



Update of National Artificial Intelligence Strategic Plan: What Clients Need to Know

OCTOBER 2, 2018

[R. Scott Nuzum](#) and [Maranda Compton](#)

Introduction

Artificial intelligence (AI) is rapidly changing every segment of American industry: enhancing productivity, reducing labor costs, and providing companies and individuals with previously unforeseen efficiencies and insights. Simply put, the influence of AI in our daily lives is increasing on an exponential scale and will only become more commonplace in the coming years.

Recognizing this fact, the federal government is increasingly devoting its efforts to identifying research and development (R&D) priorities and to setting standards of conduct to ensure that the United States remains at the forefront of global AI development. To that end, on September 26, 2018, the National Science Foundation published a [Request for Information](#) (RFI), seeking public input as the federal government contemplates updates to the 2016 “National Artificial Intelligence Research and Development Strategic Plan” (AI Strategic Plan).

The RFI presents an opportunity for all interested parties—including entities operating in the agricultural, energy, environmental, natural resources, and transportation sectors—to help frame the United States’ general policy toward the development, deployment, and oversight of AI. Comments on the RFI must be submitted by October 26, 2018.

How the AI Strategic Plan Could Impact Your Business

AI is a collection of computational methods that enable cognitive functioning in machines in a manner similar to humans. Examples of AI include machine learning, natural language processing, and computer vision. Collectively, these processes are rapidly, and without fanfare, becoming incorporated in the daily operations of companies throughout the United States. For example:

- Electric, gas, and water utilities are integrating machine learning-empowered connected devices into their infrastructure in order to better serve communities by identifying ways to be more efficient with respect to how resources are managed;
- Autonomous vehicle developers are incorporating machine learning and computer vision into their systems, with the aim of significantly improving road safety, reducing traffic fatalities, and enhancing vehicle efficiency;
- Oil and gas companies are adopting machine learning and data analytics into planning process for drilling operations (both onshore and offshore); and
- Freight and transportation companies are beginning to utilize autonomous delivery systems—including aerial and sidewalk drones—in an effort to significantly reduce the cost of deliveries and environmental impacts over the “last mile.”

While many of these—and other—uses are still in the nascent stages of development, they will only become more pervasive in the coming years.

Existing Federal AI Policy

While AI has the potential to continue to dramatically improve lives around the globe, it also carries the risk of adverse consequences and potential, incidental liability. A key question for industry and governmental entities is—and will remain—how to best to utilize, foster, and regulate these technologies in a responsible manner given the breadth of industry applications and use cases. It was with these

considerations in mind, that the Obama Administration first released an AI Strategic Plan—along with a companion report entitled, “Preparing for the Future of Artificial Intelligence”—in October 2016.

Developed as a high-level framework, the 2016 AI Strategic Plan was intended to “coordinate[] AI R&D efforts across the federal government [to] help the United States capitalize on the full potential of AI technologies to strengthen our economy and benefit society.” The plan articulated seven strategic aims:

1. Make long-term investments in AI research;
2. Develop effective methods for human-AI collaboration;
3. Understand and address the ethical, legal, and societal implications of AI;
4. Ensure the safety and security of AI systems;
5. Develop shared public datasets and environments for AI training and testing;
6. Measure and evaluate AI technologies through standards and benchmarks; and
7. Better understand the national AI R&D workforce needs.

In the two years since publication of the first AI Strategic Plan, developments in machine learning and other AI disciplines have amplified the need for individuals, industry, and government to have a better understanding of the practical, geopolitical, ethical, and legal challenges underlying the incorporation of AI into our daily lives. Given the frenetic pace of AI developments and to increase America’s competitive advantage in AI R&D and investment, the Trump Administration is now seeking to update the AI Strategic Plan to reflect current priorities both within the private sector and the federal government.

2018 NSF RFI

With updates to the AI Strategic Plan, the Trump Administration wants to identify scientific and technological needs in AI, and to track the progress and maximize the impact of R&D investments to fulfill those needs. In addition, the Administration hopes that the updated plan will further the development of AI standards to ensure that AI systems are constructed in a manner that accounts for fairness, accountability, and transparency, and function in a manner that is both reliable and safe.

Notably, the 2016 AI Strategic Plan acknowledges the potential benefits and use cases of AI in agricultural and transportation sectors, but the document makes no reference to the energy, environmental, or natural resources sectors. In the intervening two years AI usage and potential applications in these sectors has skyrocketed. This RFI, therefore, provides those sectors a unique opportunity to shape the use narrative, define the R&D needs, and identify appropriate standards that allow for greater application of AI in those spaces.

For more information

Van Ness Feldman is actively monitoring issues at the nexus of technology, energy, environment, and transportation. If you have any questions or wish to comment on the AI Strategic Plan, please contact [Scott Nuzum](#) or [Maranda Compton](#).

Follow us on Twitter [@VanNessFeldman](#)

© 2018 Van Ness Feldman, LLP. All Rights Reserved. This document has been prepared by Van Ness Feldman for informational purposes only and is not a legal opinion, does not provide legal advice for any purpose, and neither creates nor constitutes evidence of an attorney-client relationship.