



Precarious Times at Work: Detrimental Hours and Scheduling in Illinois and How Fair Workweek Policies Will Improve Workers' Well-Being

About the Project for Middle Class Renewal

The Project for Middle Class Renewal's mission is to investigate the working conditions of workers in today's economy and elevate public discourse on issues affecting workers with research, analysis, and education in order to develop and propose public policies that will reduce poverty, provide forms of representation to all workers, prevent gender, race, and LGBTQ+ discrimination, create more stable forms of employment, and promote middle-class paying jobs. Each year, the Project will be dedicated to a number of critical research studies and education forums on contemporary public policies and practices impacting labor and workplace issues. The report that follows, along with all other PMCR reports, may be found by clicking on "Project for Middle Class Renewal" at illinoislabored.org. If you would like to partner with the Labor Education Program in supporting the work of the Project or have questions about the Project please contact Robert Bruno, Director of the Labor Education Program, at (312) 996-2491.

About the Authors

Lonnie Golden is a Professor of Economics and Labor & Employment Relations at Penn State University, Abington College. He was a senior research analyst, affiliated with the Project for Middle Class Renewal, as well as with the Economic Policy Institute (DC), International Labor Organization (Geneva), and the Work-Family Research Network. His research analyzes trends, patterns, determinants and consequences of hours of work, work schedules and non-standard employment-- across labor markets, organizations and individuals. His focus is on underemployment and overemployment, overtime and part-time work, work scheduling, labor flexibility, overwork, worker health, earnings gaps, happiness, work-family time and time-use; and policies such as the Fair Labor Standards Act, Fair Workweek and work-sharing. He has published two books and many articles in leading academic journals such as *Industrial Relations*, *Monthly Labor Review*, and *Journal of Marriage and Family*. He lead-authored PMCR reports: *Scheduling Stability for More or Fewer Workers?*; *Scheduling Stability: The Landscape of Work Schedules and Potential Gains from Fairer Workweeks in Illinois and Chicago*; *Still Only Part Way Home: Part-Time Work and Underemployment in Illinois and Its Region*; *A Happiness and Objective Well-Being Index (How-Is-IL) for Living and Working in The State of Illinois*.

Alison Dickson is a Senior Instructor in the School of Labor and Employment Relations at the University of Illinois at Urbana-Champaign and an affiliate of the Project for Middle Class Renewal. Her research focuses on issues affecting U.S. workers, especially low-wage workers, families and communities. She is particularly interested in policy issues pertaining to low-wage labor markets including minimum wages, paid sick leave, fair scheduling legislation and efforts to combat wage theft.

Precarious Times at Work: Detrimental Hours and Scheduling in Illinois and How Fair Workweek Policies Will Improve Workers' Well-Being

Abstract/Executive Summary

Work hours and scheduling matter for the well-being of those employed throughout the state in Illinois, perhaps now more than ever. Before Chicago implemented the Fair Workweek ordinance (FWW) in July 2020, we issued a large-scale, geographically, and demographically representative survey of workers throughout Illinois, at the end of 2019, of over 3,000 employed. This survey provides a portrait of at least eight dimensions of work hours and schedules, their distribution by type of job and worker and across 23 different industries -- those covered by Chicago's ordinance and those uncovered. It tests empirically for their association with five indicators of workers' well-being by focusing on: Wanting more hours (underemployment, hours inadequacy); Least to most hours worked (variability or instability); Irregular shift times; On-call work; Short advance notice of schedule; Schedules set by employer with little to no input from workers; Schedules changing after posting; and Overtime hours that are mandatory.

Key Findings:

Underemployment is Pervasive in Illinois

- Those part-time and underemployed represent 11.8% of all workers and up to 13.2% when adding in the number of underemployed temporary workers.
 - Among hourly paid workers, as many as 61% are underemployed. Those paid a salary are far more likely to be satisfied with their number of hours than others.
 - Among part-time workers (21% of the sample), over 58% want more hours of work.
- Underemployment is omnipresent but relatively higher in the particular industries covered by the FWW -- Food services and drinking places, Hospitality/accommodation, Retail trade; and is actually highest, at 65%, in Transportation which includes the covered warehousing industry. The rate is near average in the covered sectors of Manufacturing and Hospitals.
 - Among part-time workers, underemployment is highest in these same industries, but also in commercial services which includes the building cleaning industry.
 - While the FWW ordinance is clearly appropriately targeted, it exempts two sectors with high underemployment--Entertainment, arts and recreation and Construction.
 - Underemployment is lower in sectors such as Professional, Social and Educational Services.
- By race/ethnicity, 57% of white part time workers want more hours, and up to 65% and 70% of Black and Latinx identified workers are underemployed part-time workers, respectively.
- Underemployment climbs at lower individual incomes, particularly under \$40,000 per year.
- Underemployment is associated with the problematic scheduling practices:
 - It is slightly higher when a limit is placed on weekly hours, but when employers set a floor on hours underemployment is not higher.
 - Those with the shortest advance notice of their schedules are the least satisfied with their number of hours. Those whose schedule "never changes" are more than twice as likely to be satisfied with hours than those who have '7 or fewer days'.
 - Those who have more input into their hours are more satisfied with their hours, while those whose employers decide hours are more likely to want more hours.
 - Part time workers who regularly work on-call are more likely to be underemployed, at 67%.
 - Those who work shifts that are split, or during night-time, are more likely to want more hours, as are those whose shifts are irregular. Irregular shift working has risen from about 11% to 15% of the employed in Illinois and is most prevalent in four sectors, including the three FWW covered industries of Retail trade, Hospitality/accommodation, and Food/drinking services.
 - Those whose schedules are often changed exhibit higher rates of underemployment, particularly if they have experienced cuts in their shifts.

- 29% of the sample had multiple jobs, and such workers were more underemployed and less satisfied with their hours than those working just a single job.
 - Almost one in four workers surveyed had trouble paying housing expenses in the last year. This includes almost one in five white workers, one in three Latinx and four in ten Black workers. It is more common for part-time, temporary, contract and on-call workers, and for hourly and non-salaried workers, than full time employees or business owners.

Secure Scheduling Impacts Well-Being

- Global well-being is higher for those who work regular daytime rather than irregular shifts.
- Satisfaction with one's work schedule is higher among those who want more hours or fewer hours.
- Job satisfaction is greater for those who are content with their current hours.
- Having mandatory overtime work reduces satisfaction with both one's schedule and job.
- Among part-time workers, those who get the hours they prefer are happier and more satisfied with life, job and schedule, although full-time employees experience higher levels of all four. Schedule satisfaction is highest for self-employed, then Independent contractor, Full time, Part time and Temps.
- Salaried workers have higher well-being than both those paid hourly or in some other way.

Adverse Consequences of Poor-Quality Work Scheduling

- Having trouble paying expenses for housing in the last year are worse for those whose usual work hours are shorter, are underemployed, have frequent on-call work, less scheduling control, advance notice and employer-set schedules, while having extra hours beyond one's usual hours does not help.
- More frequent work-family time conflict is associated not only with longer hours and full-time work, but mandatory extra hours, short (24 or fewer hours) advance notice, on-call work, irregular shift schedules, and having daily schedules set by the employer. The size of the gap between most and least hours, is not associated, suggesting the times of longer hours are offset by times of fewer.
- Reported health is lower as hours lengthen. Poorer health is associated with irregular schedules and variable hours and with both underemployment and overemployment.
- One's current state of emotional happiness is positively related to working part-time, although that seems to be for those who have children. Also, happiness is negatively associated with being either underemployed or overemployed and with having schedules that are irregular, extra hours that are mandatory, and somewhat with having shorter advance notice and variation in weekly hours.
- While both part-time and full-time employees are more satisfied with their life than non-employees, underemployment and long hours are associated with lower life satisfaction.
- Having irregular shift times is strongly associated with reduced life satisfaction, and somewhat associated with mandatory overtime and schedules set by employers.
- Dissatisfaction with one's schedule of work is exacerbated by irregular shift times, employer-set schedules and mandatory extra hours, although not much different between full- or part-time job.
- Being underemployed strongly predicts work schedule dissatisfaction and current unhappiness.
- Being underemployed is tied to having trouble paying housing.
- More income is associated with greater happiness and life satisfaction, due to improved health for those earning more than \$75,000 and because of one's occupation for those earning above \$100,000.

Findings from this study largely reinforce the need to adopt a statewide predictive scheduling law. Such a law would improve worker well-being without harming employers by curbing certain scheduling practice statewide and across some industries that were initially excluded from the FWW coverage. With this baseline report, policy makers should also act to raise awareness, since only about 3 in 10 workers were aware at the end of 2019 of the coming new standards. More than half of those were just "somewhat" rather than "very" aware. The report findings suggest that there is still a long way to go toward realizing the goals of reforming hours and scheduling practices in Illinois workplaces and its labor market.

TABLE OF CONTENTS

I.	Introduction and overview	Pg. 1
	<ul style="list-style-type: none">• Work hours, schedules, and well-being of workers: Why should we care?• Review of recent studies and Chicago’s FWW ordinance• Survey and methodology and key descriptive characteristics of the sample	
II.	Hours mismatch in Illinois: Underemployment by work characteristics	Pg. 2
	<ul style="list-style-type: none">• Underemployment by industry among all and just part-time workers• Part time underemployment by gender and ethnicity/race• Underemployment among part time workers, by gender and ethnicity/race• Multiple job holding, union coverage and underemployment	
III.	Problematic work scheduling arrangements in Illinois	Pg. 16
	<ul style="list-style-type: none">• Working irregular, non-day and on-call shifts across industries• Trouble paying housing	
IV.	Consequences Associated with Problematic Schedules: Underemployment and Underemployment Mismatch	Pg. 19
	<ul style="list-style-type: none">• Problematic work schedules• Worker awareness of the FWW law• Multivariate regressions: Four well-being outcomes of work scheduling	
V.	Conclusions and Policy Implications: A Fair Workweek Beyond Chicago?	Pg. 27

LIST OF TABLES AND FIGURES

Tables

- Table 1:** Problematic scheduling practices and common provisions in scheduling legislation
- Table 2:** Percentage of respondents by job type
- Table 3:** Descriptive statistics of respondents' number of usual weekly hours
- Table 4:** Preference for more, same, or fewer hours: Underemployment by pay status and job types
- Table 5:** Underemployment and gender, race and ethnicity and work hours
- Table 6:** Underemployment and level of individual annual income
- Table 7:** Employer limitations on work hours
- Table 8:** Length of advance notice of work schedules
- Table 9:** Underemployment by who decides work shift times
- Table 10:** Underemployment amongst workers with multiple jobs
- Table 11:** Usage of on-call scheduling practices by select industry sectors
- Table 12:** Trouble paying housing by job type, pay type and usage of on-call
- Table 13:** Subjective well-being measures by various job and scheduling features—
Descriptive results
- Table 14:** Awareness of Chicago Fair Workweek ordinance provisions
- Table 15:** Linear regression estimations - Hours and scheduling associations with 7 key outcomes

Figures

- Figure 1:** Overall employment by industry; survey respondents and prevalence of part-time and temporary positions by industry
- Figure 2:** Annual individual income range self-reported for 2018, distribution of survey respondents
- Figure 3:** Percentage of underemployed workers by industry
- Figure 4:** Percentage of underemployed by industry, part-time workers
- Figure 5:** Underemployment and frequency of on-call shifts
- Figure 6:** Underemployment by shift type
- Figure 7:** Difficulty in requesting schedule changes, by job classification
- Figure 8:** Underemployment by overtime pay
- Figure 9:** Percentage of workers with irregular shift times, top 5 industries
- Figure 10:** Percentage of workers with inability to pay housing by race/ethnicity
- Figure 11:** Well-being measures by respondent shift type

I. Introduction and Overview

Hours of work matter now more than ever. The Fair Workweek ordinance (FWW) passed in Chicago in 2019 is now being implemented, as of July 2020, though modified in enforcement slightly considering the Covid-19 pandemic. With the passage of this ordinance, Chicago continued the wave of big cities adopting such minimum standards for work hours as San Francisco, Seattle, New York City, Philadelphia and one state, Oregon. However, Chicago's ordinance is the most inclusive, expansive to date, with its scope of coverage including at least seven industries, unlike just two or three sectors in the other locations. Implementation of the law raises important research questions. What were work hours and scheduling like in Illinois just prior to the pandemic recession? Why does and will this matter for the well-being of those employed throughout the state? What improvements in worker schedules should we expect in Chicago when we reach the other side of the public health calamity and start recovering from its recession? What are the implications for adopting such laws statewide, to expand beyond the proposed state house bills--which so far addresses only the case of short (72 hours) advance notice of a work shift?¹

This report presents the findings of a new, large survey of workers employed in Illinois in late 2019. There are four main purposes: to establish the baseline conditions in Chicago just prior to passage of the Fair Workweek law and the pandemic recession and throughout Illinois; to show the distribution of scheduling practices addressed by the FWW, among workers covered and not; to reveal ramifications of work hours and scheduling on key aspects of worker well-being; and finally, to derive from these findings how continuing and expanding such policy reform to cover industries, jobs and workers outside the scope of the Chicago ordinance could potentially improve the well-being of workers throughout Illinois, by reducing underemployment, work-family time conflict and trouble paying housing expenses, and improving health and satisfaction with scheduling and life generally. With the 2020 pandemic-related economic shock, it is urgent that we establish a baseline regarding workers' hours and scheduling practices, to both assess the eventual damage of the recession and potential effects of the provisions of the scheduling ordinance on the labor market, job quality, and indicators of worker well-being.

The Fair Labor Standards Act (FLSA) was implemented 80 years ago to standardize and limit weekly work hours for employees, by dis-incentivizing employers from setting long workweeks (Golden 2015). It was not equipped to curb the unstable, unpredictable, or inadequate work hours endemic to the more recently changing structure of jobs and labor markets in the 21st century (Weil, 2019; Bernhardt et al., 2009). The use of last minute, on-call and variable work scheduling has become more common, particularly in certain sectors where facilitated by technology and intensified cost competition (Henly and Lambert, 2014). The new laws and standards, granting certain workers more advanced notice of their schedule and some compensation when they are treated as effectively on-call or on-demand workers, were largely a grassroots response to these practices and the effects of erratic hours on workers' lives.

There are *6 dimensions of work hours*, all have some bearing on workers' well-being:

- Hours (H) number worked per week, vs. a "norm" of full-time, i.e., part-time or overtime
- Deviation (D) from preferred hours (H*), i.e., underemployment or overemployment (H-H*)
- Variability (V), extent to which hours deviate from their usual hours (H), e.g., week to week
- Schedule (S) or timing of hours, i.e., regular or irregular, daytime vs. non-day shift times
- Predictability (P) of upcoming H and S, i.e., advance notice of shift length and start/end time
- Flexibility (F) of daily schedule, ability to set or adjust one's own hours, schedule, or time off.

