

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

1

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE (NIFA)
AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)

STAKEHOLDER LISTENING SESSION

Wednesday, February 22, 2012

8:32 a.m.

USDA Waterfront Building

800 9th Street, SW

Washington, D.C. 20024

Reported by: Natasha Kornilova, RPR/CSR,
Capital Reporting Company

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

2

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

2 MS. BALDWIN: Good morning and welcome. We
3 are going to try to stay very close to our schedule.
4 So I ask that you guys grab a seat and I will repeat
5 again, if you have registered to speak, we have a
6 reserved seat for you, so please come on up. It's in
7 the order that your name appears on the Agenda, and
8 also, since this meeting is recorded, we ask that
9 everyone who comes to the mike indicate who they are,
10 their title and their affiliation, so that will be part
11 of the official record.

12 For those of you who are speaking, we're
13 going to try to keep everyone on time. We do have the
14 two- minute warning and the official stop. So please
15 look for that. There are a couple people that are
16 still kind of milling in.

17 (Pause.)

18 DR. JACOBS-YOUNG: Good morning. Pass the
19 coffee boxes. Just pass them down the rows here.

20 Good morning. I'm Chavonda Jacobs-Young.
21 I'm Acting Director for the National Institute of Food
22 and Agriculture, and I want to start by welcoming you

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

3

1 and thanking you all for participating in this business
2 session for AFRI.

3 Your input is invaluable in helping us
4 implement a robust funding program that not only works
5 towards USDA's strategic goals but also helps us to
6 solve the grand challenges facing agriculture and
7 society today.

8 Today marks our 3rd AFRI Listening Session
9 and it will by no means be our last. When AFRI was
10 established through the 2008 Farm Bill, we collected
11 your input to publish AFRI's first solicitation in
12 Fiscal Year 2009. During that process, we realized how
13 valuable that input was to us and so we've continued
14 that practice to date.

15 Within the past year, NIFA has undergone a
16 massive transformation, a massive reorganization, and
17 many of you in your own organizations know what that
18 can mean for an agency or an institution.

19 We've reorganized into the four institutes
20 that help us align with the six priority areas
21 identified in the Farm Bill and we want to thank you
22 for your patience as we've gone through this very

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

4

1 critical time for the agency.

2 We believe we are now better positioned to
3 respond to the pressing needs of agricultural science
4 and to help find solutions to many of society's
5 challenges.

6 Now I know everyone is anxious to get your
7 hands on those microphones and get your thoughts and
8 ideas out into the room but I want to share just some
9 thoughts on agricultural research, education, and
10 extension activities, and don't worry, I'll be brief.
11 The stop sign will come up in just a second.

12 This topic is very important to our Under
13 Secretary Dr. Catherine Woteki and as she has so
14 clearly articulated in other venues, including here at
15 NIFA, we have three major areas for agricultural
16 research and education, three major challenges.

17 We have budgetary challenges, management
18 challenges, and societal challenges, which are probably
19 no different than what you face in your organizations
20 every day.

21 Let's start with the budget. You all
22 received a copy of our FY 2013 budget proposal, the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

5

1 President's budget proposal when you entered the room
2 and registered, and we know that in light of USDA's
3 budget request, there were a lot of overall cuts, but
4 what we can see in the 2013 budget for NIFA is that the
5 President and the Secretary recognize the importance of
6 science in agriculture and you'll see that reflected in
7 our budget proposal.

8 While other agencies experience painful cuts
9 throughout USDA, NIFA received an overall three percent
10 increase in discretionary funding and we're of the mind
11 at this point that flat is good. So a three percent
12 increase is something to really yell and scream about.
13 We're very excited about that recognition from the
14 Secretary and the Administration.

15 That three percent includes a \$60 million
16 increase to the AFRI Program, bringing the total
17 funding to \$325 million. This additional funding gives
18 us the room to grow and expand our programs.

19 When we look at the management challenges we
20 face, we have to carefully consider the level of the
21 complexity that NIFA, the environment that NIFA
22 operates in. We have our Legacy Systems, like the Land

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

6

1 Grant Partnership. We have the role of the public and
2 private entities in this agricultural science arena.
3 We have NIFA's role within the federal science
4 portfolio that we have to be cognizant of, and then
5 we're always mindful of the need to continue to train
6 and prepare the next generation of scientists and
7 leaders for agricultural science. So there's a lot of
8 complexity in the environment that we operate in.

9 All of these significant intertwined issues
10 are relevant and deserve adequate and timely
11 deliberation. In times of tight budgets, we really need
12 to examine these issues so that we can perform to our
13 best capacity.

14 Finally, it seems you have to look no further
15 than the front page of the New York Times or the
16 Washington Post to see the challenges that
17 society is facing: food security and hunger,
18 sustainable bioenergy, climate change, food safety and
19 childhood obesity.

20 On top of these challenges, we face our own
21 communication challenges. We need to continue to
22 stress the vital importance of our research and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

7

1 emphasize the benefits that it brings to society. Many
2 people are not aware of the value our science and
3 research creates. We have a real advantage in the
4 digital age to broaden the awareness of our work.

5 As this awareness grows, I believe that
6 sustained support for food and agriculture research
7 will follow, and we appreciate our stakeholders because
8 you echo our message and you have been great advocates
9 for NIFA and agricultural science.

10 These challenges may be great but NIFA and
11 the agricultural science community have the ability to
12 discover and create innovative solutions. I see this
13 ability when I meet with the grantees and see their
14 determination to solve real problems that matter to
15 people and society, whether it's helping children
16 improve their nutrition.

17 I just came back from a trip to Nebraska for
18 an award for food safety looking at E.coli non-
19 traditional strains and looking at the excitement and
20 enthusiasm with those scientists working together to
21 find some solutions to food safety was just a very
22 enriching opportunity for me, and if we go no further

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

8

1 than looking at the state of Washington and helping to
2 develop sustainable biofuel systems, the state of
3 Tennessee and other states around the country who've
4 joined in in that area.

5 AFRI's come a long way in the first few years
6 of funding and I look forward to continuing to working
7 with many of you here today to strengthen the ability
8 of food and agricultural science and research to keep
9 our food system safety and secure and receiving input
10 from you today is another step in making that happen.

11 Later today, you will hear a brief from
12 NIFA's Assistant Directors on our priorities for the
13 Foundational Program, the Challenge Area Programs, and
14 the NIFA Fellows Program. So please keep these
15 priorities in mind during the comment period.

16 One final note before we begin. I want to
17 reiterate, as Effie stated, today's session is being
18 recorded. If you make a statement, please speak from
19 one of the two microphones in the room. There's one
20 back in that corner and I guess there's going to be one
21 passed along here.

22 Also, please begin your statement with your

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

9

1 name, your title and organization affiliation. We will
2 post a public record of this meeting, and it is
3 important to know all of your comments as they really
4 are essential to us as we implement our work.

5 Thank you again and I look forward to hearing
6 your comments.

7 With that, I'll open the floor for our first
8 speaker, Dr. Debbie Shelly, who's Assistant Director
9 for the Institute of Food Production and
10 Sustainability.

11 DR. SHEELY: Good morning. I am going to
12 just start out by walking you through the basics of the
13 AFRI Program, just the nuts and bolts of how it's
14 structured, legislative requirements, those kinds of
15 things, so that we all start from kind of the same
16 page.

17 Next slide, Effie. Well, I'll just get
18 started.

19 So the AFRI Program was authorized in the
20 2008 Farm Bill and it was authorized for a total
21 funding of up to \$700 million. In Fiscal Year 2012,
22 the appropriation was \$264,470,000 and, as Dr. Jacobs-

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

10

1 Young just mentioned, it is listed in the President's
2 budget request at \$325 million.

3 I'll start in on -- so in the -- I'm just not
4 even going to look over there. It's getting me
5 distracted.

6 So the program that -- so the AFRI Program
7 actually replaces the National Research Initiative
8 Program, Competitive Grant Program we had here at the
9 agency for many years, and it sort of also combines
10 really some of the best aspects of the old NRI Program
11 and the old Initiative for Future Agricultural and Food
12 Systems Program, IFAFS. I bet some of you guys
13 remember
14 IFAFS.

15 So one of the requirements of the program is
16 that we spend no less than 30 percent of the AFRI
17 funding on grants that integrate research, education
18 and extension, and that is definitely one of the
19 requirements that came in from the old IFAFS Program.

20 Next. As well as the 30 percent on
21 integrated grants requirement, for funds that are
22 support -- so I'll back up and just say through the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

11

1 AFRI Program, we have really fabulous flexibility. We
2 can support research projects, extension projects,
3 education projects, and projects where we integrate
4 those three functions, and for shorthand, I will just
5 refer to those projects that integrate the three
6 functions of research, education, and extension as
7 integrated projects.

8 So for the funds that are dedicated for
9 research, we're to spend no less than 40 percent on
10 applied research, no less than 60 percent of those
11 funds on fundamental research, and of the funds that we
12 use to support fundamental research, we should spend no
13 less than 30 percent of those funds for work done by
14 multidisciplinary teams, and then no less than two
15 percent on equipment grants.

16 So don't do the math, it really doesn't work
17 out, but these are all requirements that were actually
18 dictated through the Farm Bill language.

19 Effie. And as mentioned, we can support
20 research, both basic and applied, education, extension,
21 and then the integration of those functions, and that's
22 what we refer to as our project types.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

12

1 Next. To make things fun, we also have
2 probably close to a dozen grant types and we offer
3 grants, really standard project grants, we refer to
4 those, and those are the projects really that are
5 conducted by single investigators or small teams of
6 investigators.

7 The larger, more complex grants are known as
8 Coordinated Agricultural Projects and the way that they
9 are differentiated is not just that they are larger but
10 they're really meant to be multidisciplinary, usually
11 multi-state, usually multi-institutional, but the
12 really important thing about these Coordinated
13 Agricultural Projects is the coordination.

14 So they really are to promote the
15 collaboration, coordination, communication, to reduce
16 the duplication of effort. In other words, to get
17 everybody together who's working in a particular
18 problem area to work together, so they're coordinating
19 their efforts with the ultimate goal of really making a
20 difference through the project.

21 We also offer planning and coordination
22 grants to a very limited extent. We have done it in

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

13

1 the past when we feel that there is a need to offer a
2 little bit of funding to help folks do some planning
3 and coordination to be prepared for a subsequent RFA
4 that would come out in the future.

5 We offer Conference Grants and those are
6 about \$50,000 grants really meant to share information
7 and to help the community identify research, education
8 or extension needs and really advance some particular
9 area of science.

10 We also have a number of grant types that are
11 known as our FASE Grants, Food and Agricultural Science
12 Enhancement Grants. So Congress did tell us that we
13 were to ensure that the program engaged really the
14 broadest range of participants and so we have set aside
15 10 percent of AFRI funding for these FASE Grants.

16 Through this 10 percent of funding, we offer
17 grants for predoctoral fellowships, postdoctoral
18 fellowships, grants for new investigators, in other
19 words, folks who have been in a career track position
20 for less than five years, as well as a set of grants
21 that are known as Strengthening Grants, and those
22 include sabbatical grants and through a sabbatical

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

14

1 grant, one may ask for a year of salary plus funds for
2 travel or supplies. We offer equipment grants for up
3 to \$250,000. Those do require a 1:1 match of funding in
4 most cases, and seed grants where one can ask for up to
5 a \$150,000 to collect some preliminary data, do a needs
6 assessment, whatever might be necessary to allow the
7 ultimate submission of a successful full proposal.

8 And then we offer strengthening and standard
9 grants or strengthening CAP Grants. Now the thing
10 about the FASE Grants, clearly you can understand who
11 would be eligible for a predoctoral fellowship or a
12 postdoctoral fellowship. All the rest of them, the
13 folks who are eligible are from small or midsized
14 institutions, minority-serving institutions, or people
15 from USDA SCORP states, and a small-to-midsized
16 institution is one in which the total enrollment,
17 student enrollment is less than 17,500 students. So
18 that's an overview of the grant types.

19 Eligibility. We actually make grants under
20 two separate legal authorities in the AFRI Program.
21 Each comes with its own eligibility. The broader
22 eligibility that we use for most of our grants is what

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

15

1 you can see on the slide there. It's extremely broad.
2 State ag experiment stations, colleges, universities, a
3 wide range of folks. Almost anyone is eligible, so
4 long as you are a U.S. institution, is eligible under
5 this broader AFRI authority.

6 We make our integrated grants for our
7 integrated projects under the Section 406 Integrated
8 Authority and that is a narrower eligibility, includes
9 four-year colleges and universities, 1994 Land Grant
10 universities, and Hispanic-serving agricultural
11 colleges and universities.

12 Okay. Next. As Dr. Jacobs-Young already
13 mentioned, this is our third Listening Session. The
14 first one, we did use the input from the first one to
15 really structure the -- to provide the initial program
16 design and structure.

17 The second Listening Session came after
18 CSREES became NIFA and at that point in time, the AFRI
19 Program actually underwent a fairly significant change
20 in structure to the challenge area structure and really
21 with the intent of achieving some focus to the program
22 to allow us to make grants of larger scale and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

16

1 ultimately to achieve greater impact through the
2 funding.

3 And then, then in June of 2010, we had
4 another stakeholder meeting where we actually heard
5 what you all thought about that major restructuring of
6 the program and we did make adjustments to the program
7 content and structure.

8 For example, in the first year after the
9 restructuring of the program in 2010, the Foundational
10 Program was written somewhat narrowly, at least that's
11 what you all told us to narrow, in fact, and so we
12 responded and so in Fiscal Year 2011, we rewrote that
13 Foundational Program. We broadened it out
14 significantly. We went right back to the Farm Bill
15 language. We included just about everything that was
16 indicated there and a few other things that we heard
17 from you were very important and so we responded to
18 what you had to say, and there are plenty of other
19 things that we did hear from you and we did our best to
20 respond.

21 The comments were summarized in the Fiscal
22 Year 2011 and 2012 RFAs that have come out

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

17

1 subsequently. Those comments were summarized and the
2 changes that we did make were indicated there.

3 Next. So for anybody who doesn't know, this
4 is the current structure of the AFRI Program. We do
5 put out seven RFAs, one each for the five challenge
6 areas listed on the screen: Childhood Obesity
7 Prevention, Climate Variability and Change, Food
8 Security, Food Safety, and Sustainable Bioenergy
9 Production.

10 Through those challenge areas, we really are
11 focusing on the achievement of measurable outcomes. In
12 other words, we're really trying to make some
13 significant measurable progress towards solving the
14 problem or addressing the issue, and we have offered
15 support for a combination of project types through
16 these challenge areas for research, education,
17 extension projects, and a lot of integrated projects.

18 We've made a fair number of CAP Grants
19 through these challenge areas and many of the grants
20 have been made on a continuation basis which simply
21 means that each year of the project is supported with
22 current fiscal year funds.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

18

1 And in the Challenge Area Programs, we have
2 made -- most of the awards are somewhat -- they are
3 larger than what you will find in the Foundational
4 Program. Right now, the largest awards we're making out
5 of those challenge areas are about \$2 million a year,
6 although in the past they have been much larger, as
7 large as \$9 million a year in just a few instances,
8 especially in our Bioenergy Program.

9 Next. The Foundational Program is comprised
10 of six program areas and you will recognize those
11 program areas as being those that were articulated in
12 the 2008 Farm Bill language for the program and within
13 each of those six program areas, there are a number of
14 priorities in which we attempt to cover all the
15 relevant issues that were provided for in the language.

16 Yes, next. And through our Foundational Area
17 Grants what we're really looking to do is -- and these
18 are primarily research grants and again about \$500,000
19 in total for up to five years, often going to single
20 investigators or small teams of investigators, and it
21 is through these grants that we're supporting a lot of
22 our basic research and really looking to build a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

19

1 foundation of knowledge that we can then use to solve
2 current and future problems.

3 Okay. And I will mention that we do offer
4 integrated projects out of the Foundational Program on
5 a very limited basis.

6 So those are the first six RFAs, so five
7 Challenge Area RFAs, one Foundational Program RFA, and
8 then a Fellowships Program. We call it our NIFA
9 Fellows Program, and it is through that program that we
10 offer support for the pre- and postdoctoral
11 fellowships, and we do just ask that those project
12 applications focus really broadly on the five challenge
13 areas. They don't have to be specifically responsive
14 to what's in the RFA but so long as they address the
15 challenge areas.

16 The predoctoral fellowships, we're offering
17 \$75,000 for two years of support, and for the post-
18 doctoral fellowships, a \$130,000 for two years of
19 support.

20 Next. And I'll finish up by just saying that
21 we'll be looking forward to hearing your comments
22 today, receiving them in writing. I strongly encourage

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

20

1 you to submit those comments in writing, even if you do
2 come and give and present here at the front of the room
3 today. You can, of course, say a lot more about what
4 you think in writing and we will promise to absolutely
5 consider every one, every comment that is provided.

6 We will be accepting the written comments
7 until March 22nd, at which time we will start to
8 analyze them and use them for the development of our
9 Fiscal Year 2013 RFAs.

10 We are hoping to get back on what we would
11 consider to be a little bit more normal timeline for
12 our Competitive Grant Program with the release of the
13 RFAs late Fall/early Winter and we would hope by the
14 first of the year.

15 And with that, I will finish. Thank you.

16 MS. BALDWIN: As I glance around the room,
17 there's a couple people standing. There are several
18 chairs and we do encourage you to take advantage of the
19 nice cushiony chairs that are there. So if I can get
20 you all to take seats, I'd appreciate it.

21 And also before we start, there's a couple
22 logistical things for those people who are interested.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

21

1 We do have a cafe Once you go out the double doors where
2 you entered, you take a left, there's a nice little
3 Starbucks sign. If you follow that to the right,
4 there's a cafewhere you can get additional water and/or
5 snacks, if you like. On your way to the actual caf
6 you'll pass both the women's and men's restrooms. So
7 those are some logistical things for you.

8 And also, there's a couple people that are
9 hiding. We have a couple Deputy Directors that I have
10 reserved seating up front for them but they didn't come
11 up. However, I do want to introduce Dr. Meryl
12 Broussard and also Dr. Ralph Otto who's way back there
13 hiding.

14 Do we have any other Assistant Directors that
15 are hiding in the back? We also have Dr. Robert
16 Holland, and I don't see the other Assistant Directors.
17 They must be shrunk down way in their seats, but they
18 are actually here. They're in the building, and we
19 want to definitely give you an opportunity to know who
20 our management team consists of.

21 For those of you who asked, there's several
22 people who asked about aspirin and things of that

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

22

1 nature, we have brought down the first aid kit. It is
2 actually there. It's early. You never know. So the
3 first aid kit is here. There's bandages. There's
4 aspirin and everything else you might need.

5 With that, Terri will actually be doing the
6 actual time for you guys. So, Terri, if you want to
7 come on and get a nice seat somewhere where they can
8 see you, and we hopefully have you guys seated in the
9 way in which you're going to speak, so that's how we
10 started out with the name assignments on the chairs.
11 Hopefully they have not been moved around.

12 With that, I will invite our first speaker up
13 to the podium and, once again, as a reminder, please
14 mention your name, your title, and your affiliation,
15 and we'll open it up to you guys.

16 MR. LaMANNA: Thank you very much. I'm Joe
17 LaManna. I'm a Professor of Physiology and Biophysics
18 at Case Western Reserve University in Cleveland, Ohio.
19 I'm here representing the Federation of American
20 Societies for Experimental Biology as the current
21 president of that organization. Currently, FASEB is
22 composed of 26 scientific societies that represent over

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

23

1 a 100,000 scientists.

2 Agricultural research has a long and valued
3 tradition in our nation, from the horticultural
4 experiments of Thomas Jefferson in the 18th Century to
5 the contributions of George Washington Carver in the
6 19th Century. Agricultural research has led to
7 important scientific advances and enormous economic
8 benefits.

9 Our community strongly believes that
10 continuing the legacy of agricultural research is
11 essential to address the ever-increasing demand for
12 food while simultaneously meeting the need for better
13 nutrition, new biofuel materials, sustainable
14 agricultural practices, and food safety.

15 FASEB has been an active supporter of NIFA
16 and AFRI since their establishment in the 2008 Farm
17 Bill. We appreciate NIFA's continued willingness to
18 solicit comments from the stakeholder community
19 regarding AFRI requests for applications in the
20 upcoming fiscal year.

21 Our recommendations are aimed at maintaining
22 and magnifying the breadth and competitive nature of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

24

1 agricultural research portfolio to ensure viability of
2 an enterprise central to the well-being of all
3 Americans.

4 By funding competitive peer-reviewed
5 research, education, and extension grants, AFRI will
6 address key problems of national, regional, and
7 multistate importance in sustaining all components of
8 agriculture.

9 Because a strong focus on individual
10 investigator-initiated research has long been the
11 foundation of U.S. leadership in science, we want to
12 ensure that investigator-initiated research remains the
13 cornerstone of the nation's agricultural research
14 system.

15 We understand that a certain percentage of
16 the annual AFRI budget is required to fund research by
17 large multidisciplinary teams and integrated programs.
18 Nonetheless, it's our belief that a significant portion
19 of asset allocation should be directed toward long-term
20 individual investigator-initiated projects that advance
21 innovative agricultural research.

22 FASEB recognizes that in these difficult

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

25

1 economic times AFRI must leverage its limited budget
2 thoughtfully to provide funding for both outcome-based
3 and fundamental agricultural research and while it
4 might be tempting to target more sources to specific
5 social problems, narrowly-targeted challenge areas will
6 exclude vital areas of agricultural research.

7 We applaud NIFA's efforts to ensure that AFRI
8 challenge area RFAs include basic research as well as
9 relevant scientific disciplines which may have been
10 unintentionally omitted in previous years.

11 FASEB supports additional broadening of all
12 AFRI RFAs to encompass other critical areas of
13 agricultural research identified through continued
14 consultation with the research community.

15 In determining an appropriate balance between
16 basic and applied research, FASEB encourages NIFA to
17 maintain a diverse AFRI portfolio with an emphasis on
18 foundational agricultural research projects that foster
19 a continuous generation of new knowledge.

20 Basic research establishes the scientific
21 foundation required to provide a safe, nutritious food
22 supply and improve crop yields and preserve the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

26

1 competitive position of U.S. agriculture in the global
2 marketplace.

3 Furthermore, fundamental research often
4 generates unexpected results with implications for
5 unanticipated areas of science. For example, plant
6 biologists studying pigment-producing genes in petunia
7 flowers were the first to notice RNA interference, a
8 natural process by which cells silence the activity of
9 specific genes.

10 Since its discovery in plants, RNAI has been
11 developed into a widely-used biological research tool
12 and is being studied as a potential basis for new
13 therapies to treat cancer, viral infection, and other
14 diseases.

15 The opportunity to explore exciting
16 challenging questions will also draw the most creative
17 scientists to the field of agricultural research.

18 We also request that NIFA expedite the
19 release of AFRI RFAs and award announcements whenever
20 possible, improve the reporting of AFRI grants,
21 including state and institution-specific information
22 would better enable our organization to highlight the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

27

1 worthy goals and beneficial outcomes of AFRI-funded
2 research, education, and extension activities.

3 We undertake a number of advocacy efforts in
4 support of AFRI and are active members of the AFRI
5 Coalition and the National Coalition for Food and
6 Agricultural Research. FASEB continues to advocate for
7 AFRI budget increases so that the program may reach its
8 authorized funding level as soon as possible and we
9 promote the reauthorization of AFRI in the next Farm
10 bill.

11 Thank you again for the opportunity to
12 comment. Please let us know if FASEB may provide any
13 additional assistance to NIFA during the development of
14 Fiscal Year 2013 RFAs.

15 MS. BALDWIN: Thank you.

16 MS. RECORDS: Thank you for the opportunity
17 to present comments here at this meeting today.

18 I'm Angela Records, and I'm here to represent
19 the American Phytopathological Society, APS, and I'm
20 here currently the APS Public Policy Fellow.

21 Founded in 1908, APS is the premier
22 educational, professional, and scientific society

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

28

1 dedicated to the promotion of plant health and plant
2 disease management for the global good. The Society
3 represents nearly 5,000 scientists whose work advances
4 the understanding of the science of plant diseases and
5 its application to plant health.

6 The APS has served as an unbiased resource on
7 plant health for USDA and other federal agencies for
8 many years. The progress made in plant health programs
9 in the United States, through supportive research,
10 teaching, and extension, from federal, state, and
11 private sources, has facilitated the sustainability and
12 profitability of America's plant production industries.

13 APS supports many of the broad areas of
14 endeavor funded through the AFRI Program. APS fully
15 supports placing a priority on improved opportunities
16 for education and training of undergraduate and
17 graduate students and postdoctoral scientists as we
18 continue to be concerned about the lack of adequately-
19 trained plant pathologists to fill future job needs of
20 industry, academia, and the government.

21 In fact, a coalition of industry and
22 scientific societies, called CSAW, Coalition for

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

29

1 Sustainable Agricultural Workforce, has formed to press
2 this issue.

3 APS applauds the vision of AFRI to support
4 fundamental and practical research in food safety,
5 particularly funding that includes collaborations
6 between food microbiologists and plant pathologists.

7 Last week, a group of more than a 120 plant
8 pathologists and food safety experts met to identify
9 research priorities that will address the association
10 of human pathogens with plants and find solutions to
11 food contamination problems. This very successful
12 meeting was funded by USDA/NIFA.

13 APS supports AFRI investments in
14 strengthening agriculture's role in meeting our
15 nation's future food and energy needs with
16 consideration of our changing global environment.

17 APS realizes the difficulty of meeting these
18 challenges with a constrained budget. The APS has long
19 been a robust proponent of increased funding for
20 research, extension, and education programs at the USDA
21 and particularly the competitive programs, such as
22 AFRI.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

30

1 We have supported the investments into the
2 sciences of genomics, microbial communities, microbial
3 plant associations, plant biosecurity, bioenergy, and
4 food safety, as each of these became priorities.

5 Recognizing the funding constraints, we urge
6 that AFRI continue to involve the plant health
7 community in identifying priorities and facilitating
8 recognition of the best science. We ask AFRI to
9 further invigorate the important foundational programs
10 that permit individuals or small teams to focus their
11 creativity on our most pressing agricultural problems.

12 We recognize that funding the large CAP
13 Programs brings diverse communities of sciences
14 together and that this focus has the potential to solve
15 important problems. However, we strongly believe that
16 the novel science funded by the Foundational Programs
17 is essential to maintaining our nation's edge in
18 agricultural sciences.

19 We also urge AFRI to include in the Food
20 Safety RFA increased emphasis on enhancing our
21 understanding of the interactions between human
22 pathogens, plants, and the environment. We ask AFRI to

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

31

1 engage the scientific community in discussions about
2 improving the peer review process.

3 APS is aware of the increasing difficulty
4 NIFA faces in identifying qualified reviewers to
5 achieve a thorough and fair peer evaluation of
6 proposals. We welcome the opportunity to discuss
7 possible resolutions with agency representatives.

8 Lastly, we ask AFRI to ensure that the
9 requirement for letters of intent for all proposals,
10 other than conference grants, is not used to prioritize
11 proposals without peer review.

12 APS members appreciate the benefits to
13 potential PIs, reviewers, and panel members of triaging
14 at the stage of letters of intent. However, if
15 triaging is to occur at this stage, then the PIs should
16 be allowed to include more information, maybe two
17 pages, and the letters should be reviewed by a small
18 panel of experts. This will reduce the possibility of
19 eliminating groundbreaking science.

20 We were pleased to see in the recent RFAs
21 references to the National Research Council document, A
22 New Biology for the 21st Century: Ensuring

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

32

1 the United States Leads The Coming Biology Revolution.
2 We support the idea that this new biology initiative
3 should be an interagency effort with a timeline of at
4 least 10 years and that its funding be in addition to
5 current research budgets.

6 In closing, the APS appreciates the efforts
7 underway by the agency to raise the visibility of and
8 hopefully associated funding for the plant sciences.

9 We thank NIFA for allowing input into AFRI and we
10 appreciate the actions that NIFA has taken in response
11 to previous comments and suggestions from sessions such
12 as this.

13 Thanks.

14 MR. EISENBACK: My name is Jonathan
15 Eisenback. I'm a Professor of Plant Pathology at
16 Virginia Tech, and I'm here today representing the
17 Society of Nematologists.

18 The Society of Nematologists is an
19 international organization formed to advance the
20 science of nematology in both its fundamental and
21 economic aspects.

22 To serve that purpose, we act as an agency of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

33

1 exchange for information, we hold regular meetings, and
2 we promote and extend the knowledge in all phases of
3 nematology.

4 You know, Nathan Cobb, the father of
5 nematology, once said that if the entire world were to
6 disappear, except for the nematodes, we would still see
7 a faint outline of the entire plant, and, in fact, we
8 now realize that four out of five animals that are
9 alive right now are nematodes.

10 Unfortunately, the damage that they cause is
11 often overlooked because they're underground, they're
12 out of sight, and they cause nondescript symptoms that
13 appear as slow growth, stunting, and yellowing that are
14 often associated with nutritional and water-associated
15 disorders.

16 But nematodes are economically important and
17 year after year our farmers pay an unseen tax because
18 of the damage caused by these microscopic worms.

19 The research and education priorities of our
20 society fall into three goals. Our first goal is to
21 lessen the societal impact caused by plant parasitic
22 nematodes. We aim to do that by developing nematode-

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

34

1 resistant crop plants through new and traditional
2 approaches. We would like to enhance the activity of
3 antagonistic organisms. We would like to use natural
4 products to modify nematode behavior. We would like to
5 improve methods to identify nematode species and races
6 quickly and accurately. We would like to limit
7 interstate and international spread of nematodes, and
8 we would like to design ecologically-based sustainable
9 systems for nematode control.

10 Our second goal is to advance our knowledge
11 of fundamental nematology by characterizing the genetic
12 diversity of these organisms, by expanding our
13 knowledge of nematode biochemistry, by investigating
14 the molecular and genetics and biology of the host
15 parasite interaction, and to renew taxonomy and
16 systematics through an integration of existing and new
17 technologies.

18 And, finally, our third goal is to promote
19 the beneficial use of nematodes. Yes, nematodes can be
20 useful. They can be used for the biological control of
21 insects and other pests. They can be used to develop a
22 better understanding of the role of nematodes in soil

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

35

1 nutrient recycling and environmental quality, and they
2 can be used to characterize and manipulate biodiversity
3 to contribute to sustainable agriculture.

4 And we would like to encourage breakout money
5 for lesser-known smaller societies so that they will
6 receive the adequate support that is necessary because
7 when you lump nematologists with other groups, it's
8 hard to get fair and unbiased review of our proposals.

9 That's all I have, even though I have plenty
10 of time left.

11 MS. BALDWIN: Thank you.

12 MS. MUNKVOLD: Good morning. My name is
13 Kathy Munkvold, and I'm the Public Affairs Manager for
14 the American Society of Plant Biologists.

15 The American Society of Plant Biologists is
16 an organization of more than 5,000 professional plant
17 biologists, educators, graduate students, and post-
18 doctoral scientists.

19 ASPB is a strong voice for the global plant
20 science community and our mission, which is achieved
21 through engagement in the research, education, and
22 public policy realms, is to promote the growth and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

36

1 development of plant biology and biologists and to
2 foster and communicate plant biology research.

3 On behalf of the American Society of Plant
4 Biologists, I would like to submit the following
5 comments for the record.

6 Plant biology research is making vital
7 contributions in national priority areas, including
8 fuel security and environmental stewardship, the
9 continued and sustainable development of better foods,
10 feeds, fabrics, and building materials, the development
11 of medicines and medical treatments, and an
12 understanding of basic biological principles that
13 underpin improvements in the health and nutrition of
14 all Americans.

15 In order to remain competitive and continue
16 addressing our national needs, the United States and
17 the USDA must make robust investments in research for
18 food and agriculture.

19 ASPB would like to offer the following
20 recommendations for AFRI as it develops its Fiscal Year
21 2013 solicitations and plans for its budget in the
22 Fiscal Year 2014.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

37

1 First, a top priority for ASPB is to sustain
2 and grow AFRI because competitive research drives
3 innovation, promotes the formation of effective
4 research teams, and delivers tangible advances in food
5 and agriculture.

6 ASPB recognizes the difficult fiscal
7 environment our nation faces but we believe strategic
8 investments in the highest-quality scientific research
9 will play a critical role toward both economic recovery
10 and future economic growth in a very competitive global
11 economy.

12 Second, ASPB asks for support of a robust
13 competitive research program with broad priorities
14 where proposals that address critical issues in the
15 USDA Mission Statement are funded solely on
16 intellectual merit and not on tightly-constrained
17 parameters.

18 ASPB understands the need to set national
19 research priorities to address grant challenges.
20 However, limiting funding to narrowly-defined priority
21 areas also limits the scope of discovery that
22 frequently leads to novel findings and unanticipated

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

38

1 connections and advances.

2 Third, ASPB asks that 30 percent of AFRI's
3 budget be dedicated to foundational research for
4 individual investigator or small team research projects
5 addressing specific research problems.

6 ASPB recognizes and supports the notion that
7 USDA-funded research must span the bench-to-field
8 continuum and alignment with USDA's overall mission.
9 However, there is significant unease in the community
10 about the small amount of funding available for
11 foundational research programs for individual
12 laboratories or small groups, even though this level of
13 understanding is essential for reviewing fundamental
14 principles that have broad implications for the USDA
15 mission, as well as all research and development.

16 Fourth, ASPB calls for funding of specific
17 programs, such as training grants, that are targeted to
18 provide the needed agricultural research workforce over
19 the next 10 years and to adequately prepare these
20 individuals for careers in the agricultural research of
21 the future.

22 Current estimates predict a significant

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

39

1 shortfall in the needed scientific engineering
2 workforce as the demographics of the U.S. workforce
3 change. For example, there's a clear need for
4 additional scientists in the areas of energy research
5 and plant breeding.

6 Fifth, ASPB calls for additional funding
7 targeted toward efforts to increase the utility and
8 agronomic performance of bioenergy crops.

9 Considerable research interest is now being
10 paid to the use of plant biomass for energy production.
11 Progress in this area has been strongly affected by the
12 fuel versus food debate which arose from the initial
13 emphasis on the use of corn for ethanol production.

14 The response to this debate has been to
15 switch the focus to plants and algae that can be grown
16 exclusively for biomass. However, if these crops are
17 to be used to their full potential, considerable effort
18 must be expended to improve our understanding of their
19 basic biology, genetics development, as well as their
20 agronomic performance.

21 Thank you for considering this testimony on
22 behalf of the American Society of Plant Biologists. We

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

40

1 hope these comments will help AFRI as it moves forward
2 with its Fiscal Year 2013 solicitations and plans its
3 budget for the Fiscal Year 2014.

4 Thank you.

5 MS. EVERSOLE: Thank you very much for the
6 opportunity to present today a couple of priorities and
7 I also want to thank NIFA for its past support of wheat
8 research and hopefully for future support.

9 I am Kelleye Eversole, and I'm here today as
10 the Executive Director of the International Wheat
11 Genome Sequencing Consortium. It's an organization, a
12 nonprofit organization of growers, breeders, and
13 scientists that was started in 2005 by a group of
14 Kansas wheat growers and as a result of a USDA and NSF-
15 funded workshop on setting parameters and priorities
16 for wheat genomics.

17 We have members and membership in 34
18 countries. We have 21 sponsors that include most of the
19 major wheat breeding companies that participate, and
20 our projects, which we have 21 major projects that are
21 collaborative and the breadth of our projects run --
22 they're in a very integrative way. In fact, they run

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

41

1 from basic structural genomics, such as genome
2 sequencing or physical mapping, all the way to breeding
3 applications.

4 Bread wheat is the most important crop in the
5 world. I know a lot of you may not realize that but
6 you have more calories and protein from wheat than from
7 any other crop. It's also the most traded crop in the
8 world and, as Chavonda mentioned this morning, we have
9 great challenges of meeting our food demands in fact in
10 wheat. In six of the past 10 years, production has not
11 equaled demand.

12 That had led the growers here in the United
13 States to start an organization to change the paradigm
14 for breeding wheat and that led to the development of
15 the International Wheat Genome Sequencing Consortium.

16 Our whole purpose is to develop a foundation
17 for breeding and our vision is to have a high-quality
18 manually-annotated sequence of bread wheat that is
19 anchored to both the genetic and the phenotypic maps.
20 We use a milestone-based strategy and we develop tools
21 along the way.

22 To reduce the complexity, we are following a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

42

1 chromosome-specific approach that has allowed us to
2 take an extremely large 17 gigabase five times the size
3 of -- more than five times the size of the human genome
4 and break it down into much more manageable pieces of
5 getting it about to equal -- getting everything from a
6 rabbit opsis genome sequence to soybean genome.

7 By using this chromosome-based approach,
8 we're also able to divide the work internationally and
9 distribute it among many different countries and bring
10 in the full power of the science to our project. We
11 develop back libraries that are used for the physical
12 mapping and to date we have more than 2.3 million
13 clones that have been developed and these are being
14 physically mapped at this time.

15 The very first map was funded by the French
16 in Chromosome-3B but almost immediately after that,
17 USDA stepped forward and funded the physical mapping of
18 Chromosome-3A by a group in Kansas State and this
19 project, the 3A Project, has now been completed and is
20 in the process of being anchored and publication
21 hopefully is underway at this moment.

22 From the very beginning, the U.S. was a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

43

1 leader in physical mapping, survey sequencing of the
2 wheat genome, but this leadership is waning because
3 we've gone from supporting four U.S. chromosomes for
4 physical mapping to having no chromosomes assigned to
5 the U.S. for minimal tile path sequencing or reference
6 sequencing.

7 We've already given two of the U.S.
8 chromosomes to other countries to try to keep the
9 momentum moving forward as our project moves forward.
10 We anticipate that all the physical maps will be
11 completed by 2013 and we're on track to actually have
12 the minimal tile path or high- quality reference
13 sequencing completed by 2015 but to do that, we really
14 need to maintain the U.S. participation in this
15 project. So we would encourage AFRI to include an
16 opportunity to submit a proposal for sequencing at
17 least one of the U.S. chromosomes.

18 This will allow the U.S. scientists to
19 continue to participate in the international
20 initiative. This will also allow the USDA to leverage
21 a small amount of money towards the entire
22 international effort which will range in the millions

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

44

1 and millions of dollars.

2 The other important component is that by
3 participating in the sequencing effort, they will --
4 each one of the individual scientists will have access
5 to all of the chromosome sequences immediately.

6 So thank you very much.

7 MS. BALDWIN: I have not seen our next
8 speaker who is Dawn Philmoney. If you're in the
9 audience -- okay. She is not here.

10 So what I will do is give us a little bit of
11 a five-minute stretch break. If you need to run get
12 coffee, you need to go get water. I do want to keep us
13 on schedule as is in the Agenda because people are
14 arriving according to what they've been told their time
15 slot is. So you guys have a very short window now to
16 take a quick break.

17 (Recess.)

18 MS. BALDWIN: All right. I'm going to ask
19 you guys to quickly take your seats, so that we can
20 respect the next speaker's time.

21 MR. GLASENER: Good morning. My name's Karl
22 Glasener. I'm the Director of Science Policy for the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

45

1 Agronomy Crop and Soil Science Societies but today I'm
2 here speaking only on behalf of the Soil Science
3 Society of America.

4 SSSA is a nonprofit educational scientific
5 society with more than 6,000 member scientists,
6 postdocs, graduate and undergraduate students, located
7 at many of our nation's great land grant universities
8 or ARS laboratories and in industry, as well.

9 The Soil Science Society of America
10 appreciates the opportunity to provide these comments
11 here today, hoping to influence the development of the
12 FY 2013 AFRI
13 FRA.

14 My first point, Soil Science is concerned
15 that AFRI has shifted a little bit too much in the
16 direction of large awards, common theme today, and big
17 projects at the expense of smaller but equally
18 important proposals. The mix of big awards and smaller
19 single PI proposals should be re-evaluated to ensure
20 that new basic scientific discovery is not overlooked.
21 There also is a need for a broad portfolio of knowledge
22 domains at multiple scales of science, basic to

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

46

1 applied.

2 Our second point, SSSA feels that the
3 NIFA/AFRI FRAs have been a bit too prescriptive which
4 doesn't allow for input from PIs on what is the best
5 research, education, and extension that needs to be
6 done to advance knowledge foundations. For example,
7 the first of the CAPs and, to a certain extent, the
8 second, as well, had direct, specified, and pre-awaited
9 deliverables and outcomes. Not all were doable
10 actually.

11 There was no place for ideas that delivered
12 on a subset of the array of the target. Indeed, not
13 all prescribed targets were, in our view, actually
14 achievable. For example, demonstrating carbon
15 sequestration or even changes in farmer adoption of
16 practices within a five-year time frame weren't
17 necessarily achievable.

18 Number 3, requirements to demonstrate a good
19 project plan need to scale with the scope of the
20 project, small basic to large applied. It seems that
21 it might be a bit challenging to require no more
22 description for a \$25 million 65-PI project than for a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

47

1 \$500,000 two-PI project.

2 Without appropriate scaling, the quality of
3 the effort really can't be assessed in our minds which
4 makes for an impossible predicament for both writers
5 and reviewers.

6 Returning to an earlier theme, a strong
7 argument can always be made for a diversified
8 portfolio; thus, different tiers and focus, depth and
9 breadth of research need to be maintained for the
10 continuum of science to work. Some of the basic work
11 is best done as a single investigator or small group
12 effort and large teams may be counterproductive at the
13 same time, yet the large teams for multifaceted
14 research, education teaching programs can also not be
15 overlooked as they will deliver the ultimate goal,
16 synthesis, and widely-distributed science translation.

17 Point 5, NIFA/AFRI needs to be cognizant of
18 all areas that they fund and aware that selecting not
19 to fund a certain area sends a message with strong
20 ripple effects to institutions making long-term
21 decisions on areas in which to invest versus drop.

22 While AFRI may not intend to send a message

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

48

1 that a certain area is not important by choosing to
2 emphasize it, in the next or even the next three years
3 funding cycle, those working in the area that are
4 dependent on extramural funding opportunities will be
5 choked off. A programmatic area can disappear from an
6 academic institution within a three-year time frame.

7 Finally, a general comment. There was a
8 certain beauty in the predictability of the old NRI
9 system. With time at a premium and many scientists
10 trying to meet multiple institutional missions, it was
11 incredibly helpful to have known time frames and
12 submission processes.

13 SSSA does realize that change is always hard
14 but getting to a point where RFA releases (1) have some
15 link to the calendar, (2) are predictable with adequate
16 time frames for development, and (3) have proposal
17 components that are commonly known to PIs and the pre-
18 award administrators who make it happen by the deadline
19 is an efficiency of doing business that most of us
20 would greatly appreciate.

21 Thanks so much for this opportunity.

22 MS. BOOREN: Good morning. My name is Betsy

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

49

1 Booren, and I'm the Director of Scientific Affairs for
2 the American Meat Institute Foundation.

3 The AMI Foundation appreciates the
4 opportunity to give stakeholder input in the AFRI
5 Program. The AMI Foundation or AMIF is a nonprofit
6 research, education, and information foundation
7 established by the American Meat Institute in 1944.
8 AMI was funded in 1906 and is the nation's largest and
9 oldest meat-packing and processing industry trade
10 association.

11 AMI members slaughter and process more than
12 90 percent of the nation's beef, pork, veal, and lamb,
13 and nearly 75 percent of all the turkey produced in the
14 United States.

15 AMI firmly believes that science is the back
16 bone for improving food safety within the meat and
17 poultry industry and has invested that belief in its
18 foundation.

19 AMI actively works with other allied
20 stakeholders to conduct research not only in food
21 safety but in areas of worker safety, nutrition, and
22 consumer information projects.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

50

1 AMIF's Food Safety Program has a clear goal
2 to reduce and ultimately eliminate Shigatoxin-producing
3 E.coli in fresh beef, Listeria monocytogenes in ready-
4 to- eat meat and poultry products, and Salmonella in
5 the meat and poultry products, as well.

6 Since 1999, the AMIF Research Program has
7 directly sponsored nearly a hundred food safety
8 research projects at leading universities and other
9 institutions, totaling over \$8 million.

10 AMIF's 2011-2012 research priorities will be
11 submitted to the record as well as the 2012-2013 once
12 they're finalized. As a funding organization, we truly
13 appreciate the challenges of setting priorities and
14 making funding decisions.

15 That being said, the AMIF recommends the
16 following for consideration during the development of
17 the 2013 AFRI Competitive Program.

18 In the area of food safety, we encourage
19 continuous and long-term funding support, especially as
20 the meat and poultry industry faces significant food
21 safety challenge. The meat and poultry industry uses
22 preventive food safety process management systems that

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

51

1 rely on monitoring of parameters to ensure the system
2 is in control.

3 One tool commonly used is microbial tests.
4 These results help companies make real-time decisions
5 about products that they are producing. There is an
6 immediate and critical need to develop real-time or
7 near real-time microbial sampling and testing
8 technologies and accurate precise technologies are
9 needed to deliver results so business continuity is
10 maintained.

11 Why is continuity so important? It allows
12 for rapid decisions during production to be made so
13 ultimately the safest product is produced. This type
14 of basic research is discovery research, hopefully the
15 research that drives innovation. This type of research
16 is time-consuming and expensive which makes it
17 difficult for our organization to fund but is ideal for
18 NIFA and
19 AFRI.

20 AMI supports the development of such programs
21 specifically for Estec, Listeria species, Salmonella,
22 as well as other emerging pathogens.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

52

1 Two, AMIF believes a greater understanding of
2 human Salmonellosis is needed. Illnesses contributed
3 to Salmonella have remained virtually stagnant since
4 1996 and have actually increased 24 percent since 2000.
5 This is even more disturbing as regulatory data for the
6 meat and poultry indicate decreases in Salmonella
7 prevalence.

8 AFRI should develop a program that examines
9 the human acquisition factors of Salmonella, examines
10 the causative species that cause illness, if those
11 causative species are commodity-specific, how to better
12 attribute Salmonella to specific foodborne illnesses,
13 address what role if competitive exclusion in
14 preventing illnesses is needed, among others.

15 Three, AMIF strongly encourages NIFA and AFRI
16 Program to re-examine foodborne illnesses, outbreaks,
17 prevalence, and other public health data used to
18 determine funding priority areas that will reduce the
19 public health risks of consuming certain foods and
20 attribute those illnesses more accurately. This data
21 is drastically needed to improve food safety in the
22 U.S.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

53

1 The AFRI Program should target these areas,
2 the areas of greatest societal impact for the
3 development of future RFAs. Research should be focused
4 to improve the health of Americans.

5 Additional recommendations will be submitted
6 to the record that we believe are needed to solve
7 practical food safety issues facing the meat and
8 poultry industry.

9 AMIF continues to support solving food safety
10 concerns throughout the whole food production
11 continuum.

12 On behalf of the American Meat Institute
13 Foundation, the AMI members that support it, I thank
14 you for allowing me to comment and I look forward to
15 working with you in the future.

16 MS. WAGESTER: Good morning. I'm Tamara
17 Wagester with the Council on Food, Agricultural, and
18 Resource Economics or C-FARE.

19 C-FARE is a nonprofit organization dedicated
20 to enhancing the application of economics to food,
21 agricultural, and resource issues at the national
22 level.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

54

1 We applaud USDA and NIFA for holding a public
2 meeting today and soliciting comments for consideration
3 in the development of the Fiscal Year 2013 AFRI
4 Program.

5 We have the following recommendations. One,
6 we appreciate the value of continuation research and
7 especially that NIFA has maintained several of the
8 foundational grant programs. Such programs are valued
9 for the ability to address the research spectrum, from
10 basic to applied questions, and for their ability to
11 serve an audience that was otherwise underserved from
12 both the researcher and stakeholder level.

13 C-FARE encourages NIFA to continue these
14 programs in future years and to maintain and enhance
15 the current level of support. Research takes time and
16 we need to maintain the levels necessary to perform the
17 very basic R&D efforts that lead to long-term national
18 benefits.

19 In particular, the applied economics
20 profession is very grateful that NIFA is offering the
21 AFRI Markets and Trade Grant on an annual basis.

22 Number 2, in general, our profession feels

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

55

1 that the RFAs are too prescriptive. The level of
2 specificity that is often written into the RFAs limits
3 the potential benefits of research.

4 Number 3, in regards to the large trans-
5 disciplinary grants, often the work and role requested
6 of economists on these funded grants have not provided
7 the opportunity to adequately demonstrate the value of
8 rigorous investigative capability of applied
9 economists.

10 Economics involves explaining and predicting
11 how policies affect human interaction in evaluating
12 past behaviors or projecting future behaviors under
13 alternative scenarios. Much of the language in the
14 RFAs does not encourage researchers to learn more about
15 human behavior and its interactions; rather, it
16 requests the researchers to change the behavior,
17 something that's not traditionally within our scope of
18 economic research.

19 We recommend, Number 4, that some RFPs should
20 be structured in a manner that includes requirements
21 for multidisciplinary dimensions that extend beyond
22 that of the typical agriculture and food disciplines.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

56

1 Number 5, the economics profession suggests
2 that NIFA publish the RFP deadline dates as far in
3 advance of the RFP publication and the actual deadlines
4 as possible. We recognize some constraints prevent
5 attaining this goal in every instance. However, we
6 believe that with the increased popularity of some of
7 the multidisciplinary projects, this will help teams
8 form and commit to a timeline to best achieve the
9 necessary results.

10 Number 6, in addition, we recommend having a
11 consistent yearly calendar so applicants know in
12 advance an RFP's due date. For example, the Markets
13 and Trade RFP will be due the first Tuesday of every
14 May.

15 Number 7, we encourage NIFA to clearly
16 identify where and when various sciences, economics in
17 particular, can contribute to the RFP structure. This
18 recommendation came to us from feedback we've heard
19 from our colleagues who have contacted national program
20 leaders about large proposals and they've been
21 encouraged not to submit proposals with economists as
22 the lead. This message continues to impact the number

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

57

1 of applications from our discipline to AFRI in all
2 areas.

3 Number 8, we urge the increased participation
4 of economists and social scientists on review panels.

5 Number 9, we encourage the RFPs to include an
6 extension component and the review teams should also
7 include at least one professional having primary
8 extension experience.

9 And, Number 10, we proposes more focus on
10 research opportunities around the hired farm labor and
11 immigration policies area.

12 We'd like to reiterate the fact that we
13 appreciate the opportunity to provide comments today
14 and that we are encouraged to work with the rest of the
15 community and the new numbers coming out for FY 2013.

16 Thank you.

17 MR. MacINTOSH: Hello. I am Gustavo
18 MacIntosh. I'm an Assistant Professor of Biochemistry
19 at Iowa State University, and I'm a co-leader of the
20 Crop Protection Initiative at Iowa State.

21 I thank you for the opportunity to talk here
22 today.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

58

1 My recommendations come as a result of not
2 only the Crop Protection Initiative that we are
3 managing at Iowa State but also through a series of
4 workshops with Iowa Soybean Growers that presented
5 real-life problems, I guess, and, of course, farmers'
6 main concern is management and they have problems in
7 which management is not always consistent and it breaks
8 down from field to field from year to year which brings
9 us to one of the main areas that I think needs to be
10 considered for research through AFRI which is looking
11 at plants, crop ecosystems, and the focus should be
12 environmental interactions that determine how plants
13 really perform in the field rather than looking at
14 individual plant biotic interaction problems which in
15 the field don't work this way.

16 This brings me to the other problem that I
17 see from AFRI which is the limited scope of the
18 Foundational Programs in terms of how much research can
19 be done in an individual grant. Although those grants
20 are targeting of individual investigators or small
21 groups, the reality is that the fund that is viable is
22 never enough for relatively small but active group of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

59

1 researchers.

2 So there is the need to reach the
3 foundational normal grant that really is for one
4 investigator or a small group but with only one or two
5 people actually working on the grant and the CAP Grants
6 that include many universities, many states, many
7 groups.

8 So we need an intermediate level of funding,
9 basically increasing the foundational limit of funds,
10 but because what we need to do is bring populations of
11 scientists, so field observations, research is done at
12 the management level with people studying the molecule
13 mechanisms that -- and that explain the behavior of
14 crops in the field.

15 So we need to focus also on mechanisms
16 because those are the ones that come give us predictive
17 power to further understand what's going to happen and
18 the interactions that have not been studied so far.

19 So the main recommendation will be that
20 Foundation Programs should be less prescriptive, allow
21 for this type of multidisciplinary teams but without
22 the need of those being multistate or multi-

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

60

1 institutions. Sometimes the best group is one that
2 works all together in different departments in the one
3 institution and so with larger funds and I would also
4 like to say that those should come from foundational
5 research and not from the challenge areas that are
6 always more restricted and also that a lot of the
7 challenge areas are overlapping with DOE portfolios and
8 so some of that could go to foundational research.

9 Thank you.

10 MS. OHLHORST: Hi. Good morning. I'm Sarah
11 Ohlhorst, Director of Government Relations with the
12 American Society for Nutrition or ASN.

13 ASN appreciates the opportunity to submit
14 comments for consideration in development of the Fiscal
15 Year 2013 AFRI Program Solicitations and the Fiscal
16 Year 2014 Budget.

17 Founded in 1928, ASN is a not-for-profit
18 scientific professional society with more than 4,400
19 members working in academia, clinical practice,
20 industry, and government.

21 Our members have been actively involved in
22 the USDA Competitive Grants Program, both as recipients

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

61

1 of grants and by serving on grant review panels.

2 ASN is extremely appreciative of the support
3 that AFRI has provided for human nutrition research and
4 for being responsive to stakeholder input derived from
5 previous listening sessions as well as from input from
6 past RFAs.

7 A strong emphasis on individual investigator-
8 initiated research has been a successful model for the
9 nation's agricultural research enterprise and we are
10 concerned that a focus on integrative programs may
11 erode the benefits received from long-term individual
12 investigator-initiated grants.

13 While ASN is supportive of collaborative
14 research, including interdepartmental coordination,
15 this collaboration should not be at the expense of PI-
16 initiated grants.

17 The U.S. must maintain and enhance the
18 potential for future scientific breakthroughs to be
19 achieved in many areas of nutrition, in addition to
20 focusing on our most immediate public health concerns,
21 like obesity.

22 To this end, ASN supports maintaining an

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

62

1 emphasis on integrated programs and multidisciplinary
2 teams while also providing significant funding for
3 investigator-initiated applied and basic nutrition
4 research.

5 ASN strongly encourages future grant funding
6 be made available to support human nutrition research
7 in areas beyond the current challenge area of childhood
8 obesity prevention. This current targeting of funding
9 to childhood obesity prevention is limiting and
10 represents a gross imbalance that can harm the future
11 of American health. By limiting funding to one issue
12 in nutrition, the Competitive Grants Program will
13 inadequately fund other opportunities where research
14 could lead to future health advances, improve
15 nutrition, and better quality of life.

16 The research gaps exposed by this narrow
17 focus will only widen unless future RFAs take the need
18 for a broad portfolio of agricultural research into
19 account. ASN believes research that forms our
20 understanding and implementation of health-promoting
21 lifestyles and dietary practices to optimize human
22 health and prevent disease should remain a priority at

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

63

1 USDA but obesity should not be the only area for
2 nutrition-related research.

3 ASN believes that it's imperative that AFRI
4 funding be made available for important research topics
5 related to but beyond childhood obesity. Specific
6 areas that require additional agricultural research
7 include system approaches to better understand and
8 maintain energy balance, the drivers underlying
9 individual food choice and how they can be modified to
10 positively impact health, approaches to adequately
11 assess and collect nutrition data, the ranges of
12 dietary intake or dietary reference intakes that are
13 consistent with maintaining homeostasis in all
14 population subgroups, as well as the adverse impacts of
15 elevated intakes of nutrients and other food
16 components.

17 Furthermore, a large proportion of AFRI grant
18 support is used to prepare the next generation of
19 nutrition scientists by ensuring that training careers
20 are sustained for years to come.

21 ASN considers this career training essential
22 and suggests that NIFA provide additional education for

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

64

1 first-time AFRI grant applicants as well as training
2 opportunities and grants for students.

3 Thank you again for the opportunity to
4 provide comments. The American Society for Nutrition
5 looks forward to future opportunities to work with the
6 agency to further enhance AFRI.

7 MR. SMITH: Good morning. My name's Walt
8 Smith, and I'm here today representing the Federation
9 of Animal Science Societies.

10 FASS has a membership comprised of well over
11 10,000 scientists and academia, government and
12 industry, with a specified mission to strengthen the
13 common interest and collective good of member
14 societies. We're made specifically initially of the
15 Poultry Science Association, the American Society of
16 Animal Scientists, as well as the American Dairy
17 Science Association.

18 Through a unified science-based voice that
19 supports animal agriculture, animal products, and food
20 systems globally, we feel the success of the AFRI
21 Program is one of our highest goals at FASS and its
22 member scientists, and we appreciate the opportunity to

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

65

1 be here today to provide some comments.

2 As mentioned by many of the previous
3 speakers, one of the greatest challenges currently
4 facing agriculture is the building capacity to meet
5 global food security needs.

6 According to FAO, animals and livestock
7 contribute 40 percent of the global value of
8 agricultural output and support the livelihoods and
9 food security of almost a billion people worldwide.
10 FASS believes that the AFRI Program can play an
11 important role in supporting the science needed to meet
12 future food security needs and needs that balances food
13 production, environmental management, and
14 sustainability.

15 While we appreciate the 7.2 million increase
16 in food security research within AFRI in the
17 President's budget, we also believe that this area
18 deserves a larger portion of the overall increase in
19 AFRI funding.

20 For example, there's a \$30 million increase
21 for bioenergy research and while FASS understands the
22 need to advance science in the area of bioenergy and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

66

1 agrees that USDA needs to play an important role in
2 that area, other agencies, such as DOE, NSF, have the
3 ability to leverage funds with USDA in those areas, but
4 in the case of food security research and animal
5 agriculture, there's truly no comparable opportunities
6 out there.

7 In addition to the concerns that there are
8 disproportionately low investments in food security, we
9 have deep concerns on the overall decreased emphasis on
10 the investment in animal agriculture. Animal ag is
11 critically important to the U.S. economy and sufficient
12 resources need to be dedicated to advancing the animal
13 sciences.

14 According to ERS, the value added to the U.S.
15 economy for livestock production, and this
16 includes meat, dairy, poultry, egg production, during
17 2011 is forecast at a \$164.6 billion. That represents
18 over 40 percent of all production value, not including
19 the impact on crops used to feed the animals.

20 When the value of production of feed crop is
21 a little over 68 billion is added to the total, the
22 value added to the U.S. economy reaches over \$230

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

67

1 billion or 57 percent of all agricultural impacts.

2 Under-funding food animal research
3 jeopardizes the critical basic and applied research
4 necessary to address these threats to the
5 sustainability of animal ag in the U.S.

6 At the Stakeholder Meeting in June of 2010,
7 we expressed concerns about the lack of funding
8 opportunities specifically for animal sciences, given
9 the lack of emphasis on animal sciences and the funding
10 allocated to Challenge Area Grants. We were assured at
11 that time that animal sciences would be well
12 represented in the Challenge Grants in areas such as
13 global climate change.

14 However, no funds from the FY 2011 Global
15 Climate Change RFA went to support animal sciences at
16 all and so, in addition, with the exclusion of animal
17 waste and animal products as bioenergy sources for the
18 AFRI 2012 RFA, the animal sciences have effectively
19 been excluded from consideration under the sustainable
20 energy challenge area, as well.

21 These factors, along with the lack of
22 opportunity for animal sciences and several other

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

68

1 challenge areas, confirm the fears of many of our
2 scientists that the proportion of NIFA resources
3 supporting animal agriculture is decreasing
4 significantly and we strongly believe that that should
5 be addressed.

6 I would like to bring your attention to a
7 FASS- sponsored event, as well, the FAIR, Farm Animal
8 Integrated Research, 2012, that will convene to
9 identify key priority areas for future investment in
10 animal sciences and that's going to be held on March
11 4th through

12 6th of this year. It's going to bring
13 together a broad range of scientists, stakeholders,
14 government officials to discuss the future needs of an
15 animal ag research and both research extension and
16 education, and the group is really going to address
17 three major themes: economic growth and environmental
18 sustainability, animal ag and societal global
19 marketplace, and the one health concept.

20 The results of that meeting will actually be
21 compiled into a report and I encourage you all to look
22 at that.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

69

1 Thank you for your time today, and I have
2 additional comments that I'd like to submit, as well.

3 MR. SIMMONS: I'm Randy Simmons. I'm a
4 Professor of Economics in the John Huntsman School at
5 Utah State University.

6 Do you all know what an economist is?
7 Somebody who's really good with numbers but doesn't
8 quite have enough personality to be an accountant.

9 What I do is political economy, so I try to
10 not be quite so boring, but my message today is that
11 the political economy of all the science is really
12 important and I would like to see at least AFRI
13 recognizing that those contributions -- my -- when my
14 parents got married, my grandparents gave -- actually,
15 it was my great grandparents gave them a cow and it was
16 one of my earliest memories is my father sitting on a
17 stool milking that cow and squirting -- the cat would
18 stand up and beg he could squirt right in the cat's
19 mouth.

20 Sometimes he used a one-legged stool which
21 was really efficient for getting around but also slip
22 out from under him. He finally moved to a three-legged

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

70

1 stool which gave him much more support and I'm
2 suggesting that the science, all of the hard science is
3 terribly important. It's one of the legs of that stool
4 but I think the economics and the politics are another
5 part and ignoring them means that we won't be able to
6 accomplish nearly as much as we could.

7 Those of us at Utah State University and at
8 Southern Utah University who are involved in our
9 research projects together through the Institute of
10 Political Economy and the Center for Rural Economics
11 and Public Lands have been looking at energy issues and
12 we find, for example, that just trying to look at the
13 regulations that are faced in trying to do something as
14 supposedly simple as site a solar farm or a wind farm,
15 you have federal regs. If you're using any of the
16 waters of the United States, you have to get a Section
17 404 permit.

18 At the state level, you have to deal with the
19 state water engineer. So if you're doing algae ponds,
20 for example. At the local level, you're going to have
21 to deal with the mosquito abatement district. We
22 forget about all these different levels that have to be

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

71

1 gone through in order to actually create some of the
2 stuff that we would like to see done.

3 The Cape Wind is a proposed wind farm off of
4 Nantucket and they have been doing this for 10 years
5 and 17 federal and state agencies had to sign off and
6 once they got all that, now they're in court with the
7 rate- setting agency and also a Native American tribe.

8 So doing all of these things, these great
9 science things without thinking about what is the
10 political economic context seems to me to be just
11 missing something that's terribly important.

