AI-Powered SNAP Modernization

Analysis of Policy Issues Impacting the Use of Artificial Intelligence in SNAP Case Processing

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Excitement, interest, and anticipation around Artificial Intelligence (AI) continues to build in the government human services sector as leaders seek to safely use AI and automation to improve customer experience and reduce administrative burdens for customers and staff. Agencies that administer the Supplemental Nutrition Assistance Program (SNAP)—among other human services programs—aim to provide excellent customer service while holding the program accountable to performance metrics around payment accuracy and timeliness, yet agencies face persistent capacity challenges. This publication unpacks the rapidly evolving policy landscape surrounding the use of AI in SNAP case processing to support agency leaders across the country as they explore how advances in technology can overcome widespread challenges, enhance their program operations, and streamline service delivery processes.

This publication—the second in a three-part series that APHSA will release on the use of AI in SNAP case processing—details the rapidly changing policy landscape surrounding the use of AI in SNAP and explores potential enabling policy actions to support this use.

This brief offers:

- **Implications of recent U.S. AI policymaking** on SNAP policy and practice;
- **Policy considerations** for the use of AI in SNAP case processing, including potential enabling policy actions;
- **Synthesis and analysis** of existing federal requirements and guidance relevant to the use of AI in SNAP case processing as of the publication date; and
- **Expansion on potential risks and opportunities** of example applications of AI as presented in the first report in this series.

Other briefs in this series include:

- The first publication in this series, "AI-Powered SNAP Modernization: An Introduction to Current and Potential Uses of AI in SNAP Case Processing," offered definitions and distinctions between AI, automation, and sub-categories of advanced technologies that are or can be used for benefits delivery; explored potential use cases of AI in SNAP case processing; and provided early reflections on potential applications of AI.[1]
- The third and final publication in this series will focus on the relationship between technological innovation and equity. It will discuss customer-centered use cases of AI aimed at improving customer experience of accessing SNAP alongside appropriate guardrails needed to minimize potential risk and bias while maximizing security. Input from current SNAP customers will critically inform this final publication.

APHSA
American Public Human Services Association

Recent AI Policymaking in the Human Services Sector

Public interest in AI and its potential uses is skyrocketing across the country and across sectors—and government human services agencies are no exception. Federal government agencies that oversee human services programs are actively developing policies to guide the operationalization of AI within human services delivery. From the October 2023 Executive Order on Safe, Secure, and Trustworthy Development and Use of AI, to more recent frameworks from the U.S. Department of Health and Human Services (HHS) and the U.S. Department of Agriculture Food and Nutrition Service (USDA FNS), federal policymakers are assembling the foundational components of national AI policy.

At the same time as widespread excitement and attention to AI is building, SNAP agencies face widespread challenges—from chronic capacity and resource constraints to urgent pressure for states to meet metrics for timely processing and payment accuracy.[2] AI and advanced automation present an opportunity to revisit how SNAP agencies navigate persistent and emergent challenges.

State and county SNAP agencies are eager to explore the potential for AI-enabled advancements in safe, secure, equitable, and compliant ways. USDA FNS released its first official guidance on automation in SNAP in early 2024 to support states undertaking automation activities to streamline processes. As of September 2024, FNS has yet to release guidance that specifically refers to AI implications in SNAP, and SNAP state agency leaders across the country share an interest in partnering with federal leaders and experts to accelerate their understanding of safe and effective uses of AI and automation to improve customer experience and reduce administrative burden.

