

### SWAA November 2022 Updates

Jose Maria Barrero, Nicholas Bloom, Shelby Buckman, and Steven J. Davis

6 November 2022







Latest survey wave included: October 2022

To sign up for regular results updates, please sign up <a href="here">here</a>.

#### **Source of Data and Citation**



 Source of all data (unless noted): Survey of Working Arrangements and Attitudes (SWAA), see <a href="www.wfhresearch.com">www.wfhresearch.com</a>

When referring to these results please cite:

Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731.

www.wfhresearch.com

### The Survey of Working Arrangements and Attitudes



- Monthly online survey since May 2020, >100,000 observations to date.
- We design the survey instrument.
- Target population: U.S. residents, 20-64, who earned ≥ \$10K in 2019 (≥\$20K in early survey waves). From January to March 2022, we transitioned to earned ≥ \$10K in prior year.
- The SWAA is fielded by market research firms that rely on wholesale aggregators (e.g., <u>Lucid</u>) for lists of potential survey participants.
- After dropping "speeders" (~16% of sample), we re-weight to match 2010-2019 CPS worker shares in age-sex-education-earnings cells. Dropping those who fail attention checks (roughly another 12%) sharpens some results.
- Median response time: 7 to 12 minutes, after dropping speeders
- Results, micro data, survey instruments, and more are freely available at www.WFHresearch.com.

#### Representativeness

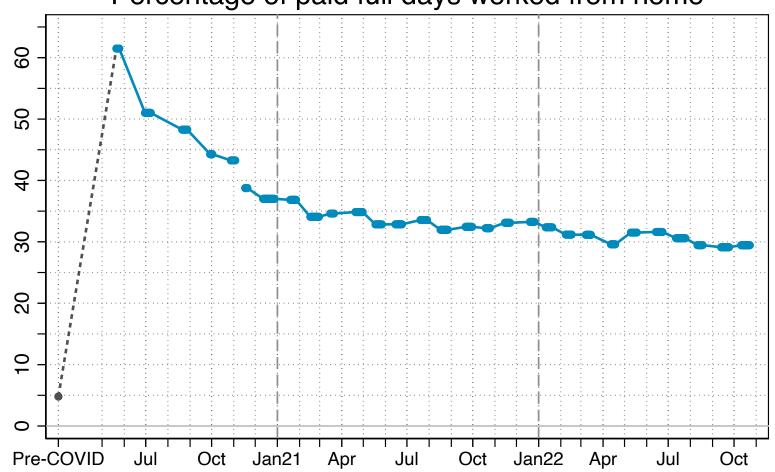


- By design, we focus on persons who exhibit some attachment to the workforce, as evidenced by prior earnings.
- No respondents are recruited based on an interest in our topics.
- Since respondents take the survey using a computer, smartphone, iPad or like device, we miss people who never use such devices.
- Before re-weighting, the SWAA under samples the less educated, particularly those who did not finish high school.
- Even after re-weighting, we may over sample those who are more tech and internet savvy, especially among the least educated.

### Percentage of Paid Full Days Worked from Home, May 2020 to October 2022







<sup>\*</sup>Pre-COVID estimate taken from the 2017-2018 American Time Use Survey

**Source**: Responses to the questions:

- Currently (this week) what is your work status?
- For each day last week, did you work a full day (6 or more hours), and if so where?

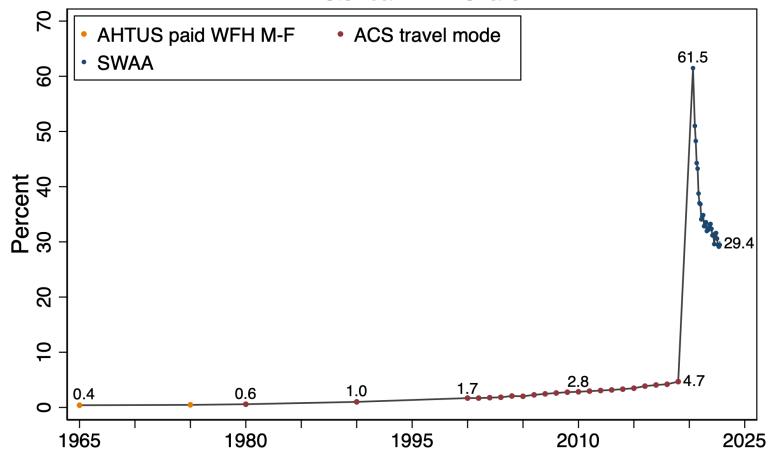
**Notes:** For each wave, we compute the percent of paid full days worked from home and plot it on the vertical axis. The horizontal-axis location shows when the survey was in the field. Before November 2020, we asked the first question above. Since November 2021, we have asked the second question. From November 2020 to October 2021, we back-cast responses to the current question using a regression model that relates the current-question responses to the responses to another question (not shown). The pre-COVID figure is from the 2017-2018 American Time Use Survey. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

