Who Keeps America Awake? Measuring Shift Shock and the Changing Boundaries of the U.S. Workday After 2020

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1 Introduction

Most discussions about the post pandemic labor market start with a familiar question. Did Americans work more or did they work less? That question is useful, but it hides something more revealing. A labor market can shift not only in the amount of work people do but in the moments of the day when that work takes place. Since 2020, the American workday has begun to stretch in quiet and uneven ways. Hours that once felt like empty margins of the day, such as early mornings and late evenings, have slowly filled with new patterns of activity.

This paper begins with that simple observation. The timing of paid work has changed, even as employment levels have largely stabilized. Using hourly participation rates from the American Time Use Survey, I show that a measurable drift in work hours has emerged. It is a subtle pattern rather than a dramatic break. Work is pulling slightly toward the edges of the day while the traditional middle hours remain surprisingly stable. This pattern creates a form of shift shock that is easy to overlook but important for understanding how people actually experience work.

The goal of this research is to treat timing as a meaningful lens through which to observe how institutions and workers adjust in a period of rapid social and economic change. By building descriptive measures such as the Workday Drift Index and comparing patterns across demographic and industry groups, the analysis approaches time itself as data. This perspective helps reveal who absorbs early starts, who carries late nights, and which sectors rely most heavily on work that occurs outside the conventional daytime schedule.

What emerges is a picture of a workday that is not breaking but slowly bending. These adjustments matter because they influence job quality, social routines, and the distribution of scheduling burdens across the population. The reorganization of work hours is more than a temporary outcome of the pandemic period. It reflects an ongoing realignment of the rhythms of American life and deserves attention as a defining trend of the contemporary labor market.

2 Background and Literature Review

Research on the timing of work has documented that when people work can be as important as how much they work. Early work by Daniel Hamermesh shows that hours are clustered in distinct parts of the day and that the timing of paid work responds to institutional features such as collective bargaining rules and national opening hours, rather than only to individual preferences. By treating clock time as an outcome of economic choices, he argues that the distribution of work across the twenty four hour day is a useful object of study in its own right, not just a side detail of total hours worked (Hamermesh).

Subsequent work links nonstandard schedules to job quality and inequality. Hamermesh and Elena Stancanelli use European data to show that long workweeks and unusual hours such as evenings and nights are more common in lower wage and service oriented occupations, and that these schedules are associated with weaker worker autonomy and worse family outcomes (Hamermesh and Stancanelli). Claudia Goldin highlights how schedule inflexibility and the expectation of availability outside conventional daytime hours contribute to earnings gaps across occupations, especially in high skill professions that reward continuous availability rather than pure productivity per hour (Goldin). Together, these studies emphasize that the timing of work is deeply connected to the structure of jobs and to who bears the burden of inconvenient hours.

A separate line of research examines how workers value control over the timing of their schedules. Alexandre Mas and Amanda Pallais use experimental evidence from a call center to show that workers place a high monetary value on predictable daytime hours and on the ability to avoid evenings and weekends. Their findings indicate that even modest improvements in schedule predictability can meaningfully affect worker satisfaction, retention, and job choice (Mas and Pallais). Complementing this perspective, Harriet Presser's work on the twenty four hour economy shows that the spread of early morning, evening, and night shifts is closely tied to lower schedule control and diminished job quality, particularly in service and retail sectors where workers have little bargaining power over when they work (Presser).

More recent work explicitly examines the evolution of work timing over the last decade. Nicole Maestas, Kathleen Mullen, and David Powell describe how technological change, remote work, and the growth of around the clock consumer demand have altered the shape of the workday, with more activity at nonstandard hours and greater dispersion in when people work even within the same occupation (Maestas, Mullen, and Powell). My paper builds on this literature by using the American Time Use Survey to describe how the timing of work in the United States has reorganized after 2020 and by introducing a Workday Drift Index that summarizes changes at the edges of the day.

3 Drift in the Timing of Paid Work After 2020

Understanding how work timing has evolved since 2020 begins with a comparison of the full daily pattern of paid labor before and after the pandemic. Figure 1 shows the hourly share of people working in 2024 alongside the average pattern from 2015 to 2019. The two curves have a similar overall shape, rising sharply in the early morning, peaking across the late morning and early afternoon, and tapering through the evening. This stability in the core hours suggests that the central structure of the workday has remained remarkably consistent. The meaningful differences appear instead at the edges of the day, where small but persistent shifts in early and late activity signal a gradual reorganization of when paid work takes place.

