

May 29, 2025

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Office
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2415 Eisenhower Avenue
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Re: Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan Docket ID No. NSF-2025-OGC-0001

As the bipartisan, national membership association representing state, county, and city human services agencies, the American Public Human Services Association (APHSA) welcomes the opportunity to submit comment on the Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan.

APHSA's members administer economic assistance and child and family well-being services and benefits – such as the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), child welfare and others – at the state, county, and city levels. Our members are experts in overseeing and aligning these programs, which bolster community well-being through access to food, health care, employment, child care, and other key building blocks. In addition, APHSA's members are leading experts in data analysis, health and human services Information Technology (IT) systems, workforce development and training, and legal dimensions of the sector.

By convening affinity groups such as IT Solutions Management for Human Services (ISM)¹ and the Public Human Services Attorneys (PHSA),² APHSA stays informed on common interests and concerns of IT and legal professionals in the human services sector. APHSA additionally convenes a Process Innovation Community of Practice focused on advancing process improvements in human services for more efficient service delivery and improved customer experience. The insights and recommendations contained in this comment letter are deeply informed by the insight and input of these member groups.

State and local human services agencies are increasingly exploring how AI can enhance program administration, improve service delivery, and address workforce capacity challenges. However, a rapidly changing landscape, limited worker and agency capacity, and fragmented regulatory frameworks present persistent challenges to innovation. A targeted national AI research and

¹ For more information on ISM, see <https://aphsa.org/ISM/>.

² For more information on PHSA, see <https://aphsa.org/PHSA/>.

development strategic plan can unlock AI's potential in public benefit administration while safeguarding privacy, transparency, and accuracy.

Priority Research Needs & Recommendations

Responsiveness, Transparency, and Trust in AI Decision Making

As public service agencies explore and utilize artificial intelligence, it is essential to prioritize the development of tools that are responsive, transparent, and trustworthy. Additional research is needed in three areas: explainability of AI decision-making, identifying best practices in maintaining AI system accuracy and relevance; and mitigating risk from imprecise algorithms.

Explainability and Awareness: A critical area for research is understanding how public benefit agencies, staff, and customers interpret and respond to AI-driven decisions. Human Services agencies are eager to harness AI capabilities to improve program operations and performance; however, these agencies need to develop robust, clear processes with plain-language guidance for implementation and use of AI systems, accompanied by readily available experts to best support decision-making and technological trustability. Additionally, ongoing research into public perceptions of AI in human services can inform the development of communications and feedback mechanisms that promote public accountability and oversight.

Adaptability and Flexibility of AI Tools: Given the evolving nature of policy and regulation related to public benefit programs, research is needed to identify best practices for maintaining AI system performance and relevance over time. The Strategic Plan should include frameworks for continuous monitoring and retraining as conditions change. Because AI systems are to be used across sectors and jurisdictions, agencies need research and guidance on how to tailor or adapt systems to local legal, policy, and demographic differences and needs.

Risk Management and Accuracy: Human services agencies are responsible for serving a wide swath of the general population on a routine basis. Agencies need research and tools for the identification and mitigation of potential risks, such as errors in outputs or more systematic issues like monitoring for signs of algorithmic bias in AI tools to effectively serve their client populations. Research could include evaluating the performance of models across demographic groups and understanding the impacts of the system's decisions, with a heightened focus on decisions related to benefit eligibility and access.

Recommendation: Advance research on AI explainability and public understanding.

- Support research into effective methods for communicating AI logic, purpose, and limitations to agency staff, leadership, and the public.
- Explore public perceptions of AI use in benefit administration to guide development of oversight, transparency, and appeal mechanisms.



- Evaluate implementation approaches to prioritize those that promote public trust, responsible decision-making, and diligent compliance among caseworkers and customers.

Recommendation: Advance research that explores and improves the adaptability & accuracy of models across jurisdictions.

- Develop frameworks for the retraining and continuous monitoring of AI models.
- Support the evaluation of models used for decisions related to public benefit eligibility, access, and delivery.

Human-Centered AI Design and Use

Human-centered design must be at the core of AI development, particularly in high-stakes public service contexts.

Human-First AI Use: Research is needed to explore how AI can be designed to enhance (rather than replace) human judgment and support caseworkers without diminishing their crucial role, especially in case management situations that may affect a person's ability to access life-supporting services. Research is needed to explore how use of AI can reduce administrative burden for caseworkers and recipients of government benefits and services, and free up time for staff to focus on higher-impact, relational work. Researchers should also explore the effects of AI integration on the stress and service delivery capacity of caseworkers, particularly as it relates to fears of job loss and ability to provide meaningful, tailored care.

