

## **Executive Summary of XSEDE Advisory Board Meeting, August 8, 2018**

**Meeting Date:** August 8, 2018

**Meeting Place:** Teleconference via Skype

***Preface:** The main topic of this call was a discussion about the availability of resources beyond 2020 and how that plays into the post-XSEDE 2.0 draft transition plan. Agenda and meeting notes are available for XAB members at <https://confluence.xsede.org/display/XT/XAB+2018+August+Call>.*

### **Summary of meeting comments and XAB suggestions**

John gave a debrief on slides that were presented at PEARC18 by Manish Parashar and Sushil Prasad from NSF and noted that there will be a remarkable drop in resources by 2020. While Manish and Sushil did not give a definitive answer, it seems likely that a new Track 2 solicitation will be coming out soon. NSF is in engaging the community and gathering requirements, and a lot of people are providing input.

Board members noted that a Track 2 solicitation will need to be out by the end of FY19, as the current Blue Waters system ends before that, so anything other than general discussions XSEDE would be ill-informed at present. It was noted that a general discussion with NSF would be useful and that XSEDE should be providing information to NSF since we control the connection to the community and understand what the community needs to advance science. We should consider how we can communicate the absolute imperatives for hardware and service availability since XSEDE must adapt and transform over time while hardware systems come and go. It was shared that the issue of on-boarding new resources was discussed during the NSF annual review, and there is an expectation that XSEDE should predict and develop expertise and training content for the community despite the fact that we don't know what is coming. XSEDE is connected to the community of scientists and service providers and could have a conversation with them to determine where their science is going and impose on those ideas the set of services that we've learned are essential. We can then share with NSF what services XSEDE will need to have in place when new technologies come along to allow research to continue. The Board discussed that there is only a loose connection between what the NSF is calling "innovative systems" and what the community needs as a resource. It would be helpful if the solicitations were driven by the science rather than the win, which drives us into proposing technologies that may or may not be useful over the long term. It was also noted that scientists don't always know how to use a new system, and XSEDE has provided this service of transitioning the science to the new technology. XSEDE has demonstrated leadership for almost a decade and should continue to demonstrate that leadership, taking less defensive position and more of a leadership position.

The Board discussed the expectation that XSEDE will deliver a draft transition plan for XSEDE3 and we should use this as an opportunity to lay all of our cards on the table as a set of what is needed to advance science and what serves the community best. It was noted that there is much uncertainty about what such a follow-on solicitation might entail and what budget will be available, but if we provide thoughtful documents to NSF, this will be invaluable when it comes time for them to execute a plan. It was noted that the future of XSEDE is separate from the future of high-end resources deployed at resources providers, but XSEDE can't allocate to machines in 2021 as there will only be 2 at that time. It was recommended that if Kelvin Droegemeier is appointed that XSEDE should send a letter about efficiencies and engagement (not funding). It was noted that training for new resources is difficult if you don't know what you're training for. XSEDE should provide NSF with input on what is going on in community to support the planning process, broadening the scope of focus from systems to science, and be ready to respond. It was suggested that a letter from the XAB to NSF providing input from the community about this problem and some ideas about

solutions would be valuable. Important information that XSEDE can provide to NSF includes information about GPU usage, those not using parallel processing, how the community is using or not using hardware, disruptive technologies that are coming, and new things on the horizon (e.g. we could tap into data that Dave Hart provided).