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P R O C E E D I N G S

MR. O'HANLON: Good morning, everyone and welcome to Brookings. I'm Mike O'Hanlon with the Foreign Policy Program. My colleague Molly Reynolds from the Governance Program here at Brookings and I would like to welcome Patrick O'Brien from the Office of Economic Adjustment at the Department of defense. We're really pleased to have you here today for a different kind of conversation than I've been privileged to have in my years at Brookings, talking not about some foreign policy crisis in Syria or Afghanistan or Russia, but talking about the impact of the military and military spending here in the United States on our communities, on our economies, on our state economies, on our national economy. And the Office of Economic Adjustment at the Pentagon has just put out really one of my favorite government reports. That may sound like damning with fake praise, but it's a beautiful report and you've got to check it out if you haven't already -- there are some copies here, it's on the web. And what it really does is break down, again, the way in which the defense dollar goes to different parts of the country, at the regional level, especially at the state level, but also at the county level, and breaking down by different kinds of military spending. In other words, where military personnel and civilian DoD employees are located and have their salary and live their lives with their families, but also where contracts go, contracts to build weapons, contracts to develop weapons, contracts to provide defense services. Just a remarkably accessible form of data, which I think is of use not only for understanding the defense dollar, but really for understanding economics and the way our national economy works.

And Molly Reynolds is an expert on congress and on the federal filibuster, a topic she's explored in her book, but also thinks a lot about congressional races and about congressional caucuses and the way different blocks form in congress and how they vote and what motivates them. And so I'll be delighted after Mr. O'Brien and I begin with a bit of conversation, where he's going to frame the report and its main findings, to then bring Molly in as well to the conversation before going to all of you.

Just one more word on Mr. O'Brien. He's from the great State of Minnesota where he went to college, got a graduate degree at Carnegie Mellon, has worked at the Department of HUD, but also worked locally in Economic Adjustment in Duluth, Minnesota and has a wide range of background therefore in trying to think of how economies build on their strengths and recover during transition and otherwise utilize the full range of assets at their disposal, which I think really makes him and his team, like my good friend Tara Butler and others in the Office of Economic Adjustment, really well positioned to produce this kind of report.

Just one last word of introduction and then I'm going to just open it up. Again, thank you, Mr. O'Brien for being here. By the way, thank you all for joining three Irishmen and Irishwoman two days after St. Patrick's Day. And Mr. O'Brien just hosted a big dinner for his community on Saturday. So we're all recovering from Sunday still, tying to keep the St. Patrick's spirit alive. I hope that's true for all of you as well, whether Irish or not.

But let me just say that there are a lot of ways to slice and dice the findings of this report and a lot of the detail is presented beautifully in map form, as I say, inside its pages. And one of my favorite ways to study the report and to begin to get a sense of where defense dollars are spent -- and I think Molly has emphasized the importance of this to me as well -- is to think about not only where defense dollars are spent in the greatest quantity, but where they are the largest fraction of a local or state economy.

And just to help you begin to establish some mental and conceptual pillars, I'm going to offer one last thought, which is as I studied the top 10 list, I formed some pairs in my head which I thought were helpful for me to remember where these dollars are most concentrated relative to the size of local and state economies. Hawaii and Alaska out west, Maine and Connecticut in New England, this area, as you can imagine with Virginia far and away the number one state spender as a percent of GDP, which is a little almost surprising. We know Virginia has a lot of military capability, but it's also a big state with a big economy and yet defense is 9 percent -- almost 9 percent of its entire economy. And then Mississippi and Alabama, with a lot of test ranges and air war colleges and other facilities. And then Kentucky, sort of the outlier. No obvious pair state that I could associate with Kentucky, but the home of the 101st Air Assault Division, among other things, and Fort Knox. So we can begin to understand the national economy and the way in which defense affects it in these kinds of ways.

But I'm now going to turn the floor over to the real expert and first ask you to join me in welcoming Mr. O'Brien and then let him say a few words about his nice report. (Applause)

MR. O'BRIEN: Thank you. Thank you, Michael, and the Brookings Institution. And might I add, Michael is part of a genre of other analysts that we work with, and it's through their work actually that people become better informed about what's happening with the DoD expenditures and it's through their work also that people can start anticipating what we can do to stay in front of different thing that are happening with the defense dollar.

So the report that we are talking about today was brought about because of the Budget Control Act of 2011. The Budget Control Act of 2011 changed the way everything happens in DoD. It brought about what's called the sequester. So if we didn't meet certain budget thresholds there was going to be an automatic cut brought about. And at the time it was enacted some people likened it to a meat cleaver, an ax -- whatever you want to call it, it was bad because there was no control over what was going to happen if you didn't meet a budget cap. And so we brought in an era that was typified by not having regular appropriations on time. We ended up on continuing resolutions. For those of you that don't know what that means, we don't end up with a full year of appropriations.

So while you're under a continuing resolution you can't go out and contract for new products, et cetera, so your procurement process starts contracting. Now, if you have this Budget Control Act and you don't meet your budget caps, you have to turn money back in. So there's the meat cleaver, as they call it, comes out and there's a sequester. You have to give up money. And if you don't have enough money to pay people, you sequester people. So this really hit the wall in 2013. And I don't know if you remember in 2013 we had to ground pilots from training in their flyers, we had to pull people out of boats, we had to tell people to stop training on the ranges, et cetera, because we couldn't pay them to do this. And it created enormous implications for readiness.

Well, all those implications are felt locally and we start getting a lot of requests from the states and communities about, okay, this is happening, we don't know why it's happening, and we're trying to understand it. And so there wasn't one common source that told people where does the defense dollar go. And so we looked at this and we said let's start pulling these pieces together. So what you have in front of you today is the outcome of this effort, and it continues to be built upon. So we continue to try to grow it.

Michael talked about impacts. We're careful not to represent impacts in that document. What we're trying to represent in that document are expenditures and those expenditures are coming from some public data bases that should be readily accessible to anybody in the public. The difference is we're putting it together to make it easier for people. So if you take a look at that report, the blue sections all represent procurement, and they come from data that we have to report, the Department has to provide to what's called USAspending.gov. And it reflects what we procure over the course of a fiscal year.

Now, the data lags, so what you have in front of you is for FY '17. The FY '18 data doesn't become available until the following March. So this month we expect we'll be getting FY '18 data and putting that together. If you take a look at this spending -- it's by place and performance -- or I'm sorry, it's not by place and performance, where the money is sent to. And if it's sent to somebody then that gets sent out to the place of performance. So there's a little bit of a wrinkle there that I'll address a little bit later. And you'll notice it talks about companies and it can talk about locations. The personnel numbers come from the Defense Manpower Data Center. So that's the keeper of all the defense manpower numbers. And what we've done in that report is we've represented military personnel, so uniforms, we represent civilian, we've also represented Guard and Reserves. And so in that report we've also presented gross numbers of employees and the cost or the expenses that we have for personnel in those locations. And if you look on the upper right-hand page of any of those tri-pages that we have, you'll see rankings on a national level where people fall out relative to each other and the Nation.

So the purpose again is to present people with a real time picture of where the defense money is going. Now, what we're hoping is that people like Michael, and a number of you in the audience, will pick it up and start drawing upon what's the correlation, what are the relationships that exist across those expenditures, and then start talking about what can we do to look at those expenditures, because, let's face it, we brought this out because of the Budget Control Act and because people were worried about impacts locally. And it's only magnified since then. So since the Budget Control Act started we've probably lost close to $90 billion in defense procurement. So those were real losses.

