

SWAA July 2022 Updates

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

27 July 2022



Latest survey wave included: June 2022

To sign up for regular results updates, please sign up [here](#).

- **Source of all data (unless noted):** Survey of Working Arrangements and Attitudes (SWAA), see www.wfhresearch.com

- **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 \geq \$10K in 2019 (\geq \$20K in early survey waves). From January to March 2022, we transitioned to earned \geq \$10K in prior year.
- The SWAA is fielded by market research firms that rely on wholesale aggregators (e.g., [Lucid](#)) 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.

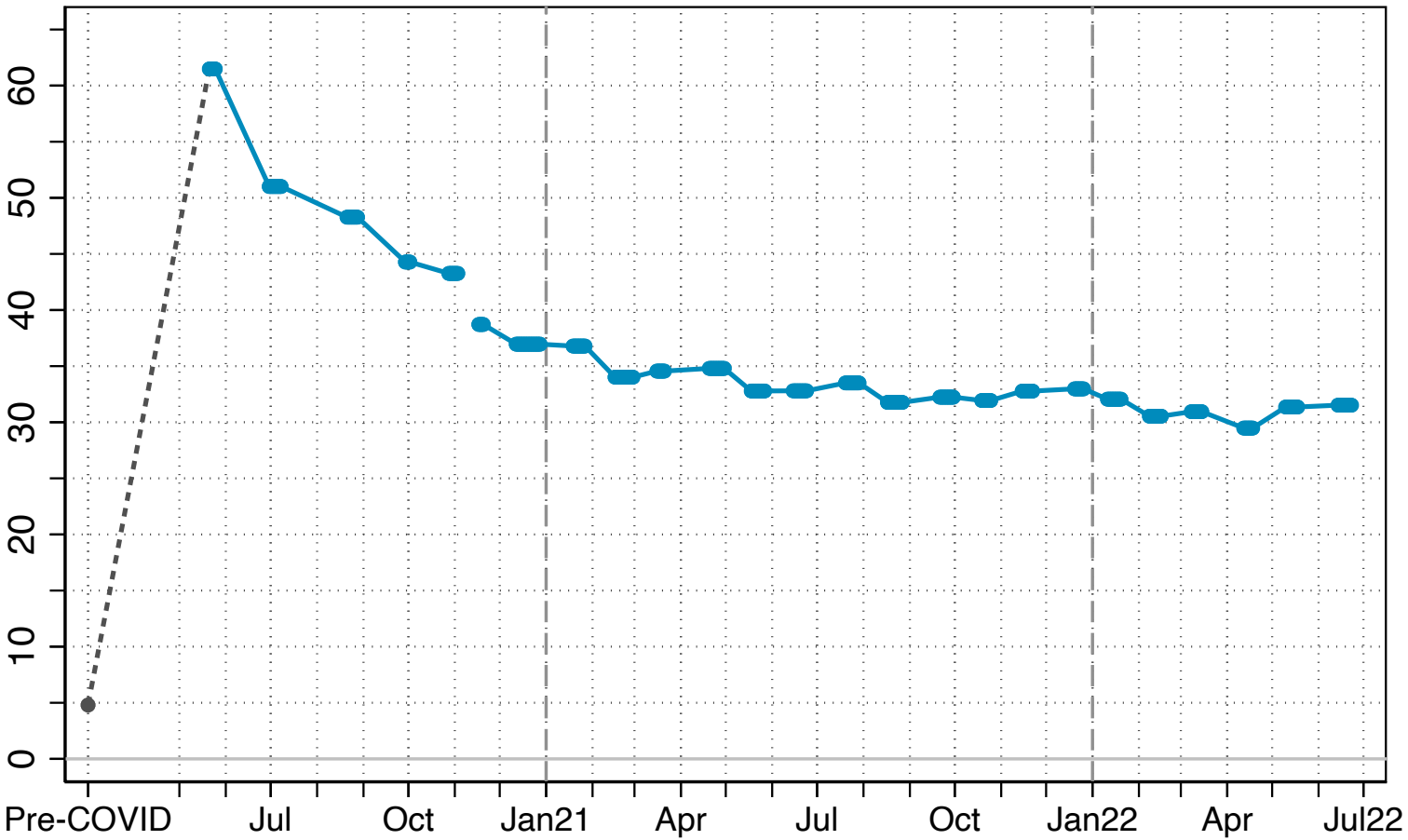
Representativeness

- 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 June 2022



Percentage of paid full days worked from home



*Pre-COVID estimate taken from the 2017-2018 American Time Use Survey
 *The break in the series in November 2020 reflects a change in the survey question.

- 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?**

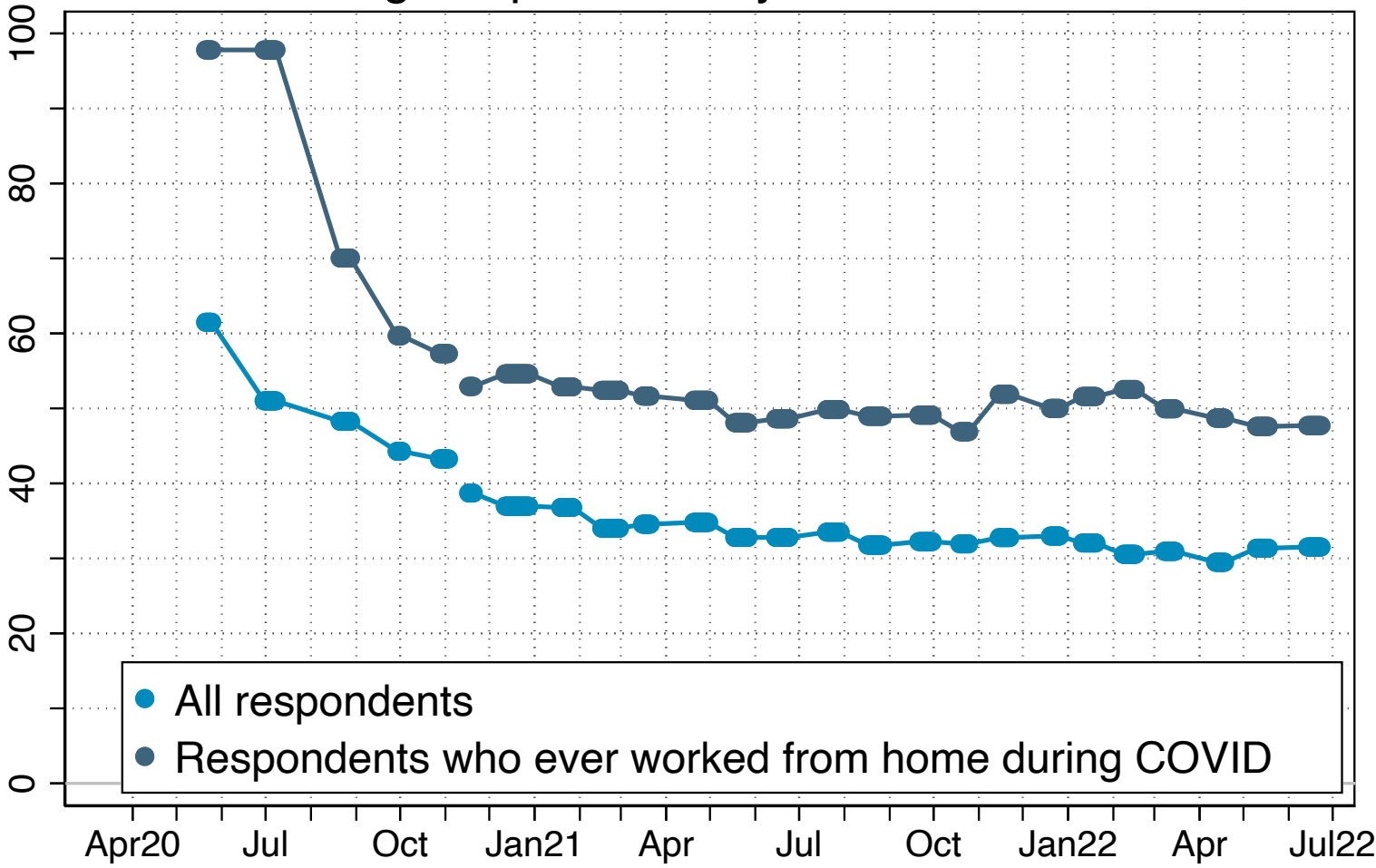
Notes: For each wave, we compute the percent of paid full days worked from home and plot it on the vertical axis. The horizontal-axis location shows when the survey was in the field. Before November 2020, we asked the first question above. Since November 2021, we have asked the second question. From 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.

