

Colin: With that, I would now like to formally begin today's teleconference and introduce Sonny Ramaswamy.

Sonny: Collin, thank you so much for the introduction. Good afternoon everybody. Thank you so much for joining us this afternoon. It is an exciting day for all of us that are involved in the research extension and education enterprise that supports our nation's nutritional security. Really, this budget for fiscal year 2017 I think truly makes a statement. President Obama in his statement this morning talked about how this budget that he has just released this morning is about innovations. It is about infrastructure. It is about education in the workforce, and it is about security.

When you really think about it, those terms are apropos to the NIFA budget as well for fiscal year 2017. There were several individuals earlier this afternoon in the conversation that secretary Tom Vilsack had, and then following that, undersecretary Cathie Woteki also had a short conversation about the budget, overall budget for the research education and economic area. I want to focus on very specifically the NIFA budget itself. For those of you that want to go see the details, I encourage you to go to [www.usda.gov/wps/portal/usda/usdahome?navid=BUDGET](http://www.usda.gov/wps/portal/usda/usdahome?navid=BUDGET). Again, [usda.gov/wps/portal/usda/usdahome?navid=BUDGET](http://usda.gov/wps/portal/usda/usdahome?navid=BUDGET). On page 92 of that document is where the NIFA budget starts, but you've also got the rest of the USDA budget there as well.

The bottom line is for fiscal year 2017, what we want to do is to support, truly support transformative discoveries that we need to address the societal challenges particularly pertaining to the achievement in the nutritional security for our nation. Obviously, this ability to achieve nutritional security is impacted very significantly by a whole host of challenges including the diminishing land and water resources, changing climate, the need for environmental stewardship, and of course last but not least, the bursting population itself.

The 2017 budget also supports several presidential initiatives, and these include antimicrobial resistance and pollinator health, and of course, the need to develop the workforce as well. We're going to be investing in the fundamental and applied science that we need so that American citizens ultimately are going to be healthier and [nutritionalistic 00:03:32] here as well, and we hope that the discoveries that all of you all make are going to allow decision makers to have the science based information so they can make informed decisions. We hope that the investments that we make now will result in our communities both rural and urban communities will be vibrant and sustainable, and that our nation's, particularly our agricultural economy continues to prosper as well and create jobs.

There are several strategic initiatives that we want to provide support for out of this budget. Obviously, this is about boosting agricultural production while minimizing agriculture's ecological footprint, and these strategic initiatives are about promoting the use of systems approaches to really help improve the various facets of agricultural systems throughout the entire value chain from the farm to the dinner table to businesses to consumers. We hope that these initiatives will transform the way our

nation produces, processes, consumes and disposes of food. Ultimately, it is about channelizing the development of transformative knowledge to improve our nation's agricultural systems.

The bottom line, big headline messages that the proposed overall funding that probably all of you have heard is the 2017 budget calls for doubling the Agriculture and Food Research Initiative funding to the fully authorized level of \$7 billion. The bottom line for the overall budget for NIFA is really 26% increase above fiscal year 2016. The budget by the way, overall budget for NIFA also includes mandatory funding from the Farm Bill programs and proposed legislation for mandatory funding for the Agriculture and Food Research Initiative itself. I want to sort of narrow down a little bit more in regards to some of the primary budget initiatives that we've got. As I said, right off the top, there's a doubling of the AFRI funding to the fully authorized amount of \$7 billion after a combination of discretionary and mandatory funds.

Under the discretionary part of the funding which is for \$3.75 billion, our intent is to support science priorities that focus on the creation, translation, delivery and application of new knowledge. That would include the foundational knowledge that we need, and to address various challenges such as Water for Food production systems, food safety, human nutrition, adaptation to the impacts of and resilience to climate change, natural resources and environmental stewardship, rural development, and our Educational Literacy Initiative as well. These funds we also will be investing in support of government-wide initiatives. These are the presidential initiatives that I referred to earlier, antimicrobial resistance, pollinator health, the [bioeconomy 00:07:06] and climate change.

