



REPORT: LABOR

Workplace surveillance is becoming the new normal for U.S. workers

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Washington Center *for* Equitable Growth

Evidence for a stronger economy

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Key takeaways

- Invasive and exploitative workplace surveillance in the United States is now growing largely unchecked due to weak worker power and a lack of legal protections or regulatory restrictions on these behaviors.
- Workplace surveillance fundamentally shifts the dynamics of power in the workplace in favor of firms in ways that harm workers and drive inequitable growth. It enables illegal discrimination, hampers worker organizing, and leads to constant stress for workers who can be fired at any time.
- Worker monitoring is part of a cycle of fractured work arrangements through which firms de-skill work and misclassify employees, allowing them to pay workers less, sidestep worker protections, and undermine workers' bargaining ability, ultimately increasing economic inequality and distorting economic growth.
- The ubiquity of technologically enabled workplace monitoring and lack of privacy protections continues a harmful cycle. Pervasive surveillance not only undermines worker power but also adds to the already-weakened state of worker power in the United States that allows firms to further surveil and exploit workers.
- The dangers posed by workplace surveillance fall most heavily on the most vulnerable workers, exacerbating an array of economic inequalities and preventing these workers from challenging these increasingly invasive practices.
- Policy and regulatory solutions to address surveillance harms should address not only the use of technology in the workplace, but also the structural causes that fissure employment relationships and de-skill jobs, and work to strengthen worker power to protect workers' rights and improve their economic outcomes now and in the years to come.

Overview

In the first weeks of the pandemic back in the spring of 2020, as many as half of U.S. workers who remained employed were suddenly working from home.¹ Managers scrambled to monitor their suddenly remote workers through constant check-ins, always-on webcams, and software that tracks keystrokes or mouse movement.² But for many workers, both remote and on-site, invasive workplace monitoring was already the norm. Call-center workers pepper confused callers with unnecessary questions in attempts to placate their mysterious Artificial Intelligence managers. Warehouse workers rush to keep up with automated production quotas. And delivery drivers complete their routes under the eye of GPS systems and AI-monitored cameras.

Workplace surveillance is not new, of course, but new technologies have made it possible for employers to monitor workers both in and out of the workplace and can harm workers in myriad ways. Some of the threats posed by increasingly sophisticated workplace surveillance are a direct result of the pervasive monitoring itself, but others are a result of the exploitative and often illegal practices that such surveillance enables, from health and safety harms to discrimination.

The dangers posed by workplace surveillance fall most heavily on the most vulnerable workers, exacerbating an array of economic inequalities and preventing these workers from challenging these increasingly invasive practices. But worker monitoring is also part of a cycle of restructured work arrangements through which firms de-skill work and misclassify employees, allowing them to pay workers less, sidestep worker protections, and undermine workers' bargaining ability.

In one recent example, Amazon.com Inc. recently implemented AI cameras in its growing fleet of delivery vehicles, requiring drivers to sign forms consenting to collection and use of their biometric data in order to keep their jobs. The company is demanding this personal data via the minute monitoring and management of workers' everyday actions, despite these delivery workers not being employed by Amazon itself. Instead, they are employed by "delivery service partners," enabling the tech giant to avoid direct responsibility for drivers' pay and working conditions and to sidestep more regulated logistics companies such as United Parcel Service Inc. and FedEx Corporation.³

At its core, pervasive and unchecked workplace surveillance fundamentally shifts the dynamics of power in the workplace in favor of firms in ways that harm workers and drive inequitable growth. It enables illegal discrimination, hampers worker organizing, and leads to constant stress for workers who can be fired at any time. More broadly, worker surveillance distorts the nature of jobs and economic opportunity by hyper-enabling the de-skilling of jobs and destroying workers' autonomy.

This report looks at why and how employers surveil their workers, the harms this surveillance causes, and the impediments it creates for worker power. It then examines how these harms contribute to distorted labor markets and inequitable economic growth. It concludes with some suggested mechanisms to address these harms, including stronger legal and regulatory protections around the use of technology in the workplace, alongside new and robust enforcement mechanisms to ensure workers' privacy and labor rights are not only protected but also enhanced due to the growing ubiquity of worker surveillance technologies. More fundamentally, however, policy solutions must address the structural causes that fissure employment relationships and de-skill jobs, and work to strengthen worker power to protect workers' rights and improve their economic outcomes now and in the years to come.

Why U.S. companies surveil workers

Companies surveil workers for many reasons, often citing security concerns, the need to streamline billing and project management, or the desire to increase worker productivity. Employers may also conduct surveillance simply for its own sake. They do so to gain a sense of greater control, to reduce risks in their operations, and simply because new technologies for monitoring are pervasive and increasingly inexpensive to implement.

In practice, this surveillance not only allows and exacerbates exploitative workplace practices, but also undermines worker power and contributes to increasingly worse wages and working conditions.