And so states and communities have been engaged in trying to make themselves and those businesses, those economies, more resilient to those fluctuations in spending. And we now have further national security needs, so they're looking at artificial intelligence and how do we grow and develop better artificial intelligence around our defense presence, they're talking about cybersecurity. We instituted a whole line of new restrictions that if you want to subcontract with DoD you have to have safeguards in place to protect yourself against cyber-attacks. Well, if you're a local official, you don't know what you don't know, and this guide helps you understand where does the money go so that you can then go out and start talking to t hose locations, to those industries, and understanding and getting a better handle on where it's going.

MR. O'HANLON: That's fantastic. If we could go through just a couple of the top findings. And I'll just take the liberty of, again, amplifying and underscoring and asking maybe to talk about one or two of the states that are on the top 10 list. I mentioned before that states that have the highest percentage of spending as a percent of GDP, but let me just read the list probably some of you have already seen in the press releases or in the report itself on the top 10 by absolute dollar magnitude. California is number one by that metric at almost $50 billion, with a mix of course of a lot of military personnel and a lot of defense industry. Number two is Virginia, not far behind at $46 billion, Texas $38 billion, Maryland $21 billion, Florida $19 billion, Washington State $15 billion -- and remember, this does not include Department of Energy. So a big deal, weed lab is not going to be included in these figures -- Connecticut at $15 billion, Georgia at $13 billion, Pennsylvania at $12 billion, Alabama at $11 billion.

So, by the way, there's no obvious correlation of red state and blue state, not that there would be or should be, but it's worth nothing you've got the blue stalwarts of Maryland and Connecticut and then the swing states of Florida and Virginia and Pennsylvania, and the red states of Alabama and Texas, and then also you have a lot of coastal states. But we also know that some of the key heartland states like Missouri produce a lot of defense equipment or have important bases.

So I just wondered, when you try to think through the map and the list, what are some of the key points you like to emphasize, just to drive home maybe some counterintuitive findings, or help yourself remember some of the most important results?

MR. O'BRIEN: So a couple of things to keep in mind. First, those top 10 numbers that Michael went through, unfortunately they continue to have been the top 10 throughout all these reductions in defense spending, it's just that the real expenditures have gone down. And what we've seen is just about every one of those states, there's been a concern to reach out to understand do we really lose something when we see that kind of a decrease in spending. So there's been a reach on those states to go out and start identifying not just the primes, not just the subs, but start looking at the supply chains. So what they've attempted to do is where does the money go for the actual place of performance of the work being done. And wherever that place of performance is, what about those businesses that are performing, and they only manufacture a widget, so if there's a lapse in defense spending, do they go away. And if they are dependent on that defense spending, is there some kind of business enterprise that they can do or extension that they can engage with to help them either expand their technology or the training to make them more resilient, perhaps to diversify their sources of income so that when the defense budget is going like this they have some other businesses that can chime in.

The personnel numbers are the personnel numbers. The personnel numbers remain relatively constant. So we haven't seen a big fluctuation with that. Quite frankly, the part that I'm worried about is the numbers that are not in the top 10. It's sometimes the rural areas, it's sometimes the states that don't have necessarily large bulk expenditures, but they have key critical technologies and those key critical technologies, are people paying attention to those and are they concerned at all about if something happens with the defense money going towards that technology, what happens to it.

And I would just bring up an example that we experienced in Grand Forks. There was an Air Force base that was affected by BRAC '05, the base closure rounds of BRAC '05. And basically we hollowed it out. So we pulled a lot of the mission out of that facility, but we said, you know, they're in an area where there's a lot of land and we want to keep the facility, but we pulled a lot of the economic activity out of it. And the community started looked at it and they said, my god, what are we going to do. And so they identified the UAS, the Unmanned Ariel Systems. And so they worked across academia, the private sector, and the communities up there, and they started understanding, okay, the Air Force is up here, this is something that's coming in the future, what can we do to in essence feed the beast. And so, if you look what they've got now, they've got a state of the art UAS training facility, they have undergraduate degrees. The Air Force loves them because they're a pipeline to service the Air Force needs for UAS activities, and they're also a test bed for commercial applications of UAS, and the Federal Aviation Administration is working with them. And so, you know, Grand Forks.

Now, I come from Minnesota and a lot of times you think you get the winters and you get this brief period of summertime, and what else do you have. Go looking for it. So you want to take a look not just at the top 10, you want to also take a look at some of these other places and say, okay, there's something going on there, what is it.

Now, I met with the governors a couple of weeks ago and I was asked, you know, what should we do about this. And they aren't all top 10 defense spending locations. And the answer is the same. You've got to start looking to see where's the money going and understand where the money going, is there a labor requirement behind it, is a labor requirement sufficient to meet the future need, is there more technology coming, are you able to provide labor for the defense presence, for the expenditures.

Same thing happens with defense industry. If we don't continue to innovate, if we don't continue to try to leverage technology, we're not going to do well as a country. So what can you as a governor or as a mayor or your analytics folks, what can you do to start understanding how that dollar translates locally? Can you bring forward workforce development opportunities, can you bring forth other business development opportunities. And the whole idea is how do you make your local economies more resilient to that defense spending that's going on and, quite frankly, results in a win-win for both the Department and the community or state that's affected by it.

MR. O'HANLON: Thank you. And just to dramatize a point that you alluded to, but your office is called the Office of Economic Adjustment. I remember 30 years ago when the Cold War ended we talked about defense conversion and we had defense conversion commissions and we went from close to 6 percent of GDP to 3 percent in a fairly short period of time. And as you point out, we've been going down the last decade, but we were at about 3 percent for the '90s, went up to 4-4 1/2 percent in the Bush-Obama buildup, if you will -- not that those two gentlemen think of themselves as part of the same military plan, but they really did preside over a period in which we went over 4 percent, and now we're back down in the low 3s again, and perhaps headed below that, even if President Trump has increased the defense budget somewhat in recent times.

So as you think through this sort of curve of steep decline after the Cold War, gentle rise, more gentle decline since, is that why you've decided to call your office the Office of Economic Adjustment. And we're not thinking so much about conversion anymore, we anticipate that we're in more of a quasi-steady state, but we still need the raw data to help communities do what you just said.

MR. O'BRIEN: Yeah. I think the world has changed. And I think there are some instances out there where industry is not going to remain competitive, and some of those areas you're looking at the need to convert from a defense dependency to some of other type of economic activity, or you're going to die. Or your population is going to get used to seeing home in the rear-view mirror as opposed to the windshield.

And so defense conversion is still there, but the dynamics that we have basically for the last 10 years now is -- and just think about it once, the timeline that Michael was referring to, you had a presidential budget that more or less survived a submission to congress, that more or less had an appropriation behind it, and we even had something called the peace dividend at the time. I don't know if you remember the good old days. We don't have that anymore. In fact, what we have right now is -- I dare you to look at presidential budget -- and it doesn't matter who's in the White House -- look at the presidential budget that represents DoD's requirements. And first off you have this Budget Control Act, and how many times is the defense budget request in line with the Budget Control Act? Well, rarely. And then you end up with the budget submission being made and then people would -- okay, let's tear our business decisions off what the president's asking. Well, wait a minute, you can't do that because congress is going to take that budget request and it may come out as something completely different. And that's what's been going on.