12 I would like to plug the continuing grants.
13 We've had a series of grants that started with CSREES
14 which allowed us to look at health and quality of life
15 and education issues and wilderness, how all of those
16 affect local economies, and it was only because it was
17 a continuing grant that we could go through all of
18 those kinds of topics and gain some indepth
19 understanding of the effects of public lands, public
20 lands policies on local communities and not that that
21 applies directly to the current agenda, other than to
22 say I think continuing grants are really useful.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

72

1 I'd like to conclude with just reminding you
2 that there are three legs on this research stool and
3 just sitting on the one leg is pretty precarious and I
4 think politics and economics need to be thought about
5 seriously in the design of the RFPs.

6 Thanks.

7 MS. NIELSEN: Good morning. My name is
8 Suzanne Nielsen. I'm a Professor and Head of the Food
9 Science Department at Purdue University.

10 I'm speaking today here on behalf of the
11 College of Agriculture at Purdue University. We in
12 Purdue Agriculture are very supportive and we find
13 great value in the USDA NIFA/AFRI as a funding source
14 and we're very supportive of the competitive grants
15 process.

16 These grants are really critical to the
17 progress and the important breakthroughs across the
18 entire spectrum of agriculture. We encourage USDA to
19 put adequate funds into the various Competitive Grants
20 Programs to attract and retain the best scientists in
21 the various fields of agriculture and to help train the
22 next generation of scientists.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

73

1 Let me first comment on a major issue of the
2 balance between funding for the grant challenge areas
3 and Foundational Programs and the various impacts that
4 this has.

5 We support the concept of the grant challenge
6 areas. However, the huge dollars that are going to
7 those programs severely limit the dollars to the
8 Foundation Programs, a message you've been hearing this
9 morning, and that makes the funding rate in those
10 Foundational Programs very low. This results in missed
11 opportunities to capitalize on basic and applied
12 research knowledge and we risk losing scientists and
13 academia.

14 Let me first address the point of missed
15 opportunities.

16 Agricultural scientists have made excellent
17 progress over the past number of years, 10-20 years.
18 The technology, the tools, the computational resources
19 that we have available are finding increased value,
20 that brings increased value to the grant dollars that
21 are received.

22 Scientists are now in a position to apply

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

74

1 basic science knowledge to real world problems.
2 However, there's very little funding within USDA
3 Foundational Programs to support such research.
4 Funding rates of less than 10 percent means that
5 opportunities for significant research impacts are
6 lost.

7 A second impact related to this balance, let
8 me address that. Those Foundational Programs are
9 really critical to ensure that agricultural research is
10 done to represent this entire spectrum of agriculture
11 and the food system.

12 For a number of scientists, various
13 disciplines within the agriculture, USDA is really the
14 only funding source for grant dollars. The current
15 profile of the AFRI Programs and the low dollars to the
16 Foundational Programs have greatly reduced or
17 eliminated this source of funding for a number of
18 specific areas within agriculture. This has really put
19 at great risk the future of those disciplines.

20 Let me give you an example of that, of this
21 concern linked to my own field of food science.

22 The current funding situation within AFRI is

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

75

1 not conducive to maintaining food science as a
2 discipline within academia. While USDA funding has
3 been available to support the research on food safety
4 and microbiology, the funding shifts and the cuts have
5 severely limited opportunities for scientists in the
6 other three quarters of the discipline of food science,
7 food chemistry, food process engineering, foods for
8 health.

9 There's just not the resources available now
10 to support research in those areas. I would argue that
11 research in those areas focusing on food quality and
12 the effects of food on people's health that this has
13 been and can be very important, addressing important
14 problems, and the research outcome is great.

15 This example of limited funding within the
16 field of food science is repeated across other
17 agricultural disciplines. I've just given you one
18 example.

19 We in Purdue Agriculture would like to
20 comment on four remaining issues: student training,
21 the nature of the RFAs, matching fund requirements, and
22 partnerships with other federal agencies.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

76

1 First, we want to stress the importance of
2 adequate USDA funding to allow for the training of
3 graduate students.

4 This training made possible by traditional
5 grants and by programs, like the USDA National Needs
6 Fellowships, is critical to create a new generation of
7 scientists. These scientists are needed for
8 agriculture disciplines in academia, in industry, and
9 in government.

10 Second, we encourage USDA to ensure that the
11 RFAs for specific programs are not overly narrow and
12 prescriptive. Rather, we would urge USDA to make the
13 RFAs broad enough for scientists to be innovative and
14 to allow for proposals on emerging issues that truly
15 can bring forth the best science.

16 A third point then is matching funds. When
17 matching funds are required on specific grant programs
18 that can make it increasingly difficult for
19 universities to take advantage of those opportunities.
20 With university budgets getting tighter, it's often
21 very difficult for us to identify matching funds and it
22 makes it impossible to apply to such grants.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

77

1 My fourth point, I'm being told I need to
2 stop, relates to working with other agencies. We
3 certainly encourage that and, finally, we thank you for
4 this opportunity to make comments at this event.

5 Thank you.

6 MS. RATCLIFFE: Good morning. My name is
7 Susan Ratcliffe. I serve as Director for the North
8 Central Integrated Pest Management Center. I'm here on
9 behalf of the Regional IPM Centers and the Center for
10 IPM.

11 For decades, Integrated Pest Management has
12 been successfully addressing important needs and
13 priorities in all aspects of agriculture, including
14 contributions to global food security. IPM has a
15 proven track record for solving critical issues that
16 could jeopardize numerous crops while providing
17 benefits to the economy, the environment, and human
18 health.

19 IPM Programs are valued by numerous
20 stakeholder groups, including producers, consumers, the
21 food industry, and both Republican and Democratic
22 legislators. Why? Because these programs effectively

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

78

1 manage pests and also respond rapidly to crises.

2 Historically, IPM Programs have been under-
3 valued and often under-funded. USDA's IPM Portfolio
4 has been cut disproportionately relative to the rest of
5 the NIFA Portfolio in recent years. In fact, although
6 NIFA's budget has increased by 25 percent since 2000,
7 funding for IPM has decreased by 36 percent.

8 Most recently, two IPM programs, Crop At
9 Risk, also known as CAR, and the Risk Avoidance and
10 Mitigation Program or RAMP were eliminated from the
11 USDA budget. These competitive programs previously
12 funded integrated projects for a wide range of pest
13 issues in a variety of crops to address the most
14 important national pest management issues. Major
15 funding included integrated projects related to plant
16 protection as well as livestock and stored product pest
17 issues.

18 These grant projects were led by national
19 experts who managed outcomes to reduce pest pressures,
20 minimize the impact of pesticide toxicity on human
21 health, and provide an economic benefit to producers
22 while protecting the environment.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

79

1 These programs help train the next generation
2 of scientists who will be the leaders of future
3 sustainable food, fiber, and fuel production systems.

4 Interest in IPM research and extension
5 remains high. In 2010 alone, AFRI received a 116
6 proposals to the Pest and Beneficial Insects and Plant
7 Systems area of emphasis but only 19 could be funded.
8 Dollars are necessary to meet the ongoing demands of
9 U.S. crop production.

10 On numerous occasions, USDA NIFA
11 administrators have suggested that the functions
12 provided by effective IPM programs that were lost
13 through budget cuts, such as CAR and RAMP, have a
14 strong chance of being addressed through the AFRI
15 Program. AFRI was constrained from including IPM
16 projects when alternative funding opportunities existed
17 but now that CAR and RAMP have been eliminated due to
18 budget cuts, that constraint is lifted. Now would be an
19 appropriate time for NIFA to address the void created
20 by these cuts.

21 NIFA's inclusion of subsections addressing
22 IPM will enable U.S. food producers to contribute

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

80

1 positively to global food security. The Regional IPM
2 Centers' directors and the Center for IPM strongly
3 support the inclusion of IPM research and extension
4 programs as subsets of the AFRI Grant Program.

5 Thank you.

6 MS. BALDWIN: And with that, that brings us
7 to our first 15-minute networking break.

8 For those NIFA employees who are here, if you
9 have not come over to the Registration Desk and gotten
10 your name tag, please do so. It helps our stakeholders
11 and partners know who we are.

12 So with that, we will be right back in this
13 room at 10:30.

14 (Recess.)

15 MS. BALDWIN: Thank you all. If Renee Arias
16 is here? Thank you very much.

17 MS. ARIAS: Good morning. My name is Renee
18 Arias, and I'm a molecular biologist working at the
19 National Peanut Lab.

20 I'd like first to give you a quick overview
21 of what we do at the lab, which is we develop varieties
22 according to the needs of the farmers in the industry.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

81

1 We also work on seed technology using only embryos
2 instead of the whole seeds because the seeds are 26
3 percent of the cost of production.

4 We have developed x-ray technology to grade
5 peanuts in a much faster way and it's been tested at
6 eight different locations in the South of the United
7 States. We also work on irrigation systems and water
8 use efficiency. We have two environmental plots to
9 study drought and mainly we are focused on drought
10 because that is the main cause of Aflatoxin
11 accumulation in peanuts.

12 I will give you an idea for those who are not
13 familiar with this type of problem, *Aspergillus flavus*,
14 a fungus that was described about 200 years ago,
15 invades peanuts and also does *Aspergillus flavus*
16 *citricus*. Both of them accumulate at least 10 different
17 micro-toxins in peanuts. Some of them are neurotoxins
18 and they are not being regulated, but the most common
19 are Aflatoxins.

20 These are regulated by the Food and Drug
21 Administration to not allow more than 20 parts per
22 billion to get in for human consumption. The threshold

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

82

1 is a little bit higher for animal feed, but in the last
2 three years, we have had severe droughts and that
3 increase the Aflatoxin content and there are records of
4 over a thousand parts per billion of Aflatoxins in
5 peanuts. This is at shelling peanuts in various
6 locations in the South.

7 Those peanuts cannot be used for human
8 consumption or for animal feed and they had to be
9 discarded and that cost the industry \$58 million per
10 year. In addition to that, when we think about peanut
11 butter, we usually think about a common snack, but,
12 unfortunately, for many low-income families in America,
13 peanut butter is a main source of protein. That
14 represents lunch or dinner.

15 So to make it safe and to keep it a low cost,
16 we are working at the Peanut Lab trying to reduce
17 Aflatoxins or eliminate Aflatoxins in peanuts.

18 One of the projects we are working on is
19 based on phytoalexins. Phytoalexins are compounds
20 produced by plants to protect themselves against
21 pathogens. Dr. Sobolev at the Peanut Lab has
22 discovered at least 10 phytoalexins and has a very good

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

83

1 idea of their dynamics upon the infection from
2 pathogens. So we are working to determine what enzymes
3 in the pathogens are acting to degrade those
4 phytoalexins and getting access to the plant.

5 Other projects that we have is an RNA
6 interference which Dr. LaManna mentioned earlier this
7 morning. We are using RNA interference to block the
8 pathway, the synthesis pathway of Aflatoxins in the
9 fungal pathogen. We have taken small fragments of
10 different genes in the pathway of synthesis of
11 Aflatoxins and made constructs for RNA interference to
12 intervene to use in the plant.

13 We are also developing genetic transformation
14 methods for peanuts as the industry is eager to have
15 this technology available. We think that that is the
16 shortest path and the fastest that can lead us to a
17 solution to Aflatoxins in peanuts.

18 The other thing I want to mention is drought
19 is the main driving force for Aflatoxin accumulation
20 and whether we call it global warming or not, we are
21 having increased droughts. In the last three years, we
22 have had droughts with very high levels -- that result

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

84

1 in very high levels of Aflatoxins in peanuts and for
2 this year, for the first six weeks of 2012, we already
3 have five inches deficit. So the historic average is
4 seven inches in the first six weeks of the year. We
5 have had two inches of rain for this year. So things
6 are not looking good.

7 Now if you think that avoiding peanuts all
8 together that would solve the problem, that's not the
9 answer. Aflatoxins and the same pathogen invade corn,
10 pistachios, pecans, and many other crops. So we need
11 to solve the problem.

12 That's all I have.

13 MR. EHEART: Good morning, and thank you for
14 holding this stakeholders meeting and thank you for
15 inviting me to it.

16 My name is Wayland Eheart, and just a quick
17 correction, if that's the right word. It says here I'm
18 representing the Board of Trustees of the University of
19 Illinois. To the extent that that's true, it's because
20 I have a proposal in with AFRI this go around and I did
21 the work for the proposal, but if the proposal is
22 successful, the Board of Trustees gets the money.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

85

1 So I'm actually representing my own
2 department, the Department of Civil and Environmental
3 Engineering, and I suppose I have to admit that, to a
4 certain extent, the things that I'm going to say in
5 terms of suggestions to AFRI and NIFA in that sense,
6 I'm only representing myself.

7 Just to give you a little bit of background
8 of my kind of area of interest, I have for the last
9 decade or so, probably more like the last 15 years,
10 worked on such things as climate change effects on corn
11 and soybean agriculture and currently I'm working on
12 bio-fuels of various kinds and the effects of
13 cultivating biofuels.

14 I had a project that looked at what it takes
15 to get farmers to adopt biofuel precursors and the
16 recent proposal that I've submitted to AFRI has to do
17 with the water requirements of miscanthus and other
18 biofuel precursors, miscanthus and switch grass in
19 particular.

20 And as I ask myself, taking a look at all
21 that research, the sum total of the results of the
22 research I've already done, the results of the research

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

86

1 I'm currently doing, and perhaps the possible results
2 of the research I hope to do and take a step back and
3 ask myself what are some of the lessons in that in
4 terms of what new bullet points or new areas of
5 priority areas might AFRI and NIFA want to put in their
6 next RFA, the thing that comes to my mind is water and
7 water rights and water permitting and water control,
8 water regulations, particularly in the 31 Eastern
9 states of the United States, and those are the things
10 that have come into my mind.

11 It's a very difficult and complex situation.
12 The state laws, the state rules that we currently have
13 in the East are woefully inadequate for the job and
14 it's a hodge-podge of regulations and non-regulations
15 when you get right down to it.

16 We have the Clean Water Act that controls
17 what you can put into the water but we don't have any
18 kind of regulations controlling what you can take out
19 and just to illustrate this point, I'd like to use the
20 marker board over here. I think this microphone is
21 detachable, right, so I can get recorded.

22 So what I want to show you is the typical

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

87

1 cost picture of a farmer, any farmer sees when they
2 think about using irrigated agriculture. I'm going to
3 draw an axis here and another axis here. This is the
4 amount of water applied and this is the incremental
5 profit.

6 So right here's zero. If you don't apply any
7 water, you don't get any incremental profit. You still
8 get some profit maybe but you don't get any more.

9 Now if you buy some irrigation equipment and
10 don't use it, you have a negative incremental profit.
11 You're going to lose money for the cost of the
12 irrigation equipment and as you apply more and more
13 water, the incremental profit increases but, of course,
14 there's a diminishing return until you finally flood
15 the fields and you get actually a decrease in the
16 return.

17 Now this is typical of the West. It's
18 typical of a dry year in the East. So we could label
19 this line Dry and if we look at it from the perspective
20 of a wet year or a wet place, it kind of looks the same
21 but the line doesn't quite cross this axis. So you
22 never -- even if you applied a lot of water, you

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

88

1 wouldn't see any return. It costs more to put the
2 water on than you're getting back for it. You never
3 quite make up what you got out of it.

4 But as we see, either because of climate
5 change or perhaps this is my nightmare scenario, either
6 because of climate change or because of perhaps just a
7 couple of really bad years of drought, such as the last
8 speaker mentioned, we might find, if there is a long-
9 term average climate change, then that will just shift
10 this axis down so that it will become profitable, what
11 was once unprofitable will now be profitable, but if we
12 just have a few bad years of drought and that's all,
13 what will happen is that this -- the farmers will
14 invest in the irrigation and their starting point will
15 be down here.

16 That cost will be sunk and so they'll have
17 this slide to look at and that's my nightmare scenario.
18 Because irrigation is so capital-intensive that once
19 they've made that capital investment, then they're
20 going to use that capital investment, they're going to
21 use that irrigation, even in years that are only
22 moderately dry.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

89

1 I'm done.

2 MR. LIU: Okay. Good morning. Thank you for
3 invitation.

4 I'm Jiping Liu from Robert Holley Center,
5 USDA
6 ARS.

7 So Leon Kochlan is our Center Director and
8 the leader of our Research Group. So our group has
9 benefited from support from USDA NIFA and its
10 predecessor, USDA NRI, National Research Initiative,
11 for more than 20 years.

12 The previous iteration of NIFA, the USDA
13 National Research Initiative, Competitive Grants was
14 very successful for our program. They funded both
15 basic and applied research. It focused on a large
16 number of small proposals that allowed the program to
17 cover a broader range of topics and funded a large
18 number of PIs.

19 Hence, it was very important program for
20 young faculty, such as certain professors who were
21 starting their program and also more senior scientists
22 from universities and ARS.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

90

1 The USDA NRI Program helped many, many plant
2 biologists build their programs, including our group,
3 led by Dr. Leon Kochlan. I'm stressing these points
4 because the genomic-based research has matured to the
5 point where we are now beginning to be able to fairly
6 rapidly translate the findings from more fundamental
7 research to crop improvement in the real world.

8 Hence, the NIFA Program has the opportunity
9 to play a leadership role in supporting research in
10 addressing the problem in increasing food production in
11 response to global climate change. Also, there are
12 opportunities to help address the world food crisis
13 which is expected to increase in severity as the world
14 population continues to rise and climate changes is
15 predicted to have many potentially negative impacts on
16 agriculture.

17 Crop plants are facing increasing biotic
18 stress conditions which is increasing challenges for
19 agriculture. What we can do is to identify and breed
20 genetically-resistant crop plants that can better cope
21 with diverse environments. An example of where the
22 USDA NIFA Program has funded this type of fundamental

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

91

1 research that has generated new knowledge that is being
2 used for crop improvement in developing countries is
3 the funding of our work for more than 20 years on crop
4 adaptation to acid soil where aluminum toxicity greatly
5 reduces crop yields.

6 About 20 percent of the U.S. soils and up to
7 50 percent of the world potentially arable lands are
8 highly acidic. On this acid soils, a toxic form of
9 aluminum is solubilized from clay minerals which
10 damages and stunts resistant, hence crop yields are
11 reduced due to drought and nutritional deficiencies.

12 In my NIFA funding-supported research that
13 resulted in the identification and characterization of
14 one of the first aluminum tolerance gene that is SBMATE
15 which is the major aluminum tolerance gene. Our
16 discovery of SBMATE led us to identify a homolog in
17 mates that is a major mates aluminum tolerance gene,
18 ZNMATE-1.

19 The findings from a genomic and molecular and
20 computative genetic characterization of these genes has
21 provided the fundamental knowledge that subsequently we
22 used with the finding from international agencies, such

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

92

1 as Generation Challenge Program and Miconide
2 Foundation, and collaborations with M-Propa in Brazil,
3 to provide the basis for improving SBMATE soil
4 tolerance for agriculture acid soils in East and West
5 Africa.

6 We are now collaborating with mates and
7 sorghum breeders in Kenya and sorghum breeders in Marti
8 and Niger to use molecular breeding tools in our
9 fundamental knowledge about SBMATE and ZMATE-1 to
10 improve mates in sorghum yields on these marginal soils
11 in Sub-Saharan Africa, an example of real world success
12 story that would not be happening without years of
13 funding from the USDA NRI and the USDA NIFA Programs.

14 Thank you.

15 MR. RYU: Good morning. A correction in
16 Agenda. My first name is wrong. My name is Jae, J-A-E.
17 My first name is J-A-E, not J-A-I. Please correct that
18 one.

19 Okay. My name is Jae Ryu from the --
20 Assistant Professor from Agricultural and Biological
21 Engineering at the University of Idaho.

22 Today, I am talking about a little bit future

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

93

1 research direction to sustainable agriculture,
2 especially focusing on environmental monitoring network
3 and the supportive tools to conduct research on food,
4 water, and energy nexus.

5 Environmental monitoring network is critical
6 in the sense that collecting the data through this
7 network is wider used for agricultural scientists to
8 see how hydrologic behavior change over time and, for
9 example, soil moisture data and the water quality data
10 are wider used for the agricultural research in the
11 agricultural- dominated watershed in the Western
12 states.

13 And also this dataset is wider used to solve
14 real world problems in rural areas and underserved
15 areas. So I emphasize that research theme.

16 In addition to the emphasizing environmental
17 monitoring network, I listen in the audience, you know.
18 There are telecommunications technology and wireless
19 network technologies going so fast. So we have to
20 implement this new technology in agriculture research,
21 I guess.

22 Actually, I have a couple of nice figures but

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

94

1 I'm not able to show them but I want to highlight the
2 research I'm conducting related to this environmental
3 monitoring network.

4 I'm currently deploying the wireless system
5 network to collecting water data, especially ground
6 water and the ground water temperature, and we want to
7 deploy the wireless system network and visualize and
8 disseminate scientific finding and information for
9 broader audience, including stakeholders and the
10 general public, to utilize this information in their
11 decision-making, and also we plan to implement mobile
12 technology to disseminate this information for the
13 general public, so general public can access our data
14 through their mobile technology, such as Smart Phone
15 and iPad, iPhone and iPad, and those kind of things.

16 Another research theme I have is related to
17 decision-support tools. I understand many decision-
18 supported tools are widely available and implemented in
19 agricultural research, but we are facing new global
20 challenge related to climate change and water supply
21 uncertainty and land use changes and urbanization.

22 In the state of Idaho, many agricultural

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

95

1 farmland is converted to residential area, commercial
2 use. So we have to handle this global challenge issue.
3 So, in addition to that, we also are suffering from
4 water conflict issues. Sometimes surface water
5 irrigation and ground water irrigation are fighting
6 each other to seek their water demand.

7 So they spend a lot of money to find
8 resources. So we have to put a lot of effort to
9 minimize such impact and resolve this conflict among
10 the stakeholders group.

11 So to deal with that, we have to think about
12 the new approach, maybe new framework to deal with such
13 kind of a problem. So I propose a system-based
14 approach to deal with this kind of a problem, built-in
15 the shared vision granting process. We can invite many
16 local stakeholder groups to develop future alternative
17 energy options to deal with the climate change and
18 develop sustainable water resource planning and
19 management. Those two can minimize the impact the
20 natural disasters, including drought and flood and
21 landslide and things like that. Also, we can have them
22 to adapt uncertain future climate.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

96

1 I also have a nice graph but I'm not able to
2 show that.

3 But at the same time, we also have a
4 challenge and issue to deal with, especially, you know,
5 this is a grand challenge, such as climate change.
6 There is no universal solution to tackle these big
7 issues. So multidisciplinary effort should be in
8 place, including hydrologists, economists, and social
9 scientists to deal with that problem.

10 So another research challenge I highlight is
11 hardware and software challenge. We hear about a lot
12 of hardware technologies, such as cloud computing and
13 computing and high-performance computer but software
14 side, software actually does not catch up to hardware
15 technology. So we have to put some effort to develop
16 software to utilize such advanced hardware technology
17 into the agricultural research.

18 So, in conclusion, I hope USDA to be the
19 frontier to implement the new technology into the
20 agricultural research and also I hope that USDA is
21 willing to invest to developing next generation of
22 decision-supported tool to help stakeholders to adapt

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

97

1 uncertain future climate and global change, like land
2 change and irrigation issues.

3 Thank you.

4 MR. KNUTSON: Good morning. I'm Ron Knutson.
5 I'm an agricultural economist from Texas A&M University
6 with 50 years of experience in working in the areas of
7 policy regarding food and agriculture.

8 This includes experience in farm policy,
9 cooperative policy, farm labor policy, food safety
10 policy, nutrition policy, and policy regarding the
11 structure of the food supply chain.

12 I draw on my experience to address the
13 perceived research and extension needs in these areas.

14 First, applied problem-solving research is
15 only useful if it reaches the people. Therefore, every
16 applied research RFP should be structured in a manner
17 that includes an extension component. Such projects
18 should minimize matching fund requirements because of
19 the inherent disadvantage extension has in matching.
20 The review teams should include at least one
21 professional having primary extension experience.

22 Second, most RFPs should be structured in a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

98

1 manner that includes requirements for multidisciplinary
2 dimensions that may extend beyond the typical
3 agricultural and food disciplines. Most of today's
4 policy issues have multidisciplinary dimensions.
5 Ignoring these dimensions is unlikely to solve
6 problems.

7 For example, policy issues in the area of
8 farm labor, food safety policy, nutrition, health and
9 obesity inherently are multidisciplinary in scope. The
10 social sciences of which agricultural economics is a
11 component have a unique ability to analyze the impacts
12 of private and public sector options for dealing with
13 these issues in terms of farmers, households, and the
14 supply chain, and rural communities.

15 Third, the uniqueness of hired farm labor and
16 related immigration policy issues deserve far more
17 attention than they have received. Actions that reduce
18 the farm labor supply will reduce the supply of the
19 most nutritionally-valued products in the dietary goals
20 and guidelines for Americans.

21 That is, fruits, vegetables, and milk will be
22 available from domestic producers in much smaller

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

99

1 quantities at much higher prices or will be imported.
2 Particular emphasis needs to be placed on inter-
3 disciplinary longitudinal studies that provide insight
4 into issues of labor shortages, labor mobility, and the
5 importance of the experience of farm laborers in
6 farming.

7 Farm labor is not just a large farm problem,
8 as is commonly perceived. Farm labor is a problem of
9 almost all sizes and types of farmers.

10 Fourth, the control of the food supply chain
11 has become increasingly concentrated at all levels.
12 For example, organic production, once thought to offer
13 profitable opportunities for smaller farms, is
14 increasingly becoming concentrated in the hands of
15 fewer and larger-scale operations.

16 Research initiatives focused on production,
17 marketing, and policy strategies needed to keep the
18 supply chain open are very important and we should be
19 open to new ideas and ventures as opposed to closed
20 systems. Such systems need to be designed to utilize
21 interdisciplinary strategies and expertise.

22 In closing, I wanted to thank you for

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

100

1 listening to the voices of researchers and scientists
2 and extension individuals in this stakeholder session.

3 Thank you very much.

4 MR. LEE: My name is James Lee. So today I
5 come here is for actually to encourage the idea that
6 actually Danny Day of Eprida and I initiated, well,
7 nine years ago, when I was at Oak Ridge National Lab
8 and I worked as, you know, a senior scientist there,
9 that is approach of Biochar Soil Amendment and Carbon
10 Sequestration for agricultural sustainability.

11 I'm going to very quickly talk about what
12 this idea is. Now we have biomass from agriculture,
13 you know, corn stovers, peanut shells, you know,
14 whatever, right, and also those waste wood leaves, you
15 know, that fall down on the ground. If we don't do
16 anything, they decay to carbon dioxide very quickly,
17 within a year or two.

18 So the idea is you treat these biomass in a
19 specialized pyrolysis, heating the biomass at about 400
20 C, and it presents oxygen because of pyrolysis. We
21 make a special char, not the biochar that you may see
22 in the wood, okay. So the reason biochar may not work

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

101

1 is for agriculture we need a special because we need
2 the capacity to hold the nutrients, right, and we need
3 the common stable in soy for 100,000 years to sequester
4 the carbon.

5 So another reason is that the biochar in wood
6 won't work because the current technology for making
7 biochar is smoke and remember we have little smoke in
8 North Carolina. It's little swamp fire, have the whole
9 West -- almost like a whole Virginia in the area is
10 kind of smoke.

11 So now if we use this current technology for,
12 you know, gigatons go to bring down gigatons, you know,
13 nationwide, you think about it. So we need research to
14 make the biochar production smoke-less, okay, and so
15 that should have no smoke because the smoke, you are
16 doing good but everybody does that, you know, it ruin
17 the environment actually. Okay. So we need research.
18 Okay.

19 But that research cannot be done by the
20 Department of Energy. You think they're working on it.
21 They don't because they don't care about biochar. So
22 with the expertise here actually, so what I'm

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

102

1 suggesting is that this is unique opportunity for USDA
2 to go into Congress, say here, this is really a big
3 thing to be able to bring -- to take CO2 from
4 atmosphere, no other technology have that capability,
5 only one, and that will fuel, that's really going to
6 help the humanity in my mind, okay, for the global
7 warming, you know, CO2 emissions, because no other
8 technology -- people think about the CO2 in ocean equal
9 so much energy and we do nothing.

10 So this is area is a very realistic way of
11 putting stability into agricultural systems. You put
12 in CO2 down in a very special way in soil fertility
13 because -- so then we have a high capacity. The farmer
14 can use less fertilizer, right, to actually his crop
15 better and then fertilizer don't run into water.
16 Someone talked about water quality, right? Help the
17 water clean. So helping environment, helping
18 agriculture, and so -- and most important is gigatons.
19 I'm talking about gigatons of carbon from atmosphere.
20 Okay.

21 No other technology have this capability to
22 save humanity but it's such a great idea. You know, we

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

103

1 started 10 years ago, right, and, you know, other
2 countries, like Australia, China, Europe, they're a big
3 deal of these things.

4 Now I'm the one initiating. Now we want to
5 thank the USDA actually. We were supported by a grant,
6 okay, that's actually helped me to get these things
7 going, but we don't have a sustainable program. The
8 Department of Energy don't care about biochar. There's
9 no biochar program there. So does the USDA because our
10 Secretary used -- I think I see one -- his talk.

11 He actually is very good and we have very
12 good Secretary to understand this. So my suggestion is
13 that we will encourage USDA -- actually, I'm going to
14 put this on the record -- to go to Congress to get, you
15 know, a special item because now our current budget for
16 the effort is under-funded. We don't want this program
17 to compete with other programs because they're needed
18 and we should not fight spending millions of dollars
19 focused here creating jobs and creating new biochars
20 make clean. So our current effort is not going to fit
21 this because it requires a modest increase. Okay.

22 Now a biochar soil test is okay but we need

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

104

1 also cover the whole to make biochar clean, smokeless
2 because nobody else can do it. So we would like to
3 have like, you know, the department go there, go to
4 Congress, get, you know, kind of a major program there
5 to bring additional money to USDA because that's the
6 way to do it, I feel. Okay?

7 So I'm going to summarize what the challenges
8 ahead of us technically, okay, because I'm a scientist.
9 Okay. First, we want to develop the demands of bio-
10 char for soil demand and carbon sequestration so there
11 will be high capacity and no toxic because, you know,
12 you have a toxin there, if you use worldwide, you can
13 get a big problem. Yes, you can some water but if you
14 contaminate the environment, you know what I'm saying,
15 so that in the world, nobody going to do it. We are
16 saying USDA should do that. You know what I'm saying?

17 The other program experts are here because,
18 you know, you have money, you have the expertise. You
19 don't need anybody else. Okay. I have four scientists
20 at Oak Ridge. You name it. They are very interested,
21 okay, at USDA lab, too, five or six universities, they
22 are very excited, but we don't have no support. You

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

105

1 can say about myself, I'm the initiator, I don't get
2 support, I have no support for this work because in the
3 United States we don't have programs.

4 So I would appreciate, you know, take this
5 message from us. You guys are very good but we want to
6 encourage you to really go to the Congress and, you
7 know, take initiative, take leadership for this program
8 because in our current situation there's no program for
9 biochar.

10 EPA, of course, they are interested in air,
11 you know, because of biochar. National Science, they
12 may be interested but they are interested more in those
13 very fancy sciences, maybe laser or whatever, but not
14 necessarily biochar.

15 So I was thinking it's very important for
16 USDA to take a leadership.

17 Thank you.

18 MR. HUANG: My name is Lihan Huang, and I'm
19 from NIFA's sister agency, Agricultural Research
20 Service.

21 First of all, I'd like to comment on the
22 excellent job that NIFA has done in providing funding

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

106

1 that has led to great significant achievements in
2 agricultural sciences, in training the future
3 scientists, and the investment NIFA has provided and
4 will continue to provide will generally have great
5 rewards in the future, and I think we can be partner in
6 this process in achieving the common good for U.S.

7 And next, I'd like to introduce my research
8 unit and I'm a research leader of the Predictive
9 Microbiology and Residue Chemistry Unit, and we have 12
10 scientists in the unit. We are developing detection
11 methods for chemical residues, veterinary drugs, and
12 pesticides, and we also develop the predictive models
13 for foodborne pathogens that are the foundation for the
14 National Safety Research Assessment Programs. So we
15 support a lot of stakeholders in this process.

16 And as a center, we do research. It's a huge
17 program and we have a lot of -- we have three research
18 units concentrating on food safety research and one is
19 the detection of foodborne pathogens and developments
20 and the other is developing the innovative technologies
21 to eradicate or reduce the food safety problems. So we
22 have three research units.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

107

1 We have received funding from NIFA and we are
2 very grateful for that.

3 As a food scientist in the food safety
4 research, I'd like to echo some of the stakeholders'
5 comments that we need more funding in the food safety
6 research area. It's never enough, as we've seen a lot
7 of outbreaks in the last few years and those are high-
8 profile outbreaks. So we need more research,
9 fundamental research, and we cannot do it alone. So we
10 want to partner with universities and other sister
11 agencies to do research that will reduce or eradicate
12 the foodborne outbreaks.

13 And specifically, I'd like to say that we
14 need to do more on the risk assessment and risk
15 analysis. We need more expertise in this area. We are
16 doing that now but we need to train future scientists
17 who are specialized in these areas and we do food
18 science programs.

19 I just don't see they produce enough food
20 science experts in this area. We need more. We are
21 borrowing expertise from other fields of science. We
22 can help in this process so we can collaborate.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

108

1 I'd like to emphasize on the rapid detection
2 methods and we need to be field ready, field ready and
3 field deployable. We can go to the field and do a real
4 rapid test and we are doing that but I think we need
5 more research in this area. The current technology is
6 just not fast enough. So we need rapid detection
7 methods for rapid intervention.

8 So, also, I think we need more research in
9 developing programs for consumer education that
10 educates the U.S. consumers to be sensitive or to be
11 sensitive to the food safety problems they are facing.
12 We need more tools to educate them, to make them more
13 aware of the food safety problems.

14 And then we also need some real more
15 effective, real effective intervention technologies for
16 food safety applications. Also, we are very thankful
17 for NIFA to allow our ARS scientists to apply for
18 grants. We hope that in the future the program will be
19 a little bit more less restrictive to ARS scientists so
20 more ARS scientists can join in this process, so we can
21 do more by collaborating between our agencies.

22 That's all. Thank you very much.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

109

1 MR. SMITH: Hello, everybody. I'm Darrin
2 Smith from Eastern New Mexico University, and I
3 appreciate the opportunity to talk.

4 I'm here to really represent small regional
5 schools. We've been very fortunate with NIFA and our
6 funding of our university. We currently have two, but
7 what we've done at our university like us is the
8 university's actually supported and dedicated our
9 department to increase experiential learning with real
10 scientific research, indepth research, and use it then
11 as a teaching tool, so that our student are going to
12 professional degrees and on to graduate school, and we
13 recruit the students based on that level of
14 opportunity.

15 It's highly recruited and we're highly
16 specific in who we take into the program with actually
17 very advanced well-developed laboratory systems, animal
18 science pens, live animal housing in environmental-
19 controlled areas.

20 So I want to again hope that we see continued
21 support for not just research one but small regional
22 under-served/under-represented students. I would like

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

110

1 to encourage the NIA to increase seed grant funding. I
2 think it's important that we see new ideas developed
3 before we go into large collaborative grants with
4 universities.

5 We do tend to collaborate a lot there and
6 it's mostly with ARS which is localized, but I think
7 the seed grants are really important to initiate ideas.
8 There's a lot of good ideas out there that don't get
9 funded.

10 I would suggest that the RFPs, again I don't
11 know the people have mentioned it, if there was times
12 or advance knowledge, it would be really helpful for us
13 to plan, especially in the smaller school where we
14 don't have well-developed grants offices. Usually it's
15 coming out of my office with my grad students.

16 Thank you very much for the opportunity.

17 MR. WANG: Good morning, everybody. My name
18 is Jingxin Wang. I'm serving currently as Professor
19 and Chair of Wood Science and Technology at West
20 Virginia University in Morgantown, West Virginia. I
21 appreciate this opportunity for NIFA.

22 Based on the program, I can see -- I mean,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

111

1 I'm very glad to see NIFA remain committed to investing
2 in feedstock, biofuel, and bioenergy development. I
3 have three or four general comments in here.

4 So, Number 1, for example, I can see the
5 value of encouraging large integrated projects, but the
6 size of these large projects should be optimized. So
7 I'm happy to see, for example, the size down from 45
8 million from a couple of years ago to \$2 million to
9 this year. So this is good. That seems fine. So
10 those projects should not be conducted or funded at the
11 expense of smaller innovative entrepreneurial projects
12 with a basic research focus.

13 I also believe that the current requests for
14 application are kind of restrictive and specific in
15 terms of topics and focal species of products found
16 there, so that innovative game-changing advances are
17 kind of less likely.

18 Furthermore, these large projects bring
19 additional administrative overhead and therefore could
20 dilute the investment in the pure scientific effort,
21 but, of course, I see the need for some large projects,
22 like CAPs, with a reasonable size and scope from there.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

112

1 So, Number 2, while the current system, for
2 example, should provide more support to young
3 researchers who are trying to become established, for
4 example, in here, who can either prefer to work with
5 few people or in small groups but who may nevertheless
6 spur significant advances.

7 So, Number 3, for example, you want to
8 enhance the global competitiveness of the American
9 forest product industry or woody biomass-based
10 industry, strengthen the rural vitality and efficiency
11 utilized of woody biomasses to advance bioenergy, for
12 example, in this area. So NIFA should also target
13 something, so-called socially- and environmentally-
14 acceptable production and consumption of value-added
15 wood products and biofuel products in this sector in
16 here.

17 The last thing I have in here, for example,
18 the review based on my experience with USDA and NIFA,
19 for example, I'm suggesting the review, special teams
20 should be some kind of consistent. So based on the
21 common, for example, from year one to year two, we
22 should be allowed the applicants make correction and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

113

1 improve their proposal based on reviewer comments. So
2 this is something I kind of like in this area, for
3 example.

4 Thank you.

5 MS. LOGUE: Good morning. Hi. My name is
6 Catherine Logue. I'm a Professor of Veterinary
7 Microbiology and Preventive Medicine in the College of
8 Vet Med at Iowa State University.

9 I appreciate the opportunity to speak to you
10 today regarding Fiscal Year '13 and '14 programs and
11 budgets that the agency's considering.

12 Coming from a state that is Number 1 in swine
13 production, we produce a heck of a lot of eggs, we're
14 also the Number 1 egg producer, clearly animals and
15 food safety are big priorities and big areas for the
16 state, and we seek and receive a lot of input from
17 commodity groups from the states through the Iowa
18 Livestock Health Advisory Council and they help to
19 guide us as to what's important and what issues are
20 emerging and we would encourage NIFA not to lose sight
21 of what the producers are saying or are concerned about
22 since this is where the next level of challenges and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

114

1 emerging issues will come from.

2 I'm also going to include in the record some
3 of the priorities from this year's ILACK.

4 Some of the issues that we're seeing at the
5 college level, we see a lot of issues with regards to
6 animal health, welfare, and zoonosis, and this will
7 always be a priority and continue to be so, and we
8 encourage the agency to consider expanding these kind
9 of programs because this is where the next level, the
10 next emerging issue will come from.

11 Our biggest concern right now is anti-
12 microbial resistance. Historically, NIFSI has been a
13 good source for funding for this and we would encourage
14 the agency not to lose sight of this and make sure that
15 it does come back up again through the other programs
16 that you have right now.

17 Food safety will continue to be a priority
18 and we are concerned about how the foundation is set
19 and we would encourage not to focus on such single
20 commodity issues but broaden it out a little and this
21 in terms of the university setting is a big priority
22 for junior researchers and if they can only apply once

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

115

1 and then it's a two-year time cycle before they get in
2 again, it could be almost year four before they find
3 out if they have funding. That can be a death knell
4 for some junior researchers. So we're beginning to
5 exclude the next generation of young researchers.

6 We would encourage the agency to continue
7 with strategic interagency partnerships. These have
8 been a great idea and a great challenge for faculty,
9 finding new and innovative ways to do things, and we
10 would encourage this to continue because we also see it
11 as a great way to leverage some additional research
12 dollars.

13 Let's see. What else did I want to say? As
14 I mentioned, the Foundational Grants and our other
15 concern is the Challenge Programs right now which are
16 very large programs with very large pots of money but
17 have a very narrow focus and we would encourage the
18 agency to consider broadening out that portfolio so as
19 not to miss out on something or miss out on emerging
20 ideas that are coming up.

21 All right. With that, I'll close it. Thank
22 you.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

116

1 MS. DAN: Good morning, everyone. My name is
2 Yinghui Dan. I'm a faculty member, also supervisor at
3 Institute of Advanced Learning and Research at
4 Department of Horticulture and Forestry of Virginia
5 Tech.

6 I'm here today to recommend a new funding
7 opportunity to meet domestic and international needs
8 for agriculture and food research initiative priorities
9 and the challenge areas.

10 One of the options to improve agriculture
11 sector is biotechnology. The global market value of
12 the biotech crop has been dramatically increased since
13 1996, the first year for biotech crop
14 commercialization. In 2011, the global market value
15 reaches about \$13 billion U.S.

16 Also, a 94-fold increase in acreage of
17 biotech crop from 1.7 million hectares in 1996 to 160
18 million hectares in 2011. This makes biotech crops the
19 fastest- adopted crop technology in the history of
20 modern agriculture.

21 Biotech crops also significantly contribute
22 to food security. From 1996 to 2010, they increased

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

117

1 plant production and the volume by \$78 billion U.S.
2 They provide a better environment by saving 443 million
3 kilograms active ingredients of pesticides. Only in 2010
4 they reduce carbon dioxide emission by 19 million
5 kilograms, equivalent to taking about nine million cars
6 off the road. They conserve biodiversity by saving 91
7 million hectares of land.

8 They also help alleviate poverty by helping
9 50 million more farmers who are some of the poorest
10 people in the world.

11 I did a statistical analysis for the Awards
12 Grants by Agriculture and the Food Research Initiative
13 in last three years. No grant was awarded for the
14 enabling technology for transgenesis. That plays a
15 critical role for biotech crop development.

16 About 1.8 percent to 3.6 percent of the total
17 award grants by the AFRI belong to enabling technology
18 for biotech development. More than 96 percent of the
19 total award grants belong to other research areas.
20 Therefore, I think that enabling technology for biotech
21 crop development is under-invested for some reason in
22 last three years.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

118

1 We are facing further challenges:
2 population, poverty, and hunger. It is estimated that
3 our world will have about 9.3 billion people by 2050.
4 Currently, one billion people suffer poverty and
5 hunger, particularly in the developing countries. The
6 world needs at least 70 percent more food by 2050. For
7 the developing countries, food production needs to be
8 doubled by 2050, the second crisis of communities.

9 In 2008, food price reaches all-time peak but
10 in 2011, our food prices reaches a peak higher than
11 2008.

12 Third, 30 percent of the world's poorest are
13 dependent on agriculture. Therefore, to meet domestic
14 and international needs for every priority and funding
15 and the challenge area, I recommend a new funding
16 opportunity that is enabling technology for the 21st
17 Century, in addition to the new plant biology for the
18 21st Century of the AFRI Program already have.

19 All the data that I present here today were
20 from ISAAA Brief Publications.

21 Thank you for the opportunity.

22 MR. STEELE: Good morning. My name is Doug

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

119

1 Steele. I'm Vice President for External Relations and
2 Director of Extension at Montana State University.
3 However, I'm here this morning representing the
4 National Extension Committee on Organization and Policy
5 which is referred to as ECOP, the National Network of
6 all the Extension Land Grant University Programs
7 together.

8 Many in this room know that this is the 150th
9 Anniversary celebration of the Morrill Act. When
10 President Lincoln signed that into law, I don't think
11 he could even at that point in time envision the
12 transformational change that would take place across
13 this country by making higher education available to
14 the public and what a unique idea with the tripartide
15 mission of research, teaching, and extension to really
16 shape and form what we've become as a country.

17 We have the opportunity this year through
18 extension to celebrate the very proud past we have with
19 our 150 years with the Morrill Act, to honor the
20 critical role we play in today's society, and, maybe
21 more importantly, to strategically invest in the bright
22 future that I think we have and AFRI affords us that

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

120

1 opportunity.

2 In the interest of the time constraints, I'm
3 going to limit my comments to five minutes, but I can
4 assure you, Dr. Sheely and Dr. Holland, we will have
5 written testimony submitted with a lot of detail
6 provided for your consideration.

7 The core things I'd like to share with you
8 include, first, increased extension-led and extension-
9 only opportunities. Experience has shown us, both with
10 NRI and now with AFRI, that integrated proposals are
11 most often led by research-focused management teams.
12 The descriptive language and topical focus within the
13 RFA should be improved to encourage extension-led
14 efforts.

15 AFRI should also afford more opportunities
16 for extension-only proposals. In 2010, only two
17 percent of AFRI funds were allowed and awarded to
18 single function extension projects and this is compared
19 to 48 percent that were awarded to single function
20 research projects.

21 The RFAs need to recognize extension as a
22 required element for engaging our target audiences in

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

121

1 discovery, testing, and applying scientific knowledge
2 and community problem-solvings with the groups that we
3 work with in this much-needed information.

4 The RFAs need to emphasize extension's role
5 in providing community-based and transformational
6 education to our target audiences in a way that is
7 meaningful and that supports extension methodologies
8 beyond a fact sheet, a single event, or publication.

9 We hope to impact change with human behavior
10 and that is done through consistency over time. The
11 agency is encouraged to ensure that all AFRI RFAs
12 include the same description of extension activities
13 and uniformly promote community-based education
14 outreach.

15 Secondly, we'd like to suggest that future
16 RFAs give functional integration greater emphasis to
17 include extension. RFAs need to be written so there
18 are clear opportunities to include education and
19 extension outreach.

20 In addition to Cooperative Extension's
21 ability to provide direct application of research
22 findings, e- Extension, our national extension web

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

122

1 presence, can reach target audiences any time anywhere
2 with online educational opportunities.

3 AFRI should continue to support e-Extension
4 communities of practice and recognize those as a
5 valuable element for the outreach education of all AFRI
6 components.

7 Given the size and long-term nature of the
8 CAPs which you've already heard several times this
9 morning, we look at the full integration of research,
10 education, extension to ensure the success of
11 translating this basic research and science into
12 practice that's usable across our communities.

13 We encourage increasing the number of
14 extension professionals that are serving on review
15 panels. In 2010, only 14.2 percent of peer-review
16 panelists had any extension relationship or extension
17 experience. If panelists do not have a clear
18 understanding of the role and expertise of extension,
19 it is difficult to make informed assessment of what an
20 integrated proposal will actually do.

21 The agency needs to include a significant
22 number of professionals who have a hundred percent or

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

123

1 at least a major extension assignment. Several
2 extension faculty have split appointments with research
3 and can also add significantly to the value to a
4 thorough and fair proposal review process and we pledge
5 our support in trying to get qualified reviewers for
6 your consideration.

7 However, this will also help us expand and
8 strengthen extension components of the Foundational
9 Grant Programs. A strong foundation to solving
10 problems requires support for research, education, and
11 extension.

12 It is important that the Foundational Grant
13 Program be open and focused on supporting the
14 foundational elements of extension-type activities.
15 Extension is a critical part of the foundational
16 response to applying new science-based knowledge to
17 solving programs on the local level.

18 And, finally, we propose that AFRI provide
19 regional flexibility and more funding for planning
20 grants. Planning grants help teams prepare in advance
21 for submitting a major proposal and especially supports
22 the emphasis on an integrated approach for those

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

124

1 proposals where researchers and extension professionals
2 align at the project planning stage instead of a
3 component that is usually added on late in the process
4 to include an outreach and extension emphasis on the
5 project.

6 Earlier planning stage results in higher-
7 quality proposal submissions and position of funding
8 award projects for greater success. With many large-
9 scale projects, such as the CAPs, a quality proposal
10 cannot always be written within the period of time
11 between the release of the RFA and the deadline for the
12 proposals to be submitted.

13 More time is needed to build a multistate,
14 multidisciplinary, multifunctional team to fully
15 explore a quality response to the RFAs. Direct
16 experience in how AFRI is addressing the challenge area
17 of climate has shown how effective these planning
18 grants can be.

19 And, finally, I just want to thank you for
20 the opportunity to provide input on behalf of the
21 National Extension System. We greatly appreciate the
22 leadership that's provided through the National

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

125

1 Institute of Food and Agriculture and look forward to
2 our continued partnerships and collaborations as part
3 of AFRI.

4 MR. HOSTETLER: I'm Chris Hostetler. I am
5 the Director of Animal Science Research, National Pork
6 Board.

7 The mission of the National Pork Board is to
8 harness the resources of all producers to capture
9 opportunities, address challenges, and the safety of
10 our consumers.

11 To this end, the National Pork Board conducts
12 three main types of activities, those being demand
13 enhancement through development of foreign and domestic
14 markets. Most of you in the room would know about
15 pork, the other white meat, even though we have not had
16 that campaign for 10 years or more.

17 Can anybody name the current one? Be
18 Inspired. Thank you very much. Coming from our
19 National Pork Producer Council representative in the
20 middle of the room.

21 The other thing that we do, another activity
22 that we do is producer support through education and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

126

1 certification programs, and the final thing that we do
2 is we sponsor research in swine health, public health,
3 environment, animal welfare, and animal science.

4 These are our comments that we have to
5 submit. There are five of them.

6 Number 1. Research relative to swine
7 production and health has made significant progress in
8 recent years. However, there remains substantial
9 challenges to efficiently producing safe, affordable
10 pork to the consumer. These challenges will be met
11 only through cooperative collaborative funding efforts
12 between the USDA, academic institutions, the National
13 Pork Board, and the pork industry.

14 Collaborative funding projects have been very
15 fruitful in the past and it is supported by the pork
16 industry. This will require continued coordination of
17 research priorities in order to prevent overlap in
18 specific research areas.

19 Number 2. Research in animal health and
20 animal production doesn't fit very well into one of the
21 five core areas and therefore may limit access to
22 funding.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

127

1 There's no guarantee that funding for one
2 core area will automatically be available for areas
3 which are not funded. Additionally, ARS researchers
4 may have limited access to these funds.

5 We strongly suggest the creation of a sixth
6 core area specifically designed to address animal
7 health and production to ensure that animal agriculture
8 and the ARS researchers have access to funding.

9 Number 3. The Coordinated Agriculture
10 Programs or CAPs has provided a valuable resource in
11 some instances, has been very beneficial in achieving
12 desired outcomes. For example, the PERS CAP Project
13 has focused research on poor swine respiratory
14 reproduction and respiratory syndrome which is the most
15 economically devastating swine disease globally.

16 However, these CAP Programs -- there are
17 issues with the CAP Program as a model of funding for
18 smaller institutions and researchers who are early in
19 their career, being able to compete for funding and
20 then, additionally, administer grants of that
21 magnitude.

22 Additionally, as CAP funding for one

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

128

1 particular project ends, there should be a funding
2 model in place which would replace the CAP grant.

3 We strongly suggest that there be a
4 comprehensive review of this model of research funding
5 to assess the appropriateness of continuing this model
6 of funding.

7 Number 4. Funding opportunities within
8 Foundational Programs changes from year to year as
9 priorities within those programs change. There needs
10 to be a mechanism for ensuring continuity of funding
11 within the Foundational Programs so that researchers
12 can develop a clear line of research.

13 Number 5. Although AFRI is the extramural
14 funding program, we continue to see reduction in USDA's
15 intramural research funding. USDA research scientists
16 are an extremely valuable resource to the agriculture
17 research community and animal livestock.

18 We encourage AFRI to consider allowing ARS
19 scientists to compete as PIs for AFRI funding.

20 These comments are respectively submitted on
21 behalf of the nearly 70,000 pork producers of the
22 United States who would like to thank NIFA for the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

129

1 opportunity to share their comments and thereby
2 participate in the decision-making process for
3 establishing the 2013 research priorities.

4 Additional comments will be provided in
5 writing to the record in the effort to strengthen the
6 continued relationship between the National Pork Board
7 and NIFA.

8 Thank you.

9 MR. BEAULIEU: Good morning. My name is Bo
10 Beaulieu. It says Lionel but I go really by Bo, and
11 I'm the Director of the Southern Rural Development
12 Center and Professor of Rural Sociology at Mississippi
13 State University.

14 I'd like to make just a few brief comments
15 regarding the Foundational Program as it relates to
16 agricultural economics and rural communities.

17 I'd like to specifically identify areas which
18 I think could further elaborate or refine the portfolio
19 of investments that may be available in this area of
20 work.

21 I have four particularly I'd like to offer as
22 topics that might relate quite well.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

130

1 First of all, digital innovation,
2 applications, and implications. There are major
3 investments being made currently in broadband
4 infrastructure, particularly by the Rural Utility
5 Services, by the National Telecommunications and
6 Information Administration, by the Federal
7 Communications Commission, philanthropies, and a whole
8 host of other entities, and what we need is research
9 and extension work that is designed to understand the
10 people and place-based factors that are accelerating or
11 impeding the adoption and diffusion of broadband and
12 other digital technologies in rural America. This
13 would include understanding both the social and
14 economic benefits and costs of broadband to rural
15 people and rural places.

16 Particularly NTIA and Rural Utility Services
17 have a particular mandate to look at reaching under-
18 served and unserved areas and people. So we, I think,
19 as part of AFRI could really examine this because,
20 although as federal agencies that are investing in
21 broadband have no research or extension portfolio, so
22 we would provide a very important and complementary

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

131

1 activity to those federal investments.

2 The second area I want to offer for your
3 consideration is disaster and mitigation and response.

4 Being from the South, we face many, many
5 natural disasters but so have many of you in the
6 audience from different parts of the country. Natural
7 disasters have had a profound impact on communities
8 across the rural landscape.

9 We would propose an investment in research
10 and extension that could examine and guide community
11 resilience strategies that's needed. These would be
12 efforts that can advance the capacity of rural
13 communities to better respond to and to recover long-
14 term recovery from disasters.

15 We have a tremendous program within extension
16 called EDEN, Extension Disaster Education Network, but
17 it also will admit that the community development, the
18 community long-term recovery is something that they
19 really desperately need as part of their portfolio.

20 The third thing is regional development and
21 economic innovation. There's a host of federal, state,
22 and local entities that are promoting a focus on

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

132

1 regional development, especially a systematic effort to
2 identify and strategically invest in current and
3 emerging regional clusters.

4 Rural Development, Economic Development
5 Administration, HUD, EPA are all investing in this
6 work, but it's important for AFRI to focus attention on
7 the importance, value, benefits, and consequences of
8 such regional strategies for rural areas.

9 What opportunities do regional approaches
10 portend, as well, for entrepreneurships, small business
11 development, recruitment, attraction, business
12 retention, expansion? Having all those activities,
13 that federal line in efforts that add value to regional
14 clusters, is really critical.

15 And the fourth area that I'd like to share
16 with you is poverty and income inequality. Three-
17 fourths of all high-poverty economies in this country
18 are in non- metropolitan areas of the U.S.

19 Moreover, we've seen tremendous amount of
20 interest or concern about the growing income inequality
21 in America and this is really facing many rural areas,
22 as well.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

133

1 Research and extension efforts designed to
2 better understand the consequences of persistent
3 poverty and growing income inequality on the stability
4 and sustainability of rural communities is desperately
5 needed and we need that good science to be able to do
6 that and then the extension programs that can help
7 advance place- based solutions to poverty and income
8 inequality.

9 Thank you very much.

10 MS. BALDWIN: We have one adjustment to the
11 actual schedule. Rene Rosenbaum has indicated an
12 interest in submitting a written comment. Therefore,
13 we fill that space with our next speaker.

14 MS. EMERSON: Yes. I'm not Dr. Rosenbaum. I
15 am Janice Emerson, the Associate Acting Director for
16 the Center for Prevention Research at Tennessee State
17 University, and I would like to add to Dr. Steele's
18 comments a little bit different approach but the same
19 thought.

20 I'd like to applaud AFRI/NIFA's grants to
21 support the research, education, extension integrated
22 efforts to ensure that our advances that you all are

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

134

1 making in the knowledge brought about by your research
2 in plant science and nutrition really reach the
3 intended purpose which is better health for our
4 citizens.

5 To accomplish this actually, we need more
6 behavioral research into motivational issues that will
7 help to understand how to promote our current research-
8 defined USDA guidelines for better nutritional intake
9 for all citizens.

10 For example, you can answer this question, I
11 know. Are most Americans following the guidelines, the
12 current USDA guidelines? And very importantly for the
13 future, are parents following these nutrition
14 guidelines in feeding their children?

15 We only have to look at the very alarming
16 child and adult obesity rates in this country to answer
17 that question.

18 So how can we change that? Well, I'll give
19 you one example. I consider a very worthwhile funding
20 for research and education and extension cooperation is
21 there's the new Fruit and Vegetable Voucher that's
22 available for the Women, Infants, and Children

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

135

1 Supplemental Food Program that USDA funds. This is a
2 major policy improvement for this and will benefit this
3 low-income group of families only if they use it.

4 So, however, due to some educational and/or
5 cultural issues or lack of motivation simply to change
6 the way they might eat, are they going to use it? So,
7 therefore, my fifth point here is that behavioral
8 research to enhance the ability to motivate not only an
9 awareness of what would be better to eat but a real
10 concern by citizens to change their diet and that of
11 their children to a less processed, a more plant-based,
12 fresh, frozen, plant-based foods would be vital.

13 It's a major health indicator in our country
14 that's falling way behind other countries and that is
15 the obesity of our citizens. It's going to lead to
16 more life-threatening diseases and it is already in
17 younger and younger children which you all know.

18 Therefore, I would like to encourage and
19 applaud again AFRI/NIFA's efforts to increase and
20 support behavioral research and related extension
21 projects that ensure that the wonderful scientific
22 breakthroughs are actually doing what they are intended

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

136

1 to do and that is to improve the health of our citizens
2 in this country and that of the world and since I did
3 this at the last minute, I will submit better and more
4 well-rounded comments in writing.

5 Thank you.

6 MR. FOEGEDING: Hello. I'm Allen Foegeding
7 in the Department of Food, Bioprocessing, and Nutrition
8 Sciences at North Carolina State University.

9 I'm here representing that department and
10 also somebody who's received four grants from the NRI
11 Program in my career.

12 According to the Bureau of Labor and
13 Statistics, the U.S. food manufacturing sector accounts
14 for 1.5 million jobs in 2008 and in 2010, the Plunkett
15 Research estimated total food sales exceeding \$1.6
16 trillion in the United States.

17 As the U.S. economy continues to grow and
18 rebound, the State of North Carolina has identified
19 food manufacturing as a key economic engine. The food
20 manufacturing engine must continue to be primed with
21 research that allows for rapid response to societal
22 issues associated with the quality, healthiness, and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

137

1 safety of our food supply, and I would like to
2 emphasize those three pillars: quality, healthiness,
3 and safety.

4 For the past few years, AFRI Grant Programs
5 have maintained a focus on six priority areas, of which
6 food safety, nutrition, and health is identified as
7 one. While these areas address much food science
8 research capability, we encourage the recent call for
9 proposals to continue to take a food science focus in
10 addressing the following issues and delivering safe,
11 healthy, nutritious, and enjoyable foods, and this
12 should cover everything from fruits, vegetables, meats,
13 seafood, poultry, dairy, and all other commodities.

14 First, we need work on fundamental mechanisms
15 and external factors that influence the interactions of
16 molecules, super molecules, and their aggregates in
17 food ingredients and major structures. That's kind of
18 a goofy scientific food structure way of saying we need
19 to understand how the molecules come together to
20 produce the foods that we enjoy so much and why we
21 enjoy them.

22 The second is we need to look at new and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

138

1 improved technologies for the processing, both thermal
2 and alternative, and also for preservation,
3 characterization, and analysis of complex foods
4 matrices, based on conventional foods, and especially
5 foods, such as low sodium, low fat, low sugar, and
6 other categories that are going to pop up from time to
7 time. This presents a very big challenge on shifting
8 our traditional food supply to these foods with
9 decreased amount of these key components.

10 Third, we need to improve the function and
11 efficacy of nutrition -- excuse me -- of nutrients and
12 other dietary bioactives and this is how do we design
13 that into our foods?

14 Finally, fourth, we need to look at
15 innovative processing techniques, including
16 fermentations, to harness a biological approach to
17 processing.

18 We'd like to encourage the food safety area
19 to be more general in terms of organisms of concern.
20 For example, Alicyclobacillus is of concern to various
21 companies currently but that is the one of choice
22 today. So organisms may be of concern in a couple of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

139

1 years that are not currently being looked at.

2 Thus, it is important to have a program set
3 up that allows to not only focus on the micro-organisms
4 currently in vogue but allow for emerging pathogens.

5 On the area of obesity, we would like to
6 parrot what has been said before. We believe in a
7 multidimensional/multidisciplinary approach to this and
8 just to show you what other people are doing throughout
9 the world, here's a project called Satiety Control
10 Through Food Structures Made By Novel Processing. It's
11 a European project for four years and eight million
12 Euros. We have nothing close to that.

13 On the last area I'd like to cover is just
14 basically the program and how it deals with
15 researchers. So we would like to encourage the program
16 to establish awards and funding opportunities,
17 especially for young investigators. These young
18 scientists will mature and continue to educate and
19 develop the next generation of scientists.
20 Availability of young investigator awards will help
21 attract talented scientists into food and agriculture
22 and thereby allowing for a continuation of our academic

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

140

1 ranks.

2 If we look, for example, to the NIH, they
3 have award categories in research grants, RO1 Series,
4 career development awards, K Series, research training
5 and fellowships, TNF Series, and program project center
6 grants, the P Series.

7 While NIFA has some elements of these
8 approaches, awards that allow for a principal
9 investigator to take on a major scientific challenge
10 and be rewarded for continued progress toward a goal
11 are not currently presented.

12 The current system seems to be weighted too
13 much for research on short-term technology-oriented
14 research. A proper mix of programs would allow for
15 funding from mechanistic investigations to be
16 transformed into real- world solutions.

17 And before you go to lunch, I'd like you to
18 think of three things. Okay? So what are you going to
19 put into that decision of that food you put on your
20 plate? Well, I think you're assuming it's safe, right?
21 We're hoping for that. Okay?

22 So your next decision is going to be between

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

141

1 health and enjoyment. Well, wouldn't it be nice if it
2 wasn't a choice between the two, but when we look at
3 our food, we see tremendous amount of enjoyment and
4 tremendous amounts of health. So that's what I think
5 the goal of this program should be.

6 Thank you.

7 MS. BALDWIN: Before we break for lunch, I
8 want to make two quick announcements.

9 There has been some interest in individuals
10 wanting access to our wifi. If you meet me at the
11 Security Desk, I can walk you up to our IT and make
12 sure you get access to the wifi system here at NIFA.

13 And also, there were a couple of people that
14 were interested in maybe speaking this afternoon. We
15 do have five available spots. So if you see me or
16 Terri, let us know, we'll fill those spots.

17 Other than that, look forward to seeing you
18 guys back here at 1 o'clock.

19 (Whereupon, at 11:49 a.m., the meeting
20 recessed for lunch, to reconvene at 1
21 o'clock p.m.)

