



Insight

What's in the New Executive Order on Artificial Intelligence?

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On Monday, President Trump signed an Executive Order (EO) titled, “[Maintaining American Leadership in Artificial Intelligence](#).” The EO kickstarts a process within the federal government to prioritize and boost artificial intelligence (AI). While the EO is an important first step to ensure continued American leadership in the area, some of the biggest and toughest questions in federal AI policy, including the level of research and development (R&D) spending and educational funding, still remain unsettled.

The EO includes ten sections, but the meat of the EO occurs in five. Section 2 outlines broad policy objectives. Section 4 details federal investment in AI R&D. Section 5 directs agencies to review their data, while Section 6 lays out guidance for the regulation of AI. Finally, Section 7 sets in motion potential educational reforms.

The National Science and Technology Council (NSTC) Select Committee on Artificial Intelligence will lead this initiative. This committee, which was formed last May, [includes](#) representatives from the Department of Commerce, the Department of Defense, the Defense Advanced Research Projects Agency, the Department of Energy, the National Science Foundation, the Intelligence Advanced Research Projects Agency, the Office of Management and Budget, and the National Security Council. The Office of Science and Technology Policy within the White House leads the committee.

Everything in the EO suggests this effort will be quite broad. In line with [AAF's previous suggestions](#), the initiative will involve “agencies that conduct foundational AI R&D, develop and deploy applications of AI technologies, provide educational grants, and regulate and provide guidance for applications of AI technologies.”

Section 2 lays out the basic goals of the initiative, which will aim to

1. Promote sustained investment in AI R&D in collaboration with industry, academia, international partners and allies, and other non-Federal entities;
2. Enhance access to high-quality and fully traceable Federal data, models, and computing resources;
3. Reduce barriers to the use of AI technologies;
4. Ensure technical standards minimize vulnerability to attacks from malicious actors;
5. Train the next generation of American AI researchers and users; and
6. Develop and implement an action plan.

The fourth section will probably attract the most controversy, since it directs agencies to consider AI as an R&D priority. There is no mention, however, of upping the total amount of federal R&D spending, which was a goal of [the Obama Administration](#) and has been a source of criticism for [a number of advocates](#). As AAF [previously noted](#), there is a distinction between underinvestment in basic research and underinvestment in AI-related technologies. The optimal amount of federal funding for research could be at the right level but not directed toward the right mix of technologies. It seems this initiative is poised to explore just how much R&D should be

funded and where it should be directed.

For those involved in the regulation of AI, the fifth and sixth sections will be important to watch. Section 5 directs agencies to conduct internal reviews of their data and models in the hope that some might be opened up for use by the wider research communities. This section echoes the recently signed [OPEN Government Data Act](#), which requires non-sensitive data be made available in machine-readable formats by default. Section 6 instructs the Office of Management and Budget to conduct a government-wide survey on AI regulatory efforts and then issue a memo on what is being done. Agency heads will need to conduct their own internal reviews, as part of this process, and might have to tweak policies to come into compliance with the OMB memo. This could open up the possibility for deregulatory rulemakings. Since executive orders don't apply to independent agencies, the work at the Federal Trade Commission, the most important regulatory body on AI, will be left out of this memo. The FTC, however, is already in the middle [of its own process to understand](#) the regulatory challenge of AI. Thus, to truly understand the OMB memo, the FTC's upcoming report will need to be considered in tandem with this memo.

Finally, Section 7 charges those agencies with educational grants to reorient around AI when possible for existing Federal fellowship and service programs. To aid this shift, the NSTC's Select Committee on AI has been tasked with providing recommendations on STEM education and workforce development.

The AAF paper mentioned above offered several suggestions on this front. The administration should

- Reconsider where [Title IV financial aid money](#) can be used, including by evaluating and potentially expanding an Obama Administration pilot project that allowed Title IV financial aid money to be used for massive online open course (MOOCs) and coding boot camps;
- Continue working with states to implement [the Strengthening Career and Technical Education for the 21st Century Act](#) that offers flexibility for states using federal resources, ensuring career and technical education programs are viable educational routes; and
- Help establish best practices for integration between businesses and education on AI for key sectors, including agriculture, manufacturing, minerals, and health care.

In total, the AI initiative is a good first step, but it is not the end. What will be more significant to dissect will be the memos and directives that come out of this process. As it currently stands, it is designed to solicit input from federal agencies and then build a set of policies around their priorities. Where this process could become contentious is if agencies begin to demand more resources to make those goals a reality. At that point, both the White House and Congress will need to start making hard decisions.