Modern workplace surveillance in the United States is rooted in a historic distrust of workers, particularly low-wage workers, with racist foundations in slavery and following exploitative labor practices.⁴ In *Dark Matters: On the Surveillance of Blackness*, for instance, sociologist Simone Brown of the University of Texas at Austin traces the surveillance, measuring, and marking of enslaved Black people in the United States through to present-day technologies of surveillance and biometrics classifications.⁵

This mistrust of workers was combined with the practice of “scientific management” in the late 19th century, in which the stated central focus of industrial production was to optimize output. This required constant monitoring in order to gather data on workers and production to maximize the effort from workers, often at the cost of workers’ health and safety.⁶

At the same time, the application of technology to work processes is rarely a neutral act of maximizing productivity. Associate professor at Georgetown Law Brishen Rogers explains that companies also deploy technology in order to de-skill work and undermine worker power, even if the resulting process is less productive or produces a lower-quality product.⁷

Pervasive surveillance and automated management is now central to many fissured work arrangements and businesses built on misclassification and lack of

accountability,⁸ from ride-hail companies such as Uber Technologies Inc. and Lyft Inc. to fast-food franchisers such as McDonald's Corporation and its competitors.⁹ Brandeis University economist David Weil, the currently nominated and former administrator of the Wage and Hour Division of the U.S. Department of Labor, uses the concept of "the fissured workplace" to describe how firms break off and domestically outsource jobs through subcontracting, franchises, and other arrangements.¹⁰ This approach maximizes profits for the lead firm but tends to worsen wages and job quality for the outsourced workers.¹¹

How worker surveillance enables fissured employment relationships

The "fissured workplace" is a term coined by Brandeis University economist David Weil to describe how companies have increasingly outsourced activities that used to be conducted in-house to focus on their "core competencies" and maximize profits at the expense of workers. Firms might do this through subcontracting, franchises, and other arrangements, including reliance on independent contractors through "gig" platforms.

In a recent report for Data & Society, economist and Equitable Growth grantee Brian Callaci explores how technology allows corporate headquarters of franchisors to minutely monitor franchisees' individual stores "without directly employing either franchisees or workers." The franchisor may also set many store conditions, such as hours and prices, without accountability for wages or working conditions.

Callaci describes how workers at an individual fast-food restaurant, such as a McDonald's, may have their actions tracked by the chain's corporate headquarters through point-of-sale computer systems, through which the franchisor can monitor things such as pace of work and discipline franchisees for failure to follow official operations manuals.

To learn more about these surveillance dynamics in fissured workplaces, please see:

- David Weil, *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It* (Cambridge: Harvard University Press, 2014).
- Kate Bahn, "Research finds the domestic outsourcing of jobs leads to declining U.S. job quality and lower wages" (Washington: Washington Center for Equitable Growth, 2019), available at <https://equitablegrowth.org/research-finds-the-domestic-outsourcing-of-jobs-leads-to-declining-u-s-job-quality-and-lower-wages/>.

- Brian Callaci, “Puppet Entrepreneurship: Technology and Control in Franchised Industries” (New York: Data & Society, 2021), available at <https://datasociety.net/library/puppet-entrepreneurship/>.

Modern surveillance practices exacerbate this fissuring. These domestic outsourcing practices allow firms to hire contractors or franchisees in the place of employees, avoiding the responsibility and risk for labor protections and benefits, but still retain minute control over labor and production processes.¹² These practices also increase inequalities between precarious, low-wage jobs and more stable, high-wage jobs with good benefits.¹³

The falling cost and increasing ubiquity of surveillance technologies also make it easier for employers to surveil workers as a sort of general risk-mitigation strategy against any threats that might arise, from worker theft to unionization. These practices are detailed in a recent *California Law Review* paper, “Limitless Worker Surveillance,” by the University of North Carolina School of Law professor Ifeoma Ajunwa, University of Southern California Annenberg research professor Kate Crawford, and New York University Law School professor Jason Schultz.¹⁴

Ajunwa, Crawford, and Schultz write that while previous forms of surveillance, such as those used by Pinkerton private detectives and other agencies in the 19th century to surveil workers, were very labor-intensive, recent advances in technology mean that the financial cost of surveillance is often very low and may require very little effort on the part of the employer to install and maintain. They also note that current forms of surveillance and monitoring frequently have “an ostensibly participatory character,” implemented with the stated goal of helping workers be more productive and reducing distractions or improving their overall health and wellness.¹⁵

Labor-intensive forms of surveillance are still common, including by the modern-day Pinkerton Detective Agency, which Amazon now employs to monitor worker unionization activities in Poland.¹⁶ But surveillance is often built into everyday software or hardware, or even added in as a feature after adoption. In 2020, for example, Microsoft Corp. added new productivity monitoring tools to its ubiquitous Microsoft 365 services, which employers could choose to activate without seeking out new software or notifying workers of the change.¹⁷

The sheer amount of data these forms of digital surveillance gather and generate can quickly surpass managers’ ability to consume it. Instead, companies can rely on dashboards of summary data, automated alerts, and increasingly complex algorithmic management practices that not only analyze the data, but also can automate

the management responses to those data.¹⁸ As journalist Josh Dzieza described in a [February 2020 article in Verge](#):

*While an employer might have always had the right to monitor your desktop throughout the day, it probably wouldn't have been a good use of their time. Now such surveillance is not only easy to automate, it's necessary to gather the data needed to optimize work.*¹⁹

Ultimately, the emphasis on quantitative measures and automated management can distort business dynamics by driving workers and employers to focus on specific actions or outputs rather than outcomes. It can also lead to escalating cycles of surveillance and control as workers adapt to these systems and seek to subvert them.

The spectrum of surveillance of U.S. workers

U.S. employers across industries and occupations use surveillance in many forms, with many of these practices now so routine that they seem unremarkable.²⁰ Key-cards and security cameras are common in a variety of workplaces, from warehouses to offices, from delivery trucks to private homes. Surveillance capabilities are also built into modern technological and digital infrastructure so that employers can often view phone calls, texts, emails, browser histories, sales records, and location stamps with minimal effort.