¹<https://www.ilga.gov/legislation/fulltext.asp?DocName=&SessionId=91&GA=100&DocTypeld=HB&DocNum=5046&GAID=14&LegID=&SpecSess=&Session=>

There are also *8 key measures of hours and schedules* considered in the survey. In addition to asking for usual and actual weekly work hours, we are able to measure in the survey the features of their hours and schedules that both capture the various dimensions of workers' hours and schedules and are the most relevant to the scheduling standards in the ordinance:

- Wanting more hours (underemployment, hours inadequacy), same, or fewer hours
- Least to most hours worked (variability or instability of weekly hours)
- Irregular shift times, nontraditional shift times
- On-call work
- Advance notice of schedule
- Schedules set only by employer (little to no input; inflexibility)
- Schedules change after posting
- Overtime hours are mandatory

Finally, there are *5 outcomes and indicators of workers' well-being*. While the potential effects of work hours and schedules--and of the ordinance--are many, we focus on five indicators of workers' well-being, common in much research:

- Satisfaction -- with their Job, Work schedule, and Life generally
- Health and Happiness
- Work-life time conflict(s) -- with personal/family, caregiving, and schooling time
- Trouble paying housing expenses
- Underemployment (as a consequence of scheduling practices)

We contrast scheduling practices and outcomes by workers' demographic characteristics ' in Illinois, and by hourly vs. salary paid, full-time vs. part-time or non-employee, industry and occupation.

Work hours, schedules and well-being of workers: Why should we care?

Aspects of workers' well-being are potentially affected when hours, schedules or shifts do not match their preferences, as a consequence of inadequate and/or unstable, unpredictable or inflexible work hours (Felstead et al, 2020; Bell and Blanchflower, 2019; Borowczyk-Martins and Etienne Lalé, 2018; Angrave and Charwood, 2015; Gerstel and Clawson, 2015; O'Halloran and Skiba, 2014; Wooden, Warren and Drago, 2009). Even when more hours positively affects well-being, variability of those hours can diminish it (Finnigan and Hale, 2017; Golden, 2015). Conversely, when workers have more control over its timing, it is associated with greater well-being (Kim, Henly, Golden, & Lambert, 2019; Golden, 2018; Okulicz-Kozaryn and Golden, 2018; Gerstel and Clawson, 2015; Golden, Henley and Lambert, 2013).

Workers' subjective well-being may be negatively affected by hours that are inadequate, variable or unresponsive to workers' needs. This includes impacts on workers' own health (Harknett and Schneider, 2019; Cho, 2018; Scholarios, 2017; Bassanini and Caroli, 2015; Costa, Sartori and Akerstedt et al 2006; Friedland and Price, 2003) and mental health (Fabian, 2020; De Moortel, Dragano, Vanroelen and Wahrendorf, 2018; McKee-Ryan and Harvey, 2011; Anderson and Winefield. 2011). Hours reductions on short notice not only lead to anxiety and insecurity (Felstead, Gallie and Green, 2020), but material hardship (Schneider and Harknett, 2019; Lambert, Henly and Kim, 2019; Finnigan, 2018; Glauber 2013; Scott, Edin, London and Kissane, 2004). Indeed, income volatility for individuals and households, stemming from periodic hours inadequacy, is traced to fluctuations or shortened hours, particularly in cases that are chronic, more than one-time, cyclical responses (Board of Governors of FRB, 2020;

McCrate, Lambert & Henly, 2019; Mitchell, 2017; Koo, 2016; Stettner et al, 2016; Enchautegui, 2013; Cauthen, 2011).

Irregular work hours and on-call work affect work-family conflict (Ananat and Gassman-Pines, 2020; Kossek & Lee, 2020; Beutell and O'Hare, 2018; Golden and Kim, 2017; Ziebertz et al 2015). This is because fluctuation creates interference of work with nonwork activity and undermines the effort-recovery process, time needed for rest in between shifts in order to perform effectively. Having to be constantly available for work creates a daily struggle for workers to reconcile competing caregiving and workplace demands (Carrillo, Harknett, Logan, Luhr and Schneider, 2017; Ziebertz et al, 2015; Correll, Kelly, Trimble-O'Connor and Williams 2014; Reynolds and Aletaris, 2010).

General happiness, life satisfaction and job satisfaction are diminished when there is a lack of control over hours or inability to preferred hours (Allan, Kim, Liu & Deemer, 2020; Schroeder, 2020; Kifle, Kler and Shankar, 2019; Valenta and Berry, 2018; Okulicz-Kozaryn and Golden, 2017; Mas and Pallais, 2017; Zukin and van Horn, 2015; Yildirim and Aycan 2008). One national survey finds that in 2017-2018, about 20% of workers in low-wage occupations have irregular schedules--with over half the irregularity being driven by their employers' scheduling preferences, thus reducing their well-being ("disutility") from work (Clemens and Strain, 2020). When employees are more satisfied with their job, life or work-life balance, they become more committed and/or productive -- the so-called "business case" of serving employers' long term interest, offsetting any initial cost to adopting the hours and scheduling practices (e.g., Kaduk, Genadek, Kelly, and Moen, 2019; Williams, Lambert and Kesavan, 2018; Wang 2018, BNA, 2016; Sturman & Walsh, 2014; Mitukiewicz and Boushey, 2014; McKee-Ryan and Harvey, 2011; Bloom, Kretschmer and Van Reenen, 2011).

The adverse effects tend to be magnified for lower wage, hourly workers, and those in part time positions, which are more prone to having just-in-time hours and schedules than full timers (Howell, and Kalleberg, 2019; Miggo, 2019; Haines, Doray-Demers and Martin, 2018; Carré and Tilly 2017; Horemans, Marx and Nolan, 2016; Boushey and Ansel, 2016; Henly and Lambert 2014; Swanberg, Watson, and Eastman 2014; Alexander and Haley-Lock 2013). About 83% of hourly part-time workers have unstable work schedules (Ruan and Reichman 2014). The burden of problematic scheduling, volatile hours and underemployment falls most heavily on vulnerable populations, those with lower pay (Golden and Kim, 2020; Storer, Schneider and Harknett 2020; LaBriola and Schneider, 2020; Nunn, Parsons and Shambaugh, 2019; Finnigan and Hunter, 2018; Young and Mattingly, 2017; Ben-Ishai, 2016). Despite the concentrated burden, polls find widespread public support for *fair workweek* (FWW) laws -- 73% said they support and only 13% oppose [CPD, 2016]. Even 78% of Chamber of Commerce executives (2016) favor, and only 11% were against, requiring advance notices of schedules and ending "on-call" shifts. The FWW laws that have passed so far are estimated to help more than 1.8 million workers (Wolfe, Jones and Cooper, 2018).

Review of recent studies and Chicago's FWW ordinance

Surveys of workers and analyses of them have played a key role in the formulation and eventual passage of the city ordinances -- following in the footsteps of San Francisco (Cooke, 2020) -- in New York City (Stolper, 2017), Seattle (Haley and Lambert, 2018), Chicago (Golden, Dickson & Bruno, 2018; City of Chicago, 2016; Dickson, Bruno and Twarog, 2015), Emeryville CA (CPD, 2016; Smalley, 2016), Philadelphia (Harknett and Schneider, 2019; Annanat and Gassman-Pines, 2020), as well as in Oregon and proposals in Los Angeles (Ben-Ishai, 2016), San Diego (Esbenshade, 2020), DC (Jobs with Justice, 2015), and the states of Oregon, Washington, Connecticut (Lousaulauna, et al 2020; Harknett and Schneider, 2018; King and Scott, 2016)--and those focused on certain industries, such as retail trade (Corser, 2017). The current survey modified the questions and expanded on the sample size from a 2017

study (PMCR, 2018), tripling the number for which respondents indicated their industry of employment--crucial given Chicago's coverage of seven industries.


Follow up studies of the first round of implementation (Lousaulauna, et al 2020; Haley and Lambert, 2018; Haley et al, 2019, Stolper and Rankin, 2019; Vigdor et al, 2016) tend to find some successes and some lacking. In New York between 2016 and 2018, advance notice of schedules became even shorter, despite the ordinance, whereas in retail, covered by it, advance notice did become longer. In Oregon, workers did experience the intended increase in rest time between shifts, however, despite a new right to request, many still maintain open availability, because they chronically need more hours. Moreover, despite the predictability pay requirement, schedules alterations within the 7-day window persisted, at least a couple of times each month to every day for some. This is attributed to the many exceptions in the Oregon law that allow schedule changes without the pay and that companies are encouraging managers to find ways to avoid paying predictability pay.

On July 24, 2019, the Chicago City Council unanimously approved an ordinance (FWW), signed by the Mayor, implemented by the Office of Business Affairs and Consumer Protections (BACP) on July 1, 2020. The ordinance required that employers must provide:

1. New hires with a good-faith estimate of the hours and days expected for the first 90 days.
2. A minimum of 10 days' notice of their work schedules (and starting July 1, 2022, with a minimum of two weeks' notice of their work schedules).
3. "Predictability pay," amounting to an hour of pay at the employee's regular rate should the employer change the employee's schedule less than 10- days before they are set to work. This includes where an employer: adds time to the employee's schedule; changes the date or time of the shift (even without a loss of hours); and/or cancels a shift or reduces hours.
4. Predictability pay if the employer cancels or reduces hours within 24 hours of the schedule start, amounting to half of what the employee would have earned during the shift.
5. Ability to avoid predictability pay if employees trade shifts or mutually agree to change the schedule with an employer. Employees also may decline a shift that starts less than 10 hours after the end of a shift. If the employee consents to such a shift, the employer must get written consent from the employee or they are required to pay time and a half for the shift.
6. Any additional ("access to") hours or shifts available to their existing covered, qualified part-time employees. However, if they would have to pay a premium rate for those additional hours, or if no part-time employee picks up the additional shifts, then the employer may offer them to their own temporary or seasonal employees.
7. No less than 10 hours between scheduled "clopening" shifts--one's closing and opening times, unless employees specifically request or agree to work, whereby employers would pay time-and-a-half for those hours within the 10 hours gap.
8. A right to request and refuse alterations in scheduled and non-scheduled time, with protection from retaliatory responses--substantial cuts in hours, demotion or discharge.

The Chicago FWW ordinance covers employees in health care, warehouse services, hotels, building services, retail, restaurants and manufacturing. Temporary workers deployed in these industries are covered. Workers excluded are those who are paid more than \$26 per hour or \$50,000 annually. The ordinance only covers employers with more than 100 employees globally, 50 of whom are covered employees under the ordinance, with the threshold for non-profits and restaurants of 250. Additionally, restaurants must have at least 30 locations globally. The provisions in such legislation connect to the various dimensions of hours and schedules and vary slightly by location (**Table 1**, Lambert, 2020).

Table 1: Problematic scheduling practices and the provisions in scheduling legislation

Problematic scheduling practices at U.S. firms and some common provisions in scheduling legislation Oregon and six municipalities* have implemented these kinds of scheduling provisions, with other state and local legislators considering similar action				
Dimensions of problematic work schedules				
Instability: Fluctuations in the number and timing of employees' work hours	Unpredictability: The difficulty of employees anticipating when they will work and when they will not	Inadequate hours: Not working enough hours to earn an adequate living	Lack of input: Not having a say in how much or when you work	Nonstandard timing: Working during times outside the conventional Monday-through-Friday daytime schedule
Major provisions in scheduling legislation				
A good-faith estimate requires firms to provide employees with an accurate estimate of the number (and, in some locations, also the timing) of hours they will work, including any on-call shifts, which also improves predictability	Two-week advance notice by firms of employees' work schedules "Predictability pay" to employees for employer-driven changes to their original work schedule The right of employees to refuse to work shifts different than on the original schedule, which also improves schedule input	Access to hours requires employers to offer available hours to current employees before hiring new staff	The right of employees to request a change in their regular work schedule without fear of retaliation, and the right to receive accommodation for major life events, such as school and caregiving	The right to rest , also called a "clopening" provision, which gives employees the right to refuse to work back-to-back shifts and extra compensation when agreeing to do so
<small>*The six municipalities are San Francisco, Seattle, New York City, Philadelphia, Chicago, and Emeryville, California. Source: Author's analysis.</small>				
				

Survey and methodology and key descriptive characteristics of the sample

A 69-item online survey was issued through Qualtrics setting minimum and maximum “quotas,” in order to get a sample representative by demographic, job and industry characteristics. The minimum included industries covered by the FWW ordinance. A total of 5,762 respondents took some part of the survey. The number answering all the survey questions, which became the usable surveys for most questions, formed a sample size of over 3,300. The sample is divided by respondents living within the City of Chicago (31.3%); outside Chicago but in Cook County (17.2%); and outside Cook County but in the State of Illinois (51.6%). This sample is very representative of the state’s population distribution. Because the distribution of industries in Illinois are remarkably similar to the industry composition of jobs in the United States, the survey results may be reliable for inferring implications for the entire country. About 72 percent of the respondents were full-time workers, near the US rates, while 21% part time and 7% nonemployee status, a bit higher and lower than national rates, respectively (**Table 2**).

Table 2: Percentage of respondents by job type

Job type	Percentage
Regular (standard) full-time employee	72.1%
Regular part-time employee	20.8%
Temporary, such as direct hire temp or by a temp agency, by contract or leasing company, or day laborer	2.6%
Independent contractor, consultant or freelance worker	2.4%
Self-employed business owner	2.0%
Total	5766

Table 3 shows that the mean number of usual weekly hours was right at a 40-hour workweek.

Table 3: Descriptive statistics of respondents' number of usual weekly hours

Hours of work of those employed in Illinois	Mean	Std Deviation	N
Hours--in last 7 days:			
Number of hours-usual	40.0	15.2	3,224
Number of hours-actual	52.3	12.8	3,227
Greatest or Fewest (over the last 6 months): Full time workers:			2,386
Greatest	52.8	15.8	
Fewest	32.2	15.5	
Part time workers:			651
Greatest	36.1	16.7	
Fewest	16.1	10.8	

Figure 1 shows that both part-time and temporary positions appear in virtually all sectors but are far more prevalent in certain industries, most of those covered by the FWW ordinance. For example, Food service and drinking places (9% of the sample), consist of over 43% part-time and temporary workers and in Retail (10% of the sample), it is 39%. However, in Manufacturing (8% of the sample), about 8% are part-time or temporary workers. In contrast, in both the uncovered sectors of Construction (6% of the sample) and non-hospital Health care services (9% of the sample), about 19% and 22%, respectively, are either part time or temporary.