And they don't decide what they're going to do on time, so then we get that continuing resolution activity that I talked about. So we've condensed the period of time, so defense businesses and industries that are important, they're not trying to convert to a peace time activity or to non-defense activity, they're simply trying to sustain themselves so they can remain responsive and the states and communities are hoping they remain resilient so they have a viable economy locally. Everything is distorted, it's messed up, and it drives everybody nuts.

So our program had to evolve to where we help them look at becoming more resilient. Look at the tank plant in Lima, Ohio. We ended up seeing some procurement activity coming to an end. And it's not that we didn't need the tank plant, it's not that we didn't need the technologies or the skills of that labor force, but because of budget realities things got distorted. And so what happens? Well, in that case the community got engaged with the state and they worked with that labor force to give them skills so that when the next army procurement cycle came around they were able to compete and get right back into what they were really good at. And the Department didn't lose it, the states and communities didn't lose it. So we may get back to just being defense conversion, but until we get more normalcy -- and I might say some sanity in this budget process that we have -- we're in a very unchartered territory and resiliency is probably the best spot to be in. And, quite frankly, everybody wants us to be there because they see what the implications are if we can't get there.

MR. O'HANLON: That's great. So just two more questions for me and then I want to bring in Molly and then bring in all of you.

Let's talk with the first question a little bit more in detail about personnel and in the second one a little bit more detail about contracts and where they go geographically.

So I'm on page 15 of the report, for those of you who are interested in following all, but as I look at personnel, it's fairly interesting to see where the most intense concentrations. And now I'm looking at absolute numbers, not relative to the population of the state. But the eastern seaboard, a lot of troops. Everywhere from this area down through the Carolinas, with Fort Bragg and Shaw Air Force, and down into Florida, a lot of Naval installations, Air Force capabilities, military headquarters. Then relatively strong through the deep south states of Alabama, Mississippi, Louisiana, a lot of people in Texas, a lot of people in Colorado, a lot in California and Washington State, and then also Ohio. Those are the densest concentrations. And even New York State, even though New York State with a big economy, defense is not a huge share of the economy, it does have Fort Drum. And so if we think about it, there's really the deep purple is along the eastern seaboard and then Texas, Colorado, California, Washington, and Ohio.

The center of the country, a little less dense for the most part in terms of personnel. But there are plenty of states that are in sort of that second category, like in Missouri or in Kansas or Oklahoma, Kentucky. So it's really just the northern swath that is relatively underrepresented I would say, if I was just going to generalize from this map, especially the center north of the country. Everything from Idaho over to the Great Lake states.

Any comment that you would make? Is that the way you would look at it when you stare at these personnel numbers? Anything more you would want to add about how to think about the geographic distribution of military personnel around the country?

MR. O'BRIEN: Yeah, I would probably put it back in the vernacular that I started off with, which is it doesn't matter if you're a dark or a lighter state in terms of the preponderance of spending. You have a presence. And so Montana, for instance, is a lightly colored state, but we know there is a major -- at least one major Air Force facility up there that's critical to the Nation's security. And so I would be careful not to read too much into the coloring in terms of something is good or not, but what I would do instead is if I'm a governor or I'm a local official, I'd want to know, okay, where is that spending going on. And based on where that spending is going on, do I need to do anything to talk about how do I preserve it or how do I make it better.

You know, it gets back to the rural areas. Now, some rural areas see a lot of defense spending, others do not. But those that do not, where it is occurring, you probably have a very important facility or you have an important presence. And it's up to these local officials to get a better handle on it. And, again, we're not talking about multiplier effects on that chart, we're simply talking about expenditures. When you start applying the multiplier effects, it starts changing things. And those changes are what makes this really interesting for the analyst, it makes it really interesting for the public officials that are responsible for those areas, because all of the sudden you're talking about livelihoods, you're talking about national security implications, you're also talking about, quite frankly, are you on the top end of this thing or back end. And if you're on the back end, what can you do to get on the front end of it.

MR. O'HANLON: By the way, I seem to recall from my CBO days 100 years ago that not a bad approximation for a defense multiplier was something like -- even though it varies depending on the kind of spending, of course -- 1.7 or 1.8 to one. In other words, you get 70 or 80 percent more activity even above the dollar that you spent. Is that --

MR. O'BRIEN: There is. But, honestly, everybody has their own multiplier that they -- and analysts are no different. There's a lot of art to this. There's some science, but there's also a lot of art.

We like to norm to a certain multiplier and that's reasonable. But, honestly, at the local level, where the rubber hits the pavement, you have a pretty good idea of what's going on and sometimes you can alter those multipliers. And we don't want to take a stand in that dynamic. We say at the end of the day, no one knows their economy better than the governors and mayors and county executives. And so this is raw data, you guys have at it.

MR. O'HANLON: By the way, just to underscore again a point that you've been making that Tara's made, the report is beautiful at breaking out by county. So I've been emphasizing at the state level just for the sake of first cut at this, but you get a lot of county by county graphical and numerical data in these pages that go into the individual states.

My last question, I see on page 14 you've listed nationally the top -- excuse me, not page 14, page 12 -- the top defense contractors, Lockheed Martin, number 1 at $30 billion or so, Boeing, t2, at $22 billion, and then rounding out the big 5, General Dynamics, Raytheon, and Northrop Grumman, all between $11-13 billion. And then below that, United Technologies, L3 Technologies, BAE Systems, Huntington Ingalls, and Humana. And when you break out the contract spending state by state, you're not just looking at where the primes are headquartered, you're looking at the subcontractor base and where the actual spending occurs. Is that a fair way to understand it?

MR. O'BRIEN: I think we're looking at where the spending occurs, but you have this place of performance dynamic, and my staff and I -- I want to recognize Liz Chimienti, who is sitting up here in the front row, who has spent enormous time putting all this together, and she ends up getting calls from me late at night or whatever asking questions, and she's like okay. The reality is we can track it only so far. So we can track it to a point where it goes. So we have an example with electric boat. So Electric Boat shows up in Connecticut as an expenditure, but once Electric Boat gets the money they send it to Quonset Point in Rhode Island for some construction activity. And so that activity, once they send it on to Quonset Point doesn't show up necessarily in the spending data that we have. And that's where governors get involved, that's where local officials get involved. Okay, where does the money come from and how does it filter in. And then do you have the labor supply, do you have the other activities to continue and to feed and maintain it.

So there are some constraints to the data. And so we've been careful to try to represent just the raw data. And we actually encourage analysts, like Michael and company, to get involved, to start looking at the data, and to start helping the others understand just what happens with that money when it goes out. So that dynamic that I mentioned where the money goes to one location and then let's say the company sends it out to other locations, they don't have to report on it. Sometimes they do and sometimes they don't. sometimes they will talk to you and sometimes they won't. That's where you make the money at the local level as an analyst or as an official, because you care about that. And if there's a problem or there's a vulnerability, you want to know about it before pink slips are issued or something, at which point you're reacting. So you want to get in front of it.

MR. O'HANLON: So sometimes the subcontractor expenditure is recognized and acknowledged?

MR. O'BRIEN: Yes.

MR. O'HANLON: Sometimes it's not depending on the data stream that you've got access to?

MR. O'BRIEN: Precisely.

MR. O'HANLON: Fantastic. Molly, I just would love to hear your reactions. I'm sure that, like me, you're fascinated by this and you sort of mapped it in your head against other things you study and know in a million different ways.