N = 75,345

As of June 2022, the Percentage of Paid Full Days Worked from Home is Stabilizing at about 50% for Workers Who Are Able To



Percentage of paid full days worked from home



- 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.

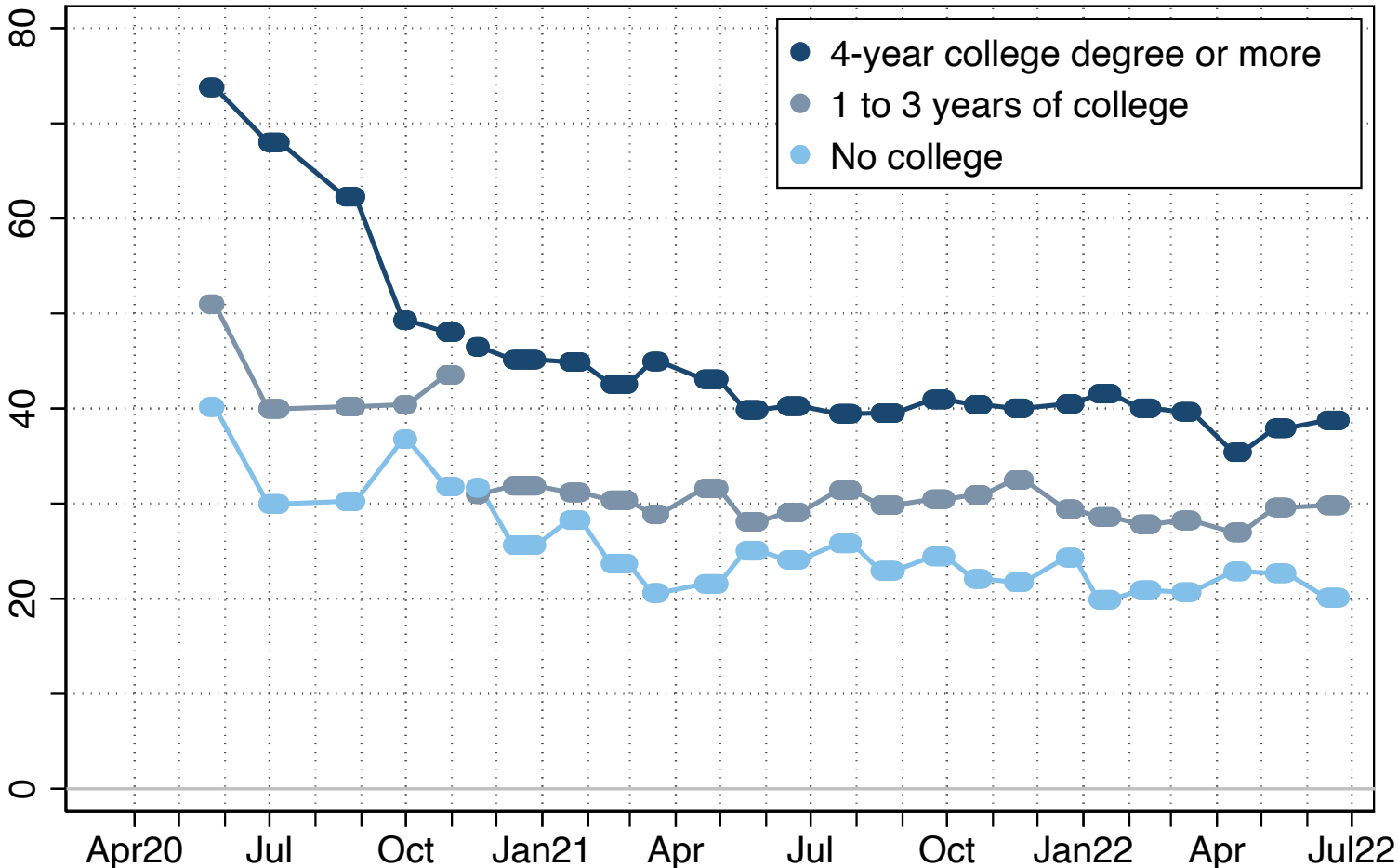
N = 75,345 (all respondents)
N = 55,321 (respondents who ever worked from home)

*The break in the series in November 2020 reflects a change in the survey question.

As of June 2022, the Percentage of Paid Full Days Worked from Home is Stabilizing at about 40% for Workers with 4-year College



Percentage of paid full days worked from home



*The break in the series in November 2020 reflects a change in the survey question.

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?**

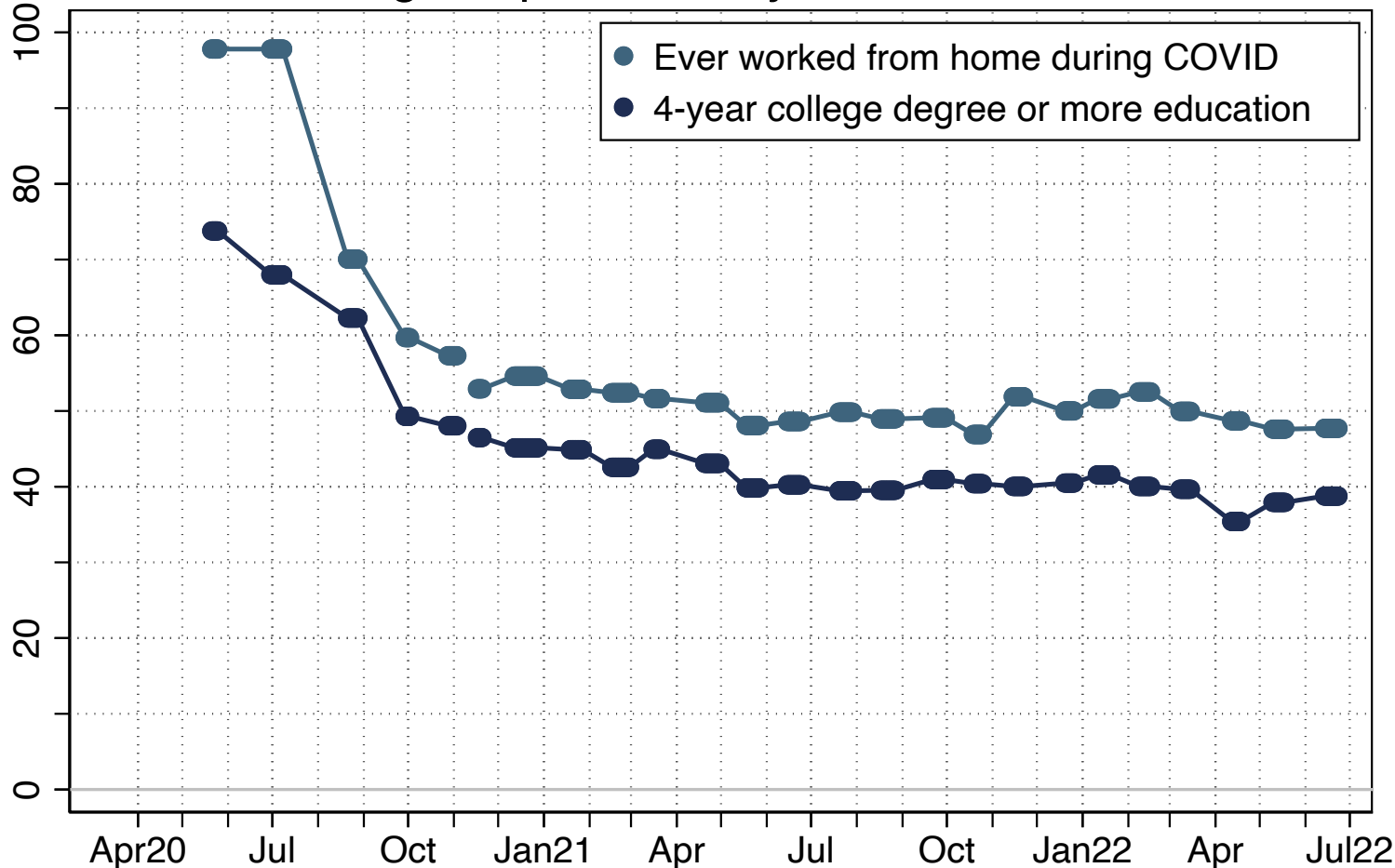
Notes: For each wave, we compute the percent of paid full days worked from home and plot it on the vertical axis. The horizontal-axis location shows when the survey was in the field. Before November 2020, we asked the first question above. Since November 2021, we have asked the second question. From 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.

