

Legislative Science and Technology Note

Artificial Intelligence, Government Services, and West Virginia

June 2024

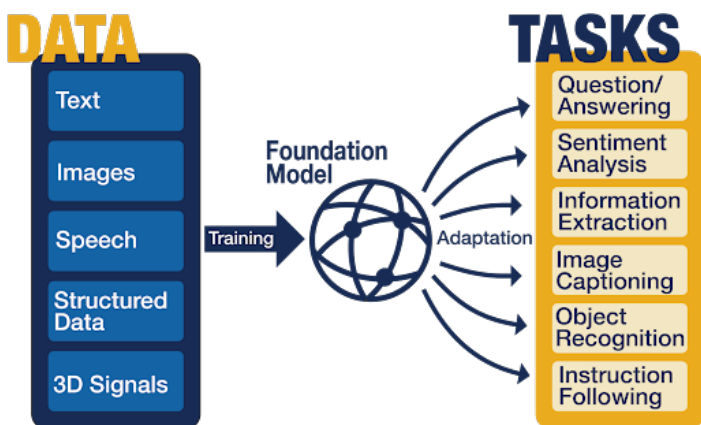
[Artificial intelligence \(AI\)](#) is technology that can “simulate human intelligence and problem-solving capabilities.”

[Generative AI](#) uses newer algorithms that generate complex output in response to user input. This Science and Technology Note considers opportunities and risks of using AI in West Virginia state government operations and services.

Opportunities for AI In West Virginia Government

While simple AI and machine algorithms (computer “recipes”) have been used for government applications since at least the 1990s, recent [breakthroughs](#) in AI’s natural language processing (NLP) capabilities have driven [excitement around new generative AI technologies](#). West Virginia could potentially increase the efficiency of government operations by incorporating these newer forms of AI.

Yet, with so much uncertainty in how these new applications will impact the economy and society, it is important for West Virginia lawmakers to understand what AI is, is not, and how it might be used effectively.



Source: WVU Bridge Initiative, adapted from the [Stanford Institute for Human-Centered Artificial Intelligence](#).

Research Highlights

- Developments in AI have created opportunities for state governments to improve their efficiency and change the ways they deliver services to constituents.
- The West Virginia government is applying artificial intelligence to new areas like road maintenance after a pilot program bill was passed in 2023 and studying the issue with a state executive branch task force and legislative AI committee.
- Possible policy options include requiring a regularly updated government “use-case” inventory, adopting a more aggressive innovation model which includes regulatory mitigation, or refraining from legislative action until the state’s AI task force delivers its recommendations in July 2025.

Challenges include identifying appropriate government functions to delegate or partially delegate to automated systems and developing plans to minimize and manage unintended consequences.

AI is not sentient, infallible, good, evil, or magic. [Under the AI umbrella](#) are techniques like machine learning and deep learning, which are inspired by human brain processes. Trained by identifying patterns in large volumes of data, generative AI’s [foundation models](#) (see figure) respond to queries and can be used to automate diverse applications.

A structural challenge with government use of generative AI is that its “reasoning” is inherently opaque, and the AI cannot show its work. Additionally, generative AI systems make mistakes and will occasionally [fabricate facts entirely \(called hallucinations\)](#). Further, AI systems are [only as good as their data](#) and can manifest various forms of [bias](#). It is important that governments don’t rely blindly on AI output and have plans in place for dealing with inevitable failures of AI systems. The National Institute for Standards and Technology (NIST) has an [AI Risk Management Framework](#) that has helped guide legislators, with a [recent profile](#) focused specifically on generative AI.

West Virginia's Existing State AI Initiatives

In 2023, the West Virginia legislature passed [HB 3214](#), the “Road Optimization and Assessment Data (ROAD) Pilot Program,” to explore how AI can be used to help assess road quality and predict required maintenance. In 2024, the legislature created an AI Task Force housed within the Office of Technology ([HB 5690](#)) and asked them to determine public use cases for artificial intelligence, requiring that they deliver recommendations on a number of issues by July 2025. Also in 2024, the House of Delegates created the AI Select Committee ([HR 3](#)), which will investigate AI for the remainder of the 86th legislature.