U.S. employers today can easily choose to track every keystroke made on a computer or capture whatever appears on the screen.²¹ And sensors built into machinery or vehicles can track a workers' output and speed, and workers may wear devices that log their location or heart rate.

Cameras are common in a variety of workplaces. As the cost of both cameras and data storage has fallen exponentially over the years, their presence and use are expanding, including in locations that previously would have been difficult to surveil. In private homes, for example, employers may hide cameras to monitor domestic workers.²² And the growing use of doorbell cameras, such as Google's Nest and Amazon's Ring, add another layer of surveillance for delivery drivers, maintenance workers, and others.²³

The rise of image-recognition software and artificial intelligence also enables real-time video and audio surveillance to feed into automated management practices that may track minute movements or facial expressions. The ubiquity of pre-installed laptop cameras, as well as plug-in webcams, also means that employers can also monitor workers who are primarily computer-based, regardless of whether they work remotely or in an office setting.²⁴

Some types of digital monitoring practices are already common in many industries that center around computer-based work. Employers generally have the techni-

cal and legal ability to access most types of communication that happen on their systems or devices, such as workers' emails, texts, or private [Slack](#) messages, as well as general internet activity.²⁵ In addition, companies may purchase or develop services that monitor workers' "active hours" on a computer, which applications they use, or how many emails they send. Some services go even further, keeping track of every keystroke a worker makes and with what frequency, and taking screenshots of the worker's computer screen for later review.

These practices often have vaguely defined and overlapping goals but are broadly centered on the idea of "productivity tracking." These apps may be implemented with the stated goal of "helping" workers be more aware of their time habits,²⁶ or employers will use them so that workers avoid "distracting" or prohibited websites, such as social media, or to streamline records for internal timesheets or client billing.²⁷ Most of these apps also include features such as keyboard and mouse activity measures, automatic screenshots, and [GPS tracking](#), and can be installed and capture any information on a worker's laptop and mobile device.²⁸

In addition to passive data collection, employers may hire firms to research workers (including their off-work activities), search social media, or use companies that collect background or credit checks. Workers may be encouraged or required to be an active participant in this surveillance, logging and categorizing their activities or installing applications to track their work and movements.²⁹ And for customer-facing occupations, customers may be solicited for reviews of a workers' performance, which may be used in determining wages or hours. For some workers, such as platform-based gig workers, these ratings can also result in automatic termination, often without the ability to meaningfully challenge these decisions.³⁰

This section of the report details the outcomes for U.S. workers of these new workplace surveillance technologies. Specifically, how:

- Quantified workplaces increasingly automate management through surveillance
- Reputational surveillance violates workers' rights to privacy and enables discrimination
- Productivity surveillance distorts incentives and workplace dynamics
- Emotional tracking methods are scientifically unfounded

Let's examine each of these outcomes in turn.

Quantified workplaces increasingly automate management through surveillance

In the United States, many forms of physical workplace surveillance are tied to classic Taylorist metrics, named after the early-20th century scientific management evangelist Fredrick Winslow Taylor. These practices center on efficiency, using automated technologies and productivity-maximizing algorithms to set strict production targets and ensure that workers meet them.³¹

In Amazon's extremely quantified warehouses, for example, sensors and tablets track workers' movements and productivity, such as boxes filled, down to seconds. Workers are pushed to reduce their "time off-task" and can be automatically fired for not meeting strict productivity goals.³² This punishing pace of work has led to high rates of injuries and leaves some workers without bathroom breaks.³³

This type of surveillance also has inequitable consequences. Low-wage workers are traditionally more likely to be surveilled, and workers of color and immigrants are most likely to be working in many of the low-wage jobs with immediate and severe consequences of surveillance, such as automatic firings due to missing productivity targets.

The consequences of worker surveillance are concentrated and compounded due to occupational segregation.³⁴ Black workers and Hispanic workers, for example, are overrepresented among drivers and truckers and cashiers.³⁵ And overall, workers of color account for more than 80 percent of workers who pack and package items by hand.³⁶

These trends are apparent within companies as well. At Amazon, Black employees comprise just 3.8 percent of the company's senior manager and executive positions but make up 31 percent of the company's call-center and warehouse jobs, while Latinx employees make up 3.9 percent of senior manager and executive positions but 26.4 percent of call-center and warehouse jobs.³⁷

Many employers also use real-time geolocation tracking to monitor workers' movements, especially in transportation and delivery services and in combination with other sensors and vehicle data. This level of surveillance is often required to manage large workforces of misclassified workers, such as FedEx drivers classified as independent contractors, or for ride-hail and food-delivery drivers, whose work is mediated entirely through an app.³⁸

Employers frequently use the tracking of workers' time and activities to limit or reduce the amount of time that they consider "on the clock."³⁹ As Data & Society

researchers Alexandra Mateescu and Aiha Nguyen describe, “itemized records of on-the-job activities ... can be used to facilitate wage theft or allow employers to trim what counts as paid work time, excluding ‘unproductive’ periods like down-time.”⁴⁰

Some of these practices are exploitative, and others are simply illegal. University of Oregon School of Law professor Elizabeth Tippet categorizes the three typical forms of digital wage theft: timekeeping software that rounds times down, automatic break deductions, and “time shaving,” or intentionally reducing employee’s logged hours.⁴¹