Figure 1: Overall employment by industry; survey respondents and prevalence of part-time and temporary positions by industry

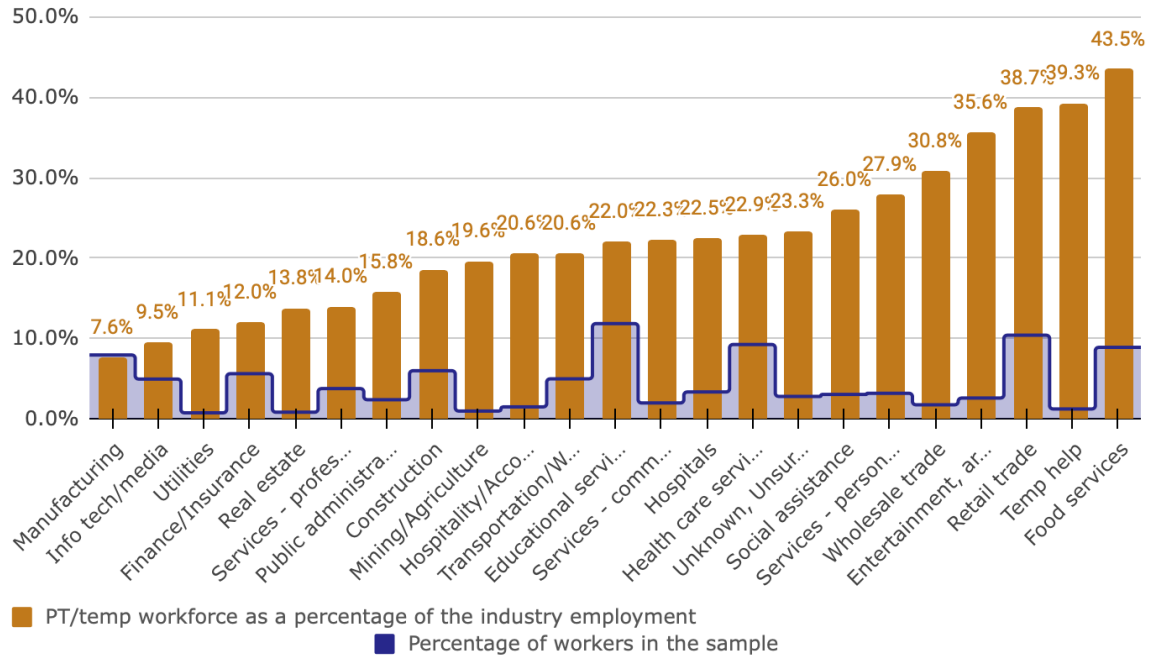
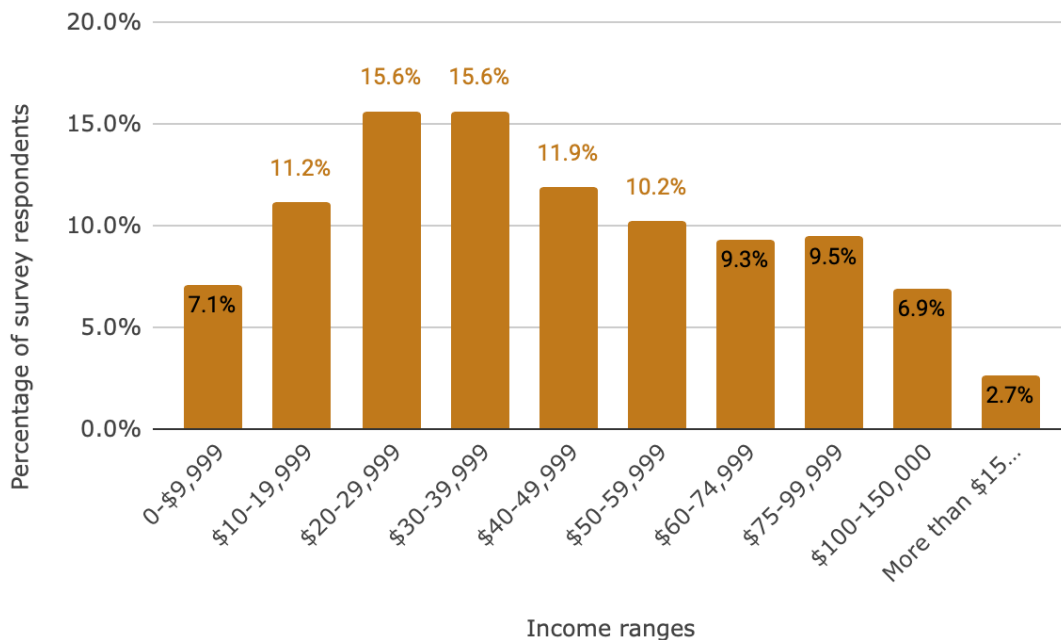


Figure 2 shows the individual annual income levels reported (5% of the sample chose not to report their income level) is quite close to the skewness of the distribution in both Illinois and US nationally.

Figure 2: Annual individual income range self-reported for 2018, distribution of survey respondents



II. Hours Mismatch in Illinois: Underemployment by Work Characteristics

Those employed in Illinois were asked a conventional question regarding satisfaction with their number of work hours: *Thinking of the number of hours you are currently scheduled (at your main job), which among these three choices would you prefer?: same number of hours for same amount of income, more hours for more income, fewer hours for less income; assuming your same rate of pay?*

Among the workers surveyed in 2019 (**Table 4**) just prior to the pandemic recession, 54.7% wanted more hours. Thus, the majority of workers in Illinois may be considered to be underemployed. This is somewhat higher than the 48% found in the 2017 survey in Illinois with the smaller sample size (Golden, Dickson and Bruno, 2018). As a total, the part-time and underemployed represent 11.75% of all employed throughout the state. This is remarkably consistent with the upper bound estimate of the proportion in the US nationally, at 11% (in 2016, CLASP, 2020). Adding in the number of temporary workers, together with part-time comprises 13.2% of total employment in Illinois in 2019. Moreover, 9% of part-time workers would prefer to trade income for fewer hours--so another 2% of workers in the Illinois work force are part-timers who work more hours than they prefer.

Table 4: Preference for more, same or fewer hours: Underemployment by pay status and job type

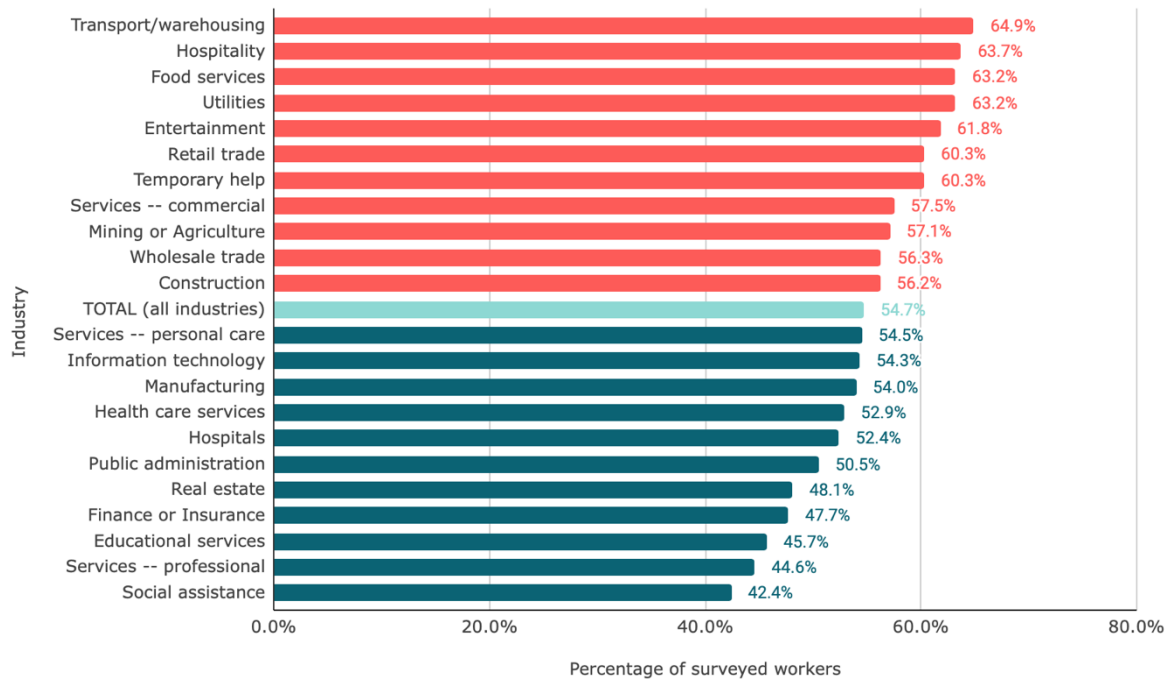
	Total	Salary	Hourly wage	Some other way [^]	Regular full-time employee	Regular part-time employee	Temporary	Independent contractor	Self-Employed
Work fewer hours for less income	8.9%	11.5%*	7.6%	7.7%	8.4%	9.7%	16.7%	11.1%	9.1%
Work more hours for more income	54.7%	42.1%	61.3%**	53.0%	54.0%	58.0%*	59.5%	43.1%	50.0%
Work same hours earn same income	36.4%	46.4%*	31.1%	39.2%	37.6%	32.3%	23.8%	45.8%**	40.9%
Total	3,390	1,087	2,122	181	2,388	651	73	67	41
** statistically significantly different at .001 level * statistically significantly different at .001 level	^ This includes: paid by project, flat rate, piece rate, entirely by commission or tips, etc.								

Just among those who are paid hourly, as many as 61% are underemployed. This rate was about a 20% higher rate than both those paid a salary or another way. Salaried workers were significantly more likely to be satisfied with their number of hours than others, although they were significantly more overemployed than others. Similarly, the rate among part-timers, at over 58%, is significantly greater than among full-timers (54%). Temporary workers have notably higher rates of underemployment than full-time and independent contract workers -- upwards of six in ten want more hours of work. While contractors and the self-employed are the most satisfied with their number of hours, part-time and especially temps are the least satisfied with their number of hours. Hourly workers, including part-timers, would be the prime beneficiaries of “access to hours” provisions of the FWW law. Indeed, 372 workers in the sample were both part-time and underemployed, for a rate of 11% in the Illinois workforce--a rate remarkably similar to the (upper bound) rate found for the US as a whole, in 2016 (Golden and Kim, 2020).

Underemployment by industry among all and just part-time workers

Figure 3 shows the variation of underemployment by industry. Certain industries clearly exhibit the highest rates of underemployment for all workers, at over 60%: Entertainment, arts or recreation (such as fitness/amusement center, spectator sports, performing arts), Food services and drinking places (such as restaurants, fast-food), Retail trade (such as clothing, grocery store, or supercenter), and Transportation or warehousing (such as freight trucking, mail delivery, taxi, ride hailing, airline/rail, storage or fulfillment center). Wanting more hours of work is prevalent in all seven of the industries covered by the FWW ordinance. It is highest in Hospitality, Food service, Retail trade, Transportation, Temporary help, and Services-commercial (which includes building cleaning). In the remaining other covered industries, the rate is near average--Manufacturing and Hospitals. The ordinance is clearly appropriately targeted, however, it excludes sectors with high underemployment, such as Entertainment, arts or recreation and Construction.

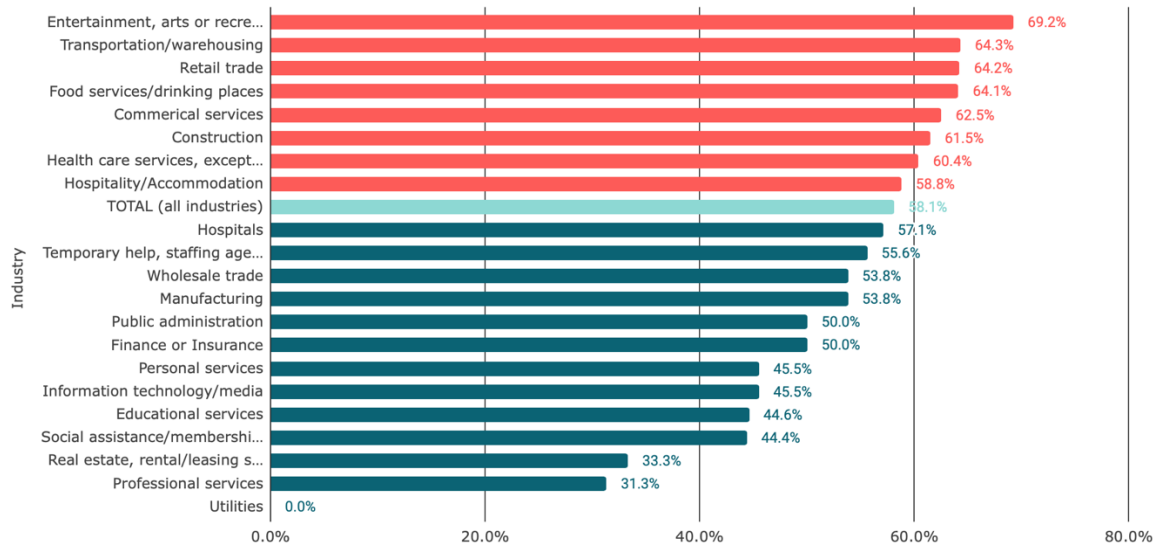
Figure 3: Percentage of underemployed workers by industry



The findings in **Figure 4** also suggest that matches to preferences are more likely to be achieved for part-time workers in certain industries - Educational services and Professional services, and then Personal services, Manufacturing, and Social assistance. The lowest underemployment, near 30%, are the part-timers in Professional services. Part-timer underemployment is most severe in Entertainment, arts/ and recreation, but also in the industries covered by the FWW-- Transportation/warehousing, Retail trade, Food services, Commercial services and Hospitality--with Hospitals and Temporary help and Manufacturing not far behind. These findings reinforce the appropriateness of coverage by industries, since they exhibit the highest rates of underemployment among workers working part-time. It suggests that extending coverage to Construction and Health care services is warranted, too, to help relieve underemployment of part-timers. A few industries had overemployment rates in excess of the 9% rate among all workers -Construction/Utilities/ Mining/Agriculture; Temporary help and Entertainment. Indeed, these three sectors have the most mismatch with their employees' hours preferences--only about half as

high as the two sectors that have the highest matching with preferred hours -- Professional services and Social assistance.

Figure 4: Percentage of underemployed by industry, part-time workers



Part time underemployment by gender and ethnicity/race

While underemployment is evident among 61% of all part-time workers, it is slightly lower among white respondents at 57% and higher among Latinx respondents at 71% and Black respondents at 66% (**Table 5**). Whites' rate of satisfaction with their part-time hours at almost 37% is significantly higher than other non-white workers wanting the "same hours." Underemployment among part-timers, however, is equivalent among genders.

Table 5: Underemployment and gender, race and ethnicity and work hours

	Men	Women	Trans-gender, Other	Men	Women	Latinx or Hispanic	Black or African-American	Asian or Pacific Islander	White	Native American Hawaiian or Alaska native	Some other race
<i>Workers:</i>	All	All	All	Part-time	Part-time						
Work fewer hours for less income	9.6%*	7.6%	17.5%	9.8%	8.4%	6.7%	12.3%	6.3%	6.1%	11.1%	12.1%
Work more hours for more income	57.2%*	52.0%	40.8%	58.7%	57.3%	62.2%*	61.8%*	69.7%*	51.0%	53.8%	43.4%
<i>Just part-time</i>						70.7%*	65.8%*	75.0%*	57.2%	77.8%*	50.0%
Work same hours and same income	33.2%	40.4%*	42.5%	31.5%	34.2%	22.6%	21.9%	18.8%	36.7%	11.1%	37.9%

In our sample in Illinois, men are both more underemployed and overemployed. Women are more content than men with their current number of hours. White respondents' underemployment rate of 51% is significantly lower than for respondents of color -- which is 62%. White respondents also have far higher rates of being content with their hours. Among the part-time workers, underemployment among white respondents is 57% but over 65% for Black workers and 70% for those identifying as Latinx.

