

What Do Workers Want?

A CDT/Coworker Deliberative Poll
on Workplace Surveillance
and Datafication



The **Center for Democracy & Technology (CDT)** is the leading nonpartisan, nonprofit organization fighting to advance civil rights and civil liberties in the digital age. We shape technology policy, governance, and design with a focus on equity and democratic values. Established in 1994, CDT has been a trusted advocate for digital rights since the earliest days of the internet. The organization is headquartered in Washington, D.C. and has a Europe Office in Brussels, Belgium.



Coworker.org is a laboratory for workers to experiment with power-building strategies and win meaningful changes in the 21st-century economy. At Coworker, we invest in the brilliance of workers by hosting and promoting workplace petition campaigns, prototyping fresh ideas for wielding influence at work and across industries, researching answers to questions about working conditions, and leveraging our vast network of workers in a wide variety of industries to reveal new insights, analysis, and data about what's happening in our economy. We support the leadership and vision of working people to imagine, design, and create our collective future.



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A CDT/Coworker Deliberative Poll on Workplace Surveillance and Datafication

Matthew Scherer
Wilneida Negrón
Lindsey Schwartz

With contributions by Michal Luria and Dhanaraj Thakur.

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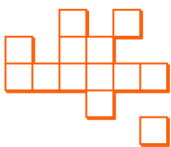
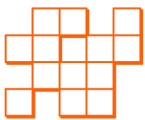
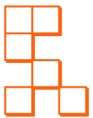
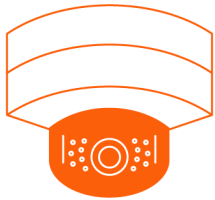
Art direction by Tim Hoagland. Illustration and design by Gabe Hongsdusit.

This CDT report is informed by interviews with experts within a variety of organizations representing different perspectives, including the federal government, academia, industry, and civil society organizations.

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Executive Summary



In today's rapidly evolving workplace, new technology holds the promise of increasing productivity and giving managers and employees alike improved ways to measure impact, but the proliferation of invasive monitoring and data collection—the “datafication” of workers—poses significant risks to workers' health, safety, privacy, and rights. The Center for Democracy & Technology (CDT) and Coworker.org collaborated on a project that explored workers' perspectives on workplace surveillance through a unique Deliberative Polling approach developed by Professor James Fishkin, founder of Stanford University's Deliberative Democracy Lab. This process empowers workers to articulate their needs and preferences regarding workplace data collection practices by providing them with resources to educate themselves on the subject and engage each other in informed discussions about this critical issue.

The goals of this project were to:

1. Identify the rules and standards regarding workplace datafication that employees support when given the opportunity to learn about and discuss the topic in a neutral setting.
2. Assess how the deliberative process influences workers' views and priorities regarding datafication.
3. Evaluate whether increased access to information and peer discussion enhances worker engagement in advocacy for their rights.

Methodology

The project employed a Deliberative Polling methodology to assess workers' opinions on workplace surveillance. It began with a national public opinion poll of 1,800 workers to identify the types of surveillance that most concern workers (which would then serve as the topics of the Deliberative Poll) and test argument persuasiveness. This was followed by the development of policy proposals and briefing materials containing background information on each topic as well as arguments for and against each proposal. These proposals and briefing materials were refined through a pilot session with 10 workers.

The main Deliberative Poll involved 186 workers who participated in the deliberations (22 in person and 164 online), 170 of whom completed the final post-deliberation survey. The deliberations consisted of three sessions focusing on four topics: monitoring work-from-home employees, location tracking, productivity monitoring, and data rights. Participants discussed proposals in small groups and posed questions to a balanced panel of experts. The process aimed to measure both participants' final opinions on each proposal as well as shifts in opinion resulting from their informed deliberations.

Results

In the final post-deliberation survey, respondents showed strong support for proposals that would grant workers a right to greater transparency regarding employers' surveillance and data collection practices, prohibit off-clock surveillance, limit location tracking, and bar employers from engaging in productivity monitoring that would harm workers' mental or physical health.

Respondents' views appeared to shift in a number of ways between the pre- and post-deliberation surveys. After deliberations, participants became less likely to support proposals that the covered forms of surveillance should "always" or "never" be allowed and generally became more likely to support more nuanced proposals. Additionally, support for the data rights proposals and the proposals to prohibit productivity monitoring that harms workers' mental or physical health gained significant additional support in the post-deliberation survey.

The deliberation participants also answered a series of general questions gauging participants' sentiments and beliefs on technology and the workplace. Here too, there were noticeable shifts in the final post-deliberation survey. Specifically, after deliberations, workers expressed both greater interest and greater confidence in their ability to influence their employers' actions — a promising finding suggesting that the very act of discussing workplace policy issues makes them better positioned to engage and organize.

Recommendations and conclusion

Moving forward, researchers should explore deliberation-centered methodologies further, both to determine workers' organic views on key workplace policy issues and as a potential engagement and organizing tool. Policymakers should recognize the urgent need for a regulatory framework addressing the datafication of workers. By centering the voices of employees in this discourse, we can better protect their rights and foster workplaces and labor markets that promote dignity, agency, and respect.



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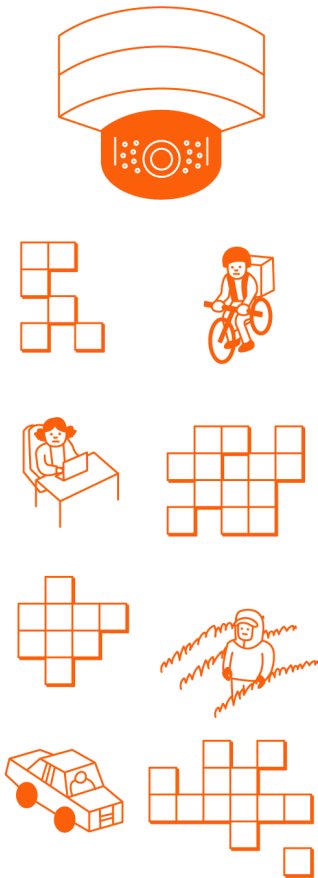
01

Introduction

The Center for Democracy & Technology (CDT) is a nonprofit, nonpartisan organization that conducts research and advocacy on technology policy issues, with the goal of advancing civil rights and civil liberties in the digital age.

Coworker is a laboratory for workers to experiment with power-building strategies and win meaningful changes in the 21st-century economy.

Our organizations are among the many civil society organizations, labor unions, and alternative labor groups that have been tracking the proliferation of intrusive monitoring and data collection practices in the workplace, a trend often referred to as “datafication” of workers and workplaces¹. This research has shed some light on how datafication can negatively impact workers’ health, safety, economic security, privacy, autonomy, and legal rights, as well as the growing prevalence of datafication technologies in the labor markets.² In addition, we have engaged in advocacy and organizing to raise awareness about the risks of datafication both in the policy and regulatory arenas, as well as among workers.



- 1 Grimshaw, A. (2019, June 3). The datafication of employment. The Century Foundation. <https://tcf.org/content/report/datafication-employment-surveillance-capitalism-shaping-workers-futures-without-knowledge/>; Mateescu, A. (2023). Challenging worker datafication. *Data & Society*. <https://datasociety.net/library/challenging-worker-datafication/> [<https://perma.cc/QQ5S-UDTW>].
- 2 Nguyen, A. (2021). The Constant Boss: work under digital surveillance. *Data & Society*. <https://datasociety.net/library/the-constant-boss/> [<https://perma.cc/Y3R9-S44C>]; Scherer, M., & Brown, L. (2021). Warning: Bossware may be hazardous to your health. *Center for Democracy & Technology*. <https://cdt.org/insights/report-warning-bossware-may-be-hazardous-to-your-health/> [<https://perma.cc/QCP9-JZ3A>]

The absence of workplace data and technology regulation enables and exacerbates the harmful effects of datafication. Few U.S. states grant workers any right to privacy in the workplace or even the right to know about the monitoring practices of their employer. Many workplace surveillance practices are kept secret, with neither vendors nor employers disclosing the extent or nature of their data collection activities.

This pattern of information asymmetry magnifies preexisting power imbalances in the workplace.

The purpose of this project was to answer three overlapping questions related to worker datafication, using a worker-centered approach:

- What rules and standards regarding workplace surveillance and data collection would workers support if given the opportunity to learn about and discuss them on their own?
- How, if at all, would that process of learning about and discussing these issues change workers' views and priorities?
- Does providing workers with information and the opportunity to discuss these issues with other workers increase their interest and engagement in workers' rights issues?

In order to answer these questions, we conducted a Deliberative Poll.³ This differs from an ordinary survey in that participants have the opportunity to learn about the survey topics beforehand from balanced briefing materials and discuss them among themselves prior to completing the survey.⁴ This format allows for a deeper and better-informed understanding of participants' priorities and preferences. In addition to the survey that Deliberative Poll

3 The terms *Deliberative Polling* and *Deliberative Poll* are trademarks of Professor James Fishkin, the founder of the Stanford Deliberative Democracy Lab who pioneered the format.

4 *What is Deliberative Polling®?* (n.d.). Deliberative Democracy Lab. <https://deliberation.stanford.edu/what-deliberative-pollingr>. [<https://perma.cc/U7RN-3JHS>]

participants completed, we have access to the transcripts of the deliberations themselves; this allowed us to use the qualitative outputs from the transcripts to contextualize and offer possible explanations for the quantitative results from the surveys.

This report describes the background and motivating factors that drove this project, details our methodology, and presents the results from the Deliberative Poll.

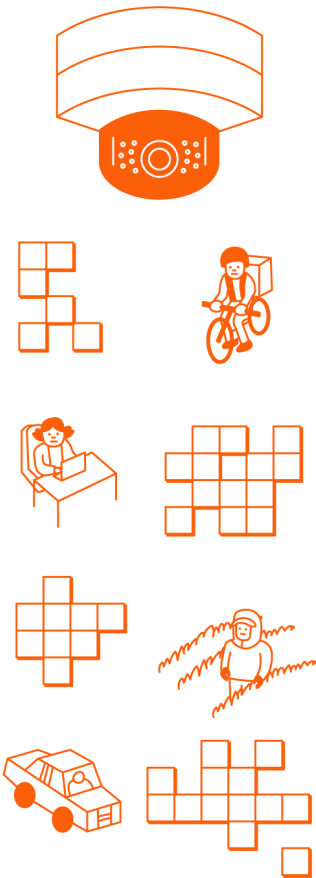


02

Background

The Rise of Worker Datafication

The global COVID-19 pandemic accelerated the demand for and adoption of worker surveillance technologies.⁵ Currently, there are thousands of products, companies, apps, and startups that collect numerous different data points from workers, ranging from physical movements, sentiment, productivity, biometric data, keystrokes, and more.⁶ While the rise of large language models (LLMs) and artificial intelligence (AI) holds the promise of new insights into how companies work and how they can improve their systems and practices, the issues surrounding collection of sensitive worker data has assumed a new urgency, since workers' data is of economic value to vendors and to the growing ecosystem of companies providing generative AI technology.



- 5 Ball, K, Publications Office of the European Union. (2021). *Electronic monitoring and surveillance in the workplace : literature review and policy recommendations*. Publications Office of the EU. <https://op.europa.eu/en/publication-detail/-/publication/e7e6f646-4694-11ec-89db-01aa75ed71a1/language-en>; Negrón, W. (2021). *Little Tech Is Coming for Workers: A Framework for Reclaiming and Building Worker Power*. Coworker.org. [<https://perma.cc/VGX6-8PDC>]; Hertel-Fernandez, A. (2024). *Estimating the prevalence of automated management and surveillance technologies at work and their impact on workers' well-being*. Washington Center for Equitable Growth. <https://equitablegrowth.org/research-paper/estimating-the-prevalence-of-automated-management-and-surveillance-technologies-at-work-and-their-impact-on-workers-well-being/> [<https://perma.cc/DM9P-YCEB>].
- 6 Bernhardt, A., Suleiman, R., & Kresge, L.; . (2022, August 18). *Data and Algorithms at Work: The Case for Worker Technology Rights*. UC Berkeley Labor Center. <https://laborcenter.berkeley.edu/data-algorithms-at-work/> [<https://perma.cc/BWT6-PCKU>].