Reputational surveillance violates workers’ rights to privacy and enables discrimination

In many industries, surveillance is often normalized for the purposes of security and fraud prevention. This practice enables employers to review transactions in case of audits or lawsuits or catch theft in real time. This can include general physical surveillance, such as cameras or key cards; computer monitoring, ranging from tracking files accessed to regular screenshots and keystroke monitoring; and surveillance of workers’ activities and movements during nonwork hours. In addition, reputational surveillance of workers or job candidates can delve well into an individual’s private life and uncover deeply personal information.⁴²

Current federal laws provide some guidance on how employers can use more established practices such as criminal background checks, credit histories, and drug testing in the hiring process and throughout the employment relationship, and many states provide additional protections and limits.⁴³ While these laws do not protect workers from all forms of discrimination—and are often lacking meaningfully robust enforcement—the rise of algorithmic hiring and evaluation practices makes the application of these laws even more difficult.

There are also many ways that collecting large amounts of data about workers and their actions can exacerbate economic inequalities and harm the most vulnerable workers. At its most basic level, the collection and use of these data create possibilities for other forms of discrimination by giving employers direct or indirect access to sensitive or protected information, from health data to personal details such as religion, family structure, or sexuality. Even if private details are not explicitly sought, constant “eavesdropping” into an individual’s communications, movements, or even web searches can make it easy for an employer to connect the dots.

Furthermore, reputational assessments that are sold by firms to be used in hiring and worker evaluation draw data from a variety of sources, with little insight into how these scores are calculated and no recourse for inaccurate information or biased conclusions. Some reputational searches and algorithmic ratings may not even be based on the activities of the workers themselves, but are instead drawn from analyses of the social media activity of other people in their personal networks, potentially leading to “networked” privacy harms.⁴⁴

Some employers, such as Walmart Inc., also use personality tests in the hiring process to screen potential workers for their propensity to unionize, further attempting to undermine worker power.⁴⁵

Domestic workers—who already operate under precarious arrangements with few protections or actual bargaining power—have always been subject to high levels of surveillance and reputation assessments by employers, a situation that is continued in digital spaces. As shown by Data & Society researchers Alexandra Mateescu and Julia Ticona, care workers using online platforms such as Care.com must often share personal information about themselves to appear more trustworthy to potential clients, a form of “visibility” that is voluntary in theory but not in practice.

Navigating personal relationships with clients in the context of precarious work arrangements and a lack of discrimination protections is not new for care workers.⁴⁶ But the online nature of care platforms makes the workers more visible and makes it more likely that employers can find out other information about them.⁴⁷ These online platforms also favor care workers who are comfortable with online tools and self-marketing, which was not previously part of the job description.⁴⁸

Productivity surveillance distorts incentives and workplace dynamics

While monitoring software can be extremely invasive, it is often justified on the grounds that it increases worker productivity. The software might even create a productivity “score” for workers. Yet these services base their scores not on firm-specific measurements of specific outputs or quality measures, which may themselves be difficult to track and quantify automatically, but rather on how much the workers interact with different types of software⁴⁹ or websites, or even their basic computer activity.

One case in point: An April 2020 article in *The Washington Post* on “tattleware” and other surveillance methods adopted by managers in the early weeks of pan-

demic lockdowns described how one worker-monitoring software would categorize an employee as “idle” if their keyboard and mouse were inactive for 15 seconds,⁵⁰ a frequently used worker-monitoring measurement standard.⁵¹

The extensive monitoring and quantification of worker actions does not automatically lead to greater worker productivity in any meaningful sense. In fact, it can do the opposite, as research suggests that workers are more productive when they have greater privacy.⁵² When employers combine extensive surveillance with automated management—including automated firing in response to mistakes or deviation from the “norm”—workers must choose between competing priorities. For instance, when retail workers are pressured to keep lines moving during the holiday rush, they may enter inaccurate item information if an item’s tag is not in the system or enter their personal email address instead of a customer’s to speed things along.⁵³

Workers are already using anti-surveillance technologies and apps to “trick” monitoring software, and these practices will likely grow as more employers use these practices to evaluate workers’ performance and pay, especially remotely managed independent contractors.⁵⁴ A blog post from the monitoring company Time Doctor shows an example of a worker using an automatic mouse-mover app to appear to be working when they are not and explicitly recommends their software for firms managing outsourced workers from platforms such as Upwork or Freelancer.⁵⁵

So-called emotional tracking methods are spreading, but are scientifically unfounded

To monitor and manage workers in customer-facing occupations, such as low-wage jobs in call centers and retail, employers are turning to so-called emotion recognition technologies that automatically evaluate workers based on their speech patterns, facial expressions, or tone of voice.⁵⁶ Many start-ups and established companies sell such services, which claim to use machine learning and artificial intelligence to identify an individual’s emotions or affect based on biometric information, such as their facial expression or voice inflection.

