

The Highest Worker Exposure in the Midwest:

THE IMPACT OF GENERATIVE AI ON THE MINNESOTA JOB MARKET



NorthStar
POLICY ACTION



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Executive Summary

In January 2025, North Star Policy Action published a report analyzing the potential impact of artificial intelligence (AI) on Minnesota workers.¹ In it, we calculated that 17% of the state’s workforce, or roughly 500,000 workers, were at high risk of having their jobs altered or replaced by AI. This analysis drew on a methodology that was created in 2020, two years before the public’s introduction to ChatGPT and the world of Generative AI (GenAI). Given that our previous work did not explicitly consider GenAI, this report utilizes an updated methodology to identify the impact of GenAI on Minnesota workers. In doing so, we find:

- ◆ Approximately **one-third of working Minnesotans, or over 800,000 workers, are in jobs with high levels of exposure to GenAI.** For the purposes of this report, exposure to GenAI indicates half or more of a worker’s tasks could be partially or wholly accomplished by GenAI, meaning that exposure could lead to supplementing existing jobs, rather than replacement.
- ◆ **Minnesota workers have the highest rate of GenAI exposure in the Midwest** and the 10th highest rate in the nation.
- ◆ **Exposure to GenAI is greater among female workers in Minnesota** and in occupations where union membership is lower.
- ◆ Beyond job automation, AI is increasingly playing a role in workplaces through **electronic monitoring and algorithms making crucial employment decisions, such as hiring and firing.** All Minnesota workers could be impacted by these uses of AI.
- ◆ **US workers are expressing increased anxiety about AI and overwhelming support for more regulation of AI.** Recent surveys show that workers in the US appear particularly concerned about AI relative to laborers in other countries.
- ◆ Despite these calls from workers, as well as the advancement of AI technology and the rise of AI adoption in US workplaces, **legislation on AI and labor has remained stagnant in Minnesota.**
- ◆ **Minnesota lawmakers should take steps to pass AI guardrails** that align worker welfare with AI innovation.

¹ Aaron Rosenthal, “Progress and protection: Aligning AI Innovation with Worker Welfare,” North Star Policy Action, January 16, 2025, <https://northstarpolicy.org/progress-and-protection/>.

While it has only been a year since we published our previous work on AI and Minnesota workers, the analysis conducted here is an important and timely improvement on our previous effort for two reasons. First, AI technology is advancing rapidly. AI can complete many tasks today that it could not have accomplished one year ago, leading to an increased impact on workers.

Second, to help us better understand these advancements, North Star Policy Action has partnered with Dr. Manjeet Rege, Professor and Chair of the Department of Software Engineering and Data Science at the University of St. Thomas. As the Director of the Center for Applied Artificial Intelligence at St. Thomas and a co-author on this report, we have greater confidence that our analysis accurately captures the cutting edge of AI's changing role in the workplace.

An Update on AI in the Workplace

RECENT ADVANCEMENTS IN (GEN)AI TECHNOLOGY

Spurred by massive investments, AI capacity is advancing rapidly. While this progression is happening in several aspects of AI technology, it is perhaps most apparent in the growing functionality of GenAI, a form of AI that generates novel and coherent content, generally in response to a human prompt. Today, many GenAI models are household names, including OpenAI's ChatGPT, Anthropic's Claude, and Google's Gemini.

While advertisements for these models tend to emphasize their capacity to respond to personal requests (e.g., create a playlist for a specific road trip), GenAI offers broader functionality in the workplace. Tasks that may have taken hours or even days for a human to complete now can be done in seconds, including reading and summarizing complex texts or generating detailed research documents.

Exemplifying the scale of these advancements in professional-level content generation, consider a recent analysis in which expert graders were asked to compare reports generated by AI to those produced by other industry experts. As seen in Figure 1, the second most recent version of ChatGPT (4o) was ranked as better than the expert report 10% of the time. A modification of ChatGPT's most recent model (5-High), released just a year later, was selected as superior more than 35% of the time. Surpassing this feat, Anthropic's Claude Opus 4.1 was judged as equal to or better than industry experts in almost half of all cases, indicating it was roughly on par with industry experts in creating professional reports.²

generative AI

noun

variants or less commonly
generative artificial intelligence

Artificial intelligence that is capable of generating new content (such as images or text) in response to a submitted prompt (such as a query) by learning from a large reference database of examples.



² “Measuring the performance of our models on real-world tasks,” OpenAI, September 25, 2025, <https://openai.com/index/gdpval/>.

FIGURE 1: SHARE OF DELIVERABLES FROM CHATGPT MODELS CHOSEN OVER THOSE PRODUCED BY INDUSTRY EXPERTS, BY RELEASE DATE

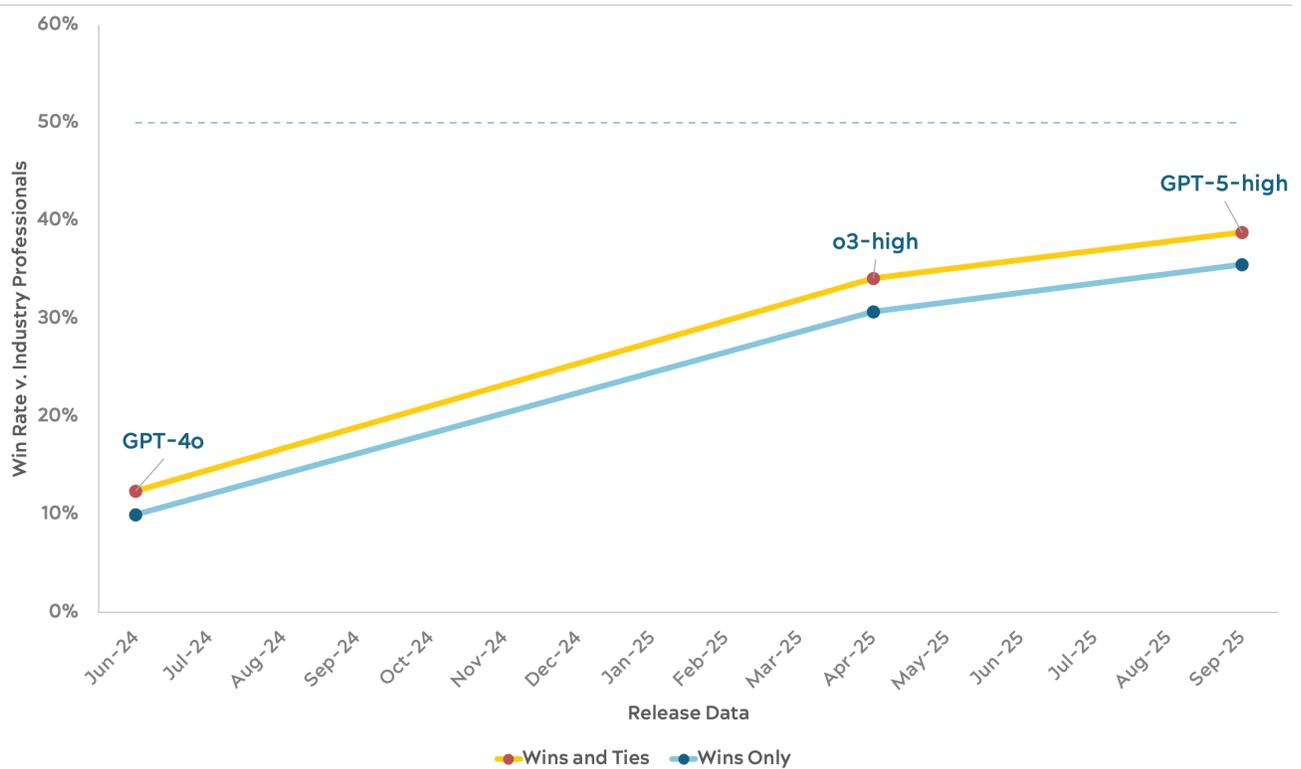


Figure Source: OpenAI

Increasingly, it is not just professional grade written text that these models can provide, but also high-quality video and image generation, pushing the models into tasks currently taken on by creative professionals. According to a recent survey, roughly half of marketing professionals now use AI for image and video creation.³

Finally, the most rapidly advancing aspect of recent GenAI breakthroughs concerns the ability of models to handle complex tasks that require multiple steps, allowing humans to feed it difficult situations that would have been far too advanced for earlier GenAI models. According to one recent analysis, the length of tasks that GenAI models can accomplish has been doubling every seven months for the past six years.⁴

Each of these changes makes GenAI capable of taking on the tasks of more workers. And it is worth recalling a somewhat-clinged truism when thinking about this trend: the current models are the least capable GenAI will ever be.