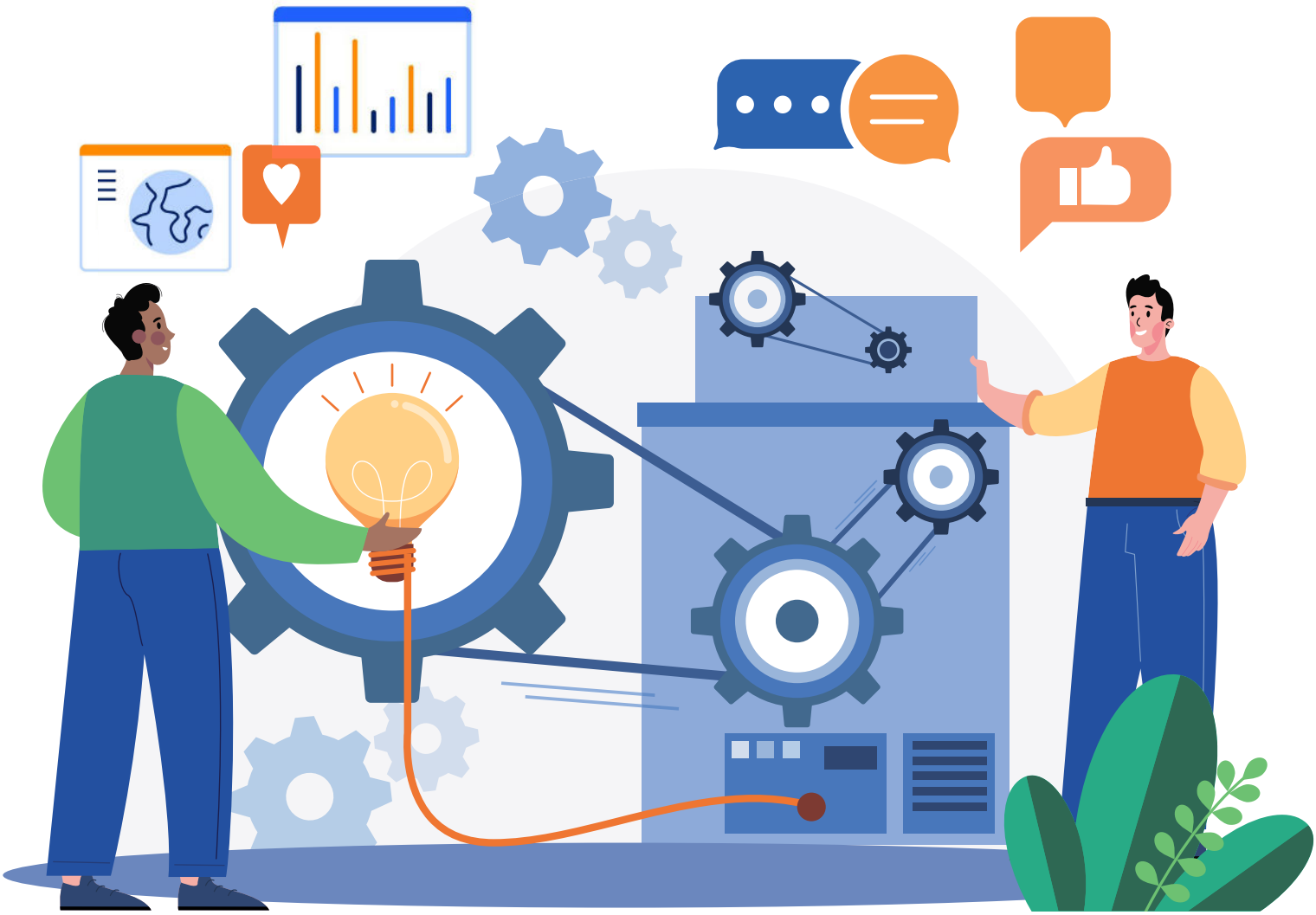

Table 1. Summary of Federal Policy Relating to the Use of AI in SNAP

Executive Order (EO) 14110, titled "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence"[3] Released October 30, 2023
This EO contained sweeping tasks for federal agencies aimed at governing the development and use of AI safely and responsibly. This included a requirement for the Secretary of HHS and the Secretary of Agriculture to publish frameworks addressing the use of AI in the implementation of public benefits and services administered by their respective agencies.
Food and Nutrition Services Guidance on the Use of Advanced Automation in SNAP[4] Released January 10, 2024
In early 2024, USDA FNS released guidance on how automation can be used in SNAP, including where state agencies need to seek approval and at what level. The guidance affirmed that any use of AI must be approved as a waiver or demonstration project, though some forms of advanced automation and Robotic Process Automation (RPA) may be implemented as a major change[5] (see more in Table 2). The guidance also outlined information that states should include in waiver or demonstration requests, such as detailing how the technology will impact program access and administration, merit staff personnel, and security, as well as what monitoring and auditing procedures will be put in place.
Office of Management and Budget Implementation Memorandum, "Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence"[6] Released March 28, 2024
This memo accompanied the EO described above and outlined specific requirements and timelines for federal agencies consistent with the AI in Government Act of 2020, the Advancing American AI Act, and EO 14110. This includes how and when agencies should undertake such actions as appointing a Chief AI Officer, developing and publishing a strategy for responsible AI use, implementing risk management practices for use cases determined to be rights- or safety-impacting, and more.
USDA Framework for State, Local, Tribal, and Territorial Use of Artificial Intelligence for Public Benefit Administration[7] **+** **HHS Plan for Promoting Responsible Use of Artificial Intelligence in Automated and Algorithmic Systems by State, Local, Tribal, and Territorial Governments in Public Benefit Administration[8]** Released April 29, 2024
The ensuing USDA and HHS AI Frameworks provided recommendations, supports, and example use cases deemed to be rights- or safety-impacting, as well as those presumed to be lower-risk. The USDA framework provided recommendations for balancing the opportunities and risks of AI in state, local, tribal, and territorial (SLTT) administration of FNS nutrition programs (including SNAP), set forth ways in which FNS can support SLTT with adoption, and shared ways to align changes with existing requirements and frameworks. The framework also provided guiding principles for the implementation of AI in public benefits, such as protecting rights and safety, advancing equity, upholding accountability, and promoting responsible innovation that engenders public trust.

Policy Pathways for Exploration of AI and Automation