22 * * * * *

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

142

1 AFTERNOON SESSION

2 (1:02 p.m.)

3 MS. BALDWIN: Good afternoon and thank you
4 all for coming back on time. We're going to respect
5 your time and make sure we start in about a couple of
6 seconds.

7 I do want to offer individuals who spoke this
8 morning the opportunity to provide your comments this
9 morning because, as some of you were speaking, you
10 weren't speaking directly into the mike and so some of
11 that wasn't -- we weren't able to pick up. If need be,
12 I'll reach out to you directly, if we get the
13 transcripts back and we can't, but I do want to offer
14 that for individuals this morning. If you happen to be
15 reading off of notes, to please provide us a copy of
16 that electronically so that we can collate that into
17 our transcripts.

18 Thank you very much, and our first speaker is
19 -- are you ready? Come on up. She's ready.

20 MS. MA: Good afternoon, everyone. My name
21 is Li-Jun Ma. I come from University of Massachusetts
22 at Amherst, and this is my first year in the university

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

143

1 setting, actually, and I really appreciate this
2 opportunity to come here and share some of the results,
3 but before I speak, I actually have bigger things than
4 just come to this meeting and as one of the researchers
5 have benefit from this institute, I think personally
6 and also from my colleagues. We owe a big thanks for
7 many people here.

8 We all hear the challenges we are facing in
9 current economic situation but this funding agency have
10 been putting forward many interesting work and give a
11 lot of support. So particularly for many programmers,
12 program officers sitting in the audience, I think they
13 did extraordinary job. Thank you all for your hard
14 work.

15 I prepared a few slides but I was not allowed
16 to present that, but I still want to go through that
17 ideas. The idea I put forward is actually using an
18 example to make my point and the slides, there are 10,
19 actually I wanted to show is the banana industry.

20 The banana we're eating is called Cavendish
21 banana and about 50 years ago, that's not the variety
22 we eat. We eat called Big Mike. That is about 50

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

144

1 years ago. But somehow the disease called Panama
2 disease just wiped it out. Big Mike is really robust
3 and productive, very easy to manage, but once the
4 disease comes in, it wiped out the production of the
5 whole banana industry.

6 The pathogen causing this disease is one
7 called *Fusarium oxysporum* and so then the banana
8 industry will find a new banana variety called
9 Cavendish which we eating now to overcome the disease.
10 So the banana industry was able to revive but about the
11 '90s, then they find the Panama tree started to die
12 out, following very similar symptoms as the Panama
13 disease about 50 years ago.

14 People didn't believe that. They think if
15 the *oxysporum* is gone from this plant, and the more
16 basic research reviewed that, it's not exact but it's
17 still *oxysporum*. It's the cause agent of this disease
18 and then you're thinking about the pathogen starting to
19 evolve and create this sort of resistant fashion and
20 coming back to deal with the major crop and what's the
21 way we can handle it and so we're facing the new
22 challenge in how to deal with this disease.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

145

1 The main point for me coming is actually
2 about maybe more than 10 years ago, that's one program
3 funded through this agency, through the collaboration
4 from NSF. NSF/USDA microbial sequencing genome, genome
5 sequencing program, and at that time, this funding
6 agency was one of the strongest support to study
7 Fusarium genome project because the recognition is
8 that as a gene Fusarium, having causing disease in so
9 many different crops, and then the genome project was
10 supported and it's created such a viable collaboration
11 through all different kind of fields and produced
12 highly-yield results. It's very exciting.

13 So then we're looking back, say what did we
14 learn from genomic efforts is looking at the Fusarium
15 oxysporum. This pathogen caused this current banana
16 disease and one very interesting fundamental biology
17 phenomenon was observed there is the genome had been
18 parted into two parts. These two parts have very
19 different evolution origins.

20 The unique part we call them horizontal
21 transphoto-chromosomes contained the genes which are
22 determined the pathogenicity and the host specificity,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

146

1 and it seems like the two lines, one is the disease and
2 the other is a basic biological research, genomic
3 research, are totally separate.

4 Now once you bring the two actually, more or
5 less forced by your agency, let's think big, let's
6 transform what we learned from genomics to serve the
7 society and we bring the people from different fields
8 together. We find that actually is where we can find
9 the solution to solve this. We find specificity
10 factors, create this new disease agent, and there are
11 more viable exercises there.

12 That's my story. My point is we are in this
13 stage. Technology have been revolutionizing almost
14 every field. The sequencing is so cheap. Everybody
15 can do it. Do everybody comfortably do it? No. Not
16 just only the agriculture-related researchers feel a
17 little bit intimidated about the upcoming of technology
18 overall or the life sciences are facing this challenge.

19 So I would really encourage this agency do
20 the same thing and leading the front and propose
21 support of the genomic research.

22 The second point -- I know, I need to stop --

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

147

1 is where is the next generation scientists? Where do
2 they need to grab the genomics and learning by
3 informatics? I'm really hoping the agency will find the
4 means to support their efforts.

5 Last but not the least is I know the fabulous
6 work coming from the support from this agency.
7 Hopefully we'll see more public awareness and even as a
8 whole, the agency can promote more to promote the
9 science supported from your agency. I think one very
10 simple thing is sometimes a good work published was not
11 recognized from the funding agencies and it caused the
12 public awareness.

13 Thank you so much.

14 MS. DUDAREVA: My name is Natalia Dudareva,
15 and I'm a Distinguished Professor at the Department of
16 Horticulture and Landscape Architecture with courtesy
17 appointment in the Department of Biochemistry at Purdue
18 University, and my program was for many years funded by
19 USDA.

20 I appreciate the opportunity to make comments
21 today, and while AFRI had a plant biochemistry program,
22 this area of research is completely excluded from NIFA

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

148

1 Program despite 60 percent of funding is available for
2 fundamental research.

3 But, however, no progress in challenge areas
4 is possible without the fundamental understanding of
5 plant metabolism. We are lucky to live in the area of
6 sequence evolution. Today, sequencing of more than
7 3,000 genomes is already completed and sequencing of
8 more than 9,000 genomes is in progress. Sequences of
9 40 plant genomes are already available.

10 What did we learn from this information? We
11 learned that there is enormous proportion of
12 undiscovered genome content. Even in a small and the
13 most advanced genome, like E.coli, the function of 20
14 percent of genome is unknown. In plants, this number
15 is 70 to 80 percent.

16 What does it mean? It means that Arabidopsis
17 with the smallest plant genome, more than 18,000 genes
18 this is a known function, and almost half of them are
19 end court enzymes.

20 These numbers highlight not only the enormous
21 potential but also urgent need for research in the
22 field of plant biochemistry and gene function

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

149

1 discovery.

2 The lack of knowledge about function of
3 thousands of genes will prevent us from rational, I
4 repeat this work "rational" development of agricultural
5 plants with enhanced nutritional values, increased
6 productivity and fitness. It will also limit prospects
7 for explosion data for plant improvement.

8 Often biochemists cannot use biochemical
9 process in agricultural plants. However, the
10 fundamental understanding of metabolic systems,
11 biochemical pathways and their regulation, and, of
12 course, the diversity of plants will help to obtain a
13 comprehensive picture of plant metabolism and provide
14 information about its flexibility in the face of a
15 myriad of change in ecologies.

16 This basic knowledge will lead to an
17 understanding of the relationship of metabolism and
18 environment, the role of biotic and abiotic
19 environments in primary and secondary metabolism, and
20 the role of catalytic promiscuity in process of plant
21 adaptation.

22 Obtained knowledge will exponentially expand

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

150

1 our toolbox of available agronomic traits vital to
2 creation of more sustainable and desirable crops in the
3 face of global climate change, loss of natural plant
4 diversity, and expanding global population.

5 Understanding of plant metabolism will allow
6 us to create more cellular processes and to use these
7 models to predict plant behavior and the different
8 environmental conditions and as a result of metabolic
9 engineering.

10 We should remember that basic research has to
11 be ahead of time in order to make a foundation for
12 translational research. Lack of funding opportunity
13 for biochemical research should be addressed since it
14 will have substantial impact on training of future
15 plant biochemists.

16 This is very important point, as the present
17 generation of biochemists is close to retirement and
18 not many of them left, and the knowledge base in
19 classical biochemistry will be lost.

20 Thank you very much for your attention.

21 MR. HOLLYER: Ladies and gentleman, Aloha and
22 Mahalo for the opportunity to submit comments today for

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

151

1 AFRI.

2 My name is Jim Hollyer, and for the past 13
3 years, I have been the Project Director for
4 Agricultural Development in the American Pacific or the
5 ADAP Project, supported by special congressional funds
6 based at the University of Hawaii at Manoa.

7 We are a consortium of the Pacific Land Grant
8 Colleges, American Samoa Community College, College of
9 Micronesia, North Marianas College, University of Guam,
10 and the University of Hawaii.

11 The College of Micronesia has since evolved
12 into three unique institutions who shall now be
13 recognized as Palau Community College, College of the
14 Marshall Islands, and College of Micronesia Federated
15 States of the Micronesia.

16 Under our new leadership formation, the
17 Pacific Land Grant Alliance or PLGA, the University of
18 Alaska, Fairbanks, has joined us. Along with the
19 University of Puerto Rico and the University of the
20 Virgin Islands in the Caribbean, we are the most remote
21 land grant colleges in the entire system. For example,
22 Guam would take at least 18 hours to get here to this

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

152

1 meeting.

2 Funding is needed for work of these under-
3 served geographically-remote land grant colleges. Due
4 to cuts in congressional spending, ADAP will be
5 wrapping up its consortium work by early 2013. This
6 does not mean, however, that the U.S.'s outpost land
7 grants work is done.

8 Our children and adults, our farmers, our
9 agricultural-related processing businesses, our
10 environments, and our island climates have needs and
11 opportunities just as the 48 mainland states. We do
12 not have some of the resources of the larger land
13 grants but we can and will compete.

14 We have some suggestions on the way AFRI and
15 NIFA are run that will help us succeed in this more
16 competitive environment. Here are four ideas needing
17 serious consideration.

18 One. Grow the pie through departmental and
19 agency partnerships in D.C. While NIFA has expressed a
20 strategic trajectory more like NSF and NIH, it will
21 take time. In the meantime, if NIFA can join with
22 other agencies within USDA, as well as with other

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

153

1 federal agencies, in a common program format,
2 applicants can spend more energy on developing strategy
3 and partnership and less on rewriting proposals for
4 different formats.

5 For example, with childhood obesity,
6 collaborative grants with NIH and CDC on joint RFPs
7 will allow for larger amounts of money that could fund
8 a greater number of projects. This is especially
9 important now that the allowed overheads have gone up
10 eating into the amount of funds left to do the actual
11 work on the ground. It would have an added benefit of
12 streamlining reporting results critical to small
13 schools with limited resources and personnel.

14 NIFA wants land grants to work with more
15 partners and cover more integrated topics but this
16 request must be accompanied by larger budgets. NIFA
17 asks for partnerships on our side and we would ask the
18 same of
19 NIFA.

20 Number 2. Requests for proposals right size,
21 giving all size schools opportunities for needed work
22 in their community.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

154

1 One of the reasons ADAP started 24 years ago,
2 that there were few right-sized projects that were
3 applicable to Pacific-sized entities. Not every
4 project needs to be huge. RFP through AFRI should
5 include opportunity for a smaller tier of projects that
6 can be done by one or two smaller colleges, in addition
7 to larger projects designed for larger impact.

8 3. Make it easier and faster to compete. A
9 standard look of the RFPs and a standard Word template.
10 Within AFRI there are a number of project areas and a
11 number of national program leaders, like a large home
12 supply store, with each program being a unique part of
13 the store, plumbing, hardware, gardening, and each
14 program having its own manager.

15 But what if NIFA's NPLs got together and
16 formulated one RFP format that would highlight on the
17 first page the main features of the grant. For
18 example, is there a match requirement? Who is allowed
19 to apply? Does the proposal need support letters?

20 While all of this information is buried in
21 the proposal, it requires a lot of looking to see if a
22 proposal is a right fit for us.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

155

1 Similarly, one Word file with all the
2 sections delineated would be an enormous help as both
3 the writer and reviewer of proposals having to craft up
4 the look, feel, and organization of each proposal is
5 unnecessary and wastes time of faculty at all land
6 grant colleges.

7 4. Start the project clock at the right time
8 when award letters are received. Nothing is more
9 stressful than winning a grant and by the time the
10 award letter arrives, there are only nine months left
11 of a 12- month project. The clock should start when
12 the award letter arrives at the PI's institution to
13 allow for proper implementation.

14 To reiterate, we want to compete and we are
15 asking that the system be streamlined. We are not
16 asking for the bar to be lowered. Four areas for
17 consideration again: growing the funding pie with
18 federal partnerships, right sizing proposals, providing
19 attribute summaries at the top of each proposal, and
20 providing one simple Word template to make the entire
21 process easier, and, finally, starting the project
22 clock only when the award letter arrives.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

156

1 Thank you very much.

2 MR. RHODES: Hi. My name is Rick Rhodes, and
3 I'm the Associate Director for the Rhode Island
4 Agricultural Experiment Station and Rhode Island
5 Cooperative Extension, and I'm here representing the
6 Northeast Extension Directors.

7 As a representative from our Northeast Land
8 Grant Universities, we are pleased to be partners with
9 NIFA and in a real sense, our land grant institutions
10 are important R&D units to NIFA through the work of our
11 experiment stations and our suite of research labs.

12 Equally important, cooperative extension is
13 the educational, the engagement, and the marketing arm
14 of the land grant institutions. We provide community-
15 based programs that meet the critical needs addressing
16 problems that we face in our society, food production,
17 preservation of natural resources, adaptation, the
18 climate change, and addressing renewable energy, and we
19 do that by extending the very best research-based
20 knowledge to our stakeholders.

21 In short, cooperative extension ensures that
22 the broader impacts of our investigations are realized,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

157

1 and to that end, I'd like to extend four
2 recommendations and reflections.

3 One. I'd ask NIFA to align AFRI priorities
4 with local, state, and multi-state needs. For
5 instance, the Northeast is the home of 20 percent of
6 the population of this country and yet only six percent
7 of the land mass. Those attributes pose a unique set of
8 agricultural food system challenges and opportunities.

9 The proximity of the urban corridor,
10 Washington, Baltimore, Philadelphia, New York, and
11 Boston, within Northeast food sheds then requires
12 innovation and vision to address these regional
13 agricultural needs, and to that end, we ask NIFA then
14 for funding opportunities then that reflect the
15 regional challenges and opportunities.

16 2. We appreciate that the institute, through
17 AFRI, recognizes the value of integrated efforts.
18 Education through extension is a key element to
19 translating and moving university-based research to
20 stakeholders.

21 We ask that integrated RFAs emphasize
22 cooperative extension's role in providing

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

158

1 transformational education. Cooperative extension is
2 road-tested and the community penetration of
3 cooperative extension and the commitment to consistent
4 public engagement poses extension to successfully move
5 then the results of our research efforts to our
6 stakeholders, to enhance knowledge, to positively
7 change behavior, and to improve the human condition of
8 our communities, irrespective of the challenge.

9 3. Peer review provides an expert base to
10 evaluate proposals. You've heard earlier a
11 recommendation to bring on extension personnel to
12 review proposals and we would echo that recommendation.

13 The incorporation of cooperative extension
14 specialists on review panels is key to determining the
15 efficacy of the outreach effort and we look forward
16 then to our extension specialists providing their
17 expertise to evaluate proposals.

18 You've heard speakers compliment NIFA and
19 I'll do the same on the big CAP grants and the smaller
20 foundational grants. We extend our gratitude for those
21 opportunities but ask that NIFA consider balancing the
22 portfolio to ensure that adequate funding is directed

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

159

1 to both problem-solving strategies, the big multi-
2 million dollar grants as well as the smaller
3 foundational grants.

4 In summary, a robust agricultural business
5 enterprise is essential to the well-being of all
6 Americans and the security of this country. New
7 knowledge and new technologies are only valuable with a
8 robust mean to move the innovations from the benches to
9 application and use by our stakeholders and cooperative
10 extension is that means for educating and engaging our
11 stakeholders and transforming our community.

12 Thank you.

13 MR. SWANSON: Hello. First of all, I'd like
14 to thank AFRI for allowing me this opportunity to
15 speak. It's fantastic to be here.

16 My name's J.D. Swanson. It's John David in
17 the program but J.D.'s just a lot easier to spell. I'm
18 an Assistant Professor at Salve Regina University in
19 Newport, Rhode Island. It's primarily an undergraduate
20 institution.

21 Moreover, I'm also currently the Secretary
22 for the U.S. ROSEXEC Genetic, Genomic, and Breeding

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

160

1 Executive Committee. The U.S. ROSEXEC is made up of 19
2 nominated and elected individuals from industry,
3 government, and academia and we actually represent all
4 of the U.S. public breeding programs that are in
5 existence.

6 In addition, we have four international
7 liaisons. So together, these 23 individuals represent
8 almost the entire ROSEXEC crop community which includes
9 apples, peaches, pears, raspberries, blackberries,
10 cherries, and others. Okay. So we're looking at
11 basically most of the tree fruit crops and most of the
12 cane fruit crops.

13 We have five mandates. Okay. The first one
14 is to serve as a communication coordination focal point
15 for the U.S. ROSEXEC Genetics, Genome, and Breeding
16 Communities.

17 Number 2. To define research priorities
18 based on input from both the industry and research
19 communities.

20 Number 3. Facilitate scientific integration
21 and foster dynamic research teams.

22 Number 4. Promote research priorities.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

161

1 Number 5. The coordination of education
2 effort from research communities to industry and
3 public.

4 ROSEEXEC's crops and, for that matter, all
5 specialty crops are an important system and really
6 require continued support from AFRI, especially through
7 the SCRI Program.

8 This can be sort of measured in two ways or
9 thought of in two ways. First of all, food security
10 supply can be thought about in another two ways. First
11 of all, caloric intake, right, the number of calories
12 you shove in your face, simple as that. Stick a lot
13 in, food's good, right?

14 But, Number 2, the one that's often neglected
15 is the idea of the variety of food that's actually
16 available. It's the variety that also becomes
17 important and so the benefits of having available
18 affordable nutritious fruit is vital.

19 To this end, ROSEEXEC's crops have very unique
20 biologies, as well. Across similar genomes, we have
21 the development of the unique fruit types. Think of
22 the difference between a peach, a strawberry, a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

162

1 raspberry, and so forth. Think of the underlying
2 biochemistries in each of those and how little we
3 understand right now.

4 They also require agricultural needs. It's a
5 standing joke in order to transform peach, for example,
6 that we need to get a crane and a pool full of agri-
7 bacterium. Think of that one. God, no one laughed. I
8 was up all night wondering how I was going to work that
9 one in.

10 The ROSEXEC's community, in partnership with
11 AFRI and others, have come a long way. When I first
12 joined the ROSEXEC community in 2006, there was little
13 to no genomic information and now we have complete
14 genomes of peach, apple, and strawberry, three pillars
15 of tripod. Using those as scaffolds, what we have is
16 raspberry, cherry, and pear are on the horizon.

17 We've also initiated the assessment through a
18 CAP grant actually using or assessing a population
19 diversity and actually integrating molecular markers.

20 So, in short, what we have right now is we
21 have a phone book. Okay? We have tools in place. Our
22 next goal is to translate that phone book into

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

163

1 developing a street map and so what this includes is
2 this includes two levels, as we kind of see it.

3 The first is the development of the
4 implementation of molecular markers. Currently, it
5 takes anywhere between 10 to 15 years in blackberry, a
6 two-year crop, to get it from literally making a
7 selection to getting it out into the marketplace.

8 If we go and we relate molecular markers,
9 getting those integrated into programs, we'll be able
10 to increase the process significantly, giving us
11 bigger, more nutritious fruit in a more timely manner.

12 Our street map also requires the fundamental
13 understanding of what genes do. We don't know that.
14 We can have all of the genomic information in the world
15 but if we don't understand what they do, it's not worth
16 it.

17 What we also need to do is we need to know
18 how these genes work, how they extend to the phenotype,
19 and how this makes a more desirable fruit to the
20 consumer. So to this end, I'd first like to thank AFRI.
21 It's only been through their support and their help
22 that we've been able to create better fruit quality so

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

164

1 far and what we'd like to do is we'd like to also
2 applaud them for their large coordinated grants and,
3 while they are important, we must also never ever
4 neglect the small and single-to- few investigative
5 grants.

6 In addition, we'd like to also request that
7 RFAs be released in a consistent and timely manner.
8 This gives us, in which case it can sometimes take us
9 six months or so to get something together, it allows
10 us to get it together in a timely fashion.

11 The last one is funding needs to be increased
12 so that all outstanding proposals can be funded. Okay?
13 It's getting that pie bigger and I know that's tough
14 but if you hear it from the community, it's important
15 for us to relate that to you.

16 Finally, the last head, as a professor at a
17 small undergraduate institution, I have 2,000 students,
18 okay, in my whole school. It's really important to
19 recognize the importance of training that next
20 generation of scientists at the undergraduate level.
21 Getting those as a conduit into the larger graduate
22 schools is vital.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

165

1 My hope, my dream is for the day that where a
2 child will be able to afford more affordable, more
3 nutritious, higher-quality fruit that little Timmy will
4 be able to select instead of his bag of sweets.

5 Thanks very much.

6 MS. PADULA: Good afternoon and again thank
7 you to the organizers of this session for the
8 opportunity to be here this afternoon.

9 I am Graciela Padula, Research Professor in
10 the Department of Food Science and Human Nutrition, the
11 University of Illinois, and also the Illinois Station
12 representative to the Multistate Project, NC-1023,
13 Thermal and Alternative Processes for Food.

14 On identifying concerns and opportunities in
15 agriculture and food systems, an important demographic
16 is the increasing longevity of the population. This is
17 excellent news and testimony to our success as a
18 society.

19 However, in a time of high medical costs, it
20 is pertinent to focus on the role of foods to sustain
21 health and thus ameliorate our dependence on medical
22 treatment for the present and future generations.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

166

1 This afternoon, I would like to highlight the
2 need for increased support for the Foundational
3 Program, specifically food engineering research and its
4 impact on nutritional quality of foods.

5 Food engineering is the branch of engineering
6 that focuses on the processes that transform
7 agricultural products into ingredients in foods. To
8 the every-day question, what are we having for dinner,
9 we'd like fruits that would replenish our energy, that
10 are safe and cause no harm, that are well-tasting,
11 nutritious, and easy to digest, that will not lead to
12 chronic disease, such as diabetes or obesity, that will
13 enhance our body's ability to fend off cancer, that
14 will contribute to our wellness in the short and long
15 run, that will enhance our ability to stay independent
16 and alert, to learn and to contribute, that is
17 affordable.

18 Our food supply, though secure and the safest
19 in the world, still falls short of expectations. Food
20 outbreaks continue to make headlines. Obesity has
21 reached epidemic proportions. Diet-related chronic
22 disease is on the rise, and foods are not fulfilling

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

167

1 their potential to protect us from cancer and age-
2 related disorders.

3 It is already an AFRI priority and challenge
4 area to improve nutrition and health. Programs and
5 function and efficacy of nutrients technologies to
6 expand the shelf life of fresh produce and food
7 technology are funded in previous years.

8 This is a recommendation to support research
9 in food engineering as a method to systematize and
10 deliver knowledge in the form of nutritionally-enhance
11 more stable and enticing food products. New scientific
12 breakthroughs and technological developments are needed
13 to retain and deliver nutrients and this is preventing
14 biochemicals and minimize flavor losses, and to reduce
15 the need for high amounts of sugar and salt in our food
16 products.

17 Food engineering studies the physical states
18 and interaction of foods from the macro to the nano
19 scale. An emerging threat grant is food materials
20 science which focuses on the structure of foods and its
21 impact on quality.

22 To achieve this purpose, fundamental research

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

168

1 is needed on food structure characterization at
2 multiple line scales and understanding its impact on
3 nutritional and sensory qualities of food, food
4 polymers behavior and the relation to freshness and
5 stability, and also better understanding of the
6 intestinal absorption processes to improve
7 digestibility and deliver nutrients and biochemicals.

8 Increased USDA investment on fundamental
9 research is critical to develop the knowledge and know-
10 how needed to realize the life-enhancing potentials of
11 our food supply. Our health and well-being depend on
12 it.

13 Thank you.

14 MS. ROSENBERG: Hi. I'm Allison Rosenberg.
15 There was a switch in the Agenda.

16 I'm Allison Rosenberg. I am the Assistant
17 Vice President for Government Relations at Iowa State
18 University, based here in Washington, D.C., and I also
19 happen to serve as the APLU Task Force Leader for
20 Agricultural Appropriations and the Liaison from the
21 Government Relations folks to the APLU's Budget and
22 Advocacy Committee.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

169

1 So my perspective is somewhat different than
2 most of what we've heard today. I'm not a technically
3 proficient person in the field but it is my job and my
4 duty and my passion actually to work on behalf of
5 funding for agricultural research and extension.

6 I'm here today obviously speaking on behalf
7 of ISU and, in particular, the Dean of the College of
8 Ag and Life Sciences Wendy Wintersteen and our Vice
9 President for Extension Cathann Kress.

10 So my comments will be at a much macro level
11 than some of the scientists you've heard from.
12 Fundamentally, I think the first point I would like to
13 emphasize is how critically important it is to securing
14 the base and capacity funds and particularly Hatch and
15 Smith-Lever.

16 In states from North Carolina to Iowa to
17 California that have seen phenomenal budget cuts to
18 public and land grant universities, the capacity funds
19 remain our critical tool for planning ahead, hiring and
20 maintaining the kind of faculty we need to address
21 urgent emerging problems, such as colony collapse or
22 others, but also then to respond to competitive

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

170

1 opportunities and to in fact transfer technology to
2 producers and the citizens.

3 So the importance of capacity funding for
4 supporting the people of this enterprise is essential
5 and, of course, agriculture research is a place-based
6 enterprise. Its land requirements, its animal
7 requirements are essential. It's a place-based
8 research undertaking, and the capacity funds allow us
9 not to just hire and keep faculty on staff but, of
10 course, to hire all those people who manage the land
11 and the animals. So it's critical in that regard.

12 I would be remiss if I didn't give equal
13 emphasis to the importance of capacity funding for our
14 extension and outreach professionals who do technology
15 transfer and who are in the field getting feedback from
16 the citizens to help us stay apprised of their needs.

17 Cathann made the point to me when I was
18 chatting with her yesterday that, as we become
19 increasingly urban, and she pointed out that even in a
20 state like Iowa, our population is becoming more and
21 more dense in a small number of counties and districts,
22 so as people become more dense in certain locations,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

171

1 it's critically important that we be out in the field
2 helping them maintain awareness of the importance of
3 the agricultural sciences.

4 Secondly, beyond capacity, of course,
5 competitive funding is essential and I'm a relative
6 newcomer to the ag field. I've been with Iowa State
7 five years. Before that, I had spent a lot of time at
8 schools with large medical institutions and I will tell
9 you that I have become passionate about this need to
10 find a new way to convey our point to the nation that
11 it's unconscionable that we invest so very little in
12 these important agricultural sciences, especially when
13 we invest \$32 billion in health agencies to address
14 problems like obesity which have an obvious
15 agricultural component.

16 Now the President's budget request for AFRI
17 is excellent. For those who forget, his budget request
18 was excellent last year and we lost those funds up on
19 the Hill. So we are going to have to do a better job,
20 and I'm not speaking to the agency now so much as to
21 the community, we're going to have to do a lot better
22 job up on the Hill this year to ensure that we stave

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

172

1 off what could be the draconian cuts.

2 For those who follow the ways of Washington,
3 if in fact we do go through this sequestration, NIFA's
4 top line would be by eight to 10 percent from its
5 current funding level and, in fact, as you all know,
6 the 2008 Farm Bill had four mandatory lines totaling a
7 \$129 million and there's no indication that those
8 dollars will be present when they do a new Farm Bill
9 this year.

10 So we stand to see a \$129 million drained
11 from our system. Again, the thought that we will
12 succeed in getting Congress to redirect those funds to
13 our research enterprise is a long shot. It's a stretch
14 in this environment.

15 So I think what I want to conclude with is
16 simply to say, as you all, I know, already believe,
17 agriculture science is not rocket science. It's a lot
18 more complicated than rocket science and it's a lot
19 sexier and I think that we advocates here in Washington
20 need to find a way to make our message sell better
21 through emphasizing and bringing home the importance of
22 agriculture to every human being.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

173

1 Thanks.

2 DR. GLENN: Good afternoon. I'm Dr. Barb
3 Glenn. I'm Vice President for Science and Regulatory
4 Affairs with CropLife America. So I'd like to say
5 hello to the AFRI management team. CropLife America is
6 very pleased to submit comments today.

7 Some of you may not know about CLA. We are
8 the not-for-profit trade organization. We represent
9 the nation's developers, manufacturers, and
10 distributors of crop protection products, all the plant
11 science solutions, including fertilizer and seed, but
12 most notably focused on pesticides, which we articulate
13 as crop protection products, but what we're talking
14 about here are herbicides, fungicides, and
15 insecticides.

16 CropLife America supports increasing public
17 funding for food and agricultural research, education,
18 and extension in USDA. We always have and we always
19 will. These research programs and extension and
20 education programs are highly valuable technologies for
21 modern ag. They provide those and they also provide a
22 technically-skilled workforce for the future of ag.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

174

1 In concert with the National Coalition for
2 Food and Agriculture Research, CLA commends the Obama
3 Administration for requesting a significant increase,
4 we hope, for the AFRI Program, as noted by my previous
5 speaker, for Fiscal Year 2013. The President's request
6 of 325 million is an important step toward reaching the
7 fully-authorized level of \$700 million for AFRI.

8 I'd like to start by mentioning a few
9 benefits of crop protection. Agriculture, of course,
10 remains one of the country's biggest economic drivers
11 and we feel crop protection products, we know growers
12 agree, are the foundation of the U.S. successful
13 agricultural system.

14 Number 1. Crop protection obviously helps
15 farmers improve agricultural productivity, contributing
16 to increases of 20 to 50 percent, and they are a
17 valuable production tool for high-quality food,
18 contributing to consumer health and nutrition.

19 The use of crop protection products is highly
20 regulated by the EPA to ensure the safety to users and
21 consumers and also to reduce environment impact. Only
22 one in a 139,000 crop protection products makes it from

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

175

1 the laboratory of our members to farmers' fields and,
2 indeed, our recent report notes that it costs over \$250
3 million to do R&D and register just one new crop
4 protection product and it takes an average of about 10
5 years. So by the time this product is available to
6 growers, the label is the law and it's a safe product.

7 In addition, crop protection's benefits
8 extend way beyond agriculture. For example, crop
9 protection contributes to a reduction of fossil fuel
10 use by our estimate of 558 million gallons per year and
11 I'd like to commend to you our recent report on the
12 economic contributions of the use of crop protection
13 products. I'd be happy to get you a copy.

14 In addition, about 36 percent of the total
15 value of field crop production is made possible with
16 the use of crop protection products with almost half of
17 the states earning over a billion dollars each in crop
18 value.

19 Finally, crop protection products provide a
20 48 percent savings in overall grocery bills to a family
21 of four in the United States. Who knew that? I did
22 not.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

176

1 With respect to research, education, and
2 extension, we'd like to begin by expressing our
3 appreciation to NIFA. First of all, CLA commends
4 NIFA's leadership on invasive species issues in noting
5 that, and I quote from a recent national program
6 leader, "pests are an invasive species and represent
7 one of the most serious economic, social, and
8 environmental threats of the 21st Century with economic
9 losses estimated at a \$137 billion per year."

10 Notwithstanding the expert work of this core
11 team of national program leaders, we urge the hiring of
12 yet again an additional expert, national program
13 leader, following a recent retirement from this super-
14 powered team.

15 Number 2. CLA supports the AFRI Programs
16 that were identified, I believe, beginning in FY '12,
17 someone can correct me, but they include foundational
18 programs, too, that are key to our members, controlling
19 weedy and invasive plants and insects and nematodes.

20 We'd also like to emphasize that investment
21 in research on crop protection is critical to train
22 students who are going to become the future experts and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

177

1 leaders in the crop protection industry.

2 Number 3. CropLife America supports the
3 regional IPM management centers and we appreciate the
4 increase in funding that they achieved recently.

5 Number 4. CLA strongly supports the IR-4
6 Program and, as is noted in FIFRA, its execution gives
7 growers benefits with pest control tools that are more
8 quickly approved for U.S. production of a wide variety
9 of specialty food crops that are in demand, indeed, by
10 consumers, and I'd like to commend to you -- thank you.
11 I got the stop sign. This recent Roundtable Report in
12 which IR-4 successes were focused on through a crop
13 grouping concept.

14 Finally, CLA supports NIFA and AFRI and we
15 look forward to working with you in the future as we
16 continue forward to provide innovation to American
17 agriculture.

18 Thank you very much.

19 DR. MEHLENBACHER: Hi. My name is Dr. Shelly
20 Mehlenbacher, and I'm representing the National Pork
21 Producers Council.

22 The National Pork Producers Council is a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

178

1 national association of 43 state producer organizations
2 that represents the federal and global interests of
3 67,000 U.S. pork operations located throughout the U.S.

4 The U.S. pork industry supports more than
5 550,000 domestic jobs and generates more than \$97
6 billion annually in total U.S. economic activity.

7 Research has fueled a significant progress
8 pork producers have made in efficient production of a
9 safe, wholesome, and economical protein source.

10 Although the pork industry has made great strides, we
11 continue to face production and disease challenges and
12 we count on USDA as well as industry-funded research to
13 help us address these challenges.

14 There have been significant changes in the
15 USDA Competitive Grants Programs in the last few years
16 and we appreciate your conducting these sessions as you
17 evaluate those changes and work to meet stakeholder
18 needs.

19 From the pork industry's point of view, among
20 our top priorities is the addition of animal health and
21 production as one of AFRI's high-priority issues. The
22 current issues, bioenergy, global climate change,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

179

1 global food security, nutrition and health, and the
2 food safety, do not provide a logical fit or the
3 emphasis needed for animal health and production
4 research.

5 The Coordinated Agricultural Programs Grants
6 have provided valuable resources to address significant
7 research topics. We appreciate the impact that the
8 Porcine Reproductive and Respiratory Syndrome CAP
9 Projects have had in helping the pork industry control
10 this devastating disease.

11 We would encourage the agency to do a review
12 of lessons learned from the CAP Programs, including the
13 ability of smaller universities and younger faculty to
14 compete for this funding, sustainability of funding to
15 see projects through to completion, and overall success
16 of this funding model.

17 While much of the emphasis of AFRI in the
18 past few years has been on the CAP Projects within the
19 core priority areas, the pork industry has concerns
20 about the narrowed focus within the traditional
21 Foundational Programs. These program areas, which used
22 to have broad calls for proposals that addressed a wide

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

180

1 range of industry needs, have significantly narrowed
2 the priorities of each call.

3 As a result, we risk losing research on
4 important priority areas that are not included in these
5 calls. In addition, if these calls are limited to
6 narrow priorities and priorities are revised each
7 funding cycle, there is no continuity of funding from
8 year to year. This diminishes the development of
9 sustainable research programs within our universities.

10 Although AFRI is the extramural funding
11 program, we continue to see reductions in USDA's
12 intramural research funding. The USDA research
13 scientists are a valuable resource to the agricultural
14 research community and we encourage AFRI to consider
15 allowing ARS scientists to compete as PIs for AFRI
16 funding.

17 We commend AFRI's commitment to not only
18 funding research but also realizing the importance of
19 translating and delivering research results. The
20 integration of education and extension has provided
21 value to the research funded by AFRI. The continued
22 funding of the Higher Education Challenge Program helps

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

181

1 to build future research capacity to meet industry
2 needs.

3 Thank you for the opportunity to share these
4 comments. The pork industry looks forward to working
5 collaboratively with USDA to strengthen agricultural
6 research.

7 Thank you.

8 MS. BALDWIN: For those of you paying close
9 attention to our Agenda, you'll notice that Dr. Allen
10 went earlier today but don't worry, I filled that spot.
11 Come on up.

12 MR. ANDERSON: Hi. I'm Karl Anderson,
13 Director of Government Relations for the Agronomy,
14 Crop, and Soil Science Societies. However, today, I'm
15 here representing the views of the Crop Science Society
16 of America.

17 I want to start by saying that we appreciate
18 this opportunity to provide input into the development
19 of Fiscal Year 2013 AFRI solicitations.

20 CSSA represents over 5,500 crop scientists in
21 academia, government, and industry. Crop science is a
22 highly-integrative science employing the disciplines of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

182

1 conventional plant breeding, transgenic crop
2 improvement, plant physiology, and cropping system
3 sciences to develop improved varieties of agronomic
4 turf and forage crops to produce the food, feed, fiber,
5 and fuel for our world's growing population.

6 I've a hand full of points I'd like to make
7 today. The Crop Science Society of America is
8 concerned that AFRI, with its limited budget, has
9 shifted too much in the direction of large awards and
10 big projects at the expense of smaller basic discovery
11 projects with individual investigators or small teams.

12 Although large projects have several
13 advantages, including bringing communities together to
14 take on grand challenges, without significant increases
15 annually in funding toward achieving the \$700 million
16 authorized level, there's a need for greater balance.

17 Consequently, we'd like to see a new mix of
18 larger and smaller proposals evaluated to ensure that
19 new basic scientific discovery in agriculture
20 continues.

21 You know, we also feel that we're concerned
22 that there's not enough funding going to the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

183

1 Foundational Research Program and we would like to see
2 a greater percentage of the AFRI budget directed to the
3 Foundational Program.

4 We would also like to see and believe that
5 AFRI should fund more exploratory but potentially
6 transformative work than it currently does.

7 Also, annually restricting the range of
8 topics or having limited rotating topics has resulted
9 in the unintended consequence of synchronizing grant
10 cycles which severely limits PI program funding
11 opportunities for long periods of time, interrupting
12 continuity and progress in the research.

13 And, lastly, we would like to see greater
14 attention focused on the plant-animal interface and
15 nutrition and would appreciate the AFRI Program
16 considering that in their solicitations.

17 Once again, I appreciate the opportunity to
18 provide our comments and look forward to seeing the
19 solicitations.

20 Thank you.

21 MR. YOUSSEF: Good afternoon, everybody. My
22 name is Mohamed Youssef. I'm from North Carolina State

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

184

1 University. Also, I'd like to make a correction. I am
2 not representative of the Research Administration. I
3 am a faculty member at the Biological and Agricultural
4 Engineering Department.

5 So I'm going to start by thanking AFRI,
6 thanking NIFA for inviting me for this opportunity to
7 provide some feedback. I'm going to provide
8 elaborative comments in written form but I would like
9 to highlight two aspects.

10 First, I have been successful getting a
11 proposal funded in the last round in the Foundation
12 Program. So I'm going to address two points. One is
13 in the award process from the perspective of the
14 researcher or the engineer.

15 It takes a lot of time and effort to submit a
16 proposal to this program and the time and effort grows
17 exponentially if we're going from the Foundational to
18 the CAP Program.

19 I would like to see the screening process
20 through the letter of intent to be more effective. I
21 don't want to say to weed out the proposals that do not
22 have the likelihood of funding in this stage. I have

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

185

1 to admit that I have not seen a colleague of mine in
2 the department or in the college that I am working on
3 that got declined, his or her letter of intent got
4 declined.

5 However, I have the experience of submitting
6 several proposals with comments back that the proposal
7 high priority but not funded. So this is a very
8 important point to take.

9 We really appreciate the researchers. We
10 spend a lot of time and effort in preparing these
11 proposals. So this is one comment.

12 The second is about the CAP and the
13 Foundational. It is not prearranged, this comment and
14 the previous comment, but, really, we really need to
15 revisit the scope, the size of the CAP Projects. I
16 have been involved in two unsuccessful attempts, over
17 10 faculty members, a real diverse group. We were
18 seeking more than \$5 million. We spent a lot of time
19 but basically things are not really that -- it doesn't
20 work this way with the researchers.

21 We cannot get together in a very short period
22 of time people from different disciplines and plan for

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

186

1 a proposal, a successful proposal in a couple of months
2 or three months or so, and the outcome, my share was
3 about \$300,000. The fund that I got from the
4 Foundational as the PI was \$480,000.

5 So if the Foundational Program, if we say,
6 okay, in our minds, we are thinking within a system
7 approach, my work will be regarded as one brick in a
8 building that we are trying to build. We can achieve
9 some of the things that we can do with the CAP Program
10 with kind of the Foundational Program, as well, if we
11 are able to convey this message clearly to the
12 researchers that basically you need to link your work
13 towards the achieving something that basically the
14 whole system approach.

15 I just went through this budget and I could
16 see the word "sustainability" in about three or four
17 areas, the climate change, the bioenergy, and food
18 protection and so on. So we are all working towards
19 producing crops, producing food and feed and fiber in a
20 sustainable way, protecting the environment, and adapt
21 to the agricultural system, so we can achieve this by
22 every researcher working on his or her field, and let

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

187

1 the communication and the collaboration be kind of more
2 organic and normal way and develop, not having between
3 \$500,000 or \$10 million project.

4 The other comments, the technical comments
5 that relate to my area of expertise I will provide it
6 in the written format.

7 Thank you.

8 MR. ZHANG: Good afternoon. I'm the last
9 speaker before you want a break, so I will be very
10 brief.

11 My name is Daowei Zhang. I'm an Alumni
12 Professor and also George W. Peake, Jr., Professor of
13 Forest Economics at Auburn University. My area of
14 teaching research and the extension, all three, is in
15 the area of nature results, management, and policy,
16 especially in forest economics and policy.

17 I appreciate the invite and this opportunity
18 to comment. As a benefactor of NIFA/AFRI funding as a
19 professor, I feel obliged to come. I feel sorry I
20 didn't come for the last couple years and I would like
21 to express my gratitude to the agency and to all the
22 hard work you have done.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

188

1 Your agency funded me 40 percent of my
2 extramural research funding. The other 40 percent is
3 coming from U.S. Forest Service and 20 percent from
4 everywhere else.

5 I have four general comments. Number 1. I
6 would like to see the terms "forest, forestry, fiber,
7 water, natural resources" to be more visible in the
8 future RFPs. I have lots of colleagues and good
9 friends in agricultural research, agricultural
10 economics, but the forestry community feels that when
11 we read the proposals, those are not visible, those
12 terms. They want to know if they should write a
13 proposal or not. Those are the comments like during
14 lunch and during the break, this type of comment.

15 The second comment is I'd like to echo the
16 sentiment that was presented by one of the speakers
17 this morning that science is just one pillar of the
18 three legs. We need a policy and politics and
19 economics.

20 I appreciate AFRI continue and had to have
21 and strongly support the Market and Trade Program. Now
22 it's called Economics of Market and the Government.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

189

1 Well, couple of years ago, that program, the
2 funding was merely for the whole country \$2 million,
3 was \$2 million. I don't know how much this year, the
4 past year, but \$2 million for the whole country as
5 market and economic development is not enough.

6 My third comment is I swear I have not
7 communicated with my neighbors my support for the
8 agency to strike a balance between the Challenge Grant
9 and the Foundational Grant, the big grant versus a
10 standard grant.

11 There's no doubt multidisciplinary projects
12 are needed but a lot of researcher projects are
13 individual- driven. I have written, as the previous
14 speakers, different type of proposals and there's a
15 humongous amount of transaction costs involved in
16 writing these proposals. If you do not get, then you
17 spend two or three months of time, I wouldn't say
18 wasted but it's very frustrating.

19 Also, my effort is heavily relied on somebody
20 else. I could do my best in my part but if my partner,
21 for whatever reason, he might have a family problem, he
22 might have stress, he might be doing lots of teaching

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

190

1 or for whatever personalities, that part of the
2 proposal is not very good and the proposal is not going
3 to get funded. Anyway, I like to see the balance on
4 that.

5 My final comment is that I like to see little
6 bit more diversity in more disciplines in the competent
7 panel membership. In the panel I have served, this is
8 nothing wrong, okay, but I see lot of agricultural
9 economics which are production-dominant. I mean, they
10 are the demand side, as well. There is results
11 economics, environmental economics, forest economics.
12 I'd like to have all of those.

13 Also, I like to see more economics scientists
14 in the integrated proposal panels and so on and so
15 forth.

16 In conclusion, I applaud NIFA's effort in
17 doing this solicitation of stakeholder input and I will
18 commend the agency for their leadership in agriculture
19 and forestry research. I look forward to see a
20 stronger
21 NIFA.

22 Thank you.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

191

1 MS. BALDWIN: And with that, we are up to our
2 first break. We'll be back here in this room at 2:15.
3 There's still coffee available. Hopefully you guys are
4 doing decaf in the afternoon but regular's there, also.

5 (Recess.)

6 MS. BALDWIN: While we're waiting for people
7 to gather their things and their seats, just a little
8 bit of an update. We have decided to add in 20 minutes
9 of question and answers from 2:50, about 2:50 until
10 3:10. So if you have any pressing questions, all of our
11 principals will be here, deputy directors, assistant
12 directors, and they're willing to open the mike up for
13 question and answers for about 20 minutes. So take
14 that into consideration.

15 And with that, I'm going to ask our next
16 speaker to come up to the mike.

17 Thank you.

18 MR. OBRYCKI: Hello. I'm John Obrycki from
19 the University of Kentucky. I'm a Professor in the
20 Department of Entomology there, and I'm speaking on
21 behalf of the Entomological Society of America today.
22 Thank you very much for the invitation.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

192

1 The Entomological Society of America is made
2 up of over 6,200 members. There are that many people
3 who like bugs. We are primarily within the United
4 States but we are expanding an international presence.
5 Just like bed bugs, the Entomological Society of
6 America is spreading throughout the world.

7 We are trying to acquire the International
8 Congress of Entomology in 2016 and we've developed a
9 program to internationalize the group in the next four
10 years.

11 Entomology has participated in a number of
12 the priority areas for/within the AFRI Program. We've
13 had a number of entomologists participate in bioenergy,
14 global climate change, global food security, either as
15 the major investigators or as a member of a team. So
16 we have participated in those very large grants.

17 I will focus most of my comments on the other
18 areas, the Foundational Programs and the Fellowship
19 Program, in terms of our comments and suggestions
20 relative to where entomology would interact within the
21 Grants Programs.

22 For the Foundational Programs, these are

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

193

1 addressing fundamental research questions, be it single
2 investigators or a small number of investigators.
3 These are critical for entomology. They are very, very
4 important.

5 As a department chair, I know how important
6 these are for new assistant professors. It is critical
7 that for many individuals who have research
8 appointments and they are looking for tenure and
9 promotion, finding and securing a grant from an AFRI
10 Program as a PI or co- PI can be critical for their
11 career development.

12 So I think that for entomology, that's very
13 important and we would just encourage there be more
14 balance in the AFRI Programs relative to the large
15 programs that we've heard about relative to the
16 Foundational Awards.

17 The Fellowship Program. Again, that is
18 really, really important for entomology graduate
19 education. We are very appreciative of the fact this
20 program has been started. It really makes a difference
21 in terms of predoctoral and postdoctoral individuals in
22 entomology to help them with their funding.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

194

1 We would offer some suggestions that if it's
2 possible to expand that program and maybe expand that
3 program in partnership with EPA, NSF, NIH, but that
4 particular area of emphasis in graduate education is
5 really important for entomology, possibly consider the
6 NIH K-type programs with the transition from postdocs
7 to faculty, and possibly consider opening up the
8 Fellowship Program to Master students.

9 So AFRI and entomology, how do they interact?
10 We really appreciate and can't emphasize the importance
11 of the Foundational Awards. We would propose maybe a
12 50/50 balance between individual projects and large
13 multi-cubed programs. Societal problems can be
14 addressed by both those types of programs.

15 We would offer suggestions for AFRI to
16 consider new partnerships. Within entomology, there's
17 a new initiative, the I-5K Initiative where 5,000
18 insect genomes are going to be sequenced and the
19 initial 30 species have been selected. I think this
20 would be an excellent opportunity for partnerships
21 between AFRI and this particular initiative.

22 We could also maybe look at AFRI ESA-

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

195

1 sponsored workshops or combined meetings but there are
2 other ways, additional ways which AFRI and entomology
3 can work together, and we would probably suggest maybe
4 a possible expansion of the scope of some of the
5 fundamental programs to include some of the insect
6 groups, some of the pest complexes, some of the
7 beneficial insect organisms that have over time been
8 sort of lost within the Foundational Programs.

9 Just to conclude, I think entomology's very
10 relevant to the AFRI Programs and AFRI is very critical
11 to entomology. We would ask for continuity of AFRI in
12 terms of its program directions over time and we do
13 think there's a major role for both the integrated but
14 with increased emphasis on the single investigator
15 foundation awards.

16 I will stop. Thank you.

17 MS. De MEJIA: Yes. Hello. My name is
18 Elvira De Mejia. I'm an Associate Professor in the
19 Department of Food Science and Human Nutrition of the
20 University of Illinois in Urbana-Champaign. I'm also
21 the Assistant Dean for Research in the College of
22 Agriculture, Consumer, and Environmental Sciences.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

196

1 I'm also a member and the current Chair of
2 the International Division for the Institute of Food
3 Technologies, which is an institute that brings
4 together around 25,000 members from all over the world,
5 and we are working with the food industry trying to
6 learn from each other, to improve the health of our
7 food supply, and trying to learn from each other about
8 food safety and food defense.

9 I'm a food scientist and today, I have some
10 comments for NIFA.

11 So agri-biosciences are critically important
12 to tracking many of the most pressing issues facing the
13 nation and the world. Yet, agri-biosciences receive
14 the least amount of funding in the nation's recent and
15 developing funding scheme. NIFA has grown 36.5
16 percent, for instance, in the year 2000, \$1 billion,
17 year 2010 1.5 billion, and just to put it into
18 perspective, NIH is 20 times higher, receives more
19 funds than NIFA. From the same year period, 2000 to
20 2010, it went from \$17 billion to \$31 billion. So we
21 can see that 20 times higher than
22 NIFA.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

197

1 I will touch on two very important aspects.
2 One is human health and the other is training of our
3 next generation of diverse scientists.

4 So in human health aspects, foundational
5 research must be expanded to include research that can
6 bring solutions to cut down on medical costs and reduce
7 healthcare costs dramatically in the country. Remember
8 that phrase, food will be your medicine and medicine
9 will be your food, many, many years ago.

10 If we have a good food supply, this can't
11 happen. Good nutritional strategies can lead to much
12 better nutrition, will reduce chronic diseases.
13 Foundational programs must bring back opportunities for
14 food scientists, for food and health, not just for
15 obesity. We have issues on diabetes, cancer, cardio-
16 vascular disease which are the main cause of death in
17 our country.

18 In this same related aspect, the interface
19 between food science and nutritional science is
20 crucial. We need to talk to each other. We need
21 funding opportunities to talk to each other, food
22 scientists and nutritional scientists. For instance,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

198

1 the effect of processing, protecting bioactive
2 compounds for the prevention of chronic diseases, such
3 as the ones I referred before, cardiovascular disease,
4 cancer, diabetes, main cause of death in our country.

5 Food technologies that will add value to our
6 food supply and fermentation was mentioned before, of
7 course, through fermentation we could improve some of
8 the biological components in our food supply to prevent
9 some diseases.

10 The interaction with different branches of
11 NIH will allow for food scientists to produce healthier
12 foods with value-added components. Production of
13 specialty health products, the development of health
14 products, nutraceuticals, functional foods, whatever
15 you want to call them, but food ingredients that will
16 provide better health.

17 The other topic I want to touch today is the
18 training of scientists, considering the challenge in
19 the demographics, in the changing demographics. For
20 instance, just to give you an example, in Illinois we
21 have two million American Latinos and 36 percent of
22 these are the age lower than 18 years of age.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

199

1 So we need to engage this new generation of
2 students very early in their careers to do research, to
3 bring them to our labs and engage them in high-quality
4 research, stimulate that work with professors and
5 students from minority-serving institutions, and we are
6 very appreciative of the benefits of receiving funding
7 for multi-cultural grants, for national needs. Those
8 have benefited many students in our group.

9 Promoting the training of unrepresented
10 minorities, more funds in order to obtain equal access
11 to research of the new demographic population in the
12 country.

13 As I said, U.S. Latino citizens represents 16
14 percent of our population in our country and through
15 research, we can motivate this new generation to get
16 training in these disciplines.

17 Also, special funding should be devoted to
18 early career professors. We have developed a program,
19 new initiative called The Research Academy, where we
20 mentor our assistant professors every year on how to
21 get grants, grant-writing, and then they find out they
22 cannot qualify as PIs of these big multidimensional

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

200

1 programs.

2 So I guess I'm here to talk about the
3 assistant professors and please, let's have something
4 special for them or at least let's try to help them to
5 get a start in their careers.

6 So the lack of continuity of the RFAs, they
7 cannot apply or are unable to obtain grants during
8 their tenure years and this affects their professional
9 development.

10 So as the biocentury continues to unfold, it
11 is fair to expect that agri-biosciences will represent
12 a key national opportunity for economic development.
13 Therefore, funding needs to be available for all the
14 new discoveries to come.

15 Thank you very much.

16 MS. OBUDZINSKI: Hi. My name is Juli
17 Obudzinski, and I'm here today to provide comments on
18 behalf of the National Sustainable Agriculture
19 Coalition, a national alliance of over 40 family farm,
20 food, rural, and conservation organizations that
21 together take common positions on federal agriculture
22 and food policies to advance sustainable agriculture.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

201

1 Research, extension, and education are key
2 issues for our coalition and NSAC helped to co-found
3 the AFRI Coalition which now represents over 40
4 professional scientific societies and agricultural
5 stakeholders.

6 In our view, AFRI must offer enhanced support
7 to the development of sustainable food and agricultural
8 systems and we therefore make the following
9 programmatic recommendations.

10 First, adequate resources and priorities
11 should be given to research projects that lead to the
12 release of farmer-ready public crop varieties and
13 livestock breeds.

14 Despite the clear call from Congress for USDA
15 to address our nation's classical plant and animal
16 breeding needs, the AFRI RFAs release since the passage
17 of the 2008 Farm Bill have fallen well short in
18 addressing these needs.

19 The FY '11 RFA took a small step but only in
20 direct competition with genomics and biotechnology.

21 We recommend that five percent of total AFRI
22 funding be dedicated to classical plant and animal

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

202

1 breeding projects, unencumbered with mandatory
2 requirements for genomics work, with priority placed on
3 regionally-adapted plant cultivars and animal breeds
4 suitable for organic and sustainable production
5 systems, pest and disease resistance, and resilience to
6 climate change.

7 We also recommend that the AFRI Review Panels
8 for these Classical Breeding Programs include a
9 majority of reviewers with strong demonstrated
10 expertise and experience in classical breeding.

11 Secondly, we also believe there needs to be
12 an expanded emphasis on organic and sustainable farming
13 systems, both within the Foundational and Challenge
14 Grant areas.

15 The 2008 Farm Bill expressly mandated key
16 foundational research areas for AFRI with priorities
17 that support the development of sustainable farming and
18 food systems.

19 We recommend that a minimum of 50 percent of
20 AFRI funding be devoted to the foundational priorities
21 established in the 2008 Farm Bill.

22 We recommend a minimum of 10 percent of AFRI

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

203

1 funding be devoted to organic systems, a priority be
2 given to projects that investigate the benefit of
3 diversified crop rotations, and integrated crop-
4 livestock systems, and that AFRI's energy priorities be
5 expanded to include energy conservation, solar and wind
6 energy development on farm and within rural
7 communities.

8 Finally, we believe that the AFRI Program
9 should be modified to strengthen the development of
10 local and regional food systems as a new research
11 priority within the Agricultural, Economic, and Rural
12 Communities Program Area.

13 Thirdly, in response to the Secretary's call
14 to grow the next generation of farmers, we recommend
15 that AFRI include an emphasis on the unique concerns
16 related to beginning farmers and ranchers.

17 Fourthly, we recommend additional
18 foundational programs within AFRI be opened up to
19 include integrated research, education, and extension
20 projects.

21 We applaud the inclusion of integrated
22 projects in the Agricultural, Economics, and Rural

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

204

1 Communities Program Area in the FY '11 RFA and feel
2 there's a great need for integrated activities to
3 stimulate entrepreneurship across rural America.

4 The Foundational Programs are the ones
5 authorized by Congress and Congress clearly dictated at
6 least 30 percent, a minimum, not a maximum, be
7 integrated.

8 Fifthly, we strongly recommend that NIFA take
9 steps to ensure that the implementation and
10 administration of AFRI complies with statutory language
11 calling for a diversity of eligible applicants by
12 requiring that each AFRI RFA be fully competitive and
13 open to all applicants and must include both integrated
14 and single function projects.

15 We object to the agency's neglect of
16 Congress's intent to allow AFRI integrated project
17 grants to be open to a wide array of entities beyond
18 universities and colleges. These include individuals,
19 nonprofit organizations, and other research
20 institutions and organizations, as well as a
21 combination of these entities.

22 The statute is crystal clear with respect to

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

205

1 both the list of who is eligible for all grants under
2 AFRI and is also clear in its specific directive that
3 the agency seek the widest possible participation in
4 the program.

5 Sixthly, we recommend that AFRI grant
6 programs award grants of all sizes, including smaller
7 grants for innovative projects. We agree that there's
8 a need for multi-institutional collaborative research
9 projects that require a significant federal investment
10 in order to address significant challenges of pressing
11 national concern.

12 We also believe that smaller budget projects
13 can stimulate the innovation and resourcefulness of our
14 country's best problem-solvers, farmers themselves.

15 We therefore recommend that both the major
16 foundational priorities and the challenge areas within
17 AFRI include small grants for innovative projects and
18 that at least 40 percent of program fund be devoted to
19 projects under \$1 million.

20 Finally, we recommend that NIFA take steps to
21 streamline the application process and reduce the
22 administrative requirements for applicants with limited

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

206

1 institutional capacity.

2 In closing, NSAC and our member groups across
3 the country feel there's much promise for research
4 focused on sustainable agricultural systems through the
5 AFRI Program.

6 We thank you for serious consideration of our
7 recommendations and would welcome any additional
8 feedback that we can provide.

9 MR. FISHER: Good afternoon, everyone. My
10 name is William Fisher, and I'm Vice President of
11 Science and Policy Initiatives for the Institute of
12 Food Technologists.

13 The Institute of Food Technologists, a
14 nonprofit scientific society, as Dr. Mejia mentioned,
15 focuses on the science of food. IFT's long-range
16 mission is to ensure safe and abundant food supply
17 contributing to healthier people everywhere. Our
18 members, over 20,000, are the link between agricultural
19 products and actual food on the table.

20 IFT appreciates the opportunity to give
21 stakeholder input because we, along with research
22 universities and major food companies, are very

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

207

1 concerned to see the lack of funding opportunities for
2 many areas considered highly important among food
3 scientists.

4 While some specific areas of research in
5 other parts of agriculture may not be funded through
6 past RFAs, the discipline of food science and most all
7 of the sub- disciplines, barring food safety, have been
8 overlooked, and the USDA is the only federal agency
9 that funds food.

10 Simply put, without inclusion in the AFRI
11 Program, research on food processing, food ingredients,
12 and other critical areas of food science will cease to
13 exist.

14 The priority areas in AFRI represent very
15 real challenges that must be solved and I think we will
16 all agree with that. Food science is key and integral
17 to solving many of these problems but is seldom
18 included, at least as described by the recent RFAs.

19 The likelihood of success with the challenge
20 areas identified will be increased by fostering
21 collaboration between all disciplines that can provide
22 part of the solution.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

208

1 It's hard to feed the world without a food
2 scientist at the table. Imagine a world where all food
3 packaging was biodegradable, where everyone in the
4 world had sufficient food that provided adequate
5 nutrition and tasted good, imagine a world where people
6 didn't have to worry about food resulting in acute or
7 chronic disease and instead ate foods that helped
8 protect them against illness, imagine all that food
9 scientists can do. Food scientists know that already.

10 By shutting food scientists out of the RFAs,
11 you are shutting out the opportunity to translate great
12 research at the production stage into real food on the
13 table. What if a new variety of wheat is developed
14 that can grow in arid environments but you can't bake
15 bread with it? A real problem. What if you produce
16 sufficient food for the world but it spoils before it
17 reaches the hungry? And what if you can change the
18 mindset of consumers to choose healthier foods but the
19 diversity of healthy foods available is limited? Food
20 scientists again understand the complexity of these
21 issues and are ready to solve them.

22 Other governments around the world are

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

209

1 providing far more research funds in the area of food
2 science than the U.S. Government today, a sad fact.
3 With no funding opportunities in food science, entire
4 lines of research will dry up. A significant ripple
5 effect will be that graduate students will not be
6 trained in critical areas, leading to a devastating
7 effect on the workforce for years to come.

8 The U.S. will lose sufficient scientific
9 talent when academicians conduct research in other
10 countries and top students are educated in those
11 countries and then companies look to those countries
12 for innovations. By neglecting food-related research,
13 the U.S. loses its competitive edge, very simple.

14 Lost competitiveness on a global scale
15 results in jobs being outsourced, jobs from basic
16 education to manufacturing to research and more.

17 We believe that food scientists working in
18 cooperation with other disciplines can make great
19 contributions to the targeted national priorities. IFT
20 urges NIFA to consider the benefits of including food
21 science-related research when the RFA topics for '12
22 and '13 are fully developed and hopes that this is a

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

210

1 more transparent process.

2 In addition, we would encourage NIFA to
3 reserve some funding for investigator-initiated ideas
4 to fully tap the creativity and establish academic
5 capacities of our nation. Such research in food
6 science has in the past and can in the future address
7 important problems and have impact.

8 In summary, we ask that in future years RFAs
9 in the priority challenge areas be developed so that
10 society may gain even more from the expertise and
11 contributions of food science and technology.

12 We also hope that a balance will be struck
13 that provides adequate funding to solve these
14 challenges while encouraging and stimulating
15 fundamental scientific research.

16 Thank you very much. We're very proud to be
17 represented here today. Thank you.

18 DR. KRANTZ: I'm not on the program. I'm
19 here anyways.

20 I'm Dr. Sibylle Krantz, Associate Professor
21 and also Director of the Coordinated Program in
22 Dietetics. I trained future dieticians.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

211

1 My area of research is childhood obesity
2 prevention and diet quality in children. I think that
3 my unique position allows me to evaluate and comment on
4 the efforts to reduce childhood obesity in a unique
5 way.

6 Some of you might wonder why I'm here because
7 obviously I'm researching in one of the highly-funded
8 areas, one of the challenge areas of the grants.
9 However, I want to point out a problem that exists
10 within the RFA being so very proscriptive, as they are.

11 There's an imbalance within the area in the
12 types of research that's pursued. We know that
13 Americans have now a larger food supply than ever
14 before but, although we had the Food Guide Pyramid, the
15 MyPyramid, and now we have the MyPlate, food choices
16 are still leading to very low diet quality and increase
17 in chronic diseases.