By income level, compared to other levels, underemployment is clearly connected to earning less than \$40,000 per year (**Table 6**). Indeed, there is a quite smooth gradation with income. Reinforcing the effect of income on desire for more hours, beyond \$100,000 per year, rates of overemployment become significantly higher. Underemployment climbs as incomes get lower -- reaching 62% at the income bracket under \$20,000. In contrast, overemployment climbs from 7% at the lower income levels to about double (14%) for those reporting incomes above \$100,000.

Table 6: Underemployment and level of individual annual income

	Total	0- \$9,999	\$10- 19,999	\$20- 29,999	\$30- 39,999	\$40- 49,999	\$50- 59,999	\$60- 74,999	\$75- 99,999	\$100- 150,000	More than \$150,000	would not say
Prefer:	3,230	217	339	474	477	360	313	284	289	211	82	184
Fewer hours	8.7%	11.1%	7.4%	7.4%	7.8%	8.1%	10.2%	8.5%	8.3%	13.3%**	14.6%**	6.0%
More hours	54.5%	57.6%*	62.2%**	61.4%**	58.7%**	51.1%	50.8%	49.3%	45.3%	44.1%	47.6%	58.7%*
Same Hours	36.8%	31.3%	30.4%	31.2%	33.5%	40.8%	39.0%	42.3%	46.4%	42.7%	37.8%	35.3%
*significantly different at .01 level	** significantly different at .001 level											

Besides the role of income, there are employer practices that contribute to underemployment (**Table 7**). When employers place a limit on their weekly hours, workers are somewhat more likely to experience underemployment. However, if the employer provides a floor - some minimum number of weekly hours - their rates of underemployment are not higher at all. Similarly, some workers are allowed to make themselves unavailable for work at certain times or days. However, this has no significant bearing for being underemployed.

Table 7: Employer limitations on work hours

Does your employer limit you to some maximum number of work hours per week?	No	Yes (no more than x# of hours)
Work fewer hours for less income	9.7%	6.1%
Work more hours for more income	52.1%	62.2%
Work the same number of hours and same income	38.2%	31.7%

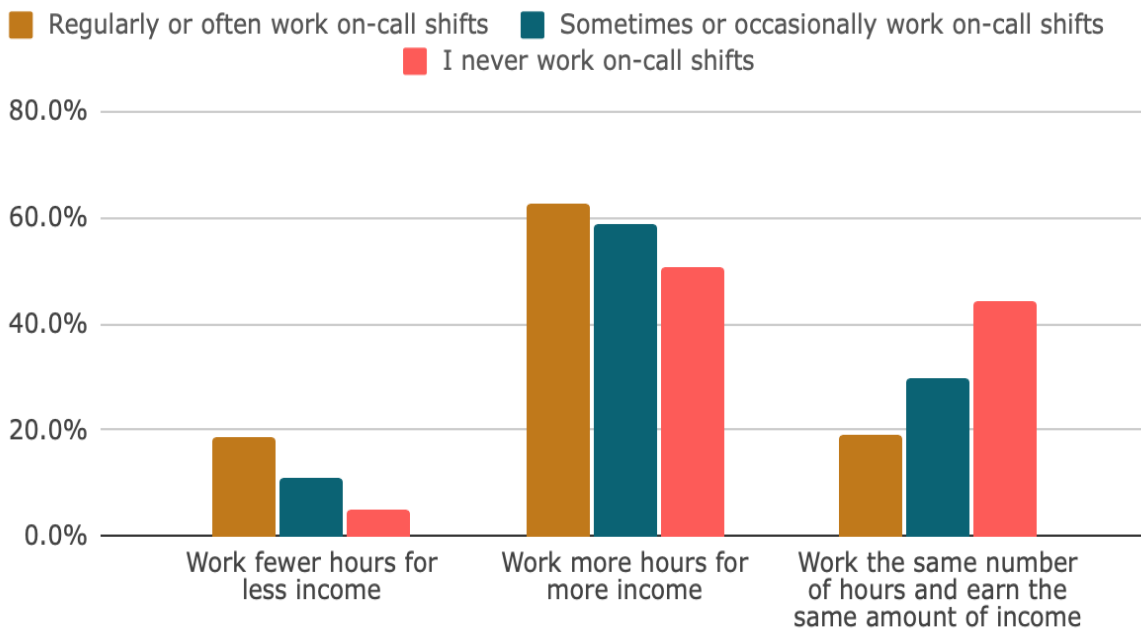
Advance notice is clearly associated with underemployment (**Table 8**). It is heightened when a worker has less than 2 weeks' notice of their schedule. For those having a schedule that "never changes," 46% are satisfied with their ours. In contrast, those with one week or less advance notice are the least satisfied with their hours. Workers with short notice are more at risk for overemployment mismatch, as well. Respondents with less than 24 hours' notice are most at risk. Any worker whose schedule never changes is less underemployed than all those who have less than 2 weeks' notice, particularly those with just 1-3 days' notice.

Table 8: Length of advance notice of work schedules

How far in advance do you typically receive your work schedule?							
	Less than 24 hours in advance	From 1 to 3 days in advance	From 4 to 7 days in advance	Between 1 and 2 weeks in advance	More than 2 weeks but less than 4 weeks in advance	4 or more weeks in advance	My schedule never changes
Work fewer hours for less income	16.0%	11.7%	14.2%	8.2%	11.6%	8.4%	4.5%
Work more hours for more income	58.8%	63.0%	58.4%	56.9%	51.7%	53.3%	47.4%
Work the same number of hours and same income	21.7%	22.7%	24.5%	32.7%	34.3%	34.7%	46.3%

Figure 5 reveals that part-timers who regularly or often work on call are significantly more underemployed, at over 67.2%, than those who either sometimes or never work on call. Those who never work on call are significantly more likely to want the same hours. Moreover, part-timers working on call are three times more likely to be overemployed.

Figure 5: Underemployment and frequency of on-call shifts



In **Figure 6** it is evident that working a regular daytime shift is consistent with wanting the same hours. In contrast, workers whose shift times are irregular or split (or non-daytime), are significantly more likely to be underemployed. Indeed, working irregular schedules elevates both underemployment and overemployment. Workers on split shifts are the most prone to underemployment, suggesting they would prefer a longer, consecutive shift instead.

Figure 6: Underemployment by shift type

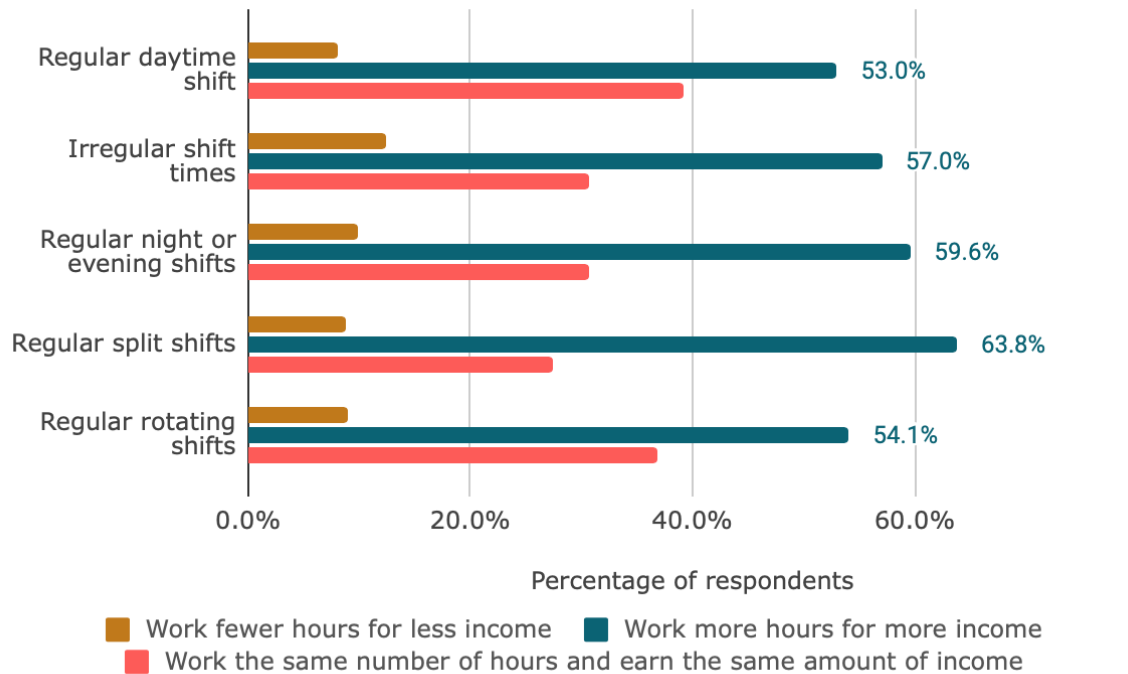


Table 9 shows clearly how control of scheduling matters. When daily schedule start and end times are decided by the employer, even with some employee input, underemployment is significantly greater than when they can decide start and end times on their own entirely or within certain limits. Indeed, when one feels they can decide their own daily schedule, they are far more likely to express satisfaction with their same number of hours worked per week. This is a strong indicator that even daily schedule flexibility is helpful toward income adequacy. Having some input into scheduling relieves overemployment somewhat, but often not significantly so. Finally, being able to often adjust one’s own daily start and end times -- referred to often as “positive flexibility” -- does not seem to have any effect on being underemployed.

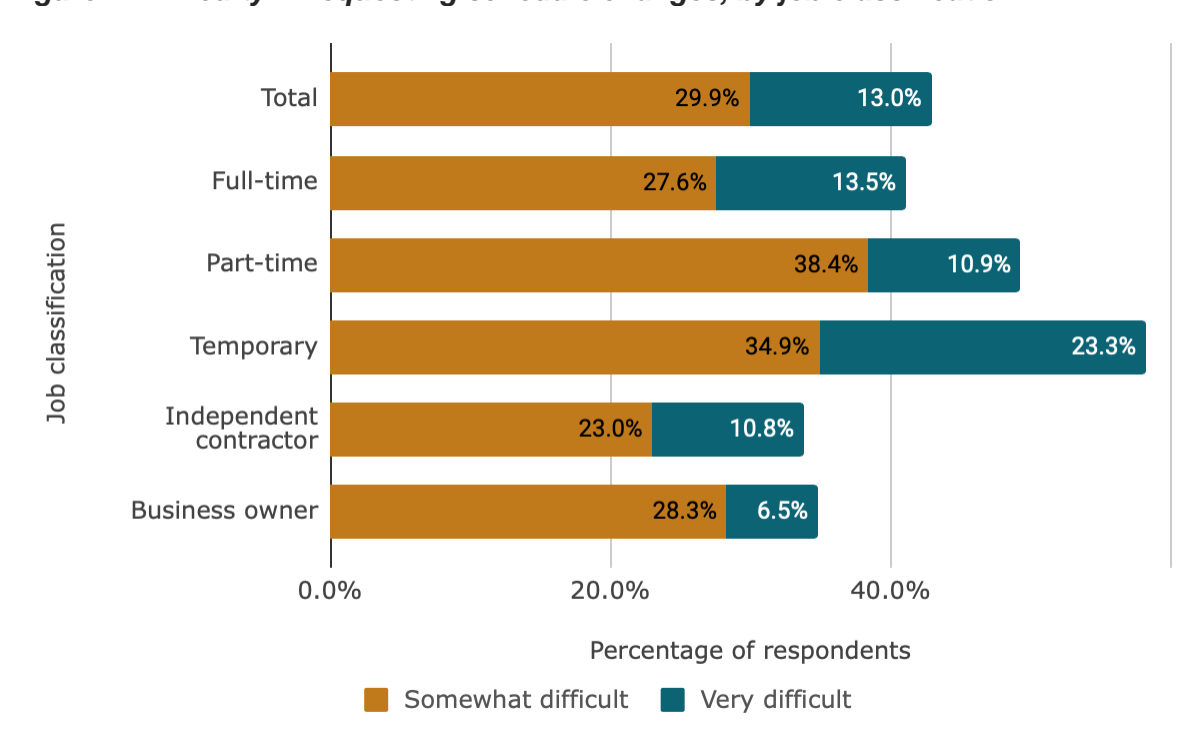
Table 9: Underemployment by who decides work shift times

	Total	Starting and finishing times are decided by my employer, with little or no input from me	Starting and finishing times are decided by my employer, but with my input	I can decide the time I start and finish work, within certain limits	I am entirely free to decide when I start and finish work	Starting and finishing times depend on things outside my and my employer’s control
Work fewer hours for less income	8.9%	7.7%	10.5%	9.0%	9.4%	10.1%
Work more hours for more income	54.7%	56.9%*	60.9%*	44.5%	48.2%	56.0%
Work same hours for same income	36.4%	35.4%	28.6%	46.5%*	42.4%*	33.9%

Another aspect of scheduling, relevant to FWW, is feeling uncomfortable requesting changes after one’s schedule is posted. **Figure 7** shows that if requesting a schedule change is perceived as “not at all difficult,” one’s satisfaction with hours is significantly greater and risk of overemployment lower. Difficulty

has a slight, although not statistically significant association with underemployment. Thus, getting time off may be easier than getting extra work hours when needed. This difficulty requesting scheduling changes is most commonly experienced among part-time workers--about half of all part-timers--and especially among temporary workers.

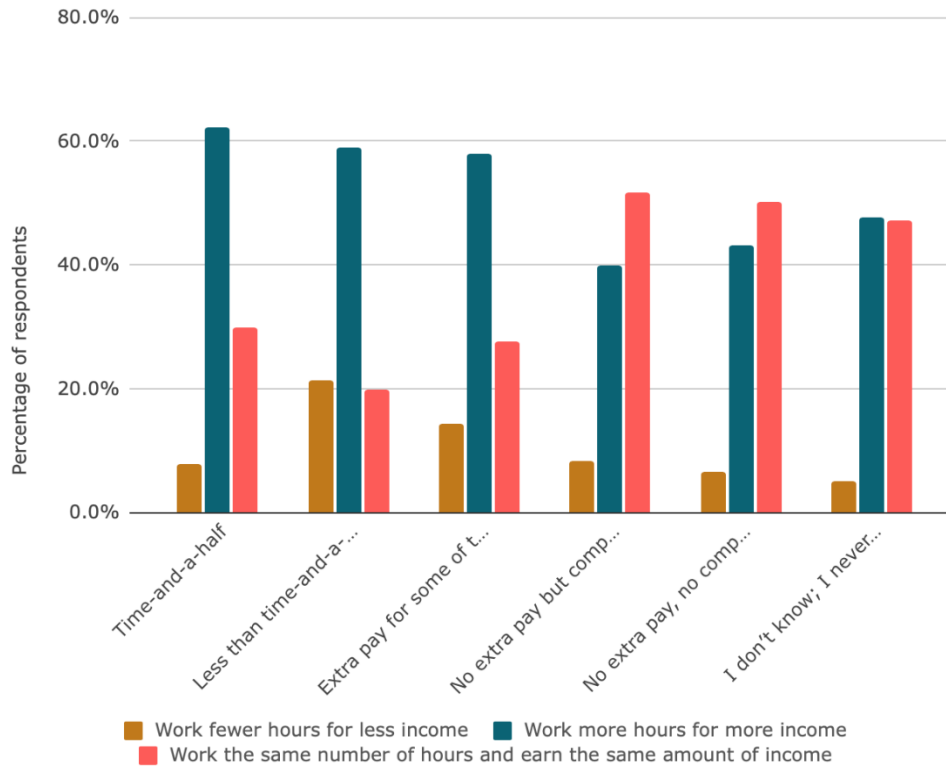
Figure 7: Difficulty in requesting schedule changes, by job classification



Underemployment is higher, over 61%, for those who “often” have their “schedule change after it has been posted.” In addition, if their hours were never cut once in the last 30 days, a worker is far more likely to want the “same” number of hours in the future. If their shifts were cut at least 10 times in the past month, they are most likely to be underemployed. Thus, experienced cuts in hours are often not welcome. However, the frequency with which one engages in shift swapping does not reduce underemployment. Never having swapped a shift is associated with both lower underemployment and preferring their same, current hours. Thus, shift swapping currently may reflect unpredictable scheduling more than an effort by employers to help employees reach their desired level of work hours. Employers worried that employees will have less flexibility to shift swap thus need not be concerned that it will reduce employee’s satisfaction with the schedule or job.

