

Center for Strategic and International Studies

TRANSCRIPT

Event

Ensuring U.S. Leadership in AI
**Opening Remarks: Government Perspectives on Data
Center Growth**

DATE

Wednesday, November 13, 2024 at 9:00 a.m. ET

FEATURING

Senator John Hickenlooper (D-CO)

Member, Senate Artificial Intelligence Caucus

Representative Garret Graves (R-LA)

Chair, House Republican Energy, Climate, and Conservation Task Force

CSIS EXPERTS

Navin Girishankar

President, Economic Security and Technology Department, CSIS

Transcript By

Superior Transcriptions LLC

www.superiortranscriptions.com

Navin
Girishankar:

Good morning, everyone. I'm Navin Girishankar, the president of the Economic Security and Technology Department here at CSIS. I want – a warm welcome to everybody, and thank you for joining us for this important discussion on “Ensuring U.S. Leadership in AI.” It's great to see a full house here. And for those of you who are watching online, welcome.

Artificial Intelligence is set to transform our world in unprecedented ways. No sector of our economy nor any aspect of governance or policy will be left untouched – from energy to basic science, education to security, AI is reshaping industries, creating new opportunities. But with disruption, there will be new challenges. Policy must ensure that the rest of the economy can support and absorb AI's transformational potential. The United States has long been a leader in technology innovation across a number of technologies. And we're fortunate to find ourselves again with advantages, meaningful advantages, in AI technologies.

But this global race is intensifying. Countries around the world are not only investing heavily in AI research and development, but are staking out strategic positions with heavy investment in physical infrastructure that are needed to ensure AI leadership. To retain and grow our leadership, the U.S. must engage in a massive scaling of our electricity grid and broader energy system. We must do so while maintaining globally competitive positions in pricing, carbon intensity, and reliability. And, crucially, we must invest and build in ways that generate large positive spillover benefits for communities across the country.

We're really fortunate today to have an exceptional group of leading experts – our country's leading experts in this area. And we'll have a useful – an interesting exchange of views on these critical issues. But to start, I want to first welcome two members of Congress, Senator Hickenlooper and Congressman Graves, for a conversation on the work that they've been doing and leading to develop a congressional conversation on AI, and thoughtful, positive contributions to this profound governance challenge.

Let me say a few words of introduction and then I'll invite both the senator and congressman on stage. Senator John Hickenlooper needs no introduction. Senator Hickenlooper of Colorado has served in the Senate since 2021, and is both former governor and former mayor of Denver. The senator serves on the Senate Commerce, Science, and Transportation Committee, where he's led legislation to improve AI auditing and standards, and on the Energy and Natural Resources Committee, where he's been a driving force for transmission expansion and permitting reform legislation. He's also on the Senate AI Caucus.

Representative Garret Graves has served Louisiana's 6th Congressional District since 2015. The representative serves on the House Transportation and Infrastructure Committee and the House Natural Resources Committee. He's the chair of the House Republican Energy, Climate, and Conservation Task Force. And has been a very strong voice on faster, more rational permitting regimes across many sectors and was crucial in advancing permitting provisions in the 2023 Fiscal Responsibility Act.

So with that, I will warmly welcome the senator and congressman to come on stage for a conversation this morning. (Applause.) Hope our mics are working. Senator, Congressman, thank you so much for joining us today.

Today's conversation is really based on a shared foundational premise that the U.S. must lead and maintain and sustain its advantage in AI – in artificial intelligence. And AI has a crucial role in U.S. national security, economic security, our long-term prosperity, and security of our markets and democracy. But leadership encompasses many, many factors.

Senator Hickenlooper, let me start with you. How are you and your colleagues in the Senate really thinking about U.S. leadership in this important area? And what are the most important issues that we need to focus on to ensure AI leadership?

Senator John
Hickenlooper
(D-CO):

Thank you, Navin. And first let me thank you and CSIS for putting this together. I'm not sure I can think of anything that is larger and has a greater sense of urgency than some of the issues we're going to talk about today.

I think the Senate – and I'm sure Representative Graves will echo that in the House – we look at this as one of the most important things we face. This is a competition on a global level. To put that in big capital letters, we have to win. It's not something we can afford to fight to a draw. We have to stay ahead and control, really own, the future of AI as it grows. And it's going to grow exponentially.