3.1 The Shape of the Workday Has Shifted

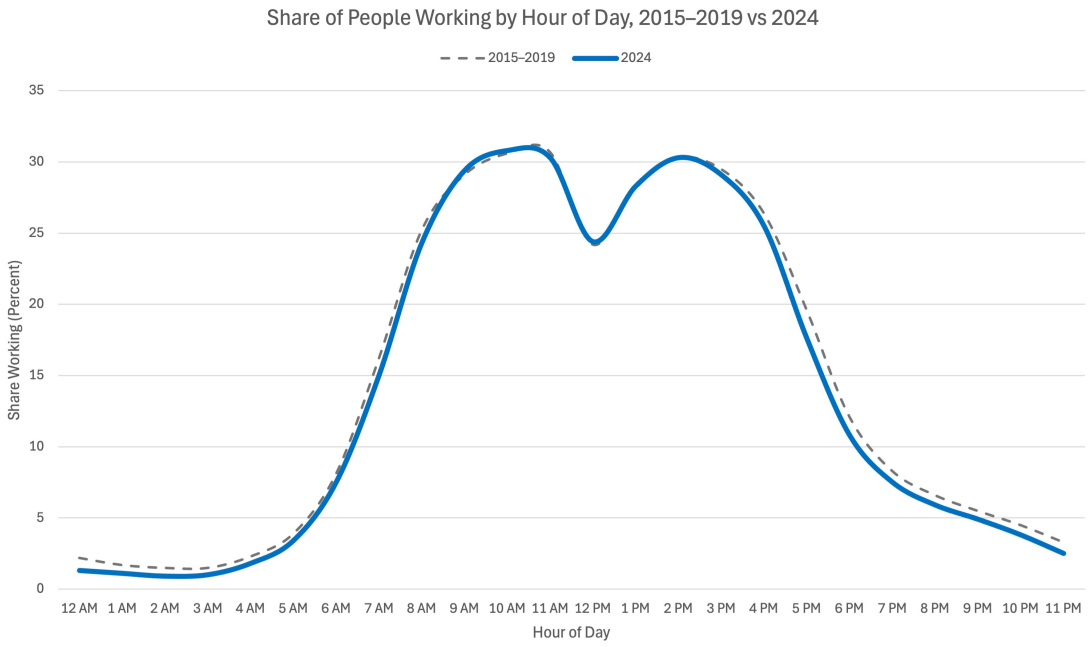

Figure 1. Share of people working by hour of day, 2015–2019 vs 2024. Source: Bureau of Labor Statistics, American Time Use Survey.

In Figure 1, the meaningful changes occur at the edges of the day. The 2024 curve begins to rise slightly earlier than before, showing a modest increase in early morning activity. At the same time, the evening decline is steeper, with fewer people working past six compared with the pre pandemic average. These small shifts reveal that the boundaries of the workday have tightened, even as its center has stayed largely the same. The workday now begins a little earlier and ends a little sooner, a pattern that hints at broader adjustments in scheduling, employer practices, and worker routines. These boundary changes form the foundation for understanding how different groups experience the evolving structure of daily labor.

3.2 Where the Shift Occurred - Early Mornings and Evenings

While Figure 1 shows that the overall shape of the workday in 2024 closely resembles the pre pandemic pattern, it also suggests that the most meaningful changes occur at the margins of the day rather than at its center. To make these shifts more visible, Figure 2 isolates the change itself by plotting the hour-by-hour difference between 2024 and the pre pandemic baseline. This approach highlights adjustments that are less obvious in the overlapping curves of Figure 1.