The scientific evidence underlying “emotion recognition” technologies is far from proven, as researcher Kate Crawford explains.⁵⁷ “Emotion recognition” systems are built on facial recognition and voice recognition technologies.⁵⁸ They both have significant problems with racist and sexist biases, as Ruha Benjamin details in *Race After Technology*, and are especially bad at interpreting people of color’s faces or women’s voices, especially Black women.⁵⁹

As with other automated management technologies, emotional recognition metrics can also drive service workers to perform their jobs in counterproductive ways that satisfy the algorithm, not the customer. Journalist Josh Dzieza [describes](#) how call-center workers may be punished for otherwise-effective speaking styles:

Angela's other metrics were excellent, but the program consistently marked her down for negative emotions, which she found perplexing because her human managers had previously praised her empathetic manner on the phone. No one could tell her exactly why she was getting penalized, but her best guess was that the AI was interpreting her fast-paced and loud speaking style, periods of silence (a result of trying to meet a metric meant to minimize putting people on hold), and expressions of concern as negative.⁶⁰

Dzieza goes on to document how workers, without any guidance on what specific aspects of their behavior were “wrong” or what they should change, attempted to meet the algorithms’ expectations. This included peppering conversations with unnecessary apologies, confusing customers, or trying to maintain an upbeat tone of voice that was incongruous with the content of the conversation.

Workplace surveillance and worker power

New workplace surveillance technologies enable employers to harm workers in a variety of ways. This section of the report details how workplace surveillance:

- Enables the exploitation of workers
- Undermines worker power by changing the structure of jobs and work
- Is a barrier to worker organizing even when not explicitly part of anti-union activity

This section explores the forms these harms can take.

Workplace surveillance enables worker exploitation

In addition to general privacy intrusions upon workers, workplace surveillance enables and encourages exploitative management practices that harm workers and worsen job quality—often but not always through [algorithmic management](#).⁶¹ Algorithmic management refers to practices that use data from digital surveillance to enable semi- or fully automated management of workers, from setting pay to hiring and firing decisions.

These algorithmic management practices include many harmful [scheduling](#) and timekeeping requirements, such as unpredictable scheduling, split shifts, or narrow definitions of “work time” within a shift.⁶² This can lead to various economic harms, such as wage theft or the loss of jobs, or health and safety harms, such as pressure to meet impossible production targets or a lack of meaningful breaks.

The individual harms from pervasive monitoring can be difficult to quantify or to identify in a single outcome. When workers are constantly surveilled and those data are stored in perpetuity, anything they do could potentially be used as some

sort of production target, performance metric, or reason for termination. This on its own leads to extreme stress, overwork, and dangerous behaviors.⁶³ And the uncertainty and opacity that arise from being surveilled also imposes a constant cognitive “tax” on workers.⁶⁴

Pervasive workplace monitoring is also a component of the broader shift to fractured employment relationships that are becoming more commonplace throughout the U.S. economy. Surveillance both enables and is necessary for precarious and fissured work arrangements, with firms using worker-generated data to further de-skill jobs that can be rigorously monitored by automated management systems.⁶⁵ Worker surveillance and data collection is also necessary for firms and corporate headquarters to exert fine-grained control on subcontractors and franchisees.⁶⁶

In addition, the collection and use of extensive worker data creates possibilities for other forms of discrimination by giving companies direct or indirect access to sensitive or protected information. This might include biometrics and other forms of health data, as well as information about a workers’ religion, family structure, or sexuality.

This reliance on opaque algorithms with dubious predictive abilities, including those created and maintained by third parties, also creates new avenues for firms to unintentionally discriminate by race, sex, age, and other factors. This might include software and apps promising to predict “trustworthiness” or measure soft skills in job candidates, or the use of hiring algorithms to sort job applicants.⁶⁷

Workplace surveillance undermines worker power by changing the structure of jobs and work

Invasive and exploitative workplace surveillance has grown largely unchecked due to a lack of legal protections or regulatory restrictions on these behaviors. The ubiquity of technologically enabled workplace monitoring and lack of privacy protections continues a harmful cycle: Pervasive surveillance not only undermines worker power but also adds to the already-weakened state of worker power in the United States that allows firms to further surveil and exploit workers.

The United States lacks a comprehensive or coherent conception of a right to privacy due to the lack of federal laws and inconsistent court interpretations of existing laws and privacy harms.⁶⁸ Most legal protections that do exist generally focus on the privacy rights of individuals as consumers, not as workers. Current federal workplace privacy protections are narrowly focused on data collected and used

in specific contexts, such as protections against surveillance during unionization activities or for specific types of data, such as employees' health data.⁶⁹

This weak legal framework for protecting privacy in the United States means workers have very few rights to privacy in the workplace, especially if a company can claim that there is a business-related reason for the surveillance.⁷⁰

Workers are unlikely to even be aware of all the ways in which they are surveilled. Companies generally do not inform them of surveillance practices, and the harms from this surveillance can be difficult to precisely identify or quantify. For instance, workers may be unaware of any surveillance until it is used against them through disciplinary action or firing, or may not be aware of it at all but still experience surveillance-enabled discrimination or control.

Workers, of course, may be aware in a general sense that they are being watched. This leads to the stress of pervasive surveillance without recourse. Or workers may be fully informed of the extensive surveillance they are under and how it is being used to track and quantify their actions, with equally stressful outcomes. The consequences of this surveillance can extend far into the future, as in most states these data may be kept, used, repurposed, and even sold at any point in time, in perpetuity.⁷¹

Workers' lack of control over their own data and privacy in the workplace is also fundamentally a result of the overall weakened state of worker power in the United States. Many invasive surveillance practices are used to monitor workers who are not employees of the surveilling company, due to the company misclassifying them as independent contractors or due to franchise or subcontracting arrangements that reduce the lead firm's accountability.