At the same time, we recognize that there are risks involved as you have the opportunities with small business, with health care, with workforce training. I mean, there is no limit to some of the incredible benefits that are going to come very quickly, probably more rapidly than even many experts believe. But that acceleration of success is going to also create problems.

A lot of them are the amount of electricity. And we're not – it's not clear how we're going to limit that. You know, how much will efficiency be able to say that, well, instead of two times the electricity we need today, it's four times. I mean, you know, our utility industry has for years gotten little bits of efficiencies for the little bit of growth and been in kind of a steady state for quite a while. We have kind of a patchwork quilt of a grid. That's all going to change.

Mr. Girishankar: Thank you, Senator. Actually, I guess my mic is not working. (Laughs.)

I want to explore this topic a little bit more about the energy requirements of AI. But first, let me turn to Representative Graves. Your thoughts on this AI leadership? How does the U.S. sustain? How are you and your House colleagues thinking about this?

Representative
Garret Graves
(R-LA):

Sure.

So, look, to tell you two quick anecdotes and then tie them back to an answer. So after Hurricane Katrina down in south Louisiana, I was asked to come in and help rebuild levees and rebuild a sustainable coastal footprint in the state. And so I go down there and I'm looking at all these plans that have been put together, and you have resource constraints – things like money, things like freshwater and sediment resources.

And so I took the plan that had been proposed previously and got to some number like \$400 billion – not kidding – sediment that was multiple times, in fact, exponentially more than the sediment we had available to restore the coast, but levees, things along those lines, and inadequate sources of fresh water to maintain the right type of habitat.

And so what we did is we came back and said, all right, what is a resource-constrained plan? What's a realistic dollar figure? What's realistic freshwater levels in which we have realistic sediment loads? And we developed a resource-constrained plan.

More recently, when Mitch Landrieu was asked to become the infrastructure czar for the White House, he called and he said – long-time friend; worked together for many years – he said, what do you think? I said, Mitch, here's – a couple of conversations, but here's the main one. I said here's your problem. The administration's regulatory agenda is incompatible with the infrastructure agenda. And so it's going to regulate. It's going to prevent you – it's going to be bottleneck you from being able to deliver. So rather than infrastructure being an asset, it's going to become a liability.

I think there are similar application or stories to be learned here. You've got three things, as I appreciate – and I'm sure there are people in this room that are much brighter than I am on AI – but you've got three things. Number one, you've got data. Number two, you have computing power. Number three, you have energy. Those are your resource constraints, similar to your freshwater, your sediment and your financial resources.

And I think in this case there's no question the U.S. needs to be a leader in AI, and we all agree on that. The problem is that you have a regulatory structure that's not compatible with your objective. And one of your biggest bottlenecks is the inability, under this current regulatory regime, to be able to deliver the energy resources that you need.

So I'll say it again – no question, we're in total lockstep agreement the U.S. needs to be a leader. But components of our regulatory structure are inconsistent or incompatible with our objective here.

Mr. Girishankar: Thank you for raising – on and off again here.

But we in CSIS, as we do our research on maintaining and sustaining tech advantage, one of the things we're starting to focus more and more on are what are important enablers for technology advantage and you've highlighted this point.

You've talked about the regulatory reform, the permitting reform, the need to unblock bottlenecks to be able to do this. I wanted to ask the senator if he had any thoughts on this if he wanted to elaborate further – particularly these enablers, including energy and workforce and some of these other elements.

Sen.
Hickenlooper: Sure. And, I mean, one of the biggest issues, obviously, is around permit reform – I think that's what Garrett's talking towards – which is I think we share – I share that concern. Obviously, we have permitting processes that make sure that there's public input, that we look at issues around cultural heritage or environmental protection – all of those issues. But over time they have become too slow for what we need.

I mean, one of the great challenges we face is we don't have enough facts. We don't understand. We're having to make decisions. There's a whole field of study right now called making decisions under deep uncertainty and that is one of the great challenges.

We're not sure exactly, you know, where that nexus point is in terms of

making sure we protect the environment, making sure that we understand and treat, you know, cultural heritage sites with respect and dignity. But we've got to do that faster.