<sup>\*</sup>The break in the series in November 2020 reflects a change in the survey question.

# WFH doubled every 15 years pre-pandemic. The increase in WFH during the pandemic was equal to 30 years of pre-pandemic growth.







1965-1975 uses data from the American Historical Time Use Survey.

1980-2019 uses data from American Community Survey.

May 2020 - October 2022 uses data from the Survey of Working Arrangements and Attitudes.

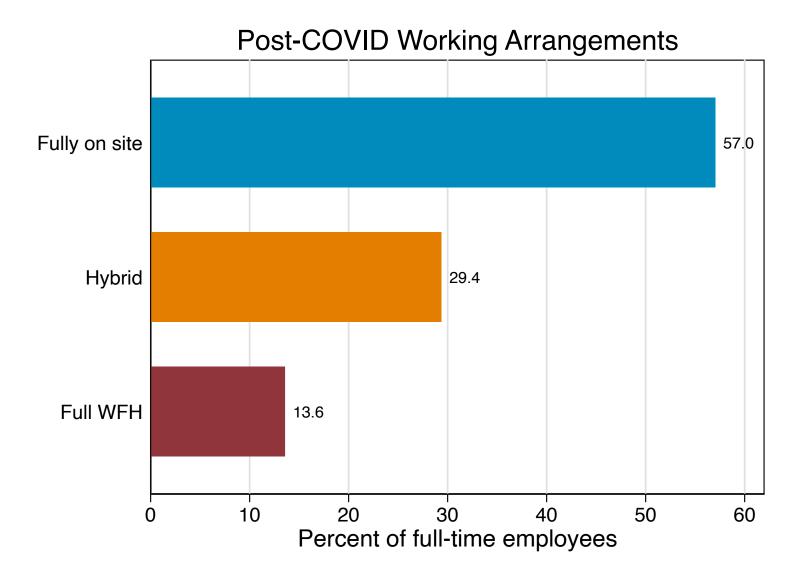
**Source**: Responses to the questions:

- In their time diary the respondent listed the activity "Paid work at home" for 6 or more hours. (AHTUS)
- How did this person usually get to work last week? (ACS)
- For each day last week, did you work a full day (6 or more hours), and, if so, where? (SWAA)

**Notes:** For each dataset, we compute the percent of working individuals who worked full days at home during the survey's reference period. For the AHTUS and ACS, if an individual reports usually working from home, we mark them as working from home 100% of the time. In SWAA we compute the percent of full paid days at home to account for a hybrid work schedule. Then we plot each percentage on the vertical axis. We re-weight the sample of US residents aged 20 to 64 earning \$20,000 or more in 2019 dollars to overall population shares.

# As of Summer/Fall 2022: ~14% of Full-Time Employees are Fully Remote, ~57% are Full-Time on Site, ~29% are in a Hybrid Arrangement





**Source**: Responses to the questions:

For each day last week, did you work a full day (6 or more hours), and if so where?

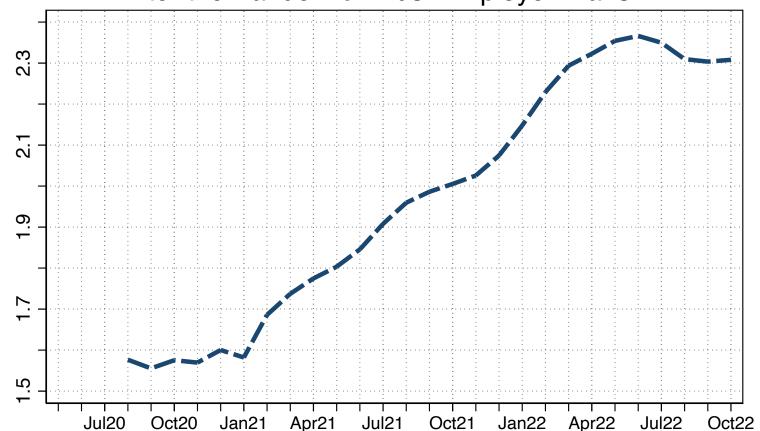
**Notes:** For each wave, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iiii) worked all all days at home during the survey's reference week. Then we show the percentage for each group. The sample covers the July to October 2022 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