So rather than try to get too sophisticated with my question, let me just ask you for your reactions to this wealth and this treasure trove of data.

MS. REYNOLDS: Well, thank you, Mike. Thank you all for coming. Thanks for inviting me to be a part of this conversation.

I want to make a couple of different kinds of observations. And I want to start by picking up on some of the things we've already talked about, about the state of the defense budget. Some of these are mentioned in the report in the introduction. So I do a lot of work on the congressional budget process, so I just want to highlight a couple of sort of really important contextual pieces of information that underlie all of this great work.

So we've already talked a little bit about the Budget Control Act caps and their role in determining the overall size of the defense budget. I just want to highlight that we have two more years under the BCA caps, but we currently lack a budget deal for the fiscal year that begins on October 1, 2019. So basically since the Budget Control Act was passed in 2011 congress has looked at those caps -- and there's a cap for defense spending and there's a separate cap for non-defense discretionary spending -- and said, you know, these caps are too restrictive, we really want to spend more than they allow us to, so we're going to negotiate a series of two year budget deals to temporarily raise those caps.

The last time congress did that, it did so only through the end of fiscal year 2019, so only through the end of September. So right now folks on Capitol Hill are looking at developing appropriations bills, both for the department of defense and for the rest of the discretionary budget, for the fiscal year that begins in October. At present, they don't know how big the pie is going to be and it's really hard to start dividing up the pie into individual segments, individual pieces until you know how large the pie is going to be. So a lot of this uncertainty from the Budget Control Act that we've already talked about comes from this dynamic, or is exacerbated by the fact that in addition to putting the caps in place in the first place, congress has periodically decided to raise that, then I think the expectation is that they will find a way to do so again. But exactly when that happens and what form it takes is really up in the air.

It's worth noting that the President's budget proposal, which has come out in kind of a couple of pieces over the past several weeks, proposes maintaining the caps that are in the original Budget Control Act for defense and non-defense spending, but funneling all of proposed defense spending increase into what we call the Overseas Contingency Operations, or OCO, portion of the federal budget. That importantly is not subject to the caps under the Budget Control Act.

So there is all kind of stuff that needs to be figured out, but that uncertainty really underlies a lot of what we've been talking about.

It's also worth noting that this current fiscal year, fiscal year 2019, was a little bit of an outlier over the past decade or so for the development and passage of the defense appropriations bill in that the defense appropriations bill was actually finished before the end of the fiscal year. It was completed in the fall before the new fiscal year began on October 1. We can talk -- I'm happy to talk at length about kind of why that was. Some of it had to do with a conscious choice by the appropriations committee leadership in the senate to try and keep as many politically problematic riders or policy provisions out of the appropriations process as possible. Some of it also had to do with a choice by congressional leaders to put that bill, the defense bill on the floor in conjunction with the bill funding the Departments of Labor, Health and Human Services, and Education. So constructing what people who watch congress would call a classic log roll. So getting, you know, folks who care a lot about the defense budget but maybe don't care as much about some of the non-defense programs to get together with people who care a lot about those non-defense programs, then everyone goes in on political support for that bill.

Again, FY '19 was a little bit of an outlier, but increasingly the Department of Defense has had to rely on continuing resolutions to fund its operations. That has both the consequence on the prohibition of new starts or undertaking new activity -- that was previously mentioned. But it also means that once congress does reach a final deal for the year, there's less time to spend the money that comes out of that final bill.

So that's a little just sort of budget context for what we're talking about here.

I want to talk a little bit now about the political consequences of the kind of information that this really great report gives us, both thinking about congress and thinking a little bit about electoral politics, which, as Mike says, is how I spend a lot of my time.

So in terms of thinking about congress, it's obviously really logical that defense spending will be more politically salient in areas where there is more of it. But what folks in political science who have done research on these questions have found is that it's not just kind of levels that matter, it's also the relative dependence of different areas on that activity. So it's not, you know -- we talked before about kind of the top 10 states by absolute amount of spending. There's also really great data in the report on the top 10 states by share of GDP that is represented by this kind of activity and not, it turns out, seems to be what's really important for members of congress and thinking about their behavior based on the presence of military spending in their districts.

And this is particularly true for rural areas, which are likely to have less diverse economies and may have a greater share of their economic activity connected to this defense spending. And so in these kind of defense reliant districts, we'll see members of congress be more active on military issues, to seek out say membership on the armed services committees in the house, on the appropriations subcommittee that handles the defense bill. So we see more dependence in the districts on this activity leading to more activity by those members, which then in turn tends to lead back to more spending. And so it was a little bit of a kind of cyclical dynamic.

We also see these kinds of members from these districts that are pretty dependent on this activity. They're generally more supportive of the military and military operations, even as compared to their colleagues who are similar ideologically but not necessarily from districts that have a lot of activity.

It's also worth noting that the kind of public visibility of the spending matters. So when we talk about say why members of congress are maybe seek out fewer opportunities to be on say the intelligence committee, it's in part because even if you have a lot of intelligence related activity in your district you can't really talk about it. And so part of why a lot of the kind of activity that gets captured by this report is important for thinking about how members of congress behave is because it's the kind of thing that they can talk about and do talk about a lot.

Just a couple of notes on how we should think about the consequences of this kind of geographic concentration for electoral politics. So lots and lots of research on does federal spending matter for -- first on questions of how do kind of politics determine where federal spending goes. And there's lots of work on this, some of it done by my Brookings colleague, John Hudak, who finds that for certain types of federal spending it's more likely to be targeted to say presidential swing states. But this research is a little bit noisy, there's lots -- it really depends on kind of what kind of spending we're talking about, it depends on sort of are we talking about levels of spending, are we talking about percentage change over time. But, again, there's some evidence that voters will tend to reward the president's party when there's more federal spending of different kinds coming to their area.

But at the end of the day, most of what we expect will matter for electoral and voting behavior is partisanship. So that's just a fundamental reality of our contemporary political system. Just a couple of examples of this, we see, for example, very low levels of split ticket voting anymore. So most voters when they go to the polls in a presidential election year will vote for a house candidate of the same party that they vote for a presidential candidate. There was a time as recently as the 1980s where we saw a lot of voters split their tickets. It's also true that in 2016, for example, it was the first time that in every state that had a senate election the party of the senator who was elected was the same as the party that got that state's electoral votes in the electoral college. There were no states that elected a senator of one party and went for the presidential candidate of the other party. That was the first time that that had happened since we started popularly electing senators in the early 20th century.

So this sort of partisanship is really what drives voting behavior, but to kind of bring it back to questions that are raised by the distribution of defense spending in this report, then the question becomes are there systematic differences and trends, the kinds of districts that are likely to have these large military presences, particularly when we dig into the kind of spending. So what do we think about the kinds of districts that have a lot of military personnel versus a lot of contracting, within types of contracting, thinking about R&D, what are other things we know about the kinds of places that are likely to have that sort of economic activity. And I think that's where we're going to see any electoral story that we can get out of this data.

But I'll stop there.

MR. O'HANLON: That's fantastic. Thank you. I don't know if you want to comment on any of that or we should just go to the audience?

MR. O'BRIEN: I'll leave the politics to the analysts.

MR. O'HANLON: I thought that might be your preference. So thank you all for your questions. So please wait for a microphone and identify yourself after I call on you. And we'll start here in -- I think I see two hands right next to each other. Let's take both those and then come back to the panel. I guess there are three. We'll take three in that cluster and then come back.