Workers classified as employees have more legal protections than independent contractors or gig workers, but still have little power to stand up to employers. Only 12.1 percent of U.S. workers—and just 7.2 percent of private-sector workers—were represented by a union in 2020, according to the Economic Policy Institute.⁷² But even unionized workers do not have a defined legal right⁷³ to bargain over surveillance or other technologies.⁷⁴

Another key piece of the lack of worker power in surveillance practices is the U.S. system of "at-will" employment, which means that workers can generally be fired suddenly and without explanation.⁷⁵ Workers cannot be explicitly fired because of their race, gender, religion, or national origin, but the lack of "just cause" protections for most workers means that those who are fired may never know what the actual reason was behind their firing.

At-will employment also further shifts the balance of power toward employers. As the National Employment Law Project [explains](#), “at-will employment undermines workers’ ability to speak up about mistreatment and perpetuates longstanding racial inequities in the workplace and labor market.”⁷⁶ This intersects with the [prevalence of surveillance](#) in low-wage jobs in particular, where workers have less of an ability to refuse invasive monitoring and can be fired on “productivity” grounds for even slight deviations from demanding quotas.⁷⁷

Research from Rutgers University shows that [worker power is also lower](#) during times of economic stress, such as the high unemployment levels seen during the Great Recession of 2007–2009.⁷⁸ And worker power almost certainly declined amid the coronavirus pandemic and ensuing recession, too, as millions of workers—particularly low-wage workers, workers of color, and women, who were already more vulnerable to discrimination—[lost their jobs](#) due to the economic crisis.⁷⁹

The erosion of worker power in the United States means that workers have few options to push back against [invasive surveillance](#), furthering the cycle of surveillance and declining worker power.⁸⁰ Some workers may be able to voice their opposition to changes internally or draw public attention to the situation. In some cases, workers have successfully pressured software makers directly to remove invasive features. The video conference software Zoom, for instance, which saw a sudden rise in popularity during the pandemic, initially had an “[attention tracking](#)” feature that showed when the application was not the “active” window of a user, but this feature was [removed](#) by its designer, Zoom Video Communications Inc., as a result of public pushback in April 2020.⁸¹ In many other cases, however, even [seeking to avoid surveillance](#) may be seen as “suspicious.”⁸²

Without legal protections or meaningful bargaining power, the only recourse many workers have is to seek employment and better working conditions elsewhere—an unattractive option for many workers, considering that the rise of employer concentration in the United States makes it difficult for workers to successfully secure a new job. This is especially true for low-wage workers in more rural areas, which have [fewer employment options](#).⁸³

Workplace surveillance is a barrier to worker organizing even when not explicitly part of anti-union activity

As discussed in previous sections, there are few workplace privacy protections that workers can turn to in response to workplace surveillance. One of the exceptions,

however, is when the surveillance targets employees' protected concerted activity to improve working conditions under the National Labor Relations Act of 1935.⁸⁴

Workplace surveillance has long been illegal when it is explicitly part of an employer's efforts to suppress employees' right to organize. Under NLRA rules and regulations, companies cannot spy on unionization activities or other protected activities, or create the impression that they are spying.⁸⁵ This applies to both secret information-gathering—anti-union surveillance does not need to be visible to employees to violate the NLRA, according to the National Labor Relations Board—or highly visible surveillance meant to be coercive.⁸⁶

According to a report from the Economic Policy Institute, “employers are charged with violating federal law in 41.5 percent of all union election campaigns,” and 13.9 percent of union elections included a charge of coercive surveillance.⁸⁷ A recent working paper from Equitable Growth grantee Anna Stansbury, a Ph.D. candidate in economics at Harvard University, shows that relatively small penalties and current enforcement approaches leave firms little incentive to comply with NLRA rules in general, further hindering organizing efforts.⁸⁸

What's more, the normalization of workplace surveillance weakens worker power by allowing more avenues for companies to justify their anti-union surveillance while also creating a general atmosphere where workers know they are always being watched. A 1941 NLRB decision stated that companies cannot conduct out-of-the-ordinary surveillance of unionization activities. Yet invasive surveillance is fast becoming the “baseline.”⁸⁹ This means it can be harder for workers to prove that an employer's actions are specifically related to their unionization activity.⁹⁰

One recent example of this is Amazon's global surveillance of workers and worker groups to identify business “threats,” such as unionization activity.⁹¹ Wilma Liebman, a former chairman of the NLRB under President Barack Obama, told Recode that Amazon's efforts to simply collect union-related data in itself is likely not illegal, “but once employees become aware of such surveillance of union and other ‘concerted’ activities, there are potential legal issues presented.” She added in an email to *Recode*:

*Open surveillance is illegally coercive even if managers do not directly threaten to retaliate or take action based on the information obtained. There is an implied message that the company people will be rewarded and the union adherents will suffer.*⁹²

Another challenge for bringing workers' rights into the digital age is that the NLRA's protections are based on distinctions around being on or off the physical

worksite or activities during work hours or during breaks, which are muddled by the “always-on” nature of mobile and digital technologies. At present, guidance on the NLRB website states that social media is considered to be “in cyberspace,” as opposed to conceptually in the workspace, and has affirmed social media can be a form of “protected concerted” activity.⁹³

At the same time, however, the NLRB under President Donald Trump expanded the rights of employers to search company-issued devices or networks, along with personal items on company property, including a worker’s car. In a 2019 ruling, the NLRB also limited the ability of employees to use company-issued computers and devices for otherwise-protected communication.⁹⁴

The COVID-19 crisis will extend and deepen workplace surveillance well beyond the pandemic

The combination of the sudden shift in work practices due to the coronavirus pandemic and reduced worker power during the ensuing recession are accelerating and adding new worker surveillance practices that will be difficult to roll back.