$$N = 16,451$$

# Employer Plans for WFH post-COVID are between 2.3 and 2.4 Days per Week (for persons able to work from home) and Stabilizing



Average Days per Week Working From Home After the Pandemic Ends: Employer Plans



Sample: Workers able to work from home

#### Responses to the question:

- After the pandemic ends, how often is your employer planning for you to work full days at home?

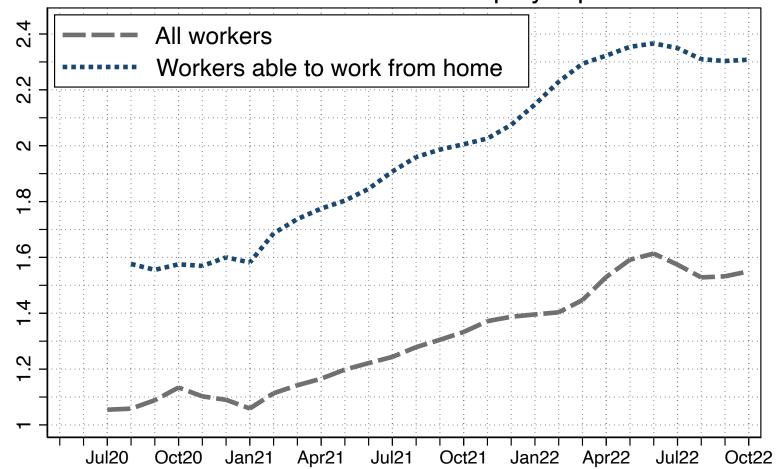
Sample: Data are from all SWAA waves, covering August 2020 to October 2022. The sample includes all respondents who reported their employer's plans for post-COVID WFH and who have work-from-home experience during the pandemic (thus able to work from home). We exclude respondents who report having no employer. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

N = 77,252 (able to work from home)

### **Employer plans for Full Paid Days Worked from Home after the Pandemic**



Average Days per Week Working From Home After the Pandemic Ends: Employer plans



#### Responses to the question:

- After the pandemic ends, how often is your employer planning for you to work full days at home?

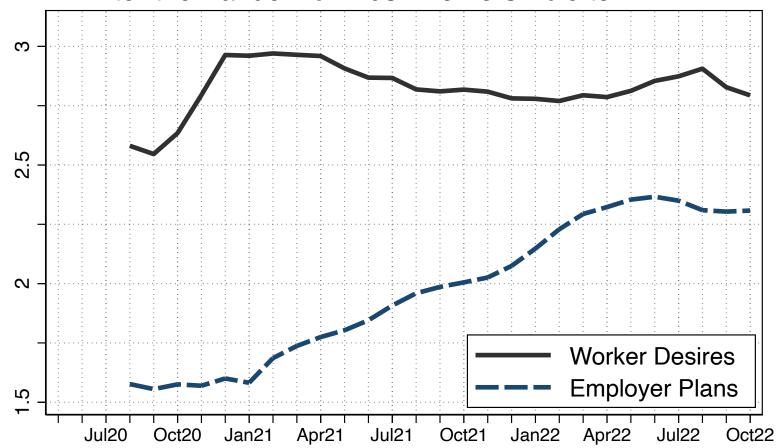
**Sample:** Data are from all SWAA waves, covering July 2020 to September 2022. The sample includes all respondents who reported their employer's plans for post-COVID WFH ("All workers" series), restricting attention to workers who have work-from-home experience during the pandemic for the series labeled "Workers able to work from home." In particular, we exclude respondents who report having no employer. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

N = 108,820 (all respondents) and 77,252 (able to work from home)

# For Workers Able to Work From Home, the Gap Between Their Desired Amount and Their Employer's Plans for Post-COVID Working From Home Continues to Shrink



Average Days per Week Working From Home After the Pandemic Ends: Workers Able to WFH



Responses to the questions:

- After the pandemic ends, how often would you like to have full paid days at home?
- After the pandemic ends, how often is your employer planning for you to work full days at home?

