

>> My name is Laura Campbell. I am part of the Convergence Accelerator Team.

>> And hi, I'm Nancy Kamei, and I'm also part of the Convergence Accelerator Team.

>> And we have several colleagues online, but they are also in listen-only mode. All right, so -- once again, this is -- you are in listen-only mode, so you need to send questions to all panelists by going over to the Q&A side of the WebEx screen. If you want to view real-time captions, those are at the link provided there. And these slides and the recording of the webinar will be available at the Convergence Accelerator website which is listed there on the slide. And the FAQs are already there for your convenience. This is an overview of the webinar. We're going to just quickly go through what is expected in your Phase I full proposal. These were already discussed in the emails that were sent to you. And then, what wasn't in emails we sent, how to submit through FASTLANE, and then the most important thing is all of your questions. Let me reiterate: This is for people who have been invited to submit a proposal. If you have not yet had a decline email you may still be in the running. So you could be on this -- on this webinar as well. We sent this information in your invitation -- one of your invitation letters. You need to make sure in your full proposal that you describe how your idea is relevant to the track, what your deliverables will be in Phase II, what partnerships and what those organizations are, and what their role is in developing the deliverables, how your project and idea are convergent, including the intellectually distinct disciplines that are part of your team's effort, and please include a project personnel table -- please make that an Excel file so that we can more readily identify the conflicts of interest and make sure that the right people look at your proposal. In order to be compliant with the RAISE mechanism, you need to include in your submission as supplemental documents when you're asked to submit those, the two letters that we emailed to you. One was called something like "Invitation Letter 1," and the other was called something like, "Invitation Letter 2," probably with an assigned research contact outline number which was somewhat arbitrarily assigned to you. And remember -- your proposal has to describe how your research effort involves two or more intellectually distinct disciplines.

Now, these are requirements that are true for any proposal submitted under the PAPPG -- the Proposal and Awards Project and Procedures Guide. So, your budget can be up to \$1 million for nine months of effort. You may have a waiver for the PI/co-PI to spend more than two months of time working on this. And you just need to make sure you point that out to us in your budget. Participant support costs are allowed. Keep in mind that those do not bear overhead costs, so work it out with your supporting office. You need to make your budget for in-person training and for now, you can assume \$2,000 per person per training activity. And once again, the spending timeline is nine months. Keep in mind that the pitch will be in approximately March 2020, and will make awards for the next phase for those activities that go on to Phase II in about May 2020. The PAPPG requires that all collaborators and other affiliation information has to be provided for all PIs, co-PIs and senior personnel who are listed in your proposal. You can have a lot of senior personnel, but I think you're limited to four co-PIs. Letters of collaboration are allowed and you can use that as a way to indicate the extent to which you have partnered with different organizations. And once again, please include a project personnel table as an Excel spreadsheet.

All right, FastLane. This information is not yet in FastLane, but it should be very soon -- so remember this slide is going to be posted so you don't have to memorize this. First, put your information in as a grantee institution. If you are a new grantee organization that has never before received an award, you need to let us know now because it may be too late to add you as a new institution, and you may need to work with one of your partners to submit. Then on the cover sheet, go to the Program Announcement /Program Description button. You can -- you will soon be able to select the Program Description for Convergence Accelerator. After you do that, you'll select the NSF unit for consideration -- that will be the Office of Integrative Activities. And under that there will be two track options for the Convergence Accelerator. Track A1 is going to be CA-HDR, for Harnessing the Data Revolution. And tracks B1 and B2 are submitted under CA-FW-HTF, which is the Future of Work at the Human Technology Frontier. Then, you click the back button which is at the bottom of the screen and select Go for the remainder of the coversheet. You'll see a bunch of stuff and near the bottom of that page, you get to select Type of Proposal and you'll select the RAISE mechanism. After that, please email your proposal number over to us. So FASTLANE will generate a proposal, we'll take all the information that you submitted, create a PDF and will email that PDF to you -- with a number at the top. This is your NSF proposal number and that's what we want to receive. While you're still working on your proposal you get a temporary number. Don't send us that. It will just be confusing. Wait until you receive the PDF and then send us that number. Make sure that when you send us your proposal number, you also tell us the PI and the title and all of this is so that we can make sure that your proposal is routed correctly just in case some of the directions on the previous slide didn't work out for you.

Timeline. This slide deck also reminds you of the goal of the pilot activities in Phase I, and of course we have slides reminding you of the topics of the tracks -- which I hope you are already intimately familiar with since your research concept outline was already selected. Some going to leave it on the thank you page for now so that you can remember where to find the FAQs. And we'll start answering your questions.

>> So the first question. So a question from Kristof that says: As far as PI and I think co-PI months are concerned, given the project start, faculty will likely not be able to take a summer month.

>> Yeah. The time that you work doesn't have to be in the summer. So the limitation on two months is assuming usually summer months, but you can actually take your NSF provided salary anytime and you can take it in the fall. Of course, you have to work that out with your institution but you can have more than two months -- whatever you need. And you just need to include that in your project justification so that we make sure when we write the review analysis if your proposal is selected for an award -- make sure that all the documentation is done correctly.