18 I believe before we can go on recommending
19 certain diets, we must understand the food choices and
20 the mechanisms leading to the food choices to have
21 effective messaging to the American people so they can
22 be allowed to increase the diet quality.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

212

1 Furthermore, RFAs focusing on behavioral
2 change are very, very effective if they can in fact
3 lead to behavioral change. As many dieticians and
4 other nutrition educators experience every day, it is
5 very, very hard to get Americans to change their
6 behavior, let alone then maintain that changed
7 behavior.

8 We must understand the mechanisms leading to
9 the behavior in the first place and then start thinking
10 about developing programs that are sustainable and that
11 will lead to a long-term change in behavior that's
12 nutrition intake-related.

13 Also, I want to point out that I personally
14 believe that there is a disconnect between research
15 conducted within industry and the research conducted
16 that's on the university level.

17 I believe that we all have the same goals in
18 mind and the mechanism that would allow industry and
19 researchers at universities to work together maybe
20 under an umbrella program provided by the USDA would be
21 highly efficient in my personal opinion.

22 So again, in closing, I want to point out

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

213

1 that children, especially those two-to-18-years-old,
2 are not independent. They very much are inter-related
3 with the adults and their environment. So just
4 focusing on childhood obesity may not lead us to where
5 we want to be. We must broaden out the scope and the
6 depth of our research efforts in order to be effective.

7 Thank you.

8 MS. CRAYTON: Good afternoon. I'm Evelyn F.
9 Crayton, Full Professor, Nutrition for Science and
10 Dietetics, Auburn University, in Alabama.

11 I'm also a Southern Program Leader Network.
12 I'm the Assistant Director for Family and Consumer
13 Sciences of the Alabama Cooperative Extension System.

14 I'd like to tell you that I'm also here today
15 to speak on behalf of the Academy, formerly the
16 American Dietetic Association, of which I'm a member of
17 the Board of Directors, but what I'd really like to
18 talk to you about today, as a member of the Alabama
19 Cooperative Extension System and a product of the
20 Louisiana Cooperative Extension System, at that time
21 was at Southern University, and we were a separate but
22 equal entity, I believe in cooperative extension

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

214

1 system.

2 I want to thank the AFRI for inviting us here
3 today to offer some suggestions for improvement. Much
4 has already been said about how to improve the research
5 areas but I'd like to talk just a minute about the need
6 for research about poverty, food insecurity, and the
7 lack of physical activity related to childhood obesity
8 and adult obesity, particularly in the rural areas.

9 I'd like to reiterate the need for single
10 grants that are targeted just for extension people.
11 Cooperative extension is a tried and a true entity. We
12 have a track record. We have the infrastructure in
13 place throughout the United States and in some of our
14 territories.

15 We need grants that are targeted specifically
16 for poor people and specifically for food-insecure
17 areas. We need these grants to be targeted for adults
18 and for the youth in the rural areas that are led by
19 extension people. We need grants for minority-serving
20 institutions beyond what we have today and the grants
21 should be led by minorities for minorities. That's not
22 to say that other people can't do research on

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

215

1 minorities but there's a certain connectivity and a
2 level of understanding about poverty.

3 I came out of poverty. I came out of a rural
4 setting and a single parent home. It can be done if
5 the right people are on the bus doing the research.

6 I'd like to thank AFRI and NIFA for an
7 opportunity to speak to what can happen when the right
8 people are given an opportunity to compete
9 competitively for grants and that these grants are
10 placed in rural communities where you have not only the
11 opportunity to improve the health of the people in the
12 community but small grants also do something else.
13 They help to increase the viability of their community
14 by providing something as simple as a part-time job to
15 some people. So it goes beyond just funding a grant for
16 the benefit of improving health. It improves the
17 wealth of the community.

18 I'd like to appeal to AFRI to make targeted
19 monies for small grants for rural communities for
20 minority-serving institutions, for minority people, and
21 new researchers to work with people and help them in
22 these food deficits and food-insecure communities which

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

216

1 lead to childhood obesity, adult obesity, and many
2 other chronic diseases, some of which we're facing in
3 the South. We're more likely to die from cardio-
4 vascular disease of which obesity is a precursor, as
5 well as Type II diabetes, in the South.

6 Thank you so much for this opportunity and we
7 look forward to working with you in any way we can, my
8 staff. I head up a staff of family consumer scientists
9 all over the state of Alabama. We're willing to work
10 with you in any way we can.

11 Thank you.

12 MR. RAHMAN: Good afternoon. I'm Shaikh
13 Rahman, Assistant Professor in Ag and Applied Economics
14 at Texas Tech University.

15 I work on the economics of ag industrial
16 organizations and climate change mitigation and
17 adaptation. Both of these research fields, I try to do
18 interdisciplinary research. For example, I use animal
19 nutrition models in my economics modeling.

20 However, I came to listen, I mainly came to
21 listen and try to learn, and I must say that I have
22 learned a lot in this session and a lot of good

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

217

1 recommendations and research focus and what to do and
2 that's a very good experience for me.

3 I'd also like to mention that when I have
4 been looking at the RFPs, I find the research focus and
5 priorities set very well and very timely, as I
6 understand it, these are very timely. Still, the
7 funding is getting cuts every year. So it's very
8 competitive and I have to explore new opportunities.

9 So I came to listen and I didn't plan to
10 talk. You can tell that I'm very, very, very nervous.
11 I didn't plan to talk because I'm an assistant
12 professor and, you know, assistant professors are the
13 scared species in academics with the smiley faces.
14 We're supposed to do a lot of work. We are supposed to
15 teach. We are supposed to publish and we are being
16 watched all the time, evaluated, and on top of that, we
17 are supposed to write grants and competitive grants and
18 which often get declined because we do not have a good
19 fabulous track record, understandably.

20 On the other hand, as an ag economist, you
21 know, I'm not a very exciting scientist. So I cannot
22 apply for NSF carrier grants. Economics or ag

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

218

1 economics are not a part of NSF grants, career grants.

2 So, fortunately, NIFA/AFRI has a new
3 investigator grant under their Science Enhancement
4 Program but I applied for one and then I find there's
5 some -- well, I shouldn't say problem. It's not very
6 well defined.

7 Well, for example, I didn't know how much
8 funding of the RFP is allocated for the new
9 investigator grant. Well, are the new investigator
10 grants evaluated separately than the regular grant
11 applications? I later learned that, well, senior
12 professors can also be a part of the new investigator
13 grant but that makes things a little complicated to
14 understand for me, and then again, what kind of new
15 investigator -- well, what are the ranges of these
16 funds?

17 Are the new investigators expected to write
18 integrated grants, system approach, or whatever? All
19 these are just like individual researcher grants. So a
20 lot of questions are related to this new investigator
21 grant and I think it is possible, this new investigator
22 grant program can be converted to some kind of NSF --

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

219

1 something like NSF career grant. Well, not by
2 duplicating but including the areas that are left out
3 of the NSF grants but related to food and agriculture
4 and all the focus areas.

5 So that's my point at this point, that I just
6 finally gathered some courage to make this point and
7 wanted to talk on behalf of these scared species.

8 So thank you very much for giving me the
9 opportunity and you have a very nice rest of the day.

10 MS. BALDWIN: Since Ms. Draeger is here, she
11 was our last and final speaker, I wanted to make sure
12 she was here, she is here, we're going to let her go
13 first, and then open up the mike for question and
14 answers. So be prepared in five minutes.

15 DR. DRAEGER: Hello. I'm Dr. Kathy Draeger.
16 I'm from the University of Minnesota. I'm representing
17 the University of Minnesota Extension today. I also
18 have responsibilities in the Department of Agronomy and
19 Plant Genetics and I'm the Statewide Director of a
20 program in our state called the Regional Sustainable
21 Development Partnerships. We build community-
22 university partnerships to bring the best of our land

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

220

1 grant research and knowledge capability together with
2 the innovation that happens at the landscape level.

3 This is the 150th Anniversary of both the
4 formation of the USDA and the Land Grant University
5 System. President Lincoln, during the Civil War, in
6 some quite dark days of that, and the Congress enacted
7 this legislation and I think all of us who are in the
8 room would agree that that was an Act that
9 fundamentally transformed and democratized agricultural
10 knowledge and education.

11 When that legislation was passed, the
12 majority of Americans were involved in farming and
13 agricultural activities. Today, it's considered that
14 about less than two percent of Americans are engaged in
15 food production and agriculture and we are the people
16 that are supporting that population to, in large part,
17 support our food access and both nationally and
18 internationally, and so I think it's proper, it would
19 be apropos to have the words of Roger Miller, if some
20 folks know him, a singer from some decades ago, who
21 said, "Sing for your supper, remember on the other end
22 of the spoon the guys working for a song."

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

221

1 So with that in mind, I have a few
2 suggestions for how we can improve and to commend the
3 AFRI Program.

4 First, I'd like to say the goals that are
5 established by AFRI that our program priority areas
6 support really resonate true with my own work in
7 Minnesota and I'll just read you a few of these to
8 quote from the goals.

9 1. Increase the number of farms engaged in
10 local and regional food systems that use sustainable
11 practices. Increase food security, especially in
12 vulnerable communities. Increase and strengthen local,
13 regional, national, and international markets.
14 Strengthen the sustainability and economic resilience
15 of rural communities, and if you look at the
16 information we were provided today, you'll see that
17 rural communities are mentioned quite a few times, and
18 again this is an area that we would support the
19 continued emphasis on.

20 And the last bullet, and you can read this
21 directly in the AFRI, this year's RFA, is basically
22 building our capacity to do research, education, and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

222

1 extension efforts.

2 I represent extension and so I want to say
3 that I would really like to see continued highlighting
4 and support of the role of extension, especially
5 looking towards extension-led integrated projects.

6 The global and national issues that we face
7 in food security will need the translational role that
8 takes the research that we're doing, the public
9 research that's coming out of our universities and
10 translates that into meaningful findings and outcomes
11 at the land use level.

12 To support that, I would agree with many here
13 today who have said that we need to have more extension
14 reviewers who are involved in the process of selecting
15 the successful applicants and I know that our
16 professional extension organizations nationwide and in
17 our states will be ready to be engaged in that effort.

18 My third point, hand in hand with the
19 increase in extension, is that we need to broaden
20 perhaps the stakeholders who are represented in this
21 room, that there's an opportunity to have more
22 regional-local issues that rise to the level of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

223

1 priority.

2 One that comes to mind that's been mentioned
3 here is the USDA delineation of food deserts in the
4 United States. Much of those are in rural areas and
5 addressing those rural food efforts.

6 So we would encourage AFRI to address
7 problems that resonate with our farmers, landowners,
8 family, youth, and communities, and one mechanism to
9 achieve that is to bring more diverse stakeholder input
10 to bear.

11 I'd like to end. Our very first speaker
12 today, he started out his talk by referring to Thomas
13 Jefferson and so I think I'd like to end this comment
14 period today anyway with another quote from Jefferson
15 that is in the Halls of the Legislature, if you look up
16 at the ceiling panels.

17 It says, "When tillage begin, other arts
18 follow. The farmers therefore are the founders of human
19 civilization."

20 So I appreciate and commend AFRI for
21 supporting our efforts.

22 MS. BALDWIN: We're going to open up the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

224

1 floor, of course, to comments, but I want to let you
2 know we still have some principals in the audience
3 here. Dr. Meryl Broussard, who'll be doing our Closing
4 Remarks, is here. We have Dr. Deborah Sheely, who is
5 here, and Dr. Robert Holland. Am I overlooking any
6 other assistant directors that might be there?

7 So they are still here and they are willing
8 to address any questions and/or concerns. So before we
9 do that, Debbie, are there any other comments that you
10 want to make up to this point regarding any statements
11 that have been made?

12 (No response.)

13 MS. BALDWIN: Okay. And if you have any
14 questions and answers, it's the same thing. Come up to
15 the mike and also state your name for the record. They
16 want to see the directors. They want to see you guys
17 upfront. So, Dr. Meryl Broussard, Dr. Deborah Sheely,
18 Dr. Robert Holland, they're the ones that are remaining
19 in the room.

20 DR. SHEELY: We also have a number of
21 division directors in the room and these are very
22 important people, as well, within the organization.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

225

1 They often serve really as team leaders for the
2 agency's challenge areas.

3 For example, Dr. Mark Poth, please stand, Dr.
4 Poth, is a division director within the Institute of
5 Bioenergy, Climate, and Environment, and he
6 specifically leads the Division of Bioenergy. Did I
7 get that right? I'm sorry. Excuse me. The Division of
8 Sustainable Bioenergy.

9 We have Dr. Mary Peet here in the front of
10 the room. She is in the Institute of Food Production
11 and Sustainability. She leads our Division of Plant
12 Systems Production.

13 Dr. Muquarrab Qureshi, over here, he is in
14 the Institute of Food Production and Sustainability.
15 He leads our Division of Animal Systems.

16 Dr. Louie Tupas, there, wave again, Louie.
17 Louie is in the Institute of Bioenergy, Climate, and
18 Environment, and he leads our Division of Global
19 Climate Change.

20 Dr. Jan Singleton is back there. Please
21 stand. Dr. Singleton, come on. She is in our Institute
22 of Food Safety and Nutrition. She leads our Division

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

226

1 of Food Safety.

2 Dr. Ali Mohamed, right there, Institute of
3 Bioenergy, Climate, and Environment, leads our Division
4 of Natural Resources and Environment? Environmental
5 Systems. I'm so sorry. I'm going to have to bone up
6 on those names, aren't I?

7 Do I have any other division directors in the
8 room that we've not noticed?

9 (No response.)

10 DR. SHEELY: Great. I just wanted to point
11 out all the other folks in the room who have leadership
12 positions and then, of course, we have lots of our
13 national program leaders in the room.

14 Would this be a good time to introduce some
15 of them?

16 National Program Leaders. Let's see. Let me
17 work my way around. Oh, yes. Dr. Mary Purcell-
18 Miramontes, Mary is our National Program Leader, one of
19 our National Program Leaders in Entomology.

20 Dr. Ann Lichens-Park, National Program Leader
21 for Microbial Genomics.

22 Who do we got? Dr. Margot Holland, please

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

227

1 stand, madam, National Program Leader for -- is it
2 Animal Health and Well-Being, okay, and she works with
3 the NIFA/AFRI Fellowship Program. You've been hearing
4 a lot of comments today about the need for student
5 training and the next generation, very important part
6 of the program.

7 Dr. Daniel Cassidy, do I see Daniel back
8 there, National Program Leader for -- fill in the blank
9 for me, Daniel. Forest-based Bioenergy, is in the
10 Institute of Bioenergy, Climate, and Environment.

11 Dr. Lakshmi Matukumalli, right there, in the
12 Institute of Food Production and Sustainability. He's
13 our National Program Leader for Animal Genetics and
14 Genomics. Close enough.

15 Dr. Fen Hunt, I believe, is in the room.
16 There she is hiding. Institute of Bioenergy, Climate,
17 and Environment, National Program Leader for Natural
18 Resources Economics, something like that. Close
19 enough.

20 No, I did not. Shing Kwok, Dr. Shing Kwok,
21 in the back of the room, National Program Leader for
22 Plant - - sorry -- Physiology.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

228

1 Then Dr. Liang Shiou Lin, National Program
2 Leader for Plant, what, Liang? I didn't hear it. Same
3 thing.

4 And then so Jeanette Thurston, National
5 Program Leader for Food Safety.

6 Dr. Ram Rao, National Program Leader for Food
7 Safety -- Food Technology. Excuse me.

8 Dr. Mervalin Morant, in the back somewhere,
9 National Program Leader also for Food Safety, as well.

10 Anybody else hiding back there that I can't
11 see?

12 (No response.)

13 DR. SHEELY: Okay. So you can see there a
14 lot of NIFA staff in the audience who've been listening
15 to everything that you have to say. So we really
16 appreciate everything.

17 So we can take questions, if anyone has any.
18 Yes?

19 MR. AGBLEVOR: I'm Foster Agblevor. I'm a
20 Professor from Utah State University, and I just had a
21 few comments and a question about biorenewables.

22 When I look at a program, the NIFA Program

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

229

1 always talks about renewable energy, but then when you
2 look at the details, it always focuses on bioethanol,
3 but if you look at renewable, I think NIFA should
4 broaden that area, especially for the emphasis of co-
5 production developments, because if we want to be
6 realistic, bioenergy or energy in general is a
7 commodity thing.

8 It has to sell very cheaply and therefore if
9 all the emphasis is just on the energy components, it's
10 not going to be competitive, as far as I can see,
11 because you have to sell it at a higher price and if
12 you sell a gallon of gasoline or anything for \$5, even
13 \$6, nobody wants to buy it.

14 But if you develop high-value co-products
15 alongside the energy, what do you see? That you can
16 even make enough money out of those co-products and
17 then you can sell the fuel cheap. That's what
18 generally happens in the petroleum industry. They have
19 high-value co- products.

20 But when you see the RFAs, there's only a
21 very small emphasis on the co-products and there is a
22 huge emphasis on bioethanol and if the argument is that

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

230

1 DOE's already doing some of the energy things, yes,
2 DOE's also doing ethanol. In fact, most of the DOE
3 proposal is on bioethanol.

4 So I would like to see NIFA focus on co-
5 products and one of the speakers in the morning
6 mentioned biochar, which is a new and emerging area,
7 which NIFA could take up because DOE doesn't touch
8 anything about biochar. DOE doesn't emphasize co-
9 products. NSF doesn't emphasize co- products. All
10 this is new avenues which NIFA could touch on.

11 So those are my comments I would like to
12 make, and a final one is that I know that this doesn't
13 sound very -- well, I mean, high-risk/high-impact
14 research. Okay. When you look at most of the areas
15 funded by NIFA, they seem to be the safe domains, but I
16 think it would be time for us to start looking at high-
17 impact/high-risk research areas.

18 Those are my comments.

19 DR. SHEELY: All right. That sounded like a
20 lot of good suggestions for us that we will have on the
21 record, and I would encourage you, if you want to write
22 some of that down and send it to us for the formal

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

231

1 record, as well, additional things, that would be
2 great.

3 You have a question, sir?

4 MR. LEE: I think the previous speaker, you
5 know, make very good points. I really appreciate that.

6 I also very happy to hear that actually, you
7 know, USDA also have bioenergy program, you know. We
8 have actually, you know, also global climate
9 initiative, right.

10 I would like to maybe kind of expand, you
11 know, what's your current thinking in terms of the
12 relation with the biochar work, you know, because
13 actually it appears to make very good point because the
14 reality of biofuel area, okay, because the energy is so
15 cheap, gasoline, okay, to make currently any fuel
16 platform -- actually, I'm from DOE, actually I know all
17 these things. Okay.

18 Because the gasoline still so cheap, you
19 know, any biofuel platform we have in the world
20 currently are not able to compete. The only thing that
21 can compete is we have bioproducts, not biochar but
22 other bio-products and make the whole process, we have

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

232

1 a chance to go to the market. Okay.

2 So it's very important to actually pay
3 attention to at least, you know, in the near term,
4 okay, when the technology -- sure, maybe biofuel able
5 to stand alone. So your program -- my suggestion is
6 your program should not like only biofuel, okay, and
7 cut off the other possibility, important possibility of
8 bioproducts from the agricultural sector. That's my
9 point. Okay.

10 So I would like, you know, maybe some other
11 national meeting maybe you can share what you guys are
12 thinking about biochar and bioenergy or biofuel. Okay?

13 Thank you. I'm James Lee. Actually, I used
14 to work at Oak Ridge for 15 years as a national
15 scientist and I'm currently at Old Dominion University,
16 Norfolk.

17 DR. SHEELY: Thank you.

18 DR. POTH: I'm Mark Poth with the National
19 Institute of Food and Agriculture. I'm the Division
20 Director for Sustainable Bioenergy.

21 There was a recent report from the National
22 Research Council that looked at the Renewable Fuel

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

233

1 Standard 2 that was put into law and they mentioned a
2 number of clear areas that we need to pay attention to.

3 Co-products are one which is why, in the FY
4 2010 RFA, we funded quite a portfolio of co-product
5 fundamental research to develop those new high-value
6 products and if you'd like to find out about the
7 progress in that you can talk to Dr. Kwok, Shing Kwok,
8 who's in the back today who can tell you about that.

9 What we have looked at in our portfolio, one
10 of our considerations is what do other agencies do and
11 what had been their missions? So if you read, for
12 instance, our Regional Program for Sustainable
13 Bioenergy, it's not about ethanol, it's about drop-in
14 fuels.

15 DOE has many efforts in their bioenergy
16 centers looking at ethanol. We're looking to move
17 beyond ethanol and even cellulosic ethanol to drop-in
18 fuels, things that can go right into the gas tank,
19 right into the jet plane.

20 You're right that there's a number of things
21 that have to be considered and you can see that in our
22 current RFA where we're trying to fill the gaps so that

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

234

1 we understand what's going on with transition to a real
2 bioeconomy of which bioenergy and biofuels will be a
3 part.

4 So our current RFA tries to fill some of
5 these gaps by addressing specific concerns. For
6 instance, related to biodiversity, if we produce a lot
7 of these bioenergy crops on marginal lands, what does
8 that displace in terms of biodiversity related to
9 pollinators or wildlife? So we're asking for work on
10 that, as well.

11 We have a separate request now that was
12 identified again by the National Academy, National
13 Research Council, looking at land use changes, the
14 question about overall land use, what would that do,
15 and what are the impacts of that land use change?

16 We've also got the social science aspects
17 there, thinking about what this transition means for
18 rural communities, so there's a separate request for
19 that, and a separate request, as well, for policy.
20 Policy will have a big impact on how feasible various
21 production schemes are and we're asking for research to
22 evaluate those kinds of things.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

235

1 So we have thought long and hard about this
2 but it's always good to get continuing input and our
3 staff is always seeking continuing input about what the
4 options are, what the possibilities are, what sort of
5 gaps we need to pay attention to.

6 We don't want to make the mistake of missing
7 something important along the way. However, we also
8 have to fit it within our limited funding scope, too.
9 So I hope that answers your questions.

10 MS. BALDWIN: We have one more question.

11 MR. RYU: My name is Jae Ryu, one of the
12 scared species on earth. I'm a biological and
13 agricultural engineer at the University of Idaho.

14 Last year, I noticed USDA and NSF jointly
15 offered funding opportunity called Water Sustainability
16 and Climate, I guess, but I'm just wondering how that
17 interagency funding works.

18 DR. TUPAS: I am Louie Tupas from the
19 National Institute of Food and Agriculture.

20 Interagency collaborations actually start
21 with a discussion with a partner agency or agencies on
22 similar topics and we do get together on different

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

236

1 forums. We are committee members on several federal
2 agency task forces or working groups, so that's how we
3 know our colleagues from other agencies, and together
4 we realize that we are sometimes approaching similar
5 objectives from different points of view and that's how
6 we partner wherein a larger-scale approach to doing
7 things can then be subdivided so that USDA or the
8 National Science Foundation fulfill both their missions
9 and their objectives but at the same time we are
10 approaching a similar goal, for example in water.

11 So the interest in water is pretty broad.
12 The National Science Foundation has a very strong
13 program on water from their perspective, a very basic
14 research. We have a very strong water program from the
15 applied research side.

16 Common to both of this is modeling and that's
17 what water sustainability and climate is. It's a
18 modeling effort, a joint modeling effort, and that's
19 what we're trying to do, using a similar mechanism of
20 downscale climate modeling, which the National Science
21 Foundation provides that input, and the applied
22 modeling for water, which we are interested in and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

237

1 which our scientists are good at.

2 So for that specific example, that's the way
3 it works. It also works similarly for other
4 collaborations we have with other agencies, like NIH
5 for genomic research or EPA for environmental research.
6 So that's how we proceed with those things. But it's
7 really common knowledge among each other and the
8 national program leaders and division directors and the
9 assistant directors are always on the lookout for those
10 kinds of opportunities.

11 MS. BALDWIN: And with that, I want to remind
12 you guys, as we did earlier, that your written comments
13 can be submitted up until March 22nd, so that gives you
14 plenty of time, if you get back home and you think of
15 something, to submit your comments to us in writing.

16 Also, as soon as possible, we'll actually
17 have the official transcripts uploaded. In case you
18 forget anything between now and then, you can refer
19 back to the transcripts and then provide your written
20 comments.

21 But with that, we're going to go into a round
22 of updates from our areas, like the Challenge Area, the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

238

1 NIFA Fellows Program, and also the Foundational
2 Program, and follow that up with our Closing Remarks.

3 So with that, I'm going to turn the mike over
4 to Dr. Mark Poth and Dr. Louis Tupas.

5 DR. TUPAS: So I'm Louis Tupas from the
6 National Institute of Food and Agriculture. Myself and
7 my colleague, Dr. Poth, who's the Division Director for
8 Sustainable Bioenergy, we're making this presentation
9 on behalf of our Assistant Director Dr. Frank Boteler,
10 and we are here to give you an update on the Challenge
11 Areas and Dr. Poth actually has some handouts that he
12 will -- Dr. Holland also is distributing some handouts
13 which is actually the document that we are presenting
14 over here.

15 So here's a quick overview of the Challenge
16 Areas that we have. Again, the Challenge Areas are
17 based on these five societal challenges, 1-2-3-4-5,
18 there we go. So these are the five societal challenges
19 that were described not just from NIFA but this is also
20 the societal challenges that USDA has targeted within
21 their Strategic Plan.

22 So we're looking at climate change and

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

239

1 variability, sustainable bioenergy, childhood obesity
2 prevention, food safety and food security, and so you
3 can see here a very brief description of what those
4 societal challenges are.

5 So this has come as again a discussion and
6 provision of what these societal challenges are and how
7 we are going to approach and what the objectives are
8 within those challenge areas.

9 Now why focus on these challenges? There
10 have been several motivating factors for us to proceed
11 along those areas. One of them is a publication of the
12 National Research Council called The New Biology for
13 the 20th Century, and it actually has some very
14 important approaches of applying biology to solve some
15 of these societal challenges.

16 There are also major movements within the
17 scientific community and this occurs not only here in
18 the United States but outside wherein there is research
19 and innovation policies that focus on future issues and
20 we're tackling them with the technologies and the
21 science that is needed to approach them.

22 There has been an increased relevance of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

240

1 agriculture and natural resource science and this has
2 come about by an improvement in our educational system
3 by realizing that agriculture is a science and because
4 of that, we have been able to receive enough funding,
5 well, not as much as we really want, but enough for us
6 to pursue those objectives and achieve our goals for
7 those societal challenges.

8 So, in summary, these societal challenges
9 generated from the substantial consequences and has
10 provided great attention to them. For example, changes
11 in the climate systems affecting food, fiber, and feed
12 production.

13 The White House and congressional efforts for
14 these kinds of mandates, for example, within the bio-
15 energy sector, there are targeted fuel production
16 targets that they're looking for.

17 We realize the need to address obesity,
18 especially childhood obesity, and then the issues of
19 food safety when we have all these widespread food
20 recalls.

21 Plus, the increasing population that's
22 expected over the next decade reaching over, you know,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

241

1 nine billion people at that stage and where we have to
2 provide enough food, fiber, feed for those kinds of
3 needs.

4 Now one of the important things that we have
5 is the business model that we've taken and it's called
6 Focus, Scale, and Impact, and Dr. Broussard can
7 actually expound on that more, much better than I can,
8 but the idea is to focus on the societal challenges.

9 The focus is really outcome-based. So there
10 is a societal outcome that we want from these projects
11 or programs that we've initiated and the idea is to
12 scale up support and this includes being able to do
13 multidisciplinary and multi-institutional work.

14 So this comes in the form of our Coordinated
15 Agricultural Projects wherein you can get as many as 50
16 investigators over a region of maybe up to a dozen
17 states, all focused on the regional goal of achieving,
18 for example, sustainability of wheat production in the
19 High Plains and that's what we're doing and we do that
20 by providing sufficient funding to do that.

21 In the 2010 cycle, for example, we funded
22 such a project. It's \$20 million over five years. So

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

242

1 it's to achieve that large scale of support for these
2 kinds of projects.

3 And then we hope to obtain the impact by
4 providing also a means to have all that science
5 provided for the public interest, so that is
6 translated, the science becomes available for use, it's
7 not just published science, it's usable science.

8 DR. POTH: Thank you, Dr. Tupas. Again, I'm
9 Mark Poth with the National Institute of Food and
10 Agriculture.

11 You've got the handy-dandy handout, I hope
12 everybody has, because as we move ahead here towards
13 the table that we're going to look at, there's no way
14 you'll be able to read it off the screen or, if you
15 can, I'd be very impressed.

16 Let's talk a little bit about the challenge
17 areas from '10, '11, and on to '12, as well. You know,
18 it was a major change in how we operate here at the
19 National Institute of Food and Agriculture to address
20 these challenges.

21 One of the things that it did was cause
22 somewhat of a delay in our release of programs to make

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

243

1 such a big change, so things kind of lagged a bit
2 according to our traditional calendar. We're still in
3 kind of a catch-up mode trying to get back on a more
4 regular schedule.

5 What that has done is sort of lagged in some
6 of our reporting, as well. We can't complete the
7 awards if we can't get the RFA out in time.

8 One of the places to go look and compare how
9 things have changed is you go to our website and if you
10 click on the AFRI link that's right on the front page,
11 you'll go to a page that will have the AFRI Annual
12 Synopsis which is an entire summary statistics about
13 how many applications we got across all of our
14 programs, who is on our panels, what region of the
15 country, how many people from extension or teaching,
16 how many people from minority-serving institutions
17 served, all those kinds of things, and it has those
18 summary details.

19 It also has tables about, you know, what
20 funding went to what areas and that's where we can move
21 on to the impressive table here.

22 One of the things to recognize about the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

244

1 challenge areas is that they not only include the large
2 CAP Grants but other components, as well, that are
3 necessary to achieve the outcomes that we're looking to
4 achieve in that particular challenge area.

5 So as you look at these, you'll see a blend
6 of things, not only the large CAP Grants but also
7 targeted grants that may do things like, if you look
8 under Climate Change, there's germ plasma phenotyping.
9 You've got to understand the materials that you have to
10 work with. Let's leverage what we've got done in
11 genomics, phenotype that, so then we're more prepared.

12 So you can have research-targeted things,
13 education-targeted things. If you go down to
14 Sustainable Bioenergy RFA, there's the line that I
15 believe is hard to read, which is Investing in
16 America's Scientific Core. This is, too, about \$5
17 million grants, a million dollars a year, so it's about
18 a \$2 million total for 2010, and the idea is that if
19 we're going to establish a new bioenergy industry in
20 the country, we're going to have to have the
21 appropriate workforce available to really make this
22 industry get off the ground.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

245

1 So there's a number of things like that in
2 our summary table here.

3 Some of this takes a little interpretation,
4 as well. If you notice some of these things, for
5 instance, have seemingly very high success rates.
6 Again, if you go down to Bioenergy, the last line on
7 that table, there's a program called Feedstock Genomics
8 with the idea that we've invested in some genomics
9 work, what if we use that to improve the feedstock
10 characteristics for bioenergy crops? It looks like two
11 people submitted and two people were funded. It's a
12 program you don't want to submit to, right?

13 The thing about that is since it's an
14 interagency program, it does not -- and the panel was
15 conducted in conjunction with the Department of Energy
16 at their facilities. It doesn't reflect the full
17 number of applications that were received. Those are
18 the ones that were received by our agency after the
19 panel process and the decision to fund moved ahead. So
20 on things like that that looks strange, it's because of
21 interagency activities many times.

22 SPEAKER: Mark, can you give us a number for

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

246

1 the scientific core?

2 DR. POTH: Yes. I just said it's about \$2
3 million, roughly. They're about a million dollars a
4 year for five years, two grants, for the scientific
5 core.

6 All these numbers are taken straight out of
7 that AFRI Synopsis that's online. So a readable
8 version is available online. You're welcome.

9 Now, as we've moved on to the 2012 RFAs, we
10 have several of those out already. The ones out for
11 Climate Variability and Change, there are two programs
12 there. One funds large-scale, again, CAP effort to look
13 at these regional approaches, trying to pull things
14 together. The other takes an integrated approach but
15 tries to do these smaller efforts to see how innovative
16 you can be and makes that kind of -- takes that kind of
17 an approach.

18 Food Security has their RFA out again, as
19 well, and the areas and people involved are identified
20 here. Again, it's trying to take a look at what we need
21 to do to improve food security for the nation and the
22 world as a whole and targets some specific things, as

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

247

1 well, including leverage, again our genomics knowledge,
2 to improve disease resistance. You know, you use a lot
3 less antibiotics if you get animals that resist disease
4 and diseases for fungal pathosystems, all those good
5 kinds of things.

6 Bioenergy. We're offering one CAP again this
7 year, that Regional Bioenergy CAP, but again, according
8 to stakeholder input, we're looking to fill gaps, as
9 well, with some research efforts that I described
10 earlier and that are summarized here.

11 We do have some RFAs that are yet to be
12 released. Childhood Obesity Prevention RFA is due out
13 in April as well as the Food Safety RFA will be out in
14 April. We're in the process of developing those and
15 they're being finalized now. The Foundational RFA is
16 also on the way, in case you're interested, as well,
17 about the same timeline.

18 The last page is Upcoming Webinar
19 Information. You know, stakeholder input is not a
20 single event. It's an ongoing process that we at NIFA
21 are continually involved in. We work hard to try and
22 engage stakeholders through a number of mechanisms.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

248

1 This is one of them here today.

2 Another one will be a series of webinars that
3 we're going to offer and the schedule is on the back
4 here. You know, at this meeting we've heard a lot of
5 overarching comments about the AFRI Program. Some are
6 fairly targeted about what we might do in particular
7 areas.

8 Well, the webinars coming up allow you to get
9 much more specific and also make it possible for people
10 who don't have the money to travel here to participate
11 and ask questions in real time and get some feedback
12 about -- get somewhat of a dialogue going about what's
13 involved with the program, what we're thinking about,
14 and the kind of input that we're using to shape those
15 particular programs.

16 We're hoping that the announcement that for
17 these webinars goes out far and wide. We would hope
18 that you would help spread the word on that which is in
19 part why we printed this up today so you can take that
20 with you, as well.

21 E-mails will be going out to our e-mail
22 lists, as well, to alert people about this opportunity

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

249

1 for input into our programs.

2 And with that, I've exhausted my handout.

3 Thank you.

4 MS. BALDWIN: As Mark mentioned, actually, at
5 noon today, the actual webinar schedules posted to the
6 website, so they actually are on the NIFA/AFRI webinar
7 sites. So they're there for you, so you don't have to
8 like write them all down, but I also want to invite Dr.
9 Holland up to the mike to speak about NIFA Fellows.

10 DR. HOLLAND: Good afternoon. I'll try to be
11 brief because I know it's been a long day for quite a
12 few of you.

13 But I'm here to talk about the NIFA
14 Fellowship Program that's under the AFRI Flagship. In
15 2010, the NIFA Fellowship Program was restructured.
16 Previously, the Fellowship Program had always been
17 produced in CSRES but it was restructured into a set of
18 two programs, one a postdoctoral fellowship program and
19 then a newly-created predoctoral fellowship program to
20 allow funding for doctoral candidates to continue
21 matriculating in their education.

22 The goal of this program was the development

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

250

1 of the future leadership of agricultural science. As
2 the NIFA leadership went to a number of different
3 meetings, as they looked around the room, they noticed
4 the grain of the room and so that indicated that in
5 future years, in the next 10 to 20 years, a number of
6 agricultural leaders would be retiring and so NIFA knew
7 that we had to step up to the plate and do something to
8 fill that void and so the development of this program
9 was created.

10 And so you may ask who are the next
11 generation of agricultural scientists. They're both
12 individuals that we normally look at as traditional
13 agricultural sciences but then we also wanted to open
14 up the program to scientists in other areas that we
15 don't normally think of as advancing agricultural
16 sciences, such as physicists, biomedical scientists,
17 etcetera.

18 We also have funded individuals who are
19 looking at social economics, policymaking, and
20 communications, and, lastly, NIFA is continuously
21 involved in the discussion regarding education,
22 training, and scholarship of the next generation of

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

251

1 agricultural leaders.

2 So the predoctoral and postdoctoral
3 fellowship, their total annual award is \$6 million.
4 However, that's dependent on the current AFRI funding.
5 So as AFRI funding increases, then the Fellowship
6 Program will likewise increase. If there's a decrease
7 in AFRI funding, then there will be a subsequent
8 decrease in the Fellowship Grants Program.

9 The postdoctoral awards are a 130,000 whereas
10 the predoctoral awards are 75,000 and both of these
11 have a duration of two years and the awards are non-
12 renewable.

13 Now the different project types that predocs
14 as well as postdocs can apply for are three project
15 types. There are the research projects, looking at
16 either basic or applied sciences, education projects
17 are also welcomed, and the different focus areas of
18 those projects are listed here, and then the last
19 project type is extension. So the three mission areas
20 that NIFA's involved in, research, education, and
21 extension, those individuals who are looking at those
22 areas can submit projects to receive funding from the

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

252

1 Fellowship Program.

2 Now to talk a little bit or to give you an
3 update on the first competition that we had which was
4 in 2010, we had approximately 41 predoc applicants
5 submit applications -- excuse me -- 41 postdoc -- no.
6 We had 41 predocs submit applications and we made 14
7 awards with a budget of approximately \$1 million and
8 the success rate of that program was approximately 34
9 percent, whereas the postdoc fellowship and that should
10 be postdocs, excuse the mistake, the error there, the
11 postdoc fellowship applicants we had approximately a
12 119. We made 40 awards for a budget of \$4.2 million
13 and the success rate for that program was also 34
14 percent. So we made approximately 54 awards totaling
15 \$5.3 million and for both programs, we had a very high
16 success rate of 34 percent.

17 This geographic map basically demonstrates in
18 blue the states that had predoctoral awards. You can
19 see Michigan and Indiana as two of the states there in
20 red. Those are the states in which there were
21 institutions that received postdoctoral fellowship
22 awards. The purple indicates states that received both

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

253

1 predoctoral and postdoctoral awards. The yellow
2 indicates states that had applicants or applications
3 submitted from institutions in those states and the
4 states that are indicated in white indicated that no
5 applications were received from institutions in those
6 states.

7 And I've used all my time. So I thank you.
8 Again, April 17th, if you have comments that you would
9 like to make about the program because when we
10 restructured the program, we did listen to all of the
11 comments that were sent to us regarding the NIFA
12 Fellowship Program and in those areas where substantial
13 modifications could be made, we did make modifications
14 based on the stakeholder input that we received.

15 (Question off microphone.)

16 DR. HOLLAND: Could you repeat the question?
17 No restrictions. Land grant, non-land grant, private,
18 research institutes, all those are eligible to apply.

19 (Question off microphone.)

20 DR. HOLLAND: Okay. The question was with
21 the 34 percent success rate, how was that evaluated?
22 It was evaluated based on the number of applications

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

254

1 that we received and the number of awards that were
2 made.

3 (Question off microphone.)

4 DR. HOLLAND: No. The comment was she
5 thought it was outcome measurement.

6 (Question off microphone.)

7 DR. HOLLAND: If they meet the eligibility
8 requirements. Oh, excuse me. The question was for
9 individuals who currently have a Master's or who have
10 completed a Master's degree, are they eligible to
11 apply? As long as they meet the requirements for the
12 predoctoral fellowship, based on your institution. So
13 there are particular requirements that we have, such as
14 in the initial program, it was that individuals had
15 advanced to Ph.D. candidacy. We received a huge -- we
16 received a large amount of input from stakeholders that
17 requested us to re-evaluate that and we did and a
18 change was made in which the eligibility requirement
19 was that a student had to have successfully completed
20 what their institution deemed as their preliminary
21 examination or their qualifying examination.

22 So, for example, if your institution waives

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

255

1 that requirement, if they consider the Master's degree
2 and they waive a preliminary examination, then that
3 individual would be eligible. They would just have to
4 provide us with the appropriate documentation from your
5 graduate college.

6 (Question off microphone.)

7 DR. HOLLAND: The question was how were these
8 candidates evaluated? Through our peer evaluation
9 process. So students submitted their applications. We
10 looked at the expertise that was needed, either in
11 research, education, extension, or in all three areas,
12 and we assembled panels that had the appropriate
13 expertise to evaluate those applications. So we had
14 individual faculty members from different institutions.
15 We had scientists from federal agencies. We had
16 individuals from private research institutions, as
17 well.

18 So same as the AFRI panel process, that was
19 the same process that was used to evaluate these
20 candidates.

21 Okay. Thank you.

22 DR. MORANT: Hi. I'm not Dr. Robert Holland.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

256

1 I was thinking he would be in the room.

2 I am Mervalin Morant, and I'm speaking on
3 behalf of Dr. Robert Holland, who is the Assistant
4 Director for the Institute of Food Safety and
5 Nutrition. I am an NPL, new to the institute, just
6 only about a month.

7 So I encourage you to contact Dr. Holland if
8 you need in the future. He's really accessible and he
9 would love to hear from you.

10 A brief outline of the presentation to be
11 really simple and fast. I'll give you an overview of
12 the Foundational Programs because I'm speaking
13 specifically about the Foundational Programs. Then
14 I'll tell you about the status of the 2011 Programs.
15 I'm sure you want to know that, and you'll be sitting
16 on the edge of your seats to hear about the status of
17 the 2012 Programs or the RFAs.

18 Then I will talk just briefly about the
19 points of contact for the NPLs for these programs and,
20 very important, the upcoming webinars for the
21 Foundational Programs.

22 So, as you know, the Foundational -- or may

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

257

1 not know, the Foundational Program is issued as one RFA
2 and there are six program areas and I'll detail those
3 in a little bit.

4 There are detailed priority areas and those
5 are based on NIFA's societal challenge areas. The
6 Foundational Programs build foundation of knowledge in
7 fundamental and applied food and agricultural sciences.

8 The project types that go with the
9 Foundational Program are single function of research,
10 education or extension. There is also very limited
11 multifunctional integrated program and you heard this
12 morning what the integration means when we speak about
13 integration at NIFA. So those can be education,
14 research, and extension or combinations of those three.

15 And then the Food and Agricultural Science
16 Enhancement or FACE Grants, which you also heard about
17 this morning, that include the predoctoral,
18 postdoctoral, and strengthening grants and others.

19 So the six program areas under the
20 Foundational Program would be plant health and
21 production and plant products, animal health and
22 production and animal products, food safety, nutrition,

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

258

1 and health, renewable energy, natural resources and
2 environment, agriculture systems and technology, and
3 agricultural economics in rural communities.

4 Plant health and production and plant
5 products, those priority areas are biology of
6 agricultural plants, plant-associated micro-organisms,
7 controlling weedy and invasive species, insects, and
8 nematodes.

9 Under the animal health and production and
10 animal products, there are the animal production,
11 reproduction, improved nutritional performance, growth
12 and lactation, animal health and disease, and animal
13 breeding, genetics, and genomics.

14 Under food safety and nutrition and health,
15 there are three priority areas, physical and molecular
16 mechanisms of food contamination, food and efficacy of
17 nutrients and improved processing technologies.

18 Renewable energy, natural resources and
19 environment, there are three program priority areas.
20 These are processes and transformation in soil, water,
21 and air, thresholds in agri-ecosystems, and management
22 in agri-ecosystems.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

259

1 For the fifth program area, there are two
2 priorities, engineering products and processes, nano
3 technology for agricultural and food systems, and the
4 last program area, that's ag econ in rural communities.
5 These are small- and medium-sized farms,
6 entrepreneurship and small business development, rural
7 development, markets and trades, and environment, and
8 this is the one program area where you'll find
9 integrated opportunities.

10 This is really busy. I have a few copies.
11 It's more or less a cheat sheet to tell you what those
12 Foundational Programs and the program areas are and
13 then the priorities under that.

14 We get a lot of questions from our applicants
15 about exactly what priority am I applying to. So I
16 have some copies if you need them to look at that.

17 For the 2011 Program, the status is there are
18 still some programs that need to be paneled and so just
19 be patient with us. We are working hard to get
20 everything out and to get your funds released. So per
21 priority area, I just encourage you to go back to your
22 RFAs and to contact the program leaders for those

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

260

1 areas, if you need specific information.

2 For 2012, you've been asking, we've been
3 getting questions, where is the Foundational RFA? We
4 anticipate that this will be released by mid April or
5 earlier but perhaps by mid April, and the point of
6 contacts, you've heard that we've had retirements and
7 big huge buyouts or whatever the rumor has been. We
8 have some retirements and buyouts and some NPLs have
9 left for greener pastures, but the points of contact
10 for your 2011 Foundational Program, those have not
11 changed.

12 As with any organization, do expect changes
13 for 2012-2013 and beyond as we have reassignments, as I
14 was reassigned, and retirements and people again
15 leaving for greener pastures.

16 So I encourage you to look at the RFA when
17 that becomes available for specific points of contact.

18 And I'm almost finished. Just talking about
19 the webinars for the Foundational Programs only, this
20 is another opportunity for listening to our
21 stakeholders. This will be done by webinars because we
22 are sure that today all of our stakeholders could not

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

261

1 participate and so we're giving other opportunities for
2 stakeholder input.

3 I want to point out to you that two weeks
4 after each webinar, you're still allowed to provide
5 written comments. So this will not be a one-day or
6 one-and-a-half-hour day event. So this is what the
7 dates are. They will be posted or are posted. They are
8 posted. Effie just confirms they are posted on the
9 website. So you can take some notes but I'd encourage
10 you for specifics to look at our website. That's
11 nifa.usda.gov.

12 And again, these are only the Foundational
13 webinars. The Challenge Area webinars are separate.

14 Again, thank you for your input and we look
15 forward to working with you.

16 (Question off microphone.)

17 DR. MORANT: Deadline dates, the question is
18 about the deadline dates for the 2012. Debbie, you
19 want to help me with this, please.

20 DR. SHEELY: The deadline dates for each of
21 the six primary program areas within the Foundational
22 Program, they will vary but, generally speaking, we

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

262

1 don't have a deadline date scheduled any closer than, I
2 think, somebody help me, six weeks. So there shouldn't
3 be anything earlier than six weeks after the release
4 date of the RFA.

5 (Question off microphone.)

6 DR. SHEELY: I sense some unhappiness
7 with what I just said. All right. Listen. We will do
8 our best to provide -- we will give you as much advance
9 notice as we can. Okay? We will take these comments.
10 I got this tremendous reaction across the room. Six
11 weeks!

12 So we clearly need to think carefully about the setting
13 of those deadline dates and we will do that.

14 Question there?

15 (Question off microphone.)

16 DR. MORANT: The question is will there be
17 preproposals or letters of intent? That will vary with
18 the program and again the information will come out
19 with the RFA. Some programs will and others may not.

20 MS. BALDWIN: Thank you all. Actually,
21 here's the compilation of all the Challenge,
22 Foundational, and NIFA webinars that are upcoming.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

263

1 That's what you will see right now on the website.

2 What we will do is send out invites. That
3 has just been posted for your convenience so that you
4 don't have to write anything down. So that is posted
5 on the website. You don't have to write it down.

6 But we will be going out very soon from each
7 of these different webinars, you'll be getting invites
8 and additional contact information on how the webinars
9 will be conducted to include the two-week written
10 comment time that is going to be allowed for each
11 webinar that's going to be conducted.

12 It looks like we are ending a little early.
13 I hope no one's disappointed.

14 The last speaker of the day will be Dr. Meryl
15 Broussard who will give us our Closing Remarks.

16 DR. BROUSSARD: This has been a long day, so
17 I'll keep my comments very brief. I know some of you
18 have been here since 8 o'clock this morning. How many
19 people?

20 (Show of hands.)

21 DR. BROUSSARD: Very good. I'm very
22 impressed.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

264

1 I want to thank Effie for her hard work in
2 pulling this together for us, hosting this, organizing,
3 getting all the information. She's done a great job.

4 When we talked about it, we were looking at
5 schedules and we said from 8 to 5 and that will be a
6 tough -- usually by this time in the evening, the crowd
7 is really much smaller than what it is.

8 So I'm Meryl Broussard, Deputy Director for
9 Ag and Natural Resources. We have two Deputy Directors
10 for the agency, myself and Dr. Otto. You heard from
11 Dr. Jacobs-Young this morning, our Acting Director,
12 about the importance of this program, I will just echo
13 that, and the importance of these stakeholder listening
14 sessions.

15 So I really want to thank you for your
16 participation. So many of you have been here all day
17 listening to this. You can see the challenge we have
18 as we listen to stakeholder input when we try to -- we
19 have limited resources. We hear the concerns. We hear
20 the opportunities. We won't be able to do everything
21 but we can assure you that we will listen to these
22 comments.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

265

1 Last time we had this listening session at
2 the end of the day when I made my comments, I said I
3 will read every one of the comments we receive and our
4 Policy folks said are you sure and I said yes, and then
5 they brought me this stack of -- it's about this big.
6 If you're ever in my office at the Whitten Building,
7 I've got that binder on my bookcase and I did read
8 every comment. I'll make that promise again. I'll
9 read these comments and I can assure you that the
10 agency, our Deputy Directors, our Assistant Directors,
11 our Program staff, will pay attention to these
12 recommendations. This is important.

13 We have a variety of stakeholders. These
14 written comments would be very helpful. We look
15 forward to what we'll see in the next month, but it's
16 kind of a continuing process. We always say all of our
17 RFAs, if you look at the first two pages of any RFA, we
18 ask for stakeholder input.

19 We also summarize how we respond to
20 stakeholder input from the past. So this is serious
21 for us. We listen to external stakeholders. We have
22 stakeholders on the Hill. Congress will talk to us

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

266

1 about our programs. Within the department, the
2 Secretary of Agriculture is one of our key
3 stakeholders. The Challenge Areas that we're
4 supporting are things that he's really pushed in this
5 Administration.

6 So again, we want to thank you. There was a
7 little bit of discussion. I'm not going to try to
8 summarize what we've heard today. But we did talk a
9 little bit and you've heard this issue about the focus,
10 scale, and impact and I carry that little card around,
11 and this was something when the new Administration came
12 in, they asked us to really look at our programs, make
13 sure they're focused, make sure we're working on a
14 scale that's appropriate to make a difference, and that
15 we have impact.

16 We heard comments about balancing this
17 portfolio, so we talk about scale. What is scale? So
18 we've heard that loud and clear. We've heard about the
19 individual investigators, the smaller projects, those
20 opportunities, and our commitment to the Foundational
21 Programs.

22 So we'll have to balance this portfolio.

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

267

1 We'll have to focus. We'll have to set priorities.

2 We've heard a lot of things today. We won't be able to

3 do everything you've suggested. We will listen to

4 that, and we'll have to look at ways for us to help us

5 focus. We'll try to be less prescriptive. That's

6 something we're really working on.

7 Many of the things we've heard we've actually

8 tried to start to implement but we really appreciate

9 what you say. I think we should start a new award

10 category. All of those who survived the full day of

11 listening here should be NIFA Stakeholder Listening

12 Session Survivor Award. If nothing else, give yourself

13 a round of applause.

14 (Applause.)

15 DR. BROUSSARD: I really didn't expect, when

16 Dr. Otto and I were fighting over who would give these

17 comments at the end of the day, and I lost, I really

18 expected a handful of people to be left after some of

19 our stakeholder -- I've been with the agency 26 years

20 or its predecessors and I've sat in on a variety of

21 these sessions. At the end of a long day, there are

22 actually days when it's just the NIFA folks at the end

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

268

1 of the day and our recorder over here.

2 So we're very happy that you committed -- we
3 know that you care about the program, that's important
4 to us, and we really appreciate you taking time out of
5 your very busy day to help inform us about what we
6 should be doing.

7 Thank you very much. What you do is
8 important and this does make a difference for us. We
9 really appreciate it. Thank you.

10 (Applause.)

11 (Whereupon, at 3:55 p.m., the meeting
12 was adjourned.)

13

14

15

16

17

18

19

20

21

22

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

269

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

CERTIFICATE OF NOTARY PUBLIC

I, NATASHA KORNILOVA, the officer before whom the foregoing proceeding was taken, do hereby certify that the proceeding was recorded by me; that the proceeding was thereafter reduced to typewriting under my direction; that said transcript is a true and accurate record of the proceeding; that I am neither counsel for, related to, nor employed by any of the parties to the proceeding; and, further, that I have no financial interest in this proceeding.

NATASHA KORNILOVA
Notary Public in and for the
District of Columbia

My Commission Expires: April 14, 2012

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

270

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

CERTIFICATE OF TRANSCRIPTION

I, PATRICIA DUCK, hereby certify that I am not the Court Reporter who reported the following proceeding and that I have typed the transcript of this proceeding using the Court Reporter's notes and recordings. The foregoing/attached transcript is a true, correct, and complete transcription of said proceeding.

Date

PATRICIA DUCK
Transcriptionist

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|--|--|
| <u> </u> \$ | 47:1 187:3 | 11 201:19 204:1 242:17 | 1928 60:17 |
| \$1 196:16 205:19 252:7 | \$58 82:9 | 11:49 141:19 | 1944 49:7 |
| \$1.6 136:15 | \$6 229:13 251:3 | 116 79:5 | 1994 15:9 |
| \$10 187:3 | \$60 5:15 | 119 252:12 | 1996 52:4 116:13,17,22 |
| \$129 172:7,10 | \$700 9:21 174:7 182:15 | 12 106:9 155:11 176:16 209:21 242:17 | 1999 50:6 |
| \$13 116:15 | \$75,000 19:17 | 120 29:7 | 19th 23:6 |
| \$130,000 19:18 | \$78 117:1 | 1-2-3-4-5 238:17 | <u> </u> 2 |
| \$137 176:9 | \$8 50:9 | 13 113:10 151:2 209:22 | 2 48:15 54:22 112:1 126:19 153:20 157:16 160:17 161:14 176:15 233:1 |
| \$150,000 14:5 | \$9 18:7 | 130,000 251:9 | 2,000 164:17 |
| \$164.6 66:17 | \$97 178:5 | 14 113:10 252:6 269:22 | 2.3 42:12 |
| \$17 196:20 | <u> </u> 1 | 14.2 122:15 | 2:15 191:2 |
| \$2 18:5 111:8 189:2,3,4 244:18 246:2 | 1 48:14 111:4 113:12,14 126:6 141:18,20 174:14 188:5 221:9 | 15 85:9 163:5 232:14 | 2:50 191:9 |
| \$20 241:22 | 1.5 136:14 196:17 | 150 119:19 | 20 81:21 89:11 91:3,6 148:13 157:5 174:16 188:3 191:8,13 196:18,21 250:5 |
| \$230 66:22 | 1.7 116:17 | 150th 119:8 220:3 | 20,000 206:18 |
| \$25 46:22 | 1.8 117:16 | 15-minute 80:7 | 200 81:14 |
| \$250 175:2 | 1:02 142:2 | 16 199:13 | 2000 52:4 78:6 196:16,19 |
| \$250,000 14:3 | 1:1 14:3 | 160 116:17 | 20024 1:15 |
| \$264,470,000 9:22 | 10 13:15,16 32:4 38:19 41:10 57:9 71:4 74:4 81:16 82:22 103:1 125:16 143:18 145:2 163:5 172:4 175:4 185:17 202:22 242:17 250:5 | 17 42:2 71:5 | 2005 40:13 |
| \$30 65:20 | 10,000 64:11 | 17,500 14:17 | 2006 162:12 |
| \$300,000 186:3 | 10:30 80:13 | 17th 253:8 | 2008 3:10 9:20 18:12 23:16 118:9,11 136:14 172:6 201:17 202:15,21 |
| \$31 196:20 | 100,000 23:1 101:3 | 18 151:22 198:22 | 2009 3:12 |
| \$32 171:13 | 10-20 73:17 | 18,000 148:17 | |
| \$325 5:17 10:2 | | 18th 23:4 | |
| \$4.2 252:12 | | 19 79:7 117:4 160:1 | |
| \$480,000 186:4 | | 1906 49:8 | |
| \$5 185:18 229:12 244:16 | | 1908 27:21 | |
| \$5.3 252:15 | | | |
| \$50,000 13:6 | | | |
| \$500,000 18:18 | | | |

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|---|
| 2010 16:3,9 67:6 79:5 116:22 117:3 120:16 122:15 136:14 196:17,20 233:4 241:21 244:18 249:15 252:4 | 23 160:7 24 52:4 154:1 25 78:6 25,000 196:4 26 22:22 81:2 267:19 <hr/> 3 3 46:18 48:16 55:4 112:7 127:9 154:8 158:9 160:20 177:2 | 200:19 201:3 205:18 252:12 400 100:19 404 70:17 406 15:7 41 252:4,5,6 43 178:1 443 117:2 45 111:7 48 120:19 152:11 175:20 4th 68:11 <hr/> 5 | 65-PI 46:22 67,000 178:3 68 66:21 6th 68:12 <hr/> 7 7 56:15 7.2 65:15 70 118:6 148:15 70,000 128:21 75 49:13 75,000 251:10 <hr/> 8 |
| 2011 16:12,22 66:17 67:14 116:14,18 118:10 256:14 259:17 260:10 2011-2012 50:10 2012 1:9 9:21 16:22 67:18 68:8 84:2 246:9 256:17 260:2 261:18 269:22 2012-2013 50:11 260:13 2013 4:22 5:4 20:9 27:14 36:21 40:2 43:11 45:12 50:17 54:3 57:15 60:15 129:3 152:5 174:5 181:19 2014 36:22 40:3 60:16 2015 43:13 2016 192:8 2050 118:3,6,8 20th 239:13 21 40:18,20 21st 31:22 118:16,18 176:8 22 1:9 22nd 20:7 237:13 | 3,000 148:7 3.6 117:16 3:10 191:10 3:55 268:11 30 10:16,20 11:13 38:2 118:12 194:19 204:6 31 86:8 325 174:6 34 40:17 252:8,13,16 253:21 36 78:7 175:14 198:21 36.5 196:15 3A 42:19 3rd 3:8 <hr/> 4 4 55:19 128:7 155:7 160:22 177:5 4,400 60:18 40 11:9 65:7 66:18 148:9 188:1,2 | 5 47:17 56:1 128:13 161:1 264:5 5,000 28:3 35:16 194:17 5,500 181:20 50 91:7 97:6 117:9 143:21,22 144:13 174:16 202:19 241:15 50/50 194:12 54 252:14 550,000 178:5 558 175:10 57 67:1 <hr/> 6 6 56:10 6,000 45:5 6,200 192:2 60 11:10 148:1 | 8 57:3 263:18 264:5 8:32 1:10 80 148:15 800 1:14 <hr/> 9 9 57:5 9,000 148:8 9.3 118:3 90 49:12 90s 144:11 91 117:6 94-fold 116:16 96 117:18 9th 1:14 <hr/> A A&M 97:5 a.m 1:10 141:19 |