**Sample:** Data are from all SWAA waves, covering August 2020 to September 2022. The sample includes all respondents who responded to the relevant survey and have work-from-home experience during the pandemic. For the employer plans series, we exclude respondents who report having no employer.

N = 77,252 (employer plans, able to work from home)

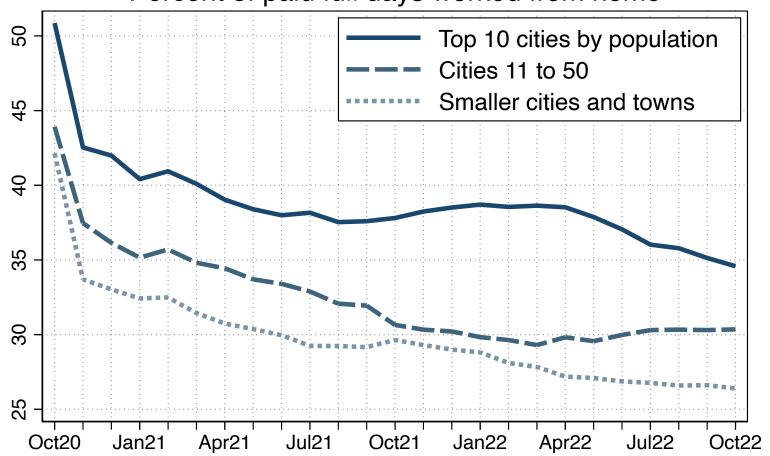
N = 83,051 (worker desires, able to work from home)

Sample: Workers able to work from home

### Working From Home is More Common in Major Cities than in Smaller Cities and Towns (but Declining as of Fall '22)



#### Percent of paid full days worked from home



\*We define cities using Combined Statistical Areas and use the location of the respondent's current job.

**Source**: Responses to the questions:

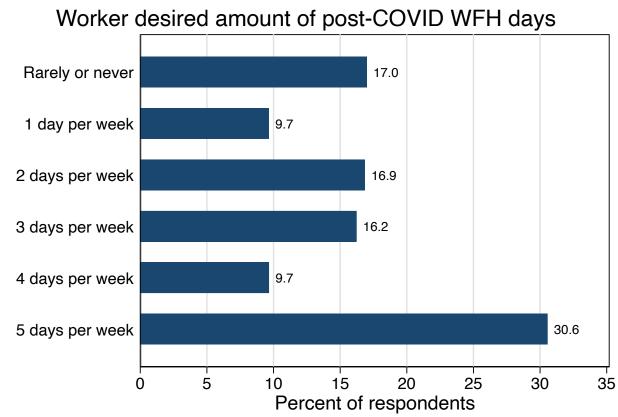
- Currently (this week) what is your work status?
- For each day last week, did you work a full day (6 or more hours), and if so where?

Notes: The chart plots 6-month moving averages where available and 3-month moving averages prior to November 2020. For each wave, we compute the percent of paid full days worked from home and plot it on the vertical axis, after sorting respondents into cities (i.e., Combined Statistical Areas) by the location of their current job's busines spremises. Before November 2020, we asked the first question above. Since November 2021, we have asked the second guestion. From November 2020 to October 2021, we back-cast responses to the current question using a regression model that relates the current-question responses to the responses to another question (not shown). We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-educationearnings cells.