³ Peter Allen Clark, “Nearly half of marketers now rely on AI for images, videos,” EMarketer, July 23, 2025, <https://www.emarketer.com/content/almost-majority-of-marketers-use-ai-create-images-videos>.

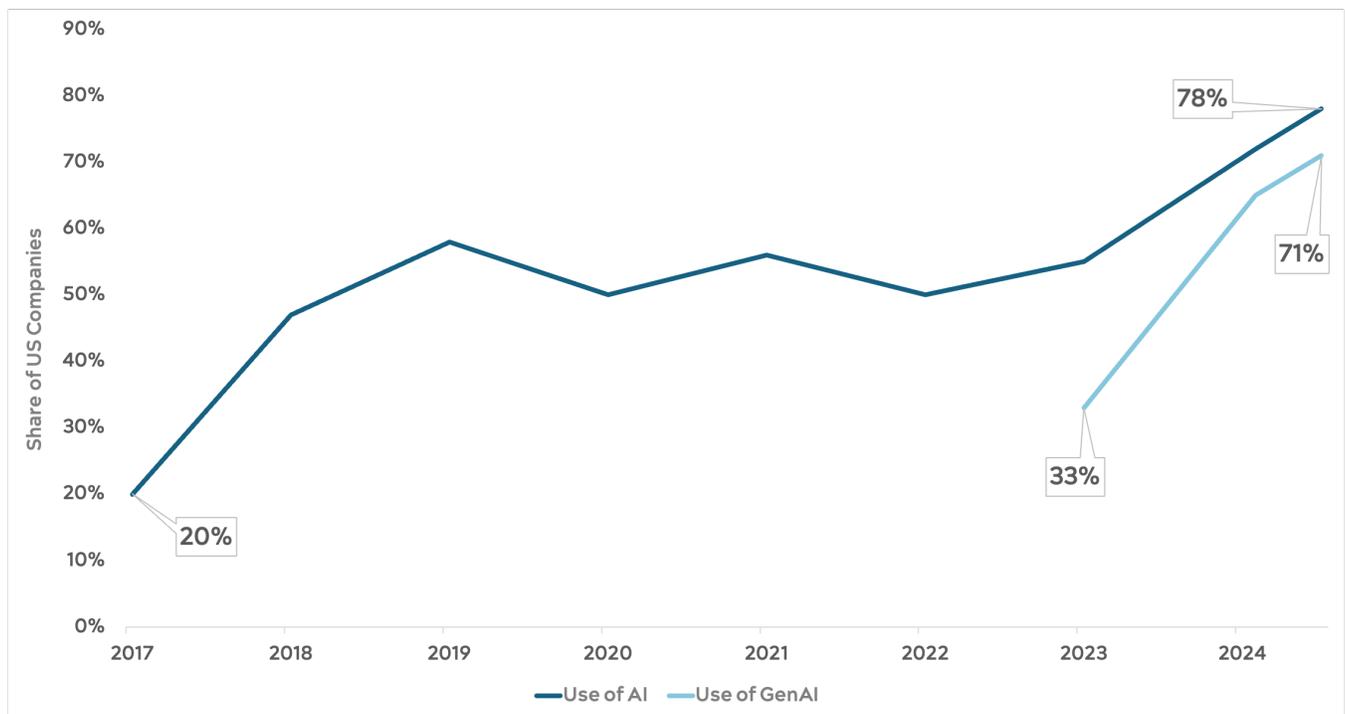
⁴ “Measuring AI Ability to Complete Long Tasks,” METR, March 19, 2025, <https://metr.org/blog/2025-03-19-measuring-ai-ability-to-complete-long-tasks/>.

Of course, simply because GenAI can accomplish more tasks does not necessarily mean it will put people out of work. A study on the introduction of AI assistants for customer service representatives found improvements in worker productivity, with particularly large gains for newer workers.⁵ Cases like this show that AI can improve workers' lives and make companies more profitable. Unfortunately, there are also many examples of less optimal outcomes for workers, as shown in the next section.

AI UTILIZATION IN THE WORKPLACE

With AI technology advancing, it is not surprising that it is being adopted by a growing share of workplaces. Figure 2 shows that as of July 2024, 8-in-ten US companies used some form of AI, including 71% that utilize GenAI- more than double the 33% that reported using GenAI just a year earlier.⁶

FIGURE 2: AI AND GENAI ADOPTION BY US COMPANIES, 2017-2024



Data Source: McKinsey & Company

With adoption increasing, workers are starting to feel an impact. Business Insider recently laid off 21% of its workforce, specifically citing the growing use of GenAI as a key factor in its decision.⁷ Amazon announced it would be cutting as many as 30,000 corporate employees, pointing out that AI tools allow them to automate routine tasks

5 Erik Brynjolfsson, Daniel Li, and Lindsey R. Raymond, "Generative AI at work," National Bureau of Economic Research, November 2023, <https://www.nber.org/papers/w31161>.

6 Alex Singla, Alexander Sukharevsky, Lareina Yee, Michael Chui, Bryce Hall, and Tara Balakrishnan, "The state of AI in 2025: Agents, innovation, and transformation," McKinsey & Company, November 5, 2025, <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai>.

7 "Business Insider cuts 21% of workforce, memo shows," Reuters, May 29, 2025, <https://www.reuters.com/technology/business-insider-cuts-21-workforce-memo-shows-2025-05-29/>.

previously accomplished by human workers.⁸ Moving beyond individual firms, an analysis of the first seven months of 2025 found that rising adoption of GenAI accounted for more than 10,000 job cuts in the US.⁹

These layoffs portend a potential acceleration of AI's influence on the labor market, particularly within the context of a slowing economy and heightened economic uncertainty. As companies deal with these financial realities, AI often provides a potential pathway for cutting labor costs by replacing existing workers and/or being able to avoid hiring new people.