**Surveillance practices
exacerbate long-term
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face in the workplace and
labor market.**

These surveillance practices exacerbate long-term trends that have weakened worker power and increased the structural disadvantages workers face in the workplace and labor market. Companies frequently use surveillance and automated management systems to accelerate the pace of work, often to levels that threaten the health and safety of workers.⁷ Some gig economy platforms use algorithms that drive down wages and lead to unpredictable pay patterns for workers.⁸ Workers are increasingly held to opaque and arbitrary performance standards and face discipline or dismissal for failing to meet them.⁹ These trends have continued to accelerate even though studies indicate that electronic monitoring does not improve employee performance and may even lead to counterproductive work behaviors.¹⁰

In the past few years, workers, labor unions, and worker advocacy groups have pushed back against these intrusive and increasingly prevalent surveillance practices. Through a combination of collective bargaining, grassroots organizing, and public advocacy, workers in both unionized and non-unionized sectors are working to ensure that technological advancements do not come at the cost of their rights and dignity. Labor unions such as the International Brotherhood of Teamsters have successfully negotiated for data

- 7 Scherer & Brown (2021); Center for Democracy & Technology, et al. (2023). *Comments to White House Office of Science and Technology Policy on Automated Worker Surveillance and Management*. <https://cdt.org/wp-content/uploads/2023/06/CDT-et-al-Workplace-Surveillance-Comments-to-OSTP-revised.pdf>. [<https://perma.cc/MGP2-F2RY>].
- 8 Dubal, V. (2023). *On Algorithmic Wage Discrimination*. Columbia Law Review. <https://columbialawreview.org/content/on-algorithmic-wage-discrimination/> [<https://perma.cc/V6YJ-33KK>].
- 9 Center for Democracy & Technology, et al. (2023).
- 10 Ravid, D. M., White, J. C., Tomczak, D. L., Miles, A. F., & Behrend, T. S. (2022). A meta analysis of the effects of electronic performance monitoring on work outcomes. *Personnel Psychology*, 76(1), 5–40. <https://doi.org/10.1111/peps.12514>; Siegel, R., König, C. J., & Lazar, V. (2022). The impact of electronic monitoring on employees' job satisfaction, stress, performance, and counterproductive work behavior: A meta-analysis. *Computers in Human Behavior Reports*, 8, 100227. <https://doi.org/10.1016/j.chbr.2022.100227>.

and privacy protections.¹¹ Grassroots organizing and alternative labor groups have also been active in demanding better working conditions and resisting invasive surveillance. Gig workers, often facing precarious employment and extensive monitoring, have formed both national and city-based collectives such as Gig Workers Collective, Gig Workers Rising, RideShare Drivers United, the Drivers Union, and Los Deliveristas Unidos.

Policymakers have also begun expressing concerns and issuing guidance on workplace data and surveillance practices. In the past two years, federal offices and agencies such as the Department of Labor,¹² Equal Employment Opportunity Commission,¹³ Federal Trade Commission, White House,¹⁴ and Consumer Financial Protection Bureau¹⁵ have been engaging workers, labor unions, and worker advocates around this issue, seeking public input, and issuing guidance.

- 11 Cook, M. (2023, September 13). *Teamsters contract prohibits use of In-Cab cameras.* *Arkansas Business*. <https://www.arkansasbusiness.com/article/teamsters-contract-prohibits-use-of-in-cab-cameras/>.
- 12 *Artificial intelligence and worker well-being: Principles and best practices for developers and employers.* (2024). United States Department of Labor. <https://web.archive.org/web/20250116123325/https://www.dol.gov/general/AI-Principles>. *The original documents referenced in footnotes 12-14 were removed from official websites after the Trump administration took office. We have provided links to archived versions of those pages.*
- 13 Equal Employment Opportunity Commission. (2023). *Select Issues: Assessing adverse impact in software, algorithms, and artificial intelligence used in employment selection procedures under Title VII of the Civil Rights Act of 1964.* <https://web.archive.org/web/20250113110319/https://www.eeoc.gov/laws/guidance/select-issues-assessing-adverse-impact-software-algorithms-and-artificial>.
- 14 The White House. (2023). Memorandum on Advancing Worker Empowerment, Rights, and High Labor Standards Globally. <https://bidenwhitehouse.archives.gov/briefing-room/presidential-actions/2023/11/16/memorandum-on-advancing-worker-empowerment-rights-and-high-labor-standards-globally/> [<https://perma.cc/5VNY-JNDG>]; Office of Science and Technology Policy (OSTP). (2023). Request for Information; Automated Worker Surveillance and Management. <https://www.federalregister.gov/documents/2023/05/03/2023-09353/request-for-information-automated-worker-surveillance-and-management> [<https://perma.cc/7SHB-N9AU>]; Office of Management and Budget. (2024). Memorandum: Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence. <https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf> [<https://perma.cc/RG7H-W7EE>].
- 15 CFPB and NLRB Announce Information Sharing Agreement to Protect American Consumers and Workers from Illegal Practices. (2023). Consumer Financial Protection Bureau. <https://www.consumerfinance.gov/about-us/newsroom/cfpb-and-nlr-announce-information-sharing-agreement-to-protect-american-consumers-and-workers-from-illegal-practices/> [<https://perma.cc/8PUZ-E3BD>].

On the legislative front, privacy and data issues have often struggled to gain political traction in the United States, and this is especially true in the workplace context. No significant legislation on surveillance and data in the workplace has been passed in Congress. All enacted data privacy laws in the states operate in a consumer- rather than worker-focused frame and, with the significant exception of the California Consumer Privacy Act, exclude employment-related data from their scope. California, Minnesota, and New York have passed laws granting warehouse workers limited rights to access information regarding quotas and work pace data, but these laws do not limit employers' ability to collect such data or require them to tell workers when and how their data is collected. Other comprehensive workplace technology state bills (regulating both electronic surveillance/bossware systems and automated hiring technologies) have emerged in a few states: Massachusetts House Bill 1873, New York Senate Bill 7623, and Vermont House Bill 114.¹⁶ While the core of these policy efforts lies in enhancing transparency and accountability, no bills focusing primarily on workplace surveillance or data collection have gotten close to passage at the state or federal level.

Consequently, workers face a situation where the scale and scope of worker surveillance are increasing, but the associated practices and effects on workers remain largely unregulated. Empirical research on what rules or standards rules workers believe should govern such surveillance, or under what circumstances (if any) surveillance is appropriate, has thus far been scant.¹⁷

16 These and other recent bills that address automated decisions in the workplace, in addition to workplace surveillance, are analyzed in a recent CDT report. Scherer, M. (2024). *Regulating Robo-Bosses: Surveying the civil rights policy landscape for automated employment decision systems*. Center for Democracy & Technology. <https://cdt.org/insights/report-regulating-robo-bosses-surveying-the-civil-rights-policy-landscape-for-automated-employment-decision-systems/> [<https://perma.cc/A8XM-NVTR>].


17 Notable exceptions include the survey in Hertel-Fernandez (2024), in which supported by a 3-to-1 margin a hypothetical bill that would require companies to disclose electronic surveillance, tell workers how it would be used, and allow them correct any data used in employment decisions; and a 2023 article by Jessica Vitak and Michael Zimmer that asked 645 workers who worked from home during the pandemic whether different forms of surveillance were appropriate. Vitak, J., & Zimmer, M. (2023). Surveillance and the future of work: exploring employees' attitudes toward monitoring in a post-COVID workplace. *Journal of Computer-Mediated Communication*, 28(4). <https://doi.org/10.1093/jcmc/zmad007>.

Industry-Led Data Standards

Meanwhile, data and software vendors have continued to develop new products for workplace surveillance and data collection. One particularly prominent and influential vendor is Argyle, an employment data and financial technology company. In 2021, Argyle launched a vendor consortium called the Open Employment Data Standards (OEDS) that attempted to categorize, track, and set standards for the different types of worker data that vendors collect, the capabilities of their products, and the security standards they use. The OEDS project wound down in August 2022, due in part to participating vendors' reluctance to share proprietary information about the data that they were collecting.¹⁸ Workers continue to see their data harvested and monetized — but, to date, the main efforts to explore potential standards and guardrails for such practices have come from the companies engaging in them.

As a result, despite the state bills previously mentioned, the democratic process has not moved with the same speed and urgency as the private sector in shaping employment data standards. In light of this, it is critical for workers and advocates for workers' rights to assist in closing the gap between legislative efforts and workers' rights advocacy efforts in order to achieve greater protections and rights for workers.

In sum, slow, fragmented legislation and regulation and the private sector's rapid development of surveillance technologies are hindering efforts to advocate for data rights in the workplace, leaving workers with inadequate protections. The disconnect between workers, advocates, and policymakers, along with weak enforcement, exacerbates the challenge of achieving comprehensive data rights for workers. These interrelated challenges have greatly hindered advocacy and organizing efforts regarding workers' data and technology rights.

 18 Open Employment Data Standards (retrieved Nov. 28, 2024), <https://perma.cc/45KU-CZLP>.

Ensuring that advocates' priorities align with workers'

Through our work on these issues, we have gotten the chance to speak directly with workers across industries and sectors — including teachers, gig workers, truck drivers, retail workers, lawyers, doctors, and office staff. On the issue of datafication and, more specifically, workplace surveillance, we found that workers' thoughts, reflections, and opinions are diverse. While many workers shared serious concerns about these practices, others expressed greater tolerance for workplace surveillance. Some workers even expressed a belief that certain forms of surveillance were useful, depending on the kind of industry and work being conducted.

Anecdotal observations such as these sparked a desire to explore workers' views on datafication in greater depth. Employers' lack of transparency regarding their surveillance and data collection practices — a situation enabled by the United States' near-total absence of laws granting data rights to workers — impedes workers' awareness of the existence and effects of datafication. Consequently, a simple public opinion poll could not answer such questions because such polls provide limited opportunity to educate participants on the underlying issues.

The lack of transparency and awareness surrounding worker datafication has also made it more difficult for labor and other civil society groups to engage workers and organize them. In addition, the gig economy and prevalence of temporary work across industries further exacerbate this challenge, which makes it difficult for workers themselves to speak with one another, develop a shared analysis, and build solidarity.

Based on these observations and challenges, we sought to answer the questions outlined in the Introduction through the Deliberative Polling methodology, which is described further in this report. The

The lack of transparency and awareness surrounding worker datafication has also made it more difficult for civil society groups to engage workers and organize them.

Deliberative Polling format allows members of the public to learn about, discuss, and opine on these issues in an environment where they can develop and express their views organically.¹⁹ The Deliberative Polling format has been used in settings across the world to elicit ordinary citizens' informed views on matters of policy. The process has been successfully used in drafting and evaluating constitutional amendments,²⁰ economic development proposals,²¹ and energy policy²² in settings across the world.

In the context of workplace policy issues, this means providing workers with the resources and platforms they need to learn about and discuss relevant topics without undue pressure from either employers or workers' advocates.

19 *What is Deliberative Polling®?*, Stanford Deliberative Democracy Lab, <https://deliberation.stanford.edu/what-deliberative-pollingr> [<https://perma.cc/4WEN-4BBC>].