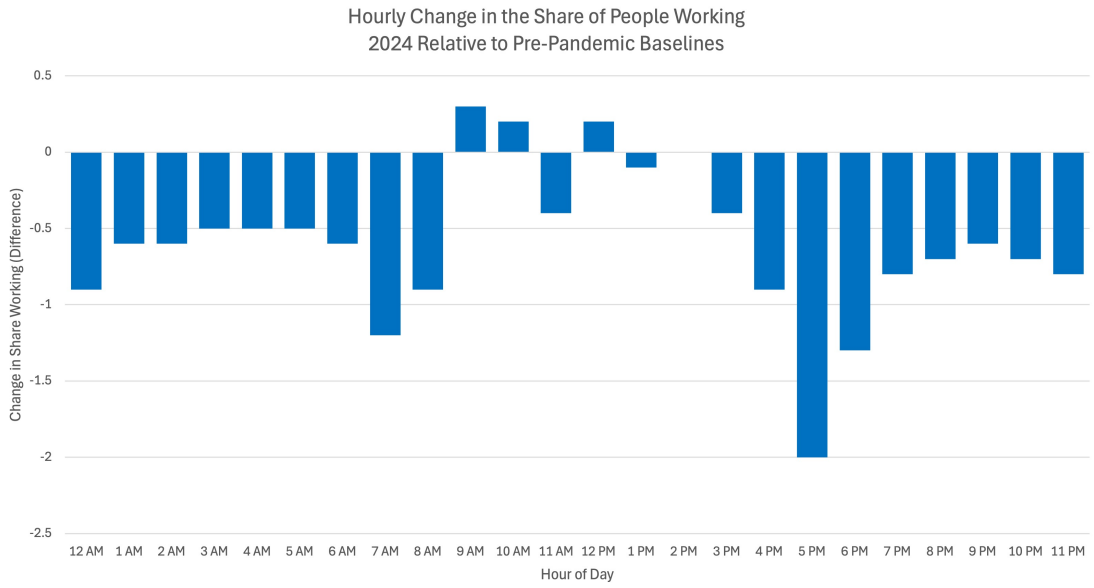

Figure 2. Hourly change in the share of people working, 2024 relative to 2015–2019. Source: BLS American Time Use Survey.

Figure 2 highlights how the timing of work in 2024 differs from pre pandemic patterns by showing the hour-by-hour change in the share of people working. Most of the bars fall below zero, which means that for much of the day, fewer people were working at any given hour in 2024 than in the earlier baseline period. The declines are especially noticeable in the early morning hours between midnight and six, where work participation drops by roughly half to one percentage point. This suggests that late-night and overnight activity has become less common, reflecting a continued retreat from around-the-clock operations in retail, leisure, and some service jobs.

The largest decline appears at five in the evening, where the share working falls by about two percentage points. This sharp drop signals a faster exit from paid work at the end of the day, contributing to the steeper evening decline seen in the full-day curve. Midday hours show much smaller deviations, with some slight increases around ten in the morning and one in the afternoon. These modest upticks reinforce the idea that the central workday remains stable while the boundaries have compressed. The picture that emerges is one where early mornings and late evenings bear the most visible effects of post 2020 scheduling changes. These shifts set the stage for examining which groups of workers are most affected by the movement of labor away from the edges of the day.