N = 45,742 (4-year college degree or more)
N = 16,724 (1 to 3 years of college)
N = 12,879 (No college)

Percentage of Paid Full Days Worked from Home, May '20 to June '22: College Graduates vs. Respondents Able to Work From Home



Percentage of paid full days worked from home



*The break in the series in November 2020 reflects a change in the survey question.

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.

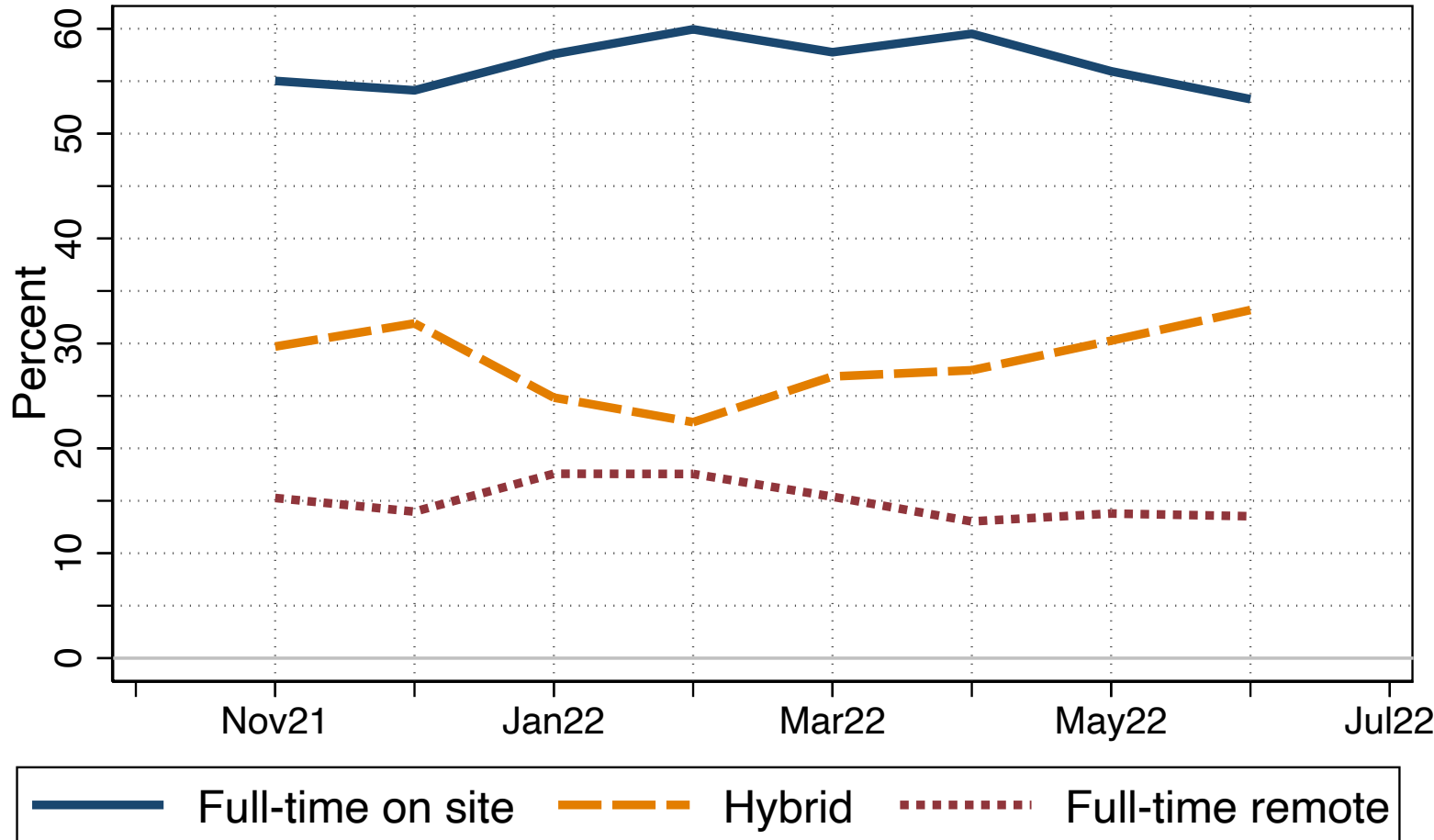
N = 45,742 (4-year college degree or more)

N = 55,321 (respondents who ever worked from home)

As of June 2022: ~15% of Full-Time Employees are Fully Remote, ~55% are Full-Time on Site, ~30% are in a Hybrid Arrangement



Current Working Arrangements: Full-time Employees



*The sample includes wage and salary employees who worked 5 or more days during the survey reference week.

Source: Responses to the questions:

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

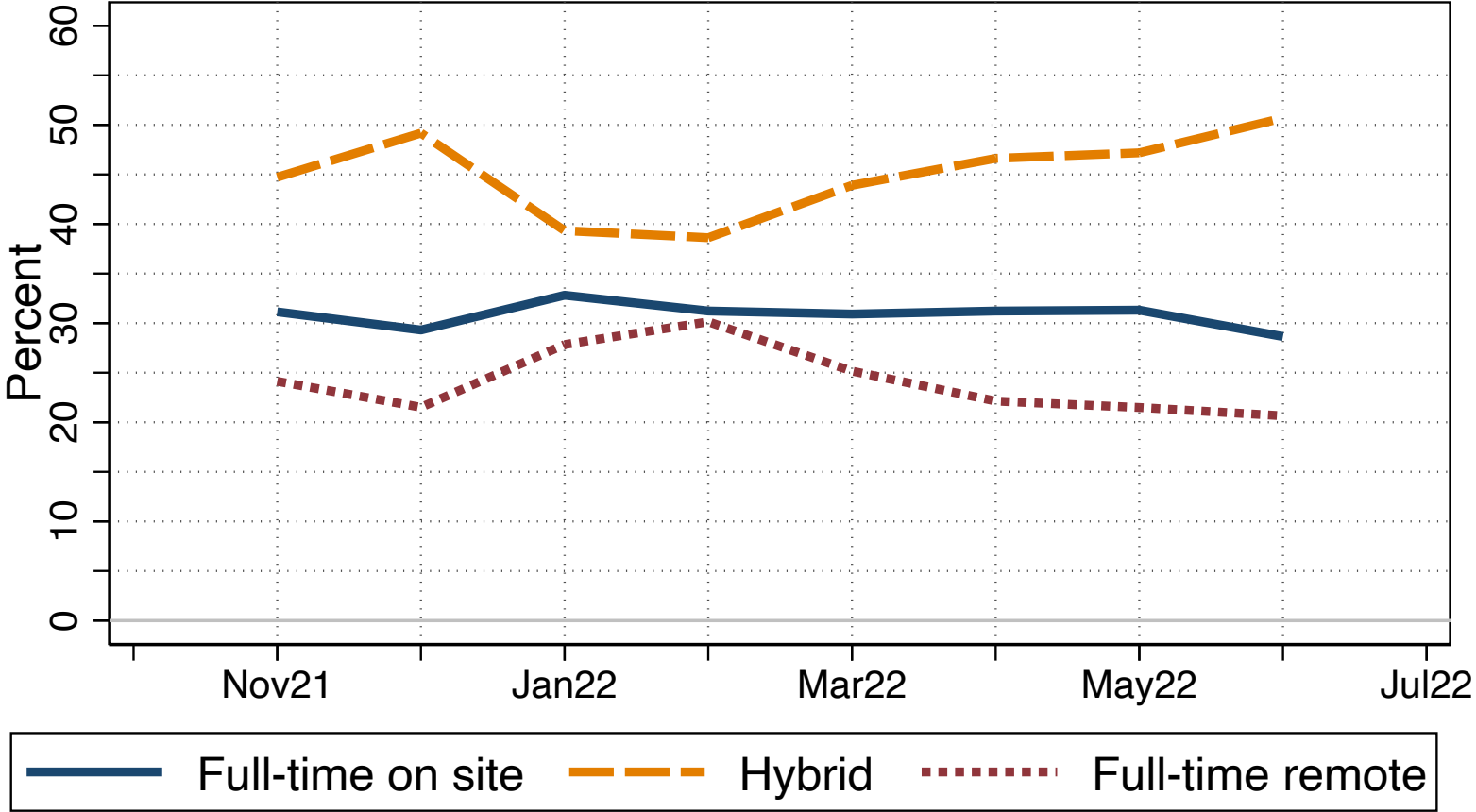
Notes: For each wave, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey's reference week. Then we plot each percentage on the vertical axis. The sample covers the November 2021 to June 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 = 21,908

But hybrid dominates when we zoom in on workers who able to work from home



Current Working Arrangements:
Full-time Employees Able to Work From Home



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 iii) worked all all days at home during the survey’s reference week. This version of the chart focuses on respondents who are able to work from home. Then we plot each percentage on the vertical axis. The sample covers the November 2021 to June 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.