20 Fishkin, J. S., & Siu, A. (2021). Mongolia: Piloting elements of a deliberative system. In *Deliberative Democracy in Asia* (pp. 190–204). Routledge. <https://doi.org/10.4324/9781003102441-12> [<https://perma.cc/55R8-8GTJ>].

21 Chirawurah, D., Fishkin, J., Santuah, N., Siu, A., Bawah, A., Kranjac-Berisavljevic, G., & Giles, K. (2019). Deliberation for Development: Ghana's first deliberative poll. *Journal of Deliberative Democracy*, 15(1). <https://doi.org/10.16997/jdd.314> [<https://perma.cc/9TCB-48DE>].

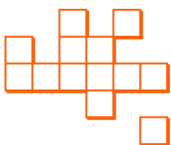
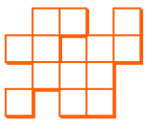
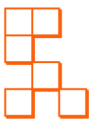
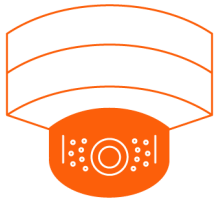
22 Mah, D. N., Cheung, D. M., Lam, V. W. Y., Siu, A., Sone, Y., & Li, K. (2021). Trust gaps in energy transitions: Japan's National Deliberative Poll after Fukushima. *Environmental Innovation and Societal Transitions*, 39, 249–269. <https://doi.org/10.1016/j.eist.2021.03.002>.

03

Methodology

The project consisted of the following steps:

1. A **national public opinion poll** of workers to identify topics of deliberation and test the persuasiveness of arguments for and against different forms of workplace surveillance.
2. Initial **development of policy proposals and briefing materials** on selected topics of deliberation.
3. A **pilot session** of 10 workers to test the briefing materials and deliberation format.
4. A **pre-deliberation survey** where participants were presented with the proposals on each topic and asked to score and rank them.
5. Giving workers the **briefing materials** so that they could learn more about the topics and proposals before the deliberations.
6. **Deliberations** where participants discussed the proposals in small groups and had the opportunity to pose questions to a balanced panel of experts.
7. A **post-deliberation survey**, whose questions were identical to those on the pre-deliberation survey, thus allowing us both to analyze participants' post-deliberation views and to identify shifts that occurred as a result of the deliberative process.



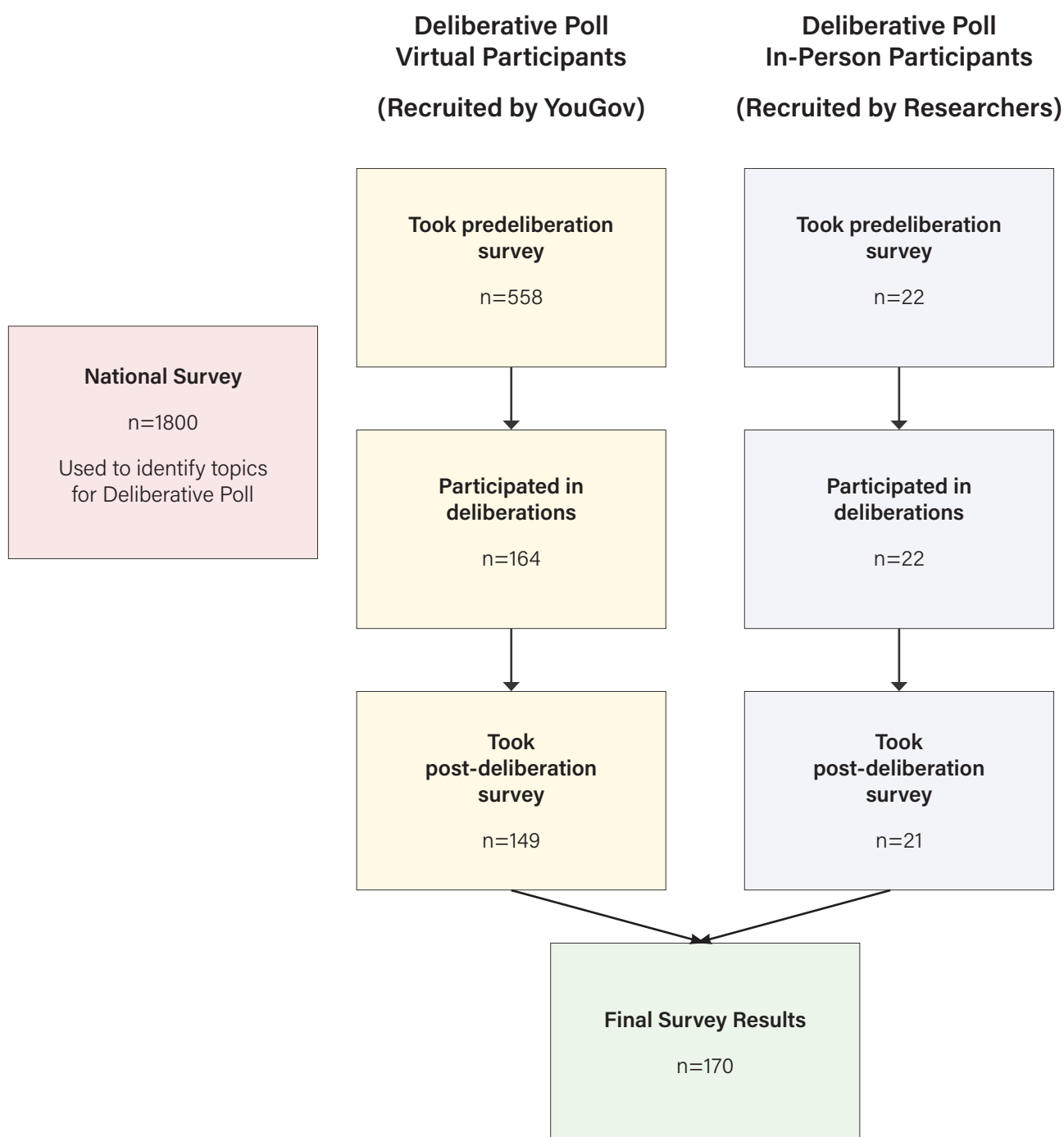


Figure 1. Graphical summary of study participants.

This figure shows the number and sources of participants in both the national survey and the Deliberative Poll.

3.1: Initial public opinion poll

Poll respondents were screened to ensure they were active participants in the U.S. workforce in non-supervisory roles.

The project started with a nationally representative public opinion poll conducted by YouGov, which surveyed 1,800 workers regarding their views on electronic surveillance and data collection in the workplace. The survey's primary goal was to identify the types of workplace surveillance that would be the subject of the Deliberative Poll by determining which types of surveillance workers found most concerning and most in need of regulation. Other questions in the survey asked workers whether, to their knowledge, they had personally experienced each type of surveillance and what arguments for and against workplace surveillance respondents found most persuasive. Poll respondents were screened to ensure they were active participants in the U.S. workforce in non-supervisory roles.²³

Respondents were asked for their opinions on 12 different forms of surveillance, which we selected based on recent research and reporting on emerging and common forms of electronic surveillance in the workplace.²⁴ To help us select topics for the Deliberative Poll, the public opinion poll also asked respondents whether they believed there should be government regulations that specify whether and how employers should be able to conduct each of these types of surveillance, measured on a 5-point scale (from "Definitely no" to "Definitely yes").

23 Because the focus was intended to be on non-managerial workers who may be subject to surveillance (rather than on managers or business owners who may impose surveillance), self-employed individuals were screened out of the survey unless they worked through a gig economy platform. We drew a distinction between gig platform workers and other workers who may identify themselves as self-employed because platform-based workers typically do not supervise other workers and are often subjected to various forms of electronic surveillance. See Sannon, S., Sun, B., & Cosley, D. (2022). Privacy, surveillance, and power in the gig economy. *CHI Conference on Human Factors in Computing Systems*. <https://doi.org/10.1145/3491102.3502083> [<https://perma.cc/6NUQ-PM8X>].

24 E.g., Vitak & Zimmer (2023); Nguyen (2021).

By medium of surveillance

Companies using the following digital technologies to monitor or control workers' activities

Communications logging: "Software that analyzes your phone calls, emails, or other communications, such as how often you make phone calls or what you say in emails you send (47.2%)

Computer activity logging: "Software that tracks your keystrokes, mouse movements, apps opened, or other activity on laptops, phones, or other devices" (46.7%)

Audio/video recording: "Video cameras, microphones, or other electronic recording devices in the workplace" (47.6%)

Work-from-home monitoring: "Software or devices that monitor your activities when you work from home" (50.4%)

Biometric monitoring: "Wellness apps or other software or devices that track biometric information, such as your heart rate, body temperature, or stress levels" (48.4%)

Facial recognition: "Facial recognition or other technology that analyzes your physical appearance" (47.6%)

Location tracking: "Software or devices that monitor your whereabouts and location" (49.4%)

By purpose of surveillance

Companies' use of digital technologies to do the following

Productivity monitoring: "Monitor productivity, such as how quickly you worked or how much work you did" (47.4%)

Downtime monitoring: "Monitor downtime, such as doing something at your workstation other than work you were assigned" (42.7%)

Break monitoring: "Monitor breaks, such as engaging in non-work activities away from your workstation like resting, using the restroom, or a snack" (41.1%)

Coworker communications monitoring: "Monitor how often you communicate with your coworkers or what you say in communications with your coworkers" (44.3%)

External communications monitoring: "Monitor how often you communicate with people who do not work for the company, such as customers or vendors, and what you say in communications with such people" (42.9%)



Table 1. National survey: support for regulation of different forms of surveillance.

This table shows the percentage of national survey respondents who believed each form of surveillance should "Definitely" or "Probably" be regulated.

 Red fill: Topics included in survey and selected for deliberation

 Yellow fill: Topics included in survey but *not* selected for deliberations

We grouped these types of surveillance as seen in Table 1, which also shows the percentage of respondents that believed each form of surveillance should “definitely” or “probably” be regulated. We selected the deliberation topics from each category with the highest level of support for regulation, which were work-from-home monitoring (50.4% supported regulation), location tracking (49.4%), and productivity monitoring (47.3%).

3.2: Pilot session and formulation of proposals and briefing materials

After analyzing the results of the national poll and selecting the three deliberation topics, we prepared briefing materials that provided workers with background information regarding the use of technology to monitor and manage workers as well as a series of potential policy proposals on the selected topics.

In the briefing materials, each proposal appeared in a table along with an equal number of arguments for and against each proposal. We drafted the briefing materials with a conscious effort to present both the background information and the arguments regarding each proposal in a neutral manner so that participants could form their own opinions and conclusions about the desirability of each proposal.

In November 2023, we held a pilot session in Oakland, California, where we tested the briefing materials and deliberative polling process with a small group of workers recruited from Coworker's network. The findings from the pilot session informed the deliberative surveys. For example, we found that participants in the pilot generally opposed absolute statements that certain forms of surveillance should always or never be allowed. In response to the proposal that employers should not be permitted to track employees' locations, several participants pointed to situations in which location tracking makes sense such as in workplaces with hazardous materials. These findings emphasized which topics need more nuanced and explicit deliberation.

Based on the insights gained from this pilot, we edited the proposals and briefing materials. We also shared the proposals with several workers' rights advocates and management-side employment attorneys and solicited their feedback during the revision process. Appendix A contains the final version of the briefing materials, including the proposals that were discussed during the March 2024 deliberations.

3.3: The Deliberative Poll

Participants

Two groups of workers participated in the Deliberative Poll itself. One group of workers, which attended the deliberations in person, was recruited through Coworker's network. These consisted of two 11-person groups of workers (for a total of 22 in-person participants), one of which met in Atlanta, Georgia and the other in Kansas City, Missouri.²⁵

²⁵ These locations were chosen for geographic and political balance; taken together with the pilot session in California, one in-person session each was held in a state in the West Coast, Midwest, and East, and one each from a blue, red, and purple state.