West Virginia Challenges and Applications for Government AI

Unlike in the private sector, there is not necessarily an advantage in being first to pioneer a given public sector AI application. Errors or failures can create large problems, such as an automated Michigan unemployment insurance system [falsely accusing over 30,000 people of insurance fraud](#). The sensitive or critical nature of many government roles raises the stakes. To deal with this, [experts have suggested](#) that states begin using and experimenting with new technologies in “[sandboxed](#)” environments before widespread deployment, as Massachusetts and Georgia have done.

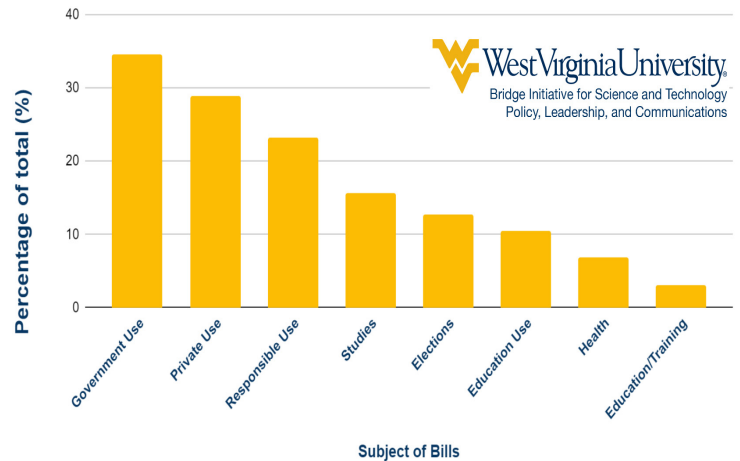
Despite these risks, there are many instances where AI could significantly assist West Virginia's government operations, and many have yet to be imagined. AI has been [used by states](#) to assist with cyber threat detection, customer service, [improving traffic flows](#), [crime predictions](#), [decision making](#), automated signature verification, [detecting and preventing wildfires](#), software development, identifying livestock brands and more.

Recent State Government AI Use Legislation

States have been remarkably active legislating on AI, with the largest share of bills introduced in 2024 concerning government use of AI. In 2023 and 2024, states passed [at least twenty bills](#) relating to government use of AI (see [here](#) for a summary of all twenty). [Most of these](#) involved creating a task force to study AI in government, including existing and proposed uses, and require a report involving recommendations. The [North Carolina legislature](#) is funding a pilot AI school safety monitoring

What was State AI Legislation Introduced in 2024 About?

Subjects considered in the 353 AI bills introduced by state legislatures in 2024. Data source: NCSL AI Tracker



Subjects considered in the 353 AI bills introduced by state legislatures in 2024. Source: Ryan Nesselrodt, WVU Bridge Initiative, based on data, categories from [NCSL AI Legislation Tracker](#).

system. Indiana passed a law [explicitly empowering](#) state agencies to develop their own AI policies. The Utah legislature [created](#) an agency opt-in “AI learning laboratory,” offering temporary regulatory mitigation for agencies experimenting with new AI applications. States like Georgia, Maryland, and Vermont [have created](#) “Chief AI Officer” positions to monitor and assist with state AI implementation.

Policy Options for Implementing AI in West Virginia Government

Possible policy options for West Virginia include requiring that each government agency maintain and make public its own inventory of proposed and current AI uses, updated annually following [the example](#) of the Office of Budget and Management. The legislature could pursue a “learning laboratory” model for government use of AI, offering agencies temporary regulatory mitigation [as Utah has done](#) or enabling agencies to develop their own AI policies as in [Indiana](#). Alternatively, the legislature could refrain from taking any legislative actions on AI until the delivery of the Task Force's report in July 2025.

This Science & Technology Note was written by Ryan Nesselrodt, PhD and West Virginia Science and Technology Policy Fellow, on behalf of the Bridge Initiative for Science and Technology Policy, Leadership, and Communications. Please see <https://scitechpolicy.wvu.edu/> or contact scitechpolicy@mail.wvu.edu for more information.