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|--|
| <p>abatement 70:21</p> <p>ability 7:11,13 8:7 54:9,10 66:3 98:11 121:21 135:8 166:13,15 179:13</p> <p>abiotic 149:18</p> <p>able 42:8 70:5 90:5 94:1 96:1 102:3 127:19 133:5 142:11 144:10 163:9,22 165:2,4 186:11 231:20 232:4 240:4 241:12 242:14 264:20 267:2</p> <p>absolutely 20:4</p> <p>absorption 168:6</p> <p>abundant 206:16</p> <p>academia 28:20 60:19 64:11 73:13 75:2 76:8 160:3 181:21</p> <p>academic 48:6 126:12 139:22 210:4</p> <p>academicians 209:9</p> <p>academics 217:13</p> <p>Academy 199:19 213:15 234:12</p> <p>accelerating 130:10</p> <p>acceptable 112:14</p> <p>accepting 20:6</p> <p>access 44:4 83:4 94:13 126:21</p> | <p>127:4,8 141:10,12 199:10 220:17</p> <p>accessible 256:8</p> <p>accompanied 153:16</p> <p>accomplish 70:6 134:5</p> <p>according 44:14 65:6 66:14 80:22 136:12 243:2 247:7</p> <p>account 62:19</p> <p>accountant 69:8</p> <p>accounts 136:13</p> <p>accumulate 81:16</p> <p>accumulation 81:11 83:19</p> <p>accurate 51:8 269:7</p> <p>accurately 34:6 52:20</p> <p>achievable 46:14,17</p> <p>achieve 16:1 31:5 56:8 167:22 186:8,21 223:9 240:6 242:1 244:3,4</p> <p>achieved 35:20 61:19 177:4</p> <p>achievement 17:11</p> <p>achievements 106:1</p> <p>achieving 15:21 106:6 127:11 182:15 186:13</p> | <p>241:17</p> <p>acid 91:4,8 92:4</p> <p>acidic 91:8</p> <p>acquire 192:7</p> <p>acquisition 52:9</p> <p>acreage 116:16</p> <p>across 72:17 75:16 119:12 122:12 131:8 161:20 204:3 206:2 243:13 262:10</p> <p>act 32:22 86:16 119:9,19 220:8</p> <p>acting 2:21 83:3 133:15 264:11</p> <p>actions 32:10 98:17</p> <p>active 23:15 27:4 58:22 117:3</p> <p>actively 49:19 60:21</p> <p>activities 4:10 27:2 121:12 123:14 125:12 132:12 204:2 220:13 245:21</p> <p>activity 26:8 34:2 125:21 131:1 178:6 214:7</p> <p>actual 21:5 22:6 56:3 133:11 153:10 206:19 249:5</p> <p>actually 10:7 11:17 14:19 15:19 16:4 21:18 22:2,5 43:11 46:10,13 52:4</p> | <p>59:5 68:20 69:14 71:1 85:1 87:15 93:22 96:14 100:5,6 101:17,22 102:14 103:5,6,11,13 109:8,16 122:20 134:5 135:22 143:1,3,17,19 145:1 146:4,8 160:3 161:15 162:18,19 169:4 231:6,8,13,16 232:2,13 235:20 237:16 238:11,13 239:13 241:7 249:4,6 262:20 267:7,22</p> <p>acute 208:6</p> <p>ADAP 151:5 152:4 154:1</p> <p>adapt 95:22 96:22 186:20</p> <p>adaptation 91:4 149:21 156:17 216:17</p> <p>add 123:3 132:13 133:17 191:8 198:5</p> <p>added 66:14,21,22 124:3 153:11</p> <p>addition 32:4 56:10 61:19 66:7 67:16 82:10 93:16 95:3 118:17 121:20 154:6 160:6 164:6 175:7,14 178:20 180:5</p> |
|---|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|--|
| <p>210:2</p> <p>additional 5:17 21:4 25:11 27:13 39:4,6 53:5 63:6,22 69:2 104:5 111:19 115:11 129:4 176:12 195:2 203:17 206:7 231:1 263:8</p> <p>additionally 127:3,20,22</p> <p>address 19:14 23:11 24:6 29:9 37:14,19 52:13 54:9 67:4 68:16 73:14 74:8 78:13 79:19 90:12 97:12 125:9 127:6 137:7 157:12 169:20 171:13 178:13 179:6 184:12 201:15 205:10 210:6 223:6 224:8 240:17 242:19</p> <p>addressed 68:5 79:14 150:13 179:22 194:14</p> <p>addressing 17:14 36:16 38:5 75:13 77:12 79:21 90:10 124:16 137:10 156:15,18 193:1 201:18 223:5 234:5</p> <p>adequate 6:10 35:6 48:15 72:19 76:2 158:22</p> | <p>201:10 208:4 210:13</p> <p>adequately 28:18 38:19 55:7 63:10</p> <p>adjourned 268:12</p> <p>adjustment 133:10</p> <p>adjustments 16:6</p> <p>administer 127:20</p> <p>administration 5:14 81:21 130:6 132:5 174:3 184:2 204:10 266:5,11</p> <p>administrative 111:19 205:22</p> <p>administrators 48:18 79:11</p> <p>admit 85:3 131:17 185:1</p> <p>adopt 85:15</p> <p>adopted 116:19</p> <p>adoption 46:15 130:11</p> <p>adult 134:16 214:8 216:1</p> <p>adults 152:8 213:3 214:17</p> <p>advance 13:8 24:20 32:19 34:10 46:6 56:3,12 65:22 110:12 112:11 123:20 131:12 133:7 200:22 262:8</p> <p>advanced 96:16 109:17 116:3 148:13 254:15</p> | <p>advances 23:7 28:3 37:4 38:1 62:14 111:16 112:6 133:22</p> <p>advancing 66:12 250:15</p> <p>advantage 7:3 20:18 76:19</p> <p>advantages 182:13</p> <p>adverse 63:14</p> <p>Advisory 113:18</p> <p>advocacy 27:3 168:22</p> <p>advocate 27:6</p> <p>advocates 7:8 172:19</p> <p>Affairs 35:13 49:1 173:4</p> <p>affect 55:11 71:16</p> <p>affected 39:11</p> <p>affecting 240:11</p> <p>affects 200:8</p> <p>affiliation 2:10 9:1 22:14</p> <p>afford 120:15 165:2</p> <p>affordable 126:9 161:18 165:2 166:17</p> <p>affords 119:22</p> <p>Aflatoxin 81:10 82:3 83:19</p> <p>Aflatoxins 81:19 82:4,17 83:8,11,17 84:1,9</p> | <p>AFRI 1:4 3:2,8,9 5:16 9:13,19 10:6,16 11:1 13:15 14:20 15:5,18 17:4 23:16,19 24:5,16 25:1,7,12,17 26:19,20 27:4,7,9 28:14 29:3,13,22 30:6,8,19,22 31:8 32:9 36:20 37:2 40:1 43:15 45:12,15 47:22 49:4 50:17 51:19 52:8,15 53:1 54:3,21 57:1 58:10,17 60:15 61:3 63:3,17 64:1,6,20 65:10,16,19 67:18 69:12 74:15,22 79:5,14,15 80:4 84:20 85:5,16 86:5 117:17 118:18 119:22 120:10,15,17 121:11 122:3,5 123:18 124:16 125:3 128:13,18,19 130:19 132:6 137:4 147:21 151:1 152:14 154:4,10 157:3,17 159:14 161:6 162:11 163:20 167:3 171:16 173:5 174:4,7 176:15 177:14 179:17 180:10,14,15,21 181:19 182:8</p> |
|--|---|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|---|--|
| <p>183:2,5,15 184:5 188:20 192:12 193:9,14 194:9,15,21,22 195:2,10,11 201:3,6,16,21 202:7,16,20,22 203:8,15,18 204:10,12,16 205:2,5,17 206:5 207:10,14 214:2 215:6,18 221:3,5,21 223:6,20 243:10,11 246:7 248:5 249:14 251:4,5,7 255:18</p> <p>AFRI/NIFA's 133:20 135:19</p> <p>Africa 92:5,11</p> <p>AFRI-funded 27:1</p> <p>AFRI's 3:11 8:5 38:2 178:21 180:17 203:4</p> <p>afternoon 141:14 142:1,3,20 165:6,8 166:1 173:2 183:21 187:8 191:4 206:9 213:8 216:12 249:10</p> <p>ag 15:2 66:10 67:5 68:15,18 169:8 171:6 173:21,22 216:13,15 217:20,22 259:4 264:9</p> <p>against 82:20 208:8</p> <p>Agblevor 228:19</p> | <p>age 7:4 167:1 198:22</p> <p>agencies 5:8 28:7 66:2 71:5 75:22 77:2 91:22 107:11 108:21 130:20 147:11 152:22 153:1 171:13 233:10 235:21 236:3 237:4 255:15</p> <p>agency 3:18 4:1 10:9 31:7 32:7,22 64:6 71:7 105:19 114:8,14 115:6,18 121:11 122:21 143:9 145:3,6 146:5,19 147:3,6,8,9 152:19 171:20 179:11 187:21 188:1 189:8 190:18 205:3 207:8 235:21 236:2 245:18 264:10 265:10 267:19</p> <p>agency's 113:11 204:15 225:2</p> <p>agenda 2:7 44:13 71:21 92:16 168:15 181:9</p> <p>agent 144:17 146:10</p> <p>aggregates 137:16</p> <p>ago 81:14 100:7 103:1 111:8 143:21 144:1,13 145:2 154:1 189:1 197:9</p> | <p>220:20</p> <p>agri 162:6</p> <p>agri-biosciences 196:11,13 200:11</p> <p>agricultural 4:3,9,15 6:2,7 7:9,11 8:8 10:11 12:8,13 13:11 15:10 23:2,6,10,14 24:1,13,21 25:3,6,13,18 26:17 27:6 29:1 30:11,18 38:18,20 53:17,21 61:9 62:18 63:6 65:8 67:1 73:16 74:9 75:17 92:20 93:7,10,11 94:19,22 96:17,20 97:5 98:3,10 100:10 102:11 105:19 106:2 129:16 149:4,9 151:4 156:4 157:8,13 159:4 162:4 166:7 168:20 169:5 171:3,12,15 173:17 174:13,15 179:5 180:13 181:5 184:3 186:21 188:9 190:8 201:4,7 203:11,22 206:4,18 220:9,13 232:8 235:13 241:15</p> | <p>250:1,6,11,13,15 251:1 257:7,15 258:3,6 259:3</p> <p>agricultural-related 152:9</p> <p>agriculture 1:3,4 2:22 3:6 5:6 7:6 24:8 26:1 35:3 36:18 37:5 55:22 64:19 65:4 66:5,10 68:3 72:11,12,18,21 74:10,13,18 75:19 76:8 77:13 85:11 87:2 90:16,19 92:4 93:1,20 97:7 100:12 101:1 102:18 116:8,10,20 117:12 118:13 125:1 127:7,9 128:16 139:21 165:15 170:5 172:17,22 174:2,9 175:8 177:17 182:19 190:18 195:22 200:18,21,22 207:5 219:3 220:15 232:19 235:19 238:6 240:1,3 242:10,19 258:2 266:2</p> <p>agriculture-related 146:16</p> <p>agriculture's 29:14</p> <p>agri-ecosystems 258:21,22</p> |
|---|---|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|---|
| <p>agronomic 39:8,20 150:1 182:3</p> <p>Agronomy 45:1 181:13 219:18</p> <p>ahead 104:8 150:11 169:19 242:12 245:19</p> <p>aid 22:1,3</p> <p>aim 33:22</p> <p>aimed 23:21</p> <p>air 105:10 258:21</p> <p>Alabama 213:10,13,18 216:9</p> <p>alarming 134:15</p> <p>Alaska 151:18</p> <p>alert 166:16 248:22</p> <p>algae 39:15 70:19</p> <p>Ali 226:2</p> <p>Alicyclobacillus 138:20</p> <p>align 3:20 124:2 157:3</p> <p>alignment 38:8</p> <p>alive 33:9</p> <p>Allen 136:6 181:9</p> <p>alleviate 117:8</p> <p>alliance 151:17 200:19</p> <p>allied 49:19</p> <p>Allison 168:14,16</p> <p>allocated 67:10 218:8</p> <p>allocation 24:19</p> | <p>allow 14:6 15:22 43:18,20 46:4 59:20 76:2,14 81:21 108:17 139:4 140:8,14 150:5 153:7 155:13 170:8 198:11 204:16 212:18 248:8 249:20</p> <p>allowed 31:16 42:1 71:14 89:16 112:22 120:17 143:15 153:9 154:18 211:22 261:4 263:10</p> <p>allowing 32:9 53:14 128:18 139:22 159:14 180:15</p> <p>allows 51:11 136:21 139:3 164:9 211:3</p> <p>all-time 118:9</p> <p>Aloha 150:21</p> <p>alone 79:5 107:9 212:6 232:5</p> <p>alongside 229:15</p> <p>already 15:12 43:7 84:2 85:22 118:18 122:8 135:16 148:7,9 167:3 172:16 208:9 214:4 230:1 246:10</p> <p>alternative 55:13 79:16 95:16 138:2 165:13</p> <p>aluminum 91:4,9,14,15,17</p> | <p>Alumni 187:11</p> <p>am 9:11 40:9 57:17 92:22 125:4 133:15 165:9 168:16 184:1,3 185:2 224:5 235:18 256:2,5 259:15 269:8 270:3</p> <p>ameliorate 165:21</p> <p>Amendment 100:9</p> <p>America 45:3,9 82:12 130:12 132:21 173:4,5,16 177:2 181:16 182:7 191:21 192:1,6 204:3</p> <p>American 22:19 27:19 35:14,15 36:3 39:22 49:2,7 53:12 60:12 62:11 64:4,15,16 71:7 112:8 151:4,8 177:16 198:21 211:21 213:16</p> <p>Americans 24:3 36:14 53:4 98:20 134:11 159:6 211:13 212:5 220:12,14</p> <p>America's 28:12 244:16</p> <p>Amherst 142:22</p> <p>AMI 49:3,5,8,11,15,1 9 51:20 53:13</p> <p>AMIF 49:5 50:6,15 52:1,15</p> | <p>53:9</p> <p>AMIF's 50:1,10</p> <p>among 42:9 52:14 95:9 178:19 207:2 237:7</p> <p>amount 38:10 43:21 87:4 132:19 138:9 141:3 153:10 189:15 196:14 254:16</p> <p>amounts 141:4 153:7 167:15</p> <p>analysis 107:15 117:11 138:3</p> <p>analyze 20:8 98:11</p> <p>anchored 41:19 42:20</p> <p>and/or 21:4 135:4 224:8</p> <p>Anderson 181:12</p> <p>Angela 27:18</p> <p>animal 64:9,16,19 66:4,10,12 67:2,5,8,9,11,15, 16,17,18,22 68:3,7,10,15,18 82:1,8 109:17,18 114:6 125:5 126:3,19,20 127:6,7 128:17 170:6 178:20 179:3 201:15,22 202:3 216:18 225:15 227:2,13 257:21,22 258:9,10,12</p> <p>animals 33:8 65:6 66:19 113:14</p> |
|---|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|---|---|
| <p>170:11 247:3 Ann 226:20 Anniversary 119:9 220:3 announcement 248:16 announcements 26:19 141:8 annual 24:16 54:21 243:11 251:3 annually 178:6 182:15 183:7 answer 84:9 134:10,16 answers 191:9,13 219:14 224:14 235:9 antagonistic 34:3 anti 114:11 antibiotics 247:3 anticipate 43:10 260:4 anxious 4:6 anybody 17:3 104:19 125:17 228:10 anyone 15:3 228:17 anything 100:16 229:12 230:8 237:18 262:3 263:4 anyway 190:3 223:14 anyways 210:19 anywhere 122:1</p> | <p>163:5 APLU 168:19 APLU's 168:21 appeal 215:18 appear 33:13 appears 2:7 231:13 applaud 25:7 54:1 133:20 135:19 164:2 190:16 203:21 applauds 29:3 applause 267:13,14 268:10 apple 162:14 apples 160:9 applicable 154:3 applicants 56:11 64:1 112:22 153:2 204:11,13 205:22 222:15 252:4,11 253:2 259:14 application 28:5 53:20 111:14 121:21 159:9 205:21 applications 19:12 23:19 41:3 57:1 108:16 130:2 218:11 243:13 245:17 252:5,6 253:2,5,22 255:9,13 applied 11:10,20 25:16 46:1,20 54:10,19 55:8</p> | <p>62:3 67:3 73:11 87:4,22 89:15 97:14,16 216:13 218:4 236:15,21 251:16 257:7 applies 71:21 apply 73:22 76:22 87:6,12 108:17 114:22 154:19 200:7 217:22 251:14 253:18 254:11 applying 121:1 123:16 239:14 259:15 appointment 147:17 appointments 123:2 193:8 appreciate 7:7 20:20 23:17 31:12 32:10 48:20 50:13 54:6 57:13 64:22 65:15 105:4 109:3 110:21 113:9 124:21 143:1 147:20 157:16 177:3 178:16 179:7 181:17 183:15,17 185:9 187:17 188:20 194:10 223:20 228:16 231:5 267:8 268:4,9 appreciates 32:6 45:10 49:3 60:13 206:20 appreciation</p> | <p>176:3 appreciative 61:2 193:19 199:6 apprised 170:16 approach 42:1,7 95:12,14 100:9 123:22 133:18 138:16 139:7 186:7,14 218:18 236:6 239:7,21 246:14,17 approaches 34:2 63:7,10 132:9 140:8 239:14 246:13 approaching 236:4,10 appropriate 25:15 47:2 79:19 244:21 255:4,12 266:14 appropriateness 128:5 appropriation 9:22 Appropriations 168:20 approved 177:8 approximately 252:4,7,8,11,14 April 247:13,14 253:8 260:4,5 269:22 apropos 220:19 APS 27:19,20,21 28:6,13,14 29:3,13,17,18 31:3,12 32:6</p> |
|--|---|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|---|
| <p>Arabidopsis 148:16</p> <p>arable 91:7</p> <p>Architecture 147:16</p> <p>area 8:4,13 12:18 13:9 15:20 18:1,16 19:7 25:8 39:11 47:19 48:1,3,5 50:18 57:11 62:7 63:1 65:17,22 66:2 67:10,20 79:7 85:8 95:1 98:7 101:9 102:10 107:6,15,20 108:5 112:12 113:2 118:15 124:16 127:2,6 129:19 131:2 132:15 138:18 139:5,13 147:22 148:5 167:4 187:5,13,15 194:4 203:12 204:1 209:1 211:1,11 221:18 229:4 230:6 231:14 237:22 244:4 259:1,4,8,21 261:13</p> <p>areas 3:20 4:15 17:6,10,16,19 18:5,10,11,13 19:13,15 25:5,6,12 26:5 28:13 36:7 37:21 39:4 47:18,21 49:21 52:18 53:1,2 57:2 58:9 60:5,7 61:19</p> | <p>62:7 63:6 66:3 67:12 68:1,9 73:2,6 74:18 75:10,11 86:4,5 93:14,15 97:6,13 107:17 109:19 113:15 116:9 117:19 126:18,21 127:2 129:17 130:18 132:8,18,21 137:5,7 148:3 154:10 155:16 179:19,21 180:4 186:17 192:12,18 202:14,16 205:16 207:2,4,12,14,20 209:6 210:9 211:8 214:5,8,17,18 219:2,4 221:5 223:4 225:2 230:14,17 233:2 237:22 238:11,16 239:8,11 242:17 243:20 244:1 246:19 248:7 250:14 251:17,19,22 253:12 255:11 257:2,4,5,19 258:5,15,19 259:12 260:1 261:21 266:3</p> <p>arena 6:2</p> <p>aren't 226:6</p> <p>argue 75:10</p> <p>argument 47:7 229:22</p> | <p>Arias 80:15,17,18</p> <p>arid 208:14</p> <p>arm 156:13</p> <p>arose 39:12</p> <p>array 46:12 204:17</p> <p>arrives 155:10,12,22</p> <p>arriving 44:14</p> <p>ARS 45:8 89:6,22 108:17,19,20 110:6 127:3,8 128:18 180:15</p> <p>articulate 173:12</p> <p>articulated 4:14 18:11</p> <p>arts 223:17</p> <p>aside 13:14</p> <p>ASN 60:12,13,17 61:2,13,22 62:5,19 63:3,21</p> <p>ASPB 35:19 36:19 37:1,6,12,18 38:2,6,16 39:6</p> <p>aspect 197:18</p> <p>aspects 10:10 32:21 77:13 184:9 197:1,4 234:16</p> <p>Aspergillus 81:13,15</p> <p>aspirin 21:22 22:4</p> <p>assembled 255:12</p> <p>assess 63:11 128:5</p> <p>assessed 47:3</p> <p>assessing 162:18</p> | <p>assessment 14:6 106:14 107:14 122:19 162:17</p> <p>asset 24:19</p> <p>assigned 43:4</p> <p>assignment 123:1</p> <p>assignments 22:10</p> <p>assistance 27:13</p> <p>assistant 8:12 9:8 21:14,16 57:18 92:20 159:18 168:16 191:11 193:6 195:21 199:20 200:3 213:12 216:13 217:11,12 224:6 237:9 238:9 256:3 265:10</p> <p>Associate 133:15 156:3 195:18 210:20</p> <p>associated 32:8 33:14 136:22</p> <p>association 29:9 49:10 64:15,17 178:1 213:16</p> <p>associations 30:3</p> <p>assuming 140:20</p> <p>assure 120:4 264:21 265:9</p> <p>assured 67:10</p> <p>ate 208:7</p> <p>atmosphere 102:4,19</p> <p>attaining 56:5</p> <p>attempt 18:14</p> <p>attempts 185:16</p> |
|--|---|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|--|
| <p>attention 68:6 98:17 132:6 150:20 181:9 183:14 232:3 233:2 235:5 240:10 265:11</p> <p>attract 72:20 139:21</p> <p>attraction 132:11</p> <p>attribute 52:12,20 155:19</p> <p>attributes 157:7</p> <p>Auburn 187:13 213:10</p> <p>audience 44:9 54:11 93:17 94:9 131:6 143:12 224:2 228:14</p> <p>audiences 120:22 121:6 122:1</p> <p>Australia 103:2</p> <p>authorities 14:20</p> <p>authority 15:5,8</p> <p>authorized 9:19,20 27:8 182:16 204:5</p> <p>automatically 127:2</p> <p>Availability 139:20</p> <p>available 38:10 62:6 63:4 73:19 75:3,9 83:15 94:18 98:22 119:13 127:2 129:19 134:22 141:15 148:1,9 150:1 161:16,17 175:5 191:3</p> | <p>200:13 208:19 242:6 244:21 246:8 260:17</p> <p>avenues 230:10</p> <p>average 84:3 88:9 175:4</p> <p>Avoidance 78:9</p> <p>avoiding 84:7</p> <p>award 7:18 26:19 48:18 117:17,19 124:8 140:3 155:8,10,12,22 184:13 205:6 251:3 267:9,12</p> <p>awarded 117:13 120:17,19</p> <p>awards 18:2,4 45:16,18 117:11 139:16,20 140:4,8 182:9 193:16 194:11 195:15 243:7 251:9,10,11 252:7,12,14,18,2 2 253:1 254:1</p> <p>aware 7:2 31:3 47:18 108:13</p> <p>awareness 7:4,5 135:9 147:7,12 171:2</p> <p>axis 87:3,21 88:10</p> <hr/> <p style="text-align: center;">B</p> <hr/> <p>background 85:7</p> <p>bacterium 162:7</p> <p>bad 88:7,12</p> <p>bag 165:4</p> <p>bake 208:14</p> | <p>balance 25:15 63:8 73:2 74:7 182:16 189:8 190:3 193:14 194:12 210:12 266:22</p> <p>balances 65:12</p> <p>balancing 158:21 266:16</p> <p>BALDWIN 2:2 20:16 27:15 35:11 44:7,18 80:6,15 133:10 141:7 142:3 181:8 191:1,6 219:10 223:22 224:13 235:10 237:11 249:4 262:20</p> <p>Baltimore 157:10</p> <p>banana 143:19,20,21 144:5,7,8,10 145:15</p> <p>bandages 22:3</p> <p>bar 155:16</p> <p>Barb 173:2</p> <p>barring 207:7</p> <p>base 150:18 158:9 169:14</p> <p>based 82:19 109:13 110:22 112:18,20 113:1 133:7 138:4 151:6 156:15 160:18 168:18 238:17 253:14,22 254:12 257:5</p> <p>basic 11:20 18:22</p> | <p>25:8,16,20 36:12 39:19 41:1 45:20,22 46:20 47:10 51:14 54:10,17 62:3 67:3 73:11 74:1 89:15 111:12 122:11 144:16 146:2 149:16 150:10 182:10,19 209:15 236:13 251:16</p> <p>basically 59:9 139:14 160:11 185:19 186:12,13 221:21 252:17</p> <p>basics 9:12</p> <p>basis 17:20 19:5 26:12 54:21 92:3</p> <p>bear 223:10</p> <p>Beaulieu 129:9,10</p> <p>beauty 48:8</p> <p>became 15:18 30:4</p> <p>become 88:10 99:11 112:3 119:16 170:18,22 171:9 176:22</p> <p>becomes 161:16 242:6 260:17</p> <p>becoming 99:14 170:20</p> <p>bed 192:5</p> <p>beef 49:12 50:3</p> <p>beg 69:18</p> <p>begin 8:16,22</p> |
|--|---|--|--|

Capital Reporting Company
 NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|--|
| <p>176:2 223:17 beginning 42:22 90:5 115:4 176:16 203:16 behalf 36:3 39:22 45:2 53:12 72:10 77:9 124:20 128:21 169:4,6 191:21 200:18 213:15 219:7 238:9 256:3 behavior 34:4 55:15,16 59:13 93:8 121:9 150:7 158:7 168:4 212:6,7,9,11 behavioral 134:6 135:7,20 212:1,3 behaviors 55:12 behind 135:14 belief 24:18 49:17 believe 4:2 7:5 30:15 37:7 53:6 56:6 65:17 68:4 111:13 139:6 144:14 172:16 176:16 183:4 202:11 203:8 205:12 209:17 211:18 212:14,17 213:22 227:15 244:15 believes 23:9 49:15 52:1 62:19 63:3 65:10 belong 117:17,19 benches 159:8 bench-to-field</p> | <p>38:7 benefactor 187:18 beneficial 27:1 34:19 79:6 127:11 195:7 benefit 78:21 135:2 143:5 153:11 203:2 215:16 benefited 89:9 199:8 benefits 7:1 23:8 31:12 54:18 55:3 61:11 77:17 130:14 132:7 161:17 174:9 175:7 177:7 199:6 209:20 best 6:13 10:10 16:19 30:8 46:4 47:11 56:8 60:1 72:20 76:15 156:19 189:20 205:14 219:22 262:8 bet 10:12 Betsy 48:22 better 4:2 23:12 26:22 34:22 36:9 52:11 62:15 63:7 90:20 102:15 117:2 131:13 133:2 134:3,8 135:9 136:3 163:22 168:5 171:19,21 172:20 197:12 198:16 241:7 beyond 55:21 62:7 63:5 98:2 121:8</p> | <p>171:4 175:8 204:17 214:20 215:15 233:17 260:13 bigger 143:3 163:11 164:13 biggest 114:11 174:10 bill 3:10,21 9:20 11:18 16:14 18:12 23:17 27:10 172:6,8 201:17 202:15,21 billion 65:9 66:17,21 67:1 81:22 82:4 116:15 117:1 118:3,4 171:13 175:17 176:9 178:6 196:16,17,20 241:1 bills 175:20 binder 265:7 bio 104:9 240:14 bioactive 198:1 bioactives 138:12 biocentury 200:10 biochar 100:9,21,22 101:5,7,14,21 103:8,9,22 104:1 105:9,11,14 230:6,8 231:12,21 232:12 biochars 103:19 biochemical</p> | <p>149:8,11 150:13 biochemicals 167:14 168:7 biochemistries 162:2 biochemistry 34:13 57:18 147:17,21 148:22 150:19 biochemists 149:8 150:15,17 biodegradable 208:3 biodiversity 35:2 117:6 234:6,8 bioeconomy 234:2 bioenergy 6:18 17:8 18:8 30:3 39:8 65:21,22 67:17 111:2 112:11 178:22 186:17 192:13 225:5,6,8,17 226:3 227:9,10,16 229:6 231:7 232:12,20 233:13,15 234:2,7 238:8 239:1 244:14,19 245:6,10 247:6,7 bioethanol 229:2,22 230:3 biofuel 8:2 23:13 85:15,18 111:2 112:15 231:14,19 232:4,6,12 biofuels 85:13</p> |
|--|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|---|
| <p>234:2</p> <p>bio-fuels 85:12</p> <p>biological 26:11 34:20 36:12 92:20 138:16 146:2 184:3 198:8 235:12</p> <p>biologies 161:20</p> <p>biologist 80:18</p> <p>biologists 26:6 35:14,15,17 36:1,4 39:22 90:2</p> <p>biology 22:20 31:22 32:1,2 34:14 36:1,2,6 39:19 118:17 145:16 239:12,14 258:5</p> <p>biomass 39:10,16 100:12,18,19</p> <p>biomass-based 112:9</p> <p>biomasses 112:11</p> <p>biomedical 250:16</p> <p>Biophysics 22:17</p> <p>Bioprocessing 136:7</p> <p>bioproducts 231:21 232:8</p> <p>bio-products 231:22</p> <p>biorenewables 228:21</p> <p>biosecurity 30:3</p> <p>biotech 116:12,13,17,18,</p> | <p>21 117:15,18,20</p> <p>biotechnology 116:11 201:20</p> <p>biotic 58:14 90:17 149:18</p> <p>bit 13:2 20:11 44:10 45:15 46:3,21 82:1 85:7 92:22 108:19 133:18 146:17 190:6 191:8 242:16 243:1 252:2 257:3 266:7,9</p> <p>blackberries 160:9</p> <p>blackberry 163:5</p> <p>blank 227:8</p> <p>blend 244:5</p> <p>block 83:7</p> <p>blue 252:18</p> <p>Bo 129:9,10</p> <p>board 84:18,22 86:20 125:6,7,11 126:13 129:6 213:17</p> <p>body's 166:13</p> <p>bolts 9:13</p> <p>bone 49:16 226:5</p> <p>book 162:21,22</p> <p>bookcase 265:7</p> <p>Booren 48:22 49:1</p> <p>boring 69:10</p> <p>borrowing 107:21</p> <p>Boston 157:11</p> <p>Boteler 238:9</p> | <p>boxes 2:19</p> <p>branch 166:5</p> <p>branches 198:10</p> <p>Brazil 92:2</p> <p>bread 41:4,18 208:15</p> <p>breadth 23:22 40:21 47:9</p> <p>break 42:4 44:11,16 80:7 141:7 187:9 188:14 191:2</p> <p>breakout 35:4</p> <p>breaks 58:7</p> <p>breakthroughs 61:18 72:17 135:22 167:12</p> <p>breed 90:19</p> <p>breeders 40:12 92:7</p> <p>breeding 39:5 40:19 41:2,14,17 92:8 159:22 160:4,15 182:1 201:16 202:1,8,10 258:13</p> <p>breeds 201:13 202:3</p> <p>brick 186:7</p> <p>brief 4:10 8:11 118:20 129:14 187:10 239:3 249:11 256:10 263:17</p> <p>briefly 256:18</p> <p>bright 119:21</p> | <p>bring 42:9 59:10 68:6,12 76:15 101:12 102:3 104:5 111:18 146:4,7 158:11 197:6,13 199:3 219:22 223:9</p> <p>bringing 5:16 172:21 182:13</p> <p>brings 7:1 30:13 58:8,16 73:20 80:6 196:3</p> <p>broad 15:1 28:13 37:13 38:14 45:21 62:18 68:13 76:13 179:22 236:11</p> <p>broadband 130:3,11,14,21</p> <p>broaden 7:4 114:20 213:5 222:19 229:4</p> <p>broadened 16:13</p> <p>broadening 25:11 115:18</p> <p>broader 14:21 15:5 89:17 94:9 156:22</p> <p>broadest 13:14</p> <p>broadly 19:12</p> <p>brought 22:1 134:1 265:5</p> <p>Broussard 21:12 224:3,17 241:6 263:15,16,21 264:8 267:15</p> <p>budget 4:21,22 5:1,3,4,7 10:2 24:16 25:1 27:7</p> |
|--|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|--|
| <p>29:18 36:21 38:3 40:3 60:16 65:17 78:6,11 79:13,18 103:15 168:21 169:17 171:16,17 182:8 183:2 186:15 205:12 252:7,12</p> <p>budgetary 4:17</p> <p>budgets 6:11 32:5 76:20 113:11 153:16</p> <p>bugs 192:3,5</p> <p>build 18:22 90:2 124:13 181:1 186:8 219:21 257:6</p> <p>building 1:13 21:18 36:10 65:4 186:8 221:22 265:6</p> <p>built-in 95:14</p> <p>bullet 86:4 221:20</p> <p>Bureau 136:12</p> <p>buried 154:20</p> <p>bus 215:5</p> <p>business 3:1 48:19 51:9 132:10,11 159:4 241:5 259:6</p> <p>businesses 152:9</p> <p>busy 259:10 268:5</p> <p>butter 82:11,13</p> <p>buy 87:9 229:13</p> <p>buyouts 260:7,8</p> <hr/> <p style="text-align: center;">C</p> <hr/> | <p>caf 21:5</p> <p>cafe 21:1</p> <p>cafwhere 21:4</p> <p>calendar 48:15 56:11 243:2</p> <p>California 169:17</p> <p>caloric 161:11</p> <p>calories 41:6 161:11</p> <p>campaign 125:16</p> <p>cancer 26:13 166:13 167:1 197:15 198:4</p> <p>candidacy 254:15</p> <p>candidates 249:20 255:8,20</p> <p>cane 160:12</p> <p>CAP 14:9 17:18 30:12 59:5 127:12,16,17,22 128:2 158:19 162:18 179:8,12,18 184:18 185:12,15 186:9 244:2,6 246:12 247:6,7</p> <p>capability 55:8 102:4,21 137:8 220:1</p> <p>capacities 210:5</p> <p>capacity 6:13 65:4 101:2 102:13 104:11 131:12 169:14,18 170:3,8,13 171:4 181:1 206:1 221:22</p> | <p>Cape 71:3</p> <p>capital 1:20 88:19,20</p> <p>capital-intensive 88:18</p> <p>capitalize 73:11</p> <p>CAPs 46:7 111:22 122:8 124:9 127:10</p> <p>capture 125:8</p> <p>CAR 78:9 79:13,17</p> <p>carbon 46:14 100:9,16 101:4 102:19 104:10 117:4</p> <p>card 266:10</p> <p>cardio 197:15 216:3</p> <p>cardiovascular 198:3</p> <p>care 101:21 103:8 268:3</p> <p>career 13:19 63:21 127:19 136:11 140:4 193:11 199:18 218:1 219:1</p> <p>careers 38:20 63:19 199:2 200:5</p> <p>carefully 5:20 262:12</p> <p>Caribbean 151:20</p> <p>Carolina 101:8 136:8,18 169:16 183:22</p> | <p>carrier 217:22</p> <p>carry 266:10</p> <p>cars 117:5</p> <p>Carver 23:5</p> <p>case 22:18 66:4 164:8 237:17 247:16</p> <p>cases 14:4</p> <p>Cassidy 227:7</p> <p>cat 69:17</p> <p>catalytic 149:20</p> <p>catch 96:14</p> <p>catch-up 243:3</p> <p>categories 138:6 140:3</p> <p>category 267:10</p> <p>Cathann 169:9 170:17</p> <p>Catherine 4:13 113:6</p> <p>cat's 69:18</p> <p>causative 52:10,11</p> <p>cause 33:10,12 52:10 81:10 144:17 166:10 197:16 198:4 242:21</p> <p>caused 33:18,21 145:15 147:11</p> <p>causing 144:6 145:8</p> <p>Cavendish 143:20 144:9</p> <p>CDC 153:6</p> <p>cease 207:12</p> |
|--|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|---|--|
| <p>ceiling 223:16</p> <p>celebrate 119:18</p> <p>celebration 119:9</p> <p>cells 26:8</p> <p>cellular 150:6</p> <p>cellulosic 233:17</p> <p>center 70:10 77:8,9 80:2 89:4,7 106:16 129:12 133:16 140:5</p> <p>centers 77:9 80:2 177:3 233:16</p> <p>central 24:2 77:8</p> <p>Century 23:4,6 31:22 118:17,18 176:8 239:13</p> <p>certain 24:15 46:7 47:19 48:1,8 52:19 85:4 89:20 170:22 211:19 215:1</p> <p>certainly 77:3</p> <p>CERTIFICATE 269:1 270:1</p> <p>certification 126:1</p> <p>certify 269:4 270:3</p> <p>C-FARE 53:18,19 54:13</p> <p>chain 97:11 98:14 99:10,18</p> <p>chair 110:19 193:5 196:1</p> <p>chairs 20:18,19 22:10</p> <p>challenge 8:13 15:20</p> | <p>17:5,10,16,19 18:1,5 19:7,12,15 25:5,8 50:21 60:5,7 62:7 67:10,12,20 68:1 73:2,5 92:1 94:20 95:2 96:4,5,10,11 115:8,15 116:9 118:15 124:16 138:7 140:9 144:22 146:18 148:3 158:8 167:3 180:22 189:8 198:18 202:13 205:16 207:19 210:9 211:8 225:2 237:22 238:10,15,16 239:8 242:16 244:1,4 257:5 261:13 262:21 264:17 266:3</p> <p>challenges 3:6 4:5,16,17,18 5:19 6:16,20,21 7:10 29:18 37:19 41:9 50:13 65:3 90:18 104:7 113:22 118:1 125:9 126:9,10 143:8 157:8,15 178:11,13 182:14 205:10 207:15 210:14 238:17,18,20 239:4,6,9,15 240:7,8 241:8 242:20</p> <p>challenging 26:16 46:21</p> | <p>chance 79:14 232:1</p> <p>change 6:18 15:19 17:7 39:3 41:13 48:13 55:16 67:13,15 85:10 88:5,6,9 90:11 93:8 94:20 95:17 96:5 97:1,2 119:12 121:9 128:9 134:18 135:5,10 149:15 150:3 156:18 158:7 178:22 186:17 192:14 202:6 208:17 212:2,3,5,11 216:16 225:19 234:15 238:22 242:18 243:1 244:8 246:11 254:18</p> <p>changed 212:6 243:9 260:11</p> <p>changes 17:2 46:15 90:14 94:21 128:8 178:14,17 234:13 240:10 260:12</p> <p>changing 29:16 198:19</p> <p>char 100:21 104:10</p> <p>characteristics 245:10</p> <p>characterization 91:13,20 138:3 168:1</p> <p>characterize 35:2</p> | <p>characterizing 34:11</p> <p>chatting 170:18</p> <p>Chavonda 2:20 41:8</p> <p>cheap 146:14 229:17 231:15,18</p> <p>cheaply 229:8</p> <p>cheat 259:11</p> <p>chemical 106:11</p> <p>chemistry 75:7 106:9</p> <p>cherries 160:10</p> <p>cherry 162:16</p> <p>child 134:16 165:2</p> <p>childhood 6:19 17:6 62:7,9 63:5 153:5 211:1,4 213:4 214:7 216:1 239:1 240:18 247:12</p> <p>children 7:15 134:14,22 135:11,17 152:8 211:2 213:1</p> <p>China 103:2</p> <p>choice 63:9 138:21 141:2</p> <p>choices 211:15,19,20</p> <p>choked 48:5</p> <p>choose 208:18</p> <p>choosing 48:1</p> <p>Chris 125:4</p> <p>chromosome 44:5</p> |
|--|---|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|---|
| <p>Chromosome-3A 42:18</p> <p>Chromosome-3B 42:16</p> <p>chromosome-based 42:7</p> <p>chromosomes 43:3,4,8,17</p> <p>chromosome-specific 42:1</p> <p>chronic 166:12,21 197:12 198:2 208:7 211:17 216:2</p> <p>citicus 81:16</p> <p>citizens 134:4,9 135:10,15 136:1 170:2,16 199:13</p> <p>Civil 85:2 220:5</p> <p>civilization 223:19</p> <p>CLA 173:7 174:2 176:3,15 177:5,14</p> <p>classical 150:19 201:15,22 202:8,10</p> <p>clay 91:9</p> <p>clean 86:16 102:17 103:20 104:1</p> <p>clear 39:3 50:1 121:18 122:17 128:12 201:14 204:22 205:2 233:2 266:18</p> <p>clearly 4:14 14:10 56:15 113:14 186:11 204:5 262:12</p> | <p>Cleveland 22:18</p> <p>click 243:10</p> <p>climate 6:18 17:7 67:13,15 85:10 88:4,6,9 90:11,14 94:20 95:17,22 96:5 97:1 124:17 150:3 156:18 178:22 186:17 192:14 202:6 216:16 225:5,17,19 226:3 227:10,16 231:8 235:16 236:17,20 238:22 240:11 244:8 246:11</p> <p>climates 152:10</p> <p>clinical 60:19</p> <p>clock 155:7,11,22</p> <p>clones 42:13</p> <p>close 2:3 12:2 115:21 139:12 150:17 181:8 227:14,18</p> <p>closed 99:19</p> <p>closer 262:1</p> <p>closing 32:6 99:22 206:2 212:22 224:3 238:2 263:15</p> <p>cloud 96:12</p> <p>clusters 132:3,14</p> <p>co 193:10 229:4,19 230:4,8,9</p> <p>CO2 102:3,7,8,12</p> <p>coalition 27:5</p> | <p>28:21,22 174:1 200:19 201:2,3</p> <p>Cobb 33:4</p> <p>coffee 2:19 44:12 191:3</p> <p>co-found 201:2</p> <p>cognizant 6:4 47:17</p> <p>co-leader 57:19</p> <p>collaborate 107:22 110:5</p> <p>collaborating 92:6 108:21</p> <p>collaboration 12:15 61:15 145:3,10 187:1 207:21</p> <p>collaborations 29:5 92:2 125:2 235:20 237:4</p> <p>collaborative 40:21 61:13 110:3 126:11,14 153:6 205:8</p> <p>collaboratively 181:5</p> <p>collapse 169:21</p> <p>collate 142:16</p> <p>colleague 185:1 238:7</p> <p>colleagues 56:19 143:6 188:8 236:3</p> <p>collect 14:5 63:11</p> <p>collected 3:10</p> <p>collecting 93:6 94:5</p> | <p>collective 64:13</p> <p>college 72:11 113:7 114:5 151:8,9,11,13,14 169:7 185:2 195:21 255:5</p> <p>colleges 15:2,9,11 151:8,21 152:3 154:6 155:6 204:18</p> <p>colony 169:21</p> <p>Columbia 269:20</p> <p>combination 17:15 204:21</p> <p>combinations 257:14</p> <p>combined 195:1</p> <p>combines 10:9</p> <p>comes 2:9 14:21 86:6 144:4 223:2 241:14</p> <p>comfortably 146:15</p> <p>coming 32:1 57:15 110:15 113:12 115:20 125:18 142:4 144:20 145:1 147:6 188:3 222:9 248:8</p> <p>commend 175:11 177:10 180:17 190:18 221:2 223:20</p> <p>commends 174:2 176:3</p> <p>comment 8:15 20:5 27:12 48:7 53:14 73:1 75:20</p> |
|--|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|---|--|
| <p>105:21 133:12 185:11,13,14 187:18 188:14,15 189:6 190:5 211:3 223:13 254:4 263:10 265:8</p> <p>comments 9:3,6 16:21 17:1 19:21 20:1,6 23:18 27:17 32:11 36:5 40:1 45:10 54:2 57:13 60:14 64:4 65:1 69:2 77:4 107:5 111:3 113:1 120:3 126:4 128:20 129:1,4,14 133:18 136:4 142:8 147:20 150:22 169:10 173:6 181:4 183:18 184:8 185:6 187:4 188:5,13 192:17,19 196:10 200:17 224:1,9 227:4 228:21 230:11,18 237:12,15,20 248:5 253:8,11 261:5 262:9 263:17 264:22 265:2,3,9,14 266:16 267:17</p> <p>commercial 95:1</p> <p>commercialization 116:14</p> <p>Commission 130:7 269:22</p> | <p>commit 56:8</p> <p>commitment 158:3 180:17 266:20</p> <p>committed 111:1 268:2</p> <p>committee 119:4 160:1 168:22 236:1</p> <p>commodities 137:13</p> <p>commodity 113:17 114:20 229:7</p> <p>commodity-specific 52:11</p> <p>common 45:16 64:13 81:18 82:11 101:3 106:6 112:21 153:1 200:21 236:16 237:7</p> <p>commonly 48:17 51:3 99:8</p> <p>communicate 36:2</p> <p>communicated 189:7</p> <p>communication 6:21 12:15 160:14 187:1</p> <p>communications 130:7 250:20</p> <p>communities 30:2,13 71:20 98:14 118:8 122:4,12 129:16 131:7,13 133:4 158:8 160:16,19 161:2 182:13 203:7,12 204:1</p> | <p>215:10,19,22 221:12,15,17 223:8 234:18 258:3 259:4</p> <p>community 7:11 13:7 23:9,18 25:14 30:7 31:1 35:20 38:9 57:15 121:2 128:17 131:10,17,18 151:8,13 153:22 156:14 158:2 159:11 160:8 162:10,12 164:14 171:21 180:14 188:10 215:12,13,17 219:21 239:17</p> <p>community-based 121:5,13</p> <p>companies 40:19 51:4 138:21 206:22 209:11</p> <p>Company 1:20</p> <p>comparable 66:5</p> <p>compare 243:8</p> <p>compared 120:18</p> <p>compete 103:17 127:19 128:19 152:13 154:8 155:14 179:14 180:15 215:8 231:20,21</p> <p>competent 190:6</p> <p>competition 201:20 252:3</p> <p>competitive 10:8 20:12 23:22 24:4 26:1 29:21 36:15 37:2,10,13 50:17</p> | <p>52:13 60:22 62:12 72:14,19 78:11 89:13 152:16 169:22 171:5 178:15 204:12 209:13 217:8,17 229:10</p> <p>competitively 215:9</p> <p>competitiveness 112:8 209:14</p> <p>compilation 262:21</p> <p>compiled 68:21</p> <p>complementary 130:22</p> <p>complete 162:13 243:6 270:8</p> <p>completed 42:19 43:11,13 148:7 254:10,19</p> <p>completely 147:22</p> <p>completion 179:15</p> <p>complex 12:7 86:11 138:3</p> <p>complexes 195:6</p> <p>complexity 5:21 6:8 41:22 208:20</p> <p>complicated 172:18 218:13</p> <p>complies 204:10</p> <p>compliment 158:18</p> <p>component 44:2 57:6 97:17 98:11 124:3 171:15</p> <p>components 24:7 48:17 63:16</p> |
|---|---|---|--|

Capital Reporting Company
 NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|--|--|
| <p>122:6 123:8 138:9 198:8,12 229:9 244:2</p> <p>composed 22:22</p> <p>compounds 82:19 198:2</p> <p>comprehensive 128:4 149:13</p> <p>comprised 18:9 64:10</p> <p>computational 73:18</p> <p>computative 91:20</p> <p>computer 96:13</p> <p>computing 96:12,13</p> <p>concentrated 99:11,14</p> <p>concentrating 106:18</p> <p>concept 68:19 73:5 177:13</p> <p>concern 58:6 74:21 114:11 115:15 132:20 135:10 138:19,20,22 205:11</p> <p>concerned 28:18 45:14 61:10 113:21 114:18 182:8,21 207:1</p> <p>concerns 53:10 61:20 66:7,9 67:7 165:14 179:19 203:15 224:8 234:5 264:19</p> | <p>concert 174:1</p> <p>conclude 72:1 172:15 195:9</p> <p>conclusion 96:18 190:16</p> <p>condition 158:7</p> <p>conditions 90:18 150:8</p> <p>conducive 75:1</p> <p>conduct 49:20 93:3 209:9</p> <p>conducted 12:5 111:10 212:15 245:15 263:9,11</p> <p>conducting 94:2 178:16</p> <p>conducts 125:11</p> <p>conduit 164:21</p> <p>conference 13:5 31:10</p> <p>confirm 68:1</p> <p>confirms 261:8</p> <p>conflict 95:4,9</p> <p>Congress 13:12 102:2 103:14 104:4 105:6 172:12 192:8 201:14 204:5 220:6 265:22</p> <p>congressional 151:5 152:4 240:13</p> <p>Congress's 204:16</p> <p>conjunction 245:15</p> <p>connections 38:1</p> | <p>connectivity 215:1</p> <p>consequence 183:9</p> <p>consequences 132:7 133:2 240:9</p> <p>Consequently 182:17</p> <p>conservation 200:20 203:5</p> <p>conserve 117:6</p> <p>consider 5:20 20:5,11 114:8 115:18 128:18 134:19 158:21 180:14 194:5,7,16 209:20 255:1</p> <p>considerable 39:9,17</p> <p>consideration 29:16 50:16 54:2 60:14 67:19 120:6 123:6 131:3 152:17 155:17 191:14 206:6</p> <p>considerations 233:10</p> <p>considered 58:10 207:2 220:13 233:21</p> <p>considering 39:21 113:11 183:16 198:18</p> <p>considers 63:21</p> <p>consistency 121:10</p> <p>consistent 56:11 58:7 63:13 112:20 158:3</p> | <p>164:7</p> <p>consists 21:20</p> <p>consortium 40:11 41:15 151:7 152:5</p> <p>constrained 29:18 79:15</p> <p>constraint 79:18</p> <p>constraints 30:5 56:4 120:2</p> <p>constructs 83:11</p> <p>consultation 25:14</p> <p>consumer 49:22 108:9 126:10 163:20 174:18 195:22 213:12 216:8</p> <p>consumers 77:20 108:10 125:10 174:21 177:10 208:18</p> <p>consuming 52:19</p> <p>consumption 81:22 82:8 112:14</p> <p>contact 256:7,19 259:22 260:9,17 263:8</p> <p>contacted 56:19</p> <p>contacts 260:6</p> <p>contained 145:21</p> <p>contaminate 104:14</p> <p>contamination 29:11 258:16</p> <p>content 16:7 82:3 148:12</p> |
|---|--|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|---|
| <p>context 71:10</p> <p>continually 247:21</p> <p>continuation 17:20 54:6 139:22</p> <p>continue 6:5,21 28:18 30:6 36:15 43:19 54:13 106:4 114:7,17 115:6,10 122:3 128:14 136:20 137:9 139:18 166:20 177:16 178:11 180:11 188:20 249:20</p> <p>continued 3:13 23:17 25:13 36:9 109:20 125:2 126:16 129:6 140:10 161:6 180:21 221:19 222:3</p> <p>continues 27:6 53:9 56:22 90:14 136:17 182:20 200:10</p> <p>continuing 8:6 23:10 71:12,17,22 128:5 235:2,3 265:16</p> <p>continuity 51:9,11 128:10 180:7 183:12 195:11 200:6</p> <p>continuous 25:19 50:19</p> <p>continuously 250:20</p> <p>continuum 38:8</p> | <p>47:10 53:11</p> <p>contribute 35:3 56:17 65:7 79:22 116:21 166:14,16</p> <p>contributed 52:2</p> <p>contributes 175:9</p> <p>contributing 174:15,18 206:17</p> <p>contributions 23:5 36:7 69:13 77:14 175:12 209:19 210:11</p> <p>control 34:9,20 51:2 86:7 99:10 139:9 177:7 179:9</p> <p>controlled 109:19</p> <p>controlling 86:18 176:18 258:7</p> <p>controls 86:16</p> <p>convene 68:8</p> <p>convenience 263:3</p> <p>conventional 138:4 182:1</p> <p>converted 95:1 218:22</p> <p>convey 171:10 186:11</p> <p>cooperation 134:20 209:18</p> <p>cooperative 97:9 121:20 126:11 156:5,12,21 157:22 158:1,3,13 159:9 213:13,19,20,22</p> | <p>214:11</p> <p>coordinated 12:8,12 127:9 164:2 179:5 210:21 241:14</p> <p>coordinating 12:18</p> <p>coordination 12:13,15,21 13:3 61:14 126:16 160:14 161:1</p> <p>cope 90:20</p> <p>copies 259:10,16</p> <p>co-product 233:4</p> <p>co-products 229:14,16,21 233:3</p> <p>copy 4:22 142:15 175:13</p> <p>core 120:7 126:21 127:2,6 176:10 179:19 244:16 246:1,5</p> <p>corn 39:13 84:9 85:10 100:13</p> <p>corner 8:20</p> <p>cornerstone 24:13</p> <p>correct 92:17 176:17 270:7</p> <p>correction 84:17 92:15 112:22 184:1</p> <p>corridor 157:9</p> <p>cost 81:3 82:9,15 87:1,11 88:16</p> <p>costs 88:1 130:14 165:19 175:2</p> | <p>189:15 197:6,7</p> <p>Council 31:21 53:17 113:18 125:19 177:21,22 232:22 234:13 239:12</p> <p>counsel 269:8</p> <p>count 178:12</p> <p>counterproductive e 47:12</p> <p>counties 170:21</p> <p>countries 40:18 42:9 43:8 91:2 103:2 118:5,7 135:14 209:10,11</p> <p>country 8:3 119:13,16 131:6 132:17 134:16 135:13 136:2 157:6 159:6 189:2,4 197:7,17 198:4 199:12,14 206:3 243:15 244:20</p> <p>country's 174:10 205:14</p> <p>couple 2:15 20:17,21 21:8,9 40:6 88:7 93:22 111:8 138:22 141:13 142:5 186:1 187:20 189:1</p> <p>courage 219:6</p> <p>course 20:3 58:5 87:13 105:10 111:21 149:12 170:5,10 171:4</p> |
|---|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|---|---|
| <p>174:9 198:7 224:1 226:12 court 71:6 148:19 270:4,6 courtesy 147:16 cover 18:14 89:17 104:1 137:12 139:13 153:15 cow 69:15,17 craft 155:3 crane 162:6 Crayton 213:8,9 create 7:12 71:1 76:6 144:19 146:10 150:6 163:22 created 79:19 145:10 250:9 creates 7:3 creating 103:19 creation 127:5 150:2 creative 26:16 creativity 30:11 210:4 crises 78:1 crisis 90:12 118:8 critical 4:1 25:12 37:9,14 51:6 67:3 72:16 74:9 76:6 77:15 93:5 117:15 119:20 123:15 132:14 153:12 156:15 168:9 169:19 170:11 176:21 193:3,6,10 195:10 207:12</p> | <p>209:6 critically 66:11 169:13 171:1 196:11 crop 25:22 34:1 41:4,7 45:1 57:20 58:2,11 66:20 78:8 79:9 90:7,17,20 91:2,3,5,10 102:14 116:12,13,17,19 117:15,21 144:20 160:8 163:6 173:10,13 174:9,11,14,19,2 2 175:3,7,8,12,15, 16,17,19 176:21 177:1,12 181:14,15,20,21 182:1,7 201:12 203:3 CropLife 173:4,5,16 177:2 cropping 182:2 crops 39:8,16 59:14 66:19 77:16 78:13 84:10 116:18,21 145:9 150:2 160:11,12 161:4,5,19 177:9 182:4 186:19 234:7 245:10 cross 87:21 crowd 264:6 crucial 197:20 crystal 204:22 CSAW 28:22</p> | <p>CSREES 15:18 71:13 CSRES 249:17 CSSA 181:20 cultivars 202:3 cultivating 85:13 cultural 135:5 current 17:4,22 19:2 22:20 32:5 38:22 54:15 62:7,8 71:21 74:14,22 101:6,11 103:15,20 105:8 108:5 111:13 112:1 125:17 132:2 134:7,12 140:12 143:9 145:15 172:5 178:22 196:1 231:11 233:22 234:4 251:4 currently 22:21 27:20 65:3 85:11 86:1,12 94:4 109:6 110:18 118:4 130:3 138:21 139:1,4 140:11 159:21 163:4 183:6 231:15,20 232:15 254:9 cushiony 20:19 cut 78:4 197:6 232:7 cuts 5:3,8 75:4 79:13,18,20 152:4 169:17 172:1 217:7 cycle 48:3 115:1</p> | <p>180:7 241:21 cycles 183:10 <hr/>D<hr/>D.C 1:15 152:19 168:18 dairy 64:16 66:16 137:13 damage 33:10,18 damages 91:10 Dan 116:1,2 Daniel 227:7,9 Danny 100:6 Daowei 187:11 dark 220:6 Darrin 109:1 data 14:5 52:5,17,20 63:11 93:6,9 94:5,13 118:19 149:7 dataset 93:13 date 3:14 42:12 56:12 262:1,4 270:20 dates 56:2 261:7,17,18,20 262:13 David 159:16 Dawn 44:8 day 4:20 100:6 165:1 212:4 219:9 249:11 261:6 263:14,16 264:16 265:2 267:10,17,21 268:1,5 days 220:6 267:22</p> |
|--|---|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|--|---|
| <p>De 195:17,18</p> <p>deadline 48:18 56:2 124:11 261:17,18,20 262:1,13</p> <p>deadlines 56:3</p> <p>deal 70:18,21 95:11,12,14,17 96:4,9 103:3 144:20,22</p> <p>dealing 98:12</p> <p>deals 139:14</p> <p>Dean 169:7 195:21</p> <p>death 115:3 197:16 198:4</p> <p>debate 39:12,14</p> <p>Debbie 9:8 224:9 261:18</p> <p>Deborah 224:4,17</p> <p>decade 85:9 240:22</p> <p>decades 77:11 220:20</p> <p>decaf 191:4</p> <p>decay 100:16</p> <p>decided 191:8</p> <p>decision 94:17 140:19,22 245:19</p> <p>decision-making 94:11 129:2</p> <p>decisions 47:21 50:14 51:4,12</p> <p>decision-support 94:17</p> <p>decision-</p> | <p>supported 96:22</p> <p>declined 185:3,4 217:18</p> <p>decrease 87:15 251:6,8</p> <p>decreased 66:9 78:7 138:9</p> <p>decreases 52:6</p> <p>decreasing 68:3</p> <p>dedicated 11:8 28:1 38:3 53:19 66:12 109:8 201:22</p> <p>deemed 254:20</p> <p>deep 66:9</p> <p>defense 196:8</p> <p>deficiencies 91:11</p> <p>deficit 84:3</p> <p>deficits 215:22</p> <p>define 160:17</p> <p>defined 134:8 218:6</p> <p>definitely 10:18 21:19</p> <p>degrade 83:3</p> <p>degree 254:10 255:1</p> <p>degrees 109:12</p> <p>delay 242:22</p> <p>deliberation 6:11</p> <p>delineated 155:2</p> <p>delineation 223:3</p> <p>deliver 47:15 51:9 167:10,13 168:7</p> <p>deliverables 46:9</p> | <p>delivered 46:11</p> <p>delivering 137:10 180:19</p> <p>delivers 37:4</p> <p>demand 23:11 41:11 95:6 104:10 125:12 177:9 190:10</p> <p>demands 41:9 79:8 104:9</p> <p>Democratic 77:21</p> <p>democratized 220:9</p> <p>demographic 165:15 199:11</p> <p>demographics 39:2 198:19</p> <p>demonstrate 46:18 55:7</p> <p>demonstrated 202:9</p> <p>demonstrates 252:17</p> <p>demonstrating 46:14</p> <p>dense 170:21,22</p> <p>department 72:9 85:2 101:20 103:8 104:3 109:9 116:4 136:7,9 147:15,17 165:10 184:4 185:2 191:20 193:5 195:19 219:18 245:15 266:1</p> <p>departmental</p> | <p>152:18</p> <p>departments 60:2</p> <p>depend 168:11</p> <p>dependence 165:21</p> <p>dependent 48:4 118:13 251:4</p> <p>deploy 94:7</p> <p>deployable 108:3</p> <p>deploying 94:4</p> <p>depth 47:8 213:6</p> <p>deputy 21:9 191:11 264:8,9 265:10</p> <p>derived 61:4</p> <p>described 81:14 207:18 238:19 247:9</p> <p>description 46:22 121:12 239:3</p> <p>descriptive 120:12</p> <p>deserts 223:3</p> <p>deserve 6:10 98:16</p> <p>deserves 65:18</p> <p>design 15:16 34:8 72:5 138:12</p> <p>designed 99:20 127:6 130:9 133:1 154:7</p> <p>desirable 150:2 163:19</p> <p>desired 127:12</p> <p>Desk 80:9 141:11</p> <p>desperately 131:19 133:4</p> |
|---|---|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 20

| | | | |
|--|--|---|--|
| <p>despite 148:1 201:14</p> <p>detachable 86:21</p> <p>detail 120:5 257:2</p> <p>detailed 257:4</p> <p>details 229:2 243:18</p> <p>detection 106:10,19 108:1,6</p> <p>determination 7:14</p> <p>determine 52:18 58:12 83:2</p> <p>determined 145:22</p> <p>determining 25:15 158:14</p> <p>devastating 127:15 179:10 209:6</p> <p>develop 8:2 34:21 41:16,20 42:11 51:6 52:8 80:21 95:16,18 96:15 104:9 106:12 128:12 139:19 168:9 182:3 187:2 229:14 233:5</p> <p>developed 26:11 42:13 81:4 110:2 192:8 199:18 208:13 209:22 210:9</p> <p>developers 173:9</p> <p>developing 33:22 83:13 91:2 96:21 106:10,20 108:9</p> | <p>118:5,7 153:2 163:1 196:15 212:10 247:14</p> <p>development 20:8 27:13 36:1,9,10 38:15 39:19 41:14 45:11 48:16 50:16 51:20 53:3 54:3 60:14 111:2 117:15,18,21 125:13 129:11 131:17,20 132:1,4,11 140:4 149:4 151:4 161:21 163:3 180:8 181:18 189:5 193:11 198:13 200:9,12 201:7 202:17 203:6,9 219:21 249:22 250:8 259:6,7</p> <p>developments 106:19 167:12 229:5</p> <p>develops 36:20</p> <p>devoted 199:17 202:20 203:1 205:18</p> <p>diabetes 166:12 197:15 198:4 216:5</p> <p>dialogue 248:12</p> <p>dictated 11:18 204:5</p> <p>die 144:11 216:3</p> <p>diet 135:10 211:2,16,22</p> <p>dietary 62:21</p> | <p>63:12 98:19 138:12</p> <p>Dietetic 213:16</p> <p>Dietetics 210:22 213:10</p> <p>dieticians 210:22 212:3</p> <p>Diet-related 166:21</p> <p>diets 211:19</p> <p>difference 12:20 161:22 193:20 266:14 268:8</p> <p>different 4:19 42:9 47:8 60:2 70:22 81:6,16 83:10 131:6 133:18 145:9,11,19 146:7 150:7 153:4 169:1 185:22 189:14 198:10 235:22 236:5 250:2 251:13,17 255:14 263:7</p> <p>differentiated 12:9</p> <p>difficult 24:22 37:6 51:17 76:18,21 86:11 122:19</p> <p>difficulty 29:17 31:3</p> <p>diffusion 130:11</p> <p>digest 166:11</p> <p>digestibility 168:7</p> <p>digital 7:4 130:1,12</p> | <p>dilute 111:20</p> <p>dimensions 55:21 98:2,4,5</p> <p>diminishes 180:8</p> <p>diminishing 87:14</p> <p>dinner 82:14 166:8</p> <p>dioxide 100:16 117:4</p> <p>direct 46:8 121:21 124:15 201:20</p> <p>directed 24:19 158:22 183:2</p> <p>direction 45:16 93:1 182:9 269:7</p> <p>directions 195:12</p> <p>directive 205:2</p> <p>directly 50:7 71:21 142:10,12 221:21</p> <p>director 2:21 9:8 40:10 44:22 49:1 60:11 77:7 89:7 119:2 125:5 129:11 133:15 151:3 156:3 181:13 210:21 213:12 219:19 225:4 232:20 238:7,9 256:4 264:8,11</p> <p>directors 8:12 21:9,14,16 80:2 156:6 191:11,12 213:17 224:6,16,21 226:7 237:8,9 264:9 265:10</p> <p>disadvantage</p> |
|--|--|---|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 21