The second group of workers participated in the deliberations online; these participants were drawn from a standing panel of U.S. residents that YouGov uses for its public opinion surveys. We aimed to have between 150 and 170 virtual participants. For these workers, YouGov had 557 workers complete the pre-deliberation survey (described further in the following subsection), anticipating that of these workers, approximately one-third would actually attend and participate in the virtual deliberations. This estimate proved accurate; of the 557 YouGov-recruited workers who completed the pre-deliberation survey, 164 (29%) attended at least one of the deliberation sessions.

The demographics of the virtual deliberation participants are available in Appendix B (this information was not collected from in-person participants). The participants' demographics tracked those of the U.S. labor force as a whole fairly closely in terms of gender and age. However, participants were substantially more likely to be Black (31%, compared to 13% of the labor force as a whole) and to have college degrees (49% versus 39%) than the general population. Participants were also more likely to have voted and, if they did vote, to have voted for Joe Biden in the 2020 election; 50% of participants said they had voted for Joe Biden in 2020, with 23% saying they voted for Donald Trump, 1% for another candidate, and 26% saying they did not vote.²⁶

26 There were some possible differences in responses based on voting history and education, although the sample size was not large enough for most of the differences to be statistically significant. For example, college-educated participants' responses indicated stronger opposition to most forms of electronic monitoring as compared to their non-college-educated counterparts. There did not appear to be systematic differences between Biden and Trump voters, but participants who voted in 2020 appeared somewhat more likely to support the data rights proposals than participants who did not vote. Future research projects with larger sample sizes should explore differences across demographic categories more deeply.

Deliberation survey

A central component of the Deliberative Polling process is, unsurprisingly, a poll — specifically, a survey that deliberation participants took both before (the “pre-deliberation survey”) and after (the “post-deliberation survey”) the deliberations. The survey asked participants:

- To state on a scale of 0 to 10 how much they opposed/supported each proposal
- To rank the proposals for each topic from the one they supported the most to the one they supported the least
- To rate and rank proposals on two other topics that were not subjects of deliberation (specifically, biometric data collection and monitoring workers’ communications)
- A series of more general questions regarding their views on technology and workplace issues

The pre- and post-deliberation survey instruments were identical, aside from a series of questions in the post-deliberation survey that solicited feedback on the Deliberative Polling process itself.

Deliberations

Deliberations were held on March 17, 2024. One hundred and sixty-four workers participated online through the Stanford Online Deliberation Platform developed by Stanford’s Deliberative Democracy Lab (DDL) and the Stanford Crowdsourced Democracy Team. This platform is specifically designed for use in Deliberative Polling. All of these virtual participants came from the YouGov-recruited group of workers who took the pre-deliberation survey.

All 22 in-person participants attended all three sessions, as did 142 of the 164 virtual participants. Virtual participants received a \$300 Visa gift card for their participation (prorated if they did not attend all sessions) and in-person participants received \$500 cards.

The total length of deliberations was seven and a half hours. The deliberations were divided into three sessions of approximately equal length, with the first session dedicated to discussing the proposals relating to monitoring employees who work from home, the second to location tracking, and the third to productivity monitoring and data rights. During each session, workers first discussed the proposals amongst themselves in groups of approximately 10 workers each (the in-person sessions in Atlanta and Kansas City each featured a single group of 11 workers).

Each group then had the opportunity to submit questions to a panel of experts, who answered the questions during a plenary session that all workers joined via the Stanford Online Deliberation Platform. For each plenary session, the expert panel consisted of one workers' rights advocate, one management-side employment law attorney, and one academic. The panelists were selected by the researchers based on relevant experience and expertise in workplace surveillance and privacy. During the plenary sessions, one of the researchers served as moderator and selected questions from the participants for the panel to answer. In so doing, the moderator attempted to use questions that touched on topics raised in multiple questions.

At the end of the day, all participants were sent links to complete the post-deliberation survey, which was identical to the pre-deliberation survey. All but one of the in-person participants completed the post-deliberation survey, as did 149 of the 164 virtual participants, for a total of 170 workers who completed the final survey.

After receiving the responses to the final post-deliberation survey, we analyzed both the results of the post-deliberation survey and how the patterns in participants' responses changed from the pre-deliberation survey. Additionally, we reviewed the transcripts from the deliberation sessions to identify statements from participants that might contextualize or indicate some of the underlying reasons for the patterns and shifts in participants' responses to the survey.



04

Results

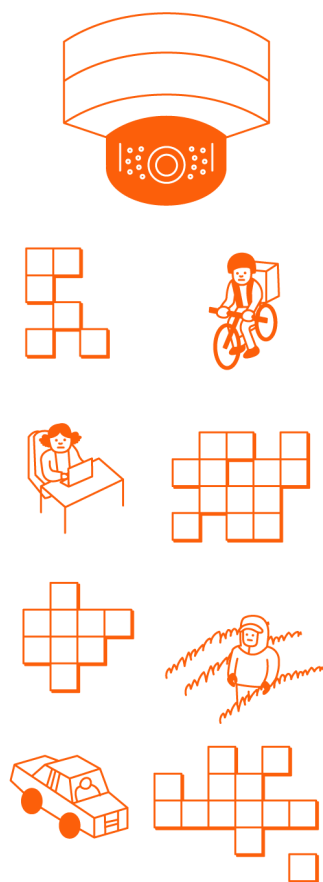
The first three parts of this section answer the three questions set forth in the Introduction:

Section 4.1: What rules and standards regarding workplace surveillance and data collection would workers support if given the opportunity to learn about and discuss them on their own?

Section 4.2: How, if at all, would that process of learning about and discussing these issues change workers' views and priorities?

Section 4.3: Does providing workers with information and the opportunity to discuss these issues with other workers increase their interest and engagement in workers' rights issues?

Throughout sections 4.1-4.3, we highlight quotes from deliberation participants that are consistent with and may help explain participants' views on these subjects. Section 4.4 then highlights a final finding that, while not a subject of any of the questions in the deliberation survey, was nevertheless a recurring theme that participants raised during deliberations: that continuous surveillance might actually undermine employers' interests.



4.1: What rules and standards regarding workplace surveillance and data collection did participants support after deliberations?

See table on next page.

Work-From-Home Monitoring	Location Tracking	Productivity Monitoring	Coworker Communication Monitoring*	Biometric Tracking*	Data Rights
Employers should always be allowed to use digital technologies to monitor employees who are working from home.	Employers should be allowed to track employees' locations whenever they are supposed to be working.	Employers should always be allowed to use digital technologies to monitor each employee's productivity.	Employers should always be allowed to monitor communications between their employees.*	Employers should not be allowed to monitor or collect employees' biometric data.*	Employers should have to tell employees what types of data they collect and how they collect it.
Employers should never be allowed to monitor employees working from home.	Employers should never be allowed to track employees' locations.	Employers should only be allowed to use digital productivity monitoring if they feel that an employee is not completing tasks or is otherwise performing poorly.	Employers should not be allowed to monitor the communications of employees who are off duty.*	Employers should not be allowed to monitor or collect biometric data unless it is necessary to ensure employees' health or safety.*	Employers should have to tell employees the purposes for which they use employees' data.
Employers should be allowed to use digital technologies to monitor employees who are working from home if the employee is using company-owned devices or equipment.	Employers should not be allowed to track an employee's location if the employee is off-the-clock	Employers should not be allowed to use digital productivity monitoring to make employees work faster if it would harm employees' physical health.	Employers should not be allowed to monitor communications between coworkers unless they are sent on company devices or computer networks.*	Employers should be allowed to collect biometric data as part of employee "wellness programs" that encourage or promote healthy behavior.*	Employees should have the right to access and review any data that employers collect about them.



Table 2: Deliberative Poll proposals: results from post-deliberation survey

* Topic/proposal included in survey but not a topic of deliberations.

- Majority of post-deliberation poll respondents gave the proposal a score of 10/10
- Majority of post-deliberation poll respondents gave the proposal a score of 8+/10.
- Majority of post-deliberation poll respondents gave the proposal a score of 6+/10.
- Proposal was mistakenly omitted from deliberation surveys.

Work-From-Home Monitoring	Location Tracking	Productivity Monitoring	Coworker Communication Monitoring*	Biometric Tracking*	Data Rights
Employers should not be allowed to monitor employees who are working from home unless the employee is suspected of wrongdoing or poor performance.	Employers should be allowed to track the locations of employees whenever they are using company-owned devices or equipment	Employers should not be allowed to use digital productivity monitoring to make employees work faster if it would harm employees' mental health.	Employers should be allowed to use artificial intelligence to monitor their employees' communications for signs of harassment, abuse, or other misconduct.*		Employers should not be allowed to sell or share an employee's data with third parties without the employee's permission.
Employers should not be allowed to use webcams or other recording devices to monitor employees who are working from home.	Employers should be allowed to use location tracking to check whether an employee is on company property ("geofencing"), but should not be allowed to track an employee's exact location		Employers should not be allowed to use artificial intelligence to monitor an employee's emails, chats, and text messages unless the employer has a specific reason to believe that employee engaged in harassment, abuse, or other misconduct.*		
	An employer should not be allowed to access information on an employee's location unless the employer has a specific health, safety, security, or performance concern regarding that employee.				



Table 2 (cont.): Deliberative Poll proposals: results from post-deliberation survey

* Topic/proposal included in survey but not a topic of deliberations.

- Majority of post-deliberation poll respondents gave the proposal a score of 10/10
- Majority of post-deliberation poll respondents gave the proposal a score of 8+/10.
- Majority of post-deliberation poll respondents gave the proposal a score of 6+/10.
- Proposal was mistakenly omitted from deliberation surveys.

	Employers should be required to tell workers what types of data they collect	Employers should be required to tell workers the purposes for which they collect that data	Employees should have the right to access and review any data that employers collect about them	Employers should not be allowed to sell or share an employee's data with third parties without the employee's permission
Mean Score	8.589	8.711	8.155	8.371
Median	10.000	10.000	9.000	10.000
Mode	10.000	10.000	10.000	10.000



Table 3: Data rights proposals already had strong support in the pre-deliberation survey.

On a scale of 0 (strongly oppose) to 10 (strongly support), how strongly would you oppose or favor the following proposals?

Respondents showed strong support for proposals that would grant workers a right to greater transparency regarding employers' surveillance and data collection practices, prohibit off-clock surveillance, limit location tracking, and bar employers from engaging in productivity monitoring that would harm workers' mental or physical health.

Strong support for data rights

The four data rights proposals started with strong support in the pre-deliberation survey, with mean support scores (on a scale of 0 to 10) ranging from 8.2 to 8.7. Majorities gave a maximum score of 10 to the proposals that employers should have to tell employees what types of data they collect and how they collect it (54%); tell them the purposes for which they will use employee data (55%); and obtain employees' permission before selling or sharing data (58%). For the fourth data rights proposal, which stated that employees should have the right to access and review data that employers collect about them, 46% of respondents gave a score of 10.

	Employers should be required to tell workers what types of data they collect	Employers should be required to tell workers the purposes for which they collect that data	Employees should have the right to access and review any data that employers collect about them	Employers should not be allowed to sell or share an employee's data with third parties without the employee's permission
Mean Score	9.112*	9.129*	8.574*	8.698
Median	10.000	10.000	10.000	10.000
Mode	10.000	10.000	10.000	10.000



Table 4: Support for data rights proposals became even more overwhelming in the post-deliberation survey.

On a scale of 0 (strongly oppose) to 10 (strongly support), how strongly would you oppose or favor the following proposals?