We've also got funding within the foundational science areas of supporting, continuing to support the CARE program, the Critical Agriculture Research and Extension program and the Exploratory Research Grants program. We also are continuing to invest in our Educational Literacy Initiative, and a number of inter-agency collaborations that we've been supporting over the last several years. Ultimately, what we hope is going to end up happening is that these investments will expand foundational knowledge, help engineer innovative technologies and advanced manufacturing capabilities, [device 00:07:52] prudent management strategies, help develop integrative and educational programs to meet current and future agricultural workforce demands.

Through the ELI program, the Educational Literacy Initiative, we also want to invest in training grants. These would be grants provided to help develop cohorts of individuals that are going to be part of the workforce itself. One last item to consider is the overall funding rate in the Agriculture and Food Research Initiative for several years has been declining to the extent that in 2014, we were only funding one out of 10 proposals, so a 10% funding rate which is a really abysmal funding rate. We hope that these additional funds that are being made available, that we're proposing in 2017 budget will allow us to significantly enhance the funding rates as well. That's about AFRI.

Within the NIFA budget in the 2017 budget request, we've also got a request to create what we refer to as 1890 Capacity Coordination Initiative. As part of that effort, the

budget requests \$10 million to support the creation of 3 new centers for the 1890 institutions in the area of helping facilitate the STEM pipeline, increase the profitability in jobs in underserved farming communities, and enhance the connections of 1890 institutions to global food security needs as well. Really at the end of the day, the intent is to help enhance coordination and partnerships amongst the 1890 institutions and other institutions and various USDA programs as well.

Yet another area where we're proposing to seek in increase is in the Sustainable Agriculture Research and Education program, the SARE program, an increase of approximately 21 and a half percent from \$24.6 million to \$29.9 million. A fourth area where we're seeking funding is the Farm VETS program. This is the Food and Agricultural Resiliency Program for Military Veterans. This is to engage veterans in the agricultural enterprise, and we're seeking 2 and a half million dollars. We're also proposing an increase in the Smith-Lever 3D program. This is a \$20 million request to support home visits in remote areas to enhance maternal, child and family health in high need remote, rural and tribal areas. The NIFA program for \$20 million is going to be a counterpart to the program that is operated by the Department of Health and Human Services which is the maternal, infant and early childhood home visiting programs.

Another area within the Smith-Lever 3D component of our budget, we're seeking to increase the FRTEP, the Federally Recognized Tribal Extension Program by \$2.8 million particularly to develop youth develop to Indian communities. Another area where we're proposing an increase in funding is for the [inaudible 00:11:25] and the [inaudible 00:11:25] management line whereas some of you recall, we have consolidated those lines from 6 lines down into 1 line of request, and the increase is \$3 million from about \$17 million to \$20 million. A [sort of 00:11:44] area that we are proposing an increase is for the Food and Agriculture Defense Initiative which includes the National Plant Diagnostic Network, the National Plant Animal Health ... Pardon me, the National Animal Health Laboratory Network, and the Extension Disaster Education Network EDEN, and we're proposing to increase that by \$3.2 million to \$10 million.

Another area of investments that we're proposing increase investments is in support of minority-serving institutions Evans-Allen 1890's Capacity Building, 1890's Extension, and 1890 facilities programs to support 1890's institutions. That increase is in the order of \$9.6 million. Secondly under the minority-serving institutions area, we're requesting an increase in \$4.6 million in support of 1994 research, tribal colleges education equity and extension services programs again, to support the needs of Native American populations. Last but not least in the minority-serving area is we're proposing the creation of \$10 million endowment for the Hispanic-serving agricultural colleges and universities. They were designated back in 2012, and we do not have an endowment fund to provide support to those institutions, and we hope that this request will come to fruition.

A few other areas that we've got, grants for youth-serving organizations or cooperative extension service systems, outreach activities. Those are going to be continued at the levels that we had funding in 2016. Also under the President's STEM Education Initiative in number of programs such as the Higher Education Challenge Grant and the Women

and Minorities in STEM Education. Those are going to be consolidated under a government-wide effort to promote greater levels of synergy. Last but not least is ... Let's see. Last but not least is ... Those of you that have been paying attention to our budget requests over the last few years now have been seeing that we've sought additional funding to modernize our grants making machinery, streamline the processes. We're continuing to invest in those areas.