This shift appears to be having a strong impact on young people. A recent report from Stanford University examined early-career workers (between the ages of 22 and 25) who were seeking jobs in the industries most exposed to AI, such as software development. These young people have experienced a 13% decline in employment since GenAI started rolling out in October of 2022. By contrast, employment for early career workers in other industries remained stable or continued to grow.¹⁰

The title of the paper presenting these results, *Canaries in the Coal Mine*, is telling: the job displacement may be more limited to certain industries now, but this impact is likely to spread. A recent survey of 1,000 US business leaders found that 40% plan to replace workers with AI in 2026.¹¹

Closer to home, the Minneapolis software firm Jamf recently laid off more than 6% of their staff (166 workers), noting that it would be accelerating its AI investments to build on “efficiencies” in its sales and customer support services.¹² Such shifts are leading to Minnesota workers expressing more anxiety about AI's effect on their careers. A recent Star Tribune article captured this sentiment, pointing out that while employers have been hesitant to hire, they have been investing in AI. As the article notes, this pursuit of technology over hiring suggests a bleak possibility should the country tip into recession. Where workers have relied on getting their jobs back in previous economic recoveries, this time could be different, with companies turning to AI rather than hiring people into their old roles.¹³

8 Greg Bensinger and Deborah Mary Sophia, “Amazon to cut about 14,000 corporate jobs in AI push,” Reuters, October 28, 2025, <https://www.reuters.com/sustainability/amazon-lay-off-about-14000-roles-2025-10-28/>.

9 Megan Cerullo, “AI is leading to thousands of job losses, report finds,” CBS News, August 5, 2025, <https://www.cbsnews.com/news/ai-jobs-layoffs-us-2025/>.

10 Erik Brynjolfsson, Bharat Chandar, and Ruyu Chen, “Canaries in the coal mine? Six facts about the recent employment effects of Artificial Intelligence,” Stanford Digital Economy Lab, November 2025, <https://digitaleconomy.stanford.edu/publications/canaries-in-the-coal-mine/>.

11 “6 in 10 companies plan to lay off employees in 2026 amid economic uncertainty,” Resume.org, September 2025, <https://www.resume.org/6-in-10-companies-plan-to-lay-off-employees-in-2026-amid-economic-uncertainty/>.

12 Brianna Kelly, “Minneapolis software firm Jamf to lay off 6% of staff as it boosts AI investment,” Bring Me the News, July 17, 2025, <https://bringmethenews.com/minnesota-business/minneapolis-software-firm-jamf-to-lay-off-6-of-staff-as-it-boosts-ai-investment>.

13 Emma Nelson, “Minnesota workers, in a tough job market, wonder: Is AI coming for my job?” The Minnesota Star Tribune, October 2, 2025, <https://www.startribune.com/ai-artificial-intelligence-take-replace-job-minnesota-labor-market-chatgpt-generative/601475409>.

MORE THAN JOB LOSS

While the discussion above focuses on automation and layoffs, AI's reach into the workplace extends far beyond job loss. Increasingly, AI systems are being used to monitor workers, track performance, and even make decisions about who gets hired or fired. These changes reshape the experience of work itself, sometimes in ways that heighten stress, erode autonomy, or foster discrimination.

Electronic monitoring has become a widespread application of workplace AI, including the use of AI systems to log keystrokes, analyze call times, or flag perceived inefficiencies.¹⁴ In many jobs, sensors and AI-driven dashboards evaluate workers in real time, issuing automated warnings or adjusting schedules. These systems rarely eliminate jobs outright, but they transform the workplace into one of constant observation, where algorithms rather than supervisors decide what good work looks like.

Minnesota has taken steps to address this issue, passing landmark legislation to protect warehouse workers after seeing increased injury rates stemming from Amazon's surveillance-driven quotas.¹⁵ While this effort represented an important first step, the expansion of AI-backed monitoring into spaces beyond warehouses, including the use of so-called bossware in white collar jobs, calls out for an expansion of similar guidelines to other industries.

AI's growing role in hiring and promotion can be equally consequential.¹⁶ Automated resume-screening software can filter thousands of applications before any human review. While marketed as efficiency tools, these systems have already produced documented harms. Workday Inc. is currently facing a lawsuit claiming that its algorithm-based screening tool discriminated against job applicants over the age of 40.¹⁷ A recent study further demonstrated that utilizing AI in resume screening can heighten racial bias in hiring, particularly if the AI tool holds its own biases.¹⁸

Taken together, these developments show that AI's impact on labor is not limited to who keeps their job, but also to how work is experienced and who has power within the workplace. As Minnesota considers its response, policymakers should recognize that meaningful AI governance must address not just automation risk but also management of workplace algorithms and AI-backed surveillance.

14 Steven Greenhouse, "Constantly monitored: The pushback against AI surveillance at work," *The Guardian*, January 7, 2024, <https://www.theguardian.com/technology/2024/jan/07/artificial-intelligence-surveillance-workers>.

15 Abdirahaman Muse, Emma Greenman, and Erin Murphy, "Minnesota enacts landmark protections for Amazon warehouse workers," *The Nation*, May 17, 2023, <https://www.thenation.com/article/politics/amazon-warehouse-workers-minnesota/>.

16 Megan Cerullo, "AI could determine whether you get hired or fired as more managers rely on the technology at work," *CBS News*, July 8, 2025, <https://www.cbsnews.com/news/ai-hired-fired-promotion-managers/>.

17 Patrick Dorrian, "Workday AI bias suits to go forward as age claim class action," *Bloomberg Law*, May 16, 2025, <https://news.bloomberglaw.com/litigation/workday-ai-bias-suit-to-go-forward-as-age-claim-class-action>.

18 Stefan Milne, "People Mirror AI systems' hiring biases, study finds," *University of Washington*, November 10, 2025, <https://www.washington.edu/news/2025/11/10/people-mirror-ai-systems-hiring-biases-study-finds/>.

WORKER ANXIETY

As AI use in the workplace has increased, so too has worker anxiety. An October 2024 survey from Pew found that nearly a third of US workers believe AI will lead to fewer jobs for them, as compared to 6% who say AI will lead to more jobs.¹⁹

Though AI pessimism is a global phenomenon, US workers appear to have a particularly cynical outlook. As seen in Figure 3, half of US adults say they are more concerned than excited about AI, while just 10% are more excited than concerned. That ratio of concern to excitement was the highest among 25 countries surveyed. By contrast, 22% of South Koreans indicated they were more excited than concerned, edging out the 16% expressing more concern than excitement.²⁰

When looking at public opinion on specific AI use cases, a couple of areas stand out. More than 70% of US adults oppose AI making a final hiring decision, compared to 7% who support such a move. Similarly, 61% say AI should not be used to track workers' movements, demonstrating widespread opposition to unchecked AI use in employment decisions and surveillance.

Drawing on these concerns, workers are expressing increasing support for standards to guide AI innovation in a way that supports them. Eight-in-ten US adults say the government should prioritize rules for AI safety.²¹ More than 70% of US workers also believe that more oversight of AI is necessary.²²

FIGURE 3. AI CONCERN V. EXCITEMENT AROUND THE WORLD

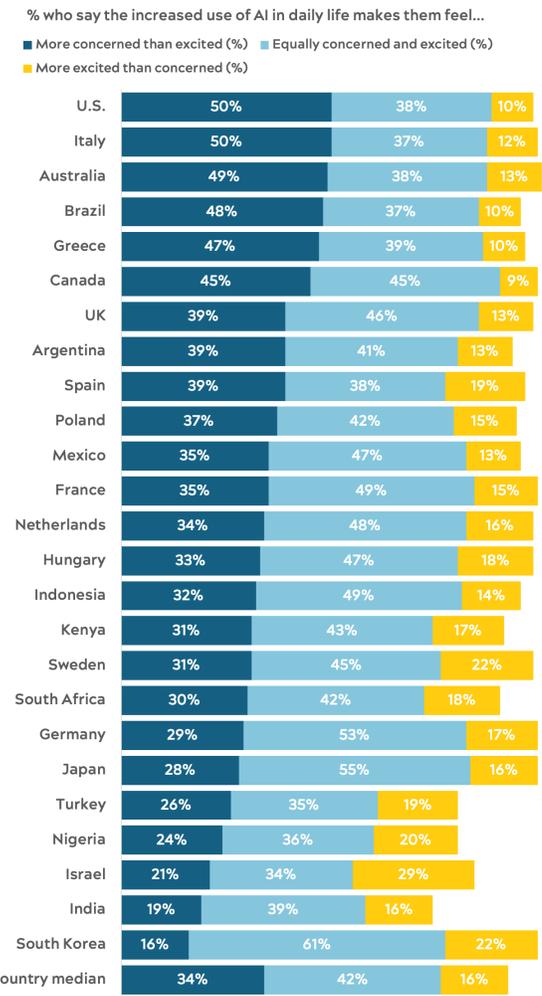


Figure Source: Pew Research Center

¹⁹ Luona Lin and Kim Parker, "US workers are more worried than hopeful about future AI use in the workplace," Pew Research Center, February 25, 2025, <https://www.pewresearch.org/social-trends/2025/02/25/workers-views-of-ai-use-in-the-workplace/>.