| | | | |
|---|---|--|--|
| <p>97:19 disappear 33:6 48:5 disappointed 263:13 disaster 131:3,16 disasters 95:20 131:5,7,14 discarded 82:9 disciplinary 55:5 99:3 discipline 57:1 75:2,6 207:6 disciplines 25:9 55:22 74:13,19 75:17 76:8 98:3 181:22 185:22 190:6 199:16 207:7,21 209:18 disconnect 212:14 discover 7:12 discovered 82:22 discoveries 200:14 discovery 26:10 37:21 45:20 51:14 91:16 121:1 149:1 182:10,19 discretionary 5:10 discuss 31:6 68:14 discussion 235:21 239:5 250:21 266:7 discussions 31:1 disease 28:2 62:22 127:15 144:1,2,4,6,9,13,</p> | <p>17,22 145:8,16 146:1,10 166:12,22 178:11 179:10 197:16 198:3 202:5 208:7 216:4 247:2,3 258:12 diseases 26:14 28:4 135:16 197:12 198:2,9 211:17 216:2 247:4 disorders 33:15 167:2 displace 234:8 disproportionatel y 66:8 78:4 disseminate 94:8,12 Distinguished 147:15 distracted 10:5 distribute 42:9 distributing 238:12 distributors 173:10 district 70:21 269:20 districts 170:21 disturbing 52:5 diverse 25:17 30:13 90:21 185:17 197:3 223:9 diversified 47:7 203:3</p> | <p>diversity 34:12 149:12 150:4 162:19 190:6 204:11 208:19 divide 42:8 division 196:2 224:21 225:4,6,7,11,15, 18,22 226:3,7 232:19 237:8 238:7 doable 46:9 doctoral 19:18 35:18 249:20 document 31:21 238:13 documentation 255:4 DOE 60:7 66:2 230:2,7,8 231:16 233:15 DOE's 230:1,2 dollar 159:2 dollars 44:1 73:6,7,20 74:14,15 79:8 103:18 115:12 172:8 175:17 244:17 246:3 domains 45:22 230:15 domestic 98:22 116:7 118:13 125:13 178:5 dominated 93:11 Dominion 232:15 done 11:13 12:22 46:6 47:11 58:19</p> | <p>59:11 71:2 74:10 85:22 89:1 101:19 105:22 109:7 121:10 152:7 154:6 187:22 215:4 243:5 244:10 260:21 264:3 doors 21:1 double 21:1 doubled 118:8 doubt 189:11 Doug 118:22 downscale 236:20 dozen 12:2 241:16 Dr 2:18 4:13 9:8,11,22 15:12 21:11,12,15 82:21 83:6 90:3 120:4 133:14,17 173:2 177:19 181:9 206:14 210:18,20 219:15 224:3,4,5,17,18, 20 225:3,9,13,16,20 ,21 226:2,10,17,20,2 2 227:7,11,15,20 228:1,6,8,13 230:19 232:17,18 233:7 235:18 238:4,5,7,9,11,1 2 241:6 242:8 246:2 249:8,10 253:16,20 254:4,7 255:7,22 256:3,7 261:17,20</p> |
|---|---|--|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|--|
| <p>262:6,16 263:14,16,21 264:10,11 267:15,16</p> <p>draconian 172:1</p> <p>Draeger 219:10,15</p> <p>drained 172:10</p> <p>dramatically 116:12 197:7</p> <p>drastically 52:21</p> <p>draw 26:16 87:3 97:12</p> <p>dream 165:1</p> <p>driven 189:13</p> <p>drivers 63:8 174:10</p> <p>drives 37:2 51:15</p> <p>driving 83:19</p> <p>drop 47:21</p> <p>drop-in 233:13,17</p> <p>drought 81:9 83:18 88:7,12 91:11 95:20</p> <p>droughts 82:2 83:21,22</p> <p>Drug 81:20</p> <p>drugs 106:11</p> <p>dry 87:18,19 88:22 209:4</p> <p>DUCK 270:3,20</p> <p>Dudareva 147:14</p> <p>due 56:12,13 79:17 91:11 135:4 152:3 247:12</p> | <p>duplicating 219:2</p> <p>duplication 12:16</p> <p>duration 251:11</p> <p>during 3:12 8:15 27:13 50:16 51:12 66:16 188:13,14 200:7 220:5</p> <p>duty 169:4</p> <p>dynamic 160:21</p> <p>dynamics 83:1</p> <hr/> <p style="text-align: center;">E</p> <hr/> <p>E.coli 7:18 50:3 148:13</p> <p>eager 83:14</p> <p>earlier 47:6 83:6 124:6 158:10 181:10 237:12 247:10 260:5 262:3</p> <p>earliest 69:16</p> <p>early 22:2 127:18 152:5 199:2,18 263:12</p> <p>earning 175:17</p> <p>earth 235:12</p> <p>easier 154:8 155:21 159:17</p> <p>East 86:13 87:18 92:4</p> <p>Eastern 86:8 109:2</p> <p>easy 144:3 166:11</p> <p>eat 50:4 135:6,9 143:22</p> <p>eating 143:20</p> | <p>144:9 153:10</p> <p>echo 7:8 107:4 158:12 188:15 264:12</p> <p>ecologically-based 34:8</p> <p>ecologies 149:15</p> <p>econ 259:4</p> <p>economic 23:7 25:1 32:21 37:9,10 55:18 68:17 71:10 78:21 130:14 131:21 132:4 136:19 143:9 174:10 175:12 176:7,8 178:6 189:5 200:12 203:11 221:14</p> <p>economical 178:9</p> <p>economically 33:16 127:15</p> <p>economics 53:18,20 54:19 55:10 56:1,16 69:4 70:4,10 72:4 98:10 129:16 187:13,16 188:10,19,22 190:9,11,13 203:22 216:13,15,19 217:22 218:1 227:18 250:19 258:3</p> <p>economies 71:16 132:17</p> <p>economist 69:6 97:5 217:20</p> | <p>economists 55:6,9 56:21 57:4 96:8</p> <p>economy 37:11 66:11,15,22 69:9,11 70:10 77:17 136:17</p> <p>ECOP 119:5</p> <p>ecosystems 58:11</p> <p>EDEN 131:16</p> <p>edge 30:17 209:13 256:16</p> <p>educate 108:12 139:18</p> <p>educated 209:10</p> <p>educates 108:10</p> <p>educating 159:10</p> <p>education 4:9,16 10:17 11:3,6,20 13:7 17:16 24:5 27:2 28:16 29:20 33:19 35:21 46:5 47:14 49:6 63:22 68:16 71:15 108:9 119:13 121:6,13,18 122:5,10 123:10 125:22 131:16 133:21 134:20 157:18 158:1 161:1 173:17,20 176:1 180:20,22 193:19 194:4 201:1 203:19 209:16 220:10 221:22 249:21 250:21 251:16,20 255:11 257:10,13</p> <p>educational 27:22</p> |
|---|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|---|---|
| <p>45:4 122:2 135:4 156:13 240:2</p> <p>education-targeted 244:13</p> <p>educators 35:17 212:4</p> <p>e-Extension 122:3</p> <p>effect 198:1 209:5,7</p> <p>effective 37:3 79:12 108:15 124:17 184:20 211:21 212:2 213:6</p> <p>effectively 67:18 77:22</p> <p>effects 47:20 71:19 75:12 85:10,12</p> <p>efficacy 138:11 158:15 167:5 258:16</p> <p>efficiency 48:19 81:8 112:10</p> <p>efficient 69:21 178:8 212:21</p> <p>efficiently 126:9</p> <p>Effie 8:17 9:17 11:19 261:8 264:1</p> <p>effort 12:16 32:3 39:17 43:22 44:3 47:3,12 95:8 96:7,15 103:16,20 111:20 129:5 132:1 158:15 161:2 184:15,16 185:10 189:19 190:16 222:17</p> | <p>236:18 246:12</p> <p>efforts 12:19 25:7 27:3 32:6 39:7 54:17 120:14 126:11 131:12 132:13 133:1,22 135:19 145:14 147:4 157:17 158:5 211:4 213:6 222:1 223:5,21 233:15 240:13 246:15 247:9</p> <p>egg 66:16 113:14</p> <p>eggs 113:13</p> <p>Eheart 84:13,16</p> <p>eight 81:6 139:11 172:4</p> <p>Eisenback 32:14,15</p> <p>either 88:4,5 112:4 192:14 251:16 255:10</p> <p>elaborate 129:18</p> <p>elaborative 184:8</p> <p>elected 160:2</p> <p>electronically 142:16</p> <p>element 120:22 122:5 157:18</p> <p>elements 123:14 140:7</p> <p>elevated 63:15</p> <p>eligibility 14:19,21,22 15:8 254:7,18</p> <p>eligible 14:11,13 15:3,4 204:11</p> | <p>205:1 253:18 254:10 255:3</p> <p>eliminate 50:2 82:17</p> <p>eliminated 74:17 78:10 79:17</p> <p>eliminating 31:19</p> <p>else 22:4 104:2,19 115:13 188:4 189:20 215:12 228:10 267:12</p> <p>Elvira 195:18</p> <p>e-mail 248:21</p> <p>E-mails 248:21</p> <p>embryos 81:1</p> <p>emerging 51:22 76:14 113:20 114:1,10 115:19 132:3 139:4 167:19 169:21 230:6</p> <p>Emerson 133:14,15</p> <p>emission 117:4</p> <p>emissions 102:7</p> <p>emphasis 25:17 30:20 39:13 61:7 62:1 66:9 67:9 79:7 99:2 121:16 123:22 124:4 170:13 179:3,17 194:4 195:14 202:12 203:15 221:19 229:4,9,21,22</p> <p>emphasize 7:1 48:2 93:15 108:1 121:4 137:2 157:21 169:13</p> | <p>176:20 194:10 230:8,9</p> <p>emphasizing 93:16 172:21</p> <p>employed 269:10</p> <p>employees 80:8</p> <p>employing 181:22</p> <p>enable 26:22 79:22</p> <p>enabling 117:14,17,20 118:16</p> <p>enacted 220:6</p> <p>encompass 25:12</p> <p>encourage 19:22 20:18 35:4 43:15 50:18 55:14 56:15 57:5 68:21 72:18 76:10 77:3 100:5 103:13 105:6 110:1 113:20 114:8,13,19 115:6,10,17 120:13 122:13 128:18 135:18 137:8 138:18 139:15 146:19 179:11 180:14 193:13 210:2 223:6 230:21 256:7 259:21 260:16 261:9</p> <p>encouraged 56:21 57:14 121:11</p> <p>encourages 25:16 52:15 54:13 62:5</p> <p>encouraging 111:5 210:14</p> <p>endeavor 28:14</p> |
|---|---|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|--|
| <p>energy 29:15 39:4,10 63:8 67:20 70:11 93:4 95:17 101:20 102:9 103:8 153:2 156:18 166:9 203:4,5,6 229:1,6,9,15 230:1 231:14 240:15 245:15 258:1,18</p> <p>engage 31:1 199:1,3 247:22</p> <p>engaged 13:13 220:14 221:9 222:17</p> <p>engagement 35:21 156:13 158:4</p> <p>engaging 120:22 159:10</p> <p>engine 136:19,20</p> <p>engineer 70:19 184:14 235:13</p> <p>engineering 39:1 75:7 85:3 92:21 150:9 166:3,5 167:9,17 184:4 259:2</p> <p>enhance 34:2 54:14 61:17 64:6 112:8 135:8 158:6 166:13,15</p> <p>enhanced 149:5 201:6</p> <p>enhancement 13:12 125:13 218:3 257:16</p> <p>enhancing 30:20 53:20</p> | <p>enjoy 137:20,21</p> <p>enjoyable 137:11</p> <p>enjoyment 141:1,3</p> <p>enormous 23:7 148:11,20 155:2</p> <p>enriching 7:22</p> <p>enrollment 14:16,17</p> <p>ensure 13:13 24:1,12 25:7 31:8 45:19 51:1 74:9 76:10 121:11 122:10 127:7 133:22 135:21 158:22 171:22 174:20 182:18 204:9 206:16</p> <p>ensures 156:21</p> <p>ensuring 31:22 63:19 128:10</p> <p>entered 5:1 21:2</p> <p>enterprise 24:2 61:9 159:5 170:4,6 172:13</p> <p>enthusiasm 7:20</p> <p>enticing 167:11</p> <p>entire 33:5,7 43:21 72:18 74:10 151:21 155:20 160:8 209:3 243:12</p> <p>entities 6:2 130:8 131:22 154:3 204:17,21</p> <p>entity 213:22 214:11</p> <p>Entomological</p> | <p>191:21 192:1,5</p> <p>entomologists 192:13</p> <p>entomology 191:20 192:8,11,20 193:3,12,18,22 194:5,9,16 195:2,11 226:19</p> <p>entomology's 195:9</p> <p>entrepreneurial 111:11</p> <p>entrepreneurship 204:3 259:6</p> <p>entrepreneurships 132:10</p> <p>environment 5:21 6:8 29:16 30:22 37:7 77:17 78:22 101:17 102:17 104:14 117:2 126:3 149:18 152:16 172:14 174:21 186:20 213:3 225:5,18 226:3,4 227:10,17 258:2,19 259:7</p> <p>environmental 35:1 36:8 58:12 65:13 68:17 81:8 85:2 93:2,5,16 94:2 109:18 150:8 176:8 190:11 195:22 226:4 237:5</p> <p>environmentally 112:13</p> <p>environments</p> | <p>90:21 149:19 152:10 208:14</p> <p>envision 119:11</p> <p>enzymes 83:2 148:19</p> <p>EPA 105:10 132:5 174:20 194:3 237:5</p> <p>epidemic 166:21</p> <p>Eprida 100:6</p> <p>equal 42:5 102:8 170:12 199:10 213:22</p> <p>equaled 41:11</p> <p>equally 45:17 156:12</p> <p>equipment 11:15 14:2 87:9,12</p> <p>equivalent 117:5</p> <p>eradicate 106:21 107:11</p> <p>erode 61:11</p> <p>error 252:10</p> <p>ERS 66:14</p> <p>ESA 194:22</p> <p>especially 18:8 50:19 54:7 93:2 94:5 96:4 110:13 123:21 132:1 138:4 139:17 153:8 161:6 171:12 187:16 213:1 221:11 222:4 229:4 240:18</p> <p>essential 9:4 23:11 30:17 38:13 63:21 159:5</p> |
|--|---|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|--|
| <p>170:4,7 171:5 establish 139:16 210:4 244:19 established 3:10 49:7 112:3 202:21 221:5 establishes 25:20 establishing 129:3 establishment 23:16 Estec 51:21 estimate 175:10 estimated 118:2 136:15 176:9 estimates 38:22 etcetera 250:17 ethanol 39:13 230:2 233:13,16,17 Europe 103:2 European 139:11 Euros 139:12 evaluate 158:10,17 178:17 211:3 234:22 255:13,19 evaluated 182:18 217:16 218:10 253:21,22 255:8 evaluating 55:11 evaluation 31:5 255:8 Evelyn 213:8 evening 264:6 event 68:7 77:4 121:8 247:20</p> | <p>261:6 ever-increasing 23:11 Eversole 40:5,9 everybody 12:17 101:16 109:1 110:17 146:14,15 183:21 242:12 every-day 166:8 everyone 2:9,13 4:6 116:1 142:20 206:9 208:3 everything 16:15 22:4 42:5 137:12 228:15,16 259:20 264:20 267:3 everywhere 188:4 206:17 evolution 145:19 148:6 evolve 144:19 evolved 151:11 exact 144:16 exactly 259:15 examination 254:21 255:2 examine 6:12 130:19 131:10 examines 52:8,9 example 16:8 26:5 39:3 46:6,14 56:12 65:20 70:12,20 74:20 75:15,18 90:21 92:11 93:9 98:7 99:12 111:4,7</p> | <p>112:2,4,7,12,17, 19,21 113:3 127:12 134:10,19 138:20 140:2 143:18 151:21 153:5 154:18 162:5 175:8 198:20 216:18 218:7 225:3 236:10 237:2 240:10,14 241:18,21 254:22 exceeding 136:15 excellent 73:16 105:22 165:17 171:17,18 194:20 except 33:6 exchange 33:1 excited 5:13 104:22 excitement 7:19 exciting 26:15 145:12 217:21 exclude 25:6 115:5 excluded 67:19 147:22 exclusion 52:13 67:16 exclusively 39:16 excuse 138:11 225:7 228:7 252:5,10 254:8 execution 177:6 Executive 40:10 160:1</p> | <p>exercises 146:11 exhausted 249:2 exist 207:13 existed 79:16 existence 160:5 existing 34:16 exists 211:9 expand 5:18 123:7 149:22 167:6 194:2 231:10 expanded 197:5 202:12 203:5 expanding 34:12 114:8 150:4 192:4 expansion 132:12 195:4 expect 200:11 260:12 267:15 expectations 166:19 expected 90:13 218:17 240:22 267:18 expedite 26:18 expended 39:18 expense 45:17 61:15 111:11 182:10 expensive 51:16 experience 5:8 57:8 97:6,8,12,21 99:5 112:18 120:9 122:17 124:16 185:5 202:10 212:4</p> |
|--|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|--|
| <p>217:2 experiential 109:9 experiment 15:2 156:4,11 Experimental 22:20 experiments 23:4 expert 158:9 176:10,12 expertise 99:21 101:22 104:18 107:15,21 122:18 158:17 187:5 202:10 210:10 255:10,13 experts 29:8 31:18 78:19 104:17 107:20 176:22 Expires 269:22 explain 59:13 explaining 55:10 exploratory 183:5 explore 26:15 124:15 217:8 explosion 149:7 exponentially 149:22 184:17 exposed 62:16 expound 241:7 express 187:21 expressed 67:7 152:19 expressing 176:2 expressly 202:15 extend 33:2 55:21</p> | <p>98:2 157:1 158:20 163:18 175:8 extending 156:19 extension 4:10 10:18 11:2,6,20 13:8 17:17 24:5 27:2 28:10 29:20 46:5 57:6,8 68:15 79:4 80:3 97:13,17,19,21 100:2 119:2,4,6,15,18 120:8,18,21 121:7,12,17,19,2 2 122:10,14,16,18 123:1,2,8,11,15 124:1,4,21 130:9,21 131:10,15,16 133:1,6,21 134:20 135:20 156:5,6,12,21 157:18 158:1,3,4,11,13, 16 159:10 169:5,9 170:14 173:18,19 176:2 180:20 187:14 201:1 203:19 213:13,19,20,22 214:10,11,19 219:17 222:1,2,4,13,16, 19 243:15 251:19,21 255:11 257:10,14 extension-led 120:8,13 222:5 extension-only</p> | <p>120:16 extension's 121:4,20 157:22 extension-type 123:14 extent 12:22 46:7 84:19 85:4 external 119:1 137:15 265:21 extramural 48:4 128:13 180:10 188:2 extraordinary 143:13 extremely 15:1 42:2 61:2 128:16 <hr/>F<hr/>fabrics 36:10 fabulous 11:1 147:5 217:19 face 4:19 5:20 6:20 131:4 149:14 150:3 156:16 161:12 178:11 222:6 257:16 faced 70:13 faces 31:4 37:7 50:20 217:13 Facilitate 160:20 facilitated 28:11 facilitating 30:7 facilities 245:16 facing 3:6 6:17 53:7 65:4 90:17 94:19 108:11 118:1 132:21 143:8 144:21</p> | <p>146:18 196:12 216:2 fact 16:11 28:21 33:7 40:22 41:9 57:12 78:5 121:8 170:1 172:3,5 193:19 209:2 212:2 230:2 factors 52:9 67:21 130:10 137:15 146:10 239:10 faculty 89:20 115:8 116:2 123:2 155:5 169:20 170:9 179:13 184:3 185:17 194:7 255:14 faint 33:7 fair 17:18 31:5 35:8 68:7 123:4 200:11 Fairbanks 151:18 fairly 15:19 90:5 248:6 fall 33:20 100:15 Fall/early 20:13 fallen 201:17 falling 135:14 falls 166:19 familiar 81:13 families 82:12 135:3 family 175:20 189:21 200:19 213:12 216:8 223:8 fancy 105:13</p> |
|--|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|---|--|
| <p>fantastic 159:15 FAO 65:6 farm 3:10,21 9:20 11:18 16:14 18:12 23:16 27:9 57:10 68:7 70:14 71:3 97:8,9 98:8,15,18 99:5,7,8 172:6,8 200:19 201:17 202:15,21 203:6 farmer 46:15 87:1 102:13 farmer-ready 201:12 farmers 33:17 58:5 80:22 85:15 88:13 98:13 99:9 117:9 152:8 174:15 175:1 203:14,16 205:14 223:7,18 farming 99:6 202:12,17 220:12 farmland 95:1 farms 99:13 221:9 259:5 FASE 13:11,15 14:10 FASEB 22:21 23:15 24:22 25:11,16 27:6,12 fashion 144:19 164:10 FASS 64:10,21 65:10,21 68:7 fast 93:19 108:6 256:11</p> | <p>faster 81:5 154:8 fastest 83:16 116:19 fat 138:5 father 33:4 69:16 fears 68:1 feasible 234:20 features 154:17 February 1:9 federal 6:3 28:7,10 70:15 71:5 75:22 130:6,20 131:1,21 132:13 153:1 155:18 178:2 200:21 205:9 207:8 236:1 255:15 Federated 151:14 Federation 22:19 64:8 feed 66:19,20 82:1,8 182:4 186:19 208:1 240:11 241:2 feedback 56:18 170:15 184:7 206:8 248:11 feeding 134:14 feeds 36:10 feedstock 111:2 245:7,9 feel 13:1 64:20 104:6 146:16 155:4 174:11 182:21 187:19 204:1 206:3 feels 46:2 54:22</p> | <p>188:10 Fellow 27:20 Fellows 8:14 19:9 238:1 249:9 fellowship 14:11,12 192:18 193:17 194:8 227:3 249:14,15,16,18, 19 251:3,5,8 252:1,9,11,21 253:12 254:12 fellowships 13:17,18 19:8,11,16,18 76:6 140:5 Fen 227:15 fend 166:13 fermentation 198:6,7 fermentations 138:16 fertility 102:12 fertilizer 102:14,15 173:11 fewer 99:15 fiber 79:3 182:4 186:19 188:6 240:11 241:2 field 26:17 58:8,13,15 59:11,14 74:21 75:16 108:2,3 146:14 148:22 169:3 170:15 171:1,6 175:15 186:22 fields 72:21 87:15</p> | <p>107:21 145:11 146:7 175:1 216:17 FIFRA 177:6 fifth 39:6 135:7 259:1 Fifthly 204:8 fight 103:18 fighting 95:5 267:16 figures 93:22 file 155:1 fill 28:19 133:13 141:16 227:8 233:22 234:4 247:8 250:8 filled 181:10 final 8:16 126:1 190:5 219:11 230:12 finalized 50:12 247:15 finally 6:14 34:18 48:7 69:22 77:3 87:14 123:18 124:19 138:14 155:21 164:16 175:19 177:14 203:8 205:20 219:6 financial 269:11 finding 73:19 91:22 94:8 115:9 193:9 findings 37:22 90:6 91:19 121:22 222:10 fine 111:9</p> |
|---|---|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 28

| | | | |
|--|---|---|--|
| <p>finish 19:20 20:15 finished 260:18 fire 101:8 firmly 49:15 first 3:11 8:5 9:7 15:14 16:8 19:6 20:14 22:1,3,12 26:7 33:20 37:1 42:15 45:14 46:7 56:13 73:1,14 76:1 80:7,20 84:2,4 91:14 92:16,17 97:14 104:9 105:21 116:13 120:8 130:1 137:14 142:18,22 154:17 159:13 160:13 161:9,10 162:11 163:3,20 169:12 176:3 184:10 191:2 201:10 212:9 219:13 221:4 223:11 252:3 265:17 first-time 64:1 fiscal 3:12 9:21 16:12,21 17:22 20:9 23:20 27:14 36:20,22 37:6 40:2,3 54:3 60:14,15 113:10 174:5 181:19 Fisher 206:9,10 fit 103:20 126:20 154:22 179:2 235:8 fitness 149:6 five 13:20 17:5</p> | <p>18:19 19:6,12 33:8 42:2,3 84:3 104:21 120:3 126:5,21 141:15 160:13 171:7 201:21 219:14 238:17,18 241:22 246:4 five-minute 44:11 five-year 46:16 Flagship 249:14 flat 5:11 flavor 167:14 flavus 81:13,15 flexibility 11:1 123:19 149:14 flood 87:14 95:20 floor 9:7 224:1 flowers 26:7 focal 111:15 160:14 focus 15:21 19:12 24:9 30:10,14 39:15 47:8 57:9 58:11 59:15 61:10 62:17 111:12 114:19 115:17 120:12 131:22 132:6 137:5,9 139:3 165:20 179:20 192:17 217:1,4 219:4 230:4 239:9,19 241:6,8,9 251:17 266:9 267:1,5 focused 53:3 81:9 89:15 99:16 103:19 123:13</p> | <p>127:13 173:12 177:12 183:14 206:4 241:17 266:13 focuses 166:6 167:20 206:15 229:2 focusing 17:11 61:20 75:11 93:2 212:1 213:4 Foegeding 136:6 folks 13:2,19 14:13 15:3 168:21 220:20 226:11 265:4 267:22 food 1:3,4 2:21 6:17,18 7:6,18,21 8:8,9 9:9 10:11 13:11 17:7,8 23:12,14 25:21 27:5 29:4,6,8,11,15 30:4,19 36:18 37:4 39:12 41:9 49:16,20 50:1,7,18,20,22 52:21 53:7,9,10,17,20 55:22 63:9,15 64:19 65:5,9,12,16 66:4,8 67:2 72:8 74:11,21 75:1,3,6,7,11,12, 16 77:14,21 79:3,22 80:1 81:20 90:10,12 93:3 97:7,9,11 98:3,8 99:10 106:18,21 107:3,5,17,19</p> | <p>108:11,13,16 113:15 114:17 116:8,22 117:12 118:6,7,9,10 125:1 135:1 136:7,13,15,19 137:1,6,7,9,17,1 8 138:8,18 139:10,21 140:19 141:3 156:16 157:8,11 161:9,15 165:10,13,15 166:3,5,18,19 167:6,9,11,15,17 ,19 168:1,3,11 173:17 174:2,17 177:9 179:1,2 182:4 186:17,19 192:14 195:19 196:2,5,7,8,9 197:8,9,10,14,19 ,21 198:5,6,8,11,15 200:20,22 201:7 202:18 203:10 206:12,13,15,16, 19,22 207:2,6,7,9,11,1 2,16 208:1,2,4,6,8,9,1 0,12,16,19 209:1,3,17,20 210:5,11 211:13,14,15,19, 20 214:6 215:22 219:3 220:15,17 221:10,11 222:7 223:3,5 225:10,14,22 226:1 227:12 228:5,6,7,9 232:19 235:19 238:6 239:2</p> |
|--|---|---|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 29

| | | | |
|---|--|--|--|
| <p>240:11,19 241:2 242:9,19 246:18,21 247:13 256:4 257:7,15,22 258:14,16 259:3</p> <p>foodborne 52:12,16 106:13,19 107:12</p> <p>food-insecure 214:16 215:22</p> <p>food-related 209:12</p> <p>foods 36:9 52:19 75:7 135:12 137:11,20 138:3,4,5,8,13 165:20 166:4,7,22 167:18,20 198:12,14 208:7,18,19</p> <p>food's 161:13</p> <p>for/within 192:12</p> <p>forage 182:4</p> <p>force 83:19 168:19</p> <p>forced 146:5</p> <p>forces 236:2</p> <p>forecast 66:17</p> <p>foregoing 269:4</p> <p>foregoing/ attached 270:7</p> <p>foreign 125:13</p> <p>forest 112:9 187:13,16 188:3,6 190:11</p> <p>Forest-based</p> | <p>227:9</p> <p>forestry 116:4 188:6,10 190:19</p> <p>forget 70:22 171:17 237:18</p> <p>form 56:8 91:8 119:16 167:10 184:8 241:14</p> <p>formal 230:22</p> <p>format 153:1 154:16 187:6</p> <p>formation 37:3 151:16 220:4</p> <p>formats 153:4</p> <p>formed 29:1 32:19</p> <p>formerly 213:15</p> <p>forms 62:19</p> <p>formulated 154:16</p> <p>forth 76:15 162:1 190:15</p> <p>fortunate 109:5</p> <p>fortunately 218:2</p> <p>forums 236:1</p> <p>forward 8:6 9:5 19:21 40:1 42:17 43:9 53:14 64:5 125:1 141:17 143:10,17 158:15 177:15,16 181:4 183:18 190:19 216:7 261:15 265:15</p> <p>fossil 175:9</p> <p>foster 25:18 36:2 160:21 228:19</p> | <p>fostering 207:20</p> <p>foundation 19:1 24:11 25:21 41:16 49:2,3,5,6,18 53:13 59:20 73:8 92:2 106:13 114:18 123:9 150:11 174:12 184:11 195:15 236:8,12,21 257:6</p> <p>foundational 8:13 16:9,13 18:3,9,16 19:4,7 25:18 30:9,16 38:3,11 54:8 58:18 59:3,9 60:4,8 73:3,10 74:3,8,16 115:14 123:8,12,14,15 128:8,11 129:15 158:20 159:3 166:2 176:17 179:21 183:1,3 184:17 185:13 186:4,5,10 189:9 192:18,22 193:16 194:11 195:8 197:4,13 202:13,16,20 203:18 204:4 205:16 238:1 247:15 256:12,13,21,22 257:1,6,9,20 259:12 260:3,10,19 261:12,21 262:22 266:20</p> <p>foundations 46:6</p> <p>Founded 27:21</p> | <p>60:17</p> <p>founders 223:18</p> <p>fourth 38:16 77:1 99:10 132:15 138:14</p> <p>Fourthly 203:17</p> <p>fourths 132:17</p> <p>four-year 15:9</p> <p>FRA 45:13</p> <p>fragments 83:9</p> <p>frame 46:16 48:6</p> <p>frames 48:11,16</p> <p>framework 95:12</p> <p>Frank 238:9</p> <p>FRAs 46:3</p> <p>French 42:15</p> <p>frequently 37:22</p> <p>fresh 50:3 135:12 167:6</p> <p>freshness 168:4</p> <p>friends 188:9</p> <p>front 6:15 20:2 21:10 146:20 225:9 243:10</p> <p>frontier 96:19</p> <p>frozen 135:12</p> <p>fruit 134:21 160:11,12 161:18,21 163:11,19,22 165:3</p> <p>fruitful 126:15</p> <p>fruits 98:21 137:12 166:9</p> <p>frustrating 189:18</p> |
|---|--|--|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 30

| | | | |
|---|---|--|--|
| <p>fuel 36:8 39:12 79:3 102:5 175:9 182:5 229:17 231:15 232:22 240:15</p> <p>fueled 178:7</p> <p>fuels 233:14,18</p> <p>fulfill 236:8</p> <p>fulfilling 166:22</p> <p>full 14:7 39:17 42:10 122:9 162:6 182:6 213:9 245:16 267:10</p> <p>fully 28:14 124:14 204:12 209:22 210:4</p> <p>fully-authorized 174:7</p> <p>fun 12:1</p> <p>function 120:18,19 138:10 148:13,18,22 149:2 167:5 204:14 257:9</p> <p>functional 121:16 198:14</p> <p>functions 11:4,6,21 79:11</p> <p>fund 24:16 47:18,19 51:17 58:21 62:13 75:21 97:18 153:7 183:5 186:3 205:18 245:19</p> <p>fundamental 11:11,12 25:3 26:3 29:4 32:20</p> | <p>34:11 38:13 90:6,22 91:21 92:9 107:9 137:14 145:16 148:2,4 149:10 163:12 167:22 168:8 193:1 195:5 210:15 233:5 257:7</p> <p>fundamentally 169:12 220:9</p> <p>funded 28:14 29:12 30:16 37:15 40:15 42:15,17 49:8 55:6 78:12 79:7 89:14,17 90:22 110:9 111:10 127:3 145:3 147:18 164:12 167:7 180:21 184:11 185:7 188:1 190:3 207:5 230:15 233:4 241:21 245:11 250:18</p> <p>funding 3:4 5:10,17 8:6 9:21 10:17 13:2,15,16 14:3 16:2 24:4 25:2 27:8 29:5,19 30:5,12 32:4,8 37:20 38:10,16 39:6 48:3,4 50:12,14,19 52:18 59:8 62:2,5,8,11 63:4 65:19 67:7,9 72:13 73:2,9 74:2,4,14,17,22 75:2,4,15 76:2</p> | <p>78:7,15 79:16 91:3 92:13 105:22 107:1,5 109:6 110:1 114:13 115:3 116:6 118:14,15 123:19 124:7 126:11,14,22 127:1,8,17,19,22 128:1,4,6,7,10,1 4,15,19 134:19 139:16 140:15 143:9 145:5 147:11 148:1 150:12 152:2 155:17 157:14 158:22 164:11 169:5 170:3,13 171:5 172:5 173:17 177:4 179:14,16 180:7,10,12,16,1 8,22 182:15,22 183:10 184:22 187:18 188:2 189:2 193:22 196:14,15 197:21 199:6,17 200:13 201:22 202:20 203:1 207:1 209:3 210:3,13 215:15 217:7 218:8 235:8,15,17 240:4 241:20 243:20 249:20 251:4,5,7,22</p> <p>funding- supported 91:12</p> <p>funds 10:21 11:8,11,13 14:1 17:22 59:9 60:3 66:3 67:14 72:19</p> | <p>76:16,17,21 120:17 127:4 135:1 151:5 153:10 169:14,18 170:8 171:18 172:12 196:19 199:10 207:9 209:1 218:16 246:12 259:20</p> <p>fungus 83:9 247:4</p> <p>fungicides 173:14</p> <p>fungus 81:14</p> <p>Furthermore 26:3 63:17 111:18 212:1</p> <p>Fusarium 144:7 145:7,8,14</p> <p>future 10:11 13:4 19:2 28:19 29:15 37:10 38:21 40:8 53:3,15 54:14 55:12 61:18 62:5,10,14,17 64:5 65:12 68:9,14 74:19 79:2 92:22 95:16,22 97:1 106:2,5 107:16 108:18 119:22 121:15 134:13 150:14 165:22 173:22 176:22 177:15 181:1 188:8 210:6,8,22 239:19 250:1,5 256:8</p> <p>FY 4:22 45:12 57:15 67:14 176:16 201:19 204:1 233:3</p> |
|---|---|--|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|--|--|
| <p>209:5 255:5 grain 250:4 grand 3:6 96:5 182:14 grandparents 69:14,15 grant 6:1 10:8 12:2 13:10 14:1,18 15:9 20:12 37:19 45:7 54:8,21 58:19 59:3,5 61:1 62:5 63:17 64:1 71:17 73:2,5,20 74:14 76:17 78:18 80:4 103:5 110:1 117:13 119:6 123:9,12 128:2 137:4 151:7,17,21 152:3 154:17 155:6,9 156:8,9,14 162:18 167:19 169:18 183:9 189:8,9,10 193:9 202:14 205:5 215:15 218:3,9,10,13,21 ,22 219:1 220:1,4 253:17 grantees 7:13 granting 95:15 grants 10:17,21 11:15 12:3,7,22 13:5,6,11,12,15, 17,18,20,21,22 14:2,4,9,10,19,2 2 15:6,22 17:18,19 18:17,18,21 24:5</p> | <p>26:20 31:10 38:17 55:5,6 58:19 59:5 60:22 61:1,12,16 62:12 64:2 67:10,12 71:12,13,22 72:14,16,19 76:5,22 89:13 108:18 110:3,7,14 115:14 117:12,17,19 123:20 124:18 127:20 133:20 136:10 140:3,6 152:7,13 153:6,14 158:19,20 159:2,3 164:2,5 178:15 179:5 192:16,21 199:7,21 200:7 204:17 205:1,6,7,17 211:8 214:10,15,17,19, 20 215:9,12,19 217:17,22 218:1,10,18,19 219:3 244:2,6,7,17 246:4 251:8 257:16,18 grant-writing 199:21 graph 96:1 grass 85:18 grateful 54:20 107:2 gratitude 158:20 187:21</p> | <p>great 7:8,10 41:9 45:7 69:15 71:8 72:13 74:19 75:14 102:22 106:1,4 115:8,11 178:10 204:2 208:11 209:18 226:10 231:2 240:10 264:3 greater 16:1 52:1 121:16 124:8 153:8 182:16 183:2,13 greatest 53:2 65:3 greatly 48:20 74:16 91:4 124:21 greener 260:9,15 grocery 175:20 gross 62:10 ground 94:5,6 95:5 100:15 153:11 244:22 groundbreaking 31:19 group 29:7 40:13 42:18 47:11 58:22 59:4 60:1 68:16 89:8 90:2 95:10 135:3 185:17 192:9 199:8 grouping 177:13 groups 35:7 38:12 58:21 59:7 77:20 95:16 112:5 113:17 121:2 195:6 206:2 236:2</p> | <p>grow 5:18 37:2 136:17 152:18 203:14 208:14 growers 40:12,14 41:12 58:4 174:11 175:6 177:7 growing 132:20 133:3 155:17 182:5 grown 39:15 196:15 grows 7:5 184:16 growth 33:13 35:22 37:10 68:17 258:11 Guam 151:9,22 guarantee 127:1 guess 8:20 58:5 93:21 200:2 235:16 guide 113:19 131:10 211:14 guidelines 98:20 134:8,11,12,14 Gustavo 57:17 guys 2:4 10:12 22:6,8,15 44:15,19 105:5 141:18 191:3 220:22 224:16 232:11 237:12</p> <hr/> <p style="text-align: center;">H</p> <hr/> <p>half 148:18 175:16 half-hour 261:6 Halls 223:15 hand 182:6 217:20</p> |
|--|--|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 33

| | | | |
|--|--|--|---|
| <p>222:18 handful 267:18 handle 95:2 144:21 handout 242:11 249:2 handouts 238:11,12 hands 4:7 99:14 263:20 handy-dandy 242:11 happen 8:10 48:18 59:17 88:13 142:14 168:19 197:11 215:7 happens 220:2 229:18 happy 111:7 175:13 231:6 268:2 hard 35:8 48:13 70:2 143:13 187:22 208:1 212:5 235:1 244:15 247:21 259:19 264:1 hardware 96:11,12,14,16 154:13 harm 62:10 166:10 harness 125:8 138:16 Hatch 169:14 having 43:4 56:10 57:7 83:21 97:21 132:12 145:8</p> | <p>154:14 155:3 161:17 166:8 183:8 187:2 Hawaii 151:6,10 head 72:8 164:16 216:8 headlines 166:20 health 28:1,5,7,8 30:6 36:13 52:17,19 53:4 61:20 62:11,14,22 63:10 68:19 71:14 75:8,12 77:18 78:21 98:8 113:18 114:6 126:2,7,19 127:7 134:3 135:13 136:1 137:6 141:1,4 165:21 167:4 168:11 171:13 174:18 178:20 179:1,3 196:6 197:2,4,14 198:13,16 215:11,16 227:2 257:20,21 258:1,4,9,12,14 healthcare 197:7 healthier 198:11 206:17 208:18 healthiness 136:22 137:2 health-promoting 62:20 healthy 137:11 208:19 hear 8:11 16:19 96:11 143:8 164:14 228:2</p> | <p>231:6 256:9,16 264:19 heard 16:4,16 56:18 122:8 158:10,18 169:2,11 193:15 248:4 257:11,16 260:6 264:10 266:8,9,16,18 267:2,7 hearing 9:5 19:21 73:8 227:3 heating 100:19 heavily 189:19 heck 113:13 hectares 116:17,18 117:7 held 68:10 hello 57:17 109:1 136:6 159:13 173:5 191:18 195:17 219:15 help 3:20 4:4 13:2,7 40:1 51:4 56:7 72:21 79:1 90:12 96:22 102:6,16 107:22 113:18 117:8 123:7,20 133:6 134:7 139:20 149:12 152:15 155:2 163:21 170:16 178:13 193:22 200:4 215:13,21 248:18 261:19 262:2 267:4 268:5 helped 90:1 103:6 201:2 208:7</p> | <p>helpful 48:11 110:12 265:14 helping 3:3 7:15 8:1 102:17 117:8 171:2 179:9 helps 3:5 80:10 174:14 180:22 hence 89:19 90:8 91:10 herbicides 173:14 hereby 269:4 270:3 here's 87:6 139:9 238:15 262:21 he's 227:12 256:8 266:4 Hi 60:10 113:5 156:2 168:14 177:19 181:12 200:16 255:22 hiding 21:9,13,15 227:16 228:10 high 43:12 79:5 83:22 84:1 102:13 104:11 107:7 165:19 167:15 185:7 230:16 241:19 245:5 252:15 higher 82:1 99:1 118:10 119:13 124:6 180:22 196:18,21 229:11 higher-quality 165:3 highest 64:21 highest-quality</p> |
|--|--|--|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|--|
| <p>37:8 highlight 26:22 94:1 96:10 148:20 154:16 166:1 184:9 highlighting 222:3 highly 91:8 109:15 173:20 174:19 207:2 212:21 highly-funded 211:7 highly-integrative 181:22 highly-yield 145:12 high-performance 96:13 high-poverty 132:17 high-priority 178:21 high-quality 41:17 174:17 199:3 high-risk/high-impact 230:13 high-value 229:14,19 233:5 Hill 171:19,22 265:22 hire 170:9,10 hired 57:10 98:15 hiring 169:19 176:11 Hispanic-serving 15:10 historic 84:3 Historically 78:2</p> | <p>114:12 history 116:19 hodge-podge 86:14 hold 33:1 101:2 holding 54:1 84:14 Holland 21:16 120:4 224:5,18 226:22 238:12 249:9,10 253:16,20 254:4,7 255:7,22 256:3,7 Holley 89:4 Hollyer 150:21 151:2 home 154:11 157:5 172:21 215:4 237:14 homeostasis 63:13 homolog 91:16 honor 119:19 hope 20:13 40:1 86:2 96:18,20 108:18 109:20 121:9 165:1 174:4 210:12 235:9 242:3,11 248:17 263:13 hopefully 22:8,11 32:8 40:8 42:21 51:14 147:7 191:3 hopes 209:22 hoping 20:10 45:11 140:21 147:3 248:16 horizon 162:16</p> | <p>horizontal 145:20 horticultural 23:3 Horticulture 116:4 147:16 host 34:14 130:8 131:21 145:22 Hostetler 125:4 hosting 264:2 hours 151:22 House 240:13 households 98:13 housing 109:18 Huang 105:18 HUD 132:5 huge 73:6 106:16 154:4 229:22 254:15 260:7 human 29:10 30:21 42:3 52:2,9 55:11,15 61:3 62:6,21 77:17 78:20 81:22 82:7 121:9 158:7 165:10 172:22 195:19 197:2,4 223:18 humanity 102:6,22 humongous 189:15 hundred 50:7 122:22 hunger 6:17 118:2,5 hungry 208:17 Hunt 227:15</p> | <p>Huntsman 69:4 hydrologic 93:8 hydrologists 96:8 <hr/>I<hr/>I-5K 194:17 I'd 20:20 69:2 72:1 80:20 86:19 105:21 106:7 107:4,13 108:1 120:7 129:14,17,21 132:15 133:20 139:13 140:17 157:1,3 159:13 163:20 173:4 174:8 175:11,13 177:10 182:6 184:1 188:15 190:12 213:14,17 214:5,9 215:6,18 217:3 221:4 223:11,13 242:15 261:9 Idaho 92:21 94:22 235:13 idea 32:2 81:12 83:1 100:5,12,18 102:22 115:8 119:14 143:17 161:15 241:8,11 244:18 245:8 ideal 51:17 ideas 4:8 46:11 99:19 110:2,7,8 115:20 143:17 152:16 210:3 identification 91:13</p> |
|--|---|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 35

| | | | |
|--|---|--|---|
| <p>identified 3:21 25:13 136:18 137:6 176:16 207:20 234:12 246:19</p> <p>identify 13:7 29:8 34:5 56:16 68:9 76:21 90:19 91:16 129:17 132:2</p> <p>identifying 30:7 31:4 165:14</p> <p>IFAFS 10:12,14,19</p> <p>IFT 206:20 209:19</p> <p>IFT's 206:15</p> <p>ignoring 70:5 98:5</p> <p>II 216:5</p> <p>ILACK 114:3</p> <p>I'll 4:10 9:7,17 10:3,22 19:20 115:21 134:18 142:12 158:19 221:7 249:10 256:11,14 257:2 263:17 265:8</p> <p>Illinois 84:19 165:11 195:20 198:20</p> <p>illness 52:10 208:8</p> <p>illnesses 52:2,12,14,16,20</p> <p>illustrate 86:19</p> <p>I'm 2:20,21 10:3 22:16,17,19 27:18,19 32:15,16 35:13 40:9 44:18,22 45:1 49:1 53:16</p> | <p>57:18,19 60:10 64:8 69:3 70:1 72:8,10 77:1,8 80:18 84:17 85:1,4,6,11 86:1 87:2 89:1,4 90:3 94:1,2,4 96:1 97:4,5 100:11 101:22 102:19 103:4,13 104:7,8,14,16 105:1,18 106:8 109:1,4 110:18 111:1,7 112:19 113:6 114:2 116:2,6 119:1,3 120:2 125:4 129:11 133:14 136:6,9 147:3,15 156:3,5 159:17,21 168:14,16 169:2,6 171:5,20 173:2,3 177:20 181:12,14 183:22 184:5,7,12 187:8,11 191:15,18,19,20 195:18,20 196:1,9 200:2,17 206:10 210:18,20 211:6,7 213:8,11,12,14,1 6 216:12 217:10,11,21 219:15,16,19 225:7 226:5 228:19 231:16 232:13,15,18,19 235:12,16 238:3,5 242:8 249:13 255:22</p> | <p>256:2,12,15 260:18 263:21 264:8 266:7</p> <p>imagine 208:2,5,8</p> <p>imbalance 62:10 211:11</p> <p>immediate 51:6 61:20</p> <p>immediately 42:16 44:5</p> <p>immigration 57:11 98:16</p> <p>impact 16:1 33:21 53:2 56:22 63:10 66:19 74:7 78:20 95:9,19 121:9 131:7 150:14 154:7 166:4 167:21 168:2 174:21 179:7 210:7 234:20 241:6 242:3 266:10,15</p> <p>impact/high-risk 230:17</p> <p>impacts 63:14 67:1 73:3 74:5 90:15 98:11 156:22 234:15</p> <p>impeding 130:11</p> <p>imperative 63:3</p> <p>implement 3:4 9:4 93:20 94:11 96:19 267:8</p> <p>implementation 62:20 155:13 163:4 204:9</p> <p>implemented 94:18</p> | <p>implications 26:4 38:14 130:2</p> <p>importance 5:5 6:22 24:7 76:1 99:5 132:7 164:19 170:3,13 171:2 172:21 180:18 194:10 264:12,13</p> <p>important 4:12 9:3 12:12 16:17 23:7 30:9,15 33:16 41:4 44:2 45:18 48:1 51:11 63:4 65:11 66:1,11 69:12 70:3 71:11 72:17 75:13 77:12 78:14 89:19 99:18 102:18 105:15 110:2,7 113:19 123:12 130:22 132:6 139:2 150:16 153:9 156:10,12 161:5,17 164:3,14,18 165:15 169:13 171:1,12 174:6 180:4 185:8 193:4,5,13,18 194:5 196:11 197:1 207:2 210:7 224:22 227:5 232:2,7 235:7 239:14 241:4 256:20 265:12 268:3,8</p> <p>importantly 119:21 134:12</p> <p>imported 99:1</p> <p>impossible 47:4</p> |
|--|---|--|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 36

| | | | |
|--|--|--|---|
| <p>76:22</p> <p>impressed 242:15 263:22</p> <p>impressive 243:21</p> <p>improve 7:16 25:22 26:20 34:5 39:18 52:21 53:4 62:14 92:10 113:1 116:10 136:1 138:10 158:7 167:4 168:6 174:15 196:6 198:7 214:4 215:11 221:2 245:9 246:21 247:2</p> <p>improved 28:15 120:13 138:1 182:3 258:11,17</p> <p>improvement 90:7 91:2 135:2 149:7 182:2 214:3 240:2</p> <p>improvements 36:13</p> <p>improves 215:16</p> <p>improving 31:2 49:16 92:3 215:16</p> <p>inadequate 86:13</p> <p>inadequately 62:13</p> <p>inches 84:3,4,5</p> <p>include 13:22 25:8 30:19 31:16 40:18 43:15 57:5,7 59:6 63:7 97:20 114:2 120:8</p> | <p>121:12,17,18 122:21 124:4 130:13 154:5 176:17 195:5 197:5 202:8 203:5,15,19 204:13,18 205:17 244:1 257:17 263:9</p> <p>included 16:15 78:15 180:4 207:18</p> <p>includes 5:15 15:8 29:5 55:20 66:16 97:8,17 98:1 160:8 163:1,2 241:12</p> <p>including 4:14 26:21 36:7 61:14 66:18 77:13,20 79:15 90:2 94:9 95:20 96:8 138:15 173:11 179:12 182:13 205:6 209:20 219:2 247:1</p> <p>inclusion 79:21 80:3 203:21 207:10</p> <p>income 132:16,20 133:3,7</p> <p>incorporation 158:13</p> <p>increase 5:10,12,16 39:7 65:15,18,20 82:3 90:13 103:21 109:9 110:1 116:16 135:19 163:10 174:3 177:4 211:16,22</p> | <p>215:13 221:9,11,12 222:19 251:6</p> <p>increased 29:19 30:20 52:4 56:6 57:3 73:19,20 78:6 83:21 116:12,22 120:8 149:5 164:11 166:2 168:8 195:14 207:20 239:22</p> <p>increases 27:7 87:13 174:16 182:14 251:5</p> <p>increasing 31:3 59:9 90:10,17,18 122:13 165:16 173:16 240:21</p> <p>increasingly 76:18 99:11,14 170:19</p> <p>incredibly 48:11</p> <p>incremental 87:4,7,10,13</p> <p>indeed 46:12 175:2 177:9</p> <p>independent 166:15 213:2</p> <p>indepth 71:18 109:10</p> <p>Indiana 252:19</p> <p>indicate 2:9 52:6</p> <p>indicated 16:16 17:2 133:11 250:4 253:4</p> <p>indicates 252:22 253:2</p> <p>indication 172:7</p> | <p>indicator 135:13</p> <p>individual 24:9,20 38:4,11 44:4 58:14,19,20 61:7,11 63:9 182:11 189:13 194:12 218:19 255:3,14 266:19</p> <p>individuals 30:10 38:20 100:2 141:9 142:7,14 160:2,7 193:7,21 204:18 250:12,18 251:21 254:9,14 255:16</p> <p>industrial 216:15</p> <p>industries 28:12</p> <p>industry 28:20,21 45:8 49:9,17 50:20,21 53:8 60:20 64:12 76:8 77:21 80:22 82:9 83:14 112:9,10 126:13,16 143:19 144:5,8,10 160:2,18 161:2 177:1 178:4,10 179:9,19 180:1 181:1,4,21 196:5 212:15,18 229:18 244:19,22</p> <p>industry-funded 178:12</p> <p>industry's 178:19</p> <p>inequality 132:16,20 133:3,8</p> |
|--|--|--|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|--|--|
| <p>Infants 134:22</p> <p>infection 26:13 83:1</p> <p>influenza 45:11 137:15</p> <p>inform 268:5</p> <p>informatics 147:3</p> <p>information 13:6 26:21 31:16 33:1 49:6,22 94:8,10,12 121:3 130:6 148:10 149:14 154:20 162:13 163:14 221:16 247:19 260:1 262:18 263:8 264:3</p> <p>informed 122:19</p> <p>infrastructure 130:4 214:12</p> <p>ingredients 137:17 166:7 198:15 207:11</p> <p>inherent 97:19</p> <p>inherently 98:9</p> <p>initial 15:15 39:12 194:19 254:14</p> <p>initially 64:14</p> <p>initiate 110:7</p> <p>initiated 61:8,16 100:6 162:17 241:11</p> <p>initiating 103:4</p> <p>initiative 1:4 10:7,11 32:2 43:20 57:20 58:2 89:10,13 105:7 116:8 117:12</p> | <p>194:17,21 199:19 231:9</p> <p>initiatives 99:16 206:11</p> <p>initiator 105:1</p> <p>innovation 37:3 51:15 130:1 131:21 157:12 177:16 205:13 220:2 239:19</p> <p>innovations 159:8 209:12</p> <p>innovative 7:12 24:21 76:13 106:20 111:11,16 115:9 138:15 205:7,17 246:15</p> <p>input 3:3,11,13 8:9 15:14 32:9 46:4 49:4 61:4,5 113:16 124:20 160:18 181:18 190:17 206:21 223:9 235:2,3 236:21 247:8,19 248:14 249:1 253:14 254:16 261:2,14 264:18 265:18,20</p> <p>insect 194:18 195:5,7</p> <p>insecticides 173:15</p> <p>insects 34:21 79:6 176:19 258:7</p> <p>insecurity 214:6</p> <p>insight 99:3</p> <p>Inspired 125:18</p> <p>instance 56:5</p> | <p>157:5 196:16 197:22 198:20 233:12 234:6 245:5</p> <p>instances 18:7 127:11</p> <p>instead 81:2 124:2 165:4 208:7</p> <p>institute 1:3 2:21 9:9 49:2,7 53:12 70:9 116:3 125:1 143:5 157:16 196:2,3 206:11,13 225:4,10,14,17,2 1 226:2 227:10,12,16 232:19 235:19 238:6 242:9,19 256:4,5</p> <p>institutes 3:19 253:18</p> <p>institution 3:18 14:16 15:4 48:6 60:3 155:12 159:20 164:17 254:12,20,22</p> <p>institutional 48:10 206:1</p> <p>institutions 14:14 47:20 50:9 60:1 126:12 127:18 151:12 156:9,14 171:8 199:5 204:20 214:20 215:20 243:16 252:21 253:3,5 255:14,16</p> <p>institution-specific 26:21</p> | <p>intake 63:12 134:8 161:11</p> <p>intake-related 212:12</p> <p>intakes 63:12,15</p> <p>integral 207:16</p> <p>integrate 10:17 11:3,5</p> <p>integrated 10:21 11:7 15:6,7 17:17 19:4 24:17 62:1 68:8 77:8,11 78:12,15 111:5 120:10 122:20 123:22 133:21 153:15 157:17,21 163:9 190:14 195:13 203:3,19,21 204:2,7,13,16 218:18 222:5 246:14 257:11 259:9</p> <p>integrating 162:19</p> <p>integration 11:21 34:16 121:16 122:9 160:20 180:20 257:12,13</p> <p>integrative 40:22 61:10</p> <p>intellectual 37:16</p> <p>intend 47:22</p> <p>intended 134:3 135:22</p> <p>intent 15:21 31:9,14 184:20 185:3 204:16 262:17</p> |
|---|---|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|---|--|
| <p>inter 99:2</p> <p>interact 192:20 194:9</p> <p>interaction 34:15 55:11 58:14 167:18 198:10</p> <p>interactions 30:21 55:15 58:12 59:18 137:15</p> <p>interagency 32:3 115:7 235:17,20 245:14,21</p> <p>interdepartmental 61:14</p> <p>interdisciplinary 99:21 216:18</p> <p>interest 39:9 64:13 79:4 85:8 120:2 132:20 133:12 141:9 236:11 242:5 269:12</p> <p>interested 20:22 104:20 105:10,12 141:14 236:22 247:16</p> <p>interesting 143:10 145:16</p> <p>interests 178:2</p> <p>interface 183:14 197:18</p> <p>interference 26:7 83:6,7,11</p> <p>intermediate 59:8</p> <p>international 32:19 34:7 40:10 41:15 43:19,22 91:22 116:7 118:14 160:6</p> | <p>192:4,7 196:2 221:13</p> <p>internationalize 192:9</p> <p>internationally 42:8 220:18</p> <p>interpretation 245:3</p> <p>inter-related 213:2</p> <p>interrupting 183:11</p> <p>interstate 34:7</p> <p>intertwined 6:9</p> <p>intervene 83:12</p> <p>intervention 108:7,15</p> <p>intestinal 168:6</p> <p>intimidated 146:17</p> <p>intramural 128:15 180:12</p> <p>introduce 21:11 106:7 226:14</p> <p>invade 84:9</p> <p>invades 81:15</p> <p>invaluable 3:3</p> <p>invasive 176:4,6,19 258:7</p> <p>invest 47:21 88:14 96:21 119:21 132:2 171:11,13</p> <p>invested 49:17 245:8</p> <p>investigate 203:2</p> <p>investigating</p> | <p>34:13</p> <p>investigations 140:15 156:22</p> <p>investigative 55:8 164:4</p> <p>investigator 38:4 47:11 59:4 61:7 139:20 140:9 195:14 218:3,9,12,15,20 ,21</p> <p>investigator- initiated 24:10,12,20 61:12 62:3 210:3</p> <p>investigators 12:5,6 13:18 18:20 58:20 139:17 182:11 192:15 193:2 218:17 241:16 266:19</p> <p>investing 111:1 130:20 132:5 244:15</p> <p>investment 66:10 68:9 88:19,20 106:3 111:20 131:9 168:8 176:20 205:9</p> <p>investments 29:13 30:1 36:17 37:8 66:8 129:19 130:3 131:1</p> <p>invigorate 30:9</p> <p>invitation 89:3 191:22</p> <p>invite 22:12 95:15 187:17 249:8</p> | <p>invites 263:2,7</p> <p>inviting 84:15 184:6 214:2</p> <p>involve 30:6</p> <p>involved 60:21 70:8 185:16 189:15 220:12 222:14 246:19 247:21 248:13 250:21 251:20</p> <p>involves 55:10</p> <p>Iowa 57:19,20 58:3,4 113:8,17 168:17 169:16 170:20 171:6</p> <p>iPad 94:15</p> <p>iPhone 94:15</p> <p>IPM 77:9,10,14,19 78:2,3,7,8 79:4,12,15,22 80:1,2,3 177:3</p> <p>IR-4 177:5,12</p> <p>irrespective 158:8</p> <p>irrigated 87:2</p> <p>irrigation 81:7 87:9,12 88:14,18,21 95:5 97:2</p> <p>ISAAA 118:20</p> <p>island 152:10 156:3,4 159:19</p> <p>Islands 151:14,20</p> <p>issue 17:14 29:2 62:11 73:1 95:2 96:4 114:10 266:9</p> <p>issued 257:1</p> |
|--|---|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|--|--|
| <p>issues 6:9,12 18:15 37:14 53:7,21 70:11 71:15 75:20 76:14 77:15 78:13,14,17 95:4 96:7 97:2 98:4,7,13,16 99:4 113:19 114:1,4,5,20 127:17 134:6 135:5 136:22 137:10 176:4 178:21,22 196:12 197:15 201:2 208:21 222:6,22 239:19 240:18</p> <p>ISU 169:7</p> <p>item 103:15</p> <p>iteration 89:12</p> <p>it's 2:6 7:15 9:13 10:4 15:1 22:2 24:18 35:7 40:11 41:7 63:3 68:12 70:3 76:20 81:5 84:19 86:11,14 87:17 101:8 102:22 105:15 106:16 107:6 109:15 110:2,6,14 115:1 132:6 135:13,15 139:10 140:20 144:16,17 145:10,12 159:15,16,19 161:16 162:4 163:15,21 164:13,14,18 170:7,11 171:1,11</p> | <p>172:13,17,18 175:6 188:22 189:18 194:1 208:1 217:7 218:5 220:13,18 224:14 229:9 232:2 233:13 235:2 236:17 237:6 241:5,22 242:1,6,7 244:17 245:11,13,20 246:2,20 247:20 249:11 259:11 265:5,15 267:22</p> <p>I've 75:17 85:16,22 171:6 182:6 249:2 253:7 265:7 267:19,20</p> <hr/> <p style="text-align: center;">J</p> <hr/> <p>J.D 159:16</p> <p>J.D.'s 159:17</p> <p>Jacobs 9:22</p> <p>Jacobs-Young 2:18,20 15:12 264:11</p> <p>Jae 92:16,19 235:11</p> <p>J-A-E 92:16,17</p> <p>J-A-I 92:17</p> <p>James 100:4 232:13</p> <p>Jan 225:20</p> <p>Janice 133:15</p> <p>Jeanette 228:4</p> <p>Jefferson 23:4 223:13,14</p> | <p>jeopardize 77:16</p> <p>jeopardizes 67:3</p> <p>jet 233:19</p> <p>Jim 151:2</p> <p>Jingxin 110:18</p> <p>Jiping 89:4</p> <p>job 28:19 86:13 105:22 143:13 169:3 171:19,22 215:14 264:3</p> <p>jobs 103:19 136:14 178:5 209:15</p> <p>Joe 22:16</p> <p>John 69:4 159:16 191:18</p> <p>join 108:20 152:21</p> <p>joined 8:4 151:18 162:12</p> <p>joint 153:6 236:18</p> <p>jointly 235:14</p> <p>joke 162:5</p> <p>Jonathan 32:14</p> <p>Jr 187:12</p> <p>Juli 200:16</p> <p>June 16:3 67:6</p> <p>junior 114:22 115:4</p> <hr/> <p style="text-align: center;">K</p> <hr/> <p>Kansas 40:14 42:18</p> <p>Karl 44:21 181:12</p> <p>Kathy 35:13 219:15</p> <p>Kelleye 40:9</p> | <p>Kentucky 191:19</p> <p>Kenya 92:7</p> <p>key 24:6 68:9 136:19 138:9 157:18 158:14 176:18 200:12 201:1 202:15 207:16 266:2</p> <p>kilograms 117:3,5</p> <p>kinds 9:14 71:18 85:12 234:22 237:10 240:14 241:2 242:2 243:17 247:5</p> <p>kit 22:1,3</p> <p>knell 115:3</p> <p>knew 175:21 250:6</p> <p>knowledge 19:1 25:19 33:2 34:10,13 45:21 46:6 73:12 74:1 91:1,21 92:9 110:12 121:1 123:16 134:1 149:2,16,22 150:18 156:20 158:6 159:7 167:10 168:9 220:1,10 237:7 247:1 257:6</p> <p>known 12:7 13:11,21 48:11,17 78:9 148:18</p> <p>Knutson 97:4</p> <p>Kochlan 89:7 90:3</p> <p>Kornilova 1:19 269:3,19</p> <p>Krantz 210:18,20</p> |
|---|---|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|--|---|
| <p>Kress 169:9</p> <p>K-type 194:6</p> <p>Kwok 227:20 233:7</p> <hr/> <p style="text-align: center;">L</p> <hr/> <p>lab 80:19,21 82:16,21 100:7 104:21</p> <p>label 87:18 175:6</p> <p>labor 57:10 97:9 98:8,15,18 99:4,7,8 136:12</p> <p>laboratories 38:12 45:8</p> <p>laboratory 109:17 175:1</p> <p>laborers 99:5</p> <p>labs 156:11 199:3</p> <p>lack 28:18 67:7,9,21 135:5 149:2 150:12 200:6 207:1 214:7</p> <p>lactation 258:12</p> <p>Ladies 150:21</p> <p>lagged 243:1,5</p> <p>Lakshmi 227:11</p> <p>lamanna 22:16</p> <p>LaManna 22:17 83:6</p> <p>lamb 49:12</p> <p>land 5:22 15:9 45:7 94:21 97:1 117:7 119:6 151:7,17,21 152:3,6,12</p> | <p>153:14 155:5 156:7,9,14 157:7 169:18 170:6,10 219:22 220:4 222:11 234:13,14,15 253:17</p> <p>landowners 223:7</p> <p>lands 70:11 71:19,20 91:7 234:7</p> <p>landscape 131:8 147:16 220:2</p> <p>landslide 95:21</p> <p>language 11:18 16:15 18:12,15 55:13 120:12 204:10</p> <p>large 18:7 24:17 30:12 42:2 45:16 46:20 47:12,13 55:4 56:20 63:17 89:15,17 99:7 110:3 111:5,6,18,21 115:16 124:8 154:11 164:2 171:8 182:9,12 192:16 193:14 194:12 220:16 242:1 244:1,6 254:16</p> <p>larger 12:7,9 15:22 18:3,6 60:3 65:18 152:12 153:7,16 154:7 164:21 182:18 211:13</p> <p>larger-scale 99:15 236:6</p> | <p>large-scale 246:12</p> <p>largest 18:4 49:8</p> <p>laser 105:13</p> <p>last 3:9 29:7 82:1 83:21 85:8,9 88:7 107:7 112:17 117:13,22 136:3 139:13 147:5 164:11,16 171:18 178:15 184:11 187:8,20 219:11 221:20 235:14 245:6 247:18 251:18 259:4 263:14 265:1</p> <p>lastly 31:8 183:13 250:20</p> <p>late 20:13 124:3</p> <p>later 8:11 218:11</p> <p>Latino 199:13</p> <p>Latinos 198:21</p> <p>laughed 162:7</p> <p>law 119:10 175:6 233:1</p> <p>laws 86:12</p> <p>lead 54:17 56:22 62:14 83:16 135:15 149:16 166:11 197:11 201:11 212:3,11 213:4 216:1</p> <p>leader 43:1 89:8 106:8 168:19 176:6,13 213:11 226:18,20 227:1,8,13,17,21 228:2,5,6,9</p> | <p>leaders 6:7 56:20 79:2 154:11 176:11 177:1 225:1 226:13,16,19 237:8 250:6 251:1 259:22</p> <p>leadership 24:11 43:2 90:9 105:7,16 124:22 151:16 176:4 190:18 226:11 250:1,2</p> <p>leading 50:8 146:20 209:6 211:16,20 212:8</p> <p>leads 32:1 37:22 225:6,11,15,18,2 2 226:3</p> <p>learn 55:14 145:14 148:10 166:16 196:6,7 216:21</p> <p>learned 146:6 148:11 179:12 216:22 218:11</p> <p>learning 109:9 116:3 147:2</p> <p>least 16:10 32:4 43:17 57:7 69:12 81:16 82:22 97:20 118:6 123:1 147:5 151:22 196:14 200:4 204:6 205:18 207:18 232:3</p> <p>leaves 100:14</p> <p>leaving 260:15</p> <p>led 23:6 41:12,14 78:18 90:3 91:16</p> |
|---|--|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 41