Also, we have on the "front end," we have extension lines and [inaudible 00:14:44] lines of funding, et cetera. In the back office, we're proposing to consolidate into one single unified account. From a management perspective, we believe by so doing we're going to incorporate significant savings ultimately in how we manage these programs. Now, from a programmatic perspective, out around the country, you should not see any differences. The funding that you have been seeing for extension programs will remain intact. The funding you've seen for [inaudible 00:15:18] support you'll see remain intact as well, but it's only in the internal to NIFA itself, and how we manage these, we're proposing to consolidate it the same.

Finally, the mandatory programs that are part of the Farm Bill are included in the fiscal year 2017 budget as authorized in the 2014 Farm Bill, but some lines are being increased. Those few lines that are being increased include for example the Specialty Crop Research Initiative, the Food Insecurity Nutrition Incentive program, the Emergency Citrus Research and Extension program, and the Beginning Farmers and Ranchers Development Program, and the Organic Agriculture Research Extension Initiative program.

That gives you a sense of where we're at. We also, right off the top I want to say as well that for the proposed doubling of the AFRI funding, there was not an expectation that there would be some sort of an offset. It is truly a doubling. The request is truly doubling, and secondly, there are a few program, smaller programs that we've managed over the last several years that in an effort to think of prioritizing the investments that we make, we've eliminated some of those smaller programs in part because we believe that we can certainly provide support for those programs out of the other funding programs that we've got such as the AFRI program itself. Now I want to go ahead and stop, and Collin, I'm ready for questions.

Todd: Hello, this is Todd Winters from the University of Tennessee at Martin. I'm president of the Non-land-grant Agriculture and Renewable Resources Universities and I actually have a comment on ... I am very happy that there has been an increase in the need for research budget. However, we believe it has been at the cost of the 4 to 5 million dollar request for the Non-land-grant College of Agriculture Capacity Building program, a line item that was authorized in the 2014 Farm Bill.

We non-land-grant train a significant number of graduates going into the food, agriculture and natural resources workforce especially in the states where we are present. This includes students going into research at the land grant. Although this appropriation is small compared to the AFRI for example, it has significantly helped our

institution expand our education and research outreach mission. I'd like a comment on that.

Sonny: Todd, thanks so much for that question. Indeed, the non-land-grant funding line has been very supportive of the kind of effort that you and others of our colleagues across America and the non-land-grant institutions have been involved in the support of the research and education enterprise. In looking and developing our budget for 2017, we thought that really there's a significant opportunity for the non-land-grant institutions faculty as well to seek funds from the other lines that we've got. Whether it's the AFRI funding line within which we've got the Education Literacy Initiative. We're hoping to do, as I said, training grants and other types of grants as well, but cohorts of students might be educated, undergraduate students and graduate students. We have the research and extension experience for undergraduates for example.

These are all opportunities that we shouldn't lose sight of, and we're certainly here to help our non-land-grant institutions as well be as successful at getting these funds, so don't focus on the fact that the approximately 4 and a half million dollars has been zeroed out, but really, look at the bigger opportunities that are available as well. We'll work with you.

Todd: Okay, thank you.

Sonny: Indeed.

Lin: Hello, this is Lin Miller. I'm calling from Sustainable Energy Strategies. I'm wondering if the Sustainable Bioenergy Challenge Area is going to be funded within ... I know it's remained in the program, but it has not been funded or accepted new proposals in the past 2 cycles. Could you say more about that?

Sonny: Yes Lin, indeed. That's one of the presidential initiatives that we're certainly paying attention to. Indeed, once the budget ... If you were to look at the budget document and once our budget brochure goes up on our website as well, you'll be able to see that the bioenergy portfolio will be ... New grants funding opportunities will be made at a pretty significant level.

Lin: Do you know when those would become available? I mean, [inaudible 00:20:53] proposed pending approval of this budget. They would be available immediately within the subsequent cycle.