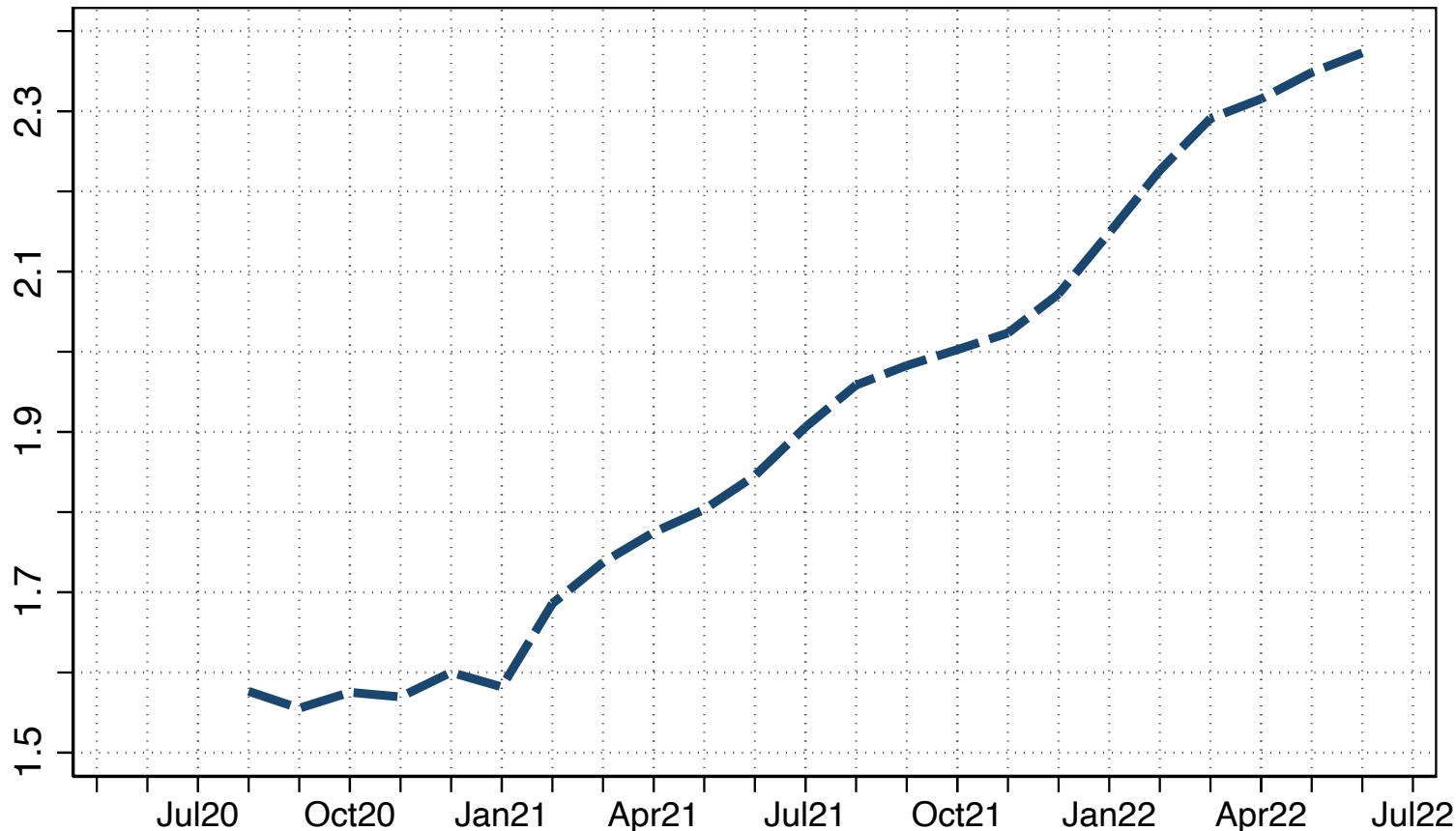
*The sample includes wage and salary employees who are able to work from home and worked 5 or more days during the survey reference week.

N = 16,203

Employer Plans for WFH post-COVID are at 2.3 Days per Week (for persons able to work from home) and rising



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?*

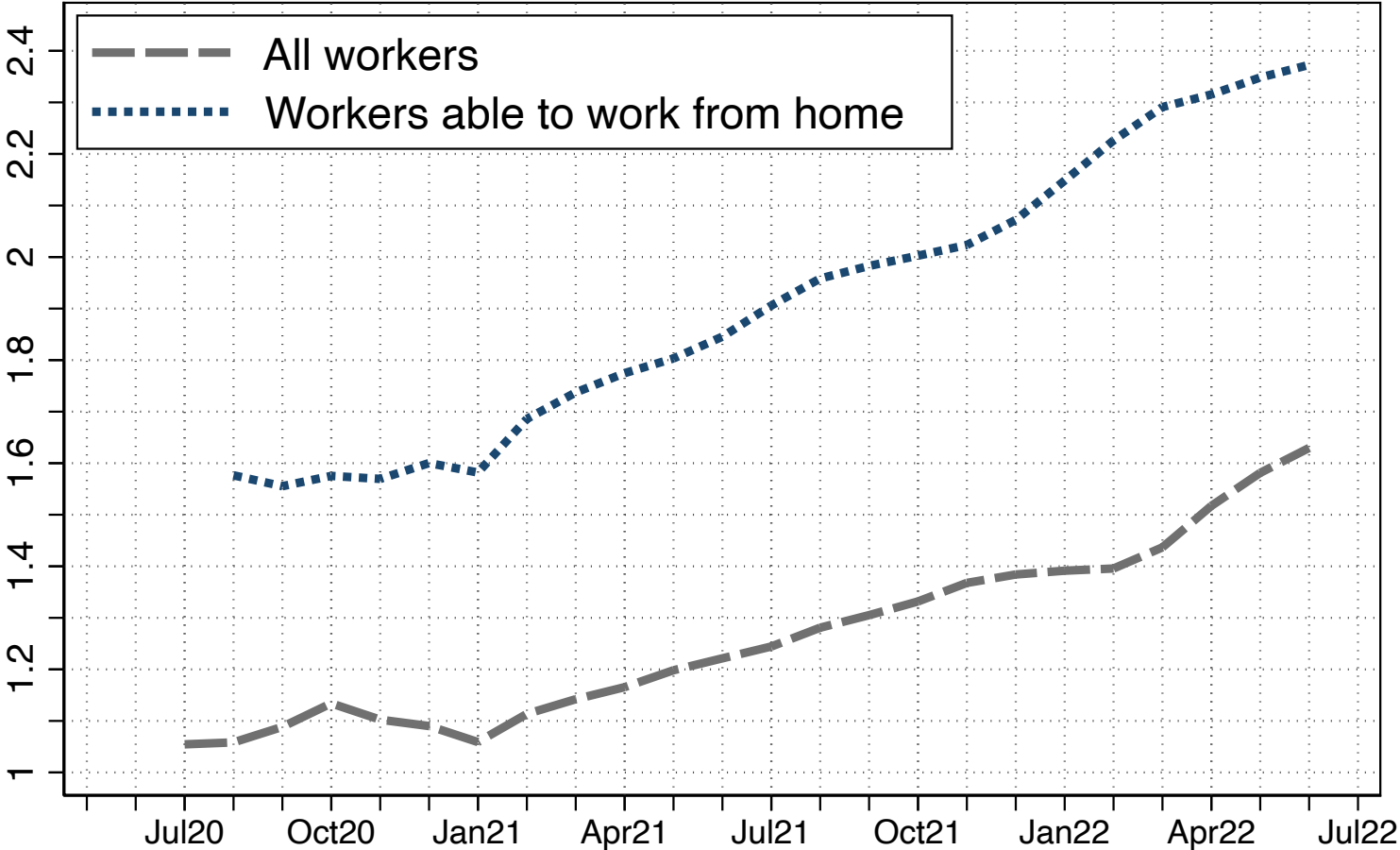
Sample: Data are from all SWAA waves, covering August 2020 to June 2022. The sample includes all respondents who reported their employer's plans for post-COVID WFH and who have work-from-home experience during the pandemic (thus able to work from home). We exclude respondents who report having no employer. 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 = 58,138 (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?*