Figure 8 shows that a worker’s desire for more hours is fueled in part by a potential for earning premium pay associated with overtime work, but not entirely. Interestingly, those who get comp time -- which legally are only workers who are exempt from required overtime pay -- are the most satisfied with their current hours and less apt to want either more or fewer hours. Workers who get neither pay nor comp time are somewhat less apt to want more hours, although despite this, as many as four in ten do want more hours.

Figure 8: Underemployment by overtime pay



By workers' occupations, the extent of underemployment is disproportionately higher in certain jobs. The highest rates, at over 60% are in: Installation, maintenance/repair (e.g., auto body, utility line), Healthcare support (rehab or home health aide), Food Preparation and Serving (cook, dishwasher), Sales and related (rental agent, cashier), Transportation and Material Moving (delivery/bus driver, warehouse order filler). It is at 60% in Protective service and Construction jobs. Jobs with the least mismatch of preferred and actual hours are in Management (operations, promotion/PR, HR, sales managers, administrators). Concurrently, there are some jobs with high overemployment, notably in Computer/Math and Life, Physical and Social Sciences.

Multiple job holding, union coverage and underemployment

When asked about having any other work for income besides their main job (in the last 6 months), including part time, evening, weekend or "gig" work, 28.8% of respondents answered affirmatively. This finding is in line with national estimates that ask regarding the last several months (FRB, 2020), whereas the BLS finds only about 5% holding more than one job, "last week." Respondents who hold multiple jobs are significantly more likely to want more hours at their main job (despite already having secondary work). Those holding secondary jobs are also more likely to feel overemployed. Survey respondents who want the same number of hours are far more likely to have just one job (**Table 10**).

Table 10: Underemployment amongst workers with multiple jobs

Worker Preferences	More than one job	One job
Work fewer hours for less income	16.8%*	5.6%
Work more hours for more income	59.3%	52.7%
Work the same number of hours and earn the same income	23.9%	41.7%*

Union members are more likely to want to work more hours than non-union members. Yet, union members are also more likely to be willing to reduce their hours. This likely reflects a difference between blue-collar and service unions from the professional unions (such as teachers and nurses). Collective bargaining and unionization have improved worker well-being by raising wage rates and benefit coverage, but we do not find evidence that union membership is enough to produce adequate hours for all its members.

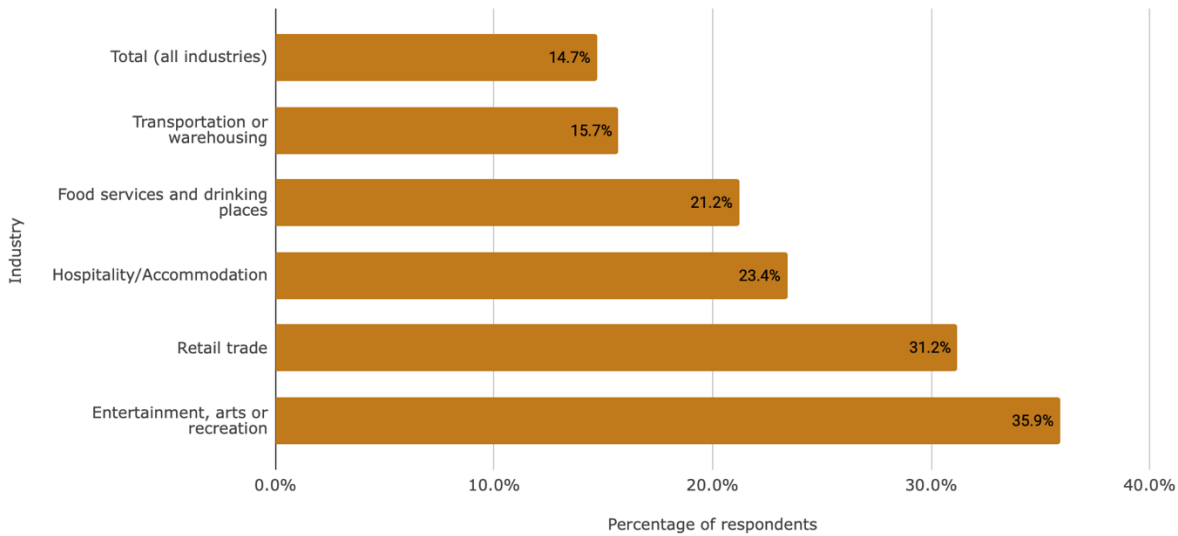
III. Problematic Work Scheduling Arrangements in Illinois

Most workers prefer to be at work at times that are regular, week to week, and during daytime hours. In addition, most prefer to not be called into work on short notice, unless it is an understood, and compensated for, nature of one’s job. How many and which workers in Illinois face irregular as opposed to regular, daytime work schedules?

Working irregular, non-day and on-call shifts across industries

When asked which of the following best describes your usual work schedule, two-thirds (66.3%) of survey respondents (n= 3,509) work on a regular daytime shift. **Figure 9** shows that 14.7% work on irregular shifts. This is up from the 11% working on irregular shifts found in 2017, with the smaller sample size (PMCR, 2018). Another 3.4% and 2.3% work on regular rotating and split shifts, respectively (the remaining 13.4% work night or evening shifts). Irregular shift working is higher, in order of presence, in the Entertainment, arts and recreation; Retail trade, Food services, Hospitality, and Transportation/warehousing (and a bit higher in Real estate and Temporary help). With the exception of Entertainment, these are the very sectors targeted by the FWW.

Figure 9: Percentage of workers with irregular shift times, top 5 industries



Perhaps the most troublesome scheduling practice, on-call work, not only varies somewhat, but is highest in the industries covered by the FWW. **Table 11** shows on-call work itself is quite prevalent in Illinois -- over 40% of all workers. For one employed in Food/drinking services, Hospitality/accommodation (H/Acc.), Temp agencies and Commercial services, usage of on-call work is above average. On-call work is actually most common in the Construction sector, which is not covered under the FWW ordinance.

Table 11: Usage of on-call scheduling practices by select industry sectors

On-call work	Total	Educ	Health care	Const.	Food svcs.	Hosp.	H/Acc.	Mfg.	Retail	Svcs.-Comm.	Transport/Warehouse	Temps
Total	3507	286	268	211	316	152	94	296	282	120	197	83
Regularly or often	19.6%	9.4%	14.2%	41.2%	23.4%	19.1%	25.5%	11.8%	13.5%	26.7%	17.8%	22.9%
Sometimes or occasionally	20.9%	12.2%	17.5%	25.1%	36.1%	23.7%	30.9%	12.2%	20.2%	20.0%	19.8%	28.9%
Never work on-call shifts	59.5%	78.3%	68.3%	33.6%	40.5%	57.2%	43.6%	76.0%	66.3%	53.3%	62.4%	48.2%

Trouble paying housing

Figure 10 and **Table 12** show that inability to pay rent or mortgage in the last year affected almost one in five white respondents and about one in three persons of color. Part-time, temporary, contract and on-call workers, and hourly and non-salaried face this difficulty more than full time employees or business owners.

Figure 10: Percentage of workers with inability to pay housing by race/ethnicity

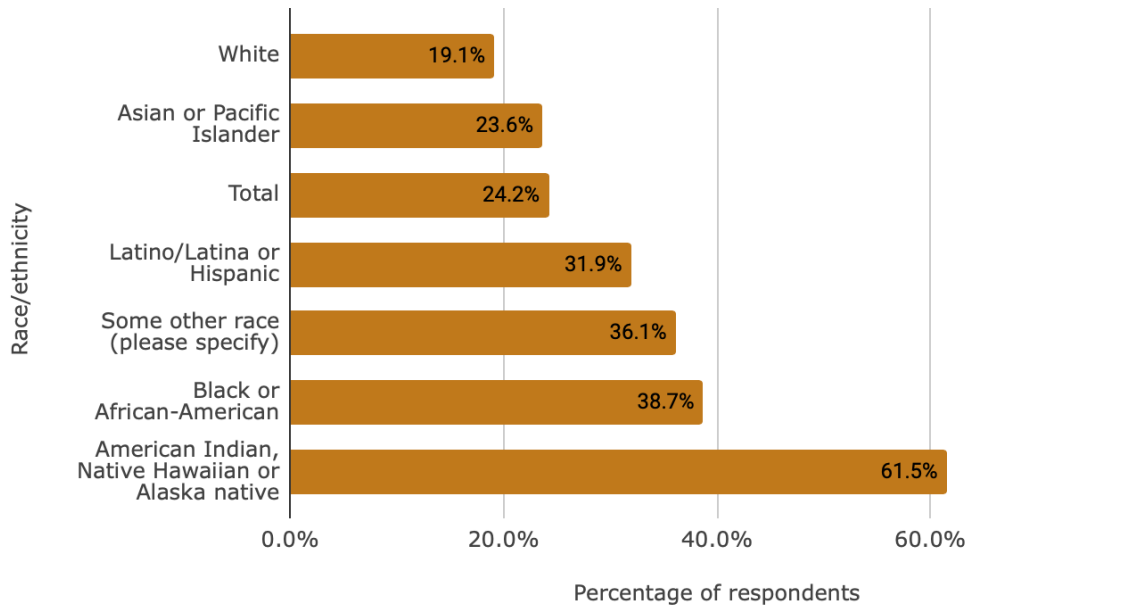


Table 12: Trouble paying housing by job type, pay type and usage of on-call

		Troubles paying housing	No troubles paying housing	Total
CLASSIFICATION	Full-time employee	22.4%	77.6%	2395
	Part-time employee	28.4%	71.6%	652
	Temporary	40.0%	60.0%	75
	Independent contractor	31.3%	68.7%	67
	Business owner	12.2%	87.8%	41
PAY TYPE	Salary	18.5%	81.5%	1038
	Hourly wage	26.5%	73.5%	2015
	Some other way*	29.4%	70.6%	170
ON-CALL USAGE	Regularly or often work on-call shifts	45.7%	54.3%	611
	Sometimes or occasionally work on-call shifts	29.3%	70.7%	666
	I never work on-call shifts	15.7%	84.3%	1954
TOTAL	Total	24.1%	75.9%	3230

IV. Consequences Associated with Problematic Schedules: Underemployment and Underemployment Mismatch

All respondents were asked to rate, on a scale of 1 to 10, the level of their satisfaction regarding their job, life and work schedule and current emotional well-being. **Table 13** shows (as indicated by green shading for higher and yellow for lower), that job satisfaction is greater, on average, for those who are content with their current hours (7.7). Those who are more satisfied with their job would prefer to work more hours (7.2) than those who want fewer (6.6). Satisfaction with one's work schedule is far higher (7.7) among those who prefer the same number of hours than more (7.2) or fewer hours (6.4). However, again, those who want more hours have significantly higher satisfaction with their schedule than those who wish fewer. This suggests employees are more motivated to work more hours when their schedule is a better fit than when not. In addition, it suggests that providing employees the number of hours they prefer will improve their satisfaction with when they are scheduled to work.

Having the hours desired adds a significantly to a person's general satisfaction with life. Alternatively, it might also mean that people more satisfied with their life are less apt to want to trade money for time or vice versa. The finding is identical for those regarding their current state of happiness within the last day. Those with the hours with which they say they prefer are happier (6.8) than the others (6.5). Moreover, workers who prefer the same hours are more likely than all others to respond either 10 or 9 regarding their satisfaction with the scheduling and with their job. Those preferring the same hours are also more likely to answer 9 and 8, and less likely to answer low levels 1 through 4, regarding how satisfied they are with life as a whole and emotional happiness within the last day. Thus, the underemployed have a lower level of well-being relative to those who get their desired hours because: they are more likely to answer 6 than 9 or 10 regarding their work scheduling and job satisfaction; and low levels from 1 to 4 regarding their life satisfaction and current happiness.

In addition (not reported in **Table 13**), being content with their current number of hours is clearly associated with less frequent work-family conflict. However, wanting to work more hours and wanting fewer hours are both associated with more frequent work-family conflict. While the latter may not be surprising--wanting more nonwork time--the former suggests they need additional money badly enough that they are willing to sacrifice experiencing even more frequent time conflict. A virtually identical finding occurs for having conflict with one's caregiving duties--and those who never have such conflict, or they are more content with their same number of hours. Finally, anyone employed who is also enrolled in education and reports having more time conflict with school activities is far more likely to want reduced work hours. However, being underemployed is also associated with having more frequent time conflicts. Students who "never" or "some of the time" experience interference with schooling are more likely to say they want their same work hours.