* Statistically significant increase from pre-deliberation survey

Support for these proposals increased still further after deliberations, by statistically significant amounts in the cases of three of the proposals. In the final survey, at least 58% of respondents gave each of the four data rights proposals a maximum support score of 10, more than 80% gave each proposal a score of 8 or more, and more than 88% a score of at least 6.²⁷

During the deliberations, a number of participants expressed the view that a worker should have a right to access data that employers collect whenever that data relates to that worker:

"I agree that they should be limited and that the employer should inform the employee of whenever they're going to be tracked or whenever data has been collected. Ultimately it's our information, so we should have a right to it."

"It is your information, not the company's. When it's you and your employment, that data should belong to you and no one else, and you should determine who gets to see it or use it. Period. No ifs, ands, or buts."

²⁷ All tests comparing pre- and post-deliberation support scores were conducting using a one-tailed Wilcoxon signed-rank test. Statistical significance is at the .05 level.

"I think it's fair for [employers] to collect the data if they are making the employees aware of what they're collecting and what they're going to use it for. And employees should be able to see what the data is because that's something personal about them. [Employers saying that] giving employees access to the information may undermine the effectiveness of the monitoring — that doesn't really seem fair to me. They should be able to [say] exactly what [they] use, because it's not their data. It's the employees' data."

These comments were consistent with participants' responses to another question on the survey, which asked participants whether, after an employee separates from a company, the employer or the former employee should get to decide whether the employer keeps or deletes the data it collected about the former employee. In the pre-deliberation survey, 60% of respondents said the former employee should usually get to decide. In the post-deliberation survey, this rose to 72%, a significant increase.²⁸

One of the arguments presented against the data rights proposals was that "It would be expensive and time-consuming for an employer to set up a system that allows employees to access and control the data that the employer collects." Multiple workers specifically called out this argument as unpersuasive, suggesting that if an employer is willing to go to the expense of collecting the data, then they should also be ready to undertake the expense of allowing workers to access it:

"I see that one of the cons is that it would be expensive and time-consuming. Well, yeah, duh, but that isn't the employees' problem . . . That shouldn't even be an excuse. If it's expensive, then they have to find a way to pay for it."

"[I]f it's too expensive and time-consuming to set up a system that allows employees to access and control the data, then don't collect the data. Problem solved."

28 p=0.0013.

Strong opposition to off-clock monitoring

The survey results also indicate strong support for a ban on surveillance that collects information about workers while they are off the clock. Before deliberations, 80% of participants gave a proposal to ban off-the-clock location tracking a support score of at least 6, with a mean support score of 8.1 and 52% giving the proposal the maximum score of 10. In the post-deliberation survey, support for these proposals increased further, and the corresponding statistics increased to 88%, 8.6, and 64%, respectively.²⁹

Two recurring themes during discussions of this proposal were that participants believed off-clock location monitoring to be an invasion of privacy and that it is not appropriate for employers to track workers during periods when the employer is not paying them:

"Privacy is very important in a person's life Employers only pay for a certain amount of that life to make money, and they should not have complete and total unfiltered access to a person's life."

"Nobody needs to know if I went to Costco or if I went to Petsmart. [If] I'm off the clock, what business is it of theirs? It's a total violation of my privacy."

"I don't think there's any reason if I was off the clock. That's my time. It's none of your business where I am or what I'm doing."

Some participants also expressed concern that employers could misuse off-the-clock location information:

"If you're off the clock, I think that's a violation of personal information. Especially, let's say in an example, if you have to go to some sort of doctor's appointment and they're tracking you there. Is there a possible retaliation against you as the employee where they can come against you and say maybe you're not fit to work here?"

29 These increases fell slightly outside the range of statistical significance ($p=0.069$).

	No off-clock location tracking (pre-deliberations)	No off-clock location tracking (post-deliberations)	No off-clock monitoring of coworker communications (pre-deliberations)	No off-clock monitoring of coworker communications (post-deliberations)
Mean Score	8.097	8.615*	8.302	8.503
Median	10.000	10.000	10.000	10.000
Mode	10.000	10.000	10.000	10.000



Table 5: Participants strongly opposed off-clock monitoring.

Support scores for off-clock monitoring proposals. See Table 2 for full wording of proposals.

* Statistically significant increase from pre-deliberation survey.

The other proposal that directly addressed off-clock monitoring was, “Employers should not be allowed to monitor the communications of employees who are off duty.” This topic appeared on the surveys but was not discussed during the deliberations. Nevertheless, the pre- and post-survey support for this proposal was strikingly similar to the parallel off-clock location tracking proposal, as indicated in Table 5.

Support for limits on location tracking

Participants tended to support the proposals that would impose restrictions on location-tracking. The only location-tracking proposal that did not receive majority support in the post-deliberation survey was the proposal that employers should be permitted to monitor workers’ locations whenever they are supposed to be working.

Table on next page.

	Employers should never be able to track employees' locations	Employers should not be able to track off-clock employees	Employers should be able to track employees whenever they use company equipment	Employers should be allowed to use geofencing, but not track precise location	Employers should only be able to track if there is a safety, performance, etc concern
Mean Score	5.898†	8.615*	6.793*	6.383*	7.290
Median	6.000	10.000	8.000	7.000	8.000
Mode	5.000	10.000	10.000	5.000	10.000



Table 6: All proposed restrictions on location tracking received majority support in the post-deliberation survey.

Support scores for location-tracking proposals (0 to 10 scale).

* Statistically significant increase from pre-deliberation survey.
 † Statistically significant decrease from pre-deliberation survey

A majority of participants gave a support score of 6 or more to the proposal that employers should never be allowed to track workers' locations, although support for that proposal dropped significantly³⁰ from the pre-survey.

Participants were even more supportive of proposals that would impose restrictions on location tracking without banning it outright. A number of participants provided examples of particular jobs for which they believed location tracking would be appropriate, at least while the worker is on duty:

"I would think that it kind of depends on the job.. If you're a security guard walking around, you know, it's important to know the security guard is on-site or whatever. But other jobs, it doesn't really matter."

Several workers indicated that monitoring would be justified if knowing a worker's location would help ensure the worker's safety or if the job required the use of a company vehicle:

³⁰ p=0.008.

"I think the only area where I think [location-tracking] would be acceptable is if someone is using a company vehicle. I think then it is valid to see where that vehicle is for safety purposes as well as to monitor the employee's compliance to routes or whatever."

"I think in terms of vehicles, especially in rural settings for say delivery drivers, for their own safety it might be nice to have a location so they can be found if something catastrophic or an accident would happen. But that's pretty much the only thing that I agree with. Computers, they don't really need to be tracked as far as location goes."

Some workers expressed a belief, however, that there were limits to these justifications for tracking:

"I worked for a company once where they knew when we signed in and when we signed out. They said it was for [our safety] — like let's say there was a fire, they knew how many employees were there. However, I think that anything other than that to me is overstepping. The reasons that they named in the proposal ... about health concerns or whatever, they'll take that and they'll use that wrongly."

"Knowing employees' location during the work day is helpful for security and safety. I can see [employers] wanting to track equipment, maybe [a worker's] location. But I would question how far they can go with that."

These nuanced, context-specific views on the propriety of surveillance appeared to become more pronounced as a result of the deliberations, as discussed further in the report.

	No productivity monitoring to make employees work faster if it harms employees' physical health	No productivity monitoring to make employees work faster if it harms employees' mental health
Mean Score	8.047	8.194
Median	9.000	10.000
Mode	10.000	10.000



Table 7: Participants strongly supported barring productivity monitoring that harms workers’ health.

Post-deliberation support scores (0 to 10 scale). See Table 2 for full wording of proposals.

Opposition to surveillance that harms workers’ mental or physical health

Two other proposals that had clear majority support from participants in the final survey were that employers should not be allowed to engage in productivity monitoring if it would harm workers’ mental or physical health. A majority (52%) of participants gave the mental health proposal a maximum support score of 10, and 73% gave it a support score of at least 8; the corresponding statistics for the physical health proposal were similar, with 49% giving it a score of 10 and 72% giving it a score of at least 8. Both of these marked statistically significant increases from the pre-deliberation survey.

Mental health concerns were also a common theme in participants’ arguments against continuous monitoring. Some participants highlighted the ‘creepiness’ factor of continuous surveillance, even likening it to a dystopia or a police state:

“I just have to add that I think some of you are probably familiar with this with the book 1984, but it’s become too ‘Big Brother.’ I feel that we can’t go anywhere without all of our movements being watched. I know in our schools we have cameras almost everywhere. At least in New Jersey we have laws about putting cameras in the classrooms, but they are just about everywhere. They’re in the auditoriums. They’re in the cafeteria. They’re in the offices. They’re in the hallways. You go out and people have cameras attached to their homes everywhere. I mean, there is good and bad about being monitored, you know, as far as crime and types of things like that, but it’s just gotten out of hand in general and now, you [deal with it when] you’re working.”

"Exactly and having worked with visual monitors. I worked in a place and we had more than 72 cameras on a bank. They claimed it was being constantly recorded, but who knows? The problem was [there was] too much going on... who's checking this stuff? ...who's holding [the footage]? Who's looking at it? I don't ever remember a case of them reviewing it. There truly is no need, you just feel like the Gestapo or somebody's walking around looking at you all the time. Short of working for the NSA or the CIA — [there] truly is no reason for anybody to be constantly monitored 24/7, 365 at the bosses' whim."

"...There's got to be some guidelines as to how [the monitoring] can be done. Whether you're going to have a creepy person watching you all the time or whether they're just going to be monitoring your electronic equipment. Either way it has to be set down as to how it's going to be done, and [it has to be] legal."

4.2: Learning about and discussing surveillance and datafication led to some noticeable shifts in workers' views and priorities

After deliberations, participants became less likely to support proposals that the covered forms of surveillance should "always" or "never" be allowed and generally became more likely to support more nuanced proposals. Additionally, as noted previously, participants' strong support for data rights and strong opposition to off-the-clock monitoring became even more pronounced after deliberations. Support for proposals that prohibit productivity monitoring that harms workers' mental or physical health gained significant additional support in the post-deliberation survey.

	Employers should be able to track employees whenever they are working (pre-deliberations)	Employers should be able to track employees whenever they are working (post-deliberations)	Employers should never be able to track employees' locations (pre-deliberations)	Employers should never be able to track employees' locations (post-deliberations)
Mean Score	5.783	5.337	6.639	5.898 †
Median	6.000	5.000	7.000	6.000
Mode	5.000	5.000	10.000	5.000



Table 8: Support for proposals that employers should always or never be allowed to track workers' locations fell after deliberations.

Support scores (0 to 10 scale)

† Statistically significant decrease from pre-deliberation survey.

Rejecting absolutes and embracing nuance

The most notable and consistent trend across all the topics discussed is that participants became more likely after deliberations to reject proposals suggesting, without qualification, that certain types of surveillance should “always” or “never” be allowed. Conversely, support for nuanced proposals — such as those suggesting that employers should only be allowed to surveil workers if there is a specific reason for doing so, or that surveillance should be banned under specific circumstances — tended to increase.

This trend was most stark in the location-tracking proposals. In the pre-deliberation survey, the proposal that employers should never be able to track employees' location had a mean support score of 6.6, third highest among the six proposals, and the proposal that employers should be able to track employees' locations whenever they are supposed to be working had a mean support score of 6.1, fifth-highest. In the post-deliberation survey, the proposals' mean support scores fell to 5.9 and 5.5, respectively — substantially lower than those of all other location-tracking proposals (whose mean support scores ranged from 6.4 to 8.6).