In other words, we've got to really be able to distill – this is red tape and a second level of bureaucracy whereas these could – these processes – let's say three processes could be done in parallel and move along and that's going to be the real challenge here is we don't – we're going to have to make these decisions without the full set of facts necessary and part of that's what you just said is how much are we going to benefit from the AI and actually being able to get AI to help us solve the problem.

Mr. Girishankar: Well, what you've said is a strong motivation for institutions like us to really focus on good analytics to try and – you know, we don't know but to what extent can we shine a light on some of this stuff and this is really a strong motivation for us.

Let me shift gears a little bit. There's the regulatory reform and I want to bring up another topic which is the role of strategic capital particularly when it comes to the infrastructure components of AI but more generally around these leading technologies.

Your thoughts, Senator, maybe on the chips agenda and the CHIPS Act. It has important components around strategic capital there but it may be emblematic of things that may be needed. I don't know what your thoughts are on this but would love to get your perspective.

Sen. Hickenlooper: Sure, and I – obviously, capital is critical and I was involved with the CHIPS and the Science Act and am a strong supporter. If you look at the magnification of capital so for every dollar that we're – the federal government is investing in trying to bring these advanced technologies back onto the United States' shores we're getting 5 (dollars) or \$6 – some people estimate as high as \$10 – of private capital coming in almost simultaneously and sometimes even before – anticipatory investments – and that's still probably not enough.

I mean, this is, again, a competition that's going to require enormous sums of money, obviously, huge amounts of energy and water, you know, in that – in that process of the allocation of capital. And we're not sure exactly what is going to be enough; we just understand that we can't – we can't afford to lose. So the CHIPS and Science was a very rapid and urgent investment that I think the country needed to – and continues to need to make sure that we can be competitive at this at the highest level.

Mr. Girishankar: Representative Graves, I know you didn't vote for CHIPS and Science but you may have a different perspective on how to achieve long-term capital bets on these advanced technologies, AI, and its underpinnings.

Would you have some thoughts on that?

Rep. Graves: Yeah. So look, one, in regard to the objectives of the CHIPS Act absolutely on board. Our concern at the time was that I think that the scope of the bill grew beyond its initial intent and I think that the dollars exceeded numbers that were reasonable.

But let's be clear, the objective of trying to ensure that we have domestic capacity is absolutely key and fully supportive there. And I do think that using incentives, like the CHIPS Act intends, to try to lure and attract capital in the right areas, it absolutely makes sense. But I'm going to go back. I think that your problem in this case is incompatibility, going back to the regulatory. So you can – you can have amazing incentives in place, but if you can't actually access the incentives or achieve your goals because your regulatory structure impedes that, it doesn't make sense. You can't – you can't over-incentivize or overwhelm the regulatory process with incentives. You've got to have better alignment there.

The senator makes a good point, but it's also somewhat ironic in that he talks about brackets of uncertainty. And they exist. They absolutely exist. But then the thing that's ironic is that some of the tools that help to narrow the brackets of uncertainty we're unable to access because of the brackets of uncertainty. (Laughter.) But going back to I think what you do here – we can sit here and make fun of this all day long. But I think what you do here is you've got to look at the solutions that are able to transcend. You're always going to have brackets of uncertainty. You're never going to have absolutism. And so you've got to look at the different options that are available, and which of those options actually transcend your brackets of uncertainty the best.

And this is something that you apply to virtually every decision that you make. And in this case, I think you can do it as well. But let me just say last, I think that you have got to be very careful about coming in and just trying to put financial incentives in place, if they're not going to allow you to achieve your objective because you have other impediments. In this case, the grid, the electricity availability, looking at how we move forward with energy that's reliable, affordable, clean, exportable, and security of supply chain. Those are all key items to achieve this overall goal that I don't think have been properly aligned in efforts to achieve the goals of the CHIPS Act.

Mr. Girishankar: Yeah. That's a powerful argument, Representative.

I want to shift gears in the time we have left to talk about the risk and the standards side of this that you've also talked about, Senator.

Sen.
Hickenlooper: You know, just before we leave that –

Mr. Girishankar: Yes, go ahead.

Sen.
Hickenlooper: Because I think it's always very frustrating to be with Representative Graves because we agree on too many things, and it can embarrass both of us – (laughter) – if we're not careful. But I think –

Rep. Graves: Crazy liberal. (Laughter.)

Sen.
Hickenlooper: In defense of the CHIPS and Science Act –

Rep. Graves: Trying to protect my backside, sorry. (Laughter.)