Sonny: Yeah. Basically, the process on the 2017 budget cycle is ... We made the proposal now. We don't have the budget hearings and things like that. Towards the end of this year is when Congress will get involved in it and pass the budget. That's the timeline, so this time next year you'll start saying the RFAs coming out, but in the fiscal year 2016 budget, we did request a funding for the AFRI program which was as you probably know, funded at \$350 million. We do have a bioenergy portfolio in there as well, and indeed, you'll see that the RFAs will start coming out here in just the next days or weeks for the 2016 cycle. In addition to that by the way, the challenge areas within our

foundational programs, also you should be able to get funding for bioenergy work.  
Okay?

Lin: Very good, thank you.

Sonny: Thank you.

Johnathan: Doc Ramaswamy, [Johnathan 00:22:26] Moore here. Good evening. Was wondering [crosstalk 00:22:29] if the Centers for Excellence are impacted by any of the funding in the new budget. What is the status of those?

Sonny: Johnathan, thanks so much for that question. Indeed, the Centers for Excellence, those of you on the phone call know was part of the Farm Bill, and we offer it for the first time this past year. A number of projects were indeed funded, and as the RFAs come out, you will see in there that you will have opportunities for Centers of Excellence. It's our expectation that ... That's in 2016, and our expectation is that in 2017 as well Johnathan that we will have, we will offer up these opportunities in the AFRI portfolio.

Johnathan: Thank you.

Jane: Hi Dr. Ramaswamy, this is Jane Schuchardt representing Cooperative Extension ECOP.

Sonny: Hi Jane.

Jane: Hi there. I wanted to be sure this was working. With regard to the important focus on nutritional security, might you point out just the 2 or 3 at the top opportunities in the proposed budget that will address this important topic?

Sonny: Could you repeat that question?

Jane: Sure. You began your comments with regard to the USDA focus on nutritional security, and my question is within the proposed NIFA budget, what would you say are the top 2 or 3 opportunities where this topic of nutritional security will have funding provided?

Sonny: Sure, sure. There's a number of them, and I'll start with the programs that we have, the expanded Food and Nutrition Education program that has been ... We requested a minor plus up of that program, and also as you know within the Hatch and Smith-Lever areas, we invest significantly in the realm of the food security/nutrition security itself, including the health outcomes that are possible as well. Then going on to the mandatory programs like Specialty Crops Research Initiative, for example, the consumption or the production of fruit and vegetables particularly as it relates from a nutritional perspective is our investments that we make.

The Food and Insecurity Nutrition Incentive program, as I said, that's been proposed to be pulsed up this year in 2017, and that's another area that promotes the consumption of fruits and vegetables particularly in poor populations, minority populations as well. Then within the AFRI program, we will have actually for this upcoming year in the area

of childhood obesity and prevention, we're going to be proposing in 2017 quite a significant increase in investment in that part of the AFRI portfolio as well. it really is pretty significant investments that are going to be made in the realm of ultimately getting the source of nutritional outcomes that we want to get.

Jane: Excellent, thank you.

Sonny: All right, thanks Jane.

Collin: Okay, moving on to our next caller, please go ahead.

Sonny: Hello?

Collin: Caller, your line is unmuted, please go ahead.

Karen: I'm sorry about that. I was muted myself. Hi Dr. Ramaswamy, this is Karen Gala with The Council on Food, Agricultural and Resource Economics. [inaudible 00:27:00] Just wanted to thank you for your leadership and support. [inaudible 00:27:04] Been an incredible leader. It's been great to work with you. In addition to AFRI, there are many NIFA programs that support research about rural economies, new [investigators 00:27:15], rural development and innovative research, and we've very happy to see that those programs are included in the request. One of the things that ... I have 2 questions actually. One is just a clarification about STEM programs. Will they be moved to the US Department of Agriculture?

Sonny: The STEM program, we have about 4 lines I believe that includes the Higher Education Challenge Grant, the Women and Minorities in STEM Education and a couple others that I'm just blanking on right now, but those are the lines that have been proposed. I think Karen that you know this, for the last 3 years now, 3 budget cycles are being moved into for the undergraduate and graduate level educational programs to be managed through the National Science Foundation. The K-12 such as [inaudible 00:28:09] the classroom and things like that could be managed by the Department of Education. That's still on the books as to being moved and consolidated, so there's greater levels of coordination. We're actually excited about the potential of that happening because that will allow us to leverage very significant additional [resource 00:28:31] both monetary and intellectual from those agencies. That's one part of it.