²⁰ Jacob Poushter, Moira Fagan, and Manolo Corichi, "How people around the world view AI," Pew Research Center, October 15, 2025, <https://www.pewresearch.org/global/2025/10/15/how-people-around-the-world-view-ai/>.

²¹ Benedict Vigers, "Americans prioritize AI safety and data security," Gallup, September 16, 2025, <https://news.gallup.com/poll/694685/americans-prioritize-safety-data-security.aspx>.

²² "44% of employees admit to misusing AI while companies struggle to regulate it," Allwork, May 7, 2025, <https://allwork.space/2025/05/44-of-employees-admit-to-misusing-ai-while-companies-struggle-to-regulate-it/>.

CURRENT GOVERNMENT EFFORTS

Despite these calls from an overwhelming majority of workers, government intervention into AI remains minimal. Executive Orders designed to guide AI innovation in a pro-worker direction, signed by President Biden, have mostly been undone under the Trump administration.²³

Some states have worked to fill this gap left by federal inaction, but efforts here have been threatened as well. Most notably, the One Big Beautiful Bill Act once included a ten year moratorium on state-level AI regulation. While that provision was eventually pulled out on a 99-1 Senate vote just days before the legislation passed, the Trump administration has continued to show an interest in preventing states from regulating AI.²⁴ Most notably, a December 2025 Executive Order signed by President Trump gives the attorney general broad authority to pursue legal actions against state AI regulations and threatens to withhold funds from states if they keep AI laws in place.²⁵ While threatening, these moves from the White House are legally dubious, with experts indicating that only Congress can restrict state regulation in this manner.²⁶

As legal challenges play out, Minnesota lawmakers should move forward with state-level protections. Moreover, with AI advancing at breakneck speed, adoption accelerating across industries, and workers growing more anxious about its effects, failure to do so may be disastrous. The time is now to craft safeguards that align innovation with worker protection.

To help underscore the importance of the Minnesota legislature stepping up, the analysis below explores the impact of GenAI on Minnesota workers. The results demonstrate how many Minnesota workers stand to benefit from state action. Or suffer from continued inaction.

23 Adam Aft, Caroline Burnett, Cynthia Cole, Brian Hengesbaugh, Keo McKenzie, Justine Phillips, Elizabeth Roper, and Avi Toltzis, “AI tug-of-war: Trump pulls back Biden’s AI Plans,” The Employer Report, January 25, 2025, <https://www.theemployerreport.com/2025/01/ai-tug-of-war-trump-pulls-back-bidens-ai-plans/>.

24 David Morgan and David Shepardson, “US Senate strikes AI regulation ban from Trump megabill,” Reuters, July 1, 2025, <https://www.reuters.com/legal/government/us-senate-strikes-ai-regulation-ban-trump-megabill-2025-07-01/>.

25 Cicilia Kang, “Trump signs Executive Order to neuter state A.I. Laws,” The New York Times, December 11, 2025, <https://www.nytimes.com/2025/12/11/technology/ai-trump-executive-order.html>.

26 Huo Jingnan, “Trump is trying to preempt state AI laws via an Executive Order. It may not be legal,” National Public Radio News, December 11, 2025, <https://www.npr.org/2025/12/11/nx-s1-5638562/trump-ai-david-sacks-executive-order>.

The Impact of Generative AI on Minnesota Workers

METHODOLOGY

North Star’s previous report regarding AI’s impact on working Minnesotans relied on a methodology from 2020, prior to the rise of GenAI.²⁷ By contrast, the analysis conducted here focuses specifically on GenAI, drawing on a dataset created by experts at the Center for the Governance of AI at Oxford University, the Wharton School at the University of Pennsylvania, and OpenAI, the developer of the GenAI chatbot, ChatGPT.²⁸

In this dataset, jobs in the US were scored according to their level of exposure to GenAI. Researchers examined the specific tasks accomplished by each job and scored the degree to which those tasks could be partially or wholly completed by current or future GenAI. This process demonstrated wide variation in AI exposure. For example, 88% of the tasks accomplished by interpreters and translators are exposed to GenAI. These tasks can be seen below in Table 1.²⁹

Table 1. Occupational Tasks for Interpreters and Translators

Task ID	Task
9328	Translate messages simultaneously or consecutively into specified languages, orally or by using hand signs, maintaining message content, context, and style as much as possible.
9335	Listen to speakers’ statements to determine meanings and to prepare translations, using electronic listening systems as necessary.
9333	Compile terminology and information to be used in translations, including technical terms such as those for legal or medical material.
9332	Refer to reference materials, such as dictionaries, lexicons, encyclopedias, and computerized terminology banks, as needed to ensure translation accuracy.
9330	Check translations of technical terms and terminology to ensure that they are accurate and remain consistent throughout translation revisions.
9327	Identify and resolve conflicts related to the meanings of words, concepts, practices, or behaviors.
9337	Compile information on content and context of information to be translated and on intended audience.
9334	Adapt translations to students’ cognitive and grade levels, collaborating with educational team members as necessary.
9336	Check original texts or confer with authors to ensure that translations retain the content, meaning, and feeling of the original material.
9339	Adapt software and accompanying technical documents to another language and culture.

²⁷ Michael Webb, “The impact of Artificial Intelligence on the labor market,” SSRN, January 11, 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3482150.

²⁸ Tyna Eloundou, Sam Manning, Pamela Mishkin, and Daniel Rock, “GPTs are GPTs: Labor market impact potential of LLMs,” Science, June 20, 2024, <https://www.science.org/doi/10.1126/science.adjo998>.

²⁹ Occupational tasks drawn directly from the O*NET 27.2 database utilized in this analysis. The O*NET database can be found at https://www.onetcenter.org/dictionary/27.2/excel/task_statements.html.

9340	Educate students, parents, staff, and teachers about the roles and functions of educational interpreters.
9329	Proofread, edit, and revise translated materials.
9341	Train and supervise other translators or interpreters.
9331	Read written materials, such as legal documents, scientific works, or news reports, and rewrite material into specified languages.
9342	Travel with or guide tourists who speak another language.
9338	Discuss translation requirements with clients and determine any fees to be charged for services provided.