| | | | |
|--|--|--|---|
| <p>106:1 120:11 214:18,21 Lee 100:4 231:4 232:13 leg 72:3 legacy 5:22 23:10 legal 14:20 legislation 220:7,11 legislative 9:14 legislators 77:22 Legislature 223:15 legs 70:3 72:2 188:18 Leon 89:7 90:3 less 10:16 11:9,10,13,14 13:20 14:17 59:20 74:4 102:14 108:19 111:17 135:11 146:5 153:3 220:14 247:3 259:11 267:5 lessen 33:21 lesser-known 35:5 lessons 86:3 179:12 let's 4:21 115:13 146:5 200:3,4 226:16 242:16 244:10 letter 155:10,12,22 184:20 185:3 letters 31:9,14,17 154:19 155:8 262:17</p> | <p>level 5:20 27:8 38:12 53:22 54:12,15 55:1 59:8,12 70:18,20 109:13 113:22 114:5,9 123:17 164:20 169:10 172:5 174:7 182:16 212:16 215:2 220:2 222:11,22 levels 54:16 70:22 83:22 84:1 99:11 163:2 leverage 25:1 43:20 66:3 115:11 244:10 247:1 Liaison 168:20 liaisons 160:7 Liang 228:1,2 libraries 42:11 Lichens-Park 226:20 life 62:15 71:14 146:18 167:6 169:8 life-enhancing 168:10 lifestyles 62:21 life-threatening 135:16 lifted 79:18 light 5:2 Lihan 105:18 Li-Jun 142:21 likelihood 184:22 207:19</p> | <p>likely 111:17 216:3 likewise 251:6 limit 34:6 59:9 73:7 120:3 126:21 149:6 limited 12:22 19:5 25:1 58:17 75:5,15 127:4 153:13 180:5 182:8 183:8 205:22 208:19 235:8 257:10 264:19 limiting 37:20 62:9,11 limits 37:21 55:2 183:10 Lin 228:1 Lincoln 119:10 220:5 line 87:19,21 128:12 132:13 168:2 172:4 244:14 245:6 lines 146:1 172:6 209:4 link 48:15 186:12 206:18 243:10 linked 74:21 Lionel 129:10 list 205:1 listed 10:1 17:6 251:18 listen 93:17 216:20,21 217:9 253:10 262:7 264:18,21</p> | <p>265:21 267:3 listening 1:8 3:8 15:13,17 61:5 100:1 228:14 260:20 264:13,17 265:1 267:11 Listeria 50:3 51:21 lists 248:22 literally 163:6 little 13:2 20:11 21:2 44:10 45:15 66:21 74:2 82:1 85:7 92:22 101:7,8 108:19 114:20 133:18 146:17 162:2,12 165:3 171:11 190:5 191:7 218:13 242:16 245:3 252:2 257:3 263:12 266:7,9,10 Liu 89:2,4 live 109:18 148:5 livelihoods 65:8 livestock 65:6 66:15 78:16 113:18 128:17 201:13 203:4 local 70:20 71:16,20 95:16 123:17 131:22 157:4 203:10 221:10,12 localized 110:6 located 45:6 178:3 locations 81:6 82:6</p> |
|--|--|--|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|---|
| <p>170:22 logical 179:2 logistical 20:22 21:7 Logue 113:5,6 long 8:5 15:4 19:14 23:2 24:10 29:18 88:8 131:13 162:11 166:14 172:13 183:11 235:1 249:11 254:11 263:16 267:21 longevity 165:16 longitudinal 99:3 long-range 206:15 long-term 24:19 47:20 50:19 54:17 61:11 122:7 131:18 212:11 lookout 237:9 lose 87:11 113:20 114:14 209:8 loses 209:13 losing 73:12 180:3 loss 150:3 losses 167:14 176:9 lost 74:6 79:12 150:19 171:18 195:8 209:14 267:17 lot 5:3 6:7 17:17 18:21 20:3 41:5 60:6 87:22 95:7,8 96:11 106:15,17 107:6</p> | <p>110:5,8 113:13,16 114:5 120:5 143:11 154:21 159:17 161:12 171:7,21 172:17,18 184:15 185:10,18 189:12 190:8 216:22 217:14 218:20 227:4 228:14 230:20 234:6 247:2 248:4 259:14 267:2 lots 188:8 189:22 226:12 loud 266:18 Louie 225:16,17 235:18 Louis 238:4,5 Louisiana 213:20 love 256:9 low 66:8 73:10 74:15 82:15 138:5 211:16 lower 198:22 lowered 155:16 low-income 82:12 135:3 lucky 148:5 lump 35:7 lunch 82:14 140:17 141:7,20 188:14 <hr/><p style="text-align: center;">M</p><hr/>Ma 142:20,21</p> | <p>macintosh 57:17 MacIntosh 57:18 macro 167:18 169:10 madam 227:1 magnifying 23:22 magnitude 127:21 Mahalo 150:22 main 58:6,9 59:19 81:10 82:13 83:19 125:12 145:1 154:17 197:16 198:4 mainland 152:11 mainly 81:9 216:20 maintain 25:17 43:14 54:14,16 61:17 63:8 171:2 212:6 maintained 47:9 51:10 54:7 137:5 maintaining 23:21 30:17 61:22 63:13 75:1 169:20 major 4:15,16 16:5 40:19,20 68:17 73:1 78:14 91:15,17 104:4 123:1,21 130:2 135:2,13 137:17 140:9 144:20 192:15 195:13 205:15 206:22 239:16 242:18 majority 202:9 220:12</p> | <p>manage 78:1 144:3 170:10 manageable 42:4 managed 78:19 management 4:17 5:19 21:20 28:2 50:22 58:6,7 59:12 65:13 77:8,11 78:14 95:19 120:11 173:5 177:3 187:15 258:21 manager 35:13 154:14 managing 58:3 mandate 130:17 mandated 202:15 mandates 160:13 240:14 mandatory 172:6 202:1 manipulate 35:2 manner 55:20 97:16 98:1 163:11 164:7 Manoa 151:6 manually- annotated 41:18 manufacturers 173:9 manufacturing 136:13,19,20 209:16 map 42:15 163:1,12 252:17 mapped 42:14 mapping 41:2</p> |
|---|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 43

| | | | |
|--|---|--|--|
| 42:12,17 43:1,4 maps 41:19 43:10 March 20:7 68:10 237:13 marginal 92:10 234:7 Margot 226:22 Marianas 151:9 Mark 225:3 232:18 238:4 242:9 245:22 249:4 marker 86:20 markers 162:19 163:4,8 market 116:11,14 188:21,22 189:5 232:1 marketing 99:17 156:13 marketplace 26:2 68:19 163:7 markets 54:21 56:12 125:14 221:13 259:7 marks 3:8 married 69:14 Marshall 151:14 Marti 92:7 Mary 225:9 226:17,18 mass 157:7 Massachusetts 142:21 massive 3:16 Master 194:8 | Master's 254:9,10 255:1 match 14:3 154:18 matching 75:21 76:16,17,21 97:18,19 materials 23:13 36:10 167:19 244:9 mates 91:17 92:6,10 math 11:16 matrices 138:4 matriculating 249:21 matter 7:14 161:4 Matukumalli 227:11 mature 139:18 matured 90:4 maximum 204:6 may 7:10 14:1 25:9 27:7,12 41:5 47:12,22 56:14 61:10 98:2 100:21,22 105:12 112:5 126:21 127:4 129:19 138:22 173:7 207:5 210:10 213:4 244:7 250:10 256:22 262:19 maybe 31:16 87:8 95:12 105:13 119:20 141:14 145:2 194:2,11,22 195:3 212:19 | 231:10 232:4,10,11 241:16 mean 3:18 110:22 148:16 152:6 159:8 190:9 230:13 meaningful 121:7 222:10 means 3:9 17:21 70:5 74:4 147:4 148:16 159:10 234:17 242:4 257:12 meant 12:10 13:6 meantime 152:21 measurable 17:11,13 measured 161:8 measurement 254:5 meat 49:2,7,16 50:4,5,20,21 52:6 53:7,12 66:16 125:15 meat-packing 49:9 meats 137:12 mechanism 128:10 212:18 223:8 236:19 mechanisms 59:13,15 137:14 211:20 212:8 247:22 258:16 mechanistic 140:15 Med 113:8 medical 36:11 | 165:19,21 171:8 197:6 medicine 113:7 197:8 medicines 36:11 medium-sized 259:5 meet 7:13 48:10 65:4,11 79:8 116:7 118:13 141:10 156:15 178:17 181:1 254:7,11 meeting 2:8 9:2 16:4 23:12 27:17 29:12,14,17 41:9 54:2 67:6 68:20 84:14 141:19 143:4 152:1 232:11 248:4 268:11 meetings 33:1 195:1 250:3 Mehlenbacher 177:19,20 Mejia 195:17,18 206:14 member 45:5 64:13,22 116:2 184:3 192:15 196:1 206:2 213:16,18 members 27:4 31:12,13 40:17 49:11 53:13 60:19,21 175:1 176:18 185:17 192:2 196:4 206:18 236:1 255:14 |
|--|---|--|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|--|
| <p>membership 40:17 64:10 190:7</p> <p>memories 69:16</p> <p>men's 21:6</p> <p>mention 19:3 22:14 83:18 217:3</p> <p>mentioned 10:1 11:19 15:13 41:8 65:2 83:6 88:8 110:11 115:14 198:6 206:14 221:17 223:2 230:6 233:1 249:4</p> <p>mentioning 174:8</p> <p>mentor 199:20</p> <p>merely 189:2</p> <p>merit 37:16</p> <p>Mervalin 228:8 256:2</p> <p>Meryl 21:11 224:3,17 263:14 264:8</p> <p>message 7:8 47:19,22 56:22 69:10 73:8 105:5 172:20 186:11</p> <p>messaging 211:21</p> <p>met 29:8 126:10</p> <p>metabolic 149:10 150:8</p> <p>metabolism 148:5 149:13,17,19 150:5</p> <p>method 167:9</p> <p>methodologies</p> | <p>121:7</p> <p>methods 34:5 83:14 106:11 108:2,7</p> <p>metropolitan 132:18</p> <p>Mexico 109:2</p> <p>Michigan 252:19</p> <p>Miconide 92:1</p> <p>microbial 30:2 51:3,7 114:12 145:4 226:21</p> <p>microbiologists 29:6</p> <p>microbiology 75:4 106:9 113:7</p> <p>Micronesia 151:9,11,14,15</p> <p>micro-organisms 139:3 258:6</p> <p>microphone 86:20 253:15,19 254:3,6 255:6 261:16 262:5,15</p> <p>microphones 4:7 8:19</p> <p>microscopic 33:18</p> <p>micro-toxins 81:17</p> <p>mid 260:4,5</p> <p>middle 125:20</p> <p>midsized 14:13</p> <p>mike 2:9 142:10 143:22 144:2 191:12,16 219:13 224:15 238:3 249:9</p> | <p>milestone-based 41:20</p> <p>milk 98:21</p> <p>milking 69:17</p> <p>Miller 220:19</p> <p>milling 2:16</p> <p>million 5:15,17 9:21 10:2 18:5,7 42:12 46:22 50:9 65:15,20 82:9 111:8 116:17,18 117:2,4,5,7,9 136:14 139:11 159:2 172:7,10 174:6,7 175:3,10 182:15 185:18 187:3 189:2,3,4 198:21 205:19 241:22 244:17,18 246:3 251:3 252:7,12,15</p> <p>millions 43:22 44:1 103:18</p> <p>mind 5:10 8:15 86:6,10 102:6 212:18 221:1 223:2</p> <p>mindful 6:5</p> <p>minds 47:3 186:6</p> <p>mindset 208:18</p> <p>mine 185:1</p> <p>minerals 91:9</p> <p>minimal 43:5,12</p> <p>minimize 78:20 95:9,19 97:18 167:14</p> <p>minimum</p> | <p>202:19,22 204:6</p> <p>Minnesota 219:16,17 221:7</p> <p>minorities 199:10 214:21 215:1</p> <p>minority 215:20</p> <p>minority-serving 14:14 199:5 214:19 215:20 243:16</p> <p>minute 2:14 136:3 214:5</p> <p>minutes 120:3 191:8,13 219:14</p> <p>Miramontes 226:18</p> <p>miscanthus 85:17,18</p> <p>miss 115:19</p> <p>missed 73:10,14</p> <p>missing 71:11 235:6</p> <p>mission 35:20 37:15 38:8,15 64:12 119:15 125:7 206:16 251:19</p> <p>missions 48:10 233:11 236:8</p> <p>Mississippi 129:12</p> <p>mistake 235:6 252:10</p> <p>mitigation 78:10 131:3 216:16</p> <p>mix 45:18 140:14 182:17</p> <p>mobile 94:11,14</p> |
|--|---|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|--|---|
| <p>mobility 99:4 mode 243:3 model 61:8 127:17 128:2,4,5 179:16 241:5 modeling 216:19 236:16,18,20,22 models 106:12 150:7 216:19 moderately 88:22 modern 116:20 173:21 modest 103:21 modifications 253:13 modified 63:9 203:9 modify 34:4 Mohamed 183:22 226:2 moisture 93:9 molecular 34:14 80:18 91:19 92:8 162:19 163:4,8 258:15 molecule 59:12 molecules 137:16,19 moment 42:21 momentum 43:9 money 35:4 43:21 84:22 87:11 95:7 104:5,18 115:16 153:7 229:16 248:10 monies 215:19</p> | <p>monitoring 51:1 93:2,5,17 94:3 monocytogenes 50:3 Montana 119:2 month 155:11 256:6 265:15 months 155:10 164:9 186:1,2 189:17 Morant 228:8 255:22 256:2 261:17 262:16 Moreover 132:19 159:21 Morgantown 110:20 morning 2:2,18,20 9:11 35:12 41:8 44:21 48:22 53:16 60:10 64:7 72:7 73:9 77:6 80:17 83:7 84:13 89:2 92:15 97:4 110:17 113:5 116:1 118:22 119:3 122:9 129:9 142:8,9,14 188:17 230:5 257:12,17 263:18 264:11 Morrill 119:9,19 mosquito 70:21 mostly 110:6 motivate 135:8 199:15 motivating 239:10 motivation 135:5</p> | <p>motivational 134:6 mouth 69:19 move 158:4 159:8 233:16 242:12 243:20 moved 22:11 69:22 245:19 246:9 movements 239:16 moves 40:1 43:9 moving 43:9 157:19 M-Propa 92:2 much-needed 121:3 multi 59:22 159:1 multi-cubed 194:13 multi-cultural 199:7 multidimensional 199:22 multidimensional/ multidisciplinar y 139:7 multidisciplinary 11:14 12:10 24:17 55:21 56:7 59:21 62:1 96:7 98:1,4,9 124:14 189:11 241:13 multifaceted 47:13 multifunctional 124:14 257:11 multi-institutional 12:11 205:8</p> | <p>241:13 multiple 45:22 48:10 168:2 multistate 24:7 59:22 124:13 multi-state 12:11 157:4 Multistate 165:12 Munkvold 35:12,13 Muquarrab 225:13 MyPlate 211:15 MyPyramid 211:15 myriad 149:15 myself 85:6,20 86:3 105:1 238:6 264:10 <hr/><p style="text-align: center;">N</p><hr/>name's 44:21 64:7 159:16 nano 167:18 259:2 Nantucket 71:4 narrow 16:11 62:16 76:11 115:17 180:6 narrowed 179:20 180:1 narrower 15:8 narrowly 16:10 narrowly-defined 37:20 narrowly-targeted 25:5</p> |
|--|--|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|---|
| <p>Natalia 147:14</p> <p>Natasha 1:19 269:3,19</p> <p>Nathan 33:4</p> <p>nation 23:3 37:7 171:10 196:13 210:5 246:21</p> <p>national 1:3 2:21 10:7 24:6 27:5 31:21 36:7,16 37:18 53:21 54:17 56:19 76:5 78:14,18 80:19 89:10,13 100:7 105:11 106:14 119:4,5 121:22 124:21,22 125:5,7,11,19 126:12 129:6 130:5 154:11 174:1 176:5,11,12 177:20,22 178:1 199:7 200:12,18,19 205:11 209:19 221:13 222:6 226:13,16,18,19, 20 227:1,8,13,17,21 228:1,4,6,9 232:11,14,18,21 234:12 235:19 236:8,12,20 237:8 238:6 239:12 242:9,19</p> <p>nationally 220:17</p> <p>nation's 24:13 29:15 30:17 45:7 49:8,12 61:9 173:9 196:14</p> | <p>201:15</p> <p>nationwide 101:13 222:16</p> <p>Native 71:7</p> <p>natural 26:8 34:3 95:20 131:5,6 150:3 156:17 188:7 226:4 227:17 240:1 258:1,18 264:9</p> <p>nature 22:1 23:22 75:21 122:7 187:15</p> <p>NC-1023 165:12</p> <p>nearly 28:3 49:13 50:7 70:6 128:21</p> <p>Nebraska 7:17</p> <p>necessarily 46:17 105:14</p> <p>necessary 14:6 35:6 54:16 56:9 67:4 79:8 244:3</p> <p>negative 87:10 90:15</p> <p>neglect 164:4 204:15</p> <p>neglected 161:14</p> <p>neglecting 209:12</p> <p>neighbors 189:7</p> <p>neither 269:8</p> <p>nematode 33:22 34:4,5,9,13</p> <p>nematodes 33:6,9,16,22 34:7,19,22 176:19 258:8</p> <p>nematologists</p> | <p>32:17,18 35:7</p> <p>nematology 32:20 33:3,5 34:11</p> <p>nervous 217:10</p> <p>network 93:2,5,7,17,19 94:3,5,7 119:5 131:16 213:11</p> <p>networking 80:7</p> <p>neurotoxins 81:17</p> <p>nevertheless 112:5</p> <p>newcomer 171:6</p> <p>newly-created 249:19</p> <p>Newport 159:19</p> <p>news 165:17</p> <p>nexus 93:4</p> <p>NIA 110:1</p> <p>nice 20:19 21:2 22:7 93:22 96:1 141:1 219:9</p> <p>Nielsen 72:7,8</p> <p>NIFA 1:3 3:15 4:15 5:4,9,21 7:9,10 8:14 15:18 19:8 23:15 25:16 26:18 27:13 31:4 32:9,10 40:7 51:18 52:15 54:1,7,13,20 56:2,15 63:22 68:2 78:5 79:10,19 80:8 85:5 86:5 89:9,12 90:8,22 91:12 92:13 105:22 106:3</p> | <p>107:1 108:17 109:5 110:21 111:1 112:12,18 113:20 128:22 129:7 140:7 141:12 147:22 152:15,19,21 153:14,16,19 156:9,10 157:3,13 158:18,21 176:3 177:14 184:6 190:21 196:10,15,19,22 204:8 205:20 209:20 210:2 215:6 228:14,22 229:3 230:4,7,10,15 238:1,19 247:20 249:9,13,15 250:2,6,20 253:11 257:13 262:22 267:11,22</p> <p>nifa.usda.gov 261:11</p> <p>NIFA/AFRI 46:3 47:17 72:13 187:18 218:2 227:3 249:6</p> <p>NIFA's 6:3 8:12 23:17 25:7 78:6 79:21 105:19 154:15 172:3 176:4 190:16 251:20 257:5</p> <p>NIFSI 114:12</p> <p>Niger 92:8</p> <p>night 162:8</p> <p>nightmare 88:5,17</p> |
|--|---|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|--|--|
| <p>NIH 140:2 152:20 153:6 194:3,6 196:18 198:11 237:4</p> <p>nine 100:7 117:5 155:10 241:1</p> <p>nobody 104:2,15 229:13</p> <p>nominated 160:2</p> <p>non 7:18 132:18 251:11</p> <p>nondescript 33:12</p> <p>Nonetheless 24:18</p> <p>non-land 253:17</p> <p>nonprofit 40:12 45:4 49:5 53:19 204:19 206:14</p> <p>non-regulations 86:14</p> <p>noon 249:5</p> <p>nor 269:10</p> <p>Norfolk 232:16</p> <p>normal 20:11 59:3 187:2</p> <p>normally 250:12,15</p> <p>North 77:7 101:8 136:8,18 151:9 169:16 183:22</p> <p>Northeast 156:6,7 157:5,11</p> <p>notably 173:12</p> <p>Notary 269:1,19</p> <p>note 8:16</p> <p>noted 174:4 177:6</p> <p>notes 142:15 175:2</p> | <p>261:9 270:6</p> <p>not-for-profit 60:17 173:8</p> <p>nothing 102:9 139:12 155:8 190:8 267:12</p> <p>notice 26:7 181:9 245:4 262:9</p> <p>noticed 226:8 235:14 250:3</p> <p>noting 176:4</p> <p>notion 38:6</p> <p>Notwithstanding 176:10</p> <p>novel 30:16 37:22 139:10</p> <p>NPL 256:5</p> <p>NPLs 154:15 256:19 260:8</p> <p>NRI 10:10 48:8 89:10 90:1 92:13 120:10 136:10</p> <p>NSAC 201:2 206:2</p> <p>NSF 40:14 66:2 145:4 152:20 194:3 217:22 218:1,22 219:1,3 230:9 235:14</p> <p>NSF/USDA 145:4</p> <p>NTIA 130:16</p> <p>numerous 77:16,19 79:10</p> <p>nutricelticals 198:14</p> <p>nutrient 35:1</p> <p>nutrients 63:15 101:2 138:11</p> | <p>167:5,13 168:7 258:17</p> <p>nutrition 7:16 23:13 36:13 49:21 60:12 61:3,19 62:3,6,12,15 63:11,19 64:4 97:10 98:8 134:2,13 136:7 137:6 138:11 165:10 167:4 174:18 179:1 183:15 195:19 197:12 208:5 212:4,12 213:9 216:19 225:22 256:5 257:22 258:14</p> <p>nutritional 33:14 91:11 134:8 149:5 166:4 168:3 197:11,19,22 258:11</p> <p>nutritionally- enhance 167:10</p> <p>nutritionally- valued 98:19</p> <p>nutrition-related 63:2</p> <p>nutritious 25:21 137:11 161:18 163:11 165:3 166:11</p> <p>nuts 9:13</p> <hr/> <p style="text-align: center;">O</p> <hr/> <p>Oak 100:7 104:20 232:14</p> | <p>Obama 174:2</p> <p>obesity 6:19 17:6 61:21 62:8,9 63:1,5 98:9 134:16 135:15 139:5 153:5 166:12,20 171:14 197:15 211:1,4 213:4 214:7,8 216:1,4 239:1 240:17,18 247:12</p> <p>object 204:15</p> <p>objectives 236:5,9 239:7 240:6</p> <p>obliged 187:19</p> <p>Obrycki 191:18</p> <p>observations 59:11</p> <p>obtain 149:12 199:10 200:7 242:3</p> <p>Obtained 149:22</p> <p>Obudzinski 200:16,17</p> <p>obvious 171:14</p> <p>obviously 169:6 174:14 211:7</p> <p>occasions 79:10</p> <p>occur 31:15</p> <p>occurs 239:17</p> <p>ocean 102:8</p> <p>o'clock 141:18,21 263:18</p> <p>offer 12:2,21 13:1,5,16 14:2,8 19:3,10 36:19 99:12 129:21</p> |
|---|--|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|--|
| <p>131:2 142:7,13 194:1,15 201:6 214:3 248:3</p> <p>offered 17:14 235:15</p> <p>offering 19:16 54:20 247:6</p> <p>office 110:15 265:6</p> <p>officer 269:3</p> <p>officers 143:12</p> <p>offices 110:14</p> <p>official 2:11,14 237:17</p> <p>officials 68:14</p> <p>Oh 226:17 254:8</p> <p>Ohio 22:18</p> <p>Ohlhorst 60:10,11</p> <p>okay 15:12 19:3 44:9 89:2 92:19 100:22 101:14,17,18 102:6,20 103:6,21,22 104:6,8,9,19,21 140:18,21 160:10,13 162:21 164:12,18 186:6 190:8 224:13 227:2 228:13 230:14 231:14,15,17 232:1,4,6,9,12 253:20 255:21 262:9</p> <p>old 10:10,11,19 48:8 232:15</p> | <p>oldest 49:9</p> <p>omitted 25:10</p> <p>one-and-a 261:6</p> <p>one-day 261:5</p> <p>one-legged 69:20</p> <p>ones 59:16 198:3 204:4 224:18 245:18 246:10</p> <p>one's 263:13</p> <p>ongoing 79:8 247:20</p> <p>online 122:2 246:7,8</p> <p>open 9:7 22:15 99:18,19 123:13 191:12 204:13,17 219:13 223:22 250:13</p> <p>opened 203:18</p> <p>opening 194:7</p> <p>operate 6:8 242:18</p> <p>operates 5:22</p> <p>operations 99:15 178:3</p> <p>opinion 212:21</p> <p>opportunities 28:15 48:4 57:10 62:13 64:2,5 66:5 67:8 73:11,15 74:5 75:5 76:19 79:16 90:12 99:13 120:9,15 121:18 122:2 125:9 128:7 132:9 139:16 152:11 153:21</p> | <p>157:8,14,15 158:21 165:14 170:1 183:11 197:13,21 207:1 209:3 217:8 237:10 259:9 261:1 264:20 266:20</p> <p>opportunity 7:22 21:19 26:15 27:11,16 31:6 40:6 43:16 45:10 48:21 49:4 55:7 57:13,21 60:13 64:3,22 67:22 77:4 90:8 102:1 109:3,14 110:16,21 113:9 116:7 118:16,21 119:17 120:1 124:20 129:1 142:8 143:2 147:20 150:12,22 154:5 159:14 165:8 181:3,18 183:17 184:6 187:17 194:20 200:12 206:20 208:11 215:7,8,11 216:6 219:9 222:21 235:15 248:22 260:20</p> <p>opposed 99:19</p> <p>opsis 42:6</p> <p>optimize 62:21</p> <p>optimized 111:6</p> <p>options 95:17 98:12 116:10 235:4</p> <p>order 2:7 36:15</p> | <p>71:1 126:17 150:11 162:5 199:10 205:10 213:6</p> <p>organic 99:12 187:2 202:4,12 203:1</p> <p>organisms 34:3,12 138:19,22 195:7</p> <p>organization 9:1 22:21 26:22 32:19 35:16 40:11,12 41:13 50:12 51:17 53:19 119:4 155:4 173:8 224:22 260:12</p> <p>organizations 3:17 4:19 178:1 200:20 204:19,20 216:16 222:16</p> <p>organizers 165:7</p> <p>organizing 264:2</p> <p>origins 145:19</p> <p>others 52:14 160:10 162:11 169:22 257:18 262:19</p> <p>otherwise 54:11</p> <p>Otto 21:12 264:10 267:16</p> <p>outbreaks 52:16 107:7,8,12 166:20</p> <p>outcome 75:14 186:2 241:10 254:5</p> <p>outcome-based</p> |
|---|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|--|--|
| <p>25:2 241:9</p> <p>outcomes 17:11 27:1 46:9 78:19 127:12 222:10 244:3</p> <p>outline 33:7 256:10</p> <p>outpost 152:6</p> <p>output 65:8</p> <p>outreach 121:14,19 122:5 124:4 158:15 170:14</p> <p>outside 239:18</p> <p>outsourced 209:15</p> <p>outstanding 164:12</p> <p>overall 5:3,9 38:8 65:18 66:9 146:18 175:20 179:15 234:14</p> <p>overarching 248:5</p> <p>overcome 144:9</p> <p>overhead 111:19</p> <p>overheads 153:9</p> <p>overlap 126:17</p> <p>overlapping 60:7</p> <p>overlooked 33:11 45:20 47:15 207:8</p> <p>overlooking 224:5</p> <p>overly 76:11</p> <p>overview 14:18 80:20 238:15 256:11</p> <p>owe 143:6</p> | <p>oxygen 100:20</p> <p>oxysporum 144:7,15,17 145:15</p> <hr/> <p style="text-align: center;">P</p> <hr/> <p>p.m 141:21 142:2 268:11</p> <p>Pacific 151:4,7,17</p> <p>Pacific-sized 154:3</p> <p>packaging 208:3</p> <p>Padula 165:6,9</p> <p>page 6:15 9:16 154:17 243:10,11 247:18</p> <p>pages 31:17 265:17</p> <p>paid 39:10</p> <p>painful 5:8</p> <p>Palau 151:13</p> <p>Panama 144:1,11,12</p> <p>panel 31:13,18 190:7 245:14,19 255:18</p> <p>paneled 259:18</p> <p>panelists 122:16,17</p> <p>panels 57:4 61:1 122:15 158:14 190:14 202:7 223:16 243:14 255:12</p> <p>paradigm 41:13</p> <p>parameters 37:17 40:15 51:1</p> | <p>parasite 34:15</p> <p>parasitic 33:21</p> <p>parent 215:4</p> <p>parents 69:14 134:13</p> <p>parrot 139:6</p> <p>participants 13:14</p> <p>participate 40:19 43:19 129:2 192:13 248:10 261:1</p> <p>participated 192:11,16</p> <p>participating 3:1 44:3</p> <p>participation 43:14 57:3 205:3 264:16</p> <p>particular 12:17 13:8 54:19 56:17 85:19 99:2 128:1 130:17 169:7 194:4,21 244:4 248:6,15 254:13</p> <p>particularly 29:5,21 86:8 118:5 129:21 130:4,16 143:11 169:14 214:8</p> <p>parties 269:10</p> <p>partner 106:5 107:10 189:20 235:21 236:6</p> <p>partners 80:11 153:15 156:8</p> <p>partnership 6:1 153:3 162:10 194:3</p> | <p>partnerships 75:22 115:7 125:2 152:19 153:17 155:18 194:16,20 219:21,22</p> <p>part-time 215:14</p> <p>pass 2:18,19 21:6</p> <p>passage 201:16</p> <p>passed 8:21 220:11</p> <p>passion 169:4</p> <p>passionate 171:9</p> <p>past 3:15 13:1 18:6 40:7 41:10 55:12 61:6 73:17 119:18 126:15 137:4 151:2 179:18 189:4 207:6 210:6 265:20</p> <p>pastures 260:9,15</p> <p>path 43:5,12 83:16</p> <p>pathogen 83:9 84:9 144:6,18 145:15</p> <p>pathogenicity 145:22</p> <p>pathogens 29:10 30:22 51:22 82:21 83:2,3 106:13,19 139:4</p> <p>pathologists 28:19 29:6,8</p> <p>Pathology 32:15</p> <p>pathosystems 247:4</p> <p>pathway 83:8,10</p> |
|---|---|--|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|---|
| <p>pathways 149:11</p> <p>patience 3:22</p> <p>patient 259:19</p> <p>PATRICIA 270:3,20</p> <p>Pause 2:17</p> <p>pay 33:17 232:2 233:2 235:5 265:11</p> <p>paying 181:8</p> <p>peach 161:22 162:5,14</p> <p>peaches 160:9</p> <p>peak 118:9,10</p> <p>Peake 187:12</p> <p>peanut 80:19 82:10,13,16,21 100:13</p> <p>peanuts 81:5,11,15,17 82:5,7,17 83:14,17 84:1,7</p> <p>pear 162:16</p> <p>pears 160:9</p> <p>pecans 84:10</p> <p>peer 31:2,5,11 158:9 255:8</p> <p>peer-review 122:15</p> <p>peer-reviewed 24:4</p> <p>Peet 225:9</p> <p>penetration 158:2</p> <p>pens 109:18</p> <p>people 2:15 7:2,15 14:14 20:17,22</p> | <p>21:8,22 44:13</p> <p>59:5,12 65:9</p> <p>97:15 102:8</p> <p>110:11 112:5</p> <p>117:10 118:3,4</p> <p>130:10,15,18</p> <p>139:8 141:13</p> <p>143:7 144:14</p> <p>146:7</p> <p>170:4,10,22</p> <p>185:22 191:6</p> <p>192:2 206:17</p> <p>208:5 211:21</p> <p>214:10,16,19,22</p> <p>215:5,8,11,15,20 ,21 220:15</p> <p>224:22 241:1</p> <p>243:15,16</p> <p>245:11 246:19</p> <p>248:9,22 260:14</p> <p>263:19 267:18</p> <p>people's 75:12</p> <p>per 81:21 82:4,9 175:10 176:9 259:20</p> <p>perceived 97:13 99:8</p> <p>percent 5:9,11,15 10:16,20</p> <p>11:9,10,13,15</p> <p>13:15,16 38:2</p> <p>49:12,13 52:4</p> <p>65:7 66:18 67:1</p> <p>74:4 78:6,7 81:3</p> <p>91:6,7 117:16,18</p> <p>118:6,12</p> <p>120:17,19</p> <p>122:15,22</p> <p>148:1,14,15</p> <p>157:5,6 172:4</p> <p>174:16</p> <p>175:14,20</p> | <p>188:1,2,3 196:16</p> <p>198:21 199:14</p> <p>201:21</p> <p>202:19,22 204:6</p> <p>205:18 220:14</p> <p>252:9,14,16</p> <p>253:21</p> <p>percentage 24:15 183:2</p> <p>perform 6:12 54:16 58:13</p> <p>performance 39:8,20 258:11</p> <p>perhaps 86:1 88:5,6 222:20 260:5</p> <p>period 8:15 124:10 185:21 196:19 223:14</p> <p>periods 183:11</p> <p>permit 30:10 70:17</p> <p>permitting 86:7</p> <p>PERS 127:12</p> <p>persistent 133:2</p> <p>person 169:3</p> <p>personal 212:21</p> <p>personalities 190:1</p> <p>personality 69:8</p> <p>personally 143:5 212:13</p> <p>personnel 153:13 158:11</p> <p>perspective 87:19 169:1 184:13 196:18 236:13</p> | <p>pertinent 165:20</p> <p>pest 77:8,11 78:12,14,16,19 79:6 177:7 195:6 202:5</p> <p>pesticide 78:20</p> <p>pesticides 106:12 117:3 173:12</p> <p>pests 34:21 78:1 176:6</p> <p>petroleum 229:18</p> <p>petunia 26:6</p> <p>Ph.D 254:15</p> <p>phases 33:2</p> <p>phenomenal 169:17</p> <p>phenomenon 145:17</p> <p>phenotype 163:18 244:11</p> <p>phenotypic 41:19</p> <p>phenotyping 244:8</p> <p>Philadelphia 157:10</p> <p>philanthropies 130:7</p> <p>Philmoney 44:8</p> <p>phone 94:14 162:21,22</p> <p>phrase 197:8</p> <p>physical 41:2 42:11,17 43:1,4,10 167:17 214:7 258:15</p> <p>physically 42:14</p> |
|--|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 51

| | | | |
|--|---|---|--|
| <p>physicists 250:16</p> <p>physiology 22:17 182:2 227:22</p> <p>phytoalexins 82:19,22 83:4</p> <p>Phytopathological 27:19</p> <p>PI 45:19 61:15 183:10 186:4 193:10</p> <p>pick 142:11</p> <p>picture 87:1 149:13</p> <p>pie 152:18 155:17 164:13</p> <p>pieces 42:4</p> <p>pigment- producing 26:6</p> <p>pillar 188:17</p> <p>pillars 137:2 162:14</p> <p>PIs 31:13,15 46:4 48:17 89:18 128:19 180:15 199:22</p> <p>PI's 155:12</p> <p>pistachios 84:10</p> <p>place-based 130:10 170:5,7</p> <p>placed 99:2 202:2 215:10</p> <p>places 130:15 243:8</p> <p>placing 28:15</p> <p>Plains 241:19</p> <p>plan 46:19 94:11</p> | <p>110:13 185:22 217:9,11 238:21</p> <p>plane 233:19</p> <p>planning 12:21 13:2 95:18 123:19,20 124:2,6,17 169:19</p> <p>plans 36:21 40:2</p> <p>plant 26:5 28:1,4,5,7,8,12,1 9 29:6,7 30:3,6 32:8,15 33:7,21 35:14,15,16,19 36:1,2,3,6 39:5,10,22 58:14 78:15 79:6 83:4,12 90:1 117:1 118:17 134:2 144:15 147:21 148:5,9,17,22 149:7,13,20 150:3,5,7,15 173:10 182:1,2 201:15,22 202:3 219:19 225:11 227:22 228:2 257:20,21 258:4</p> <p>plant-animal 183:14</p> <p>plant-associated 258:6</p> <p>plant-based 135:11,12</p> <p>plants 26:10 29:10 30:22 34:1 39:15 58:11,12 82:20 90:17,20 148:14 149:5,9,12</p> | <p>176:19 258:6</p> <p>plasma 244:8</p> <p>plate 140:20 250:7</p> <p>platform 231:16,19</p> <p>play 37:9 65:10 66:1 90:9 119:20</p> <p>plays 117:14</p> <p>please 2:6,14 8:14,18,22 22:13 27:12 80:10 92:17 142:15 200:3 225:3,20 226:22 261:19</p> <p>pleased 31:20 156:8 173:6</p> <p>pledge 123:4</p> <p>plenty 16:18 35:9 237:14</p> <p>PLGA 151:17</p> <p>plots 81:8</p> <p>plug 71:12</p> <p>plumbing 154:13</p> <p>Plunkett 136:14</p> <p>plus 14:1 240:21</p> <p>podium 22:13</p> <p>point 5:11 15:18 45:14 46:2 47:17 48:14 73:14 76:16 77:1 86:19 88:14 90:5 119:11 135:7 143:18 145:1 146:12,22 150:16 160:14 169:12 170:17 171:10 178:19 185:8 211:9</p> | <p>212:13,22 219:5,6 222:18 224:10 226:10 231:13 232:9 260:5 261:3</p> <p>pointed 170:19</p> <p>points 86:4 90:3 182:6 184:12 231:5 236:5 256:19 260:9,17</p> <p>policies 55:11 57:11 71:20 200:22 239:19</p> <p>policy 27:20 35:22 44:22 97:7,8,9,10 98:4,7,8,16 99:17 119:4 135:2 187:15,16 188:18 206:11 234:19,20 265:4</p> <p>policymaking 250:19</p> <p>political 69:9,11 70:10 71:10</p> <p>politics 70:4 72:4 188:18</p> <p>pollinators 234:9</p> <p>polymers 168:4</p> <p>ponds 70:19</p> <p>pool 162:6</p> <p>poor 127:13 214:16</p> <p>poorest 117:9 118:12</p> <p>pop 138:6</p> <p>popularity 56:6</p> <p>population 63:14</p> |
|--|---|---|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
 NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|--|
| <p>90:14 118:2 150:4 157:6 162:18 165:16 170:20 182:5 199:11,14 220:16 240:21</p> <p>populations 59:10</p> <p>Porcine 179:8</p> <p>pork 49:12 125:5,7,11,15,19 126:10,13,15 128:21 129:6 177:20,22 178:3,4,8,10,19 179:9,19 181:4</p> <p>portend 132:10</p> <p>portfolio 6:4 24:1 25:17 45:21 47:8 62:18 78:3,5 115:18 129:18 130:21 131:19 158:22 233:4,9 266:17,22</p> <p>portfolios 60:7</p> <p>portion 24:18 65:18</p> <p>pose 157:7</p> <p>poses 158:4</p> <p>position 13:19 26:1 73:22 124:7 211:3</p> <p>positioned 4:2</p> <p>positions 200:21 226:12</p> <p>positively 63:10 80:1 158:6</p> <p>possibilities 235:4</p> <p>possibility 31:18</p> | <p>232:7</p> <p>possible 26:20 27:8 31:7 56:4 76:4 86:1 148:4 175:15 194:2 195:4 205:3 218:21 237:16 248:9</p> <p>possibly 194:5,7</p> <p>post 6:16 9:2 19:17 35:17</p> <p>postdoc 252:5,9,11</p> <p>postdocs 45:6 194:6 251:14 252:10</p> <p>postdoctoral 13:17 14:12 19:10 28:17 193:21 249:18 251:2,9 252:21 253:1 257:18</p> <p>posted 249:5 261:7,8 263:3,4</p> <p>potential 26:12 30:14 31:13 39:17 55:3 61:18 148:21 167:1</p> <p>potentially 90:15 91:7 183:5</p> <p>potentials 168:10</p> <p>Poth 225:3,4 232:18 238:4,7,11 242:8,9 246:2</p> <p>pots 115:16</p> <p>poultry 49:17 50:4,5,20,21 52:6 53:8 64:15 66:16 137:13</p> | <p>poverty 117:8 118:2,4 132:16 133:3,7 214:6 215:2,3</p> <p>power 42:10 59:17</p> <p>powered 176:14</p> <p>practical 29:4 53:7</p> <p>practice 3:14 60:19 122:4,12</p> <p>practices 23:14 46:16 62:21 221:11</p> <p>pre 19:10 48:17</p> <p>prearranged 185:13</p> <p>pre-awaited 46:8</p> <p>precarious 72:3</p> <p>precise 51:8</p> <p>precursor 216:4</p> <p>precursors 85:15,18</p> <p>predecessor 89:10</p> <p>predecessors 267:20</p> <p>predicament 47:4</p> <p>predict 38:22 150:7</p> <p>predictability 48:8</p> <p>predictable 48:15</p> <p>predicted 90:15</p> <p>predicting 55:10</p> <p>predictive 59:16 106:8,12</p> <p>predoc 252:4</p> <p>predocs 251:13</p> | <p>252:6</p> <p>predoctoral 13:17 14:11 19:16 193:21 249:19 251:2,10 252:18 253:1 254:12 257:17</p> <p>prefer 112:4</p> <p>preliminary 14:5 254:20 255:2</p> <p>premier 27:21</p> <p>premium 48:9</p> <p>prepare 6:6 38:19 63:18 123:20</p> <p>prepared 13:3 143:15 219:14 244:11</p> <p>preparing 185:10</p> <p>preproposals 262:17</p> <p>prescribed 46:13</p> <p>prescriptive 46:3 55:1 59:20 76:12 267:5</p> <p>presence 122:1 192:4</p> <p>present 20:2 27:17 40:6 118:19 143:16 150:16 165:22 172:8</p> <p>presentation 238:8 256:10</p> <p>presented 58:4 140:11 188:16</p> <p>presenting 238:13</p> <p>presents 100:20 138:7</p> |
|---|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 53

| | | | |
|--|---|---|---|
| <p>preservation 138:2 156:17</p> <p>preserve 25:22</p> <p>president 5:5 22:21 119:1,10 168:17 169:9 173:3 206:10 220:5</p> <p>President's 5:1 10:1 65:17 171:16 174:5</p> <p>press 29:1</p> <p>pressing 4:3 30:11 191:10 196:12 205:10</p> <p>pressures 78:19</p> <p>pretty 72:3 236:11</p> <p>prevalence 52:7,17</p> <p>prevent 56:4 62:22 126:17 149:3 198:8</p> <p>preventing 52:14 167:13</p> <p>prevention 17:7 62:8,9 133:16 198:2 211:2 239:2 247:12</p> <p>preventive 50:22 113:7</p> <p>previous 25:10 32:11 61:5 65:2 89:12 167:7 174:4 185:14 189:13 231:4</p> <p>previously 78:11 249:16</p> <p>price 118:9 229:11</p> | <p>prices 99:1 118:10</p> <p>primarily 18:18 159:19 192:3</p> <p>primary 57:7 97:21 149:19 261:21</p> <p>primed 136:20</p> <p>principal 140:8</p> <p>principals 191:11 224:2</p> <p>principles 36:12 38:14</p> <p>printed 248:19</p> <p>priorities 8:12,15 18:14 29:9 30:4,7 33:19 37:13,19 40:6,15 50:10,13 77:13 113:15 114:3 116:8 126:17 128:9 129:3 157:3 160:17,22 178:20 180:2,6 201:10 202:16,20 203:4 205:16 209:19 217:5 259:2,13 267:1</p> <p>prioritize 31:10</p> <p>priority 3:20 28:15 36:7 37:1,20 52:18 62:22 68:9 86:5 114:7,17,21 118:14 137:5 167:3 179:19 180:4 185:7 192:12 202:2 203:1,11 207:14 210:9 221:5</p> | <p>223:1 257:4 258:5,15,19 259:15,21</p> <p>private 6:2 28:11 98:12 253:17 255:16</p> <p>probably 4:18 12:2 85:9 195:3</p> <p>problem 12:18 17:14 58:16 81:13 84:8,11 90:10 95:13,14 96:9 99:7,8 104:13 189:21 208:15 211:9 218:5</p> <p>problems 7:14 19:2 24:6 25:5 29:11 30:11,15 38:5 58:5,6,14 74:1 75:14 93:14 98:6 106:21 108:11,13 123:10 156:16 169:21 171:14 194:13 207:17 210:7 223:7</p> <p>problem-solvers 205:14</p> <p>problem-solving 97:14 159:1</p> <p>problem-solvings 121:2</p> <p>proceed 237:6 239:10</p> <p>proceeding 269:4,5,8,11,12 270:4,5,8</p> <p>process 3:12 26:8 31:2 42:20 49:11</p> | <p>50:22 72:15 75:7 95:15 106:6,15 107:22 108:20 123:4 124:3 129:2 149:9,20 155:21 163:10 184:13,19 205:21 210:1 222:14 231:22 245:19 247:14,20 255:9,18,19 265:16</p> <p>processed 135:11</p> <p>processes 48:12 150:6 165:13 166:6 168:6 258:20 259:2</p> <p>processing 49:9 138:1,15,17 139:10 152:9 198:1 207:11 258:17</p> <p>produce 107:19 113:13 137:20 167:6 182:4 198:11 208:15 234:6</p> <p>produced 49:13 51:13 82:20 145:11 249:17</p> <p>producer 113:14 125:19,22 178:1</p> <p>producers 77:20 78:21 79:22 98:22 113:21 125:8 128:21 170:2 177:21,22 178:8</p> <p>producing 51:5</p> |
|--|---|---|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 54

| | | | |
|---|---|---|---|
| <p>126:9 186:19</p> <p>product 51:13 78:16 112:9 175:4,5,6 213:19</p> <p>production 9:9 17:9 28:12 39:10,13 41:10 51:12 53:10 65:13 66:15,16,18,20 79:3,9 81:3 90:10 99:12,16 101:14 112:14 113:13 117:1 118:7 126:7,20 127:7 144:4 156:16 174:17 175:15 177:8 178:8,11,21 179:3 198:12 202:4 208:12 220:15 225:10,12,14 227:12 229:5 234:21 240:12,15 241:18 257:21,22 258:4,9,10</p> <p>production-dominant 190:9</p> <p>productive 144:3</p> <p>productivity 149:6 174:15</p> <p>products 34:4 50:4,5 51:5 64:19 67:17 98:19 111:15 112:15 166:7 167:11,16 173:10,13</p> | <p>174:11,19,22 175:13,16,19 198:13,14 206:19 229:19 230:5,9 233:6 257:21,22 258:5,10 259:2</p> <p>profession 54:20,22 56:1</p> <p>professional 27:22 35:16 57:7 60:18 97:21 109:12 200:8 201:4 222:16</p> <p>professionals 122:14,22 124:1 170:14</p> <p>professor 22:17 32:15 57:18 69:4 72:8 92:20 110:18 113:6 129:12 147:15 159:18 164:16 165:9 187:12,19 191:19 195:18 210:20 213:9 216:13 217:12 228:20</p> <p>professors 89:20 193:6 199:4,18,20 200:3 217:12 218:12</p> <p>proficient 169:3</p> <p>profile 74:15 107:8</p> <p>profit 87:5,7,8,10,13</p> <p>profitability 28:12</p> <p>profitable</p> | <p>88:10,11 99:13</p> <p>profound 131:7</p> <p>program 3:4 5:16 8:13,14 9:13,19 10:6,8,10,12,15, 19 11:1 13:13 14:20 15:15,19,21 16:6,9,10,13 17:4 18:4,8,9,10,11,1 2,13 19:4,7,8,9 20:12 27:7 28:14 37:13 49:5 50:1,6,17 52:8,16 53:1 54:4 56:19 60:15,22 62:12 64:21 65:10 78:10 79:15 80:4 89:14,16,19,21 90:1,8,22 92:1 103:7,9,16 104:4,17 105:7,8 106:17 108:18 109:16 110:22 118:18 123:13 127:17 128:14 129:15 131:15 135:1 136:11 139:2,14,15 140:5 141:5 143:12 145:2,5 147:18,21 148:1 153:1 154:11,12,14 159:17 161:7 166:3 174:4 176:5,11,12 177:6 179:21 180:11,22 183:1,3,10,15 184:12,16,18</p> | <p>186:5,9,10 188:21 189:1 192:9,12,19 193:10,17,20 194:2,3,8 195:12 199:18 203:8,12 204:1 205:4,18 206:5 207:11 210:18,21 212:20 213:11 218:4,22 219:20 221:3,5 226:13,16,18,19, 20 227:1,3,6,8,13,1 7,21 228:1,5,6,9,22 231:7 232:5,6 233:12 236:13,14 237:8 238:1,2 245:7,12,14 248:5,13 249:14,15,16,18, 19,22 250:8,14 251:6,8 252:1,8,13 253:9,10,12 254:14 257:1,2,9,11,19, 20 258:19 259:1,4,8,12,17, 22 260:10 261:21,22 262:18 264:12 265:11 268:3</p> <p>programmatic 48:5 201:9</p> <p>programmers 143:11</p> <p>programs 5:18 8:13 18:1 24:17</p> |
|---|---|---|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 55

| | | | |
|---|--|---|---|
| <p>28:8 29:20,21 30:9,13,16 38:11,17 47:14 51:20 54:8,14 58:18 59:20 61:10 62:1 72:20 73:3,7,8,10 74:3,8,15,16 76:5,11,17 77:19,22 78:2,8,11 79:1,12 80:4 90:2 92:13 103:17 105:3 106:14 107:18 108:9 113:10 114:9,15 115:15,16 119:6 123:9,17 126:1 127:10,16 128:8,9,11 133:6 137:4 140:14 156:15 160:4 163:9 167:4 173:19,20 176:15,18 178:15 179:5,12,21 180:9 192:18,21,22 193:14,15 194:6,13,14 195:5,8,10 197:13 200:1 202:8 203:18 204:4 205:6 212:10 241:11 242:22 243:14 246:11 248:15 249:1,18 252:15 256:12,13,14,17, 19,21 257:6 259:12,18 260:19 262:19</p> | <p>266:1,12,21 progress 17:13 28:8 39:11 72:17 73:17 126:7 140:10 148:3,8 178:7 183:12 233:7 project 11:22 12:3,20 17:15,21 19:11 42:10,19 43:9,15 46:19,20,22 47:1 85:14 124:2,5 127:12 128:1 139:9,11 140:5 145:7,9 151:3,5 154:4,10 155:7,11,21 165:12 187:3 204:16 241:22 251:13,14,19 257:8 projecting 55:12 projects 11:2,3,5,7 12:4,8,13 15:7 17:17 19:4 24:20 25:18 38:4 40:20,21 45:17 49:22 50:8 56:7 70:9 78:12,15,18 79:16 82:18 83:5 97:17 111:5,6,10,11,18 ,21 120:18,20 124:8,9 126:14 135:21 153:8 154:2,5,7 179:9,15,18 182:10,11,12 185:15 189:11,12 194:12 201:11</p> | <p>202:1 203:2,20,22 204:14 205:7,9,12,17,19 222:5 241:10,15 242:2 251:15,16,18,22 266:19 promiscuity 149:20 promise 20:4 206:3 265:8 promote 12:14 27:9 33:2 34:18 35:22 121:13 134:7 147:8 160:22 promotes 37:3 promoting 131:22 199:9 promotion 28:1 193:9 proper 140:14 155:13 220:18 proponent 29:19 proportion 63:17 68:2 148:11 proportions 166:21 proposal 4:22 5:1,7 14:7 43:16 48:16 84:20,21 85:16 113:1 122:20 123:4,21 124:7,9 154:19,21,22 155:4,19 184:11,16 185:6 186:1 188:13</p> | <p>190:2,14 230:3 proposals 31:6,9,11 35:8 37:14 45:18,19 56:20,21 76:14 79:6 89:16 120:10,16 124:1,12 137:9 153:3,20 155:3,18 158:10,12,17 164:12 179:22 182:18 184:21 185:6,11 188:11 189:14,16 propose 95:13 123:18 131:9 146:20 194:11 proposed 71:3 proposes 57:9 proscriptive 211:10 prospects 149:6 protect 82:20 167:1 208:8 protecting 78:22 186:20 198:1 protection 57:20 58:2 78:16 173:10,13 174:9,11,14,19,2 2 175:4,9,12,16,19 176:21 177:1 186:18 protection's 175:7 protein 41:6 82:13 178:9 proud 119:18</p> |
|---|--|---|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|---|
| <p>210:16 proven 77:15 provide 15:15 25:2,21 27:12 38:18 45:10 57:13 63:22 64:4 65:1 78:21 92:3 99:3 106:4 112:2 117:2 121:21 123:18 124:20 130:22 142:8,15 149:13 156:14 173:21 175:19 177:16 179:2 181:18 183:18 184:7 187:5 198:16 200:17 206:8 207:21 237:19 241:2 255:4 261:4 262:8 provided 18:15 20:5 55:6 61:3 79:12 91:21 106:3 120:6 124:22 127:10 129:4 179:6 180:20 208:4 212:20 221:16 240:10 242:5 provides 158:9 210:13 236:21 providing 62:2 77:16 105:22 121:5 155:18,20 157:22 158:16 209:1 215:14 241:20 242:4 provision 239:6 proximity 157:9 public 6:1 9:2</p> | <p>27:20 35:13,22 52:17,19 54:1 61:20 70:11 71:19 94:10,13 98:12 119:14 126:2 147:7,12 158:4 160:4 161:3 169:18 173:16 201:12 222:8 242:5 269:1,19 publication 42:20 56:3 121:8 239:11 Publications 118:20 publish 3:11 56:2 217:15 published 147:10 242:7 Puerto 151:19 pull 246:13 pulling 264:2 Purcell 226:17 Purdue 72:9,11,12 75:19 147:17 pure 111:20 purple 252:22 purpose 32:22 41:16 134:3 167:22 pursue 240:6 pursued 211:12 pushed 266:4 putting 102:11 143:10 Pyramid 211:14</p> | <p>pyrolysis 100:19,20 <hr/><p style="text-align: center;">Q</p><hr/>qualified 31:4 123:5 qualify 199:22 qualifying 254:21 qualities 168:3 quality 35:1 43:12 47:2 62:15 71:14 75:11 93:9 102:16 124:7,9,15 136:22 137:2 163:22 166:4 167:21 211:2,16,22 quantities 99:1 quarters 75:6 question 134:10,17 166:8 191:9,13 219:13 228:21 231:3 234:14 235:10 253:15,16,19,20 254:3,6,8 255:6,7 261:16,17 262:5,14,15,16 questions 26:16 54:10 191:10 193:1 218:20 224:8,14 228:17 235:9 248:11 259:14 260:3 quick 44:16 80:20 84:16 141:8 238:15 quickly 34:6 44:19</p> | <p>100:11,16 177:8 quite 69:8,10 87:21 88:3 129:22 220:6 221:17 233:4 249:11 quote 176:5 221:8 223:14 Qureshi 225:13 <hr/><p style="text-align: center;">R</p><hr/>R&D 54:17 156:10 175:3 rabbit 42:6 races 34:5 Rahman 216:12,13 rain 84:5 raise 32:7 Ralph 21:12 Ram 228:6 RAMP 78:10 79:13,17 ranchers 203:16 Randy 69:3 range 13:14 15:3 43:22 68:13 78:12 89:17 180:1 183:7 ranges 63:11 218:15 ranks 140:1 Rao 228:6 rapid 51:12 108:1,4,6,7 136:21</p> |
|--|---|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|---|
| <p>rapidly 78:1 90:6</p> <p>raspberries 160:9</p> <p>raspberry 162:1,16</p> <p>Ratcliffe 77:6,7</p> <p>rate 71:7 73:9 252:8,13,16 253:21</p> <p>rates 74:4 134:16 245:5</p> <p>rather 55:15 58:13 76:12</p> <p>rational 149:3,4</p> <p>reach 27:7 59:2 122:1 134:2 142:12</p> <p>reached 166:21</p> <p>reaches 66:22 97:15 116:15 118:9,10 208:17</p> <p>reaching 130:17 174:6 240:22</p> <p>reaction 262:10</p> <p>readable 246:7</p> <p>reading 142:15</p> <p>ready 50:3 108:2 142:19 208:21 222:17</p> <p>real 7:3,14 74:1 90:7 92:11 93:14 108:3,14,15 109:9 135:9 140:16 156:9 185:17 207:15 208:12,15 234:1 248:11</p> <p>realistic 102:10</p> | <p>229:6</p> <p>reality 58:21 231:14</p> <p>realize 33:8 41:5 48:13 168:10 236:4 240:17</p> <p>realized 3:12 156:22</p> <p>realizes 29:17</p> <p>realizing 180:18 240:3</p> <p>real-life 58:5</p> <p>really 5:12 6:11 9:3 10:10 11:1,16 12:3,4,10,12,14, 19 13:6,8,13 15:15,20 17:10,12 18:17,22 19:12 43:13 47:3 58:13 59:3 68:16 69:7,11,21 71:22 72:16 74:9,13,18 88:7 102:2,5 105:6 109:4 110:7,12 119:15 129:10 130:19 131:19 132:14,21 134:2 143:1 144:2 146:19 147:3 161:5 164:18 185:9,14,19 193:18,20 194:5,10 213:17 221:6 222:3 225:1 228:15 231:5 237:7 240:5 241:9 244:21 256:8,11</p> | <p>259:10 264:7,15 266:4,12 267:6,8,15,17 268:4,9</p> <p>realms 35:22</p> <p>real-time 51:4,6,7</p> <p>reason 100:22 101:5 117:21 189:21</p> <p>reasonable 111:22</p> <p>reasons 154:1</p> <p>reassigned 260:14</p> <p>reassignments 260:13</p> <p>reauthorization 27:9</p> <p>rebound 136:18</p> <p>recalls 240:20</p> <p>receive 35:6 113:16 196:13 240:4 251:22 265:3</p> <p>received 4:22 5:9 61:11 73:21 79:5 98:17 107:1 136:10 155:8 245:17,18 252:21,22 253:5,14 254:1,15,16</p> <p>receives 196:18</p> <p>receiving 8:9 19:22 199:6</p> <p>recent 31:20 78:5 85:16 126:8 137:8 175:2,11 176:5,13 177:11 196:14 207:18</p> | <p>232:21</p> <p>recently 78:8 177:4</p> <p>Recess 44:17 80:14 191:5</p> <p>recessed 141:20</p> <p>recipients 60:22</p> <p>recognition 5:13 30:8</p> <p>recognition 145:7</p> <p>recognize 5:5 18:10 30:12 56:4 120:21 122:4 164:19 243:22</p> <p>recognized 147:11 151:13</p> <p>recognizes 24:22 37:6 38:6 157:17</p> <p>recognizing 30:5 69:13</p> <p>recommend 55:19 56:10 116:6 118:15 201:21 202:7,19,22 203:14,17 204:8 205:5,15,20</p> <p>recommendation 56:18 59:19 158:11,12 167:8</p> <p>recommendations 23:21 36:20 53:5 54:5 58:1 157:2 201:9 206:7 217:1 265:12</p> <p>recommending 211:18</p> <p>recommends</p> |
|--|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|--|
| <p>50:15 reconvene 141:20 record 2:11 9:2 36:5 50:11 53:6 77:15 103:14 114:2 129:5 214:12 217:19 224:15 230:21 231:1 269:8 recorded 2:8 8:18 86:21 269:5 recorder 268:1 recordings 270:6 records 27:16,18 82:3 recover 131:13 recovery 37:9 131:14,18 recruit 109:13 recruited 109:15 recruitment 132:11 recycling 35:1 red 252:20 redirect 172:12 reduce 12:15 31:18 41:22 50:2 52:18 78:19 82:16 98:17,18 106:21 107:11 117:4 167:14 174:21 197:6,12 205:21 211:4 reduced 74:16 91:11 269:6 reduces 91:5 reduction 128:14</p> | <p>175:9 reductions 180:11 re-evaluate 254:17 re-evaluated 45:19 re-examine 52:16 refer 11:5,22 12:3 237:18 reference 43:5,12 63:12 references 31:21 referred 119:5 198:3 referring 223:12 refine 129:18 reflect 157:14 245:16 reflected 5:6 reflections 157:2 regard 170:11 regarded 186:7 regarding 23:19 97:7,10 113:10 129:15 224:10 250:21 253:11 regards 55:4 114:5 Regina 159:18 region 241:16 243:14 regional 24:6 77:9 80:1 109:4,21 123:19 131:20 132:1,3,8,9,13 157:12,15 177:3 203:10 219:20 221:10,13 233:12 241:17</p> | <p>246:13 247:7 regional-local 222:22 regionally- adapted 202:3 register 175:3 registered 2:5 5:2 Registration 80:9 regs 70:15 regular 33:1 218:10 243:4 regular's 191:4 regulated 81:18,20 174:20 regulation 149:11 regulations 70:13 86:8,14,18 regulatory 52:5 173:3 reiterate 8:17 57:12 155:14 214:9 relate 129:22 163:8 164:15 187:5 related 63:5 74:7 78:15 94:2,16,20 98:16 135:20 167:2 197:18 203:16 214:7 218:20 219:3 234:6,8 269:10 relates 77:2 129:15 relation 168:4 231:12 Relations 60:11</p> | <p>119:1 168:17,21 181:13 relationship 122:16 129:6 149:17 relative 78:4 126:6 171:5 192:20 193:14,15 relatively 58:22 release 20:12 26:19 124:11 201:12,16 242:22 262:3 released 164:7 247:12 259:20 260:4 releases 48:14 relevance 239:22 relevant 6:10 18:15 25:9 195:10 relied 189:19 rely 51:1 remain 36:15 62:22 111:1 169:19 remained 52:3 remaining 75:20 224:18 remains 24:12 79:5 126:8 174:10 Remarks 224:4 238:2 263:15 remember 10:13 101:7 150:10 197:7 220:21</p> |
|---|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|---|---|
| <p>remind 237:11</p> <p>reminder 22:13</p> <p>reminding 72:1</p> <p>remiss 170:12</p> <p>remote 151:20</p> <p>Rene 133:11</p> <p>Renee 80:15,17</p> <p>renew 34:15</p> <p>renewable 156:18 229:1,3 232:22 251:12 258:1,18</p> <p>reorganization 3:16</p> <p>reorganized 3:19</p> <p>repeat 2:4 149:4 253:16</p> <p>repeated 75:16</p> <p>replace 128:2</p> <p>replaces 10:7</p> <p>replenish 166:9</p> <p>report 68:21 175:2,11 177:11 232:21</p> <p>reported 1:19 270:4</p> <p>Reporter 270:4</p> <p>Reporter's 270:6</p> <p>reporting 1:20 26:20 153:12 243:6</p> <p>represent 22:22 27:18 74:10 109:4 160:3,7 173:8 176:6 200:11 207:14 222:2</p> | <p>representative 125:19 156:7 165:12 184:2</p> <p>representatives 31:7</p> <p>represented 67:12 210:17 222:20</p> <p>representing 22:19 32:16 64:8 84:18 85:1,6 119:3 136:9 156:5 177:20 181:15 219:16</p> <p>represents 28:3 62:10 66:17 82:14 178:2 181:20 199:13 201:3</p> <p>reproduction 127:14 258:11</p> <p>Reproductive 179:8</p> <p>Republican 77:21</p> <p>request 5:3 10:2 26:18 153:16 164:6 171:16,17 174:5 234:11,18,19</p> <p>requested 55:5 254:17</p> <p>requesting 174:3</p> <p>requests 23:19 55:16 111:13 153:20</p> <p>require 14:3 46:21 63:6 126:16 161:6 162:4 205:9</p> <p>required 24:16</p> | <p>25:21 76:17 120:22</p> <p>requirement 10:21 31:9 154:18 254:18 255:1</p> <p>requirements 9:14 10:15,19 11:17 46:18 55:20 75:21 85:17 97:18 98:1 170:6,7 202:2 205:22 254:8,11,13</p> <p>requires 103:21 123:10 154:21 157:11 163:12</p> <p>requiring 204:12</p> <p>research 1:4 4:9,16 6:22 7:3,6 8:8 10:7,17 11:2,6,9,10,11,1 2,20 13:7 17:16 18:18,22 23:2,6,10 24:1,5,10,12,13, 16,21 25:3,6,8,13,14,1 6,18,20 26:3,11,17 27:2,6 28:9 29:4,9,20 31:21 32:5 33:19 35:21 36:2,6,17 37:2,4,8,13,19 38:3,4,5,7,11,15, 18,20 39:4,9 40:8 46:5 47:9,14 49:6,20 50:6,8,10 51:14,15 53:3 54:6,9,15 55:3,18 57:10</p> | <p>58:10,18 59:11 60:5,8 61:3,8,9,14 62:4,6,13,16,18, 19 63:2,4,6 65:16,21 66:4 67:2,3 68:8,15 70:9 72:2 73:12 74:3,5,9 75:3,10,11,14 79:4 80:3 85:21,22 86:2 89:8,10,13,15 90:4,7,9 91:1,12 93:1,3,10,15,20 94:2,16,19 96:10,17,20 97:13,14,16 99:16 101:13,17,19 105:19 106:7,8,14,16,17 ,18,22 107:4,6,8,9,11 108:5,8 109:10,21 111:12 115:11 116:3,8 117:12,19 119:15 120:20 121:21 122:9,11 123:2,10 125:5 126:2,6,17,18,19 127:13 128:4,12,15,17 129:3 130:8,21 131:9 133:1,16,21 134:1,6,7,20 135:8,20 136:15,21 137:8 140:3,4,13,14 144:16 146:2,3,21</p> |
|--|---|---|---|