>> There was a question sent in by Lloyd, who said, who do we let know if we've never received NSF funding before? And our reply is please send an email to C-Accel@NSF.gov. The next

question is, can the proposal be submitted as a collaborative research proposal as opposed to a proposal with a prime -- primary PI and sub-awardee?

>> We would rather not. I don't think we've set a policy on this, but we would rather not have collaboratives, and the reason for that is that we want all of you to have to work much more intimately together than sometimes happens with collaborative submissions. So, we appreciate that the budgeting is more complicated when it all flows through one organization. That's a great question. But please don't submit collaboratives. We would vastly prefer one proposal with everyone connected via a useful matrix of sub-awards.

>> If Phase I is about teambuilding and research plan development, do you expect any broader impact activities during Phase I, or should the broader impact section of the Phase I proposals list the activities intended for Phase II?

>> That's a great question. NSF review criteria always require intellectual merit and broader impacts. Broader impacts are required in every proposal and that's true here as well. However, you should keep in mind is that your broader impacts can be related to the overall outcomes that the research will have and can also be related to things like the professional development opportunities and intellectual growth that will happen among the cohort. So there are a lot of ways that you can address broader impacts, but yes -- you must address them in this proposal.

>> I'm reading that question in a slightly different way, so I'll give it a different answer. Which is -- there's a very wide range of applicants that are in the pool right now. There are some teams that are just getting together for the first time and will be using the Phase I period to recruit their partners. And there are other teams that seem to have been together for a longer period of time. So, it will very much depend on you and your team and where you are and your teambuilding and where you are in terms of being ready to do work. You certainly can use the money during the Phase I period to do research and development work if you're at the point where you're ready to do that.

>> There's a limit of four co-PIs. Does that include the main PI? So, one PI and three co-PIs?

>> So, I think it's one PI and four co-PIs. But you can add additional people who are important to your activity by calling them senior personnel. And requirements within FASTLANE will be the same in terms of having to provide a two-page bio sketch and the collaboratives and other affiliation information.

>> How many total project participants are we able to have attend the in-person training?

>> We haven't decided yet. I think that we don't want those meetings to be so ungainly that they're unproductive. So you should think about who needs to be there in order to make sure that your activity is effective. So if you have a team of 20, I don't think all 20 of them need to be there.

>> If you have a team of three --

>> For sure, bring them all. Maybe even a team of five.

>> Okay. Is the \$1 million -- \$1 million total cost or direct cost?

>> Great question. It's the total overall budget including all of your overhead and everything else. It's the maximum amount of money that you get to ask NSF to provide.

>> Do you expect all co-PIs to attend the trainings? Do the same people have to attend all three training sessions?

>> Right. And so, it depends on how many co-PIs you have and do you think would most benefit and most represent the team in the cohort. Into the second question -- no -- the same people do not have to attend all three training sessions.

>> Great. There's a question about whether the webinar, the recorded webinar will be available later. Yes. It will be available at the Convergence Accelerator website hopefully in just a few days, and the slides will also be posted very shortly.

>> Again, about the training. Our only the lead and co-PIs expected to attend the in-person training, or is someone from each partner expected to attend? And so I think you want to balance that, PIs and partners, and when you think about who can attend -- or who you want to attend the trainings.

>> So you don't need all of the partners there, but if you expect them to be part of the pitch competition, for instance, then you'd want them to come to some of the training because that will be about how to present a pitch. If you think that a particular partner will be really crucial for your transition to practice and that they will play an instrumental role in building additional partnerships that allow you to really put something out into public use, well then, they might need to come to some but maybe not all of the training activities. So you'll have to balance that.

>> Can you please give us a better idea of what you're expecting to be accomplished during Phase I? Is it all planning and teambuilding, or can we start building prototypes?

>> I think we just answered that question. And it's very much dependent on where your team is - the starting point for your team at this moment. You certainly can use the entire Phase I period and up to \$1 million for planning and teambuilding. But if you feel like you've got your team in place, you certainly can use the Phase I money to start working towards your Phase II deliverables.

>> And we have invited projects that are at different stages. So we expect to have a range in terms of how the budget is used.

>> Is having partners from state and federal agencies sufficient, or do we need to include agency partners?

>> That's a great question. You need to include the kinds of partners that will help ensure that your activity transitions into actual use by real people, not just your research group and the kind of people who go to your professional meetings. So, for some activities that may just be city government and an NGO, and for other activities it would really need to include for-profit partners. So it depends.

>> I think it very much depends. It might also depend on the track that the team is applying to. So in some of the OKN projects, their partners may very well be data providers from state and federal agencies. In contrast, somebody who is applying to Track B2, which is about rescaling and retraining of workers, may very well have an industry partner. So it's very much dependent on the track that you are applying to and the project that you're proposing to the NSF.

>> Can you describe the \$2,000 in funds for in-person NSF training -- how many project team members participate in the training? I think we've answered that a number of times. That \$2,000 per trip per person is just our best estimate for now. What we are anticipating is that the initial training, which is supposed to be in mid-to-late September will be here at the National Science Foundation. There will be two additional trainings which are penciled in for November and January. So November '19 and January 2020. But the location of those trainings has not yet been set.

>> So they won't necessarily all be in DC, but we hope \$2,000 per person per trip covers flight, hotel and per diem expenses as accurately as is necessary.