	Employers should not be able to track off-clock employees (pre)	Employers should not be able to track off-clock employees (post)	Employers should be able to track employees using company equipment (pre)	Employers should be able to track employees using company equipment (post)	Employers should be allowed to use geofencing, but not track precise location (pre)	Employers should be allowed to use geofencing, but not track precise location (post)	Employers should only be able to track if there is a safety, performance, etc concern (pre)	Employers should only be able to track if there is a safety, performance, etc concern (post)
Mean	8.097	8.615*	6.085	6.793*	5.701	6.383*	6.957	7.290
Median	10.000	10.000	6.000	8.000	5.000	7.000	8.000	8.000
Mode	10.000	10.000	5.000	10.000	5.000	5.000	10.000	10.000



Table 9: Support for each of the more nuanced location-tracking proposals increased after deliberations.

Support scores (0 to 10 scale) from pre- and post-deliberation surveys. See Table 2 for full wording of proposals.

* Statistically significant increase from pre-deliberation survey

A similar trend appeared in the productivity monitoring and co-worker communications proposals; mean support scores for the proposals that employers should “always” be permitted to monitor productivity and communications between coworkers both fell after deliberations, while support for 6 of the other 7 proposals in those respective categories rose. The only absolute proposal whose support increased after deliberations (albeit by a statistically insignificant amount) was the proposal that employers should never be allowed to track workers’ biometric data; notably, the biometric surveillance proposals were included in the pre- and post-deliberation surveys but were not discussed during the deliberations themselves.

Multiple workers voiced opposition to the proposals that would permit continuous monitoring on the grounds that such monitoring could create or deepen a lack of trust between employers and workers:

“We’re grown-ups here. If you hire me to do a job, you should have faith and trust in me doing the job.”

"I don't agree with continuous monitoring. I feel that if you trust someone enough to hire them as an employee, there should be another way of monitoring what their work is—perhaps, you know, reports at the end of the day."

Many participants also noted that when workers are traveling, working remotely, or using company equipment, some level of monitoring is often appropriate:

"Some [oversight] needs to be done just to make sure that basic protocols are being done, like [recording] phone calls... There has to be a little bit of monitoring making sure you're not driving the company truck to, you know, two states over for a birthday party when you're supposed to be going on your route or whatever. There needs to be a little bit of monitoring just to keep track of product or technology but honestly with basic metrics you can see that people are doing at least the minimum, and then if there's anything to discuss you can go from there. definitely, I do agree with [what others said earlier] — at the end of the day, the employer has to safeguard his own interests...so there should be some safeguards put in place just to ensure that they are doing their work, but monitoring an employee all the time is definitely wrong."

"I'd say for the sake of lawsuits and pay discrepancies, I definitely would say that [monitoring] is something that is important. Because there are times where remote employees will have to travel to different locations or show up on-site somewhere. And if you're driving and you feel like you're technically on the clock while you're driving, so making sure that mileage is covered and even if you're like something like a truck driver and you're getting in an accident, there's liability and all those things involved so tracking is necessary. It just depends on the case that it's being used in."

Similarly, some workers indicated that the need for different forms of monitoring may vary by industry. For example, one worker, when discussing the proposal that employers should never be allowed to

monitor work-from-home employees, indicated that different levels of monitoring might be appropriate for different jobs while also expressing concern that even modest monitoring could lead down a slippery slope to continuous surveillance:

"You know, 'never' is a little bit problematic. I think there are differences in Industries, but the danger is always in taking things too far. So, you know, many decades ago, I worked a customer service job where our calls were monitored. It was on-site and that's fine. You don't need to monitor calls every single minute and you certainly don't need to have a webcam on people when they're only doing calls. Um, so the absolutes don't work, but the danger is if you let a little bit in then the next thing, you know, every second is visually and audibly being monitored for no good reason."

"There should be monitoring but with certain limits. In the hospital, for example, I get monitored, and sometimes it creates stressful situations. But again, if it's home work, that could be tricky."

Another worker in the same group echoed these concerns, stating that "there are times when you may need to monitor to make sure the performance is being done," but expressing concern that this may "open the door to constant monitoring."

Some workers, while acknowledging that monitoring might sometimes be appropriate, suggested that mentoring or training might be an equally or more effective and beneficial way to improve performance:

"I am a remote employee and I feel that in my capacity if my productivity starts to slip then maybe I need monitoring. Maybe I need some new sort of training...but to be able to just say oh, you can't monitor any employees — that's ludicrous and that gets us to the place where we can't be remote workers anymore, because these employers are not going to sit there and be like, 'Okay. I'm going to give you a laptop. I'm going to give you a phone. I might even give you a car or a car allowance, but you're not going to allow me to monitor you.'"

	No productivity monitoring to make employees work faster if it harms employees' physical health (pre)	No productivity monitoring to make employees work faster if it harms employees' physical health (post)	No productivity monitoring to make employees work faster if it harms employees' mental health (pre)	No productivity monitoring to make employees work faster if it harms employees' mental health (post)
Mean	7.673	8.047*	7.458	8.194*
Median	9.000	9.000	8.000	10.000
Mode	10.000	10.000	10.000	10.000



Table 10: Increased support for barring productivity monitoring that harms workers’ health.

Support scores from pre- and post-deliberation surveys (0 to 10 scale). See Table 2 for full wording of proposals.

* Statistically significant increase from pre-deliberation survey.

“You know, I am a remote employee and I feel that in my capacity if my productivity starts to slip then maybe I need monitoring. Or maybe I need some new sort of training. Maybe I need to do some training.”

These results suggest that workers do not view the use of monitoring technologies as inherently beneficial or harmful in themselves. Rather, the purposes for which employers use them and the consequences stemming from their deployment determine whether workers believe particular forms of surveillance should be used.

Consolidation of support for data rights and opposition to surveillance that harms workers’ mental or physical health

As mentioned in sections 3.2.1 and 3.2.4, the final survey showed that a strong majority of participants favored all of the data rights proposals, as well as the proposals that employers should be prohibited from engaging in productivity monitoring if it would harm workers’ mental or physical health. Support for these proposals was apparent in the pre-deliberation survey, but that support increased significantly in the post-deliberation survey.

Support for both proposals increased significantly from the pre-deliberation survey, with the mental health proposal seeing a particularly significant increase.³¹

4.3: The deliberation process appeared to increase workers' interest and engagement in the issues discussed.

As previously noted, the deliberative surveys included a series of general questions gauging participants' sentiments and beliefs on technology and the workplace. Analyzing workers' responses to the survey's sentiment questions suggests workers became both more interested in discussing workplace issues and more confident in their ability to influence their employers' actions after deliberations. Several of these questions saw statistically significant changes in participants' attitudes. Specifically, after deliberations, participants became:

- More likely to say that they enjoy talking about workplace issues³²
- Less likely to say that workplace issues are too complicated for them to understand³³
- More likely to say they have opinions on workplace issues worth listening to³⁴
- More likely to say that their employer cares about what they think³⁵
- Less likely to say they have no say in what their employer does³⁶

31 p=0.002, compared to p=0.038 for the physical health proposal.

32 p<0.001.

33 p=0.048.

34 p=0.011.

35 p<0.001.

36 p=0.013.

The last two findings — that workers became more likely to think that their employer cares what they think and less likely to say that they have no say in what their employer does — were unexpected and noteworthy. They may suggest that the deliberative process made workers feel not just more confident in their knowledge about workplace issues, but also more confident in their voice and ability to influence what happens in the workplace. Giving workers an opportunity to learn about and discuss workplace issues thus may make them better positioned to engage and organize to protect and advance their own interests.

4.4: Excessive surveillance may go against employers' interests

One recurring theme in the deliberation transcripts was that many participants suggested, consistent with recent research,³⁷ that excessive levels of surveillance can be counterproductive for the employer, in addition to being harmful to workers.

Participants generally indicated that they understood employers' motivations for monitoring their employees under some circumstances, such as when employees have company equipment or are traveling for work. But, as previously noted, participants largely viewed continuous monitoring as signaling a lack of trust and respect on the part of the employer. Many participants suggested that pervasive surveillance and the resulting damage to trust could ultimately hurt, rather than help, job performance:

"I think that besides the invasion of privacy, you are establishing an environment of distrust, which doesn't usually get better performance, which is supposedly what the monitoring is for. You get good performance from people when you establish trust, and there are always other ways to analyze employees' performance."

37 See Siegel, et al. (2022).

"As someone who has worked from home in a sort of non-traditional job where you normally wouldn't be able to do that and now manages people who work in-office and people who work remotely. I think that besides the invasion of privacy you are establishing an environment of distrust, which doesn't usually get better performance, which is supposedly what the monitoring is for. You get good performance from people when you establish trust. ... There's a work product. You should be able to see that product and know if it's good or not. You don't need to watch people every second."

Others likewise described what they viewed as more reasonable means of monitoring and evaluation, with the focus re-directed towards the quality of the work produced, rather than the minutiae of workers' process:

"For me, trust is crucial in the work relationship and employers should trust their employees to deliver results whether you're working from home or in the office, so just respect their autonomy and focus on outcomes rather than micromanaging every aspect of it."

"If you don't trust me to do my job... Well, first of all, you can see the metrics, you can see the work I do so don't tell me you need to watch every second of my day to make sure I do the work — you can see whether I'm doing it or not. You don't like my production, fire me."

"I don't agree with continuous monitoring. I feel that if you trust someone enough to hire them as an employee, there should be another way of monitoring what their work is, perhaps, you know, reports at the end of the day. I worked remotely from home for a year after COVID, and they were able to monitor almost everything that we did when we were teaching remotely and it was extremely stressful. I had to be concerned about what [students were] learning from home. If I was on break I had to worry about if they were still tapped into what I was doing, for example a prep period — I feel the prep period should be mine."

The management styles described by participants show a shared desire for autonomy in the workplace. By trusting workers' ability to do their jobs well, and engaging with them directly when necessary, employers can strengthen employer-employee relationships, rather than breed the environment of distrust under constant surveillance:


"I don't think employers should have to police their employees. It shows a lack of trust. If the employees are not productive enough that's when employers should talk to [them] instead of tracking them at all times because like everyone else said they can abuse it."

Other participants argued against continuous monitoring by focusing on the financial and psychological costs for workers and employers alike:

"When employees have been over-monitored, it affects them. It even affects the employers in some ways. Like when you over-monitor them, they overwork. Maybe let me take an example like drivers. When you monitor them and you want them to work morning and night, you find that they might come on the road, fall asleep, and have an accident. They will be in a problem, you the employer, your goods will also be in a problem. So over-monitoring is not appreciated. Too much is very, very dangerous."

"I think that to be able to give an output that's 100%, you need to be 100% yourself as an employee. Your mental health is supposed to be 100% and your physical health is supposed to be 100%. So if the monitoring affects your mental or physical health, it's going to be disadvantageous both to the employee and the employer because you are not giving 100% of yourself, and you're not giving off 100% of yourself, meaning that productivity is going to be low and it's going to also affect the employer."

These workers' recognition of the inefficiencies of continuous monitoring point to ways in which workers' and employers' interests overlap. The cost of implementing continuous or intrusive monitoring, compounded with the psychological and physical toll on employees, shows how such monitoring may paradoxically undermine efforts to improve job performance and deter unethical behavior.³⁸ Resources could thus be better directed towards less intrusive forms of oversight that support workers' autonomy, agency, and overall well-being in the workplace.

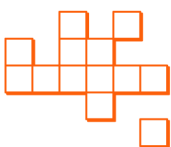
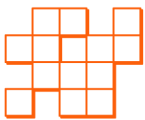
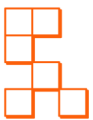
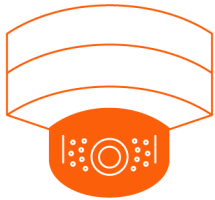
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- 38 Edwards, L., Martin, L., & Henderson, T. (2018). Employee Surveillance: The Road to Surveillance is Paved with Good Intentions. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3234382>; French, C. (2019, February 19). The paradox of employee surveillance - Behavioral scientist. Behavioral Scientist. <https://behavioralscientist.org/the-paradox-of-employee-surveillance/>.

