the behind-the-scenes work that goes on, both with our Commerce colleagues as well as our leadership team. We meet at least every two weeks via phone or in person. We had a very robust discussion yesterday where it’s very, very collaborative and collegial, and we are very, very grateful to be able to foster that environment.

That comes from the leadership of Department of Commerce. We are very fortunate to have DAS Brown having sat on this side of the table and taken her passion for manufacturing and understanding of the importance of diversity not only for SMEs and large businesses but geographic sector diversity. DAS Brown is so humble, she will not tell you that on the average she has one to two days off per month. Her weekends, travel schedules, she’s recovered from pneumonia I think not quite all the way as you can hear from her cough. Her work ethic is relentless and she really, really
believes in this country and in the work of this Council. So, I think we should give her a round of applause.

(Applause.)

VICE-CHAIR MARTINEZ: You know, I'm just going to transition into my closing remarks and let you all know I think you all see the value of having the brainstorming and networking sessions that we have outside the beltway. Does everyone have some good feedback on Chicago, right? We had a wonderful time here. Grateful to Zach. We're very, very grateful to the DMDII folks including our own Liz Emanuel who we miss tremendously but we're very, very happy she's upward and onward.

The Technology Manufacturing Association that's hosting here in this amazing building, our option is going to be to go ahead and do a tour just before our lunch arrives at 12:00 o'clock, so we're trying to get done a little bit early to give you the opportunity to take advantage
of this facility here, maybe take some lessons learned home. I think that=s very, very important.

I=d also like to highlight one of our colleagues, Jim here from Whirlpool, James Keppler, we are very, very, very appreciative. We cannot say enough about the hosting that you did yesterday. So, I think Jim also deserves a round of applause.

(Applause.)

VICE-CHAIR MARTINEZ: Then last but not least on the host, I think that really we need to give you a round of applause as well. No one sees logistics. I think you are in constant communication maybe six times a day with Department of Commerce in the last few months. So, please, give our friend also, Zach, a round of applause.

(Applause.)

VICE-CHAIR MARTINEZ: Last but not least, I=d like to thank our Chair, our esteemed Chair. I think she=s doing an exceptional job of leading us, really, really fostering the
camaraderie. It is a privilege to be able to work with you and work with every one of you. I learn so much from you all the time, both in formal settings like this as well as informal. I thank you all for your patriotism. Thanks so much.

CHAIRMAN SMYTH: Thank you, Claudine. Much appreciated. I think we've made phenomenal progress. When we started this journey in April, we realized that we had probably less than half the time of previous councils. I want to thank the entire Council for their investment, that's been a significant investment of time and resources.

I'd also specifically like to thank the supporting staff, people behind the scenes, many of whom are present sitting in the back of the room.
I, you know, very much appreciate what they're doing on a personal level, my support, and also you guys are reaching back and we would not be able to move as quickly and diligently without our experts on the team. So, perhaps a small sign of appreciation?
(Applause.)

CHAIRMAN SMYTH: Thank you very much. Okay, in this vein, I think formal thanks are also due to DAS Brown, Ms. Roche and Ms. Segal and their staffs for not only coordinating these meetings but facilitating the engagement of SMEs and the cross agency dialogue. That=s really been a critical component of our success and our ability to accelerate. I think several of the speakers today have commented on that fact and it really is essential to perform this due diligence.

I think it=s really, really important within the agencies to understand and there=s so much activity happening cross agency, what are the existing programs, and to echo DAS Brown to say what are the gaps in these because it=s much easier to course correct something that is already in place. In that way, we can make a significant impact and relatively quickly. So, I want to thank you all for doing that within the individual chairs.

You know, as it=s been mentioned today,
we have three recommendation letters that have already been accepted. They are top quality and they are in record time. But in addition to that, that is not the only mechanism that we have at our disposal. We have other letters in the pipeline but we also have multiple white papers and there was some general discussion on that today.

I also think it is extremely important to capture the chronicles, and that is a word that came up a number of times in the last couple of days, the chronicles of how we achieve the letters, who did we speak to, what was the organization, and really leave some level of standing operating procedure for the people who will follow us and take it to the next level. I want to thank everybody for their activities in developing what I would regard as the spectrum of deliverables for the Secretary and the Department of Commerce.

So, I would just like to open the floor for any general comment before I officially adjourn the meeting. Yes, do you want to make a comment?
Sorry. We have a couple of minutes.

VICE-CHAIR MARTINEZ: If I can. I just want to let everyone know, in preparation for our next all Manufacturing Council meeting which we’re targeting in February or March, probably February, we don’t have the congressional calendar published yet, and so that’s another reason why the date is a little bit uncertain. But we want to make sure we’re responsive to the feedback we got in the previous all Council meeting which was to replicate what was done twice I believe in the previous Council, and that is to act as an educational resource, have the Council go up and do some education outreach for the Hill.

So, if you have any contacts or any specific areas that you’d like to reach into, I would really appreciate if you connect with Archana and give your expertise and resources so that we can start to determine what those meetings will look like, and get your calendars ready as well. Right now, we’re looking to do an off site briefing
in May, and then regroup again in Washington, DC probably in September for our final meeting. Again, we will follow up on those dates with you. I know your calendars are very sensitive, specially international travel, and we will make every effort to get those established very quickly.

CHAIRMAN SMYTH: Thank you, Claudine. Any other general comment? Okay, I would like to formally adjourn this meeting. Thank you, everybody. Oh, and by the way, I just received and extremely important note, the food is here.

(Off the record.)

CHAIRMAN SMYTH: Okay, just a quick breaking news, for those of you who are flying as I am out of O=Hare, Bill said he just received a communication that there are a number of TSA people, or there are less than the usual number and expect huge delays. You may want to bring that into consideration with your flight time. Thank you, Bill.

(Whereupon, at 11:48 a.m., the meeting
was adjourned.)