>> So Gregory sends in this question. Could you go over the specific parts of the proposal in more detail? And I'm going to ask Greg -- can you please send in another question with a more specific question than that?

>> NSF proposals have a lot of specific elements and I think you can get more information from the NSF website. It starts with an abstract. You need to have broader impacts, intellectual merit addressed in specific sections. And then after that, it's fairly free-form. But there are some additional things that the NSF website talks about like a data management plan. Those are also mentioned in your invitation letter. So that's a complicated question.

>> So please try and give us a follow-up question that's may be more specific. Can an administrative assistant be added on the Phase I proposal?

>> Yes. An administrative assistant can absolutely be part of your Phase I proposal. Indeed, as you are thinking about developing a management structure for your Phase II effort, you may wish to consider various kinds of administrative and coordination personnel who you need to have as part of your team to make sure that your effort is effective and well-managed.

>> The next question I think we've answered. How much of the proposal do you expect to be spent on team formation and teambuilding, especially if large amounts of teambuilding have already been completed? And so I think it's -- again -- very much dependent on your team and where you are at this moment, how much you're going to spend on teambuilding and planning, vs. how much you're going to spend on research and development.

>> IRB question. So, can we speak to the IRB approval expectations for these grants, and to the summer timeline for release of funds? All right, two questions in one. In terms of IRB approval, if your activity will need IRB approval because it works with, for instance, human subjects, then you should start those wheels rolling. But the IRB does not need to be approved until the funds are actually awarded. And since you probably wouldn't be doing work with human subjects during Phase I, you can just be setting up things like protocols during Phase I.

>> So, you can be working on getting your IRB approval and be in that phase -- not yet signed. The award can actually be made but you cannot do work on human subjects until you have that IRB approval signed. And the summer timeline for release of funds -- we are targeting September 9 for release of funds.

>>How should the balance of the project description of activities be between activities for Phase I vs. Phase II?

>> I would say that the proposal that we hope to see from you in a few short weeks should describe what you're going to do in Phase I so that Phase II could be a reality. So, Phase I is going to include working out details about how you're going to execute your project -- what the milestones would be. So we don't expect you to already know what you're going to do in Phase II, because that's the point of Phase I. So the focus is on what you're going to do in Phase I, but we need to know what your deliverable, what your goal is, for Phase II. Otherwise, we can't understand what star you're shooting for.

>> Again, the whole idea of the Convergence Accelerator is to have deliverables in the approximately May 2022 timeframe that will be of use to the American people.

>> So this question is about nonprofits. It is referring to, I think, and FAQ 34. Can they be funded as sub awards?

>> Yes. Non-profits, and actually for-profits, can be funded. Now, you need -- in your budget justification and the overall description of what you're going to do within the proposal -- you need to explain what the sub-awardees are going to do so that we understand why budget should flow to them. And that's true whether they're a non-for profit -- whatever kind of partner organization. We need to understand why they need money and what they're going to do with that. But that budget can flow from an award to small and large nonprofits, and indeed, there's no limit that I know of on the amount that can be supported.

>> Can we send evidence of collaboration with partner organizations as email communications that show collaboration, or does it have to be a formal letter?

>> Oh, no. Emails are fine. You can submit those as letters of collaboration in, you know -- you can just PDF them. But whatever you want to do, that's fine. We don't need something that's on letterhead with the signatures in blue ink or anything like that. Emails are fine.

>> Since it's not a collaborative proposal, can sub-award faculty be considered to be co-PIs? Is that up to us to define?

>> Correct. It is up to you to define.

>> What is NSF's stance regarding international collaborations in this competition?

>> What a great question. So in the Convergence Accelerator effort -- actually, as is true in all NSF activities -- international collaboration is encouraged where you can explain the ways in which that collaborator provides access to unique expertise or other resources that are valuable to the project. So we always encourage international collaboration. Now, there is an additional level of evaluation that applies to having sub award funds flow to an international partner. For an international partner to receive funding, you, of course, have to explain how their role is crucial to the success of the project -- that you couldn't accomplish the intellectual merit without their contribution. And you also have to explain how that activity could not be accomplished by an organization or person based in the U.S.

>> Our invitation letter said, use a September 2019 start date. But the slide deck says May 2019.

>> Your start date should be September and it will run until May. September 2019 until May 2020 is your active time.

>> As Phase I allowed a no-cost time extension while applying for Phase II?

>> You shouldn't need that. The Phase II solicitation is going to come out pretty soon. So you're going to feel like you're spending a lot of time writing proposals. And the Phase II proposals are going to be due while Phase I is still going on, probably in about February 2020. And then we plan to make the Phase II award by May 2020. So you should still be well within your spending period. For those activities that are not fortunate enough to receive a Phase II reward, we might consider no-cost extensions.

>> Is a collaborative plan required as part of the proposal?

>> Yeah, that would've been a great thing for us to ask for but we did not. Nevertheless, I think because of the complicated nature of some of the partnerships and collaborations that are required, I think that every proposal should be describing what the activities and roles are of all the partners, and that relates -- could also be considered a collaboration plan in more definition.

>> You want to make sure that the readers of your proposal understand who's going to be on your team and what they're going to be doing for you on that team -- which we did ask for but we didn't call it a collaboration plan. That's a good idea for next time. I just --

>> Can an industry partner be a co-PI?