3.3 The Workday Drift Index Shows a Structural Change

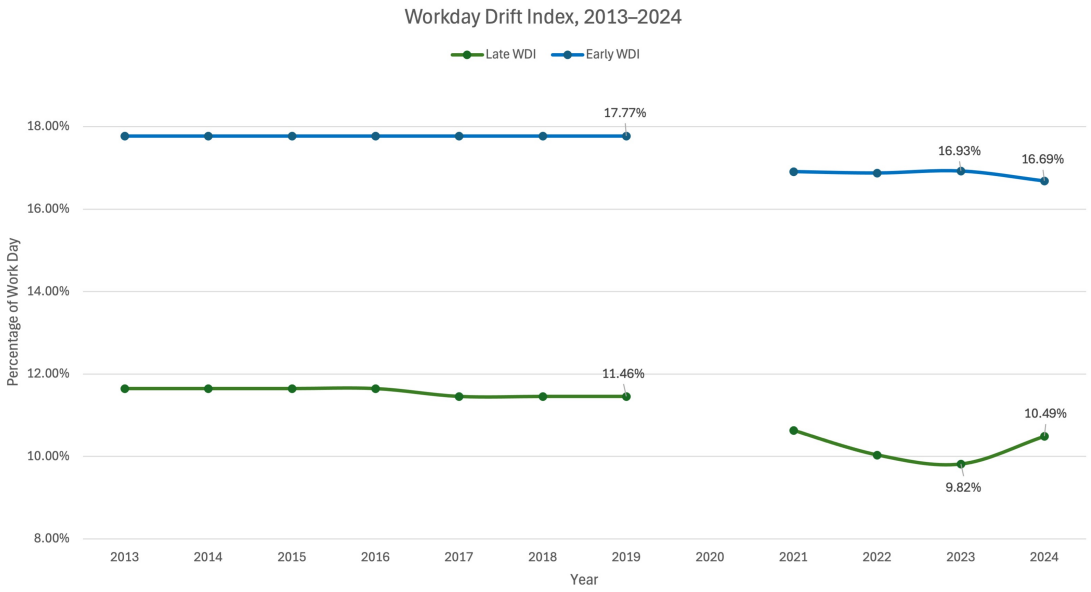

Figure 3. Workday Drift Index, 2013–2024. Source: BLS American Time Use Survey.

The Workday Drift Index provides a summary view of how much paid work occurs outside the traditional daytime window by measuring the share of workers active after six in the evening. Before the pandemic, the index was remarkably stable. From 2013 through 2019, the share of people working after six hovered tightly around eleven and a half percent with almost no year-to-year variation. This consistency shows that despite fluctuations in employment levels and industry composition, the timing of evening work was a deeply ingrained feature of the labor market during the 2010s.

Beginning in 2021, the index breaks sharply from this long period of stability. Evening work falls noticeably in 2021 and continues to decline through 2022, eventually reaching a low of nine point eight two percent in 2023. The decline represents one of the largest timing shifts in the entire series, reflecting earlier store closures, reduced evening staffing in service and leisure sectors, and changes in scheduling practices that emerged during the pandemic and carried into the recovery period. Although the index rises again in 2024, the rebound is only partial. Evening work remains well below its pre pandemic levels.

The pattern captured by the Drift Index suggests a structural rather than temporary change in the timing of paid work. The core hours of the day have stayed intact, but the labor market has moved away from late evening activity in a way that persisted even after economic conditions normalized. This shift reflects a reorganization of when work happens rather than how much work people do. It also sets the foundation for understanding who absorbs the remaining early and late hours and how these changes interact with demographic and industry differences explored in the next section.

4 Who Experiences Shift Shock? Demographic Patterns

Understanding where the drift in work timing comes from requires looking beyond the aggregate workday and examining how different groups participate at the edges of the day. The overall patterns in Section 3 show that early mornings and late evenings have changed the most since 2020, but these shifts are not spread evenly across the workforce. Some workers are far more likely to absorb early starts and late finishes than others, reflecting differences in job type, schedule control, and life stage.

Age is one of the clearest divides in the timing of paid work. Younger adults, who are more heavily employed in service and retail industries, tend to work more during evening hours, while older workers in more stable full-time roles are more present in the early morning. These differences are visible in the American Time Use Survey data and provide insight into how the timing of work intersects with broader patterns in labor market segmentation. The figures that follow show how work participation before eight in the morning and after six in the evening has shifted for workers ages fifteen to twenty four compared with those ages twenty five to thirty four.