As public human services agencies search for the best entry points to begin using AI in their programs, they must work within the realm of existing state and federal policy. SNAP is a highly regulated federal program, and thus has strict requirements around what is and is not allowable. Even so, since SNAP is a state- and county-administered program, there are opportunities for state agency leaders to explore new ways to administer the program that work for the state's needs within the federal bounds. Depending on the desired policy or programmatic change, agencies can explore different pathways for experimentation. Each path comes with varying requirements and levels of federal approval. Table 2 outlines the pathways available for SNAP agencies to explore innovative approaches to program administration.

Table 2. Policy Avenues for SNAP Innovation

Policy Format	Defining Characteristics	Approval Needed from FNS	Example	Application for Automation/AI
State Policy Options[9]	Existing approved options chosen each year through annual state plans	None; once policy options are created by Congress, states may choose to adopt them	Length of a household's certification period	No current state policy options about using AI or automation; however, these technologies could ease administration of these options, such as flagging households for potential eligibility for certain deductions
Major Change[10]	Signifies a substantial change in the way SNAP applicants and participants interact with the SNAP agency, including added functionality. Comes with extensive reporting requirements	FNS must acknowledge major change requests, and strongly encourages states to wait for acknowledgement before implementation	Creation of new call center or virtual assistant	Many, if not all, uses of advanced technology will likely require a major change form to be completed
Waivers[11]	May deviate from regulatory provisions but must conform with existing federal law. Require justification on why they are needed and who they will impact	FNS must approve before implementation, usually for a temporary period	Telephonic signature allowing states to take applications over the phone	Would likely be required for new types of automation or use of AI not yet approved and outside of regulations
Demonstration Project[12]	Projects that waive requirements of Food and Nutrition Act and SNAP regulations. Can be used to test new ideas, but approval is complex. Projects must be cost neutral, include a robust evaluation, cannot be in place for longer than 5 years, and cannot impact more than 15% of the population	FNS must approve before implementation	Elderly Simplified Application Project (ESAP) to extend certification periods and remove recurring interviews for households with elderly members	Would likely be required for new types of advanced automation or AI which would require changes not currently allowable by the Food & Nutrition Act

Policy Limitation: Merit Staffing Requirements

While there is not yet federal guidance specifically detailing what AI can and cannot be used for in a state SNAP agency, policy requirements for certification functions in SNAP—here referred to as "merit staffing rules"—will undoubtedly influence allowability of AI-enabled solutions.

In SNAP, only state "merit staff"[13] can perform eligibility and certification functions, including interviews, eligibility determination, and accepting and processing appeals, complaints, or reported changes that could impact eligibility or benefit levels. In prior guidance and interpretation,[14] bots are considered non-merit staff and prohibited from performing these functions.