>> Yes.

>> Is it required that we have at least one person designated as senior personnel or a co-PI for collaborating organizations?

>> No, you don't need to have a person from every partner organization defined as senior personnel or a co-PI. However, it depends on what the role of that partner organization is, and that should help you determine whether someone needs to be senior personnel or if you don't need to have that kind of description for them.

>> How should government employees fill out the current and pending support for them if they're not project supported?

>> So if you define them as senior personnel, you can have senior personnel defined in a project who do not receive any NSF support. And if you -- if you define a government employee from, like another government agency as senior personnel, then you would have to put in their current and pending, and I think the ways in which their current research is already supported by whatever agency they work for would probably have to be listed.

>> And Lisa, if you're not satisfied with that answer, you can email me. Send us an email and we'll try to get you a better answer.

>>What is the target notification date for Phase I awards?

>> Well, we're going to make awards September 1. We hope to send out emails actually in August letting people know if we think -- if, you know -- pending the approval of the Division of Grants and Awards we recommended them for an award. And then, you should get your definitive letter in September.

>> Could there also be workshops that include a larger number of organizations budgeted separately if this is part of our project strategy I think is a question.

>> You absolutely can include workshops. So, if part of the way that you're going to build your partnerships for your activity include things that you are calling workshops -- basically, activities where you bring people together -- yeah, that's totally appropriate for your budget. And you

should just keep in mind that participant support costs are a good way to fund that and that those don't incur overhead costs in the same way that other kinds of spending do.

>> Do we need to specify deliverables in Phase I?

>> Well, you have to tell us what your deliverables would be in Phase II, otherwise we don't know what you're doing in Phase I. So the exact details of your deliverables in Phase II will probably evolve during Phase I, but clearly you already have a plan in mind or we wouldn't have invited you.

>> Do we need to specify deliverables for the Phase I period, you think?

>> No.

>> Yeah -- you need to tell us what you're working towards, but Phase I does not include deliverables unless you're ready for that.

>> The real deliverables are for May 2022, which is at the end of the Phase II period where we hope you have something that's tangible and ready to serve the American people.

>> Not only do we hope, we know. We know you will.

>> Can an industry partner be a co-PI.

>> Yes -- an industry partner can be a co-PI. The only thing that you need to keep in mind is that your institution probably has rules around the relationships that need to be in place between organizations in order for funding to flow between them because the lead organization -- your granting institution -- has fiduciary, fiscal responsibility to NSF for the spending of their money. So you may have to have some sort of MOU or other agreement in place with an industry partner in order to support them as a sub awardee. However, I think you can call someone a co-PI even if they don't get money. That's possible.

>> There are a couple questions about training -- what will be the focus of the training session, and can you talk about what's expected of the training sessions?

>> At this point, I can say that there are at least two aspects of the training sessions. One aspect is track specific, or maybe the big track specific. So there will be some content that is just for the Open Knowledge Network people and there will be other content that is for track B1 and B2, and there may also be some content that is specifically B1 and/or B2. And on top of the track-specific content, we are planning other modules that could include aspects of team science and user discovery.

>> So, do you need the subcontract documents for partners to be executed before submission of the proposal? Oh, goodness. No. That would certainly be great but -- but the timeline is soon. So, you need to -- if you were to get an award in September -- you need to have a plan for how that's going to happen and your budget needs to describe how monies would flow, but you don't have to have all of your documents and partnerships fully described and executed before you submit on June 3.

>> Should we expect to define in the proposal who will participate in which training session?

>> No, you don't need to do that. You just need the budget for the number of people that you believe you'll be sending to each of the training sessions. We've already addressed collaboration letters from the partners.

>> You may.

>> Can students attend the NSF training?

>> Hmm, that's a great question. Yes. But whether it would be valuable to have them attend depends on their role in the project. So I don't think that the training that we provide will be solely a learning opportunity. It will be definitely training to ensure more effective execution of your project when you prepare proposals at the end of Phase I and you move on to Phase II. So, if there are students who are part of the team who will play a role in that, well, absolutely -- they should come to the training to make them more effective.

>> The next question is, what types of activities which you envision as being appropriate for teambuilding? And so I'm not sure if this is a question about what should the proposer be doing during the Phase I period.

>> So, you need to envision the team that will allow you to do the research and transitioned to practice activities that are required for a Convergence Accelerator effort. So if you're currently primarily a team of researchers with, let's say, some loose connections to an NGO, and what your goal is to create a deliverable that would be used by, say, laypersons in the community or maybe people in a bunch of different research disciplines, then you need to think about how you're going to connect with those different groups and build the partnerships that are needed to actually transition your ideas into practice. So, all kinds of activities can be appropriate for bringing that team together. You may need to have a bunch of one-on-one or one on a few meetings. You may need to have some group meetings. All kinds of things. Build your team.

>> Aside from travel and workshops, what are some of the activities that could use up to \$1 million, which seems like quite a lot. I'm assuming doing research, I think --

>> That's quite possible. So there's a lot of envisioning of what your research will be and refining what the deliverables and the milestones will be in Phase II. There is -- you might have

to spend money traveling to talk to potential users to help you define the problem that you're solving or help you think about the kinds of solutions that a user might actually want to use or buy.