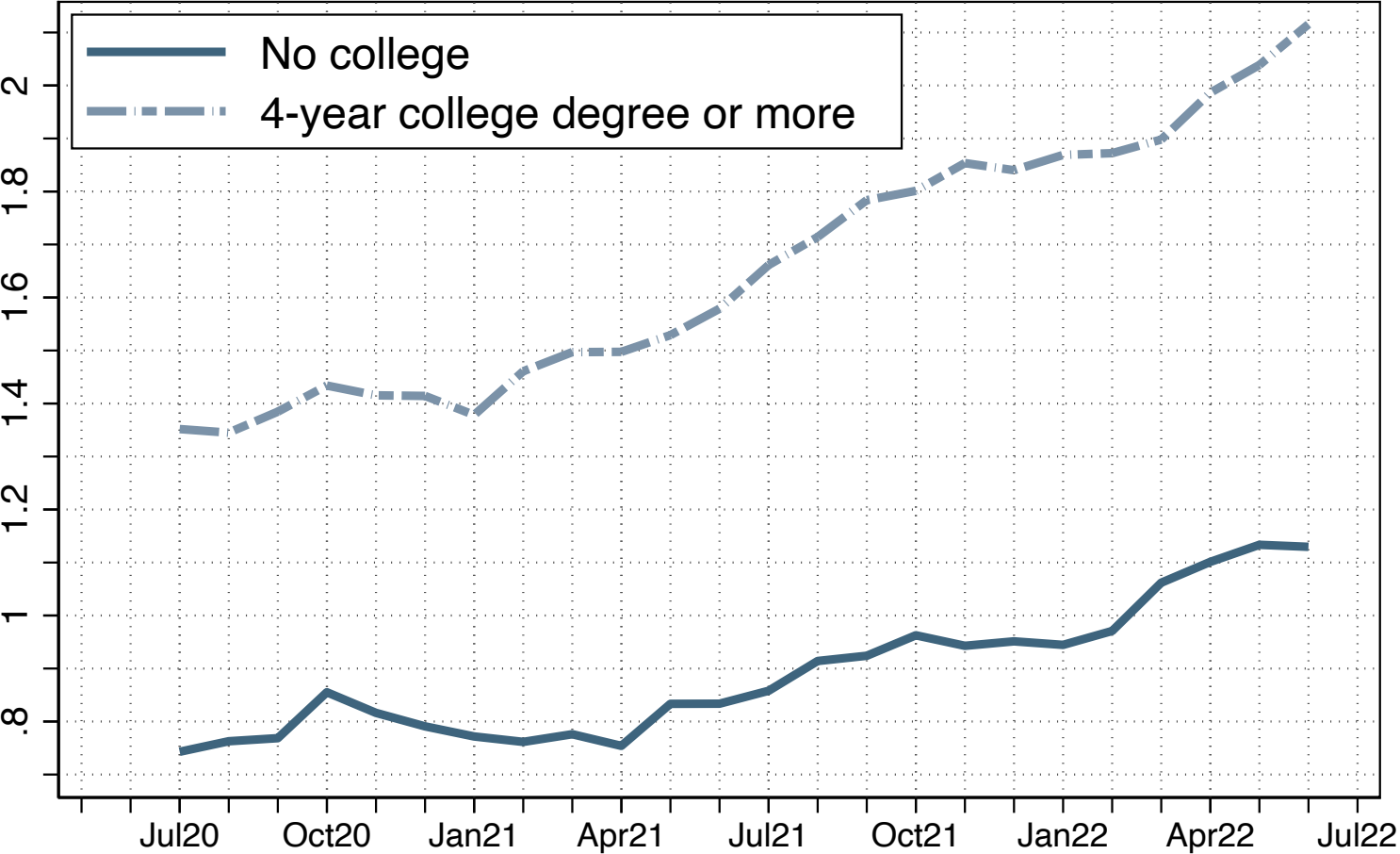
Sample: Data are from all SWAA waves, covering July 2020 to June 2022. The sample includes all respondents who reported their employer’s plans for post-COVID WFH (“All workers” series), restricting attention to workers who have work-from-home experience during the pandemic for the series labeled “Workers 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 = 82,885 (all respondents) and 58,138 (able to work from home)

Employer Plans for Full Paid Days Worked from Home After the Pandemic are ~2x Higher for College Graduates than for Those with No College



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?*

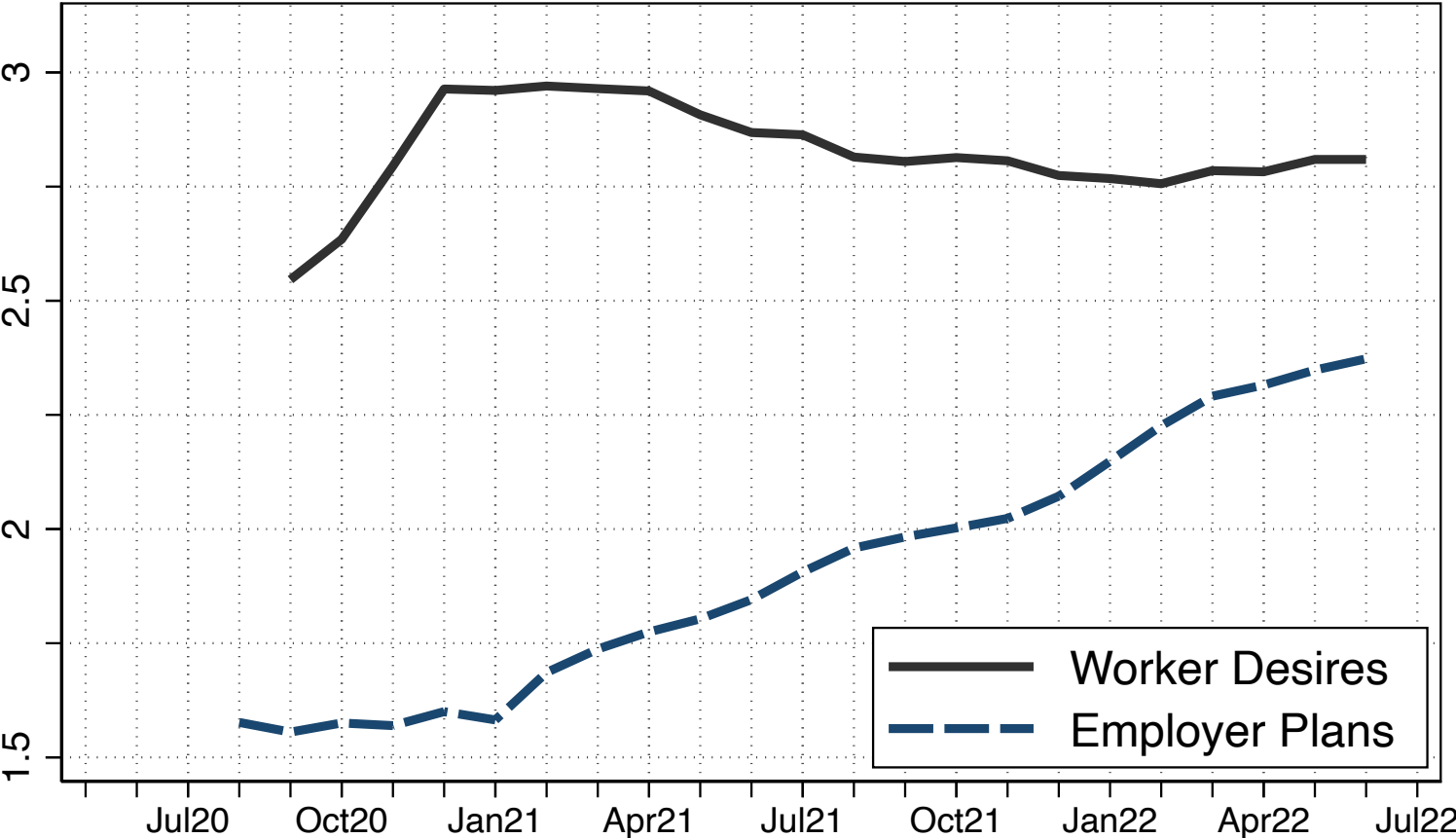
Sample: Data are from all SWAA waves, covering July 2020 to June 2022. The sample includes all respondents who reported their employer’s plans for post-COVID WFH (“All workers” series), plotting separate series for workers who have 4-year college degrees and those with no college. We exclude respondents who report having no employer and 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 = 47,854 (respondents with 4-year college degrees or more)
N = 15,954 (respondents with no college)