QUESTIONER: Sergei (inaudible) student, Rutgers University, New Jersey. So how much in percent is like when dependence becomes important. So, for instance, New Jersey -- I looked it up -- has 1.1 percent of defense spending, so I guess it's not important. So what percent is important? Like 3, 2.5?

Thanks.

MR. O'HANLON: I know how you're going to answer that. Go ahead, please.

MR. MAUCIONE: Hi, I'm Scott Maucione with Federal News Network. I think one of the interesting things about this is also a study in lobbying it seems. I mean congress, as you pointed out, has a certain cyclical part of this and they also have the ability to make the pie bigger if they need to. I was just wondering if you could give me some of your thoughts on how this sort of feeds the military industrial complex, and at what point does this kind of become too much in some areas or too less in some areas.

MR. O'HANLON: That's probably more for Molly. And then we'll take one more.

MR. THEROS: Hi, Patrick Theros, a retired Foreign Service officer. Is there any way to break out defense exports from this document, or is thee someplace else to go?

MR. O'HANLON: So would you like to start with any of those that you want to tackle?

MR. O'BRIEN: So I'll try and grab two or three of those. So on dependencies, we have an internal working number that if you're roughly 1.5 times the national average we would consider you to have a dependency on defense spending. Now, that may have absolutely nothing to do with if defense amounts to a lower percentage of spending locally if it's spent on something that's really important. And what does that mean? Is it spent on something that's significant for national defense or national security, is it something that's critical to technology or something that you're attempting to leverage locally or regionally to build upon for your local economy? So it's all relative, okay.

But as I said, generically speaking, annually we'll take a look at what the national norms are and we will internally say if you're basically 1.5 times the national norm we would consider you to do be dependent on defense spending, or that there's a greater preponderance of spending in your area. If that helps.

In terms of defense exports, you can't really use this report to help with that. I think what I could do is offer aside from this conversation my staff certainly could speak with you a little bit further about that and see if there's opportunities to direct you more toward the information that would be helpful in that regard.

MR. O'HANLON: And Molly?

MS. REYNOLDS: So I'll try to take a crack at the second question and the question of kind of the overall amount of defense spending. So I think about this largely from a process perspective and less from kind of a substance perspective, and I'll leave it to substantive experts like Mike to talk about what's the right overall size of the defense budget.

But I will say that one of the dynamics that we've found ourselves in for about the last decade, in part because of the structure of the Budget Control Act, is because the BCA has separate caps for non-defense spending and defense spending, we've gotten into this kind of -- I don't necessarily know if I want to call it a box -- but a routine maybe where the negotiations about how big that pie should be have been a lot about, all right, if you, some segment of congress, wants a bigger defense pie, you also have to agree to a larger non-defense pie. And if you're someone who cares a lot about the non-defense pie and maybe would otherwise prefer a smaller defense pie, you have to be willing to go along with a bigger defense pie if we're going to get any sort of arrangement in place that gets everyone kind of what they want.

And so that's sort of where we've been for roughly 10 years under the

Budget Control Act. So a really big question for me is what happens when the Budget Control Act expires in two years? Where do we go from here and how do -- you know members of congress are creatures of habit and get -- particularly if you've only ever been in congress in the sort of budgetary environment, if all of how you've been socialized to writing the federal budget is this routine and this set up, what happens when that goes away. I don't have a great answer to that, but that's a lot of what I think about when I try to think about this question.

MR. O'HANLON: I'm just going to add a couple of more points before we come back to you for additional questions.

On this issue of defense dependency -- because it's something I've tried to look at over the years going back to the CBO days. And when we did a study back in the early 1990s there during the draw down from 6 percent to 3 percent, so national defense has a percent of the GDP from 6 to 3 in a half decade period of transition. We assessed overall that the effects on the national economy would be relatively modest, not insignificant, but relative modes. And the benefits of deficit reduction could largely counter the loss of the stimulus the defense was previously providing at a time when the unemployment rate was higher than it is now.

But we also observed -- we did case studies on St. Louis, Missouri area, northern California, and Maine, because obviously, as Patrick was saying earlier, different economies have different kinds of inherent strengths and adaptabilities. And I think it was the economy in Maine that we assessed as having the greater likely difficulty of making due without that defense spending, compared to the choice, as you went down from 6 percent to 3 percent nationally, and maybe even more in those 3 places, since they all had high defense dependency of one type or another.

So I think those are the kind of numbers that stick in my head as well as useful historical benchmarks. We also know the Soviet economy went into a huge tailspin. It had been well over 10 percent of GDP in the Soviet Union in the '70s and '80s. Then they went through their period of shock therapy. My colleague, Cliff Gaddy, wrote about this through the 1990s. And that was a horrible effect on the national economy of Russia in the 1990s, which took them a decade to begin to recover from, arguably.

And the very last point I'll make, which harkens back to an event we did a few years ago at Brookings where I had the privilege of being up here with Ben Bernanke when he had just arrived at Brookings after his stint at the Fed you may have heard of, is that he and others underscored that in the Cold War, when our defense spending was also at times close to 10 percent of GDP, we had in effect a national industrial policy. We didn't call it that, we don't like to say we pick winners, but anything that was close to or dependent on the kind of R&D and tech advancement that was related to defense, space, electronics, rocket engines, jet engines, these sorts of things could benefit from a spillover effect that came out of the defense economy, because defense was such a huge part of the overall GDP. And defense R&D was such a big part of the overall national research and development effort.

Today, defense is in the low 3s as a percent of GDP and I think defense R&D is something like 1/6 or 1/7 of the national total. So we're just in an era when the defense dependency of the economy writ large is still significant, but it's less than it used to be.

So sorry for letting me take that little walk down memory lane, but I wanted to add some additional points.

MR. O'BRIEN: I would just add one item to that. If you talk to the defense department today, the notion of the industrial base is distorted. And it's distorted because of the number of years that we've been under the Budget Control Act. So we've been doing things on our physical plant and our industrial procurements that we would not have normally been doing if we had been able to regularly do things. So whatever is represented today, either in these numbers -- you know, these numbers represent catch up activities. So the physical plant that we had, we were not doing regular maintenance. So, you know, if you have to change the oil in your car, you know, on these installations we weren't changing the oil in the car because we were dealing with other emergencies on these installations.

So you're seeing some procurement activity beyond just weapons system procurements. They're trying to catch up to establish a new state of readiness across our installations where we have a hole right now. And the same across some of these other weapon platforms. We haven't had the money, and so the Department is trying to catch up on a number of different platforms. And what's the right number? I think that's something that the Department's leadership is trying to grapple with congress over and they're worried that we're not at the right number. They're worried that we have vulnerabilities that necessitate greater expenditures, but how do we get there. And that's the conversation that's going to be in the public domain this time around, because we're saying we are trying to catch up on so many different fronts, how do we get there.

MR. O'HANLON: Great. So let's go a little bit in the front row. The woman here in the fourth row and then we'll go up here to the second row, do a group there as well.

MS. TRIMBLE: Good morning, Paula Trimble, Lewis-Burke Associates. One of the things that we've seen as a big trend is this movement towards access to nontraditional companies across the defense department, DIUX, Silicon Valley. How have you seen the report shift and change as a result of that because seemingly, looking at the numbers, it's still the large contractors? But do you see shifts within the states because of those changes in contracting?