>> So there may be quite a bit of time and quite a bit of travel involved, although you can also -- if your team is ready to embark on some research activities, you can absolutely do that as well during Phase I if you're ready for that.

>> Are we expected to include an educational/training component in the activities we plan? For example, for undergraduate/graduate with a larger community?

>> No. We're not actually envisioning something like that, although you could choose to do some sort of activity like that as part of your broader impacts activities. But it's not required. However, you should think about, if your product -- the deliverable that you're working on, whatever it is -- if that -- if that is going to be used by elements of a larger community, than for goodness sake, you should be reaching out to that larger community during Phase I. You need to identify with their real needs are and work with them to understand how you can satisfy that need.

>> So when you say community, you mean in the case of researchers using an open knowledge network or --

>> Mm-hmm. But it could be the general public using an open knowledge network.

>> People who are interested in some sort of GIS data or something like that.

>> If you do have postdocs for some reason included on the team, you do need a mentorship plan.

>> That's always true.

>> Can partners, especially researchers and companies, receive funds, including statements for travel, etc.?

>> Yes. That's a great question. So, yes, you can include a budget within your request to NSF that sends funds to a sub-awardee that is a for-profit entity. And you just need to explain to us what that person or team will be doing that is essential and why they need to have these funds. And that said, of course that can include funding for the time, for travel, for whoever needs to come to these in person trainings.

>> Right. You might have to go to conferences to meet some of your potential users.

>> So our fearless leader, Doug Maughan just joined. And you should remember when making sub awards to for-profit entities, they cannot receive profit or fee. So they can receive funding for

travel, for stipend, for their time working on your awesome project, but their employer -- this a for-profit entity -- cannot receive the fee. No fee, no profit. NSF does not pay those, period.

>> So this is a question about looking in the PAPPG for the program announcement choice. If I do not find anything under the 19-050 category for the DCL. It seems that it's just the DCL.

>> Great question. Yes, at this point, it is just the DCL. The paperwork to have it appear within FASTLANE as something you can click on to select as a program description -- those wheels are turning and they're not turning as fast as some might hope, including me, but hopefully soon, maybe in a week maybe it will be there. And meanwhile, the explanation that we have here -- this is not yet true but will be true soon. There soon will be a position description -- a program description, I mean -- that you can submit to within FASTLANE.

>> If we do the above -- so it's asking about what program to choose -- and also keep to the guidelines on the title as RAISE, C-Accel Pilot track B1, AI and Future Jobs, what do we choose under the Unit Considerations of division and programs?

>> So you will need to choose for unit of consideration the Office of Integrative Activities. Once you choose the program description for the Convergence Accelerator, which does not exist yet -- but once it does exist and you choose it, then I think integrative activities will be your only choice for NSF unit of consideration under division. And once you select that, then you have two choices for program -- either convergence accelerator, CA-HDR or CA-FW-HTF.

>> I think you answered this already, but are we allowed to have international collaborators in Phase I? You absolutely are allowed to have international collaborators in Phase I. If you going to give them any funding as a sub awardee, you need to explain how their essential to the project and how that work could be done by U.S.-based organization or person. are we allowed to use funds for services from the public partners to leverage their expertise? For example, services from public cloud providers including people time? So they mean companies I think.

>> Yeah. You can pay for services. Absolutely.

>> Like Web services or something.

>> Yeah. If you need to buy services, if you need gene sequencing or something, you pay for the services that your project needs. Oh, there's a question.

>> Are partner organizations the same as collaborators or do parties have to commit effort for funding?

>> Some partners hopefully will commit effort and will be funding, but no -- we're using partners, collaborators, co-PIs, senior personnel -- we're using all these terms -- teams and partners -- are using them quite interchangeably.

>> And partners might give in-kind contributions to a project, not necessarily funding. But they may make some kind of specialized facility or equipment available for the project.

>> Can I go back to the cloud question? NSF has been working to establish agreements with a number of the cloud providers through CISE, and there might be an opportunity for reduced cost access to cloud service providers through other parts of NSF. We can explore that as well. But it is something that CISE has been working on.

>> Is there a focus of the program on the timeline of the potential impact of the project? Do the outcomes have to be immediately impactful? For example, in 3 to 4 years, or can it be more basic research -- for example, actual impact in a decade or so?

>> Nope. This is a Convergence Accelerator. Your impacts need to be much more immediately felt. So, you don't need to necessarily create, like, a test bed or something as tangible as that in two years. But some projects absolutely will, and every project needs to have an impact that is actually perceptible -- perceptible and in use by 2022.

>> A deliverable.

>> For the evaluation section, do NSF reviewers prefer to see evaluations performed by entities that are independent from the main grantee?

>> I'd say that you need to evaluate the impacts of things -- like if you're developing a training platform, then you need to make sure that your trading platform actually works and is it just words. And you can choose whatever evaluation entity you think can do the best job at that.

>> Can we include any summer salaries at all? For example, June 2020 or are all funds expected to be spent beforehand?

>> All of your phones need to be spent out by May 2020. So, June 2020 is beyond the Phase I spending window.

>> Will all participants in Phase I pitch for Phase II funds at the same time, or will they be staggered considering Phase I projects will range from 6 to 9 months?