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Discussion and recommendations

The key takeaway from the survey results and the transcripts of the deliberations themselves is that workers want their employers to treat them with trust and respect. The responses to the data rights proposals demonstrate that overwhelmingly, workers think employers should be required to tell them what types of monitoring they are doing and why they are doing it, and give workers the opportunity to review any data collected as a result.

But this desire for transparency does not mean uncompromising opposition to electronic monitoring and data collection. Among the location tracking proposals, the least-popular proposal was that location tracking should always be allowed, followed closely by a blanket prohibition on all location tracking. Most participants were open to monitoring if the employer has a good reason for it, such as protecting a worker's health or an employer's property. But they want transparency in how their data is collected and agency in how their data is used.



The results of the survey also suggest that workers would reward employers who provide such transparency, especially if they are given an opportunity for input into employers' monitoring and data collection policies. The mere act of deliberating about workplace issues (in this case, in a non-work setting) made participants significantly more likely to think that they had a say in what their employer does.³⁹ It is easy to imagine employees feeling still more empowered if employers themselves gave employees the opportunity to discuss workplace surveillance and data collection policies. As both the participants' comments and prior research suggests, that increase in morale and trust might have a more positive impact on employee performance than the surveillance or data collection itself.

In practice, unfortunately, the trend toward workplace datafication has not been accompanied by a corresponding increase in transparency about employers' monitoring and data collection practices. It seems unlikely that employers will voluntarily provide workers with the level of transparency and agency they seek, particularly since the rise of data-hungry artificial intelligence systems is increasing the value of individuals' data, thus creating incentives for employers to collect and monetize worker data. Consequently, legislators should pass laws establishing the basic transparency and safeguards that the Deliberative Poll participants strongly favored, including:

- Requiring employers to tell workers the purposes of surveillance, as well as what types of data are collected and how.
- Giving workers the right to access and review any data that employers collect about them.
- Requiring employers to obtain workers' permission before they sell or share their data with third parties.
- Prohibiting any off-the-clock forms of surveillance and data collection.
- Prohibiting surveillance that harms workers' health or safety.

³⁹ See section 4.3, *supra*.

The precise contours of such legislation should be determined through continued engagement with affected workers and their representatives. Additional research — including and especially those that use deliberative methodologies — can and should help inform the development of appropriate legislation and regulations.

Recommendations for future research

Diving deeper into the findings and exploring more discrete proposals

The findings of this project carry a number of potential implications that should be explored through additional research. First, both the transcripts and the survey results — showing that, when allowed to explore the proposals and topics on their own, workers moved toward nuanced proposals and away from absolute rules — suggest that the deliberations helped surface a range of experiences and attitudes around workplace surveillance. Future research should use similar approaches centered on worker deliberation to more deeply explore:

- The specific rules, standards, and policy approaches to workplace surveillance favored by workers from different sectors and with different demographic characteristics.
- The connections between surveillance practices and workers' mental and physical health. This focus could strengthen arguments for limiting certain types of monitoring and promote policies that prioritize worker well-being.
- The underlying attitudes and experiences that drive workers' policy preferences on these issues.
- Whether the participation of managers or employer representatives in deliberations affects the discussions or the survey responses, or could be used as a method of incentivizing employers to engage workers and incorporate their informed views when determining workplace policies and practices.

Researchers should also investigate cost-effective and scalable ways to sustain worker engagement and discussions on workplace technology issues, especially without the incentive of paid participation. This could involve online forums, regular focus groups, or partnerships with worker advocacy organizations.

Analyzing the comparative impact of in-person versus virtual deliberations

Future worker-centered Deliberative Polls should also, if possible, include more in-person groups and participants. The discussion transcriptions for the in-person deliberations were significantly longer than those for the virtual discussions⁴⁰ and, impressionistically, the in-person participants appeared to more openly share their personal experiences and engage in more free-flowing discussions of the topics. A larger deliberative poll featuring a larger number of in-person participants (and a correspondingly larger number of participants overall) would enable a deeper analysis of the views of workers from different sectors and demographic groups. It would also allow for statistical comparisons between the in-person and virtual participants, which would provide valuable insights into whether the format of deliberations has an effect on workers' post-deliberation engagement and opinions—information that would also be valuable for advocates seeking to organize workers around these and other workplace and labor issues.

40 For example, the transcript for the Session 1 of the Atlanta in-person group had more than 40% more words than the longest Session 1 transcript from the virtual groups.

Employee-driven discussions to increase engagement and support labor organizing

Both the results of the survey and our impressions from talking with participants after the deliberations suggest that workers enjoyed the deliberative process and that their participation in the deliberations increased their interest and engagement regarding workplace technology policy. As noted previously, participants' responses to the sentiment questions showed that workers were much more interested in discussing workplace issues, and felt significantly more empowered to do so, after participating in the deliberations. This strongly suggests that getting workers to participate in worker-centered and worker-driven discussions might be an effective method of increasing worker engagement and thus might be an effective organizing tool. Unfortunately, with the vast majority of workers lacking union representation, it may be difficult to organize such discussions in modern workplaces in a manner that permits participating workers to speak freely.

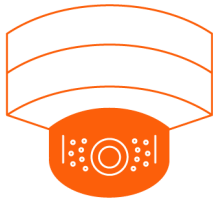
On that front, it is not clear that this project's methodology can readily be scaled while recruiting a participant pool that is roughly representative of the workforce. In the post-deliberation survey, participants indicated a high level of interest in participating in paid follow-up research; of the 170 participants who completed the final survey, 167 (98.2%) said they would be interested in participating in such research if asked. This response is a double-edged sword, however. While the overwhelming interest is promising, it is not clear how many of the participants would be interested in continued discussions, research, or organizing around workplace technology issues if they would not be paid for their participation, or if they were paid at a lower rate than the generous stipends participants received for this project. Future research and organizing efforts should thus explore cost-efficient ways to set up and leverage worker-driven discussions.



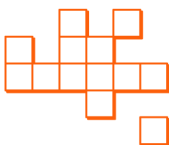
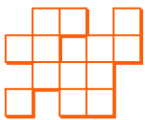
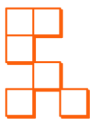
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Appendix A: Briefing materials

What Is Deliberative Polling?



Ordinary polls provide a snapshot of the public's impressions of sound bites and headlines. However, most citizens do not have the time or opportunity to become well-informed about complex public issues.



Deliberative Polling provides a neutral ground where citizens can address the question: What would a representative sample of the public think about policy issues if it were more informed and could weigh the pros and cons of different policy options under good conditions for thinking about them? Those good conditions include balanced briefing materials, moderated small group discussions, questions that the small groups pose to panels of competing experts in plenary sessions, and an opportunity for each participant to express their opinions in confidential questionnaires before and after the deliberation. The Deliberative Polling method aims to produce a more thoughtful, better informed, and more accurate picture of public opinion.

Introduction: Electronic Monitoring and Data Collection in the Workplace

Today's deliberative poll is about digital technologies and data collection in the workplace. Digital technologies are tools, devices, and systems that create or process data. Examples of digital technologies include devices such as computers, mobile phones, and digital cameras, as well as the software and apps that run on those devices.

Employers today use many digital technologies to track and manage their employees. Some digital tools monitor and collect data on employees' activities. These include location trackers, keystroke and mouse-click loggers, and advanced camera and sensor technologies. Such tools allow companies to monitor whether employees are doing what they are supposed to be doing and how quickly they are working. Some tech companies even say they have developed tools that can measure employees' emotions and personalities.

Employers can feed the data from these digital tools into other systems that allow employers to supervise employees without the physical presence of a human manager. Some companies use these management systems to discipline employees if monitoring tools indicate they are working too slowly or not doing assigned tasks.

Many workers' advocates argue that employers use digital surveillance, monitoring, and management in ways that can harm workers. They say these tools invade workers' privacy by revealing information about their health and personal lives. Many companies use digital tools to make employees work faster, sometimes to the point where employees injure themselves or develop long-term illnesses. Placing higher demands on workers while taking away their control over how they perform their work may also lead to a type of stress known as job strain. Research shows that job strain is associated with many mental and physical health problems.⁴¹

On the other hand, many companies argue that using digital tools to monitor and manage their workforce helps both employers and employees. They say that these tools allow employers to improve the security of their buildings and computer systems. Some of these tools can also help employers detect illegal or abusive behavior. Employers also argue that these tools allow them to make sure each team member is pulling their weight, allowing companies to reward employees who perform well and to identify and correct or punish abusive or unethical behavior. One recent study showed that workers who know they are being monitored are 7% to 46% more productive.⁴² Digital monitoring tools also make it easier for companies to allow employees to work remotely because the data these tools collect means there is less need for supervisors to oversee each employee's performance.

41 See, e.g., Schnall, Peter L., Paul A. Landsbergis, and Dean Baker. "Job strain and cardiovascular disease." *Annual review of public health* 15.1 (1994): 381-411; Madsen, Ida EH, et al. "Job strain as a risk factor for clinical depression: systematic review and meta-analysis with additional individual participant data." *Psychological medicine* 47.8 (2017): 1342-1356; Babu, Giridhara R., et al. "Republished: is hypertension associated with job strain? A meta-analysis of observational studies." *Postgraduate medical journal* 90.1065 (2014): 402-409.

42 Gitnux, Must-Know Employee Monitoring Statistics, <https://blog.gitnux.com/employee-monitoring-statistics/>.

For this session, “monitoring” and “surveillance” mean tracking workers’ activities through digital technologies such as cameras and GPS trackers, as well as software, apps, and other programs that run on computers, tablets, phones, and other devices.

Proposals and Arguments

Topic 1: Monitoring employees who work from home

The number of remote workers has increased recently, particularly since the COVID-19 pandemic. As the number of remote workers has increased, so has the number of digital tools employers use to monitor employees working from home. These digital tools include software programs that track employees’ computer activity, take screenshots of their screens during the workday, or use cameras and microphones to take pictures or record audio/video of their workspace.

Employers frequently justify using such tools by pointing out that human supervisors cannot observe the performance or behavior of employees working from home. An employer may only allow employees to work from home if it is allowed to monitor those employees closely--something an employer cannot do without using digital monitoring tools. Critics argue that using such surveillance equipment intrudes on employees’ privacy and dignity, blurring the line between an employee’s home and work lives.

Proposal 1: Employers should always be allowed to use digital technologies to monitor employees who are working from home.

Arguments For

Arguments Against

Continuous monitoring ensures that employees stay on task throughout the workday.

This type of monitoring may make employees feel they have no privacy in their own homes and that their employer does not trust them.

Employers have no other means of monitoring the performance of remote employees.

Research suggests that constant monitoring harms workers' mental and physical health.

Proposal 2: Employers should never be allowed to monitor employees working from home

Arguments For

Arguments Against

The home is a person's most private and personal space, so allowing electronic monitoring to extend to employees' homes is a major invasion of privacy.

Because supervisors can't visit every employee's home to check on them, employers need to have some way of making sure remote employees are doing their jobs.

Spying on employees in their own homes blurs the line between employees' personal and work lives.

If monitoring is restricted, employers might end work-from-home policies and require all employees to report in person at company offices.

Proposal 3: Employers should not be allowed to monitor employees who are working from home unless the employee is suspected of wrongdoing or poor performance.

Arguments For

Arguments Against

Requires employers to have a good reason before engaging in monitoring

Bosses could easily abuse this loophole and target certain employees or groups of employees for monitoring



Table 11. Examining proposals for and against monitoring employees who work from home.

Proposal 4: Employers should be allowed to use digital technologies to monitor employees who are working from home if the employee is using company-owned devices or equipment.