MR. O'BRIEN: I don't think the report has been there long enough to where we could witness those kind of fluctuations or trends. We have to start dealing with more of the unconventional type of ways of doing business. There's no question about it. And artificial intelligence has a lot to do with that too. And so we're still adapting. And so things are -- we're catching up on things. So I would be careful not to read too much off this data in terms of what that kind of -- the sustainability or the reliance or the applicability of those kind of industries because they clearly continue to be the source for the future. It's how do you best plug into them.

MR. O'HANLON: As I recall, by the way, I think that for those kind of areas other defense budget documents have broken out the aggregate budget, and I think it's still in the single digit billions. So it's growing, but it's comparative to the numbers you're talking about in the report, which is $270 billion of nationwide services, is still a pretty modest fraction.

MR. O'BRIEN: But there's not a real good way of still breaking that out yet.

MR. O'HANLON: Yeah, right. Go to the second row here please.

QUESTIONER: Robert Pestronk, citizen. Are healthcare related expenditures in this report both for active and for veteran? And if they're not, what is the relative size of those expenditures in contrast to some of the figures that are shown here?

MR. O'BRIEN: Some contracts are and some may not be. I would say definitively that we don't capture all of those expenditures in the report. If we are entering into a major contract with a health provider or some kind of an insurance product provider, et cetera, those would likely be captured. Some of the other expenditures would not be.

MR. O'HANLON: And VA is not in there, right? Veterans Affairs?

MR. O'BRIEN: Right.

QUESTIONER: Benefits aren't a part of it.

QUESTIONER: Right, right.

QUESTIONER: Benefits are?

MR. O'HANLON: They are not.

QUESTIONER: Not?

MR. O'HANLON: Right.

MR. O'HANLON: On the other hand, if it were a military hospital in a given area, that was -- the expense is directly associated with that, would be captured.

MR. O'BRIEN: Yeah, or like I said, if you sign a major contract with an insurance carrier or somebody like that to provide a service, they're going to show up on the procurement.

QUESTIONER: And do you have a sense for their relative in versus out? Are most of the expenditures therefore in or are most of them are out because they are elsewhere or not captured?

MR. O'BRIEN: I would characterize most as being out to support what we're doing.

MR. O'HANLON: Especially because the Department of Veterans Affairs budget is $180 billion a year and it's all out, so.

MR. O'BRIEN: Yes.

MR. STONE: Mike Stone from Reuters. I'd liked your Grand Forks analogy. It's sort of like a Wayne Gretzky skate toward the puck idea.

MR. O'BRIEN: Yeah, they do that up there too. (Laughter) I'm from Minnesota so, you know, hockey is --

MR. STONE: I thought that would be popular, although he's Canadian.

Is there a missed opportunity? Is there someone who skated toward the other end of the ice that you can give an example of? And could this be used as a blueprint for a BRAC? And last off, what was your interaction with Norquist's audit and was -- if there was no interaction, was there a missed opportunity?

MR. O'BRIEN: Well, okay, so there's probably three or four questions there. So we are part of the overall audit, but as a component. So the numbers that you see in that report represent auditable transactions across the entirety of DoD. And auditability is your ability to trace documents, substantiate what you're doing.

Do we have examples of people -- well, you know, the world is littered with a lot of examples of -- particularly communities that are in difficult situations trying to chase economic opportunity and being taken advantage of. I would say though around defense spending we have been pretty fortunate in that most efforts have had a positive return on those efforts and people have not lost out. That's not to say that every once in a while you may have an issue. But I think where we are today in the current situation that we have, the Grand Forks example is really important because you should take a look at those installations that are local and where are they seeing the future, is there something you can do. And let's face it, if you have a local university or vo tech school, if you have a vibrant business community that can tie across different sectors of the business side, and you have a public sector that can reach across a number of different public entities and then workforce development, you can bring a menu of support that would interface with that installation and see where future needs might be and start, as we say, feeding what the future capital needs might be for that presence.

Does that answer the three questions?

MR. STONE: The BRAC one.

MR. O'BRIEN: BRAC, right now we don't have that on the horizon. As a blueprint for BRAC, look, I think what they did in Grand Forks is a great example of what you do when the building says we think we may have a future use for that facility, but as of today we want to hold onto it and maybe not do too much with it. So you have to make lemonade out of the lemons that you're given. Does that work everywhere? Sometimes it will. Our job, quite frankly, is where that does happen is to go sit down with the community and figure it out. I don't know that we're going to have another BRAC, or if we have another BRAC that it's going to be the way that it has been the last four or five rounds. Congress has seemed to indicate they don't want to go there, the building has not been spending money to do anything to suggest they're preparing for a BRAC or anticipating a BRAC. And we still get a lot of questions from communities about could this close or not. And, quite frankly, the guidance that communities are being given is, you know, think about the installations you have and how can you work with them to improve kind of what they have. Because keep in mind, it goes back to that issue. I said they have a number of holes in them now because we haven't been maintaining them. And so they're relying on those communities to come up with ideas where they can collaborate, you know, how do you get the potholes filled, or how do you get a new waste treatment plant, or how do you get a new water treatment system put in. And we're already on new energy utility systems.

So the premise right now is how do you help us become more resilient.

MR. O'HANLON: We'll stay up here in the second row for one more and then we'll look back a little bit.

MR. GOULD: Hi, there. Joe Gould from *Defense News*. Great report and a great panel. Thank you.

In 2017, the year referenced in the report, there were some reporting, and also Lockheed's CEO said that a number of lower tier suppliers were leaving the market. And I'm wondering what your data has to say about that.

And then, secondly, if you'll forgive me a second question, this Administration has been very vocal about the sort of economic side, the defense industrial side of defense spending, and I'm wondering if your data bears out that there's been a shift, or if we're not there with the data whether you would predict that there will be a shift as a result of the actions of this Administration.

MR. O'BRIEN: Well, so the data shows that the Administration is trying to catch up to where defense spending would otherwise have been had we not been going through these valleys of the Budget Control Act. So these self-inflicted kind of gaps in funding. So clearly there is additional expenditures going out to try to catch up. No question about it. And are they effective? Well, we're trying to now cover holes that were probably eight to ten years in the making and we're probably into the second or third year of really appropriations to try to fix the problem. Where we are didn't happen overnight and you can't fix it overnight. So we're on kind of a trajectory to address a number of the issues that exist. But we still have a ways to go.

What was the second part?

MR. GOULD: Does your data bear out that there were a number of third and lower tier suppliers exiting the market?

MR. O'BRIEN: Right. So you can't necessarily come to that conclusion with our report. There is anecdotal information to suggest there has been some shifting. There's been some consolidations across industries too. Quite frankly, that's why when this whole issue started up, let's say seven-eight years ago, we started telling states that it was -- you know, if they cared about some of those sensitivities or dependencies, they needed to start talking to those second and third tier companies. And they first didn't know who they were. So they started doing research and finding out who they were and then reaching out to them.

And honestly I don't think I would say that we've had anything that amounts to a sea change in terms of people leaving. What we've see is primes working primarily with their supply chains and they've continued to be responsive, more or less, to the Department's needs as we go.

MR. O'HANLON: I'll just do a quick shout out. You probably remember, Joe, the report that came out last fall. I forget which Pentagon office did it, but it was on the supply chain question. It was a classified --

QUESTIONER: (Inaudible) of policy.