Capital Reporting Company
 NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|---|---|
| <p>147:22 148:2,21 150:10,12,13 156:11 157:19 158:5 160:17,18,21,22 161:2 165:9 166:3 167:8,22 168:9 169:5 170:5,8 172:13 173:17,19 174:2 176:1,21 178:7,12 179:4,7 180:3,9,12,14,18 ,19,21 181:1,6 183:1,12 184:2 187:14 188:2,9 190:19 193:1,7 195:21 197:5 199:2,4,11,15,19 201:1,11 202:16 203:10,19 204:19 205:8 206:3,21 207:4,11 208:12 209:1,4,9,12,16, 21 210:5,15 211:1,12 212:14,15 213:6 214:4,6,22 215:5 216:17,18 217:1,4 220:1 221:22 222:8,9 230:14,17 232:22 233:5 234:13,21 236:14,15 237:5 239:12,18 247:9 251:15,20 253:18 255:11,16 257:9,14</p> <p>research-based 156:19</p> | <p>researcher 54:12 184:14 186:22 189:12 218:19</p> <p>researchers 55:14,16 59:1 100:1 112:3 114:22 115:4,5 124:1 127:3,8,18 128:11 139:15 143:4 146:16 185:9,20 186:12 212:19 215:21</p> <p>research-focused 120:11</p> <p>researching 211:7</p> <p>research-targeted 244:12</p> <p>reserve 22:18 210:3</p> <p>reserved 2:6 21:10</p> <p>residential 95:1</p> <p>Residue 106:9</p> <p>residues 106:11</p> <p>resilience 131:11 202:5 221:14</p> <p>resist 247:3</p> <p>resistance 114:12 202:5 247:2</p> <p>resistant 34:1 91:10 144:19</p> <p>resolutions 31:7</p> <p>resolve 95:9</p> <p>resonate 221:6 223:7</p> <p>resource 28:6 53:18,21 95:18 127:10 128:16</p> | <p>180:13 240:1</p> <p>resourcefulness 205:13</p> <p>resources 66:12 68:2 73:18 75:9 95:8 125:8 152:12 153:13 156:17 179:6 188:7 201:10 226:4 227:18 258:1,18 264:9,19</p> <p>respect 44:20 142:4 176:1 204:22</p> <p>respectively 128:20</p> <p>respiratory 127:13,14 179:8</p> <p>respond 4:3 16:20 78:1 131:13 169:22 265:19</p> <p>responded 16:12,17</p> <p>response 32:10 39:14 90:11 123:16 124:15 131:3 136:21 203:13 224:12 226:9 228:12</p> <p>responsibilities 219:18</p> <p>responsive 19:13 61:4</p> <p>rest 14:12 57:14 78:4 219:9</p> <p>restricted 60:6</p> <p>restricting 183:7</p> | <p>restrictions 253:17</p> <p>restrictive 108:19 111:14</p> <p>restrooms 21:6</p> <p>restructured 249:15,17 253:10</p> <p>restructuring 16:5,9</p> <p>result 40:14 58:1 83:22 150:8 180:3</p> <p>resulted 91:13 183:8</p> <p>resulting 208:6</p> <p>results 26:4 51:4,9 56:9 68:20 73:10 85:21,22 86:1 124:6 143:2 145:12 153:12 158:5 180:19 187:15 190:10 209:15</p> <p>retain 72:20 167:13</p> <p>retention 132:12</p> <p>retirement 150:17 176:13</p> <p>retirements 260:6,8,14</p> <p>retiring 250:6</p> <p>return 87:14,16 88:1</p> <p>Returning 47:6</p> <p>review 31:2,11 35:8 57:4,6 61:1 97:20 112:18,19 122:14 123:4</p> |
|--|---|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 61

| | | | |
|---|--|---|--|
| <p>128:4 158:9,12,14 179:11 202:7 reviewed 31:17 144:16 reviewer 113:1 155:3 reviewers 31:4,13 47:5 123:5 202:9 222:14 reviewing 38:13 revised 180:6 revisit 185:15 revive 144:10 Revolution 32:1 revolutionizing 146:13 rewarded 140:10 rewards 106:5 rewriting 153:3 rewrote 16:12 RFA 13:3 19:7,14 30:20 48:14 67:15,18 86:6 120:13 124:11 201:19 204:1,12 209:21 211:10 221:21 233:4,22 234:4 243:7 244:14 246:18 247:12,13,15 257:1 260:3,16 262:4,19 265:17 RFAs 16:22 17:5 19:6,7 20:9,13 25:8,12 26:19 27:14 31:20 53:3 55:1,2,14 61:6</p> | <p>62:17 75:21 76:11,13 120:21 121:4,11,16,17 124:15 157:21 164:7 200:6 201:16 207:6,18 208:10 210:8 212:1 229:20 246:9 247:11 256:17 259:22 265:17 RFP 56:2,3,13,17 97:16 154:4,16 218:8 RFPs 55:19 57:5 72:5 97:22 110:10 153:6 154:9 188:8 217:4 RFP's 56:12 Rhode 156:3,4 159:19 Rhodes 156:2 Rick 156:2 Rico 151:19 Ridge 100:7 104:20 232:14 rights 86:7 right-sized 154:2 rigorous 55:8 ripple 47:20 209:4 rise 90:14 166:22 222:22 risk 73:12 74:19 78:9 107:14 180:3 risks 52:19 RNA 26:7</p> | <p>83:5,7,11 RNAI 26:10 RO1 140:3 road 117:6 road-tested 158:2 Robert 21:15 89:4 224:5,18 255:22 256:3 robust 3:4 29:19 36:17 37:12 144:2 159:4,8 rocket 172:17,18 Roger 220:19 role 6:1,3 29:14 34:22 37:9 52:13 55:5 65:11 66:1 90:9 117:15 119:20 121:4 122:18 149:18,20 157:22 165:20 195:13 222:4,7 Ron 97:4 room 4:8 5:1,18 8:19 20:2,16 80:13 119:8 125:14,20 191:2 220:8 222:21 224:19,21 225:10 226:8,11,13 227:15,21 250:3,4 256:1 262:10 Rosenbaum 133:11,14 Rosenberg 168:14,16 ROSEXEC</p> | <p>159:22 160:1,8,15 162:12 ROSEXEC's 161:4,19 162:10 rotating 183:8 rotations 203:3 roughly 246:3 round 184:11 237:21 267:13 Roundtable 177:11 rows 2:19 RPR/CSR 1:19 ruin 101:16 rules 86:12 rumor 260:7 run 40:21,22 44:11 102:15 152:15 166:15 rural 70:10 93:14 98:14 112:10 129:11,12,16 130:4,12,14,15,1 6 131:8,12 132:4,8,21 133:4 200:20 203:6,11,22 204:3 214:8,18 215:3,10,19 221:15,17 223:4,5 234:18 258:3 259:4,6 Ryu 92:15,19 235:11 <hr/>S<hr/>sabbatical 13:22</p> |
|---|--|---|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|--|
| <p>sad 209:2</p> <p>safe 25:21 82:15 126:9 137:10 140:20 166:10 175:6 178:9 206:16 230:15</p> <p>safest 51:13 166:18</p> <p>safety 6:18 7:18,21 8:9 17:8 23:14 29:4,8 30:4,20 49:16,21 50:1,7,18,21,22 52:21 53:7,9 75:3 97:9 98:8 106:14,18,21 107:3,5 108:11,13,16 113:15 114:17 125:9 137:1,3,6 138:18 174:20 179:2 196:8 207:7 225:22 226:1 228:5,7,9 239:2 240:19 247:13 256:4 257:22 258:14</p> <p>salary 14:1</p> <p>sales 136:15</p> <p>Salmonella 50:4 51:21 52:3,6,9,12</p> <p>Salmonellosis 52:2</p> <p>salt 167:15</p> <p>Salve 159:18</p> <p>Samoa 151:8</p> <p>sampling 51:7</p> <p>Sarah 60:10</p> <p>sat 267:20</p> | <p>Satiety 139:9</p> <p>save 102:22</p> <p>saving 117:2,6</p> <p>savings 175:20</p> <p>SBMATE 91:14,16 92:3,9</p> <p>scaffolds 162:15</p> <p>scale 15:22 46:19 124:9 167:19 209:14 241:6,12 242:1 266:10,14,17</p> <p>scales 45:22 168:2</p> <p>scaling 47:2</p> <p>scared 217:13 219:7 235:12</p> <p>scenario 88:5,17</p> <p>scenarios 55:13</p> <p>schedule 2:3 44:13 133:11 243:4 248:3</p> <p>scheduled 262:1</p> <p>schedules 249:5 264:5</p> <p>scheme 196:15</p> <p>schemes 234:21</p> <p>scholarship 250:22</p> <p>school 69:4 109:12 110:13 164:18</p> <p>schools 109:5 153:13,21 164:22 171:8</p> <p>science 4:3 5:6 6:2,3,7 7:2,9,11 8:8 13:9,11</p> | <p>24:11 26:5 28:4 30:8,16 31:19 32:20 35:20 42:10 44:22 45:1,2,9,14,22 47:10,16 49:15 64:9,15,17 65:11,22 69:11 70:2 71:9 72:9 74:1,21 75:1,6,16 76:15 105:11 107:18,20,21 109:18 110:19 122:11 125:5 126:3 133:5 134:2 137:7,9 147:9 165:10 167:20 172:17,18 173:3,11 181:14,15,21,22 182:7 188:17 195:19 197:19 206:11,15 207:6,12,16 209:2,3 210:6,11 213:9 218:3 234:16 236:8,12,20 239:21 240:1,3 242:4,6,7 250:1 257:15</p> <p>science-based 64:18 123:16</p> <p>science-related 209:21</p> <p>sciences 30:2,13,18 32:8 56:16 66:13 67:8,9,11,15,18, 22 68:10 98:10</p> | <p>105:13 106:2 136:8 146:18 169:8 171:3,12 182:3 195:22 213:13 250:13,16 251:16 257:7</p> <p>scientific 22:22 23:7 25:9,20 27:22 28:22 31:1 37:8 39:1 45:4,20 49:1 60:18 61:18 94:8 109:10 111:20 121:1 135:21 137:18 140:9 160:20 167:11 182:19 201:4 206:14 209:8 210:15 239:17 244:16 246:1,4</p> <p>scientist 100:8 104:8 107:3 196:9 208:2 217:21 232:15</p> <p>scientists 6:6 7:20 23:1 26:17 28:3,17 35:18 39:4 40:13 43:18 44:4 45:5 48:9 57:4 59:11 63:19 64:11,16,22 68:2,13 72:20,22 73:12,16,22 74:12 75:5 76:7,13 79:2 89:21 93:7 96:9 100:1 104:19 106:3,10 107:16 108:17,19,20 128:15,19 139:18,19,21</p> |
|---|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|--|---|
| <p>147:1 164:20 169:11 180:13,15 181:20 190:13 197:3,14,22 198:11,18 207:3 208:9,10,20 209:17 216:8 237:1 250:11,14,16 255:15</p> <p>scope 37:21 46:19 55:17 58:17 98:9 111:22 185:15 195:4 213:5 235:8</p> <p>SCORP 14:15</p> <p>scream 5:12</p> <p>screen 17:6 242:14</p> <p>screening 184:19</p> <p>SCRI 161:7</p> <p>seafood 137:13</p> <p>seat 2:4,6 22:7</p> <p>seated 22:8</p> <p>seating 21:10</p> <p>seats 20:20 21:17 44:19 191:7 256:16</p> <p>second 4:11 15:17 34:10 37:12 46:2,8 74:7 76:10 97:22 118:8 131:2 137:22 146:22 185:12 188:15</p> <p>secondary 149:19</p> <p>Secondly 121:15 171:4 202:11</p> | <p>seconds 142:6</p> <p>Secretary 4:13 5:5,14 103:10,12 159:21 266:2</p> <p>Secretary's 203:13</p> <p>Section 15:7 70:16</p> <p>sections 155:2</p> <p>sector 98:12 112:15 116:11 136:13 232:8 240:15</p> <p>secure 8:9 166:18</p> <p>securing 169:13 193:9</p> <p>security 6:17 17:8 36:8 65:5,9,12,16 66:4,8 77:14 80:1 116:22 141:11 159:6 161:9 179:1 192:14 221:11 222:7 239:2 246:18,21</p> <p>seed 14:4 81:1 110:1,7 173:11</p> <p>seeds 81:2</p> <p>seeing 114:4 141:17 183:18</p> <p>seek 95:6 113:16 205:3</p> <p>seeking 185:18 235:3</p> <p>seem 230:15</p> <p>seemingly 245:5</p> <p>seems 6:14 46:20 71:10 111:9 140:12 146:1</p> | <p>seen 44:7 107:6 132:19 169:17 185:1</p> <p>sees 87:1</p> <p>seldom 207:17</p> <p>select 165:4</p> <p>selected 194:19</p> <p>selecting 47:18 222:14</p> <p>selection 163:7</p> <p>sell 172:20 229:8,11,12,17</p> <p>send 47:22 230:22 263:2</p> <p>sends 47:19</p> <p>senior 89:21 100:8 218:11</p> <p>sense 85:5 93:6 156:9 262:6</p> <p>sensitive 108:10,11</p> <p>sensory 168:3</p> <p>sent 253:11</p> <p>sentiment 188:16</p> <p>separate 14:20 146:3 213:21 234:11,18,19 261:13</p> <p>separately 218:10</p> <p>sequence 41:18 42:6 148:6</p> <p>sequenced 194:18</p> <p>sequences 44:5 148:8</p> <p>sequencing 40:11 41:2,15</p> | <p>43:1,5,6,13,16 44:3 145:4,5 146:14 148:6,7</p> <p>sequester 101:3</p> <p>sequestration 46:15 100:10 104:10 172:3</p> <p>series 58:3 71:13 140:3,4,5,6 248:2</p> <p>serious 152:17 176:7 206:6 265:20</p> <p>seriously 72:5</p> <p>serve 32:22 54:11 77:7 146:6 160:14 168:19 225:1</p> <p>served 28:6 130:18 152:3 190:7 243:17</p> <p>Service 105:20 188:3</p> <p>Services 130:5,16</p> <p>serving 61:1 110:18 122:14</p> <p>session 1:8 3:2,8 8:17 15:13,17 100:2 142:1 165:7 216:22 265:1 267:12</p> <p>sessions 32:11 61:5 178:16 264:14 267:21</p> <p>setting 40:15 50:13 71:7 114:21 143:1 215:4 262:12</p> |
|---|---|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|--|---|
| <p>seven 17:5 84:4</p> <p>several 20:17 21:21 54:7 67:22 122:8 123:1 182:12 185:6 236:1 239:10 246:10</p> <p>severe 82:2</p> <p>severely 73:7 75:5 183:10</p> <p>severity 90:13</p> <p>sexier 172:19</p> <p>Shaikh 216:12</p> <p>shape 119:16 248:14</p> <p>share 4:8 13:6 120:7 129:1 132:15 143:2 181:3 186:2 232:11</p> <p>shared 95:15</p> <p>sheds 157:11</p> <p>Sheely 9:11 120:4 224:4,17,20 226:10 228:13 230:19 232:17 261:20 262:6</p> <p>sheet 121:8 259:11</p> <p>shelf 167:6</p> <p>shelling 82:5</p> <p>shells 100:13</p> <p>Shelly 9:8 177:19</p> <p>She's 142:19 264:3</p> <p>shift 88:9</p> <p>shifted 45:15 182:9</p> | <p>shifting 138:7</p> <p>shifts 75:4</p> <p>Shigatoxin-producing 50:2</p> <p>Shing 227:20 233:7</p> <p>Shiou 228:1</p> <p>short 44:15 156:21 162:20 166:14,19 185:21 201:17</p> <p>shortages 99:4</p> <p>shortest 83:16</p> <p>shortfall 39:1</p> <p>shorthand 11:4</p> <p>short-term 140:13</p> <p>shot 172:13</p> <p>shove 161:12</p> <p>shown 120:9 124:17</p> <p>shrunk 21:17</p> <p>shutting 208:10,11</p> <p>Sibylle 210:20</p> <p>sight 33:12 113:20 114:14</p> <p>sign 4:11 21:3 71:5 177:11</p> <p>signed 119:10</p> <p>significant 6:9 15:19 17:13 24:18 38:9,22 50:20 62:2 74:5 106:1 112:6 122:21 126:7 174:3 178:7,14 179:6 182:14</p> | <p>205:9,10 209:4</p> <p>significantly 16:14 68:4 116:21 123:3 163:10 180:1</p> <p>silence 26:8</p> <p>similar 144:12 161:20 235:22 236:4,10,19</p> <p>similarly 155:1 237:3</p> <p>Simmons 69:3</p> <p>simple 70:14 147:10 155:20 161:12 209:13 215:14 256:11</p> <p>simply 17:20 135:5 172:16 207:10</p> <p>simultaneously 23:12</p> <p>Sing 220:21</p> <p>singer 220:20</p> <p>single 12:5 18:19 45:19 47:11 114:19 120:18,19 121:8 193:1 195:14 204:14 214:9 215:4 247:20 257:9</p> <p>single-to 164:4</p> <p>Singleton 225:20,21</p> <p>sir 231:3</p> <p>sister 105:19 107:10</p> <p>site 70:14</p> | <p>sites 249:7</p> <p>sitting 69:16 72:3 143:12 256:15</p> <p>situation 74:22 86:11 105:8 143:9</p> <p>six 3:20 18:10,13 19:6 41:10 84:2,4 104:21 137:5 157:6 164:9 257:2,19 261:21 262:2,3,10</p> <p>sixth 127:5</p> <p>Sixthly 205:5</p> <p>size 42:2,3 111:6,7,22 122:7 153:20,21 185:15</p> <p>sizes 99:9 205:6</p> <p>sizing 155:18</p> <p>slaughter 49:11</p> <p>slide 9:17 15:1 88:17</p> <p>slides 143:15,18</p> <p>slip 69:21</p> <p>slot 44:15</p> <p>slow 33:13</p> <p>small 12:5 14:13 18:20 30:10 31:17 38:4,10,12 43:21 46:20 47:11 58:20,22 59:4 83:9 89:16 109:4,21 112:5 132:10 148:12 153:12 164:4,17 170:21 182:11</p> |
|---|--|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|---|--|
| <p>193:2 201:19 205:17 215:12,19 229:21 259:5,6</p> <p>smaller 35:5 45:17,18 98:22 99:13 110:13 111:11 127:18 154:5,6 158:19 159:2 179:13 182:10,18 205:6,12 246:15 264:7 266:19</p> <p>smallest 148:17</p> <p>small-to-midsized 14:15</p> <p>Smart 94:14</p> <p>smiley 217:13</p> <p>Smith 64:7,8 109:1,2</p> <p>Smith-Lever 169:15</p> <p>smoke 101:7,10,15</p> <p>smokeless 104:1</p> <p>smoke-less 101:14</p> <p>snack 82:11</p> <p>snacks 21:5</p> <p>Sobolev 82:21</p> <p>so-called 112:13</p> <p>social 25:5 57:4 96:8 98:10 130:13 176:7 234:16 250:19</p> <p>socially 112:13</p> <p>societal 4:18 33:21 53:2 68:18 136:21 194:13 238:17,18,20</p> | <p>239:4,6,15 240:7,8 241:8,10 257:5</p> <p>societies 22:20,22 28:22 35:5 45:1 64:9,14 181:14 201:4</p> <p>society 3:7 6:17 7:1,15 27:19,22 28:2 32:17,18 33:20 35:14,15 36:3 39:22 45:3,5,9 60:12,18 64:4,15 119:20 146:7 156:16 165:18 181:15 182:7 191:21 192:1,5 206:14 210:10</p> <p>society's 4:4</p> <p>Sociology 129:12</p> <p>sodium 138:5</p> <p>software 96:11,13,14,16</p> <p>soil 34:22 45:1,2,9,14 91:4 92:3 93:9 100:9 102:12 103:22 104:10 181:14 258:20</p> <p>soils 91:6,8 92:4,10</p> <p>solar 70:14 203:5</p> <p>solely 37:15</p> <p>solicit 23:18</p> <p>solicitation 3:11 190:17</p> <p>solicitations 36:21 40:2 60:15</p> | <p>181:19 183:16,19</p> <p>soliciting 54:2</p> <p>solubilized 91:9</p> <p>solution 83:17 96:6 146:9 207:22</p> <p>solutions 4:4 7:12,21 29:10 133:7 140:16 173:11 197:6</p> <p>solve 3:6 7:14 19:1 30:14 53:6 84:8,11 93:13 98:5 146:9 208:21 210:13 239:14</p> <p>solved 207:15</p> <p>solving 17:13 53:9 77:15 123:9,17 207:17</p> <p>somebody 69:7 136:10 189:19 262:2</p> <p>somehow 144:1</p> <p>someone 102:16 176:17</p> <p>somewhat 16:10 18:2 169:1 242:22 248:12</p> <p>somewhere 22:7 228:8</p> <p>song 220:22</p> <p>sorghum 92:7,10</p> <p>sorry 187:19 225:7 226:5 227:22</p> <p>sort 10:9 144:19 161:8 195:8</p> | <p>235:4 243:5</p> <p>sound 230:13</p> <p>sounded 230:19</p> <p>source 72:13 74:14,17 82:13 114:13 178:9</p> <p>sources 25:4 28:11 67:17</p> <p>South 81:6 82:6 131:4 216:3,5</p> <p>Southern 70:8 129:11 213:11,21</p> <p>soy 101:3</p> <p>soybean 42:6 58:4 85:11</p> <p>space 133:13</p> <p>span 38:7</p> <p>speak 2:5 8:18 22:9 113:9 143:3 159:15 213:15 215:7 249:9 257:12</p> <p>speaker 9:8 22:12 44:8 88:8 133:13 142:18 174:5 187:9 191:16 219:11 223:11 231:4 245:22 263:14</p> <p>speakers 65:3 158:18 188:16 189:14 230:5</p> <p>speaker's 44:20</p> <p>speaking 2:12 45:2 72:10 141:14 142:9,10 169:6 171:20 191:20</p> |
|---|---|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|--|
| <p>256:2,12 261:22</p> <p>special 100:21 101:1 102:12 103:15 112:19 151:5 199:17 200:4</p> <p>specialists 158:14,16</p> <p>specialized 100:19 107:17</p> <p>specialty 161:5 177:9 198:13</p> <p>species 34:5 51:21 52:10,11 111:15 176:4,6 194:19 217:13 219:7 235:12 258:7</p> <p>specific 25:4 26:9 38:5,16 52:12 63:5 74:18 76:11,17 109:16 111:14 126:18 205:2 207:4 234:5 237:2 246:22 248:9 260:1,17</p> <p>specifically 19:13 51:21 64:14 67:8 107:13 127:6 129:17 166:3 214:15,16 225:6 256:13</p> <p>specificity 55:2 145:22 146:9</p> <p>specifics 261:10</p> <p>specified 46:8 64:12</p> <p>spectrum 54:9 72:18 74:10</p> | <p>spell 159:17</p> <p>spend 10:16 11:9,12 95:7 153:2 185:10 189:17</p> <p>spending 103:18 152:4</p> <p>spent 171:7 185:18</p> <p>split 123:2</p> <p>spoils 208:16</p> <p>spoke 142:7</p> <p>sponsor 126:2</p> <p>sponsored 50:7 68:7 195:1</p> <p>sponsors 40:18</p> <p>spoon 220:22</p> <p>spot 181:10</p> <p>spots 141:15,16</p> <p>spread 34:7 248:18</p> <p>spreading 192:6</p> <p>spur 112:6</p> <p>squirt 69:18</p> <p>squirting 69:17</p> <p>SSSA 45:4 46:2 48:13</p> <p>stability 102:11 133:3 168:5</p> <p>stable 101:3 167:11</p> <p>stack 265:5</p> <p>staff 170:9 216:8 228:14 235:3 265:11</p> <p>stage 31:14,15</p> | <p>124:2,6 146:13 184:22 208:12 241:1</p> <p>stagnant 52:3</p> <p>stakeholder 1:8 16:4 23:18 49:4 54:12 61:4 67:6 77:20 95:16 100:2 178:17 190:17 206:21 223:9 247:8,19 253:14 261:2 264:13,18 265:18,20 267:11,19</p> <p>stakeholders 7:7 49:20 68:13 80:10 84:14 94:9 95:10 96:22 106:15 107:4 156:20 157:20 158:6 159:9,11 201:5 222:20 247:22 254:16 260:21,22 265:13,21,22 266:3</p> <p>stand 69:18 172:10 225:3,21 227:1 232:5</p> <p>standard 12:3 14:8 154:9 189:10 233:1</p> <p>standing 20:17 162:5</p> <p>Starbucks 21:3</p> <p>start 2:22 4:21 9:12,15 10:3 20:7,21 41:13 142:5 155:7,11 174:8 181:17</p> | <p>184:5 200:5 212:9 230:16 235:20 267:8,9</p> <p>started 9:18 22:10 40:13 71:13 103:1 144:11 154:1 193:20 223:12</p> <p>starting 88:14 89:21 144:18 155:21</p> <p>state 8:1,2 15:2 26:21 28:10 42:18 57:19,20 58:3 69:5 70:7,18,19 71:5 86:12 94:22 113:8,12,16 119:2 129:13 131:21 133:16 136:8,18 157:4 168:17 170:20 171:6 178:1 183:22 216:9 219:20 224:15 228:20</p> <p>stated 8:17</p> <p>statement 8:18,22 37:15</p> <p>statements 224:10</p> <p>states 8:3 14:15 28:9 32:1 36:16 41:13 49:14 59:6 70:16 81:7 86:9 93:12 105:3 113:17 128:22 136:16 151:15 152:11 167:17 169:16 175:17,21 192:4 214:13 222:17</p> |
|---|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 67

| | | | |
|---|--|--|---|
| 223:4 239:18 241:17 252:18,19,20,22 253:2,3,4,6 Statewide 219:19 Station 156:4 165:11 stations 15:2 156:11 statistical 117:11 statistics 136:13 243:12 status 256:14,16 259:17 statute 204:22 statutory 204:10 stave 171:22 stay 2:3 166:15 170:16 Steele 118:22 119:1 Steele's 133:17 step 8:10 86:2 174:6 201:19 250:7 stepped 42:17 steps 204:9 205:20 stewardship 36:8 Stick 161:12 stimulate 199:4 204:3 205:13 stimulating 210:14 stool 69:17,20 70:1,3 72:2 stop 2:14 4:11 77:2 146:22 | 177:11 195:16 store 154:12,13 stored 78:16 story 92:12 146:12 stovers 100:13 straight 246:6 strains 7:19 strange 245:20 strategic 3:5 37:7 115:7 152:20 238:21 strategically 119:21 132:2 strategies 99:17,21 131:11 132:8 159:1 197:11 strategy 41:20 153:2 strawberry 161:22 162:14 streamline 205:21 streamlined 155:15 streamlining 153:12 street 1:14 163:1,12 strengthen 8:7 64:12 112:10 123:8 129:5 181:5 203:9 221:12,14 strengthening 13:21 14:8,9 29:14 257:18 stress 6:22 76:1 | 90:18 189:22 stressful 155:9 stressing 90:3 stretch 44:11 172:13 strides 178:10 strike 189:8 strong 24:9 35:19 47:6,19 61:7 79:14 123:9 202:9 236:12,14 stronger 190:20 strongest 145:6 strongly 19:22 23:9 30:15 39:11 52:15 62:5 68:4 80:2 127:5 128:3 177:5 188:21 204:8 struck 210:12 structural 41:1 structure 15:15,16,20 16:7 17:4 56:17 97:11 137:18 167:20 168:1 structured 9:14 55:20 97:16,22 structures 137:17 139:10 student 14:17 75:20 109:11 227:4 254:19 students 14:17 28:17 35:17 45:6 64:2 76:3 109:13,22 110:15 164:17 | 176:22 194:8 199:2,5,8 209:5,10 255:9 studied 26:12 59:18 studies 99:3 167:17 studying 26:6 59:12 stuff 71:2 stunting 33:13 stunts 91:10 sub 207:7 subdivided 236:7 subgroups 63:14 submission 14:7 48:12 submissions 124:7 submit 20:1 36:4 43:16 56:21 60:13 69:2 126:5 136:3 150:22 173:6 184:15 237:15 245:12 251:22 252:5,6 submitted 50:11 53:5 85:16 120:5 124:12 128:20 237:13 245:11 253:3 255:9 submitting 123:21 133:12 185:5 Sub-Saharan 92:11 subsections 79:21 subsequent 13:3 251:7 |
|---|--|--|---|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010

Capital Reporting Company
 NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|--|---|
| <p>subsequently 17:1 91:21</p> <p>subset 46:12</p> <p>subsets 80:4</p> <p>substantial 126:8 150:14 240:9 253:12</p> <p>succeed 152:15 172:12</p> <p>success 64:20 92:11 122:10 124:8 165:17 179:15 207:19 245:5 252:8,13,16 253:21</p> <p>successes 177:12</p> <p>successful 14:7 29:11 61:8 84:22 89:14 174:12 184:10 186:1 222:15</p> <p>successfully 77:12 158:4 254:19</p> <p>suffer 118:4</p> <p>suffering 95:3</p> <p>sufficient 66:11 208:4,16 209:8 241:20</p> <p>sugar 138:5 167:15</p> <p>suggest 110:10 121:15 127:5 128:3 195:3</p> <p>suggested 79:11 267:3</p> <p>suggesting 70:2 102:1 112:19</p> | <p>suggestion 103:12 232:5</p> <p>suggestions 32:11 85:5 152:14 192:19 194:1,15 214:3 221:2 230:20</p> <p>suggests 56:1 63:22</p> <p>suitable 202:4</p> <p>suite 156:11</p> <p>sum 85:21</p> <p>summaries 155:19</p> <p>summarize 104:7 265:19 266:8</p> <p>summarized 16:21 17:1 247:10</p> <p>summary 159:4 210:8 240:8 243:12,18 245:2</p> <p>sunk 88:16</p> <p>super 137:16 176:13</p> <p>supervisor 116:2</p> <p>supper 220:21</p> <p>Supplemental 135:1</p> <p>supplies 14:2</p> <p>supply 25:22 94:20 97:11 98:14,18 99:10,18 137:1 138:8 154:12 161:10 166:18 168:11 196:7 197:10 198:6,8 206:16 211:13</p> <p>support 7:6 10:22</p> | <p>11:2,12,19 17:15 19:10,17,19 27:4 29:3 32:2 35:6 37:12 40:7,8 50:19 53:9,13 54:15 61:2 62:6 63:18 65:8 67:15 70:1 73:5 74:3 75:3,10 80:3 89:9 104:22 105:2 106:15 109:21 112:2 122:3 123:5,10 125:22 133:21 135:20 143:11 145:6 146:21 147:4,6 154:19 161:6 163:21 166:2 167:8 188:21 189:7 201:6 202:17 220:17 221:6,18 222:4,12 241:12 242:1</p> <p>supported 17:21 30:1 94:18 103:5 109:8 126:15 145:10 147:9 151:5</p> <p>supporter 23:15</p> <p>supporting 18:21 43:3 65:11 68:3 90:9 123:13 170:4 220:16 223:21 266:4</p> <p>supportive 28:9 61:13 72:12,14 93:3</p> <p>supports 25:11 28:13,15 29:13 38:6 51:20 61:22 64:19 121:7</p> | <p>123:21 173:16 176:15 177:2,5,14 178:4</p> <p>suppose 85:3</p> <p>supposed 217:14,15,17</p> <p>supposedly 70:14</p> <p>sure 114:14 141:12 142:5 219:11 232:4 256:15 260:22 265:4 266:13</p> <p>surface 95:4</p> <p>survey 43:1</p> <p>survived 267:10</p> <p>Survivor 267:12</p> <p>Susan 77:7</p> <p>sustain 37:1 165:20</p> <p>sustainability 9:10 28:11 65:14 67:5 68:18 100:10 133:4 179:14 186:16 221:14 225:11,14 227:12 235:15 236:17 241:18</p> <p>sustainable 6:18 8:2 17:8 23:13 29:1 34:8 35:3 36:9 67:19 79:3 93:1 95:18 103:7 150:2 180:9 186:20 200:18,22 201:7 202:4,12,17 206:4 212:10 219:20 221:10 225:8 232:20</p> |
|--|--|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|---|--|
| <p>233:12 238:8 239:1 244:14 sustained 7:6 63:20 sustaining 24:7 Suzanne 72:8 SW 1:14 swamp 101:8 Swanson 159:13,16 swear 189:6 sweets 165:4 swine 113:12 126:2,6 127:13,15 switch 39:15 85:18 168:15 symptoms 33:12 144:12 synchronizing 183:9 syndrome 127:14 179:8 Synopsis 243:12 246:7 synthesis 47:16 83:8,10 system 8:9 24:14 48:9 51:1 63:7 74:11 94:4,7 112:1 124:21 140:12 141:12 151:21 155:15 157:8 161:5 172:11 174:13 182:2 186:6,14,21 213:13,19,20</p> | <p>214:1 218:18 220:5 240:2 systematic 132:1 systematics 34:16 systematize 167:9 system-based 95:13 systems 5:22 8:2 10:12 34:9 50:22 64:20 79:3,7 81:7 99:20 102:11 109:17 149:10 165:15 201:8 202:5,13,18 203:1,4,10 206:4 221:10 225:12,15 226:5 240:11 258:2 259:3 <hr/>T<hr/>table 206:19 208:2,13 242:13 243:21 245:2,7 tables 243:19 tackle 96:6 tackling 239:20 tag 80:10 taking 85:20 117:5 268:4 talent 209:9 talented 139:21 talk 57:21 100:11 103:10 109:3 197:20,21 200:2 213:18 214:5 217:10,11 219:7 223:12 233:7</p> | <p>242:16 249:13 252:2 256:18 265:22 266:8,17 talked 102:16 264:4 talking 92:22 102:19 173:13 260:18 talks 229:1 Tamara 53:16 tangible 37:4 tank 233:18 tap 210:4 target 25:4 46:12 53:1 112:12 120:22 121:6 122:1 targeted 38:17 39:7 209:19 214:10,15,17 215:18 238:20 240:15 244:7 248:6 targeting 58:20 62:8 targets 46:13 240:16 246:22 task 168:19 236:2 tasted 208:5 tax 33:17 taxonomy 34:15 teach 217:15 teaching 28:10 47:14 109:11 119:15 187:14 189:22 243:15 team 21:20 38:4</p> | <p>124:14 173:5 176:11,14 192:15 225:1 teams 11:14 12:5 18:20 24:17 30:10 37:4 47:12,13 56:7 57:6 59:21 62:2 97:20 112:19 120:11 123:20 160:21 182:11 Tech 32:16 116:5 216:14 technical 187:4 technically 104:8 169:2 technically-skilled 173:22 techniques 138:15 technological 167:12 technologies 34:17 51:8 93:19 96:12 106:20 108:15 130:12 138:1 159:7 167:5 173:20 196:3 198:5 239:20 258:17 Technologists 206:12,13 technology 73:18 81:1,4 83:15 93:18,20 94:12,14 96:15,16,19 101:6,11 102:4,8,21 108:5 110:19 116:19 117:14,17,20</p> |
|--|---|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|--|
| <p>118:16 146:13,17 167:7 170:1,14 210:11 228:7 232:4 258:2 259:3</p> <p>technology-oriented 140:13</p> <p>telecommunications 93:18 130:5</p> <p>temperature 94:6</p> <p>template 154:9 155:20</p> <p>tempting 25:4</p> <p>tend 110:5</p> <p>Tennessee 8:3 133:16</p> <p>tenure 193:8 200:8</p> <p>term 88:9 131:14 232:3</p> <p>terms 58:18 85:5 86:4 98:13 111:15 114:21 138:19 188:6,12 192:19 193:21 195:12 231:11 234:8</p> <p>Terri 22:5,6 141:16</p> <p>terribly 70:3 71:11</p> <p>territories 214:14</p> <p>test 103:22 108:4</p> <p>tested 81:5</p> <p>testimony 39:21 120:5 165:17</p> <p>testing 51:7 121:1</p> <p>tests 51:3</p> | <p>Texas 97:5 216:14</p> <p>thank 3:21 9:5 20:15 22:16 27:11,15,16 32:9 35:11 39:21 40:4,5,7 44:6 53:13 57:16,21 60:9 64:3 69:1 77:3,5 80:5,15,16 84:13,14 89:2 92:14 97:3 99:22 100:3 103:5 105:17 108:22 110:16 113:4 115:21 118:21 124:19 125:18 128:22 129:8 133:9 136:5 141:6 142:3,18 143:13 147:13 150:20 156:1 159:12,14 163:20 165:6 168:13 177:10,18 181:3,7 183:20 187:7 190:22 191:17,22 195:16 200:15 206:6 210:16,17 213:7 214:2 215:6 216:6,11 219:8 232:13,17 242:8 249:3 253:7 255:21 261:14 262:20 264:1,15 266:6 268:7,9</p> <p>thankful 108:16</p> <p>thanking 3:1 184:5,6</p> | <p>thanks 32:13 48:21 72:6 143:6 165:5 173:1</p> <p>that's 11:21 14:18 16:10 22:9 35:9 55:17 68:10 71:11 84:8,12,17,19 88:12,17 102:5 103:6 104:5 108:22 122:12 124:22 131:11 134:21 135:14 137:17 141:4 143:21 145:2 146:12 161:14,15 164:13 193:12 211:12 212:11,16 214:21 217:2 219:5 222:9 223:2 229:17 232:8 236:2,5,16,18 237:2,6 240:21 241:19 243:10,20 246:7 249:14 251:4 259:4 261:10 263:1,11 266:14 267:5 268:3</p> <p>theme 45:16 47:6 93:15 94:16</p> <p>themes 68:17</p> <p>themselves 82:20 205:14</p> <p>therapies 26:13</p> <p>thereafter 269:6</p> <p>thereby 129:1 139:22</p> | <p>therefore 97:15 111:19 117:20 118:13 126:21 133:12 135:7,18 200:13 201:8 205:15 223:18 229:8</p> <p>there's 6:7 8:19,20 20:17,21 21:2,4,8,21 22:3 39:3 65:20 66:5 74:2 75:9 87:14 103:8 105:8 110:8 127:1 131:21 134:21 172:7 182:16,22 189:11,14 191:3 194:16 195:13 204:2 205:7 206:3 211:11 215:1 218:4 222:21 229:20 233:20 234:18 242:13 244:8,14 245:1,7 251:6</p> <p>thermal 138:1 165:13</p> <p>they'll 88:16</p> <p>they're 12:10,18 21:18 33:11 40:22 50:12 71:6 88:19,20 101:20 103:2,17 191:12 224:18 240:16 246:3 247:15 249:7 250:11 266:13</p> <p>they've 44:14 56:20 88:19</p> <p>third 15:13 34:18 38:2 76:16 98:15</p> |
|--|--|---|--|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|--|--|
| <p>118:12 131:20 138:10 189:6 222:18</p> <p>Thirdly 203:13</p> <p>Thomas 23:4 223:12</p> <p>thorough 31:5 123:4</p> <p>thoughtfully 25:2</p> <p>thoughts 4:7,9</p> <p>thousand 82:4</p> <p>thousands 149:3</p> <p>threat 167:19</p> <p>threats 67:4 176:8</p> <p>three-legged 69:22</p> <p>three-year 48:6</p> <p>threshold 81:22</p> <p>thresholds 258:21</p> <p>throughout 5:9 53:10 139:8 178:3 192:6 214:13</p> <p>Thurston 228:4</p> <p>thus 47:8 139:2 165:21</p> <p>tier 154:5</p> <p>tiers 47:8</p> <p>tight 6:11</p> <p>tighter 76:20</p> <p>tightly- constrained 37:16</p> <p>tile 43:5,12</p> <p>tillage 223:17</p> <p>time-consuming</p> | <p>51:16</p> <p>timeline 20:11 32:3 56:8 247:17</p> <p>timely 6:10 163:11 164:7,10 217:5,6</p> <p>Timmy 165:3</p> <p>title 2:10 9:1 22:14</p> <p>TNF 140:5</p> <p>today 3:7,8 8:7,10,11 19:22 20:3 27:17 32:16 40:6,9 45:1,11,16 54:2 57:13,22 64:8 65:1 69:1,10 72:10 92:22 100:4 113:10 116:6 118:19 138:22 147:21 148:6 150:22 169:2,6 173:6 181:10,14 182:7 191:21 196:9 198:17 200:17 209:2 210:17 213:14,18 214:3,20 219:17 220:13 221:16 222:13 223:12,14 227:4 233:8 248:1,19 249:5 260:22 266:8 267:2</p> <p>today's 8:17 98:3 119:20</p> <p>tolerance 91:14,15,17 92:4</p> <p>tool 26:11 51:3 96:22 109:11 169:19 174:17</p> | <p>toolbox 150:1</p> <p>tools 41:20 73:18 92:8 93:3 94:17,18 108:12 162:21 177:7</p> <p>top 6:20 37:1 155:19 172:4 178:20 209:10 217:16</p> <p>topic 4:12 198:17</p> <p>topical 120:12</p> <p>topics 63:4 71:18 89:17 111:15 129:22 153:15 179:7 183:8 209:21 235:22</p> <p>total 5:16 9:20 14:16 18:19 66:21 85:21 117:16,19 136:15 175:14 178:6 201:21 244:18 251:3</p> <p>totaling 50:9 172:6 252:14</p> <p>totally 146:3</p> <p>touch 197:1 198:17 230:7,10</p> <p>tough 164:13 264:6</p> <p>toward 24:19 37:9 39:7 140:10 174:6 182:15</p> <p>towards 3:5 17:13 43:21 186:13,18 222:5 242:12</p> <p>toxic 91:8 104:11</p> <p>toxicity 78:20 91:4</p> | <p>toxin 104:12</p> <p>track 13:19 43:11 77:15 214:12 217:19</p> <p>tracking 196:12</p> <p>trade 49:9 54:21 56:13 173:8 188:21</p> <p>traded 41:7</p> <p>trades 259:7</p> <p>tradition 23:3</p> <p>traditional 7:19 34:1 76:4 138:8 179:20 243:2 250:12</p> <p>traditionally 55:17</p> <p>train 6:5 72:21 79:1 107:16 176:21</p> <p>trained 28:19 209:6 210:22</p> <p>training 28:16 38:17 63:19,21 64:1 75:20 76:2,4 106:2 140:4 150:14 164:19 197:2 198:18 199:9,16 227:5 250:22</p> <p>traits 150:1</p> <p>trajectory 152:20</p> <p>trans 55:4</p> <p>transaction 189:15</p> <p>transcript 269:7 270:5,7</p> <p>transcription</p> |
|---|---|--|--|

Capital Reporting Company
 NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|--|---|
| <p>270:1,8 Transcriptionist 270:21 transcripts 142:13,17 237:17,19 transfer 170:1,15 transform 146:6 162:5 166:6 transformation 3:16 83:13 258:20 transformational 119:12 121:5 158:1 transformative 183:6 transformed 140:16 220:9 transforming 159:11 transgenesis 117:14 transgenic 182:1 transition 194:6 234:1,17 translate 90:6 162:22 208:11 translated 242:6 translates 222:10 translating 122:11 157:19 180:19 translation 47:16 translational 150:12 222:7 transparent 210:1</p> | <p>transphoto- chromosomes 145:21 travel 14:2 248:10 treat 26:13 100:18 treatment 165:22 treatments 36:11 tree 144:11 160:11 tremendous 131:15 132:19 141:3,4 262:10 triaging 31:13,15 tribe 71:7 tried 214:11 267:8 tries 234:4 246:15 trillion 136:16 trip 7:17 tripartite 119:14 tripod 162:15 true 84:19 214:11 221:6 269:7 270:7 truly 50:12 66:5 76:14 Trustees 84:18,22 try 2:3,13 43:8 69:9 200:4 216:17,21 247:21 249:10 264:18 266:7 267:5 trying 17:12 48:10 70:12,13 82:16 112:3 123:5 186:8 192:7 196:5,7 233:22 236:19 243:3</p> | <p>246:13,20 Tuesday 56:13 Tupas 225:16 235:18 238:4,5 242:8 turf 182:4 turkey 49:13 turn 238:3 two-PI 47:1 two-to-18-years- old 213:1 two-week 263:9 two-year 115:1 163:6 type 51:13,15 59:21 81:13 90:22 188:14 189:14 216:5 251:19 typed 270:5 types 11:22 12:2 13:10 14:18 17:15 99:9 125:12 161:21 194:14 211:12 251:13,15 257:8 typewriting 269:6 typical 55:22 86:22 87:17,18 98:2</p> <hr/> <p style="text-align: center;">U</p> <hr/> <p>U.S 15:4 24:11 26:1 39:2 42:22 43:3,5,7,14,17,1 8 52:22 61:17 66:11,14,22 67:5 79:9,22 91:6</p> | <p>106:6 108:10 116:15 117:1 132:18 136:13,17 159:22 160:1,4,15 174:12 177:8 178:3,4,6 188:3 199:13 209:2,8,13 U.S.'s 152:6 ultimate 12:19 14:7 47:15 ultimately 16:1 50:2 51:13 umbrella 212:20 unable 200:7 unanticipated 26:5 37:22 unbiased 28:6 35:8 uncertain 95:22 97:1 uncertainty 94:21 unconscionable 171:11 under-funded 78:3 103:16 Under-funding 67:2 undergone 3:15 undergraduate 28:16 45:6 159:19 164:17,20 underground 33:11 under-invested</p> |
|--|--|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|---|--|---|
| <p>117:21 underlying 63:8 162:1 underpin 36:13 underserved 54:11 93:14 under-served/ under- represented 109:22 understand 14:10 24:15 59:17 63:7 94:17 103:12 130:9 133:2 134:7 137:19 162:3 163:15 208:20 211:19 212:8 217:6 218:14 234:1 244:9 understandably 217:19 understanding 28:4 30:21 34:22 36:12 38:13 39:18 52:1 62:20 71:19 122:18 130:13 148:4 149:10,17 150:5 163:13 168:2,5 215:2 understands 37:18 65:21 undertake 27:3 undertaking 170:8 underway 32:7 42:21 underwent 15:19 undiscovered</p> | <p>148:12 unease 38:9 unencumbered 202:1 unexpected 26:4 unfold 200:10 unfortunately 33:10 82:12 unhappiness 262:6 unified 64:18 uniformly 121:13 unintended 183:9 unintentionally 25:10 unique 98:11 102:1 119:14 145:20 151:12 154:12 157:7 161:19,21 203:15 211:3,4 uniqueness 98:15 unit 106:8,9,10 United 28:9 32:1 36:16 41:12 49:14 70:16 81:6 86:9 105:3 128:22 136:16 175:21 192:3 214:13 223:4 239:18 units 106:18,22 156:10 universal 96:6 universities 15:2,9,10,11 45:7 50:8 59:6 76:19 89:22</p> | <p>104:21 107:10 110:4 156:8 169:18 179:13 180:9 204:18 206:22 212:19 222:9 university 22:18 57:19 69:5 70:7,8 72:9,11 76:20 84:18 92:21 97:5 109:2,6,7 110:20 113:8 114:21 119:2,6 129:13 133:17 136:8 142:21,22 147:18 151:6,9,10,17,19 159:18 165:11 168:18 184:1 187:13 191:19 195:20 212:16 213:10,21 216:14 219:16,17,22 220:4 228:20 232:15 235:13 university-based 157:19 university's 109:8 unknown 148:14 unless 62:17 unlikely 98:5 unnecessary 155:5 unprofitable 88:11 unrepresented 199:9 unseen 33:17</p> | <p>unserved 130:18 unsuccessful 185:16 upcoming 23:20 146:17 247:18 256:20 262:22 update 191:8 238:10 252:3 updates 237:22 upfront 224:17 uploaded 237:17 upon 83:1 urban 157:9 170:19 Urbana- Champaign 195:20 urbanization 94:21 urge 30:5,19 57:3 76:12 176:11 urgent 148:21 169:21 urges 209:20 usable 122:12 242:7 USDA 1:13 5:9 14:15 28:7 29:20 36:17 37:15 38:14 40:14 42:17 43:20 54:1 60:22 63:1 66:1,3 72:13,18 74:2,13 75:2 76:2,5,10,12 78:11 79:10 89:5,9,10,12 90:1,22 92:13</p> |
|--|---|--|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|--|--|---|---|
| <p>96:18,20 102:1 103:5,9,13 104:5,16,21 105:16 112:18 126:12 128:15 134:8,12 135:1 147:19 152:22 168:8 173:18 178:12,15 180:12 181:5 201:14 207:8 212:20 220:4 223:3 231:7 235:14 236:7 238:20</p> <p>USDA/NIFA 29:12</p> <p>USDA-funded 38:7</p> <p>USDA's 3:5 5:2 38:8 78:3 128:14 180:11</p> <p>useful 34:20 71:22 97:15</p> <p>users 174:20</p> <p>usually 12:10,11 82:11 110:14 124:3 264:6</p> <p>Utah 69:5 70:7,8 228:20</p> <p>utility 39:7 130:4,16</p> <p>utilize 94:10 96:16 99:20</p> <p>utilized 112:11</p> <hr/> <p style="text-align: center;">V</p> <hr/> <p>valuable 3:13 122:5 127:10 128:16 159:7</p> | <p>173:20 174:17 179:6 180:13</p> <p>value 7:2 54:6 55:7 65:7 66:14,18,20,22 72:13 73:19,20 111:5 116:11,14 123:3 132:7,13 157:17 175:15,18 180:21 198:5</p> <p>value-added 112:14 198:12</p> <p>valued 23:2 54:8 77:19 78:3</p> <p>values 149:5</p> <p>variability 17:7 239:1 246:11</p> <p>varieties 80:21 182:3 201:12</p> <p>variety 78:13 143:21 144:8 161:15,16 177:8 208:13 265:13 267:20</p> <p>various 56:16 72:19,21 73:3 74:12 82:5 85:12 138:20 234:20</p> <p>vary 261:22 262:17</p> <p>vascular 197:16 216:4</p> <p>veal 49:12</p> <p>Vegetable 134:21</p> <p>vegetables 98:21 137:12</p> <p>ventures 99:19</p> | <p>venues 4:14</p> <p>version 246:8</p> <p>versus 39:12 47:21 189:9</p> <p>Vet 113:8</p> <p>veterinary 106:11 113:6</p> <p>viability 24:1 215:13</p> <p>viable 58:21 145:10 146:11</p> <p>Vice 119:1 168:17 169:8 173:3 206:10</p> <p>view 46:13 178:19 201:6 236:5</p> <p>views 181:15</p> <p>viral 26:13</p> <p>Virgin 151:20</p> <p>Virginia 32:16 101:9 110:20 116:4</p> <p>virtually 52:3</p> <p>visibility 32:7</p> <p>visible 188:7,11</p> <p>vision 29:3 41:17 95:15 157:12</p> <p>visualize 94:7</p> <p>vital 6:22 25:6 36:6 135:12 150:1 161:18 164:22</p> <p>vitality 112:10</p> <p>vogue 139:4</p> <p>voice 35:19 64:18</p> | <p>voices 100:1</p> <p>void 79:19 250:8</p> <p>volume 117:1</p> <p>Voucher 134:21</p> <p>vulnerable 221:12</p> <hr/> <p style="text-align: center;">W</p> <hr/> <p>Wagester 53:16,17</p> <p>waiting 191:6</p> <p>waive 255:2</p> <p>waives 254:22</p> <p>walk 141:11</p> <p>walking 9:12</p> <p>Walt 64:7</p> <p>Wang 110:17,18</p> <p>waning 43:2</p> <p>War 220:5</p> <p>warming 83:20 102:7</p> <p>warning 2:14</p> <p>Washington 1:15 6:16 8:1 23:5 157:10 168:18 172:2,19</p> <p>wasn't 141:2 142:11</p> <p>waste 67:17 100:14</p> <p>wasted 189:18</p> <p>wastes 155:5</p> <p>watched 217:16</p> <p>water 21:4 44:12 70:19 81:7 85:17 86:6,7,8,16,17 87:4,7,13,22</p> |
|--|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|---|---|---|
| <p>88:2 93:4,9 94:5,6,20 95:4,5,6,18 102:15,16,17 104:13 188:7 235:15 236:10,11,13,14, 17,22 258:20</p> <p>water-associated 33:14</p> <p>Waterfront 1:13</p> <p>waters 70:16</p> <p>watershed 93:11</p> <p>wave 225:16</p> <p>Wayland 84:16</p> <p>ways 115:9 161:8,9,10 172:2 195:2 267:4</p> <p>wealth 215:17</p> <p>web 121:22</p> <p>webinar 247:18 249:5,6 261:4 263:11</p> <p>webinars 248:2,8,17 256:20 260:19,21 261:13 262:22 263:7,8</p> <p>website 243:9 249:6 261:9,10 263:1,5</p> <p>we'd 57:12 121:15 138:18 164:1,6 166:9 176:2,20 182:17</p> <p>Wednesday 1:9</p> <p>weed 184:21</p> | <p>weedy 176:19 258:7</p> <p>week 29:7</p> <p>weeks 84:2,4 261:3 262:2,3,11</p> <p>weighted 140:12</p> <p>welcome 2:2 31:6 206:7 246:8</p> <p>welcomed 251:17</p> <p>welcoming 2:22</p> <p>welfare 114:6 126:3</p> <p>we'll 19:21 22:15 141:16 147:7 163:9 191:2 237:16 265:15 266:22 267:1,4,5</p> <p>well-being 24:2 159:5 168:11 227:2</p> <p>well-developed 109:17 110:14</p> <p>wellness 166:14</p> <p>well-rounded 136:4</p> <p>well-tasting 166:10</p> <p>Wendy 169:8</p> <p>we're 2:12 5:10,13 6:5 11:9 17:12 18:4,17,21 19:16 42:8 43:11 64:14 72:14 109:15 113:13 114:4 115:4 140:21 142:4 143:20 144:21 145:13 160:10 171:21</p> | <p>173:13 182:21 184:17 191:6 210:16 216:2,3,9 217:14 219:12 222:8 223:22 233:16,22 234:9,21 236:19 237:21 238:8,22 239:20 241:19 242:13 243:2 244:3,11,19,20 247:6,8,14 248:3,13,14,16 261:1 266:3,13 267:6 268:2</p> <p>West 87:17 92:4 101:9 110:19,20</p> <p>Western 22:18 93:11</p> <p>wet 87:20</p> <p>we've 3:13,19,22 17:18 43:3,7 56:18 71:13 107:6 109:5,7 119:16 132:19 162:17 163:22 169:2 192:8,12 193:15 226:8 234:16 241:5,11 244:10 245:8 246:9 248:4 260:2,6 266:8,18 267:2,7</p> <p>whatever 14:6 100:14 105:13 189:21 190:1 198:14 218:18 260:7</p> <p>wheat 40:7,10,14,16,19 41:4,6,10,14,15,</p> | <p>18 43:2 208:13 241:18</p> <p>whenever 26:19</p> <p>whereas 251:9 252:9</p> <p>wherein 236:6 239:18 241:15</p> <p>Whereupon 141:19 268:11</p> <p>whether 7:15 83:20</p> <p>white 125:15 240:13 253:4</p> <p>Whitten 265:6</p> <p>whole 41:16 53:10 81:2 101:8,9 104:1 130:7 144:5 147:8 164:18 186:14 189:2,4 231:22 246:22</p> <p>wholesome 178:9</p> <p>who'll 224:3</p> <p>whom 269:3</p> <p>who's 9:8 12:17 21:12 69:7 136:10 233:8 238:7</p> <p>whose 28:3</p> <p>who've 8:3 228:14</p> <p>wide 15:3 78:12 177:8 179:22 204:17 248:17</p> <p>widely 94:18</p> <p>widely-distributed 47:16</p> <p>widely-used 26:11</p> |
|---|---|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

| | | | |
|---|--|---|---|
| <p>widen 62:17 wider 93:7,10,13 widespread 240:19 widest 205:3 wifi 141:10,12 wilderness 71:15 wildlife 234:9 William 206:10 willing 96:21 191:12 216:9 224:7 willingness 23:17 wind 70:14 71:3 203:5 window 44:15 winning 155:9 Winter 20:13 Wintersteen 169:8 wiped 144:2,4 wireless 93:18 94:4,7 woefully 86:13 Women 134:22 women's 21:6 wonder 211:6 wonderful 135:21 wondering 162:8 235:16 wood 100:14,22 101:5 110:19 112:15 woody 112:9,11 work 7:4 9:4 11:13,16 12:18</p> | <p>28:3 42:8 47:10 55:5 57:14 58:15 64:5 81:1,7 84:21 91:3 100:22 101:6 105:2 112:4 121:3 129:20 130:9 132:6 137:14 143:10,14 147:6,10 149:4 152:2,5,7 153:11,14,21 156:10 162:8 163:18 169:4 176:10 178:17 183:6 185:20 186:7,12 187:22 195:3 199:4 202:2 212:19 215:21 216:9,15 217:14 221:6 226:17 231:12 232:14 234:9 241:13 244:10 245:9 247:21 264:1 worked 85:10 100:8 worker 49:21 workforce 29:1 38:18 39:2 173:22 209:7 244:21 working 7:20 8:6 12:17 48:3 53:15 59:5 60:19 77:2 80:18 82:16,18 83:2 85:11 97:6 101:20 177:15 181:4 185:2 186:18,22 196:5</p> | <p>209:17 216:7 220:22 236:2 259:19 261:15 266:13 267:6 works 3:4 49:19 60:2 227:2 235:17 237:3 workshop 40:15 workshops 58:4 195:1 world 33:5 41:5,8 74:1 90:7,12,13 91:7 92:11 93:14 104:15 117:10 118:3,6 136:2 139:9 140:16 163:14 166:19 192:6 196:4,13 208:1,2,4,5,16,2 2 231:19 246:22 world's 118:12 182:5 worldwide 65:9 104:12 worms 33:18 worry 4:10 181:10 208:6 worth 163:15 worthwhile 134:19 worthy 27:1 Woteki 4:13 wrapping 152:5 write 188:12 217:17 218:17 230:21 249:8 263:4,5 writer 155:3</p> | <p>writers 47:4 writing 19:22 20:1,4 129:5 136:4 189:16 237:15 written 16:10 20:6 55:2 120:5 121:17 124:10 133:12 184:8 187:6 189:13 237:12,19 261:5 263:9 265:14 wrong 92:16 190:8 <hr/> X <hr/> x-ray 81:4 <hr/> Y <hr/> yearly 56:11 year's 114:3 221:21 yell 5:12 yellow 253:1 yellowing 33:13 yesterday 170:18 yet 47:13 157:6 176:12 196:13 247:11 yields 25:22 91:5,10 92:10 Yinghui 116:2 York 6:15 157:10 you'll 5:6 21:6 181:9 221:16 242:14 243:11 244:5 256:15 259:8 263:7 young 10:1 89:20</p> |
|---|--|---|---|

Capital Reporting Company
NIFA / AFRI Stakeholder Listening Session 02-22-2012

Page 77

| | | | |
|--|--|--|--|
| 112:2 115:5 139:17,20 younger 135:17 179:13 yourself 267:12 Youssef 183:21,22 youth 214:18 223:8 you've 73:8 122:8 158:10,18 169:11 227:3 242:11 244:9 260:2,6 266:9 267:3 <hr/> <p style="text-align: center;"><u>Z</u></p> zero 87:6 Zhang 187:8,11 ZMATE-1 92:9 ZNMATE-1 91:18 zoonosis 114:6 | | | |
|--|--|--|--|

(866) 448 - DEPO

www.CapitalReportingCompany.com

© 2010