Table 13: Subjective well-being measures by job and scheduling features--Descriptive results
(purple denotes significantly higher, orange denotes significantly lower)

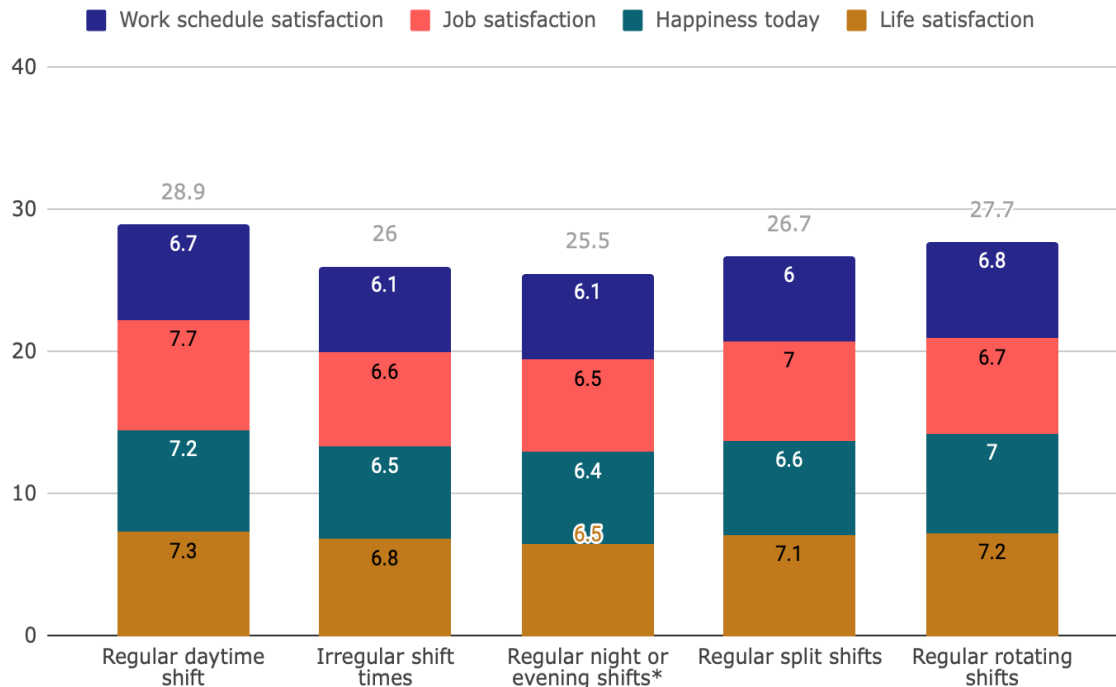
		Overall life satisfaction	Happiness today	Job satisfaction	Work schedule satisfaction
Job type	Regular full-time employee	7.1	6.6	7.2	7.4
	Regular part-time employee	6.8	6.4	7.0	7.1
	Temporary	6.3	5.7	6.5	6.4
	Independent contractor	6.8	6.4	7.4	7.7
	Self-employed business owner	7.0	6.9	8.1	8.2
Shift type	Regular daytime shift	7.3	7.2	7.7	6.7
	Irregular shift times	6.8	6.5	6.6	6.1
	Regular night or evening shifts	6.5	6.4	6.5	6.1
	Regular split shifts	7.1	6.6	7	6
	Regular rotating shifts	7.2	7	6.7	6.8
Pay type	Salary	7.6	7	7.6	7.9
	Hourly wage	6.7	6.3	6.9	7.1
	Some other way, such as only by the project, flat rate, piece rate, entirely by commission or tips, etc.	6.9	6.4	7	7.3
Job autonomy	Very true	7.5	7	7.9	8.1
	Somewhat true	6.8	6.4	7	7.2
	Not too true	6.5	6.1	6.4	6.5
	Not at all true	5.8	5.4	5.2	5.6
Advanced notice	Less than 24 hours in advance	6.9	6.7	7.1	6.8
	From 1 to 3 days in advance	6.9	6.7	6.9	7
	From 4 to 7 days in advance	7.1	6.6	7.1	7
	Between 1 and 2 weeks in advance	6.7	6.3	6.7	6.7
	More than 2 weeks but less than 4 weeks	6.7	6.4	7.1	7
	4 or more weeks in advance	7.1	6.4	7.4	7.2
	My schedule never changes	7.1	6.5	7.3	7.8
Frequency of schedule changes	Often	7.1	6.5	6.9	6.8
	Sometimes	6.7	6.5	6.8	6.6
	Rarely	6.9	6.6	7.1	7.2
	Never	7	6.8	7.3	7.3
Difficulty of requesting schedule changes	Not at all difficult	7.4	6.9	7.7	8
	Somewhat difficult	6.6	6.2	6.7	6.7
	Very difficult	6.3	5.9	6.1	5.9
	I don't know	6.9	6.4	7.1	7.6
Not able to be unavailable	Yes	7.1	6.7	7.3	7.5
	No	6.7	6.3	6.8	7
	I don't know	7.0	6.3	7.2	7.4

Minimum hours guaranteed	No	6.9	6.6	7.0	7.2
	Yes, at least (# of hours)	7.1	6.5	7.3	7.5
	I don't know	6.8	6.4	6.9	7.2
Mandatory overtime	Yes	6.9	6.5	6.8	6.9
	No	7.0	6.6	7.2	7.5
Overtime payment	At a time-and-a-half rate of pay or more	7.0	6.5	7.1	7.3
	I get some extra pay but at less than a time-and-a-half rate of pay (e.g. just straight-time)	6.8	6.7	7.0	6.8
	I'm paid extra for some of overtime but not for all (e.g., sometimes work "off the clock")	7.0	6.5	7.0	7.1
	I'm not paid anything extra but I receive comp time	7.1	7.0	7.5	7.8
	I'm not paid anything extra nor given comp time off	7.1	6.4	7.0	7.4
	I don't know, I never work overtime	7.0	6.4	7.5	7.7

Problematic work schedules

Shift times clearly have a bearing on workers' total well-being. **Figure 11** shows that both Irregular and Night/evening shift times yield lower well-being than Daytime shifts, summed for all indicators--happiness and satisfaction with schedules, job and life. Split and rotating shifts are not as harmful but are associated with reduced job satisfaction. By sector, being employed in these industries is (in order) associated with the highest level of currently emotional happiness: Information technology, Construction, Finance/banking, Agriculture/mining, Public administration and Educational services.

Figure 11: Well-being measures by respondent shift type



Among the part-time (PT) workers, those who get the hours they prefer are happier and more satisfied with life, job and schedule, than those who are either underemployed or overemployed. However, full-time (FT) employees experience the highest level for all four indicators. For life satisfaction, FT employees report higher well-being than PT and Temporary (Temp) workers, but not significantly higher than for independent contractors (IC) or the self-employed (SE). For today's emotional happiness state, FT, PT and SE are at the same level, and all are better off than Temp workers. Regarding job satisfaction, being SE is clearly tops for well-being, while FT, PT and IC are about equal and all are better than being a Temp. For schedule satisfaction, there is a clear linear order, starting at the highest for SE, IC, FT, PT and all better than Temp. That PT is at least somewhat lower than others (though not significantly so) may be surprising, given the reduced hours commitment. Finally, salaried workers have higher wellbeing on all four indicators than all others.

Regarding the key scheduling practices, workers whose schedule "never changes" have greater life satisfaction than those who have 1 to 4 weeks advance notice. In addition, they are both happier and more job satisfied than those with only 1 to 3 days, or 1 to 2 weeks' notice. Importantly, they are more satisfied with their work schedules than everyone else, although those getting their schedules 4 weeks in advance are also somewhat more satisfied with their schedule. Similarly, how often schedules change matter. If a worker reports that it never or rarely changes, they are satisfied more with both their job and schedule than those who at least sometimes have their schedule changed. However, their life satisfaction and emotional state are not measurably affected by how often their schedule changes. Moreover, regarding facing some difficulty to request changes, those reporting less such difficulty have much higher improved wellbeing on all four fronts--happiness and satisfaction with job schedule and life. Finally, being able to make oneself unavailable for work is associated significantly positively with all four outcomes.

When it comes to their number of hours, having some minimum hours from their employer or job is associated with higher satisfaction with life, job and schedule, although not with happiness. Those whose overtime is mandatory rather than volitional have much reduced satisfaction with both their schedule and their job, although not for the other more general indicators of well-being. In addition, those who receive (presumably legally) compensatory (comp) time off for at least some of their overtime working, have higher well-being.

Worker Awareness of the FWW Law

Awareness of the new standards are not high (**Table 14**). About 7 in 10 respondents were unaware (2,316 of the 3,363 employed) of the FWW. More than half of those "aware" were just "somewhat" rather than "very" aware, although "very aware" was significantly more common for four of the provisions (green shaded). Awareness of certain provisions, such as the advance notice for posting schedules, was greater than other provisions in the law and "access to hours" somewhat lower. Thus, there is a long way to go to reforming the hours and scheduling practices that characterize workplaces, particularly in certain sectors of the labor market. This speaks to the need for effective information campaigns, enforcement and future measurement of the efficacy of specific provisions of the new standards and their intended effects on well-being.

Table 14: Awareness of Chicago Fair Workweek ordinance provisions

Awareness of FWW Provision:	Among all workers	Among those aware who are "very aware"	Among those aware who are "a little aware"
At least 10 days of advance notice of your schedule	36.8%	50.8%	26.0%
Some "predictability pay" for scheduling changes after schedule is posted	29.8%	35.8%	25.2%
A right to request a scheduling adjustment	29.6%	28.1%	30.7%
A minimum rest period between evening and next day shifts	28.8%	32.7%	25.8%
First access to additional available work hours, before hiring from outside	16.8%	19.8%	14.5%
Protections from retaliation for exercising enforcing your rights	20.2%	22.2%	18.6%
Overall awareness of law's existence	29.1%	12%	17%
<i>Count (employed in last 6 months, n = 3,363)</i>		455	592

Multivariate regressions: Four well-being outcomes of work scheduling

Beyond the cross tabulations, we estimate several models of the determinants of seven key worker outcomes and report the findings from one test. This includes underemployment (wanting more hours) as an outcome and also as a determinant of the other six outcomes. We report the multivariate results for the seven key hours and scheduling practices, their statistical significance (**Table 15**). These control for workers' other characteristics (education, demographics) to see the extent to which a given feature of their work hours is associated with a given well-being indicator. We also report the findings for some of the key control variables and these indicators.

Table 15: Linear regression estimation of Hours and scheduling associations with 7 key outcomes

<i>Hours and Scheduling Variables</i>	Trouble paying housing	Work-family conflict	Health	Life satisfaction	Current happiness	Satisfaction with schedule	Underemployment (wants more hours)
Usual Hours/Week	-0.0022**	0.0050**	-0.0059***	-0.0143***	-0.0142**	-0.0209***	-0.0016
Has On-Call work	0.0998***	0.2457***	0.2270***	0.3322***	0.6302***	0.0057	0.0129
Has Mandatory OT	0.1365***	0.5430***	-0.0084	-0.2249**	-0.2693**	-0.5659***	-0.0714**
Start/End Times	0.0362**	0.2501***	0.0633	-0.1186	-0.0866	-0.3156***	0.0530*
Advance < 24 hours	0.1213***	0.3522***	0.1081	0.0283	0.3458*	-0.1764	-0.0028
Irregular Shift Times	-0.0237	0.2028***	-0.172***	-0.6360***	-0.5107***	-0.9152***	-0.0663
Most-Least Hours	-0.0014	0.0019	-0.009***	-0.0109	-0.0151*	-0.0040	0.0053**
(most-least)-squared	0.0000	0.0000	0.00007*	0.0000	0.0000	-0.0001	-0.0001*
Wants Fewer Hours	0.1902***	0.6727***	0.1355*	-0.3388*	-0.6372***	-1.0213***	
Wants More Hours	0.1030***	0.2577***	0.0958**	-0.1872*	-0.4007***	-0.1041	
Paid Hourly	0.0332	-0.0870	-0.0856*	-0.2043	-0.1932	-0.4123***	
Paid some other way	0.1202**	0.0825	-0.1327	-0.3657	-0.2788	-0.7005**	
Demographic Variables							
Male	-0.0276	0.0015	0.1143**	-0.3390***	0.1126	0.0810	0.0258
Other	-0.2044**	0.1984	-0.4676**	-0.4840	0.5596	-1.7928***	-0.0618
Transgender	0.2994**	0.1187	-0.1327	-1.0880	-0.1428	-0.0365	-0.4212
Asian, Pacific islander	-0.1249*	-0.1264	-0.0989	0.1045	0.1806	-0.0368	0.3108***
Black	-0.0312	-0.1320	0.2203*	0.2648	0.3983	0.2419	0.1826**
Latino	-0.0739	-0.1536	0.1419	0.3442	0.2496	0.1511	0.2117**
White	-0.0878	-0.0965	0.1512	0.3082	0.2103	0.2538	0.1319
Constant	0.2024	1.8087***	4.4616***	9.1632***	8.3625***	9.8097***	1.8155***
N	2348	2347	2351	2312	2327	2332	2386
<i>Regressions control for Age, Age-squared, and for 23 industries and occupations</i>							
<i>Reference categories: Female, Ethnicity "Other," Paid Salary</i>							
<i>*** Significant at .001 level; ** Significant at .01 level; * Significant at .05 level.</i>							

Having trouble paying expenses for housing in the last year is worse for those whose usual work hours are shorter, i.e., if they have more hours of work, the less frequently they experience the financial strain paying the rent or mortgage. Working in a part-time job, in and of itself, does not appear to be associated with this difficulty, however. In addition, if they want more hours than they can currently get at their job or in the labor market, i.e., are underemployed, they have more such financial difficulty. This effect of underemployment is the largest in size of all the hours issues. Having more frequent on-call work also has a consistently large positive association with paying housing expenses. Having irregular shift times, however, has no bearing. Nor does having a wider range of variation in hours over time. Perhaps this means many people take on or accept the periodic extra hours to defray such expenses. Nonetheless, if one must work extra hours beyond usual hours, this does not help pay housing, indeed, the reverse, it is associated with greater difficulty, all else constant. The lack of scheduling control is a strong predictor of

housing expense difficulty. Both having shorter advance notice and employer-set schedules raise the prospect of having strain to pay for housing expenses.

Longer hours and full-time work unambiguously and always lead to more frequent time conflict from work to family. However, this is attributable mainly to salaried work and nonunion workers. Virtually all the low-quality scheduling features are associated with having more frequent job-family conflict. By size of effect, having mandatory extra hours is greatest, followed by short (24) hours advance notice, on-call work, irregular shift schedules, and having daily schedules set by the employer. The size of the gap between most and least hours, however, is not associated with job-family conflict. However, the largest effect of all is having hours beyond one's preferences -- desiring fewer hours. Interestingly, while much smaller in size than overemployment, those underemployed also report more frequent job-family conflict, and despite their relatively shorter weekly hours, they have more time conflict than those who prefer their current hours. (Note: results are omitted from the quarter of the sample that used a different question for union membership status).

Being a part-time and especially a full-time employee is healthier than the non-employee job status. Nonetheless, as hours lengthen, health reported is lower. This runs counter to frequent findings of a "healthy worker" effect -- that healthier people work longer hours. Two of the low-quality scheduling practices are associated with poorer health -- irregular schedules and variable hours (most minus least). On-call working is associated positively, as if it were a healthy worker effect. Finally, both underemployment and overemployment -- wanting more or fewer hours -- are associated with reduced self-rated health (while somewhat larger for overemployment, the effect is more significant for underemployment). Thus, one's health is harmed most by more variable, irregular hours and when those hours either fall short or exceed one's preferred workweek. One's current state of emotional happiness experienced is relatively greater among those working part-time, although that seems to be combined with having children. Longer usual work hours are associated with lower current happiness. However, at a given wage or salary level, longer hours do not have this effect. The negative effects on happiness of feeling underemployed are large and significant. Feeling overemployed also and even larger. Just as large negative effects are associated with having schedules that are irregular. Having extra hours that are mandatory is quite negative. Having schedules set on short advance notice and variation in weekly hours also have some negative repercussions on the current emotional state of a worker. Finally, taking into account that one may be compensated for it via wage or salary, heightens the adverse effect on wide variation in hours.

Both part-time and full-time employees are more satisfied with their life than non-employees, self-rated on a scale of 1 to 10. In addition, longer work hours are generally associated with reduced life satisfaction. This is reinforced by the finding that overemployed people also express lower satisfaction with life. Nonetheless, underemployed people are also significantly less satisfied with life. Thus, life satisfaction is about both the number of hours worked and also the mismatch with preferences for fewer or greater hours. It is also, though in most cases not significantly so, about the variation (most minus least) in those hours. However, having irregular shift times are very strongly associated with reduced life satisfaction. In addition, in order of size, the other dimensions of hours associated with lower life satisfaction are when work involves mandatory overtime and schedules are set by employers. Dissatisfaction with one's schedule of work is exacerbated by longer usual hours and overemployment, although not significantly by whether one has a full- or part-time job. Irregular shift times, extra hours being mandatory and employer-set schedules are dissatisfying, demonstrating that lack of control over one's work time is a key contributor to worker well-being.