>> That's a great question. Almost everyone will pitch around March 2020, but they won't all necessarily be exactly the same day. But I think our plan is for everyone to pitch in March 2020.

>> And that is assuming that you want to be considered for the Phase II grant. So, submitting a Phase II proposal and pitching our requirements to receive the Phase II funding.

>>How much detail is expected in the proposal about the RAISE mechanism / convergence nature of the partnership? Do we need to go in depth or is a short explanation okay?

>> You need to describe your partnerships and what everyone is doing in a fair amount of detail. But the convergent nature of your research can be addressed more briefly. But please don't leave it out. So make sure you explain how you are conducting conversion research that includes two or more intellectually distinct disciplines. But we want to know more about what you're actually doing, not just why it's convergent.

>> And convergent is required. So it's a required part of the convergence accelerator. If you don't --

>> It's one of our two words.

>> If you don't address it, it's going to be very hard for us to recommend your proposal for award.

>>Are letters of collaboration part of the 15 page limit?

>> I don't think so. I think letters of collaboration are supplemental documents.

>> Supplemental documents. So the 15 pages has to do with your description of the project, and then there are lots of different types of supplements -- supplementary documents which I think is the J section of PAPPG.

>> Can you elaborate a bit on what you mean by user-inspired application in the call?

>> Sure. So for us, the use-inspired is -- how use another word, which is applied. So you have to talk about and to aim at how your ideas and your technology will be used and applied by end consumer, customer, whoever's going to use your technology. But your ideas and your proposal should talk about how your and solutions will be used or applied in life.

>> Your deliverables need to actually be used by someone who isn't just a researcher in an academic silo just like yours. Although, it could be used by a large, diverse academic community. That could be a use-inspired application.

>> You need to define who your users are and what you're going to give them that's awesome.

>> In the case of some of the track A1 proposals, the user is an academic. It's not always true.

>> Are equipment/storage costs allowable for prototype development and exploration during Phase I?

>> Yes. Absolutely.

>> What does success -- I'll give this one to Doug -- what does success look like to you for the Convergence Accelerator beyond the 2022 deliverable of use to the American public?

>> So I think for us the success discussion is, what we're trying to do within the Convergence Accelerator is -- as it says -- multidisciplinary research, partnerships with academic and industry and nonprofit teams delivering something of significance for national problems such that in the end -- at the end of 2022 and beyond, what you develop can be put out into -- whether it's infrastructure, whether it's tools, whether it's some type of prototype product -- whatever the case may be. For us, success is that the accelerator has worked in creating the end -- I'll call it product. It doesn't have to be a product, but an end product that is in use. And it might happen through intellectual property being licensed. It might happen through a startup company being created. It might happen any number of ways. But it's not -- it can't just be research that sits on the shelf and doesn't get used.

>> And just as an aside, the Director of the National Science Foundation just gave some testimony. That's up on the web on a YouTube.

>> YouTube, and it's also -- her testimony is also on the web. It was last Wednesday, May 8.

>> And she talks a fair bit about the convergence accelerator.

>> Okay, so the next two questions are about letters of collaboration. Is there a strict format? Can they be descriptive? Is there a template? Are there any restrictions?

>> Yes. So if you Google NSF PAPPG 2019, you'll get more information than you've ever wanted. And yes -- there is absolutely a format for letters of collaboration and a template. And you don't have to exactly follow the template. However, your letters should not be descriptive in the sense that you cannot use the letter of collaboration space to provide more information about what someone will do, because that looks to us as though you're trying to cheat on the 15-page limit and put extra information into the letters of collaboration. So all the information about what the collaborators will do and why it's essential to the success of the project -- that needs to be in the proposal. And so your letters of collaboration should be fairly brief and to the point and not gone at length. And they should never say anything about how great the proposal is, because then you're just clearly trying to get around your page limit.

>> Do all outside collaborators need to be listed in the personnel table?

>> That's a great question. Please -- please do list everyone who is relevant to the work that you're doing. That includes the PIs, the co-PIs, the senior personnel -- but other people who are crucial that you may not have defined a senior personnel or Co-PI -- they should be there, too. And the reason for that is, we're going to use the project personnel table as a way to ensure that

we avoid conflicts of interest. So if you have somebody that's important to your project who works at an institution, we don't want somebody who was employed at that institution to be a reviewer, because then they would have a conflict of interest. So, give us as much information as you can for us to make sure that we do the right thing when we review your proposals.

>> And as I think most of you know on the call, the NSF takes conflicts of interest very seriously. So, we're going to be using a table to help us make sure that your projects move through the process without conflicts.

>> And it's just really bad when somebody gets, like, halfway through a proposal and then finds a name of a person that they used to be the graduate advisor for, and then suddenly they can't review it anymore. So please give us as much information as possible.

>> How many Phase I awards do you intend to make?

>> Our current number is somewhere between 30 and 40 Phase I awards out of those that have been invited.

>> Are course buyouts allowed for faculty, or is support limited to summer tech salary, though not used during the summer, of course.

>> Of course buyouts are allowed. Whatever your institution is willing to consider that allows you to make effective use of your time is preferable.

>> What should phase -- what should the management structure for Phase II look like?

>> That depends on your project. If you have a complicated activity that involves many different kinds of organizations and doing a lot of different elements, then you're going to need to have a fairly well-conceived management structure. Some activities will be smaller and more focused, and would not need as much, well, structure to the management plan.