*Data Source: O*NET 27.2 Database of Task Statements*

By contrast, just 6% of the tasks for carpet installers, shown in Table 2, are exposed to GenAI. Drawing on these results, we would then say that interpreters and translators have a GenAI exposure score of 88, while carpet installers have a score of 6.³⁰

Table 2. Occupational Tasks for Carpet Installers	
Task ID	Task
2835	Inspect the surface to be covered to determine its condition, and correct any imperfections that might show through carpet or cause carpet to wear unevenly.
2836	Roll out, measure, mark, and cut carpeting to size with a carpet knife, following floor sketches and allowing extra carpet for final fitting.
2833	Join edges of carpet and seam edges where necessary, by sewing or by using tape with glue and heated carpet iron.
2834	Cut and trim carpet to fit along wall edges, openings, and projections, finishing the edges with a wall trimmer.
2837	Plan the layout of the carpet, allowing for expected traffic patterns and placing seams for best appearance and longest wear.
2838	Stretch carpet to align with walls and ensure a smooth surface, and press carpet in place over tack strips or use staples, tape, tacks or glue to hold carpet in place.
2839	Take measurements and study floor sketches to calculate the area to be carpeted and the amount of material needed.
2841	Install carpet on some floors using adhesive, following prescribed method.
20142	Clean up before and after installation, including vacuuming carpet and discarding remnant pieces.
2844	Measure, cut and install tackless strips along the baseboard or wall.
2842	Nail tack strips around area to be carpeted or use old strips to attach edges of new carpet.
2840	Cut carpet padding to size and install padding, following prescribed method.
2843	Fasten metal treads across door openings or where carpet meets flooring to hold carpet in place.

³⁰ For our analysis, the occupation-level data was received from researchers at the Brookings Institute, who utilized this same dataset for their analysis, as seen in Molly Kinder, Xavier de Souza Briggs, Mark Muro, and Sifan Liu, “Generative AI, the American worker, and the future of work,” Brookings, October 10, 2024, <https://www.brookings.edu/articles/generative-ai-the-american-worker-and-the-future-of-work/>.

Following the lead of this Brookings publication, a task was considered “exposed” to GenAI if ChatGPT-4 could decrease the time to complete the task by at least 50% OR if software that could be developed on top of ChatGPT-4 could decrease task completion time by 50%. Again, following the lead of the Brookings publication, we utilized a model that suggested a “middling amount of future innovation” in applications using ChatGPT, meaning there are scenarios in which innovation might create even greater capacity, and likely lead to more job disruption. That this analysis relies on ChatGPT-4 technology also indicates it is somewhat outdated, as OpenAI has released ChatGPT-5 to the public. Unfortunately, there is not a publicly available methodology that replicates this analysis using ChatGPT-5, so we are forced to rely on the ChatGPT-4 inspired dataset. Again, this dataset does consider future innovation, so it should at least partially capture GenAI capacities made possible by ChatGPT-5. For more information on the methodology, see the Brookings analysis cited earlier (Kinder et al., 2024) or the Science article upon which that analysis is based: Tyna Eloundou, Sam Manning, Pamela Mishkin, and Daniel Rock, “GPTs are GPTs: Labor market impact potential of LLMs,” Science, June 20, 2024, <https://www.science.org/doi/10.1126/science.adj0998>.

2845	Draw building diagrams and record dimensions.
2846	Move furniture from area to be carpeted and remove old carpet and padding.
2847	Cut and bind material.
<i>Data Source: O*NET 27.2 Database of Task Statements</i>	

For this analysis, we focus on two thresholds in analyzing GenAI exposure. We consider those workers with exposure scores of 50 or greater, meaning half or more of their job tasks could be partially or wholly completed by GenAI, to be highly exposed. Workers with exposure scores of 75 or greater are categorized as very highly exposed.

With these exposure scores in hand for all US jobs, we can then analyze how many working Minnesotans hold jobs with high or very high levels of GenAI exposure. To do this, we match the GenAI exposure scores to data on Minnesota workers from both the Bureau of Labor Statistics (BLS) and the US Census.³¹

Importantly, exposure should not be understood here as synonymous with replacement. The fact that a worker may have 90% of their tasks exposed to GenAI does not necessarily mean they will have their job replaced by AI. It is possible that instead those tasks will merely be supplemented by AI, leading to increased productivity for the worker and the company for which they work. Indeed, it is this type of arrangement that we believe is possible and most beneficial as AI adoption rises in US workplaces.

In addition, our analysis is solely focused on AI’s impact as it pertains to completing job tasks, leaving out other forms of AI exposure, such as surveillance and involvement in employment-related decisions. From this perspective, while the analysis below finds that a substantial portion of working Minnesotans are exposed to AI via tasks they complete for their job, the actual number of workers with jobs impacted by AI is assuredly much larger. Indeed, to the degree that AI could be utilized in almost any hiring or firing decision, the potential universe of impacted workers encompasses the entirety of the state’s labor force.

³¹ The BLS data utilized here comes from the May 2024 State Occupational Employment and Wage Estimates: <https://www.bls.gov/oes/current/oesrest.htm>. US Census data comes from the 2023 American Community Survey (ACS): <https://www.census.gov/programs-surveys/acs.html>. BLS data was utilized to identify more accurate counts of workers in specific occupations, while ACS data provided the ability to analyze AI exposure based on the demographic characteristics of workers. While the ACS data is less accurate in capturing occupation level data, the differences between the analyses using these two datasets is very small. All figures indicate which data source was used in the analysis.

GENAI EXPOSURE AMONG ALL MINNESOTA WORKERS

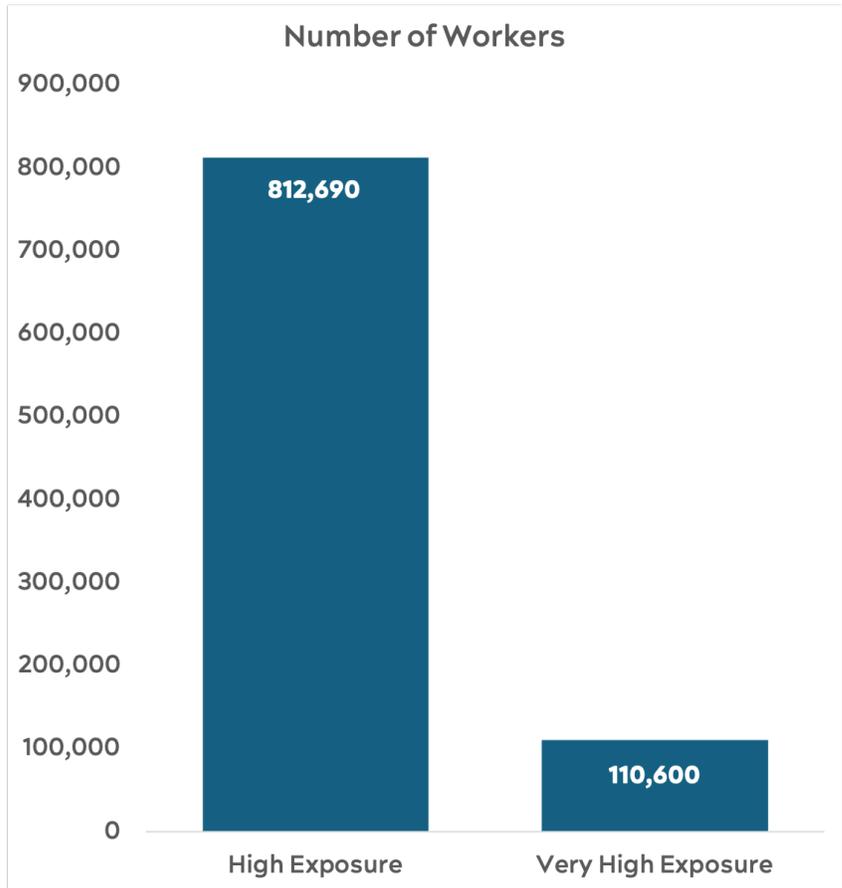
We begin by looking across all Minnesota workers. Figure 4 shows that over 800,000 Minnesota workers are in highly exposed jobs, meaning that GenAI could partially or completely accomplish more than half of the tasks involved in their current job. That share of workers represents nearly a third of the state's labor force (31.3%).³²

At a more extreme level, over 100,000 working Minnesotans are in jobs where more than 75% of their tasks could be exposed to GenAI (representing a little over 4% of workers in the state).