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



Sample: Workers able to work from home

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 July 2020 to June 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.

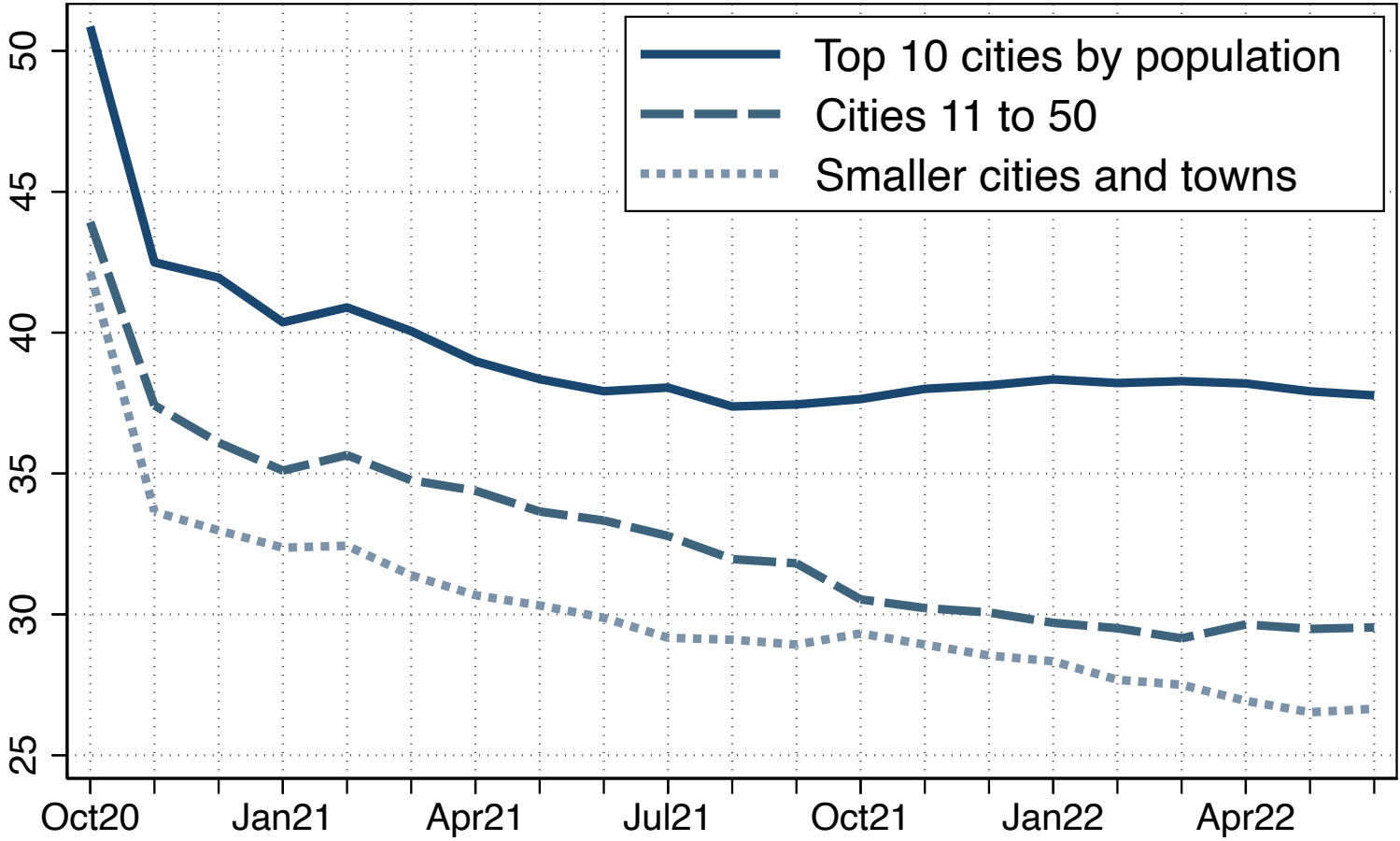
N = 58,073 (employer plans, able to work from home)

N = 62,426 (worker desires, able to work from home)

Working From Home is Much More Common in Major Cities than in Smaller Cities and Towns



Percent of paid full days worked from home



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 business premises. 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). 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.

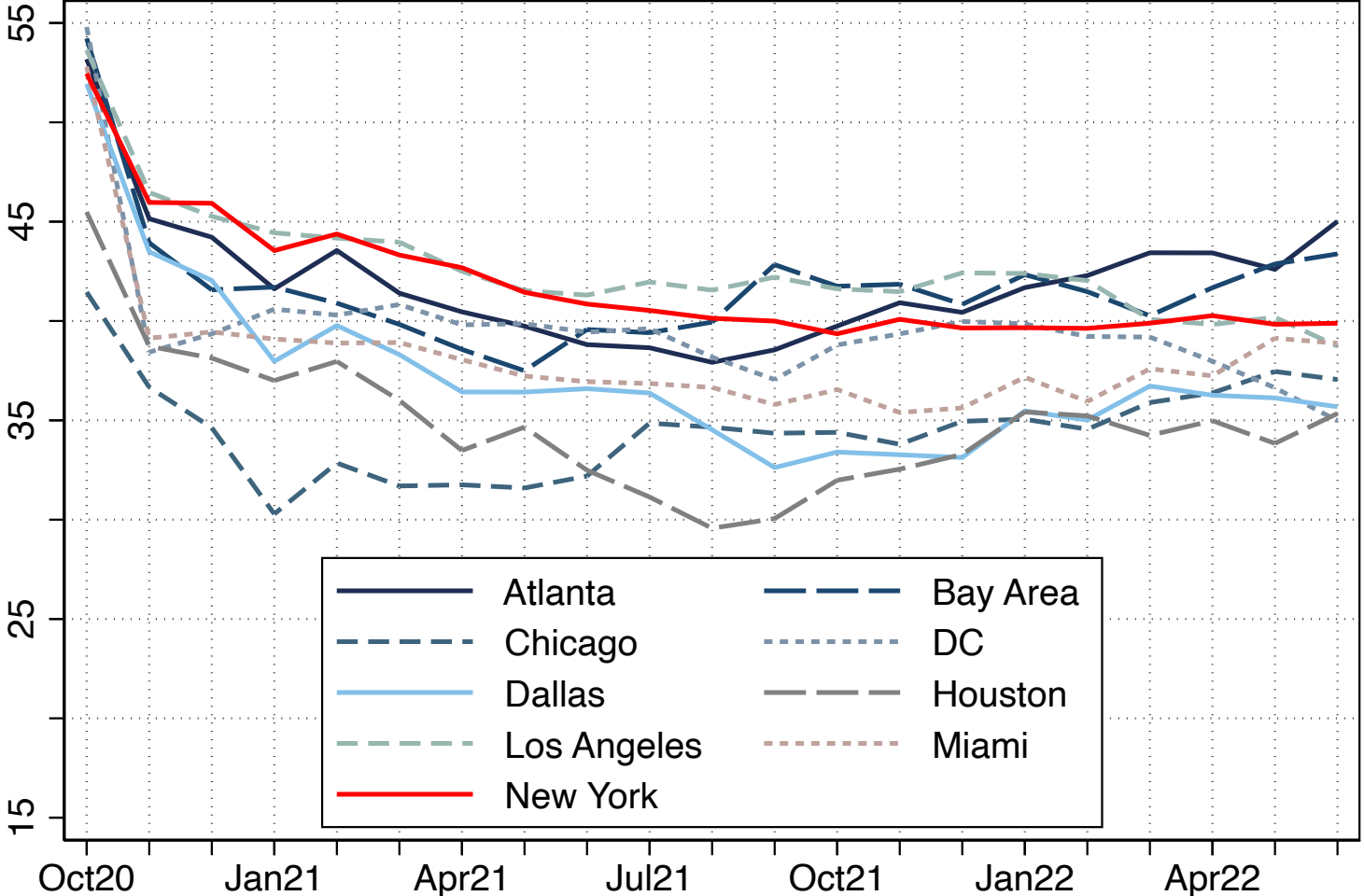
*We define cities using Combined Statistical Areas and use the location of the respondent's current job.