Now separately what we've done Karen is no, we're not giving up on the STEM education area per se. Education I should say, not just STEM education, education per se and literacy. Because it includes the social sciences, and as you and I have discussed previously. What we have done is to really boost our investments in our Education Literacy Initiative. We continued to increase investments there by offering up opportunities for school teachers, for community colleges, for undergraduate programs, the Research and Experiences for Undergraduates, the graduate fellowships, post-doctoral fellowships, and now we're proposing to do the [klee-nee 00:29:28] grants as well.

What we've started doing now Karen and the others on the telephone call, we're collecting data by CIP code, the CIP code. I think it stands for Curriculum and Instructional ... that the Department of Education developed. We're going to grab data and actually utilize those data to see what areas of the educational enterprise need to be boosted and what areas need to be nurtured, et cetera. These are the sorts of things that we're doing as well, so we've really taken to heart the many conversations we have had around the country, and in fact as you know, tomorrow we've asked the National Research Council tomorrow and day after to hold this workshop here in [Washington D.C. 00:30:14] where there's going to be about 120 people that are going to convene to have a deep conversation about the workforce needs in the food, agriculture and natural resources enterprises.

Karen: Right, great. Thank you. Is there any possibility of me asking a second question? I just have a quick question about the difference between the AFRI mandatory funds and the discretionary funds. There was some difference pointed out in the President's appendices so that mandatory funds would invest into [systems 00:30:48] approaches, and I was just wondering if you could comment a little bit on that if that distinction is of note.

Sonny: Ultimately, our hope is that you and the rest of the folks in the food and agricultural research and education enterprise see the value in this very significant request in the President's budget of getting to the authorized level of \$700 million. Whether it's discretionary funding or mandatory funding, not to focus on that part of it. It really is to focus on the fact that the request is for \$700 million. We hope that Congress also sees it that way and provides the funding requested. In regards to the investments that we make, it really is a continuum between the "discretionary," the discretionary part and the AFRI mandatory part. The systems approach is investments in enhancing funding rates, the additional investments in the Education Literacy Initiative.

These are all things that we need to be investing in. It's not like we're going to put a wall between the AFRI discretionary part and the AFRI mandatory part. It is a continuum. It's complementary funding that we're going to be looking to really help the enterprise. We need these transformative discoveries. We need these innovations. We need the education. We need the pipeline of young people of the workforce to be nurtured as well.

The way we're viewing it is legislatively. It might take a certain legislation to come through with the funding, but ultimately, I was joking earlier with Paula Geiger our budget director. I said, "The color of money is green," and I'm hoping that's the way it's viewed across the nation, that the color of money is green, and that the \$700 million are really, really seriously needed. If you look at how far behind we are in the United States compared with other countries in the investments that we make, we need to really think of ultimately not just our nutritional security, but our national security as well.

Karen: Thank you so much.

Sonny: Thanks Karen.

Speaker 8: This is [inaudible 00:33:32] from Texas A&M University.

Sonny: Yeah. [crosstalk 00:33:38] How are we doing?

Speaker 8: I would like to congratulate Dr. Ramaswamy and [inaudible 00:33:44] for securing this really high level of funding compared to [inaudible 00:33:48] years.

Sonny: Thank you very much. We've not secured it yet. It was just a proposal, and hopefully we will be successful in securing it as well.

Speaker 8: Yeah, definitely, hopefully it will be successful. My point, one question I have is on the nutrition security and food security [inaudible 00:34:11] human health by using fruits and vegetable research. There was actually in the [inaudible 00:34:18], there is some guidelines on the phytochemicals. If you look at historically, even though there is a guidelines, but the funding allocation to that particular area of nutrition security and food security is very less, so what are the actions you're going to make to change that paradigm shift to say, focus on increasing fruits and vegetables [inaudible 00:34:42] human health? That focus is [inaudible 00:34:44]. The funding has not reallocated much in the last several years.