In sum, when we consider the outcomes associated with each characteristic of work it is clear that the longer a worker's reported usual weekly hours, the less trouble he/she has paying housing costs. But that increased financial capacity comes at the expense of both reduced health and greater work-family

conflict. Interestingly, longer hours are positively associated with life satisfaction but negatively with current happiness. Longer hours lower satisfaction with one's schedule. While longer usual hours are associated with less desire for more hours, perhaps surprisingly, not significantly lower than those who are satisfied with their number of hours. Compared to working non-standard jobs, full-time work is associated with greater life satisfaction but no greater schedule satisfaction, and with more work-family conflict. Perhaps surprisingly, having a full-time job does not significantly reduce trouble paying housing nor the preference for more hours, although the latter is attributable mainly to having kids to support. Regular (standard) part-time jobs, on the other hand, do heighten the preference for more hours. Like full-time regular jobs, they are associated with greater life satisfaction and no greater scheduling satisfaction, but unlike full-time in their somewhat positive association with health status. Regarding the character of work scheduling, having irregular shifts is associated with greater work-family conflict and lower personal health. It is also negatively associated with happiness and life satisfaction, and most strongly, with scheduling satisfaction. These associations are robust across specifications (control variables). While also negatively associated with underemployment and trouble paying housing, it is not significantly so.

Among workers that have the least say in their daily schedule times, there is lower satisfaction with the work schedule and a somewhat lower satisfaction with their life. In addition, lack of schedule control seems to yield underemployment, too. With workers whose hours are set less than 24 hours in advance, they face greater difficulty paying housing and work-family conflict. Among those working on-call, there is greater difficulty paying housing and work-family conflict, but does not significantly impact adversely the other outcomes, although it is insignificantly associated positively with both work schedule satisfaction and underemployment. Mandatory overtime work is associated with poor outcomes--especially so with work schedule dissatisfaction and work-family conflict, also life satisfaction and happiness and even trouble paying housing. However, it does somewhat reduce the preference for more hours. Hours instability -- most minus least hours worked -- is associated with reduced health and happiness, and life satisfaction controlling for one's earnings level. Its negative association with schedule satisfaction is not statistically significant.

Additionally, unstable hours are associated with greater underemployment, which suggests the weeks of lower hours are not a reflection of a preference for permanently shorter hours. Finally, being underemployed strongly predicts work schedule dissatisfaction and unhappiness and somewhat for life satisfaction. It also is tied to having trouble paying housing and, surprisingly, more work-family conflict. Part-time employees are more likely to want more hours. For full-timers, wanting more hours seems mainly about having children to support. More underemployment is created when employers are setting one's daily work schedule and there is wider variation in weekly hours. However, the wider is the gap, the less that gap contributes to feeling underemployed. Finally, people who have worked multiple jobs are no more or less happy or satisfied with their life and job than those with a single job.

How workers are paid matters. Workers who are paid primarily without a set hourly wage or a salary, are the least satisfied with their work schedule and most at risk for trouble paying housing, somewhat lower health status, happiness today and life satisfaction. Hourly workers have somewhat less work-family conflict and they are no more prone to trouble paying housing than are salaried workers. However, they are far less satisfied with their work schedules. Hourly paid workers are also less healthy, though this is attributable to their relatively lower earnings per hour. Indeed, those wage rates per hour are an important economic variable--while a higher hourly earnings rate itself does not significantly reduce trouble paying housing, it is associated significantly positively with one's health, happiness and satisfaction with both life and work schedule. By income level, those earning less than \$40,000 per year have the most trouble meeting housing expenses. Those earning more than \$150,000 have the highest life satisfaction and happiness. Incomes of greater than \$100,000 annually are associated with improved health. Money does buy greater happiness and life satisfaction, but the improvement from income comes via better health

when earning more than \$75,000 and from one's occupation when earning greater than \$100,000 per year. Underemployment, importantly but not surprisingly, is significantly greater for those earning between \$10,000 - \$30,000 per year. However, earning above \$60,000 per year appears to come with the tradeoff of increased work-family conflict.

Key findings regarding workers' demographics include that having kids present in the household heightens work-family conflict and trouble paying housing expenses, but does not exacerbate underemployment and is associated with greater individual happiness and life satisfaction. Compared to women, men report having more work-family conflict, however this is entirely attributable to the five troublesome scheduling practices. While men have somewhat lower satisfaction with work schedules, this is due to their job or industry. There are differences by race: Black and Latinx have more trouble paying housing expenses than white and Asian workers, and are more likely to be underemployed than whites, all else constant. Across races, however, there are no notable differences in the satisfactions or in work-family conflict.

V. Conclusions and Policy Implications for Illinois: A Fair Workweek Beyond Chicago

There are two key efforts at the Federal level that could inform policy development in Illinois to address scheduling practices and the underlying sources of their adverse outcomes on workers, their families, communities, and national well-being.

In the "Part Time Bill of Rights" (PTBOR) of 2020 ([S.3358](#), [H.R.5991](#)), the employer gets a written statement from a hired part-time employee regarding their desired number of the weekly hours, days and times the employee is available to work, although it may be modified at any time. Both laws contain a version of the "Access to Hours" piece, which most directly addresses underlying causes and consequences of part-time underemployment. The employer is obligated to offer any new additional weekly work hours to qualified, existing employees. If not taken up, the employer is free to hire any new employee from an external applicant pool, including from temporary services or contracting with a contractor or subcontractor. Should employers hire new employees, contract or temp workers first, they would have to compensate the existing disregarded employee(s)--the pay for the hours worked by the outside employee. The PTBOR also contains a provision for Part-time Parity, akin to the provisions in San Francisco's Retail Workers Bill of Rights that would ensure part-time workers are treated equally on pay rates for equal work and the accrual of benefits.

The second relevant bill is the "Schedules That Work Act" (STWA) ([S.3256](#), [H.R.5004](#)) introduced in the US Congress. The Federal Act parallels many of these fair workweek laws, which would apply to all companies with 15 or more employees. The STWA also contains a Right to Request provision, granting employees a protected right to request flexible work arrangements or alterations to their work hours or schedule, without fear of retaliation or discrimination or discharge from their employer. Most pertinently, the right to request would include a stated minimum time of notice for schedule. Some states have passed or considered an individual, "right to request" that widens the scope to all hourly workers in all industries (e.g., Berkeley CA). The states of Vermont, New Hampshire and Oregon extend this employee "right to request" to changes in work hours, schedules, or location. Montana protects an employee request for job sharing. The Vermont law permits requesting "a flexible work arrangement" for any reason (not just parenting), at least twice per calendar year, and the employer is required to consider such requests "in good faith."

In addition, workers in California, Connecticut, Massachusetts, New Hampshire, New Jersey, New York, Oregon, Rhode Island and District of Columbia are protected by laws that require employers to provide "reporting pay," to employees who report to work as scheduled but are sent home before completing their

full shifts (CPD, 2014). California, New York and District of Columbia also require employers to provide “split-shift pay,” or to pay an additional hour of pay when they work multiple shifts in one day that are interrupted by non-paid, non-working periods. San Francisco and New York City specified “predictability pay” of two to four hours of pay to formula retail employees at their regular rate of pay when required to be “on-call” for a shift the employer cancels.

A bill in Minnesota proposed stronger protections regarding discrimination against workers on part-time hours. A Minimum Hours provision would ensure workers get scheduled for a “floor” of weekly hours, such as 24 or 30, to sustain their weekly earnings. Such laws are still scarce, offered only for cleaning or maintenance jobs in large commercial buildings, but they do exist in DC and should be considered for Illinois.

Finally, implementing Illinois’ State UI systems’ Short-time Compensation (STC) programs would directly support workers who are underemployed. Indeed, it would counter the main underlying sources of underemployment -- reduced hours and/or low or lost earnings. In the federal response to the economic crisis created by the COVID-19 pandemic, the federal government is fully reimbursing the (27) states’ funds for their existing STC programs -- for which there is widespread, employer and bipartisan support (Manzo and Bruno, 2020; Houseman et al 2017; Baker, 2017; Stettner et al 2016) and a bill to advance the program in the Illinois General Assembly (SR1190). STC could and should be used to subsidize those workers who are either called back or even newly hired at just part-time or shortened hours.

The Fair Workweek (FWW) ordinance was passed and implemented in Chicago to help protect and improve the well-being of workers in the face of typically unwelcome, potentially egregious, work hours and scheduling practices. It was the country’s most inclusive such ordinance so far, covering workers in seven industries--Food services, Retail, Hospitality, Manufacturing, Hospitals, Warehouses and Temporary workers employed in those industries. Thus, a lot is riding on its successful implementation and documenting its effects on workers and labor markets. This report features a new, large, representative survey to explore reasons for adopting such laws and to establish a baseline to observe its actual outcomes on labor markets, workers’ well-being and employer practices, from which we may infer why and how to expand statewide in Illinois and in other US cities considering the FWW type laws. The benefits to workers of greater stability, predictability and adequacy of work hours, may be shared with employers, via improved productivity and turnover, which in turn would offset much of any initial cost of adopting the new scheduling standards (Williams, Lambert and Kesavan, 2018).

REFERENCES

- Alexander, Charlotte, and Anna Haley-Lock. "Underwork, Work-Hour Insecurity, and A New Approach to Wage and Hour Regulation." *Industrial Relations*, 54.4 (2015): 695-716.
- Allan, B. A., Kim, T., Liu, T. Y., & Deemer, E. D. "Moderators of involuntary part-time work and life satisfaction: A latent deprivation approach." *Professional Psychology: Research and Practice*, 51.3 (2020): 257–267.
- Anderson, Sarah and Anthony Winefield. "The Impact of Underemployment on Psychological Health, Physical Health, and Work Attitudes." in Douglas Maynard and Daniel Feldman (eds), *Underemployment: Psychological, Economic, and Social Challenges* (2011): 165-186.
- Angrave, David and Andy Charlwood. "What is the relationship between long working hours, over-employment, under-employment and the subjective well-being of workers? Longitudinal evidence from the UK." *Human Relations* 68, no. 9 (2015): 1491-151.
- Ananat, Elizabeth O. and Anna Gassman-Pines. "Work Schedule Unpredictability: Daily Occurrence and Effects on Working Parents' Well-Being." *Journal of Marriage and Family* (2020).
- Baker, Dean. "Eight market-oriented proposals that reduce income inequality." *AEI Paper & Studies* (2017): 1.
- Bassanini Andrea and Eve Caroli. "Is work bad for health? The role of constraint versus choice." *Annals of Economics and Statistics/ Annales d'Économie et de Statistique* 119/120 (2015): 13-37.
- Bell, David NF, and David G. Blanchflower. "The well-being of the overemployed and the underemployed and the rise in depression in the UK." *Journal of Economic Behavior & Organization* 161 (2019): 180-196.
- Ben-Ishai, L. *Young Workers in LA Struggle with Volatile Schedules*, CLASP/UCLA Labor Center (2016), December.
- Bernhardt, A., Milkman, R., Theodore, N., Heckathorn, D. D, Auer, M., DeFilippis, J., et al. *Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities*. UCLA: Institute for Research on Labor and Employment (2009). Retrieved from <https://escholarship.org/uc/item/1vn389nh>.
- Beutell, N.; O'Hare, M. "Work schedule and work schedule control fit: Work-family conflict, work-family synergy, gender, and satisfaction." In *Work-Family Synergy, Gender, and Satisfaction* (2018), January 19. Available online: <https://ssrn.com/abstract=3105671>
- Bloom, Nicholas, Tobias Kretschmer, and John Van Reenen. "Are Family-Friendly Workplace Practices a Valuable Firm Resource?" *Strategic Management Journal*, vol. 32 (2011): 343–367.
- Board of Governors of the Federal Reserve System (FRB). *Report on the Economic Well-Being of U.S. Households in 2019* (2020), May.
- Borowczyk-Martins, Daniel, and Etienne Lalé. "The welfare effects of involuntary part-time work." *Oxford Economic Papers* 70, no. 1 (2018): 183-205.

Boushey, Heather and Bridget Ansel. *Working by the hour: The economic consequences of unpredictable scheduling practices*, Washington Center for Equitable Growth, (2016), September 6.

Bureau of National Affairs (BNA), *Irregular Scheduling: Balancing Employers' Flexibility Needs with Employees' Predictability Needs*, 09-8008, Workforce Strategies, Vol. 34, No. 3 (2016), March, Arlington, VA.

Carré, Françoise and Chris Tilly. *Where bad jobs are better: Retail jobs across countries and companies*. Russell Sage Foundation (2017).

Carrillo, Dani, Kristen Harknett, Allison Logan, Sigrid Luhr, and Daniel Schneider. "Instability of work and care: How work schedules shape child-care arrangements for parents working in the service sector." *Social Service Review* 91, no. 3 (2017): 422-455.

Cauthen, Nancy, K. *Scheduling Hourly Workers: How Last Minute, "Just-In-Time" Scheduling Practices Are Bad for Workers, Families and Business*, Demos, NY, (2011).

Center for Law and Social Policy, Retail Action Project, and Women Employed. *Tackling Unstable and Unpredictable Work Schedules: A Policy Brief on Guaranteed Minimum Hours and Reporting Pay Policies*, (2014).

Center for Popular Democracy (CPD) Fair Workweek Initiative and Working Partnerships USA. *A Hidden Crisis: Underemployment in Silicon Valley's Hourly Workforce*, (2016), April.

Center for Popular Democracy Fair Workweek Initiative, *Half a Job: Why People Working Part-Time Deserve a Fair Workweek*, (2020), February.

Cho, Youngmin. "The effects of nonstandard work schedules on workers' health: A mediating role of work-to-family conflict." *International Journal of Social Welfare* 27, no. 1 (2018): 74-87.

Clemens, Jeffrey and Michael R. Strain. "Implications of schedule irregularity as a minimum wage response margin," *Applied Economics Letters*, (2020). DOI:10.1080/13504851.2020.1713978.

Cooke, Adrienne Genevieve Ybanez. "Stolen wages, stolen lives: A critical analysis of the fair workweek policy." PhD diss., University of Illinois (2019).

Correll, Shelley J., Erin L. Kelly, Lindsey Trimble O'Connor, and Joan C. Williams. "Redesigning, redefining work." *Work and Occupations* 41, no. 1 (2014): 3-17.

City of Chicago. *Working Families Task Force Final Report*, (2016), April 4.

Corser, M. *Job Quality and Economic Opportunity in Retail: Key Findings from a National Survey of the Retail Workforce*. Center for Popular Democracy. Fair Workweek Initiative, (2017), November.

Costa, G., S., G., Sartori, S., and Akerstedt, T. Influence of Flexibility and Variability of Working Hours on Health and Well-Being. *Chronobiology International*, 23.6 (2006): 1125-1137.

