

## **Improving Science Advice to the White House through the President's Council of Advisors on Science and Technology**

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### **Statement of Problem**

- Independent, expert advice from scientists, engineers, and others with technical backgrounds has been an essential part of White House science and technology policymaking for all administrations dating back to World War II. However, each president has taken a distinct approach toward organizing and utilizing his scientists.
- In the previous four administrations, the President's Council of Advisors on Science and Technology (PCAST)—an advisory committee of roughly 20 non-federal members appointed by the president and managed by the White House Office of Science and Technology Policy (OSTP)—has provided an important channel for representatives from the academic and industrial research communities to advise on the administration's science and technology priorities, give feedback on presidential science and technology initiatives, and provide recommendations on urgent, as well as long-term policy matters, with significant scientific and technical components.
- Operational practices from the Obama, G.W. Bush, Clinton, and G.H.W. Bush administrations have proved that PCAST's relationship to the president and its efforts to focus on key issues relevant to the administration's policy agenda are strong indicators of an effective PCAST.
- Developing a diverse and well-organized PCAST will help the current and future presidential administrations gain critical insight into ways science and technology can help drive policy solutions.

### **Policy Recommendations**

- 1.) **The president should appoint a diverse group of knowledgeable and respected science and technology leaders to PCAST, giving special attention to both the range of its expertise and the gender, racial and ethnic composition of its membership.** The expertise of PCAST's members should reflect the administration's strategic science and technology goals, but still include a full array of other areas including physical sciences, biological sciences, engineering and technology, and social, behavioral, and economic sciences. PCAST should include members with experience in academia, industry, and government service. Furthermore, PCAST membership should reflect the diversity of the scientific workforce, with increasing participation of women and underrepresented minorities.
- 2.) **The president should empower PCAST by requesting studies relevant to administration priorities and meeting regularly with its members.** Direct engagement with the president will help PCAST focus the breadth of its studies to align

with the administration's policy agenda, as well as allow PCAST to alert the president of new opportunities for initiatives. PCAST should prioritize a handful of timely science, technology, innovation, and education related issues relevant to the president's policy agenda and center its activities to develop and enact new policies in the chosen areas.

- 3.) **OSTP should allocate, and Congress should provide, sufficient funds for at least two full-time OSTP employees to support PCAST activities and travel expenses for a minimum of six plenary sessions per year and publication costs.** PCAST should have a specific line item in OSTP's annual budget to ensure funding is adequate to for PCAST to conduct in-depth analysis for longer reports, as well as shorter-term letters and studies on timely policy matters, and engage in follow-up activities to help drive the uptake of its recommendations in the White House, Congress, federal agencies, and broader research and education sectors.
- 4.) **PCAST develop relationships with Congress, agencies and the White House staff.** PCAST should maintain relationships with key members of Congress and their staff, White House officials, and agency representatives, as appropriate, to gain insight into their priorities as well as receive feedback on PCAST activities. In addition, OSTP should dedicate resources toward wider dissemination of PCAST reports and letters.

### **Potential Impact of Policy Changes**

Since its creation in 1990 under President George H.W. Bush, PCAST has proved to be an indispensable and versatile resource for the president and senior members of the White House staff. In PCAST's current charter, renewed by President Trump, the Assistant to the President for Science and Technology serves as co-chair of PCAST. The title of Assistant to the President indicates that the individual has direct access to the president, and in previous administrations, the appointment has been made, in part, to show that science and technology are among the president's priorities. Most recent presidents have appointed an individual to this post and nominated him or her for Senate confirmation as director of OSTP. As co-chair to PCAST, the Assistant the President for Science and Technology traditionally recommends candidates to the president for PCAST membership and helps stimulate its activities.

By appointing and tasking PCAST, the president will have direct access to America's foremost leaders in science, engineering, technology, and medicine to help guide his policy agenda and achieve the administration's strategic goals in innovation, infrastructure, advanced manufacturing, and national security, as well as advise him on new opportunities for strengthening American scientific and its technical workforce. Additionally, empowering and meeting regularly with PCAST will send a strong, positive message to the broader scientific community and American public about the importance of science to the administration and the use of scientific data and analysis in federal policymaking. Finally, receiving advice from this distinguished group will help the White House to develop robust and thoughtful policies that can help drive the US economy while protecting its citizens.