Sonny: Sure. If you look at our overall NIFA's funding portfolio, we have a number of programs and a number of lines, over 60 lines of funding that we've got. As I said earlier for example, the Specialty Crops Research Initiative is very specifically geared to help producers grow fruit and vegetables, deal with various types of biological and [inaudible 00:35:19] constraints and things like that, getting it to market, et cetera. Those are the sorts of things that's on the production side of the coin. We've also got programs like the Food and Security Nutrition Incentive program and others that are really on the demand side and consumption of more of these fruits and vegetables and things like that.

We also help to provide funding through AFRI to create regional nutrition Centers of Excellence. These centers are supposed to actually get the evidence. Are we moving the needle in regards to obtaining better health outcomes particularly of children, but in general, the entire population. We've got a number of these programs, and what we're doing is in the last couple of 3 years, to start really looking to see if we're indeed moving the needle or not. It's all going to be evidence-based, not just some hand waving that, "Oh yeah, we felt good." It'll be eating more fruit and vegetables, but really the question is, "Then what happens? Are we actually seeing some improved health outcomes as well?"

If you look at our AFRI nutrition funding portfolio, you will see those sorts of investments being made. What we hope is people like you at Texas A&M and other institutions might consider submitting ... Johnathan Moore asked me the question about Centers of Excellence. You might want to take the kind of work that you're doing, the assets that you've got, and come to us saying that, "We want to create a Center of Excellence for looking at nutritional outcomes." That might be from the field, from the farm to the actual consumption of those foods and ultimate outcomes as well.

If you look at our portfolio more broadly, indeed, we're doing that, and if you compare our request for applications for example in the last couple of 3 years, RFAs from previous years, you'll see that even the verbiage and the terminologies and the priorities and things like that, we are moving the needle. One last thing I want to say is we're partying with NIH for example, with the National Institute of Diabetes and Diseases of the Kidney, NIDDK on looking on biomarkers in humans that are consuming let's say beans, that are consuming certain types of food and things like that. We just gave a \$2 million grant to Colorado State University for example. They're actually looking at beans, and is that resulting in a particular marker that you can track in humans that's resulting in better nutritional outcomes as well. Those are some things that we're doing. I encourage you to be creative and imaginative and look at RFAs. If you don't like what you see, give us some input, and we will certainly [go 00:38:37] through all of that too. Okay?

Speaker 8: Thank you very much. That is a good ... I think particularly collaborating with the NIH is a good thing because it [inaudible 00:38:44] a long time. That's good.

Collin: Okay, moving on to our next caller, please go ahead.

Ferd: Hi, this is Ferd Hoefner at the National Sustainable Agriculture Coalition. Thanks so much for doing this briefing. My question you referred a couple of times to plus ups and the mandatory accounts for [FCRI 00:39:07], and FINI, and BFRDP, et cetera. I'm not seeing that in the budget, so I'm wondering if you can elaborate on what those plus ups are because I just don't see them.

Sonny: Ferd, thank you so much for that question, and good to talk to you. I haven't seen you in a while. If you look at the actual budget numbers between 2016 and 2017, there's plus ups, and we'll have our budget brochure up on our website tomorrow, and I'd ask you to please look at it. Then if you still need some additional explanation, let me know please. We'll get back to you, okay? We can do that offline out back.

Ferd: Okay, that sounds good.

Sonny: Go ahead please. Go ahead Ferd.

Ferd: No, that's fine. I'll look for that, and I'm looking at the appendix now and there's no sign of any plus ups. I'll be curious and I'll follow up with you.

Sonny: Hey Ferd, Paula who's sitting with me here just reminded me that what happened in 2016, remember we had the sequestration that took a bite out? If you look at that sequestration bite and then you look at the 2017, then there's like a \$4 million increase or \$3 million on those lines.

Ferd: [crosstalk 00:40:44] I see what you're saying. Yes, but sequestration is going to apply again, so that won't [crosstalk 00:40:51].

Sonny: I misspoke and indeed, just about 45 minutes ago, Paula said to me we very well have to be looking at sequestration as well.

Ferd: Yeah, because sequestration goes through 2024 now, so we're stuck with it unless Congress acts. Thanks, that helps me understand.

Sonny: All right Ferd.

Ferd: Thank you.