Some SNAP agencies already use "non-merit staff"[15] to support specific tasks, most commonly in call centers. Allowable tasks for non-merit staff include answering applicant and customer questions about the program, assisting individuals with completing applications, being able to read (but not edit) an individual's case, and sharing current case status with applicants. In March 2024, FNS released a toolkit to explain what non-merit staff are permitted to do in SNAP, with or without prior approval from FNS. Currently allowable functions for non-merit staff, described in Table 3, may represent a starting point for agencies considering opportunities for both automation and for potential AI activities.

Table 3. Non-merit staffing activities that may be completed using AI, with appropriate federal notification and approval

Requiring a major change notification only	Scanning documents
	Performing data matching that does not require household contact
	Providing general information (like office location)
	Providing case information such as case or application status
Requiring a major change notification and explicit FNS approval	Answering questions about the program
	Scheduling and rescheduling appointments
	Supporting online screening for likely eligibility

Policy Considerations: Rights- and Safety-Impacting Uses

To ensure equity, privacy, and accuracy in SNAP case processing, agencies must also consider safety, rights, security, risk, and bias. The OMB memorandum places significant emphasis on defining and detailing means to mitigate potential harm of rights- and safety-impacting uses of AI, while the FNS framework provides example use cases that may be rights- or safety-impacting and the potential requirements of agencies pursuing these uses.

Uses of AI that are rights- or safety-impacting present the most risk and may require FNS notification, review, and governance. The FNS framework has provided multiple examples of these uses, listed in Table 4 alongside simplified definitions of rights- and safety-impacting AI put forth by the U.S. Chief Information Officers Council.[16]

Table 4. Simplified Definitions and Uses Of AI that Present the Most Potential Risk

Rights Impacting AI: AI whose output serves as a basis for decision or action that has a legal, material, or similarly significant effect on an individual's or community's civil rights, civil liberties, or privacy, equal opportunities, and/or access to critical resources or services.
Benefit Administration
Integrity and Enforcement
Workforce Management (assigning cases to workers based on predicted complexity)
Employment and Training Evaluation (determining suitability for and matching with opportunities)
Translation of Program Materials and Live Translation
Safety-Impacting AI: AI that has the potential to meaningfully impact the safety of human life or well-being, climate or environment, critical infrastructure, and/or strategic assets or resources.
Health Screening or Risk Assessment
Nutrition Tailoring

Some uses of AI have not been identified as inherently rights- or safety-impacting; however, these uses could impact rights or safety if applied without proper safeguards. Examples of uses of AI that are not inherently rights- or safety-impacting, according to the FNS framework, include:

- Interactive Voice Recognition (IVR) technology that uses voice recognition to assist callers in navigating menus and routing calls;
- Optical Character Recognition (OCR) that transcribes information from uploaded documents or paper forms;
- Chatbots using natural language processing to understand questions, with human-coded, logic-based preset outputs, not generative AI responses;
- Sentiment analysis/natural language processing that categorizes themes and trends in unstructured text for customer experience and customer satisfaction surveys, helpdesk tickets, or social media posts referencing a benefits programs;
- Creation of synthetic data for testing information technology systems; and
- AI-enabled search tools that answer questions about program requirements or policies by directing caseworkers to the relevant section of an official policy manual or other primary source.

As with all uses of AI, human oversight and review is crucial and can present lower risks if the proper processes are followed. Table 5 offers ways to assure critical human oversight over AI outputs.

Table 5. Examples of Humans in the Loop for Potential SNAP AI Use Cases

AI Function or Output	Human Oversight
AI-enabled tool is used to create, summarize, or transform (such as rewriting in plain language) public facing program materials	A human with program expertise holds accountability for the output and reviews for validation
Translating vital documents and/or public facing program materials	A skilled human translator validates and holds accountability for the output
Providing auto captioning	Auto-captioning functionality is offered in addition to having a live American Sign Language interpreter
Converting scans of physical documents into machine readable formats for further analysis and/or improved accessibility	A human with program expertise provides validation for both input (original document) and outputs of (document in a machine-readable format)

