I am an individual researcher (in Planetary Science), so my direct experience is limited to the academic/science community. I have only worked at “highly served” institutions that have a lot of ongoing work with NASA, so my direct experience with under-served institutions is limited.

I can provide some random actionable suggestions, as well as an idea for an experience-sharing program:

[1] Require research conducted with NASA support be published open-access. I suspect that under-served communities have reduced access to scholarly journals, which is a barrier to starting new research programs.

[2] Create a mechanism where researchers at under-served institutions can login to a NASA library VPN, and thereby gain access to academic journals. This could be in addition to #1, because some publishers are starting to negotiate deals where subscribing institutions have a package access/publish agreement. NASA can decide whether this VPN service would be for the whole under-served institution, or just for researchers there who have already obtained NASA support, or for researchers working on active proposals to NASA (perhaps they get VPN after they submit a NOI for a proposal).

[3] Promote http://sara.nasa.gov as a gateway to research opportunities. It is more accessible than the ROSES document, and it allows key parts of ROSES to be highlighted/emphasized.

[4] Provide example successful proposals. Not mine though, they are private. I’m not sure how you could implement this, but it would be very helpful.
[5] Include a question on the ROSES cover sheet (NSF does or did this somehow) where you ask “How would selecting this program support DEIA?” And of course define what DEIA is. Include a second question, “Would you agree to participate in the experience-sharing program?” See below. That way people can have a lightbulb moment, and go “I could participate in the program and thereby help support DEIA.” If necessary, state that answers to these questions do not affect proposal selection. Or, if you can legally have the answers influence selection, then do it! Also have a question like, “Are you at an under-served institution?” But word it better than that.

Experience-sharing program

Create a speakers program, and promote it to under-served institutions (announce on sara.nasa.gov + other sites + send personal emails to chairs of departments, asking them “forward this to people in charge of seminar/colloquium”).

The list of speakers should cover all the disciplines in which NASA wants to increase participation.

A speaking engagement covers a standard presentation (like a seminar or colloquium talk in my field). It also includes 1-on-1 meetings with people at the under-served institution, where they can ask the speaker about their personal experience applying for NASA grants and so forth.

NASA would prepare the speakers via information packets on whatever grant, assistance, or procurement effort they are trying to diversify. If there is no pandemic, NASA covers all travel costs for the speaker.

It would be helpful if speakers kept in touch with people they met with at the under-served institution, so that they could offer assistance over time and during different steps of the process of working with NASA (proposals, contracts, actual research, progress reports, review panels, etc.).

All of this takes work for the speakers, and each individual has different constraints in terms of whether their institution encourages volunteer work, allows outside compensation, etc. So it is not clear to me how speakers could be rewarded, or if they need to be. Speakers could list their participation in the program on ROSES coverpage answers (see #5 above).

May your efforts be successful.

Dr. Michael H. Wong