Jane: Sonny and Paula, this is Jane again, and you've provided a URL at the beginning of the presentation, but then you indicated that the NIFA budget brochure would be up on the website tomorrow. That's probably the one that I should get out to everyone. Will there be some sort of an announcement of that budget brochure coming?

Sonny: Yes, there will be. The [gov 00:41:45] delivery system that we're using for updating everybody, through that there will be an alert with all the appropriate links and all that.

Jane: Perfect, thank you.

Ken: Hello, this is Ken Olsen with the American Dairy Science Association.

Sonny: Hi Ken.

Ken: Hello, it's great to see the level that's being proposed here for the budget. One thing I was wondering, we've been a little bit concerned about disparity in funding between the plant and animal sectors. Do you anticipate that we'll be able to balance that a bit more if the additional funds come through?

Sonny: Yeah. Again, you and I have spoken about this. When I came onboard, I promised, and we have actually been delivering. We've moved the needle very significantly to increase investments in the animal science area as well. We undertook some analyses, and sure enough, we saw that the animal science area needed to be increased, and we have been doing that, and we will continue to do that Ken.

Ken: I really appreciate your work on that, so thank you.

Sonny: Absolutely, thank you.

Collin: Okay, it looks like we do have another caller in the queue. Going out to our next caller, please go ahead.

Jody: Hi, this is Jody Jellison, University of Massachusetts. I was wondering if you could share where you see the regional climate change [inaudible 00:43:22] is going?

Sonny: Oh yeah. Hi Jody.

Jody: Hi.

Sonny: Indeed, the regional climate hubs, that's what you were referring to, the USDA hubs. Indeed, they are quite active, and some hubs are doing a lot more than other hubs I think, but in general, everybody is doing a lot of really excellent work. In our RFAs, we made a commitment to incorporate appropriate language to support climate change, and climate change is not something that's going to go away. Certainly it's part of the presidential initiatives as well. I'd encourage you members of the various climate hubs and people that work in the area of climate and resiliency and adaptation and things like that to really look at applying for funding from us. Not just in the area of the discoveries that need to be made, but also in the realm of translating that knowledge into tools that can be used by farmers and communities and others as well. Certainly, [here's 00:44:40] the opportunity to seek funding from us.

Jody: Thanks.

Sonny: Thank you.

Collin: Okay, looks like another hand did just go up. Going now to our next caller, please go ahead.

Speaker 12: This [is Jacobson 00:45:01] out in Montana. This is really good news is what we're going to do in a competitive funding area. What do you see coming down the way in terms of formula funds that are going to help maintain the research infrastructure?

Sonny: I think you've heard me speak to this about the critical need for us to continue to provide support for capacity funds as well, Hatch, and Smith-Lever and other programs. We will work collectively with you and the others across the United States to continue to seek resources for capacity funds as well. That's the promise that I made, and I will continue to work with you folks. It's critically needed. There's no doubt about it, so the approach that I've proposed is to think of capacity funds, capital infrastructure and competitive funding, the triad that we need, the 3-legged stool that we need for this enterprise. We hope that as we go forward that we will be able to make a compelling argument for that part of the portfolio as well.

Speaker 12: Thank you.

Sonny: Thanks.

Robert: Hello. This is Robert Taylor. Hello, Sonny?

Sonny: Hello Robert. How are you doing sir?

Robert: Good, fine. I'm from [Florida 00:46:39] University and I'm just wondering. How are we going to recognize or have access to infrastructure development? Because I think our infrastructure, especially in our 1890 schools are really, very old and sometimes even behind high schools. How can we realize actual funds to address that?

Sonny: Robert, indeed, you and I have had multiple conversations about this, and earlier I was talking about how for the minority-serving institutions, there's several different areas of where we're proposing an increase, very specifically, an increase of \$9.6 million for Evans-Allen 1890 Capacity Building education grants, 1890 Extension and 1890 Facilities programs. As a first step towards getting a little more, few more dollars to the facilities need, that's one part of it, but more broadly as you know, a company called Sightlines with the help of APLU and the land-grant community and the non-land-grant et cetera, has undertaken this analysis across the United States.