MINNESOTA COMPARED TO OTHER STATES

On their own, these numbers suggest that a significant number of Minnesota workers are currently impacted by GenAI or are likely to be impacted soon. In addition, these results also raise a question of how Minnesota workers fare relative to other states.

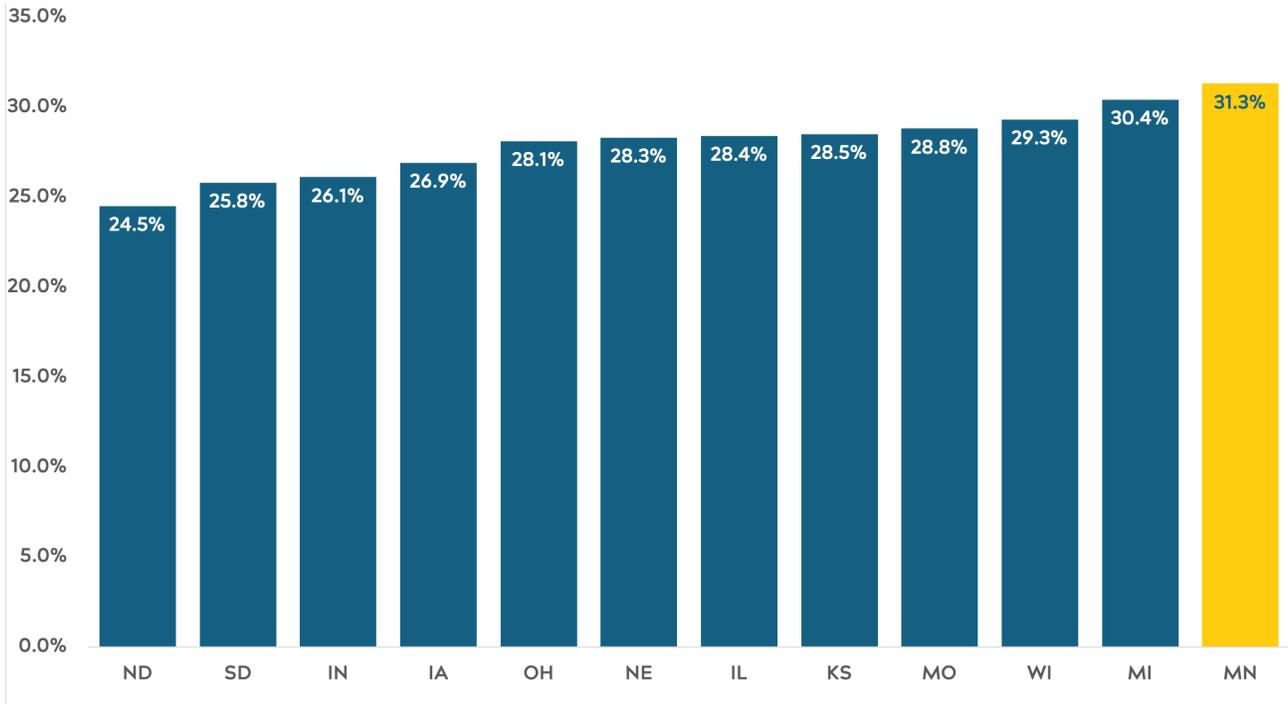
FIGURE 4: GENAI EXPOSURE FOR ALL MINNESOTA WORKERS



Data Source: Author's analysis of BLS data.

³² For a more detailed look at AI exposure among specific jobs in Minnesota, and to compare Minnesota's AI exposure to other states, there is an AI employment scenario dashboard that was developed by the AI Research Center at Woxsen University under the supervision of Dr. Hemachandran K and Dr. Manjeet Rege. The dashboard can be found at https://mywoxsen.in/project/genai_ml_job_market/dashboard.php.

FIGURE 5: SHARE OF WORKERS WITH HIGH GENAI EXPOSURE, MIDWEST



Data Source: Author's analysis of BLS data.

If we compare the share of highly exposed workers in Minnesota to other states, we find that Minnesota's workforce appears particularly vulnerable. Only nine other states in the country have a greater share of highly exposed workers, led by nearly 35% of the workforce in tech-heavy Washington state. By contrast, less than a quarter of Wyoming's workers (23%) can be categorized as highly exposed. Notably, with 31% of its workforce being highly exposed, Minnesota is not only the tenth most exposed state in the country but also holds the greatest share of exposed workers in the Midwest region, as seen in Figure 5.

HIGHLY IMPACTED JOBS IN MN

The implication of Minnesota’s relatively high level of AI exposure is that the state holds a disproportionately large number of workers in jobs with tasks congruent to completion by GenAI. Table 3 digs into this implication by showing the 10 largest jobs in the state that have GenAI exposure scores of 50 or greater (i.e., highly exposed).

Table 3. Largest Jobs in Minnesota with High GenAI Exposure

Job Title	Number of Minnesota workers	AI Exposure Score
Customer Service Representatives	59,170	57
Office Clerks	55,710	57
Software Developers	39,580	87
Manufacturing Sales Representatives	32,010	61
Accountants and Auditors	30,400	55
Secretaries and Administrative Assistants	30,160	63
Bookkeepers, Accounting, and Auditing Clerks	27,520	78
Market Research Analysts	24,650	50
Service Sales Representatives	20,440	63
Retail Worker Supervisors	20,350	50

Data Source: Author’s analysis of BLS data.

In addition to demonstrating how many Minnesota workers are in highly exposed jobs, Table 3 also illustrates some commonality among these jobs. In contrast to previous technological advancements, where blue-collar workers tended to see their tasks automated, the jobs listed here show the threat of GenAI for white collar work.³³