N = 71,326

The Evolution of Working From Home Across 9 Major Cities



Percent of paid full days worked from home



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?**

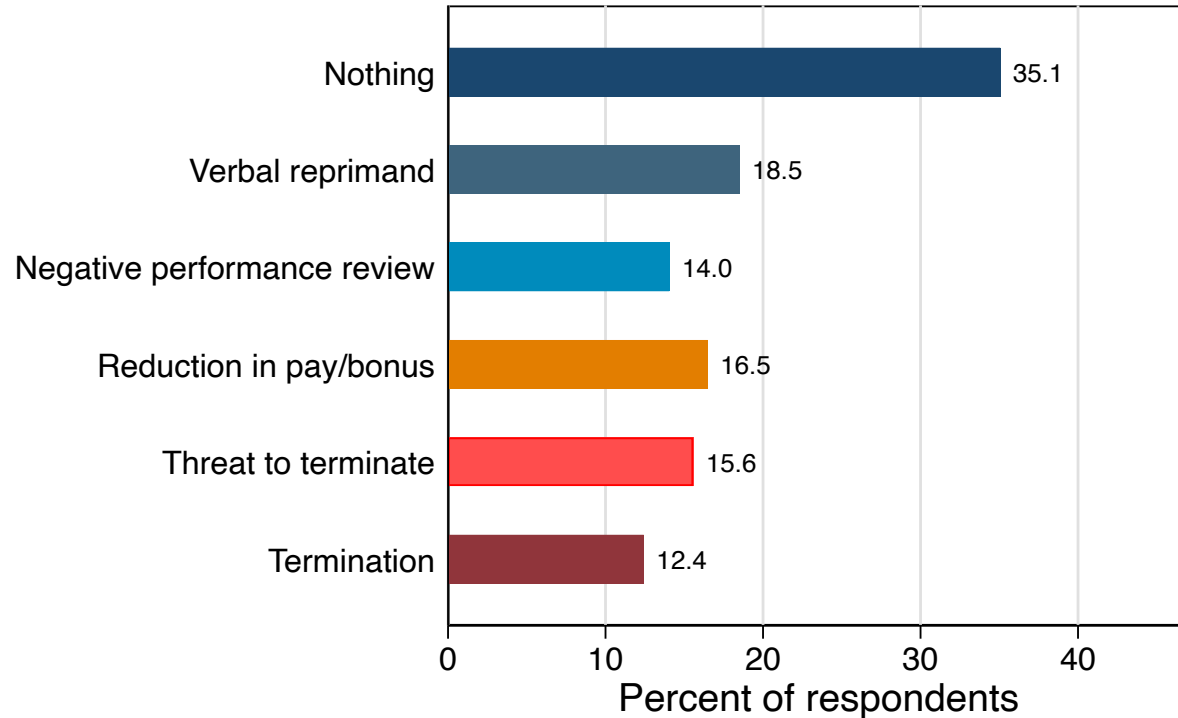
Notes: The chart plots 6-month moving averages where available and 3-month moving averages prior to November 2020. For each wave, we compute the percent of paid full days worked from home and plot it on the vertical axis, after sorting respondents into cities (i.e., Combined Statistical Areas) by the location of their current job’s business premises. 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). 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 = 71,326

35% of Workers Report “No Consequences” For Failing to Show Up to Work in Person. Only 17% do for Failing To Complete Work On Time.

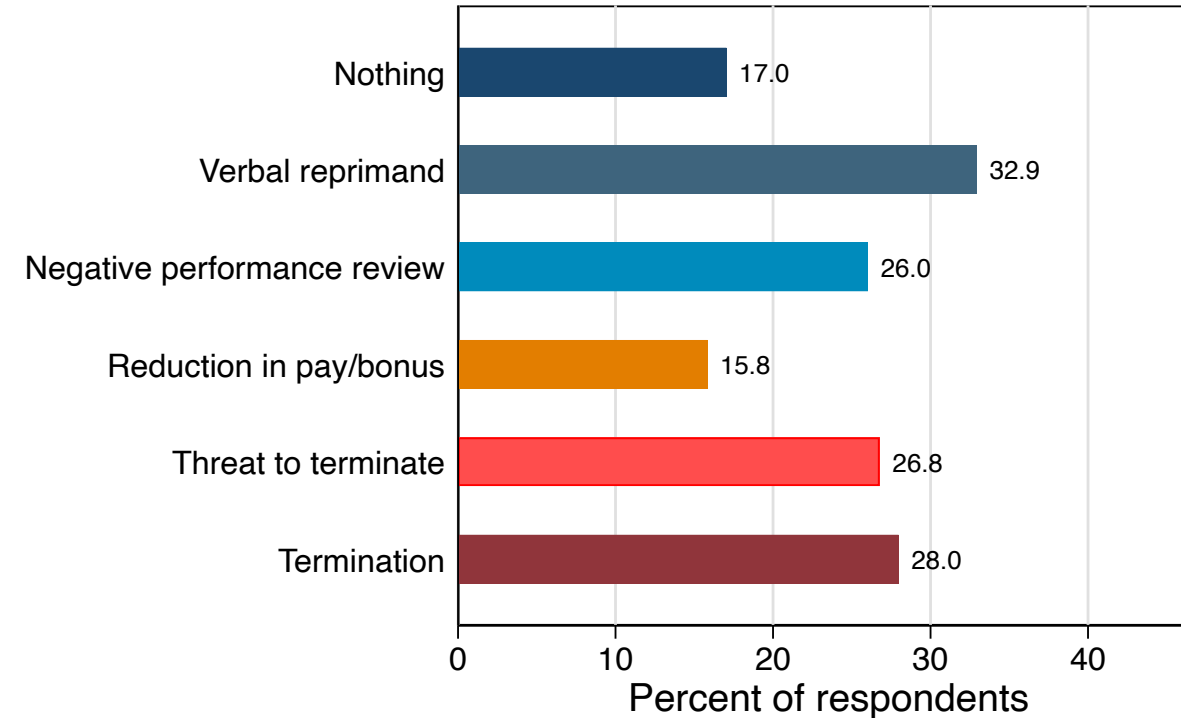


How has your employer responded to employees who work on business premises fewer days than requested?



*Note: Excludes respondents who say 'I don't know' or 'Other'.

How would your employer react if you consistently failed to complete work on time?



*Note: Excludes respondents who say 'I don't know' or 'Other'.