User Testing: Incorporating feedback from those who use and are affected by AI tools, namely front-line staff and customers, can significantly improve their effectiveness, relevance, and adoption. To ensure systems meet real-world needs, iterative user testing must be prioritized. Iterative design methods, such as co-design and human-centered design, should be central to the development of AI tools that affect end users.

Staff Capacity and Knowledge: As AI systems are introduced into human services agencies, staff capacity and knowledge will be crucial determinants of successful adoption. Research should investigate the training, skills, and work supports frontline workers need to effectively engage with AI tools. This includes identifying the gaps in technology proficiency, as well as the types of training and support structures staff need. Additionally, research can explore how agency leadership can influence staff adoption of AI tools through engagement and change management.

Recommendation: Invest in human-centered, user-focused AI research

- Promote human-first design and testing of AI systems to support—not replace—front-line decision-making, particularly in complex, high-stakes service delivery.
- Prioritize research that examines how AI improves outcomes overall and reduces disparities in outcomes, access, and user experience.
- Fund studies on risk mitigation in eligibility and case prioritization tools.

- Promote the development of AI systems that are designed in partnership with customers and front-line staff, applying participatory and co-design methods to ensure tools support dignified service.

Recommendation: Strengthen research on workforce readiness and capacity building.

- Conduct national assessments of staff knowledge, digital literacy, and readiness to interact with AI tools.
- Evaluate the effectiveness of different training models and implementation supports, including embedded coaching, real-time assistance, and peer learning networks.
- Develop guidance on change management and leadership practices that foster trust and confidence in AI adoption within public agencies.
- Conduct studies examining workload, burnout, and well-being of staff in AI-augmented workflows, identifying design strategies that improve job satisfaction and service quality.

Recommendation: Foster cross-sector partnerships and collaboration.

- Facilitate partnerships among researchers; local, state, and federal agencies; technology developers; academics; and people with lived experience accessing public benefit programs to ground research in practice and user experience.
- Encourage collaboration with civic tech organizations, think tanks, academic institutions, and community-based organizations to accelerate meaningful innovation.
- Support interdisciplinary research teams that bring together expertise from data science, AI and technology, human services, law, ethics, design, and behavioral science.

Technology and Data Infrastructure

To develop AI tools and systems that meet the needs of agencies, AI researchers must first understand the current landscape of agency technology and data infrastructure. This includes examining what technologies agencies currently have access to, what worker capabilities are, and how data is being collected and handled.

Data Quality and Standards: To strengthen and ensure the accuracy of AI systems, research is needed to assess the completeness, quality, and interoperability of the data that state, county, and city agencies currently have. Researchers could explore tools or practices for data standardization and validation, such as systems that flag and account for inaccurate or incomplete data and/or help agencies develop and adopt shared data standards and definitions.

Data Governance and Interoperability: For AI tools to function effectively across agencies and programs, agencies must have access to robust data governance and interoperability standards. Research on how to design systems with data privacy and security at the forefront is crucial, ensuring compliance with all relevant regulations while enabling responsible data sharing. Researchers could elevate successful case studies for agencies to follow where relevant.

Technology Readiness and System Assessment: Researchers should assess the current technological capacity of agencies, including existing systems, IT skills, and integration barriers. Studies could explore how agency readiness varies across contexts and identify enabling conditions for successful AI adoption. Research on the most relevant system architectures, models, and platforms for agencies would allow agencies to make informed decisions about the most helpful and efficient systems for their needs. Considerations for explainability, scalability, interoperability, and long-term sustainability will also be crucial in this process.

Recommendation: Ensure AI systems are adaptable and policy responsive.

- Fund research on frameworks for continuous monitoring and retraining of AI tools in response to shifting policy and demographic trends.
- Support development of modular, generalizable AI systems that can be adapted to varied state and local legal and policy contexts.
- Identify methods to test system adaptability across jurisdictions without sacrificing accuracy or accountability.

Recommendation: Advance research on technology readiness, data infrastructure, and interoperability.

- Fund foundational research on the quality, completeness, and standardization of administrative data used in AI systems.
- Conduct technology readiness assessments to identify infrastructure gaps and inform implementation strategies.
- Identify best practices for privacy-preserving, secure data-sharing architectures that comply with federal and state regulations.
- Promote case studies and pilot programs that demonstrate interoperable systems and responsible data governance across agencies.

APHSA welcomes the opportunity to elaborate upon the insights and recommendations provided in this letter. APHSA is committed to supporting state and local human services agencies' mission in planning for and implementing AI solutions in public benefit administration while safeguarding privacy, transparency, and accuracy. For any questions or follow-up, please contact Jessica Maneely or Marci McCoy-Roth.

Respectfully,

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