Due to the pandemic, up to half the U.S. workforce suddenly shifted to entirely remote work in the early days of the pandemic.⁹⁵ Many managers swiftly turned to invasive digital monitoring to keep tabs on their workers.⁹⁶ A 2020 Harvard Business School working paper on the workplace impact of COVID-19 called these practices “virtual sight-lines.”⁹⁷ As these workers return to on-site work, or if many offices shift to a more hybrid approach to remote work, firms are very likely to leave these practices in place.⁹⁸

Workers who worked on-site during the pandemic often also faced heightened monitoring, too. Previously, many employers or related third parties had collected workers’ health data, either through biometric collection or through “voluntary” employer-provided health insurance or wellness programs.⁹⁹ This is one area where workers have more formal legal protections, but protections may not be enforced when technology comes into play or if collection is “voluntary” but economically encouraged.

Biometric tracking specifically is already used in some industries as forms of identification, such as letting retail workers “clock in” through fingerprint scanning.¹⁰⁰ It is also used as part of productivity tracking, as described above, in attempts to monitor workers’ attention or emotional affect.

More recently, many companies implemented new or expanded monitoring of health and biometric data for onsite workers in the name of protecting worker and

customer safety during the pandemic. This is a practice that affects workers ranging from grocery store employees to National Basketball Association players.¹⁰¹ For instance, many companies began conducting temperature checks on workers at the beginning of the pandemic, often using thermal cameras to screen employees more efficiently, though their accuracy is questionable.¹⁰²

Medical tests also are inherently invasive, yet they may be necessary to help protect workers and customers under specific circumstances and with appropriate guidelines. But these measures and others can become more harmful because of their structural context. The majority of U.S. workers lack paid leave to deal with family and medical needs: Only 18 percent of private-sector workers have paid family leave, and only 44 percent have paid personal leave.¹⁰³ And then, there's the lack of sufficient Unemployment Insurance benefits for those who lose their jobs through no fault of their own.¹⁰⁴ All of these structural conditions in the U.S. labor market mean that job security is precarious should workers take unpaid leave and also because workers who submit to such medical testing in their workplaces risk being sent home without pay due to a potentially inaccurate temperature check.¹⁰⁵

In the context of the COVID-19 pandemic, measures ostensibly implemented for health and safety purposes by employers were often only necessary because the U.S. government did not pay for workers to stay home without losing their jobs, as was the case in many European countries who subsidized furloughed workers.¹⁰⁶ This lack of direct federal government intervention for public health reasons forced many low-wage workers to continue to work out of economic necessity, and many of their employers did not provide sufficient personal protective equipment or sick leave, as Aiha Nguyen of Data & Society explains.¹⁰⁷

Furthermore, Nguyen writes, the surveillance-based approach to health and safety measures grows out of a broader systemic failure to protect workers.¹⁰⁸ This shifts the risk and responsibility of workplace health and safety from firms to workers, who are now being surveilled.¹⁰⁹

Policies to address the future of worker surveillance

There are many models for legislative action, including the [Worker Privacy Act](#) proposed by the Center on Privacy & Technology at Georgetown University Law Center.¹⁰ Some aspects of these policy proposals target the use of technology for surveillance and how workers can bargain over related practices. And some aspects address the underlying issues of worker power and employment relationships that are fundamentally intertwined with workplace monitoring and its consequences. These include:

- Broad protections around how workers' data are collected, used, and stored
- Meaningful oversight and enforcement of worker privacy issues
- Structural causes that have shaped current surveillance practices and undermine worker power

Without comprehensive federal legislative and regulatory action that addresses the underlying factors distorting labor market dynamics, workplace surveillance will continue to expand and perpetuate the cycle of eroding worker power and economic outcomes to the detriment of all U.S. workers. This final section of the report highlights potential areas for policy interventions that can address these imbalances and build a foundation to protect all U.S. workers.

Worker data and privacy protections

Transparency is a key first step in many of these models, requiring that firms notify workers of what data they are collecting about them and how, along with how these data will be used and retained. Under the proposed Worker Privacy Act, for instance,

companies would be required to notify workers of how these data are analyzed and used in decision-making around hours, wages, hiring, benefits, promotion, or termination, and would allow bargaining over how the data are collected and used.

Because workers are often left to guess how the data collected about them will be used, under the proposed Worker Privacy Act, companies would also need to give workers advance notice of actions taken as a result of this data collection and analysis, as well as the ability to challenge those decisions. These legal steps would prevent companies from instituting algorithmic management practices that automatically fire workers with no recourse.

Some states already have passed legislation that provides a few of these data transparency elements in an employment context. California has passed broad consumer privacy protection laws, including the [California Privacy Rights Act of 2020](#). This law protects many workers due to rules on how data are collected and stored, and gives individuals the right to request the data's deletion.¹¹¹

Many policy recommendations also call for giving unions the explicit ability to bargain over the implementation of surveillance technologies in the workplace. Unions have negotiated over related issues in the past and are bargaining over emerging surveillance technologies today. As a 2020 [UC Berkeley Labor Center working paper](#) describes, some unions in the United States are already in negotiations over the use of biometric information, the right to turn off GPS tracking during breaks and nonwork hours, training for managers who can view worker data, limits on how data are used, and workers' grievance rights.¹¹²

The rise of the fissured employment relationships means that workers may be subject to extreme levels of surveillance and automated management practices by firms that are not direct employers. As such, privacy protections must be applied regardless of the employment relationship. For instance, the Worker Privacy Act specifies that its protections apply to workers who are classified as independent contractors or who work as subcontractors or for franchisees.