Sen.
Hickenlooper: I think that the – I support that bill. And I think many Democrats and Republicans support that bill, in anticipation that we would also look at trying to find ways to streamline and make more efficient, the permitting necessary to make sure that we can – you know, the grid – it's like the old – before we had the interstate highways, we had all this patchwork of a network of transportation. And it wasn't systematized. It wasn't efficient. And that's really what we need to go back to and look at, how do we make our grid as efficient as our national interstates are?

Mr. Girishankar: And certainly lots of consensus on very, very practical problems that need to be unlocked.

Sen.
Hickenlooper: Exactly.

Mr. Girishankar: That both of you have echoed. Let's shift gears to standards, something that both of you have worked on. Senator, you've introduced Validation and Evaluation for Trustworthy AI, VET AI Act, which would direct the National Institute of Standards and Technology to develop guidelines for third-party audits of AI systems. Tell us a little bit more about this, and how it would impact AI governance and industry practices, and your thoughts behind that.

Sen.
Hickenlooper: Well, I think one of the highest priorities we have is the necessity to delineate – to make clear – delineate, but make clear, what is AI? What

are – when you see a video online, is that computer generated? Is that fake? Or is that the real person saying that? And have some sort of a watermark, or if it's an audio you have a little – a little bell, a little chime can go off. But some standard approach that we make transparent what is AI and what is not. And obviously there will be people breaking these rules and breaking these laws, but we have to set something up like that.

And part of the argument – there are those smart people that want to set up a whole new regulatory agency for all of technologies, especially AI, so that those standards would come from there. I want to go faster. And I think we have the National Institute of Standards and Technology. That's the right place where these – the work should be done to make sure that we set a set of standards, in conjunction with industry. I'm not saying that we're going to figure out how to do it outside of industry. This has got to be a collaborative process that's going to arrive at the most efficient and most effective way to make sure that we have that transparency, just as a start.

As we go forward, a lot of the other things that we're worried about with AI are also going to be able to go through and create a system of standards to make sure that we hold ourselves and our industries accountable.

Mr. Girishankar: Thank you. And this is the balance that you've discussed about opportunities, but also managing the challenges. And we'll hear a little bit more about that in the – in the next segment.

But before we do that, I want to come back to Representative Graves. You've also sponsored the Intelligent Transportation Integration Act, which is aiming to leverage AI for traffic management, another interesting initiative here around industry standards and AI applications. Could you – could you share some of the thoughts you've had around your work on that legislation and what you're trying to achieve there?

Rep. Graves: Sure. Yeah. Just before I do, I want to respond to Senator Hickenlooper's comments real quick. If you're talking about moving in a direction of setting up a tool that rings a bell every time something happens that's invalid or somebody said something invalid, in Congress all we'd hear is bells ringing. (Laughter.) Scares the hell out of me.

Seriously, so – so, you know, this is actually an idea – and I'm embarrassed to admit this, but I think this dates back to 2015, where I've done a lot of infrastructure planning and infrastructure implementation. And you think about some of the data that, like, Waze

and Google Maps and others have in terms of trip origination and destination, and you think about how we build roads. Many of you have seen those little rubber hoses that go across the roads, and what that does is it counts traffic. And there's something called level of service, and it just says, like, how many cars are on this road compared to the capacity of the road.

And so, look, I know this was 10 years ago I came up with this, all right, so just – but that's not the way that we need to be planning infrastructure. You have all of this data that's out there that could be aggregated that informs you where are trips originating and what's the destination. So rather than putting another lane on a road that does something like this and gives you this circuitous route to this overwhelming destination, let's use that anonymous aggregated data in a way to inform our transportation planning. You have – make up numbers – 70 percent of the people originating here and trying to get to this destination; what is the most efficient way to get there, and which mode of transportation is the most efficient way of achieving it? Meaning, should we do some short rail line? Should we actually just build a road that goes straight, reducing fuel consumption, reducing time traveled, reducing emissions? And we're building roads in a way that's incredibly antiquated. I mean, it even goes back to, like, traffic-light technology that we're using at this point. I mean, like, the red-green-yellow thing, how many of you have sat at traffic lights when there's not a car in sight in the middle of the night when you're coming back from a bar, right? Don't look at me like you don't know what I'm talking about. You know exactly what I'm talking about. (Laughter.)

