Making a Critical Connection: Science Advice and the Next President

The economy. Health care. Energy. The environment and cost-effective ways to keep it healthy. National security. Prevention of terrorism. President-elect Barack Obama will have a full plate!

Science, technology and innovation are key elements in such matters, and because of earlier investments, our nation has some of the world's leading scientists and engineers, including a vibrant university research system coupled with an innovative, productive industrial sector. These are pillars of our technical infrastructure. If President-elect Obama marshals these resources to help tackle central problems, he will be off to a head start. To do that, he would be wise to appoint a science and technology advisor whose advice he trusts as an early pre-inauguration act. Laws and customs in Washington may be different from those in biology, or chemistry, or physics, but each is equally valid in its regime. A wise advisor can bridge the gap.

Needed is a trusted presidential science advisor who has the breadth of knowledge, experience, and sound judgment to help devise practical and effective policies. The benefits of making the right decisions are enormous — as are the costs of making mistakes. Over the past 60 years, every president has had an advisor on science and technology and an office focused on science and technology. Since 1976, the Office of Science and Technology Policy (OSTP) has been in place in the White House. The science advisor and OSTP have historically played a central role — usually behind the scenes — in crafting national policies. A robust OSTP, located in the White House complex and closely integrated with the other White House functions such as the Office of Management and Budget, is of great importance.

Science and engineering are foundations of knowledge upon which new products, services, industries and jobs are built, and upon which sound public policy is crafted. There are many examples of the benefits of building policies on a strong scientific foundation — enabling the digital information age, making the United States second to none in biomedical research — and the costs of not doing so are unacceptable, leading to declining competitiveness in manufacturing, the lack of cost-effective alternatives to foreign oil as a primary energy source, and increased offshoring of our advanced R&D and technological innovation.

The Woodrow Wilson International Center for Scholars, the Center for the Study of the Presidency and others have recently released reports calling for enhanced capacity for science and technology policymaking in the White House. The reports recommend a series of practical bipartisan steps the next president can take to ensure that he can benefit from reliable analyses and advice. At the top of the list is the early appointment of a nationally respected leader to be science advisor—and restore the position to the rank of the Assistant to the President for Science and Technology. An early appointment will ensure that the president has access to advice on the selection of qualified people to fill additional key scientific positions in his administration and is able to incorporate science and technology into major policy and budget initiatives in a timely and effective way.

Ultimately, implementation and governance are as important as advice. The nation's scientists and engineers, whether in universities, government agencies, corporations or nonprofit organizations are a tremendous national resource. The president can influence how this great resource is used to meet our national goals. Through his leadership, the president can inspire and challenge the scientific and engineering communities to devise solutions to the problems facing the nation, just as President John F. Kennedy did.

The first step is to be quick to appoint a science advisor with vision and a strong commitment to public service and who can develop a close working relationship with President-elect Obama. Wisdom is the essential ingredient of sound advice — and sound advice is the prerequisite for inspired and effective public policy.

Former Presidential Science Advisors:

Edward E. David John H. Gibbons Neal F. Lane John P. McTague

The opinions expressed in this article are those of the authors and do not necessarily reflect views of the Woodrow Wilson International Center for Scholars or the Foresight and Governance Project.