De Moortel, Deborah, Nico Dragano, Christophe Vanroelen, and Morten Wahrendorf. "Underemployment, overemployment and deterioration of mental health: the role of job rewards." *International archives of occupational and environmental health* 91, no. 8 (2018): 1031-1039;

- Dey, Matthew, Mark A. Loewenstein, David S. Piccone Jr, and Anne E. Polivka, "Demographics, earnings, and family characteristics of workers in sectors initially affected by COVID-19 shutdowns," *Monthly Labor Review*, U.S. Bureau of Labor Statistics, (2020), June,
- Dickson, Alison, Lonnie Golden, and Robert Bruno. "*Scheduling stability: The Landscape of Work Schedules and Potential Gains From Fairer Workweeks in Illinois and Chicago.*" Available at SSRN 3172354 (2018).
- Dickson, Alison, Bruno, Robert, Emily E. L. B. Twarog. *Shift-Work Shuffle: Flexibility and Instability for Chicago's Chicago Fast Food Workforce*, Project for Middle Class Renewal, School of Labor and Employment Relations, University of Illinois, (2015), December.
- Enchautegui, María E. *Nonstandard Work Schedules and the Well-Being of Low-Income Families*, Urban Institute, Paper 26 (2013), July.
- Esbenshade, Jill. *Time Theft: Employer Scheduling Practices and Their Impacts on San Diego County Workers* - Center on Policy Initiatives, San Diego State University, (2020), September.
- Fabian, Mark. "How Can the Middle Class Flourish in the 21st Century? Insights from the Science of Well-Being." Economic Studies at Brookings, Washington DC, (2020), August.
- Felstead, A., D. Gallie, F. Green and G. Henseke. "Unpredictable Times: The Extent, Characteristics and Correlates of Insecure Hours of Work in Britain." *Industrial Relations Journal* 51 (2020): 34–57.
- Finnigan, Ryan. "Varying weekly work hours and earnings instability in the Great Recession." *Social Science Research* 74 (2018).
- Finnigan, Ryan and Jo Mhairi Hale. "Working 9 to 5? Union Membership and Work Hours and Schedules." *Social Forces* (2017).
- Finnigan, Ryan and Savannah Hunter. "Occupational Composition and Racial/Ethnic Inequality in Varying Work Hours in the Great Recession." In *Race, Identity and Work*. Emerald Publishing, (2018).
- Friedland, Daniel S. and Richard H. Price. "Underemployment: Consequences for the Health and Well-being of Workers." *American Journal of Community Psychology* 32.1-2 (2003): 33-45.
- Gerstel, Naomi and Dan Clawson. "Inequality in work time: Gender and class stratify hours and schedules, flexibility and unpredictability in jobs and families." *Sociology Compass* 9, 12 (2015): 1094-1105.
- Glauber, Rebecca. 2013. [Wanting More but Working Less: Involuntary Part-time Employment and Economic Vulnerability](#). The Carsey School of Public Policy at the University of New Hampshire.
- Golden, Lonnie. "FLSA Working Hours Reform: Worker Well-Being Effects in an Economic Framework." *Industrial Relations: A Journal of Economy and Society* 54.4 (2015): 717-749.
- _____. *Still Only Part Way Home with Part-time Involuntary Part-time Work and Underemployment in Illinois and Region*, Project for Middle Class Renewal, University of Illinois, Urbana-Champaign IL (October 2017a).

_____. *A Happiness and Objective Well-Being Index (HOW-IS-IL) for Living and Working in the State of Illinois, 2016-17*. Project for Middle Class Renewal University of Illinois, Urbana-Champaign IL (2017b).

Golden, Lonnie and Jaeseung Kim (2017), Irregular Work Shifts, Work Schedule Flexibility and Work-Family Conflict and Work Stress in the U.S., Sarah De Groof et al. *"Work-Life Balance in the Modern Workplace. Interdisciplinary Perspectives from Work-Family Research, Law and Policy."*

Golden, Lonnie and Jaeseung Kim, 2020, *The Involuntary Part-time Work and Underemployment Problem in the U.S.*, Center for Law and Social Policy (CLASP), August.

Golden, Lonnie, Julia Henly, and Susan Lambert. "Work schedule flexibility: a contributor to employee happiness?" *Journal of Social Research and Policy* (2013).

Guyot, Katherine and Richard V. Reeves *Unpredictable work hours and volatile incomes are long-term risks for American workers*. Up Front, Brookings, DC, August 18, 2020.

Haley, Anna, Kristen Harknett, Shannon Harper, Susan Lambert, Jennifer Romich and Daniel Schneider, *The Evaluation of Seattle's Secure Scheduling Ordinance: Year 1 Findings*, December 2019.

Haines, Victor III, Pascal Doray-Demers and Vivianne Martin. "Good, bad, and not so sad part-time employment." *Journal of Vocational Behavior* 104 (2018): 128-140);

Harknett, Kristen and Schneider, Daniel. "Consequences of routine work-schedule instability for worker health and well-being." *American Sociological Review* 84.1 (2019): 82-114;

_____. 2020. "Precarious Work Schedules And Population Health, *Health Affairs*, Health Policy Brief, February 13, DOI: 10.1377/hpb20200206.806111.

Henly, J. R., and Lambert, S. J. 2014. "Unpredictable Work Timing in Retail Jobs Implications for Employee Work-Life Conflict." *Industrial & Labor Relations Review* 67(3): 986-1016.

Horemans, J., Marx, I. & Nolan, B. Hanging in, but only just: part-time employment and in-work poverty throughout the crisis. *IZA J Labor Stud* 5, 5 (2016). <https://doi.org/10.1186/s40174-016-0053-6>.

Howell, David R., and Arne L. Kalleberg. "Declining job quality in the United States: Explanations and evidence." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 5, no. 4 (2019): 1-53.

Houseman, Susan et al., "Demonstration and Evaluation of the Short-Time Compensation Program in Iowa and Oregon: Final Report," External Papers and Reports, (2017), <https://research.upjohn.org/externalpapers/75>.

Jobs With Justice, *Unpredictable, Unsustainable: The Impact of Employers' Scheduling Practices in D.C.* Washington DC, (2015).

Kaduk, Anne, Katie Genadek, Erin L. Kelly, and Phyllis Moen. "Involuntary vs. voluntary flexible work: insights for scholars and stakeholders." *Community, Work & Family* 22, no. 4 (2019): 412-442.

Kifle, Temesgen, Parvinder Kler, and S. Shankar. "The underemployment-job satisfaction nexus: A study of part-time employment in Australia." *Social Indicators Research* 143, no. 1 (2019): 233-249.

King, Mary C. *The Impact on Oregonians of the Rise of Unpredictable Scheduling Report to the Portland City Council*, (2016), October 12.

Koo, K.H. The Evolution of Earnings Volatility during and after the Great Recession. *Industrial Relations*, vol. 55, no. 4, (2016): 705-732.

Kossek, E. E., & Lee, K.-H. The coronavirus & work–life inequality: Three evidence-based initiatives to update U.S. work–life employment policies. *Behavioral Science & Policy*. (2020)
https://behavioralpolicy.org/journal_issue/covid-19/

LaBriola, Joe, and Daniel Schneider. "Worker Power and Class Polarization in Intra-Year Work Hour Volatility." *Social Forces* 98, no. 3 (2020): 973-999.

[Lambert, Susan, *Fair work schedules for the U.S. economy and society: What's reasonable, feasible, and effective* – Vision 2020: Evidence for a stronger economy, Washington Center for Equitable Growth \(2020\): 101, February 18.](#)

Lambert, Susan J., Julia R. Henly, and Jaeseung Kim. "Precarious work schedules as a source of economic insecurity and institutional distrust." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 5, 4 (2019): 218-257.

Lambert, S.J. and Haley, A. Evaluation of Seattle's Secure Scheduling Ordinance: Baseline Employer Perspectives and Practices. In West Coast Poverty Center, (2018), March.
www.seattle.gov/Documents/Departments/CityAuditor/auditreports/SecureSchedulingReport.pdf

Loustaunau, Lola, Larissa Petrucci, Ellen Scott and Lina Stepick. *Persistent Unpredictability: Assessing the Impacts of Oregon's Employee Work Schedules Law*, University of Oregon LERC, (2020) July 1.

Manzo, Frank and Robert Bruno, *Implementing a Work-Share Program in Illinois Protecting Jobs, Boosting Incomes, and Saving Taxpayer Dollars*, Project for Middle Class Renewal, University of Illinois, (2020) April 7.

Mas, Alexandre, and Amanda Pallais. "Valuing alternative work arrangements." *American Economic Review* 107, no. 12 (2017): 3722-59.

McCrate, Elaine, Susan J. Lambert, and Julia R. Henly. "Competing for hours: Unstable work schedules and underemployment among hourly workers in Canada." *Cambridge Journal of Economics* 43, 5 (2019): 1287-1314.

Miggo, Amanda. "The Secure Scheduling Movement: Why Every State Should Consider Enacting Secure Scheduling Legislation." *Cap. UL Rev.* 47 (2019): 155.

Mitchell, David S. "Stable and Predictable Scheduling as Antidote to Income Volatility." *Financial Security Program, the Aspen Institute* (2017).

Mitukiewicz, Alexandra, and Heather Boushey. "Job Quality Matters: How Our Future Economic Competitiveness Hinges on the Quality of Parents' Jobs." *Washington Center for Equitable Growth* (2014).

Nunn, Ryan, Jana Parsons and Jay Shambaugh, "Race and Underemployment in the US Labor Market, Brookings, (2019), August 1.

Okulicz-Kozaryn, Adam and Lonnie Golden. "Happiness is flextime." *Applied Research in Quality of Life* 13, no. 2 (2018): 355-369.

O'Halloran Patrick and Michaeline Skiba. "The dangers of underemployment in the United States." *Oxford Journal: An International Journal of Business & Economics* 9.2 (2014).

Ruan, Nantiya, and Nancy Reichman. "Hours Equity Is the New Pay Equity." *Villanova Law Review*, 59 (2014): 35.

Reynolds, J., and Aletraris, L. "Mostly Mismatched With a Chance of Settling: Tracking Work Hour Mismatches in the United States," *Work and Occupations*, 37 (2010): 476–511.

Schneider, Daniel & Kristen Harknett. "Schedule instability and unpredictability and worker and family health and wellbeing." Washington Center for Equitable Growth, Working Paper 2016-09, (2016), September.

Schneider, Daniel and Kristen Harknett. *Hard Times: Routine Schedule Unpredictability and Material Hardship among Service Sector Workers*, Washington Center for Equitable Growth, Working Paper, (2019), October.

____ 2018a. "Working in the Service Sector in Philadelphia." University of California, February .

____ 2018b. *Working in the Service Sector in Connecticut*, Research Brief, March.

____ 2018c. *Working in the Service Sector in Washington State*, Research Brief, December.

Scholarios, Dora, Hannah Hesselgreaves, and Raymond Pratt. "Unpredictable working time, well-being and health in the police service." *The International Journal of Human Resource Management* 28, no. 16 (2017): 2275-2298.

Schröder, M. "Men Lose Life Satisfaction with Fewer Hours in Employment: Mothers Do Not Profit from Longer Employment—Evidence from Eight Panels." *Social Indicators Research* (2020).
<https://doi.org/10.1007/s11205-020-02433-5>.

Scott, Ellen, Kathryn Edin, Andrew London, and Rebecca Kissane. "Unstable Work, Unstable Income: Implications for Family Well-Being in the Era of Time-Limited Welfare." *Journal of Poverty*, 8, no. 1, (2004): 61–88.

Smalley, Chadrick. *Analysis: Emeryville Retail and Food Service Employee Scheduling*, (2016), August 17.

Stettner, Andrew, Michael Cassidy and George Wentworth, *A New Safety Net for An Era of Unstable Earnings*, Report Century Foundation, (2016), December 15.

Stolper, Harold. *Unpredictable: How Unpredictable Schedules Keep Low-Income New Yorkers From Getting Ahead*. Community Service Society of New York, (2017).

Stolper, Harold and Nancy Rankin. *Unpredictable Scheduling: Fair Workweek Laws in New York City*, Community Service Society of New York, (2019), July.

- Storer, Adam, Daniel Schneider, and Kristen Harknett. "What Explains Racial/Ethnic Inequality in Job Quality in the Service Sector?." *American Sociological Review* (2020): 0003122420930018.
- Sturman, M. C., and Walsh, K. "Strengthening the employment relationship: the effects of work-hours fit on key employee attitudes." *Journal of Organizational Behavior*, 35 (2014): 762–784.
- Swanberg, Jennifer E., Elizabeth Watson, and Meridith Eastman. "Scheduling challenges among workers in low-wage hourly jobs: similarities and differences among workers in standard-and nonstandard-hour jobs." *Community, Work & Family* 17.4 (2014): 409-435.
- U.S. Bureau of Labor Statistics, *Job Flexibilities and Work Schedules -- 2017-2018: Data From the American Time Use Survey*, USDL-19-1691, (2019), September 24.
- Valente, R.R. and Berry, B.J.L. "Working hours and life satisfaction: a cross-cultural comparison of Latin America and the United States." *Happiness Studies* 17 (2016): 1173–204. doi: 10.1007/s10902-015-9637-5
- Vigdor Measurement & Evaluation, LLC. *Scheduling in Seattle: Current State of Practice and Prospects for Intervention*, Prepared for the City of Seattle (2016), July 15.
- Wang, J. "Hours underemployment and employee turnover: the moderating role of human resource practices." *The International Journal of Human Resource Management*, 29, no. 9, (2018): 1565-1587.
- Weil, David. "Understanding the Present and Future of Work in the Fissured Workplace Context." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 5, no. 5 (2019): 147-165.
- Williams, Joan C., Saravanan Kesavan, and Lisa McCorkell. "When retail workers have stable schedules, sales and productivity go up." *Harvard Business Review* (2018).
- Wolfe, Julia, Janelle Jones, and David Cooper. "'Fair Workweek' Laws Help More than 1. 8 Million Workers." Washington, DC: *Economic Policy Institute report* (2018).
- Wooden, M., D. Warren, D., and R. Drago. "Working Time Mismatch and Well-being." *British Journal of Industrial Relations*, vol. 47 (2009): 147–179.
- Yildirim, Dilek, and Zeynep Aycan. "Nurses' work demands and work–family conflict: A questionnaire survey." *International journal of nursing studies* 45, no. 9 (2008): 1366-1378.
- Young, Justin R., and Marybeth J. Mattingly. "Underemployment among Hispanics: the case of involuntary part-time work." *Monthly Labor Review* (2016).
- Ziebertz, Carla M., Madelon L. M. van Hooff, Debby G. J. Beckers, Wendela E. Hooftman, Michiel A. J. Kompier and Sabine A. Geurts. "The Relationship of On-Call Work with Fatigue, Work-Home Interference, and Perceived Performance Difficulties," *BioMed Research International*, (2015): 1.
- Zukin, Cliff and Carl Van Horn. *A Tale of Two Workforces: The Benefits and Burdens of Working Part Time*, John J. Heldrich Center for Workforce Development, Bloustein School of Public Policy, Rutgers University, (2015), June.