This is necessary, given how surveillance is used to control workers across scattered supply chains. And this type of policy is already being applied elsewhere. New legislation in Spain, for instance, would [give labor unions access](#) to workforce management algorithms used by on-demand companies such as Uber, even when these companies classify their workers as independent contractors.¹¹³

Oversight and enforcement of workplace surveillance protections

The erosion of worker power and worker organizing in the United States means that workers may not be able to meaningfully oppose invasive surveillance practices even if they are informed of them, illuminating a role for more proactive government oversight of these practices. For example, a [recent report on Amazon’s surveillance practices](#) from the Open Markets Institute also recommends requiring that companies “disclose and justify each of their surveillance practices to state and federal agencies,” which would then need to approve those practices.¹¹⁴

These mandatory disclosures would enable more active public oversight of workplace surveillance practices and give state and federal agencies information on currently secret and opaque company practices.

Much like how current U.S. laws and regulations limit how certain types of sensitive data, such as health data, are collected and used in the workplace, many models also recommend limits on specific types of surveillance practices and the types of information that can be collected by companies. This would require a combination of federal law and regulatory changes, including [updated guidance](#) from the National Labor Relations Board around the use of technology for surveillance and for organizing in the workplace.¹¹⁵

Finally, implementing these changes—as well as fully applying [existing protections against discrimination](#)¹¹⁶ and protecting workers’ rights to organize—again requires proactive and robust enforcement.

Structural causes that fracture employment relationships and undermine worker power

Going forward, each workplace will have different challenges, and the technology available and its implementation will change over time. To address the evolving nature of technology’s role at work and to combat the power imbalances that have led to these harms in the past, it is vital to address the structural causes that intersect with workplace monitoring to undermine worker power and make jobs worse.

Meaningful government oversight and strong unions can shape how new technologies are implemented in the workplace, but other policy changes can also shift the balance of power away from employers and back to a more balanced relationship.

...it is vital to address the structural causes that intersect with workplace monitoring to undermine worker power and make jobs worse.

For instance, policymakers can pass “just cause” job protections, as New York City recently did for fast-food workers, which can strengthen workers’ ability to address harmful monitoring practices without fear of retaliation.¹¹⁷

Yet “pervasive monitoring of workers also means that minor infractions can easily be found and used to side-step just cause protections,” as the National Employment Law Project notes.¹¹⁸ Multiple states are beginning to address this by considering various forms of just-cause legislation that would ban employers to different degrees from relying on data collected through pervasive surveillance in making decisions around discipline, termination, compensation, or other employment-related decisions.¹¹⁹

Worker misclassification and the fissuring of work arrangements in the United States are also deeply intertwined with many exploitative surveillance and management practices, both incentivizing lead firms to engage in these practices and preventing them from being accountable for their harms.¹²⁰ Addressing the underlying factors that drive the adoption and downstream impacts of these practices requires combating illegal employment relationships, improving job quality for all workers, and strengthening workers’ ability to shape their working conditions.

In addition to cracking down on worker misclassification through enforcement actions, what’s needed are stricter rules on who can be considered an independent contractor, alongside implementing joint-employer standards to protect workers within franchise arrangements.¹²¹ Also needed are rules that allow independent contractors to collectively bargain over their working conditions, such as those included in the proposed Protecting the Right to Organize, or PRO, Act.¹²²

Finally, research shows that exploitative practices inside and outside of physical U.S. workplaces are also more common when unemployment is high and workers have fewer alternative employment options.¹²³ As such, policymakers need to raise the minimum wage and then need to invest in key social infrastructure elements, such as caregiving supports, Unemployment Insurance, and direct income supports, to make it easier for workers to leave bad employment situations.¹²⁴ Policymakers can also strengthen workers’ outside options by enacting antitrust actions that address employer concentration.¹²⁵

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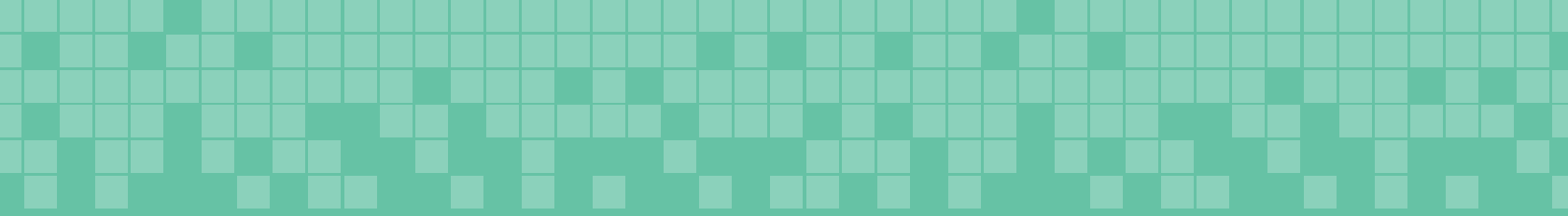
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