>> For Phase II, do you anticipate a traditional proposal mechanism, or a presentation to a group and paneled as some of the earlier communications suggested?

>> We will have both. So at the end of Phase I, you will need to produce a traditional written proposal that will be reviewed.

>> So at the end of Phase I, you will write a proposal for Phase II, and anyone who wants to compete for Phase II will also do a pitch. So, both a written proposal and a pitch to a blue-ribbon panel will be part of moving on to Phase II.

>> And then to just give a little more color to that answer. So, you will actually be writing your Phase II proposals in the December-January timeframe. They're going to be doing very early in

2020. So you won't be waiting until the end of your Phase I activity to write the Phase II. It's going to be overlapping with your Phase I activities.

>> Do we need to describe market research?

>> So, I think, again, this is going to depend on what track you're working in. But if you have a product or a deliverable that you think -- it could be purchased by somebody, then I would definitely include any customer discovery or market information.

>>Can the PI include additional efforts for writing Phase II?

>> Well, the PI and other personnel should include an appropriate amount of time on this activity -- the activities of Phase I -- to make sure that they're effective. And the goal of Phase I is to get the Phase II. So I think you should consider that you're going to be writing a Phase II proposal. You'll be doing a pitch competition. And you should plan accordingly with your time.

>> Will these proposals be reviewed by NSF staff only, or will they also be reviewed by ad hoc grant panels? So I think they're referring to the Phase I proposals.

>> Yes. They will be reviewed both internally and by external reviewers.

>> And they are definitely going to be reviewed internally. And we have the option of getting input from external reviews. It's not required, but it is anticipated that some external review will be used.

>> Is it permissible to reimburse travel expenses for international participants to join us at a team meeting?

>> That's a great question. So if you need international experts to provide insights into work that you doing, then -- absolutely -- NSF is willing and able to pay to have the right people at a meeting to make sure that smart outcomes come from that meeting. So, yes, you can pay for international participants to come to team meetings. You need to explain why they need to be there, which is true for domestic participants as well.

>> Again, about the start date. The invitation letter says to use a start date as September 9. Can we use September 1 as you stated in your directions?

>> Whatever, sorry.

>> In writing the Phase II proposal -- you just answered that question, right? Is writing the Phase II proposal inappropriate funded activity in the Phase I work plan?

>> I think it would be.

>> How many Phase I proposals were invited?

>> We can't actually say.

>> Enough that it will be very competitive.

>> But not as competitive as it would have been if you -- if all the research concept outlines were full proposals.

>> We have an idea of how many graduates and undergraduate students will be involved in Phase I, but we do not know who they will be. What do we do in terms of filling out the personnel table?

>> Oh, great question. So, we don't need to know the people's names and identities if they don't yet exist on the project, because the point of the project personnel table is for us to avoid conflicts of interest in reviewing your proposal. So, you don't have to put them into your project personnel -- don't put people in the project personnel table until you actually know who they are. Or you could just put, you know, graduate student and leave a blank if you want to be complete.

>> You use funding to buy equipment, for example, computer servers?

>> Sure.

>> Does all the research/IP become public? Do we need to have some kind of IP strategy?

>> Ooh, great question. Yes. You need to have some kind of IP strategy. So the goal is to produce a public good -- so public value -- but not everything that is produced has to be owned by the public. So you absolutely should be considering the intellectual property that different partners are bringing to the table and will be sharing, and you also need to be considering what kind of intellectual property your activity is going to develop, and how you would like to protect that.

>> Yes. We want your deliverables to serve the public. Not that they are

>> Owned by the public.

>> Yes. Is a formal assessment plan required for Phase I? I don't understand the question means.

>> Maybe if you're doing an education activity. Well, you wouldn't have done -- so Phase I for most applicants will not involve actually doing much that would be assessed. But if you're going to do things that you need to assess the efficacy of before you move on to Phase II, well, then you need an evaluation, and assessment plan. I think it depends on your project.

>> I think it depends on the track. Because I think you could do an assessment plan in the B2/B2 tracks probably more easily than the A1 track.

>> But I think the the bottom line is, in your proposal, you put those things that you need to accomplish in order to position yourself to be best suited to compete for Phase II. If an assessment plan is useful in giving you more ammunition and more evidence that you're prepared to go into Phase II, by all means, perform it.

>> And -- right -- and if you're not satisfied with that, send us an an email to C-Accel@NSF.gov. Is there an external evaluation requirement for this phase.

>> It depends what you project is. So, you don't have to do an external evaluation. You could do an internal evaluation. And indeed, you don't necessarily have to do an evaluation. However, if you're doing something like delivering a training activity, well, you can't just do that and say it was a huge success because we delivered it. You need to evaluate whether it actually was a success. And so it depends on what you're proposing to do in Phase I, whether you need to have external or internal evaluation.

>> Can you describe the review panel further? The description indicated in panel review with some proposals moving on to external review?

>> That is correct.

>> I don't think that we can say much more. There will be internal review, for sure.

>> It's required by RAISE. Because we are reviewing these under RAISE, you are submitting them and we are reviewing them under the RAISE mechanism, we will internally review all of them. Some may also receive external review, which could be in the form of ad hoc review, or could be an external review panel.

