

Addressing the U.S. Labor Market Impacts of Advanced AI

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AI is poised to reshape the U.S. labor market, with estimates suggesting that 80% of the workforce will be impacted by the diffusion of current AI systems. While AI promises significant economic benefits through accelerated growth and technological innovation, rapid advancements will fundamentally alter skill demands and cause many workers to make job transitions.

Some leading AI developers project that autonomous AI agents could surpass human performance in most cognitive work tasks within just a few years. The labor market impacts of such an advancement are likely to be profound. However, considerable uncertainty remains about exactly how these advances will affect wages and employment patterns. This combination of significant potential impacts and uncertainty about when and where they will emerge makes addressing AI's labor market effects especially challenging.

A dual-pronged policy response is needed—one that both monitors AI's impact and strengthens society's ability to adapt to potentially rapid economic change. This brief recommends policy actions to monitor impacts through high-frequency data collection on AI adoption and use, enhanced tracking of job transitions, and focused assessments of particularly vulnerable worker populations. It further recommends building adaptive capacity by fostering public-private partnerships to broaden access to AI-driven productivity gains, developing rapid-response frameworks that enable policy agility in the face of uncertainty, and exploring how a scalable automation adjustment assistance program could be designed that is responsive to labor market impacts.

These measures are vital to boost the economic security of American workers and ensure that AI-driven productivity fuels economic growth and national competitiveness.

The policy challenge

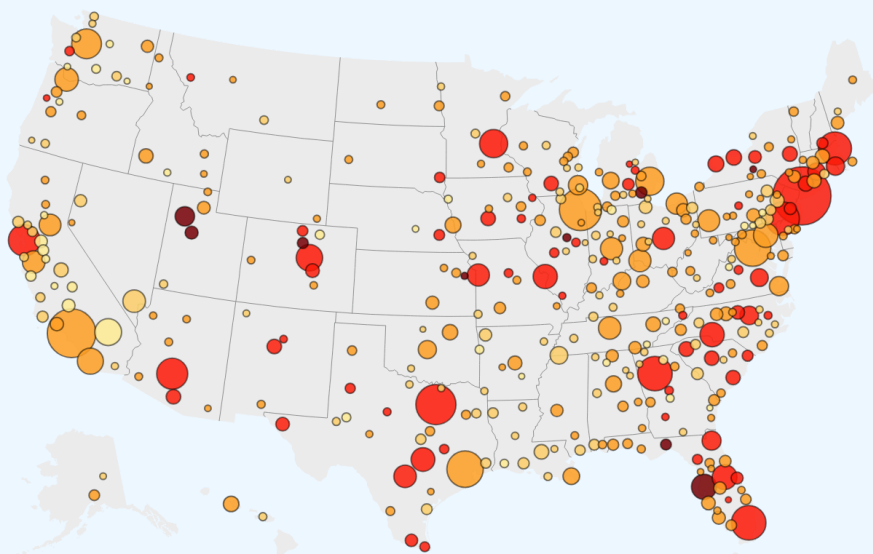
AI is already reshaping our workforce, with substantially more profound impacts ahead. Current general-purpose AI is likely to transform the nature of many existing jobs, create new jobs, and eliminate others. Impacts on employment and wages will vary significantly across sectors and worker groups, though roughly 80% of the U.S. workforce is likely to be impacted in

some way by today's AI systems as they are adopted across the economy.¹ Some leading AI developers predict autonomous AI agents capable of replacing cognitive workers could emerge within two to three years.² In this scenario, policymakers should expect profound impacts on the labor market.³ Some workers will benefit greatly while many others will face displacement and reduced economic security.

Addressing workforce disruption from AI is necessary to promote human flourishing and ensure continued U.S. AI leadership. The urgency of this challenge is reflected in public concerns—as of January 2025, 32% of surveyed Americans expressed concern about their own job eventually being automated.⁴ This apprehension matters because continued AI progress depends on broad social support. For American AI leadership to endure, workers must see AI advances as aligned with their own economic interests, not opposed to them. Therefore, effective policies must strike a balance: supporting workers through transitions while simultaneously encouraging AI innovation, economic growth, and national competitiveness.

Worker Vulnerability to AI-Driven Disruption

Color-coded to show the percentage of workers in each metro area forecast to be highly vulnerable to AI-driven disruption, larger bubbles represent greater total # of workers impacted



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Figure 1 | Worker vulnerability

Percentage of population vulnerable to AI-driven disruption in each metro area.

Source: Manning and Aguirre, Forthcoming 2025

¹ Eloundou, Manning, Mishkin and Rock, 2024, [GPTs are GPTs: An Early Look at the Labor Market Impact Potential of LLMs](#), Science.

² Anthropic, 2025, [Response to the Request for Information on the Development of an Artificial Intelligence Action Plan](#).

³ For a more complete discussion of the potential range of labor market impacts from advanced general-purpose AI see pp. 110-118 of the [2025 International AI Safety Report](#), Section on Labor Market Risks.

⁴ YouGov US, 2025, [How worried are Americans about being automated out of a job?](#)

Policy responses require flexibility amid uncertainty. The pace, scale, and distribution of labor market impacts remain difficult to predict with certainty.⁵ Nevertheless, mounting evidence suggests we should approach this transition with caution and preparedness rather than complacency. Effective policy planning demands real-time labor market data collection to identify which workers are being affected and how impacts manifest across sectors. This visibility can enable policymakers to determine when and where targeted government action may be necessary.

Policy options

This brief recommends a dual-pronged policy strategy: **monitor impacts** and **build adaptive capacity**.