N = 91,751

## Workers who are able to work from home want more full-time remote and less full-time in-person work than their employers are currently offering





Current amount of post-COVID WFH days 31 5 Zero days 1 day per week 10.1 2 days per week 16.9 3 days per week 12.0 4 days per week 6.0 5+ days per week 23.4 15 20 25 30 10 Percent of respondents

Sample: Full-time wage and salary employees who are able to WFH. N = 8799

Sample: Full-time wage and salary employees who are able to WFH. N = 8422

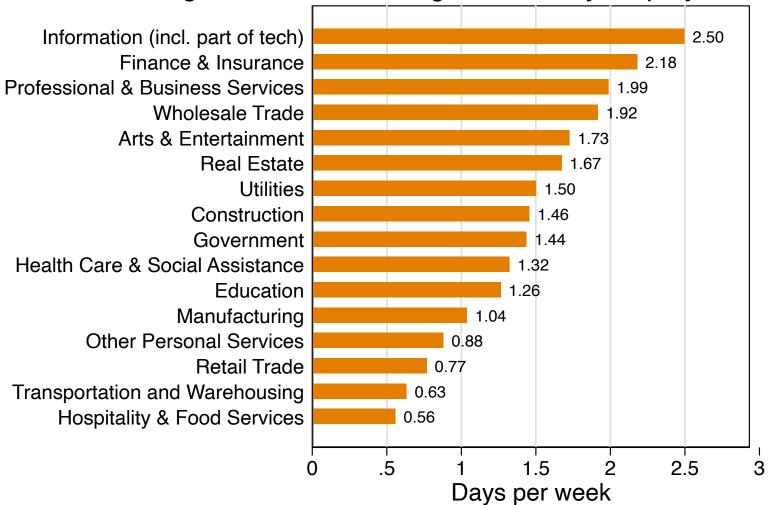
Responses to the questions: As the pandemic ends, how often would you like to have paid workdays at home? For each day last week, did you work a full day (6 or more hours), and if so where?

**Sample:** Data are from the August to October 2022 SWAA waves. The sample includes full-time wage and salary employees (i.e. who worked 5 or more days during the survey reference week) who have work-from-home experience during the pandemic and pass the attention-check questions. Numbers for "5 days per week" in the right chart include responses for 6 or 7 full days worked from home. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

## Current levels of working from home are highest for the information, finance, and professional and business services sectors



Current working from home: All wage and salary employees



#### Responses to the question:

For each day last week, did you work a full day (6 or more hours), and if so where?

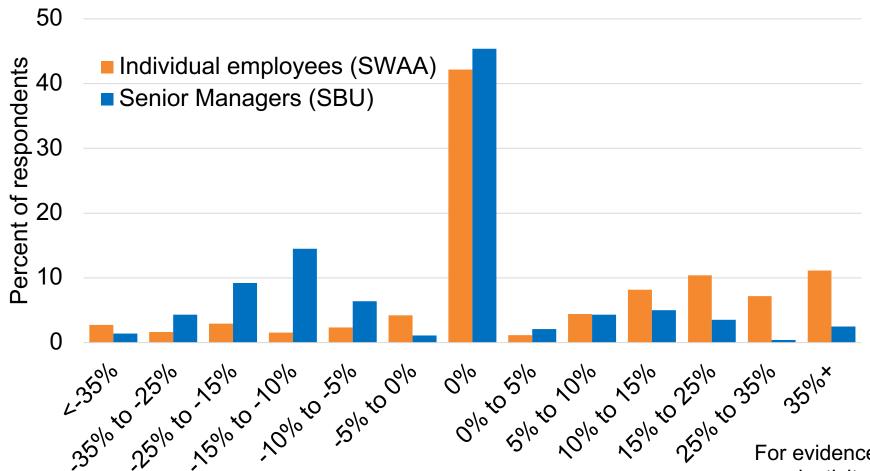
Sample: Data are from the May to October 2022 SWAA waves. The sample includes all wage and salary employees who pass the attention-check questions. We exclude mining due to insufficient observations and agriculture to focus on non-farm jobs. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

$$N = 25,729$$

Employees think work from home has positive productivity effects, on average, while managers see negative average effects. Separate research finds that most of the worker-perceived productivity gains reflect a savings in commuting time.