That report was released, and indeed, Ian Maw is going [to 00:48:17] convene in a conversation here very shortly with a few individuals to develop a path forward on what do we do with that Sightlines report. What I'm hoping, and I'm sure you've heard me speak to this before. It doesn't really take a multi-year effort on our part all of us working together. Going back to having the capacity funds, having the capital investments, capital infrastructure investments and competitive funding, they go hand and hand. The decrepitude of our nation's infrastructure is really serious, like you said, sometimes even worse than some high schools, and we ought to do something about it. Compared with the other nations that are also in this game, the United States has fallen behind, so my hope is that we can turn this around. Again, it will require all of us rolling our sleeves up and thinking about how we might make this come to fruition.

Robert: Thank you Sonny.

Sonny: Yeah Robert, thank you.

Gina: Good evening Sonny. This is Gina Luke over at the American Veterinary Medical Association. I wanted to ask ... Hi. Thank you so much for all the good news in the budget. I wanted to ask a question about the Antimicrobial Resistance Initiative. Can you detail some of the different funding that's going to be in the various for antimicrobial resistance?

Sonny: As you probably know, if you look at 2015 and then you look at 2016, we more than doubled the investment in antimicrobial resistance. We're going to propose to increase it yet again in 2017 as well. I don't recall very specifically specific dollars that we're going to be investing, but we hope to ... This is in line with the presidential initiative as well is to invest in antimicrobial resistance, and it comes in multiple different forms, some of it under our Water for Food Systems portfolio funding, looking at movement of microbial concern and potential ... [antibiotics 00:50:51] and things like that in water, in water, in production systems, in how we manage our livestock. There's going to be opportunities, funding opportunities from that perspective.

Also, in regards to what we're doing very specifically from the use of antimicrobials and how do you mitigate it, et cetera, so really proposing a farm to consumer level type of an approach is what we've been pushing for the last few years. There's going to be different parts of our budget that we'll track. We have these cross cuts, and we will track those as well. Believe you and me, this is something that's front and center that

several agencies have additional funding that's been incorporated into the President's budget request for antimicrobial resistance.

Gina: All right, thank you.

Mike: Good afternoon Sonny, Mike Harrington from Colorado. How are you today?

Sonny: Mike, I'm good. How are you doing Mike?

Mike: Good. I wanted to follow up a little bit on the capital infrastructure study that was done. As you know, this is a big elephant to try to eat. What are your thoughts about how we go about that? If I recall, there's something like \$200 million a year just to maintain status quo.

Sonny: Yes. I'll tell you what, it will require a longer conversation Mike, and how about we do it offline?

Mike: We can do that.

Sonny: In fact, all of our thinking is not well cooked yet and ready for prime time, so let's discuss it offline. As I said, Ian Maw is in the process of getting a small group of individuals together to help develop some thinking on a path forward.

Mike: Thank you.

Sonny: Got it, yeah, indeed Mike. Thank you. All right, I think we're on the hour now. I think we can go ahead and wrap up since you've not seen any hands go up. Collin, I just want to go ahead and start wrapping up here, and again, I want to thank everyone that joined us here. As you go back to your organizations, your institutions, as you have these conversations, I hope you think of the possibilities here. Each individual has his or her eye on particular parts of the NIFA budget, particular parts of the USDA budget. The old adage about rising tide is apropos here as well. If you're thinking about the conversations you're going to have, the outreach you're going to do, just think of that rising tide metaphor and speak to the critical importance of funding period, broadly [writ 00:54:22] periods, or the food and Agricultural Enterprise.

Our colleagues in the National Sustainable [inaudible 00:54:30] Coalition for example, they talk about not just about the SARE program. They're deeply in interested in Hatch and Smith-Lever. They're deeply interested in the AFRI program as well. They're deeply interested in the mandatory programs. I'd ask all of you to join us. If we can collectively roll our sleeves up and try to make a case for this, make a compelling case for this, we're going to ensure that this is all going to come to fruition. Again, thank you very much, and our work is cut out really now because of the heavy lifting that needs to be done, and I hope you'll join me and the others in making all this come to fruition. Thanks again folks, have a wonderful day. Bye-bye.

Colin: Okay, thank you Sonny, and thank you everybody in the audience for joining us today. This concludes the call. You may now disconnect.