Monitor impacts

- **Sustain high-frequency data collection on AI adoption and business impacts.** Ensure that the Office of Management and Budget approves the pending request to add an AI supplement to the Census Bureau's [Business Trends and Outlook Survey](#).⁶ This would enable biweekly data collection from tens of thousands of firms across the U.S. on their usage of AI and its reported impact on hiring. The AI supplement that ran as part of the Business Trends and Outlook Survey between September 2023 and February 2024 provided the single best monthly estimate of business-level AI adoption in the US. Continued high-frequency data collection on AI adoption going forward can enable researchers to better identify the impact of AI diffusion on key outcomes like wages, employment, and demand for skills.
- **Encourage leading AI companies to share information about AI's economic impacts.** Leading AI developers should be encouraged to regularly publish anonymized information about the use of their general-purpose AI across the economy. Anthropic recently started to do this with its [Economic Index](#), but this effort can be expanded to allow for improved visibility into AI's automation impacts. Improved economic impact reporting should focus on identifying automation patterns from usage data, including data on high-volume API use and business use of frontier AI systems.
- **Improve occupational transition tracking.** Direct the Bureau of Labor Statistics to collect and publish quarterly job transition data at the occupation-to-occupation level, rather than only industry-to-industry transition data, so that researchers and government officials can be better equipped to identify the relationship between AI usage and job changes over time.

⁵ Manning, 2024, [Predicting AI's Impact on Work](#), GovAI Blog Post.

⁶ Dinlersoz, 2024, [Measuring AI Use by U.S. Businesses](#), Federal Economic Statistics Advisory Committee Presentation

- **Initiate high-risk occupation monitoring.** Establish specialized tracking for occupations with the highest projected vulnerability to AI-driven disruption in the near term (see [Figure 1](#) and [Table 1](#)). Prioritize data collection on AI adoption, hiring, and job separations in these occupations so that researchers and policymakers can assess the accuracy of present-day predictions about disruption potential for workers in these jobs. This data can then be used to develop more accurate forecasts of future impacts across the economy.
- **Streamline researcher access to critical data.** Current processes for accessing Census confidential data, for example, involve extensive paperwork and reviews that take several months. Approved researchers are then sometimes required to travel to designated facilities to access and use government data. To accelerate research on AI’s workforce impacts and provide real-time insights for policymakers, OSTP should task the Census Bureau to develop secure remote access protocols that enable qualified researchers to work with relevant datasets on a rolling basis. Ensuring that independent researchers have streamlined access to government data on AI adoption and economic outcomes will allow them to connect these insights with private sector data on job postings and AI usage, creating a more timely and comprehensive understanding of how AI is reshaping labor markets.

Occupations with significant labor force participation and high vulnerability to AI-driven disruption

Source: Manning and Aguirre, Forthcoming 2025

Occupation	Total Employment
Customer service representatives	2,858,170
Sales representatives of services	2,382,660
Receptionists and information clerks	1,023,000
Medical secretaries and administrative assistants	749,500
Hosts and hostesses, restaurant, lounge, and coffee shop	393,030
Counter and rental clerks	382,330
Public relations specialists	241,600
Insurance claims and policy processing clerks	201,650
Dispatchers, except police, fire, and ambulance	192,660
Court, municipal, and license clerks	151,400
Data entry keyers	154,290
Legal secretaries and administrative assistants	131,210
Psychiatric technicians	111,220
Web and digital interface designers	102,220
Public safety telecommunications	97,820
Web developers	90,280
Tax preparers	82,500
Telemarketers	81,500

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Table 1 | Occupations with significant employment and high vulnerability to AI-driven disruption

Build adaptive capacity

- **Explore establishing a scalable automation adjustment assistance program that can be responsive to labor market impacts.** Task the

Department of Labor to explore establishing an automation adjustment assistance initiative that can deliver targeted support to affected workers in high-risk occupations, and could flexibly expand as needed based on AI automation and job transition data. Such a program could be modeled in part after certain aspects of previous bipartisan initiatives like [Trade Adjustment Assistance](#) (TAA), which aimed to support American workers whose jobs were affected by trade with China.⁷

- **Champion widespread access to AI's productivity benefits.** Coordinate with Congress, relevant federal agencies, industry associations, and AI companies to support programs that ensure AI productivity gains benefit workers across all economic sectors. This includes collaborating with states to integrate AI literacy as a core component of educational curricula,⁸ and establishing public-private partnerships that can make productivity-enhancing AI tools more accessible to a wide range of workers.
- **Establish an adaptive response framework.** Bring together industry leaders, relevant agency heads, and academic experts to develop scenario-based planning for AI workforce impacts. Task this group with defining metrics to track the pace and scale of labor market disruption, preparing coordinated policy responses calibrated to different impact scenarios, and establishing mechanisms for agencies to adapt rapidly as AI capabilities evolve. This approach would enable policymakers to adjust regulations, funding allocations, and support programs based on emerging trends, rather than reacting after significant disruption has occurred.⁹

About the Author



Sam Manning @ [Twitter] [LinkedIn] [Instagram]

Senior Research Fellow, Centre for the Governance of AI

Sam's work focuses on measuring the economic impacts of frontier AI systems and designing policy options to help ensure that advanced AI can foster economic prosperity. He previously conducted economic impacts research at OpenAI. Sam has an MSc in International and Development Economics from the University of San Francisco.

This RFI response reflects the views of the author, not the views of their employer.

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⁷ See [Hyman, Kovak, and Leive, 2024](#) and [Hyman, 2022](#) for evaluations of TAA's impact.

⁸ For example, the New York State University system [recently announced](#) that AI education would be a core component of the curriculum starting in 2026, and learning outcomes would be modified to ensure that students have the skills to effectively recognize and use AI.

⁹ Korinek, 2023, [Scenario Planning for an A\(G\)I Future](#).