#### Estimated effect of working from home on productivity?



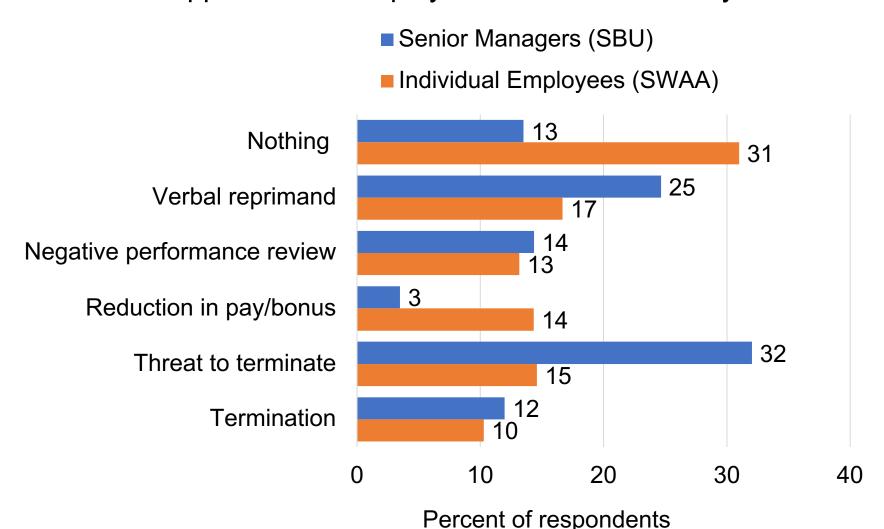
**Notes**: SWAA participants asked "How much less/more efficient are you working from home than on business premises?" from the July to September 2022 waves reweighted to match all US employees 20 to 64. N=13,082. www.wfhresearch.com Survey of Business Uncertainty (SBU) participants were asked: "How much less/more productive would employees [who work from home at least one day per week] be if working on business premises five days a week?" reweighted to match all US firms. **N=282.** See more information about the SBU at: www.atlantafed.org/SBU

For evidence on the sources of worker-perceived productivity benefits, see "Why Working from Home Will Stick" and these slides.

## Employees often report that nothing happens if they stay home on "work days," while managers claim they threaten to fire violators



What happens when employees WFH on "work days"



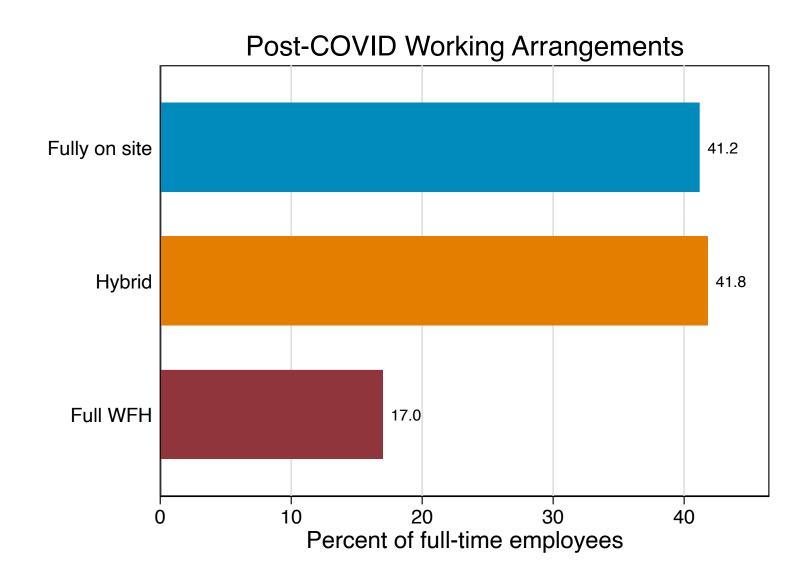
**Notes:** SWAA participants were asked "How has your employer responded to employees who work on business premises fewer days than requested?" over June to September 2022 re-weighted to match US working population 20 to 64.

N= 17,875. www.wfhresearch.com SBU participants were asked "Currently, how does your firm deal with employees who work fewer days on business premises than required by company policy?" in September 2022 reweighted to match US firms.

N= 335. www.atlantafed.org/SBU

# As of Summer/Fall 2022: ~17% of Full-Time Employees with a Bachelor's Degree or More Education are Fully Remote, ~41% are Full-Time on Site, ~42% are in a Hybrid Arrangement





**Source**: Responses to the questions:

- For each day last week, did you work a full day (6 or more hours), and if so where?

**Notes:** For each wave, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees with at least a 4-year college degree who either i) worked all their days on business premises; ii) worked some days on busines premises and some days at home; or iiii) worked all all days at home during the survey's reference week. Then we show the percentage for each group. The sample covers the July to October 2022 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

N = 9,972

#### References



• Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731.