>> Can a project impact be limited to a single city?

>> I think it could.

>> It could but I think for -- for broader impact, in the world of smart cities, technologies that are useful for one city certainly could be used in other cities as well. And while you might have impacted your local jurisdiction, your ideas and your proposal go a lot further if you can talk about how it can impact even more cities or more jurisdictions as well. While you're probably going to tested and demonstrated in a single city, certainly I would encourage you to think about how -- how it can be used more widely.

>> Who pays for travel to the NSF the pitch? And should be included in the budget? What a great question. So, we didn't say that the pitch was actually going to be at the NSF. So I just want to point that out.

>> You should put travel in there for the pitch competition. We don't know yet where it will be held.

>> \$2,000 per person per trip to go somewhere, and I can guarantee you it's going to be in the United States.

>> And that somewhere and it will be in March.

>> That's all we can tell you right now.

>> And yes, put it in the budget.

>> Does the NSF expect Phase I awardees within the track to collaborate for Phase II applications? What a beautiful question.

>> It depends, but often -- yes. So, not every Phase I grantee will necessarily find someone else within the initial cohort with whom they could work for Phase II. But we fully expect that during the process of moving through Phase I, considering what your deliverable will be and how you can be most effectively transition that into the use of practice, we expect some partnerships to develop among the Phase I awardees.

>> Can technical points of contact be mentioned in the letters of collaboration?

>> You can mention other people. You shouldn't go on and on about how great they are, because that would violate the format. But you can mention the people who are part of the collaboration should be mentioned in a letter of collaboration.

>> What I think they're asking is, if the going to transition something into practice and facilitate that, and in 2022 with their activities over in about, you know, March -- then should they be explaining how it will continue to be used? I think that they should. I mean, our -- our goal is to have things that transition into actual use and practice, and so your activities in Phase I should lead to a project and Phase II that produces something that isn't just a one off, that continues to be used beyond the end of your project.

>> And I think the important part there is to describe from a sustainability standpoint the -- what might be required from additional government investment, what might be required from outside investments such as venture capital, or even larger industry -- or --

>> Or a foundation or something. Give us the best indication or idea of how you think it will get out into the market and be maintained in the market beyond 2020.

>> And then our goal will be to help you realize that goal. For the projects that we fund, the fact that you need other groups to help you make something sustainable is not an obstacle. That's something that we want to help you realize.

>> Some collaborators -- for example, industrial partners -- could be partners in multiple proposals. Is that a problem?

>> Indeed, that is not a problem. We expect that industrial partners and others could be part of more than one proposal submission. However, you should keep in mind as people are being described as partners, the time that they can realistically dedicate to your effort. So, if we see one person whose spending 90 percent of their effort on five activities, we're going to be a little suspicious.

>> We can't tell you how many teams were invited to submit a Phase I proposal.

>> Sorry.

>> Can we pay honoraria for guest speakers at a workshop?

>> Sure you can. It depends on was traditional for your particular area. You can absolutely pay travel for people to come and attend and participate. If someone is such a big name that they would need an honoraria to come and talk, then that's possible.

>> Do you plan on getting funding for proposals that request closer to the \$1 million budget maximum, or is it the hope to fund more proposals that are asking for smaller amounts of money?

>> We have said that the maximum proposal can be \$1 million. We haven't looked at a balancing of different activities. We -- we don't know yet because we haven't seen any Phase I proposals, but our expectation is that most proposals will be between \$900,000 and \$1 million. And we will -- if there is leftover funds, that might give us enough to fund an additional one or two.

>> So we'll see. We don't have a plan specifically.

>> Send us your best bet on what you need in terms of budget.

>> What do you mean by assessment plan?

>> I think you're going to have to Google that and see the plethora of information that should be out there about assessment. So some activities need to be assessed. And for example, using as training. If you train people, you can't say, oh, these people are trained effectively. You need to have an assessment plan to determine what they learned. So that's what I was referring to. Not every Phase I proposal will include activities that require assessment.

>> More likely in the B tracks than the A tracks, right?

>> Okay, and any examples of approved RAISE approvals?

>> With apologies, we cannot provide any sample proposals. We're not allowed to do that. Not even redacting almost everything. You should send us your best bet. However, you might find it effective to ask around your institution.

>> You can go to NSF awards search mechanism. So Google NSF awards search, and then type in RAISE in a couple of the keywords that go with something that you doing, or just RAISE, and you'll get a huge list of all of the public -- all of the public information about who's received a RAISE award. And then you can try to find somebody at your institution, or somebody that you know and ask them if they would share their proposal. We are not allowed to share that.

>> And in the past, there is a special section about what's required in a RAISE proposal. Definitely read that. We sent links to that in your invitation letter.

>> And it looks like we've answered all the questions.

>> Only twelve minutes over. That's great.

>> So -- oh my goodness -- thank you for all of you who are still hanging in there. And if we didn't answer a question or if you hang up and you realized there was something you really wanted to know, please email us at C-Accel@NSF.gov, or we're going to do this exact same thing next week. The same time -- same time -- next Tuesday. So feel free to call and then.

>> All right, I think that's everything. Thank you very much. We appreciate it.

>> Good luck.

>> Thanks, everyone.

>> Your questions were great..