The FNS framework also places emphasis on mitigating bias in the use of AI. According to the framework, agencies employing AI should proactively assess and mitigate factors that contribute to bias, algorithmic discrimination, or inequitable outcomes before developing or procuring the technology. The framework encourages agencies to proactively integrate bias assessments into processes for design, development, implementation, testing, training, and ongoing monitoring. These processes should include all three categories of AI bias identified by the National Institute of Standards and Technology's publication "Towards a Standard for Identifying and Managing Bias in Artificial Intelligence":[17]

- **Systemic bias:** Procedures and practices that operate in ways that result in certain groups being advantaged or favored and others being disadvantaged or devalued. Systemic bias can be present in AI datasets; organizational norms, practices, and processes; and the public interacting with AI systems.
- **Statistical and computational bias:** Errors introduced when an AI is trained on data that is not representative of the population.
- **Human-cognitive bias:** How an individual or group perceives and uses AI information to make a decision or fill in missing information, or how humans think about the purposes and functions of an AI system.

As agencies begin to explore and evaluate potential AI uses, they must consider rights, safety, security, and risk, before, during, and after implementation. APHSA will further discuss these topics, centering input from current SNAP customers, in the third and final brief of this series.

Conclusion

This publication is part of APHSA's AI-Powered SNAP Modernization project, which explores AI in SNAP case processing and brings awareness to how AI might enhance operations when grounded in equity and focused on customer needs. This project aims to not only add to existing knowledge of AI in SNAP, but also to provide a foundation that state, county, city, and federal policymakers can use to inform their decisions and priorities. APHSA will remain engaged in and continue to lead conversations around AI in human services. Looking forward, the final brief in the series will bring customer voice into the AI conversation and focus specifically on issues of equity in the integration of AI in SNAP case processing.

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For more information about APHSA's efforts around artificial intelligence in human services more broadly, visit our web page at https://aphsa.org/APHSA/Focus_Areas/AI.

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Endnotes

[1] You can find the second brief here: https://files.constantcontact.com/391325ca001/4f32cd0e-8383-4628-b82b-c40f29ee2e8f.pdf

[2] As an example of how capacity and resource challenges show up for SNAP Agencies, see the Letter from Secretary Vilsack to Governors on SNAP Performance and Operations here: https://www.fns.usda.gov/snap/governor-letter-performance-operations

[3] You can find EO 14110 here: https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/

[4] The FNS guidance can be found here: https://www.fns.usda.gov/snap/advanced-automation

[5] For definitions of and distinctions between automation, RPA, and AI, see AI-Powered SNAP Modernization: An Introduction to Current and Potential Uses of AI in SNAP Case Processing.

[6] The OMB memo can be found here: /M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf

[7] The FNS framework can be found here: https://www.fns.usda.gov/framework-artificial-intelligence-public-benefit

[8] The HHS framework can be found here: https://www.hhs.gov/sites/default/files/public-benefits-and-ai.pdf

[9] For a full list of state policy options, see: https://www.fns.usda.gov/snap/waivers/state-options-report

[10] Policy regarding major changes can be found at 7 CFR § 272.15. The January 2016 FNS Implementation Memo can be found here: https://www.fns.usda.gov/snap/admin/program-design-major-changes-implementation-memo

[11] Policy regarding waivers can be found at 7 CFR § 272.3(c). For a database of SNAP rule waivers, see: https://www.fns.usda.gov/snap/waivers/rules

[12] Policy regarding demonstration projects can be found at 7 U.S.C. § 2026(b).

[13] In accordance with 7 CFR 272.4 (a)(1), merit staff are state agency personnel used in the certification process shall be employed in accordance with the current standards for a merit system of personnel administration or any standards later prescribed by the U.S. Civil Service Commission under section 208 of the Intergovernmental Personnel Act of 1970.

[14] The FNS guidance for advanced automation can be found here: https://www.fns.usda.gov/snap/advanced-automation

[15] Non-merit staff are any staff who are not state agency personnel under a merit-based system.

[16] Simplified definitions from the Office of the Federal Chief Information Officer can be found here: https://www.cio.gov/ai-policy/

[17] The NIST publication can be found here: https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1270.pdf