MR. O'HANLON: Right. Thank you. Molly, you want to comment on any of this? Okay. I'm going to go in the back for a bit and maybe have time still to come back up front afterwards. But let's take all three of those hands. See if we take them all together, or if it's more natural to answer one by one.

MR. BERTUCA: Hi, Tony Bertuca with *InsideDefense*. We're having this discussion as the defense department has just sent $12 billion MILCON to congress, potential programs that might be delayed in order to build the wall. They want $3.6 billion to do that.

Sort of for Ms. Reynolds, how should we view the discussion around this data and this subject given the congressional heartburn around 2808?

And then for Mr. O'Brien, what kind of work will your office do once those decisions are made to review those decisions and the impacts of the $3.6 billion getting deferred?

Thank you.

MR. O'HANLON: Shall we take the other two or you want to answer now?

MR. O'BRIEN: I'm okay.

MR. O'HANLON: Okay. Sir?

MR. GRADY: John Grady, Naval Institute. Question refers back to OCO. If you're cramming all of your new spending on programs into one year, which is what they would do through that emergency spending stuff, what do you do to industries such as ship building? And then the other part of that would be Zakheim on the commission that studied this stuff -- Roger Zakheim -- he said that you need to rebuild the defense industrial base to do AI and all those other things that you're talking about.

So you're in a conundrum there that's both congressionally set and DoD set. So that's a question.

MR. O'HANLON: And one more.

MR. LOCKWOOD: Yeah, Frank Lockwood with the *Arkansas Democrat Gazette*. In Arkansas our biggest county by far, quarter of billion dollars, is Ouachita County, population 23,868. How unusual is it for a small rural county to be so dominant in a state? Do you see that other places? And should these folks be worried do you think?

MR. O'HANLON: You want start with any of those? I'll let Molly talk to the wall question.

MR. O'BRIEN: Okay.

MR. O'HANLON: Go ahead.

MS. REYNOLDS: So I'll start with your question about the list that was I think released yesterday on MILCON projects from which funds would be diverted to support construction of a barrier on the southern border. I mean I think what's really important to -- I mean this is why part of why I started comments with talking about the BCA is that we have lots of moving parts and it's important to keep them all in mind at the same time. And so the same members of congress who are thinking about making choices about the defense budget for next year, how to approach how much to raise the caps by, are also the same members of congress who have to decide is there a MILCON in my district that is going to get money diverted from it in pursuit of construction of a wall.

And so in politics I often think about congress as a giant game of whack a mole, which is every time you whack down one mole, that doesn't go away, it just pops back up somewhere else. And so I think your question about kind of congressional angst about what's happening in folks' districts around 20808 and then those particular projects, is those are the same kind of dynamics that we're talking about when we think about how do members react and how do they think about the relative reliance in their individual districts on military spending.

MR. O'HANLON: I'll just answer one question before coming back to you. Also on the politics, the gentleman from the Naval Institute, it seems to me that the way I would answer your question is that if the Trump Administration were to get its way with an OCO strategy for this year and for this upcoming year, and then perhaps the next year, it could in effect be a successful bridge to the post Budget Control Act era, at which point defense spending becomes in theory unconstrained, at least by that same legislation, which will have expired.

However, the Trump Administration has to convince the congress, and especially the democratic led house. So if in theory, you know, even though it's not really the way any of us are supposed to budget, it could effectively work. That kind of money doesn't prevent you from spending it well, even though it's, again, not really the right way to do a budget process, but in practice I would be surprised if they get anything close to what they asked for given the distribution of power in Washington right now.

MR. O'BRIEN: And my crystal ball doesn't see that far ahead, except to say that somehow, no matter how muddy this gets, we always seem to muddle through things and we end up where we need to be at the end of the day and people end up getting the right answer.

And I've seen this for 30 years now, and so I've kind of weathered the defense conversion/peace dividend. We went through an enormous gut-wrenching exercise after 9/11 and where we are today as well. Now, nothing compares to the Budget Control Act honestly. But I think there's a lot of rational people involved in this and I think the lines certainly are drawn, as they would be in any negotiation, but we end up at the right spot.

The report Michael referenced earlier, there is an industrial based policy report out on the integrity and the sustainability of our industrial based policy. There are concerns about it. The question that was asked earlier about are we seeing some maybe second or third tier folks leaving, you know, there's concerns about how do you feed those supply chains to make sure there's labor sufficient to sustain those businesses, et cetera. And I would encourage anybody to take a look at the report that's out there on this, and it's a good read.

The questions on the wall, our office doesn't have anything to do with it. That's an easy response too, quite frankly. The wall is a challenge for the Department, responsible people are looking at it and they're trying to come up with the means to respond to the requirement as they're also trying to meet the needs of our forces. And I would continue to defer and to look to our leadership for making those decisions.

The question on did I hear -- the state was Arkansas? Is that the state that I heard? Arkansas is probably one of the states I have in mind when I say I would look at that map and see -- you know, some of those states that are not colored in the deep colors but yet they have significant presence. So Arkansas, you have Little Rock and you have Pine Bluff Arsenal. And I was talking to your governor about this just a couple of weeks ago too. And you have issues at both of those facilities and they're the -- you know, in some respects they epitomize what we've been talking about here. So they've both been kind of the outcome of the Budget Control Act and what are you doing across those two facilities to continue to make sure they're doing their mission. So in that case, Arkansas is stepping forward to work with both Little Rock and Pine Bluff. And, quite frankly, they're trying to step in wherever they see that either the installation can't get sufficient funding or something is too great of a challenge to work through their mechanisms they have, can the state or the community step up to help buttress it.

So you epitomize in Arkansas what you should be doing, which is where is the concentration of employment, what accounts for it, and then go sit down and talk -- either if it's an installation, talk with the garrison or wing commander, understand what their needs are, and what can you do to help them.

And Kentucky, of all places, right. So Michael talked about Kentucky at the onset. Kentucky has been bending over backwards to figure out what can they do to help their installations. And those installations and collectively across the state, they may not account for one of the top 10 states, but they're really critical to Kentucky's wellbeing and they embrace them. And so they're engaging at whatever levels do exist, and they view them as being a top 10 employer regardless of whether they are or not, given the stats in this guide.

MR. O'HANLON: Okay. So I see three more hands. Maybe we will take those three and then come back for final answers and concluding remarks.

The woman here in the sixth row and then two hands up front please.

QUESTIONER: Hi, I'm Meredith from Greenbridge Strategy. You spoke a little bit about the funding gap to address installation issues. I know in the NDAA recently you were issued authority to give grants. Does this report feed into your decisions? Or how are those two programs kind of related?

MR. O'BRIEN: This report feeds into our decisions only to the extent that we find defense dependencies and as states or communities are trying to figure out how can they respond to something. It helps us to educate states or communities on where to go to start looking at this and working with them to be responsive.

Our grants are not represented in this report. Those are -- you know, it's a separate kind of a product. And I would also say there is a plethora of local officials out there right now who really don't know what's going on. And I have had visits from mayors, et cetera, when they've been given pink slips and the come in and they're reacting. And what we're trying to do is put this data out there and say don't -- you know, there's a benefit to be a little bit more preemptive or proactive. Know about this stuff before it comes back to bite you and know that there's uncertainty. You know, there's still two years left of the Budget Control Act. I don't know what's going to happen after it. Maybe we get to a period of normalcy. I don't know. But we ultimately (inaudible) to execute the laws of the land and our responsibility is to execute those laws to make sure we still field the national defense. And that's what we're going to do.