4.1 Differences in Work Timing Across Age Groups

Early Work (Before 8 AM), Ages 25–34 vs 15–24

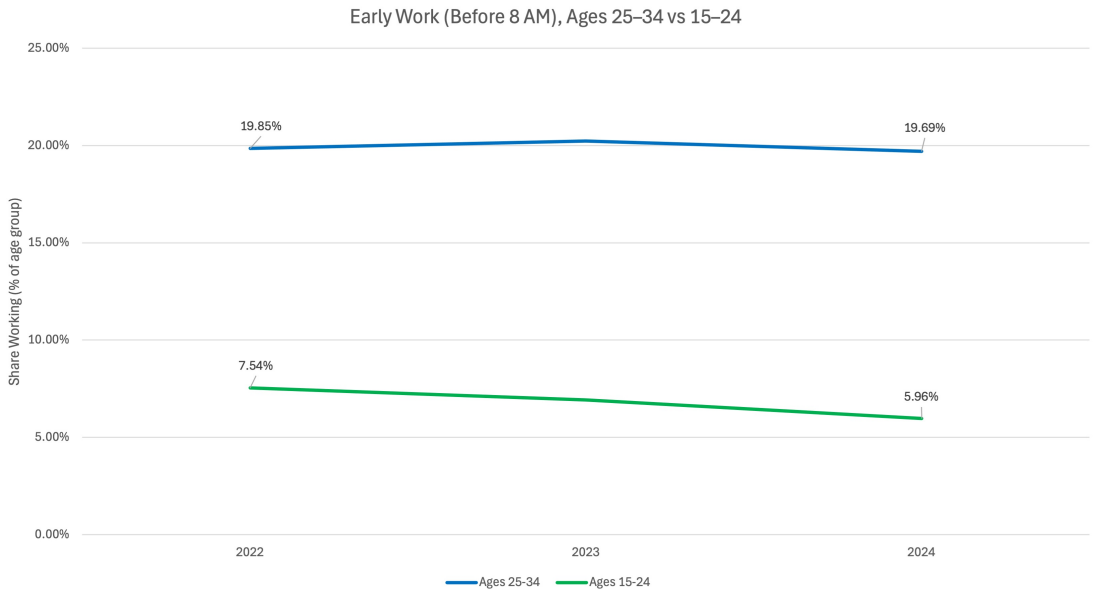

Figure 4a. Hourly share of people working, by age group (2022 - 2024), Early. Source: BLS American Time Use Survey.

Figure 4a shows that the likelihood of working before eight in the morning differs sharply by age group and has become increasingly polarized in recent years. Workers ages twenty five to thirty four

maintain a consistent early morning presence, with roughly twenty percent of this group working before eight in each year from 2022 to 2024. This stability suggests that the types of jobs held by many in this age range continue to require traditional morning starts, reflecting more structured daytime roles in professional, administrative, and transportation sectors.

In contrast, early work among younger workers ages fifteen to twenty four has declined steadily. Their pre eight a.m. participation falls from about seven and a half percent in 2022 to under 6 percent in 2024. This downward trend likely reflects the shifting industry composition of youth employment, which is concentrated in service and retail work that increasingly begins later in the day. The gap between the two age groups widens over time, illustrating that early morning labor is becoming more concentrated among older workers while younger workers retreat from the earliest shift hours.

Late Work (After 6 PM), Ages 25–34 vs 15–24

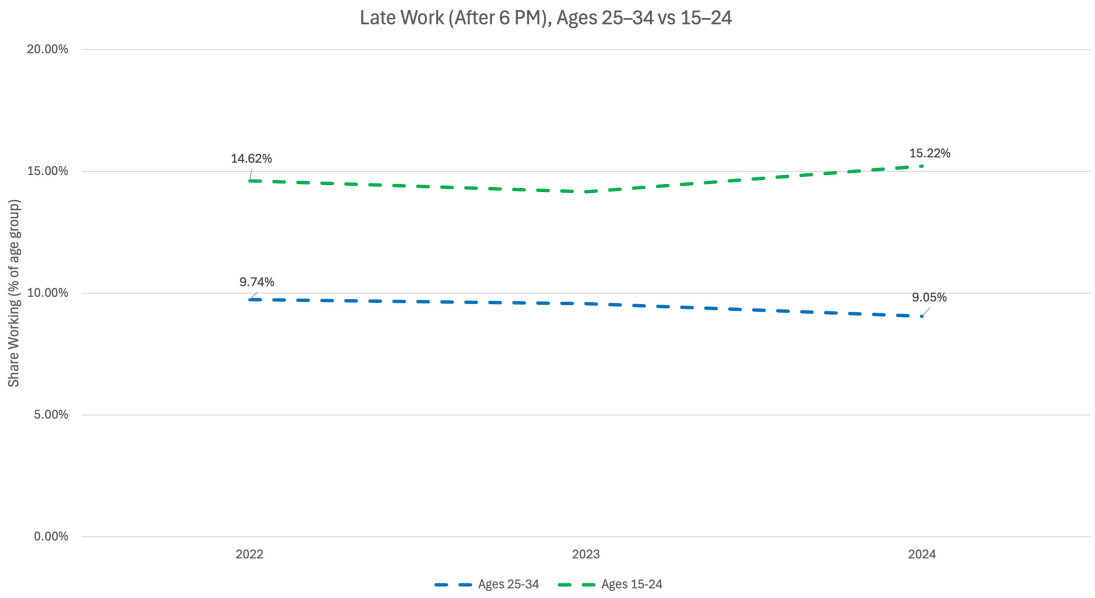

Figure 4b. Hourly share of people working, by age group (2022 - 2024), Late. Source: BLS American Time Use Survey.

