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Request for Information: Development of a 2025 National Artificial Intelligence Research and Development Strategic Plan

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Submitter Information

Organization: Child Trends

General Comment

Please find attached Child Trends' response to the National Science Foundation's (NSF) Request for Information (RFI), Docket ID No. NSF-2025-OGC-0001: 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan.

Attachments

Child Trends Comment_NSF RFI_2025 National AI RandD Strategic Plan

May 29, 2025

Suzanne H. Plimpton
Reports Clearance Officer
National Science Foundation
2415 Eisenhower Ave
Alexandria, VA 22314

Docket ID No: NSF-2025-OGC-0001

Dear Ms. Plimpton,

Child Trends is pleased to respond to the National Science Foundation's (NSF) Request for Information (RFI), Docket ID No. NSF-2025-OGC-0001: *2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan*.[i] The rapid evolution of AI and the development of frontier models—highly advanced models pushing the boundaries of AI capabilities—hold immense promise for improving the lives of Americans. These advances could drive unprecedented innovation across science, technology, and public service. However, with increasing capabilities, AI systems also present complex challenges that require proactive research, governance, and transparency to build and maintain public trust with AI applications. Current concerns include both intentional misuse (such as malicious actors misusing frontier models to cause harm) and unintentional risks (such as model malfunctions that result in unintended consequences). Of particular concern are the emerging capabilities for deceptive behaviors in AI systems—i.e., behaviors that may mimic intent, mislead users, or bypass safeguards.[ii] Without rigorous oversight, such behaviors could lead to serious—and potentially irreversible—harms, especially to vulnerable populations such as children.

This response addresses two areas mentioned in the RFI: (1) research into AI standards, security, and reliability; and (2) advances in AI for public sector and government applications. Our insights draw from our active work with AI in social science research,[iii] our decades of experience with emerging technologies as they intersect with child development and family systems,[iv,v,vi] and our knowledge of international resources such as the International AI Safety Report.[vii]

Comments Regarding Research into AI Standards, Security, and Reliability

Stakeholders involved in developing and deploying AI systems need comprehensive assessment frameworks, in lieu of red teaming, to ensure that AI systems are safe and reliable for children. To ensure safety and ethical functionality of AI systems, developers often employ "red teaming," a method that involves the use of extreme, often harmful questions to uncover weaknesses and test resilience. While effective, this method can expose participants to distressing or psychologically harmful content.[viii] For this reason, children and youth should not be involved in red teaming activities, as their cognitive and emotional development makes them especially vulnerable to the negative impacts of such exposure. Instead, assessment of AI systems should be based upon a comprehensive assessment framework.[ix]

Researchers, policymakers, and developers need robust simulation models to anticipate the societal impacts of AI**.** Current assessment techniques for AI systems remain nascent and fragmented, making it difficult to anticipate the full range of their potential societal impacts.[x] Simulation and modeling frameworks offer a way to explore "what-if" scenarios, test policy responses, and identify potential risks before they materialize in the real world. By complementing observed data, these models will help uncover impacts that are complex, indirect, or difficult to measure in real time. Investing in such models will enable AI regulations and policies to be not only reactive, but also proactive and forward-looking.

These simulation models should be grounded in broad, interdisciplinary evidence, allowing policymakers to account for the complex and interconnected trajectories of technological development.[xi] By simulating both potential benefits and harms across multiple domains, this type of assessment can offer valuable insights to support more resilient AI governance policy.

Simulation models are particularly important for evaluating the potential impact of AI applications in domains such as mental health,[xii] bullying prevention,[xiii] and the child welfare system.[xiv] When thoughtfully developed, AI systems in these areas have the potential to expand access to care, improve early intervention, and support more personalized services for children and families. At the same time, their effects may be subtle, cumulative, or context-dependent, -- making them difficult to assess using traditional evaluation methods. To address this, simulation models must be designed with a "whole child" perspective,[xv] integrating developmental, social, emotional, and environmental factors. Only through such a comprehensive approach can researchers, developers, and policymakers begin to understand and mitigate the unintended consequences of AI on children and families, while also harnessing its potential to support their well-being.

Comments Regarding Advances in AI for Public Sector and Government Applications

One of the most promising applications of AI in government is its potential to enhance public data systems. Fragmented and siloed information continues to hinder effective public service delivery. Based on Child Trends' work with federal, state, and local government agencies,[xvi, xvii, xviii] we have found that AI holds significant potential to power intelligent integration of data systems, allowing for the matching of unique identifiers across agencies. For example, such integrated systems would facilitate cross-program coordination, improve access to services, and reduce bureaucratic burden.

Recently, we have collaborated with state and local agencies to apply AI in the development of integrated data systems that support child and family well-being. This work involves mapping data sources across agencies, developing data pipelines, aligning data exchange standards, and providing technical assistance to support data governance bodies and to coordinate the efforts of data-contributing entities and data system users. For example, in one state, we are using AI to link the records of children and families to support presumptive eligibility determinations. In another, we are using AI to identify service gaps by integrating education, health, and social service data to better inform policy decisions. From this work, we have found that AI can strengthen interagency data sharing while maintaining privacy and ethical standards.

Thank you for the opportunity to comment on this proposed strategic plan. We are happy to expand on any of these points as you seek solutions that are mindful of our suggestions. If you have any questions, please contact Winnie Li at Child Trends.

Sincerely,

/s/

Kristen Harper

Vice President of Public Policy and Engagement

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[i] This document is approved for public dissemination. The document contains no business-proprietary or confidential information. Document contents may be reused by the government in developing the 2025 National AI R&D Strategic Plan and associated documents without 90 FR 17836 attribution.
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