MR. O'HANLON: So up here. I'll go to the front row and then the second row. We'll take those two together and then wrap up.

QUESTIONER: Good morning. Thank you for coming by to have this discussion. My name is Neil Shabon; I'm with the American Legion. Kind of the basis of as it goes, you only remember what you remember, so if you had to say what are your take aways from this massive, like, you know, discussion, especially in terms of when we're trying to reference these questions afterwards. Like leaving here, we're going to look to this report. So what is not in this report that you would say need addressing? And how do you say that we should find that information? So what can we take away from this book versus what's not in this book that needs to be addressed?

MR. O'HANLON: And then the gentleman in the second row.

MR. BRUNO: Hi, Michael Bruno of *Aviation Week*. And I'm curious going back to the BRAC question, is there any way to tie this data that you do to the 22 percent figure that DoD says is unnecessary infrastructure, or the GAO's high-risk list spending? Or those just totally different data sets and you can't tie them together?

MR. O'BRIEN: I would say they're different. I don't think you can tie this to any of that information. I mean, you can if you're aware of what's going on locally and you have awareness for your installation. You can go look at an installation up in here and start trying to figure out what has been the procurement levels and the personnel levels at that installation going back as far as you can go. But I don't think you can draw any other conclusions on that. I would be careful not to.

You know, at the end of the day that 22 percent may or may not having anything to do with mission readiness. And military value is something completely different. And the current Secretary of the Air Force was very adamant that just because you're at a certain percent of underuse or underutilization, that doesn't mean that you are not a gem in the national security crown and we have to have you. So I would be very careful not to read too much in that vernacular of this report.

The number one problem that -- or the number one challenge for the first question is the supply chains, what happens to that money. You know, what happens if you're at Quonset Point and you know the money is coming to you from Groton -- or wherever it's going to come from, what are you going to do about it, or how resilient are those facilities to continue to build submarines or surface ships? And what are the supply chains that rely on? Are those supply chains in your state, are they beyond your state in a region? You know, we've seen a lot of synergies when the states of New England have bonded together to start thinking about -- you know, there's a lot synergy across supply chains for every one of our major manufacturers, regardless of what state they're in.

So in some respects, getting aside from the parochialisms of being state and talking about regions and saying I'm in Connecticut, but somebody that's really critical to my manufacturing base is in Massachusetts and we used to not spell Massachusetts, let alone talk to them, and now you know what, we spell it and we talk to them because we can't afford not to.

So the one piece that's not in here, and it probably will never get in here, is a greater awareness of those supply chains. And you're only going to get there by actually doing the dig yourself or through your folks at the local and the state level to go out and start working it.

MR. O'HANLON: Molly, any reactions you would have to this question, which is a good one to sort of start to wrap up on.

MS. REYNOLDS: Yeah, no, I mean the one thing I would say is just that this is really great data and I would just commend you and your team to keep producing it. To the extent that we can start to use data like this to understand other political questions, the kind of questions that I look at in my work. Overtime analysis is so important and being able to look at sort of how things change from year to year, thinking about the Budget Control Act and its future, I think that's really important.

So that's not so much what's not in this specific report, just a commendation to keep up the good work.

MR. O'HANLON: And I would just add one least point on this as well, which is that -- and you may want to wrap up then, if you have anything else to say, Mr. O'Brien -- but when I think of some of the points you made today about different parts of the country that needed to think about their comparative advantages, I think of some of the projects here at Brookings in Metropolitan Studies and elsewhere. For example, Mark Muro did a beautiful piece on Colorado a few years ago looking at how Colorado could leverage the presence of Colorado Springs with U.S. Northern Command and Air Force Space Command, maybe now integrated, unified command for space, and think about how to leverage the fact that it had a lot of good scientists and firms already supporting that defense industry, but try to make Colorado more of a global center of excellence for space launch in general, including on commercial sides of things.

And we've had other colleagues at Brookings who have tried to get specific on how do you take an advantage you've got with one -- it could be a university, it could be a military base, it could be a military research facility, sort of a gem in that local economy, and build on it and somehow also get the private sector more generally to see opportunities for partnerships.

So, to me, the idea of where you can do public-private partnerships is a natural research question that this report can help facilitate. It's not really the one you would expect the report to solve or answer in its own, but it provides a lot of the grist and the data to allow that kind of analysis to proceed.

And with that, I'll stop and see if you have any final valedictory words here for us. And, again, I want to thank you so much for being here today.

MR. O'BRIEN: Sure. I want to also thank you and your co-researcher and the other researchers in the audience. You have to continue to look at this, you have to continue to mull through it, and you have to continue to look at correlations. And I'm not talking about just statistical correlations, I'm talking about geospatial correlations, et cetera, too. There's a lot of work that can be done in this, and my office is not going to do that work. We feel our role is to put the information out there, put it out there in an unvarnished sort of way, and let you have at it.

A couple of other things. First, cyber. Artificial intelligence is really important for the future. Cyber is critically important also. So some years ago there was this news article about somebody being behind the wheel of -- let's say it's a Jeep Cherokee -- I'm not sure what vehicle it was -- and all the sudden someone was able to hack into it and take control of it. And all of the sudden somebody else was controlling it and they could have been miles away or countries away.

Cyber is an important vulnerability. It's a vulnerability that the states and communities are looking to catch up on. So those supply chains that I mentioned earlier, that we don't have a fully definition of here, but which gets identified through additional work, those supply chains are vulnerable to cyber. And the Department has criteria now to where we don't want to contract with them if they can't certify that they have a way of dealing it. So look at those vulnerabilities because with those vulnerabilities come opportunities to educate a local workforce that becomes smart on it and to support our efforts to thwart or to prevent further cyber-attacks.

The second part of this is workforce development. And this isn't just unique to the manufacturing world. Workforce development in this country has to catch up where the technologies are going and the innovations are going. And it's no different for DoD. So what's not listed in here are the skill mixes that are required for the personnel. They have the jobs for the industries that are being contracted with. That's vintage business development, it's vintage tying workforce training with business development.

And, unfortunately, a lot of our experience to date suggests that workforce development can't keep up with the higher technologies and the higher skills that you have to have to remain competitive. How do you do that. States have laws saying how things can happen. Academia has laws saying things can happen. So there are items in here that are not addressed, but they pose public policy challenges. And this information actually should prompt some of those conversations at the state and local level.

And I'll leave it at that. And I also invite anybody who takes a look at this, if you have ideas about either something that's not missing or that's not in the document, or is missing or you think something could be done to improve it, we'd like to know about it because we'll make a conscientious effort to continue to improve on it.

So there's contact information in here for Tara Butler. She's also here. You can bring that to her attention. We also have Liz Chimienti, who is the -- you know, I look at this as Liz's report. Congratulations, Liz. But Liz takes pride in how this report goes and she's responsible for the accuracy of it. She does a hell of a job. And if you have inputs or suggestions, she is very open to how to improve it too. So we welcome those.

MR. O'HANLON: In just a second I'll ask you to join me in thanking not only Patrick and Tara, but Liz, as well. But let me first say the website where you can find this is www.OEA.gov, OEA, Office of Economic Adjustment dot gov.

And with that, please joining me in thanking this great panel. (Applause)

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