Figure 4b shows that work participation after six in the evening also varies markedly by age, but in the opposite direction from early morning trends. Younger workers ages fifteen to twenty four consistently make up the largest share of the evening workforce, with participation rising slightly from about fourteen and a half percent in 2022 to just over fifteen percent in 2024. This pattern reflects the industry composition of youth employment, which is concentrated in restaurants, retail, leisure, and other service jobs that remain busiest during evening hours. The modest increase over time suggests that even as overall evening work has declined, younger workers continue to anchor these late day shifts.

Workers ages twenty five to thirty four show the reverse pattern. Their evening participation declines gradually from roughly nine point seven percent in 2022 to just over nine percent in 2024. This downward trend is consistent with the broader contraction of evening work documented in the Workday Drift Index. It also reflects the movement of many workers in this age group into more stable daytime roles, greater schedule control, and reduced reliance on shift based employment. The widening gap between the two age groups indicates that the burden of late evening work has become increasingly concentrated among younger workers.

Overall, older workers continue to dominate early-morning work while withdrawing further from evening shifts. Younger workers move in the opposite direction away from early work and remaining the core labor supply after 6 PM. These patterns highlight meaningful differences in job type, schedule flexibility, and industry composition across age groups.

4.2 Working Alone vs. With Others Across the Life Cycle

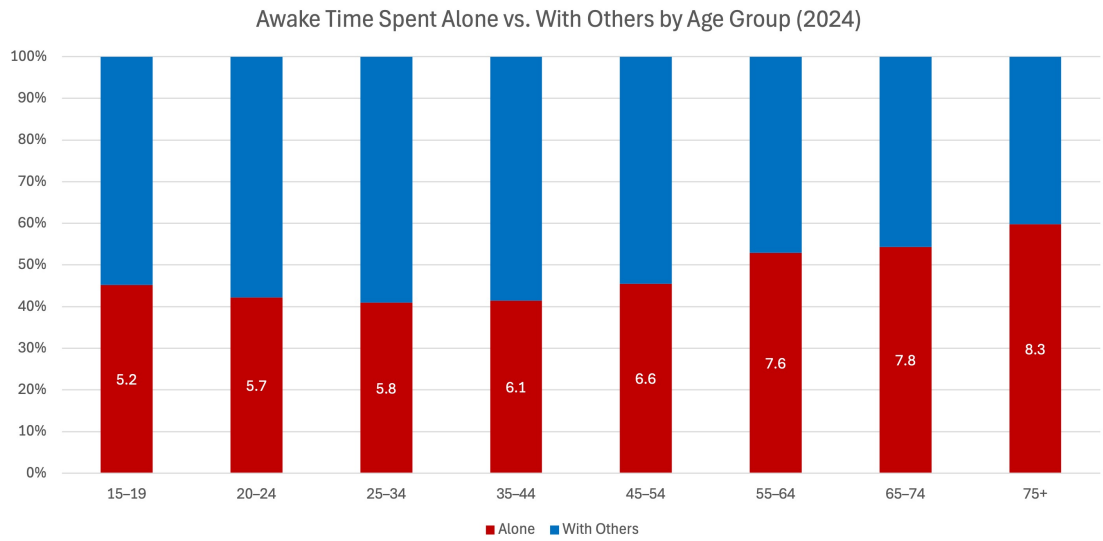

Figure 5. Awake time spent alone vs. with others, by age group (2024). Source: BLS American Time Use Survey.

Figure 6 shows that the amount of time people spend alone during the day increases steadily with age, even though total awake hours remain similar across groups. Teens and young adults spend the least time alone, typically around five to six hours per day, reflecting high levels of interaction with classmates, coworkers, friends, and household members. This social density aligns with the higher levels of evening work observed among younger workers, since many of the jobs they hold take place in customer-facing or team-based environments where interaction is built into the workday.