So, I mean, it just – this doesn't make sense what we're doing today. We're stuck in such an antiquated world. And so that's what that legislation does, just leveraging that data to help inform more efficient uses – excuse me, more efficient planning of transportation. And this is all about cost efficiency, environmental efficiency, implementation efficiency, and of course at the end of the day expediting your ability to – or, improving your efficiency to be able to travel. I mean, these are win-wins, and everybody should be able to agree on that.

Mr. Girishankar: This is a powerful insight about thinking through the implications of AI for different sectors and industries and aspects of our economy, which really underscores how much work all of us have to do to better understand what is coming. And it's the point that the senator made about knowing what we don't know and how we have to actually really start to look into this.

Let me end – I know your time is precious, but I want to – I would be – I would be remiss if I didn't raise the issue of global competition around

AI. A number of countries, principally China, are moving very, very quickly to catch up, and they're making heavy investments. They have their own significant industrial strategies around this, around AI, around other technologies. Others, including friends and allies – Japan and UAE – they also want to move ahead and work with us in these areas. So how should we think about our partnerships with these partners and our competition with adversaries when it comes to AI?

Sen.
Hickenlooper: Well, certainly the competition – well, you want to go first?

Rep. Graves: No, no. Please.

Sen.
Hickenlooper: I feel – I feel guilty because, you know – you know, I go first every time and then he always thinks of things to say that I omitted. You're so unfair. (Laughter.)

Rep. Graves: One, you're in the House of Lords; you get to go first.

Sen.
Hickenlooper: House of Lords. (Laughter.)

Rep. Graves: Two, it gives me more time to think about stuff, so. (Laughter.)

Sen.
Hickenlooper: I think the global competition has got to be first and foremost in our minds at all times. It's that important. Quantum computing is another place where we can't afford to come in second. I feel very optimistic about our ability to – despite the leads – the number of engineers that are coming out of Chinese universities that we – staggering numbers about the resources and the people that they're putting into this. But we have a system in this country of entrepreneurship and innovation tied together, that, with a collaborative history between, that, you know, our institutions of higher learning, our private sector, our military, they're all, you know, accelerating the advances we make at a level – and this has been going on for more than – almost 100 years, more than 50 years.

It is a system that our freedom creates. And China just doesn't have that. And they are always going to be behind us. And they're going to copy us like crazy. Their engineers will take everything they can get and copy us. But they will not be the first. And I think that's key. And it requires us to be very careful of which allies we include in our research as we go forward, and what parts of the research is universal should be reported out at, you know, the national scientific consortium – you know, those conferences – and which we keep as strategic, you know, top secret information.

Mr. Girishankar: Thank you, Senator. Representative Graves, your thoughts.

Rep. Graves: Yeah. So, look, the senator talked earlier about his bill, and NIST, and, you know, finding the right balance. And he's right. You know, you got to find the right balance. But I think that you've really got to be thoughtful about the authoritarian regimes like China. Do you really think that they're going to come in and say, well, you didn't properly go through this National Environmental Policy Act analysis, and therefore we're going to delay your project? No. Do you really think they're going to come in and say, well, our FERC equivalent, you know, isn't approving this – you know, this corridor, and so, you know, you can't – no. They're going to come in. And they're going to knock down those impediments.

And my two cents is that we're going to be a better leader. We're going to – in terms of ensuring that the technology is used in a way that is advantageous versus adversarial or dangerous, if we can continue to maintain the edge on the technology. And right now, you know, as you acknowledge, I think the United States does have an edge. But that edge will not be maintained unless we address – and I'm sorry for saying it a third time, but I think it's really critical – unless we address the lack of compatibility and other components of our governance structure. And that includes local government, state government, of course, FERC, and our own government. But it's going to be critical to us maintaining this edge and ensuring that we have the expertise to ensure that the technology is used in a way that's positive.

Mr. Girishankar: Well, so much of this depends on having very, very clear goals that we can all align to. And I think both of you have exercised tremendous leadership in helping us sharpen our focus on that. And just wanted to thank you and give you a hand for spending your time with us today. This is a great motivation for the work that we're doing, and that hopefully we can continue to do.

Rep. Graves: Thank you.

Sen.
Hickenlooper: Thank you, Navin. (Applause.)

(END.)