Arguments For

Arguments Against

Allows companies to make sure their equipment is being used properly and not for illegal or unethical purposes

Argument from employees' perspective: Does not provide any real protection for employees who are required to use company devices for their work or who cannot afford a separate personal device

Protects the privacy of information on employees' personal devices

Argument from employees' perspective: The stress workers experience from surveillance is the same regardless of whether the surveillance is conducted through a personal device or a company device

Strikes a balance between protecting the privacy and dignity of remote employees and the company's interests in productivity and proper use of its equipment

Proposal 5: Employers should not be allowed to use webcams or other recording devices to monitor employees who are working from home.

Arguments For

Arguments Against

Recording devices can easily reveal aspects of employees' private personal lives that have nothing to do with their jobs

Recording devices are needed to evaluate the performance and behavior of employees whose jobs involve frequent meetings and phone calls

There are usually less intrusive ways to ensure remote employees are staying on-task and following company policies

Recording devices may be needed to ensure employees are taking lunch breaks and otherwise comply with the law



Table 11 (cont). Examining proposals for and against monitoring employees who work from home.

Topic 2: Location tracking

It is easier than ever for companies to use GPS and similar technologies to track their employees. Some companies use devices that can track an employee's location with very high accuracy--showing their exact location in a warehouse or office building, for example. Others use less precise techniques such as "geofencing," which creates an alert when an employee enters or leaves a specific area (such as a company-owned building).

Employers may track employees' locations for a variety of reasons. Location tracking allows employers to determine if an employee is where they are supposed to be while on duty. Employers may also want to know where an employee is if the employee enters a dangerous area or if a workplace health or safety issue arises. Some employers simply argue that companies should be allowed to know where an employee is whenever that employee is on company time.

However, some people are concerned that location tracking can reveal private information about workers, especially if employers track employees outside work hours or during breaks. Even on-the-clock location tracking might reveal things employees don't want their employers to know. For example, if an employee has a health condition that requires them to use the restroom frequently, tracking their location might reveal that condition to the employer.

Table on next page.

Proposal 1: Employers should be allowed to track employees' locations whenever they are supposed to be working.

Arguments For	Arguments Against
Helps ensure employees are on-task by enabling employers to check whether employees are where they are supposed to be during the workday.	There are better and more respectful ways for companies to monitor employees' productivity, such as by having managers periodically check in on them during the workday.
Knowing employees' location during the workday is helpful for workplace security and safety.	Bosses may use location information to harass specific employees or single them out for mistreatment.
While an employee is on company time, the company has the right to know where they are.	As long as employees finish their assigned tasks, an employer does not need to know an employee's exact location at any specific time.

Proposal 2: Employers should never be allowed to track employees' locations.

Arguments For	Arguments Against
Knowing an employee's location does not show you whether they are being productive. Employers should trust employees to contact supervisors or coworkers if they experience a problem during the workday.	An outright ban goes too far; there are many good reasons for location tracking, including protecting company property and ensuring that managers know where to find their employees.
The risk that location information could be misused or abused outweighs any benefits the employer or employee can get from location tracking.	Privacy and other concerns can be addressed by limiting the circumstances under which an employer can track employees' location or use location information.



Table 12. Examining proposals for and against the use of location tracking by employers.

Proposal 3: Employers should not be allowed to track an employee's location if the employee is off-the-clock.

Arguments For

Arguments Against

Tracking an employee who is not supposed to be working is an unnecessary invasion of the employee’s privacy.	An employee who is off the clock may still be using a company device, inside a company vehicle or building, or otherwise using company property, and employers should always be able to keep track of company property.
Employees’ off-duty activities might reveal information they would prefer the employer not know; for example, if an employee goes to a specific house of worship or clinic, that could reveal the employee’s religion or specific medical information.	Tracking an employee’s off-duty activity might reveal if the employee is working for a competitor or otherwise engaging in behavior that harms the company.

Proposal 4: Employers should be allowed to track the locations of employees whenever they are using company-owned devices or equipment.

Arguments For

Arguments Against

Phones and computers are expensive equipment, and a company has a legitimate reason to want to track where they are at all times in case they are lost, stolen, or misused.	Many workers have company computers or phones with them outside work hours. Tracking those devices will frequently reveal information about employees’ personal lives.
Tracking the location of employer-owned devices helps prevent unauthorized access to the employer’s data or property.	Tracking that extends into employees’ off-duty hours harms employee morale and trust.



Table 12 (cont.). Examining proposals for and against the use of location tracking by employers.

Proposal 5: Employers should be allowed to use location tracking to check whether an employee is on company property ("geofencing"), but should not be allowed to track an employee's exact location.

Arguments For

Arguments Against

Allows the employer to track whether the employee is on company property, which helps ensure the security of that property.	<i>Argument from employees' perspective:</i> Still can invade employees' privacy, because employees may have legitimate reasons to leave a company facility during the workday (such as a doctor's appointment) or to access a company facility outside work hours (if an employee left something in their locker, for example).
Doesn't unnecessarily invade employees' privacy-- knowing that an employee is on company property shouldn't reveal information on employees' personal lives.	<i>Argument from employers' perspective:</i> Not precise enough to allow employers to determine if an employee is at their workstation or accessing parts of a building where they are not supposed to be.

Proposal 6: An employer should not be allowed to access information on an employee's location unless the employer has a specific health, safety, security, or performance concern regarding that employee.

Arguments For

Arguments Against

Helps ensure that employees' location information is not misused or abused.	<i>Argument from employees' perspective:</i> Employers might say that they are tracking employees to make sure they are doing their jobs, even though they are really tracking them for other reasons, such as to see if they are planning to unionize or to gather information about their personal lives.
Still allows companies to access location information if they have a legitimate need to do so.	<i>Argument from employers' perspective:</i> Employers should be permitted to check if a particular employee is where they are supposed to be while they are on duty, even if there isn't a specific concern about that employee.



Table 12 (cont.). Examining proposals for and against the use of location tracking by employers.

Topic 3: Productivity monitoring

Productivity monitoring is when an employer uses digital tools to track how quickly employees are working or whether they are doing the tasks they are supposed to be doing. Productivity monitoring tools include time-tracking software, computer and email monitoring, and productivity apps that operate on mobile phones or handheld scanners. These tools can track workers’ movements and activities continuously and in great detail.

Critics say that employers often use these tools in ways that harm workers. They say employers often collect far more information than they need to monitor an employee’s day-to-day productivity, invading employees’ privacy and damaging trust. Some companies use productivity monitoring to speed up the pace of work to dangerous levels, raising the risk of injury or illness.

Employers counter that these tools can increase employees’ productivity significantly, enabling them to raise pay. Employers can also use productivity data to identify areas where employees may need additional training or support. Productivity data can also help employers make pay, promotion, or termination decisions.

Proposal 1: Employers should always be allowed to use digital technologies to monitor each employee's productivity.

Arguments For

Arguments Against

Continuous monitoring ensures that employees stay productive throughout the workday	Employees who are constantly monitored are more likely to experience high levels of stress, which can lead to mental and physical health problems
Electronic monitoring is less expensive and less intrusive than using human managers to monitor employees' productivity	Continuous monitoring invades employees' privacy and may demoralize employees, who may feel that their employer does not trust them



Table 13. Examining proposals for and against the use of productivity monitoring tools by employers.

Proposal 2: Employers should only be allowed to use digital productivity monitoring if they feel that an employee is not completing tasks or is otherwise performing poorly.

Arguments For

Arguments Against

Requires employers to have a good reason before engaging in productivity monitoring

Bosses could misuse the information from productivity monitoring tools to target, pressure, or threaten employees

Protects the privacy of most employees

Employees from marginalized groups may be targeted for productivity monitoring more frequently than others, leading to discrimination

Proposal 3a: Employers should not be allowed to use digital productivity monitoring to make employees work faster if it would harm employees' physical health.

Proposal 3b: Employers should not be allowed to use digital productivity monitoring to make employees work faster if it would harm employees' mental health.

Arguments For

Arguments Against

Speeding up the pace of work increases the risk of accidents and repetitive motion injuries

Using electronic monitoring to manage the pace of work allows employers to reward employees who complete tasks quickly

Increasing demands on employees while taking away their freedom to decide when and how they perform work leads to stress and related mental and physical health problems.

Employers should have the right to set standards for how quickly employees work and enforce those standards by the most efficient means available.



Table 13 (cont.). Examining proposals for and against the use of productivity monitoring tools by employers.

- Proposal 1a:** Employers should have to tell employees what types of data they collect and how they collect it.
- Proposal 1b:** Employers should have to tell employees the purposes for which they use employees' data.
- Proposal 1c:** Employees should have the right to access and review any data that employers collect about them.

Arguments For	Arguments Against
Puts workers in a better position to challenge incorrect or unfair decisions	Employers should be able to choose the most efficient means available to monitor employees and evaluate their performance
Denying workers access to information that relates to them violates their privacy, dignity, and autonomy	Giving employees access to this information may undermine the effectiveness of monitoring and lead employees to try to "game the system"



Table 14. Examining proposals for and against a variety of potential data rights considerations, for both employers and employees.

Topic 4: Data rights

The next discussion topic overlaps with the topics discussed previously: what rights should workers have regarding the data that employers collect about them through digital tools? Right now, employers generally control any data they collect about workers and do not need to tell employees when and how they are being monitored. Do you think employers should have to tell workers when they use digital tools to monitor them? If so, what information should employers give to employees about such monitoring and data collection?

In most states, employers can share or sell employee data to other companies without workers' permission. Critics argue that this system allows companies to exploit employees' personal information in ways that do not help employees and may even harm them (for example, if there is a data breach). They also note that neither employers nor employees can control or monitor what happens to employees' data if an employer shares it with third parties.

Proposal 2: Employers should not be allowed to sell or share an employee's data with third parties without the employee's permission.

Arguments For

Arguments Against

Employees should be able to decide what happens to data that may reveal personal information about them.	Employers are best able to ensure the security of employee data and decide who might be able to make good use of that data.
Allows employees to decide for themselves who has access to their data and whether the benefits of sharing the data with other companies are worth the risk that the data could be misused or exposed.	It would be expensive and time-consuming for an employer to set up a system that allows employees to access and control the data that the employer collects.



Table 14 (cont.). Examining proposals for and against a variety of potential data rights considerations, for both employers and employees.

On the other hand, some argue that employers have the resources to keep their employees' data secure. Employers also can analyze the data they collect and identify patterns and trends that help them run the business better. It also might be expensive and difficult for companies to set up a system that allows employees to access and control what happens with data collected through digital tools.

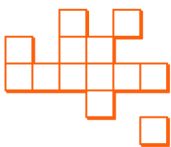
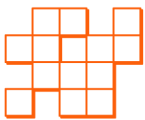
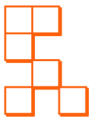
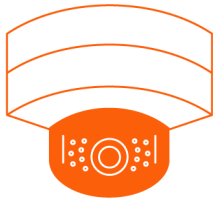


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Appendix B: Deliberation survey demographics

Note: Collected only from the 149 virtual participants

- Age:
 - Range: 21 to 72
 - Mean: 40
 - 25th %ile: 29
 - Median: 37
 - 75th %ile: 48
- Gender
 - 50.3% male
 - 49.7% female
- Race/ethnicity
 - 46.3% white
 - 30.9% Black
 - 14.8% Hispanic
- Highest Educational Attainment
 - 49.1% Bachelor's or higher
 - 12.1% Post-grad degrees



- 2020 presidential vote
 - 50% Biden
 - 23% Trump
 - 27% Third-party or did not vote
- Employment status
 - Full-time: 63.1%
 - Part-time: 29.5%
 - Unemployed: 5.4%
 - Homemaker: 0.7%
 - Other: 1.34%





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Center for Democracy & Technology

1401 K Street NW, Suite 200

Washington, D.C. 20005



202-637-9800



@CenDemTech