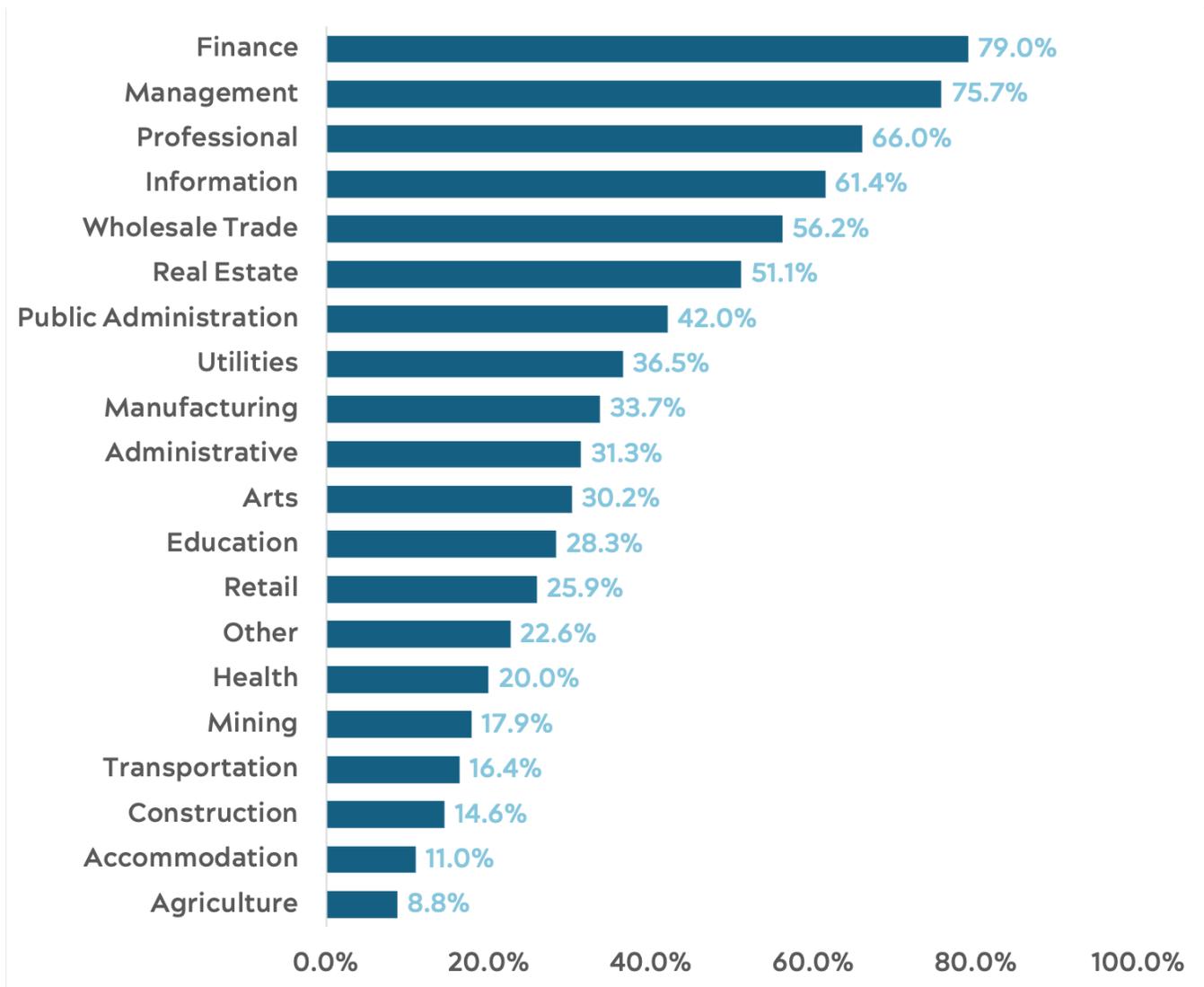
While the jobs listed here may reflect a white collar similarity, they also illustrate a wide range of white collar abilities. For example, through its capacity to respond to human prompts, GenAI holds the potential to take over significant aspects or the entirety of many customer service jobs, as could be seen in Salesforce recently replacing 45% of its customer support workers with AI agents.³⁴ Showcasing a different capacity, GenAI’s increasing adeptness in writing code puts software developers at risk. Demonstrating still another skillset, GenAI’s ability to analyze large amounts of data and provide coherent answers allows it to complete many tasks currently taken on by analysts, as well as accountants and auditors. Through these capabilities, hundreds of thousands of Minnesota jobs are placed at risk.

³³ Molly Kinder, Xavier de Souza Briggs, Mark Muro, and Sifan Liu, “Generative AI, the American worker, and the future of work,” Brookings, October 10, 2024, <https://www.brookings.edu/articles/generative-ai-the-american-worker-and-the-future-of-work/>.
³⁴ Craig Hale, “Salesforce CEO says it cut 4,000 support jobs- and replaced them with AI,” TechRadar, September 2, 2025, <https://www.techradar.com/pro/salesforce-says-it-cuts-4-000-support-jobs-and-replaced-them-with-ai>.

IMPACTED INDUSTRIES

To capture a more comprehensive sense of GenAI's impact, we can collapse jobs into their respective industries. In Figure 6, GenAI's white collar adeptness is on display again. Astonishingly, this analysis suggests that 79% of workers in the finance industry are in a highly exposed job, making it the most heavily impacted industry in the state.

FIGURE 6: SHARE OF WORKERS WITH HIGH GENAI EXPOSURE BY INDUSTRY, MINNESOTA



Data Source: Author's analysis of ACS data.

Notably, even industries where the share of exposed workers is smaller still show a significant amount of impact. For example, 33% of manufacturing workers are highly exposed, along with 28% of workers in education. Finding an industry in Minnesota that is free of GenAI's impact appears to be nearly impossible.

IMPACT BY UNION DENSITY

One of the potential safeguards that workers have against harmful AI exposure is union membership. Unions give workers the capacity to utilize the collective bargaining process to negotiate over the implementation of AI in their workplace. Recent history exemplifies the benefits of this arrangement. In 2023, TV and movie writers created an arrangement wherein they can incorporate AI into their writing process, but do not have to worry about AI being used to write full scripts and pushing them out of a job. The result is more productive writers, more profitable studios, and more movies and shows for viewers to enjoy, all while ensuring that humans remain leaders in content generation. In demonstrating how AI can create societal benefits, the writers created a blueprint for future workplace organizing.³⁵

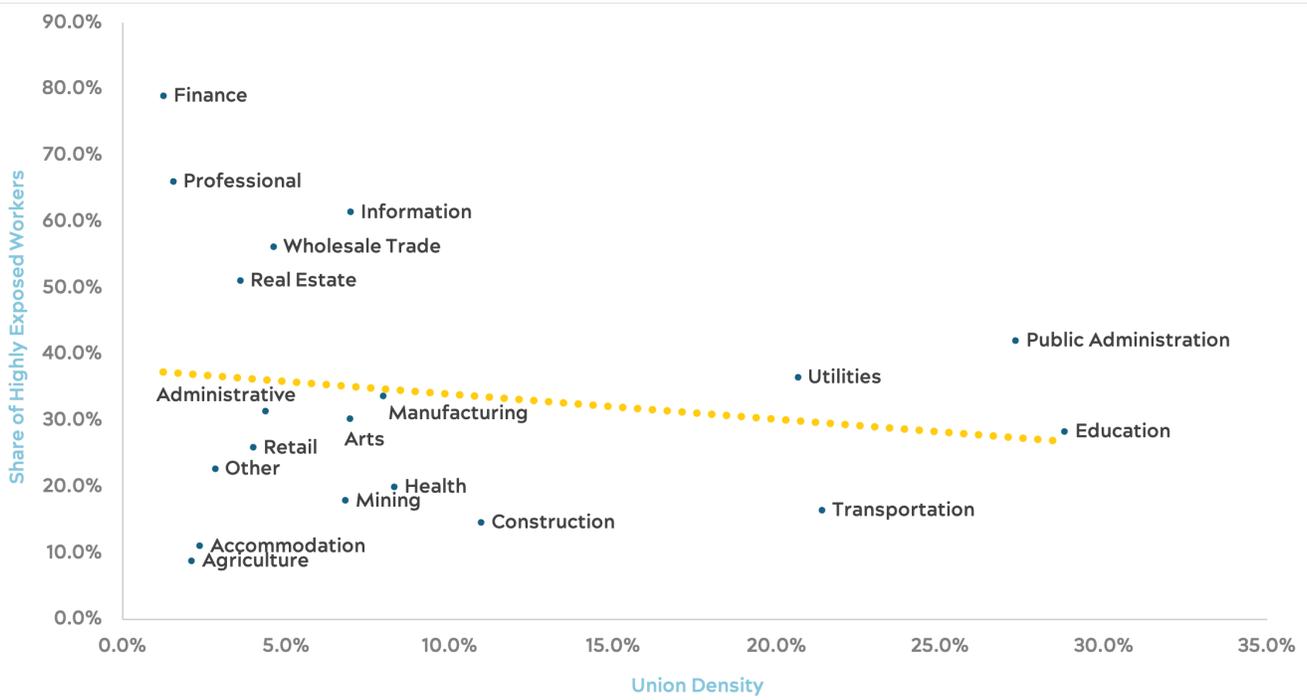
Unfortunately, current labor force dynamics suggest that most workers will not be able to use collective bargaining to reach such a mutually beneficial conclusion. While union density has been declining for all US workers since the 1980s, analyses show that it is particularly low in occupations most impacted by AI. For example, workers in computer science have long enjoyed high demand and low precarity, making workplace organizing less necessary. As a recent Brookings Institute report notes, there is a “great mismatch,” wherein the workers most in need of a union voice in the face of high AI exposure are also the least likely to have it.³⁶

This same mismatch shows up in Minnesota, as seen in Figure 7. Industries with higher GenAI exposure, such as finance, have relatively low levels of union density. By contrast, industries with higher density, such as education, see relatively lower levels of GenAI exposure. The slightly downward slope of the trendline included in Figure 7 clarifies that, as a general rule in Minnesota, union density decreases as AI exposure goes up.