As adults move into midlife and beyond, alone time rises in a smooth and almost linear pattern. By ages fifty five to sixty four, people spend more than seven and a half hours of their awake day

alone, and by age seventy five and older, the average climbs above eight hours. This growing solitude provides important context for interpreting work timing. Older workers dominate early morning hours, which may align with routines that structure the day in settings where social engagement is otherwise more limited. In contrast, the evening hours that younger workers disproportionately occupy coincide with a stage of life where daily activities and employment are more socially embedded. Together, these patterns show that differences in the timing of work are intertwined with the broader social rhythms of the day and may reinforce existing life-cycle patterns of connection and isolation.

5 Industry Exposure to Nonstandard Work Hours

Rank	Industry	Share of hours after 6 p.m. (%)
1	Leisure and hospitality	21.5
2	Transportation and utilities	17.7
3	Wholesale and retail trade	12.9
4	Manufacturing	11.6
5	Information	10.3
6	Professional and business services	9.5
7	Public administration	8.9
8	Agriculture, forestry, fishing, and hunting	8.8
9	Other services	7.5
10	Financial activities	6.3

Table 1. Top 10 industries ranked by evening and night work, measured as the share of total work hours occurring after 6 p.m. in 2024. Source: BLS American Time Use Survey microdata.

The timing of paid work is shaped not only by worker characteristics but also by the structural routines of different industries. Some sectors operate on a daytime schedule with tightly bounded hours, while others depend on activity that peaks early in the morning or extends well into the evening. These institutional patterns help explain why certain groups of workers, such as younger adults, are more likely to absorb late shifts while others take on early morning responsibilities.

Table 1 shows the industries with the highest share of work occurring after six in the evening. Leisure and hospitality stands out as the most evening intensive sector, with more than one fifth of all work hours taking place after six. Restaurants, bars, entertainment venues, and hotels rely heavily on nighttime staffing, which aligns with the higher rates of evening work observed among younger workers in the previous section. Transportation and utilities also exhibit substantial late hour activity, reflecting the round-the-clock nature of logistics, delivery, and maintenance operations.

Other industries, such as retail trade and manufacturing, show moderate levels of evening work, indicating that even traditionally daytime sectors contain pockets of nonstandard scheduling. Information, professional services, and public administration have smaller shares of late work but still maintain measurable evening activity, suggesting that project based or deadline driven tasks occasionally extend beyond normal hours. The wide distribution of evening work across industries highlights the diffuse but persistent demand for labor outside traditional daytime windows. These structural differences shape the landscape of nonstandard work and help explain who keeps America awake.

6 Conclusion

The evidence presented in this paper shows that the timing of work in the United States has shifted in subtle but meaningful ways since 2020. While the core hours of the workday remain largely unchanged, the edges of the day tell a different story. Early mornings have strengthened slightly for some workers, and late evenings have contracted across the workforce, leaving a narrower band of nonstandard work activity than existed before the pandemic. These patterns echo the broader trends highlighted in the existing literature, which emphasize the importance of schedule structure, worker autonomy, and the organization of daily labor.

The Workday Drift Index illustrates how stable the timing of evening work had been for nearly a decade and how sharply it declined after 2021. The partial rebound in 2024 suggests some adjustment, but evening participation has not returned to its historical levels. This shift represents not a temporary disruption but a reorganization of when work is performed. Demographic patterns reinforce this view. Younger workers continue to dominate late day work, while older workers retain a larger share of early morning activity. These differences mirror the life cycle of jobs, schedule control, and social routines. The data on time spent alone further underscore how work timing interacts with broader patterns of social engagement and isolation across age groups.

Industry differences add an additional layer of structure. Sectors such as leisure and hospitality, transportation, and retail remain disproportionately reliant on evening labor, while others concentrate work within standard daytime windows. These findings show that the 2020 labor market is not defined solely by changes in employment or hours worked, but also by a quiet reshaping of the temporal boundaries of paid labor. Understanding this drift is essential for assessing job quality, worker well-being, and the distribution of scheduling burdens. As work continues to evolve, the structure of the day may become an increasingly important dimension for researchers and policymakers seeking to understand how Americans navigate the rhythms of daily life.

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