³⁵ Adam Seth Litwin, “Hollywood’s deal with screenwriters just rewrote the rules around AI,” *The New York Times*, September 29, 2023, <https://www.nytimes.com/2023/09/29/opinion/wga-strike-deal-ai-jobs.html>.

³⁶ Molly Kinder et al., October 2024.

FIGURE 7: SHARE OF WORKERS WITH HIGH GENAI EXPOSURE BY UNION DENSITY, MINNESOTA



Data Source: Author’s analysis of ACS data.

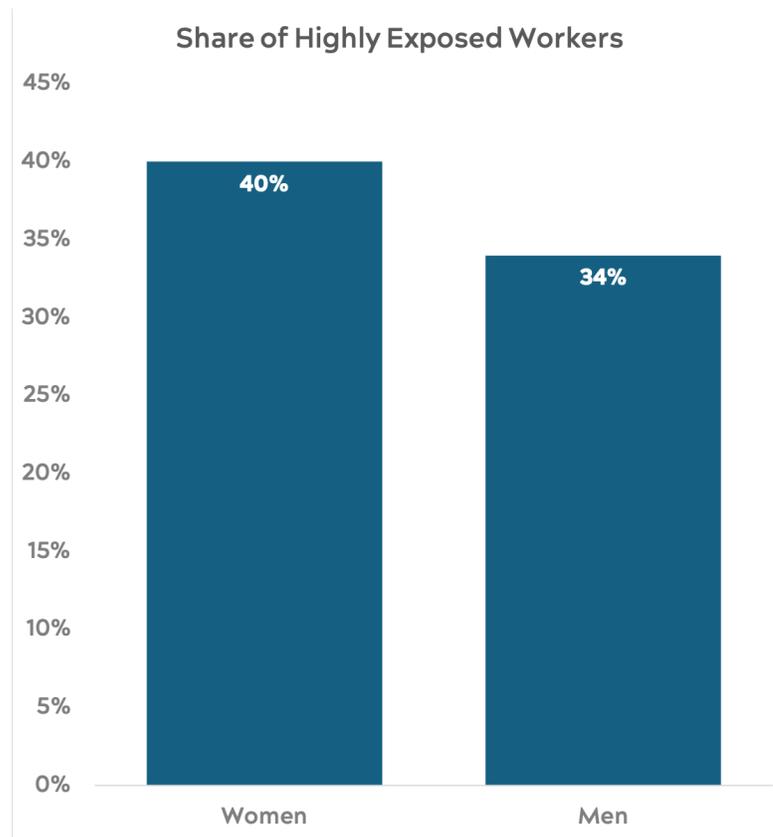
Lacking the collective voice offered by organized labor, workers in these jobs are likely to require government intervention to provide them with greater short-term security. In the medium and longer-term, the “great mismatch” creates an opportunity for new workplace organizing campaigns in industries that have previously been resistant to unions, giving workers a chance to respond to their newfound precarity. Indeed, recent union drives among tech employees demonstrate the possibilities offered to unions through this shift in labor relations.³⁷

³⁷ Kelli Korducki, “The unions are (finally) coming for big tech,” LeadDev, June 5, 2025, <https://leaddev.com/leadership/unions-finally-coming-big-tech>.

IMPACT BY GENDER

A final consideration for our analysis is how GenAI exposure varies across demographic groups, with a specific focus here on gender. Our analysis finds that nearly 40% of women in Minnesota are in highly exposed jobs, as compared to 34% of men.³⁸ When it comes to GenAI in the workplace, it would appear that Minnesota women are in a slightly more vulnerable position.

FIGURE 8: SHARE OF WORKERS WITH HIGH GENAI EXPOSURE BY GENDER, MINNESOTA



Data Source: Author's analysis of ACS data.

³⁸ Figure 7 shows that the high exposure percentage for women and men (40% and 34%, respectively) are higher than the 31.3% shown for all workers in Figure 4. This discrepancy comes from Figure 4 drawing on data from the BLS, while Figure 7 uses ACS data. Again, we believe the BLS provides more accurate data as it pertains to employment counts, but the lack of microdata in the BLS precludes an analysis on AI exposure across demographic groups, as is carried out in Figure 7.

Conclusion

Minnesota's workplaces are at a critical juncture. AI holds tremendous potential to boost both worker productivity and prosperity. But the past is littered with examples of technological advancements leading to concentrated wealth at the expense of worker welfare. To avoid repeating this history, lawmakers must act.

Unfortunately, Minnesota has seen relatively little legislative activity in this area, even as AI capacity and workplace adoption have surged. Public opinion surveys make clear that this stagnation runs counter to the beliefs of workers, who are expressing greater anxiety about AI and an increased desire to see safeguards put in place.

Our analysis bolsters this claim from workers, showing that nearly a third of working Minnesotans are in jobs that are or could be highly exposed to GenAI, representing the largest share of affected workers among states in the Midwest.

But even this figure understates AI's true reach on workers' lives. Our analysis focuses on task displacement, but AI is increasingly shaping who gets hired or fired and expanding employers' capacity for electronic surveillance. While a third of the workforce may face direct task disruption, the reality is that all Minnesota workers could see AI influence their professional lives.

The good news: AI's spread does not inevitably mean harm for workers. With the right regulations, AI can support a more vibrant economy that allows Minnesotans to focus on the most meaningful aspects of their work. For example, the state could consider standards around AI use in employment-related decisions, as was passed in Illinois.³⁹ Similarly, funding retraining programs for workers impacted by AI, as considered in New Jersey,⁴⁰ and boosting collective bargaining power to ensure more workers are given a voice in AI implementation, as introduced in Washington,⁴¹ can move AI innovation in a worker-friendly direction.

By contrast, failing to take these actions opens Minnesota's workforce up to the risk of falling behind. Minnesota has a long history of leading the Midwest in fair labor standards and forward-looking economic policy. That legacy can continue in the age of AI. If lawmakers act decisively, Minnesota can become a national leader in showing that technological advancement and worker welfare are not opposing goals, but complementary ones. With the right policies, AI can fuel growth, create better jobs, and reaffirm Minnesota's reputation as a place where technological progress serves workers and not the other way around.

³⁹ See HB3773 in Georgia, <https://www.ilga.gov/Legislation/BillStatus?DocNum=3773&GAID=17&DocTypeID=HB&SessionID=112&GA=103>.

⁴⁰ See A5540 in New Jersey, <https://legiscan.com/NJ/text/A5540/2024>.

⁴¹ See SB 5422 in Washington, <https://app.leg.wa.gov/billsummary?BillNumber=5422&Year=2025&Initiative=false>.



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