Responses to the questions: (1) *How has your employer responded to employees who work on business premises fewer days than requested? Please select all that apply.* (2) *How would your employer react if you consistently failed to complete work on time? Please select all that apply.*

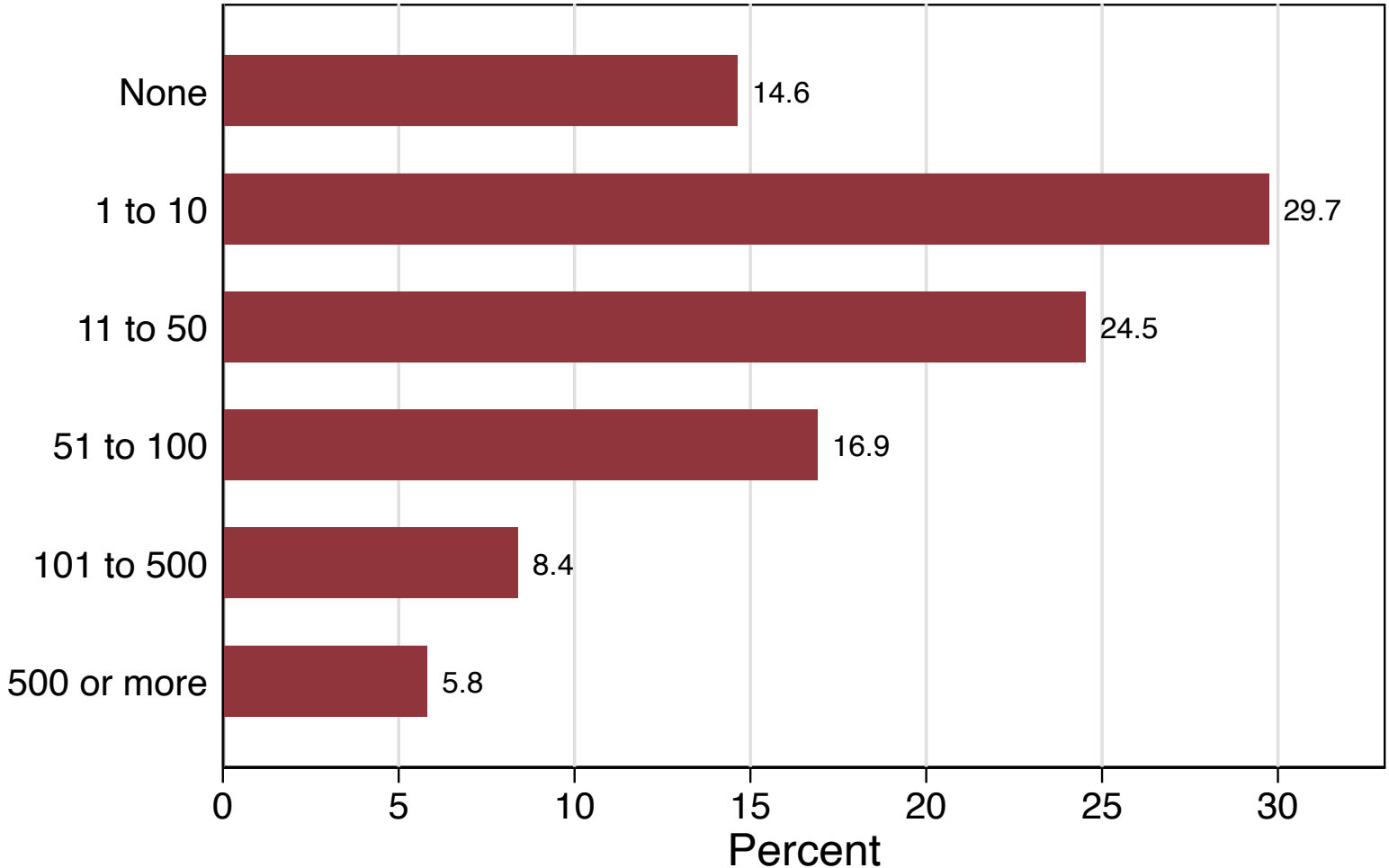
Notes: Each chart shows the percent of respondents choosing each response option (allowing them to choose all that apply). The sample includes responses from the June 2022 SWAA wave, focusing on wage and salary employees who reported working for pay during the survey’s reference week. We re-weight the 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 = 3,799

85% of respondents talk to at least one other person during a typical workday



During a typical workday, how many coworkers, customers, and clients do you engage in person or by video?



Responses to the question:
- During a typical workday, *how many coworkers, customers, and clients do you engage in person or by video*

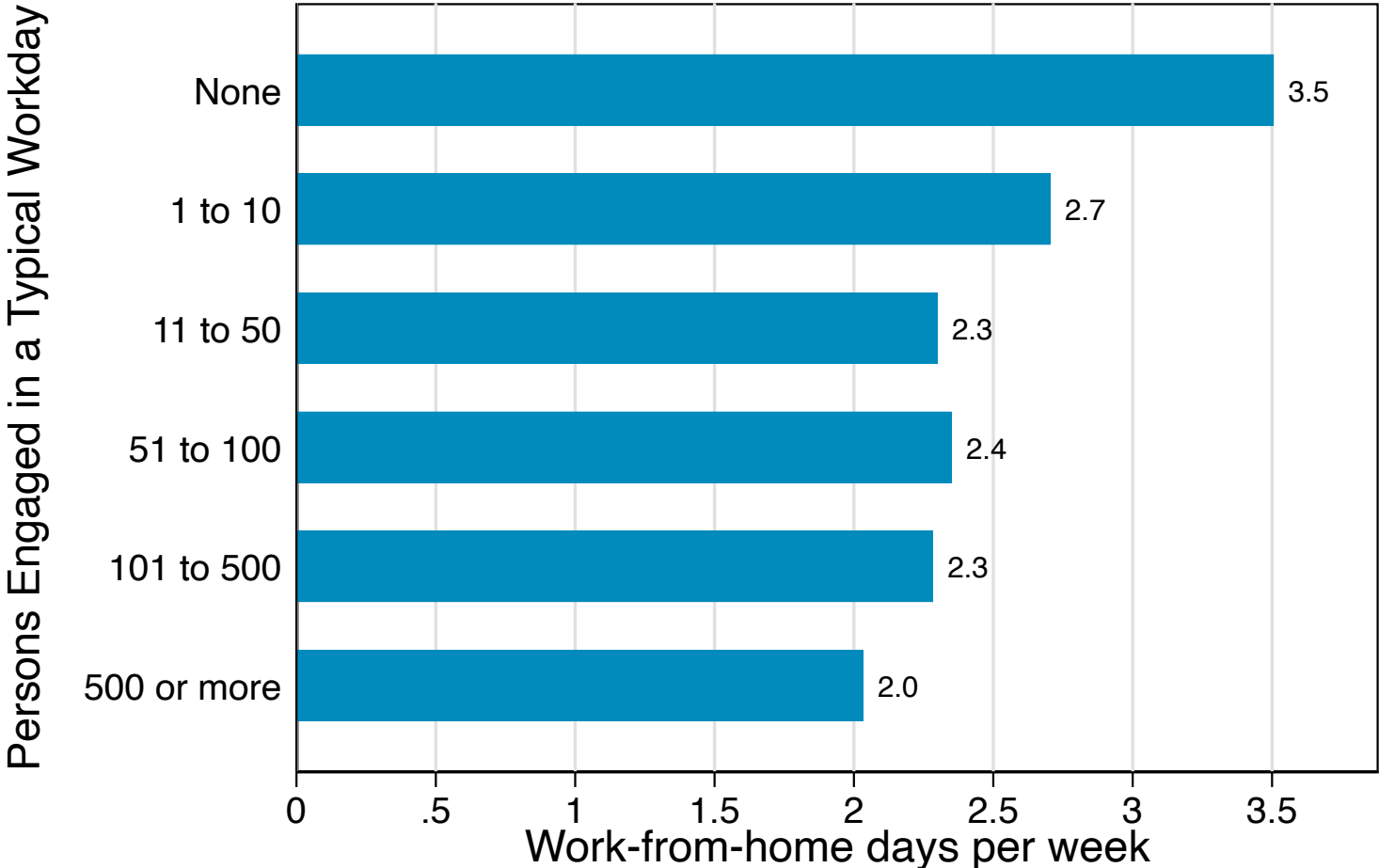
Notes: The chart shows the percent of respondents choosing each option for the question above. The sample includes responses from the June 2022 SWAA wave, focusing respondents who reported working for pay during the survey’s reference week. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

N = 4,626

Engaging with fewer people correlates with higher levels of remote work



Workers who talk to more people do less working from home



*Sample: Respondents who are able to work from home.

Responses to the question:

- During a typical workday, **how many coworkers, customers, and clients do you engage in person or by video**
- For each day last week, did you **work a full day (6 or more hours)**, and if so **where?**

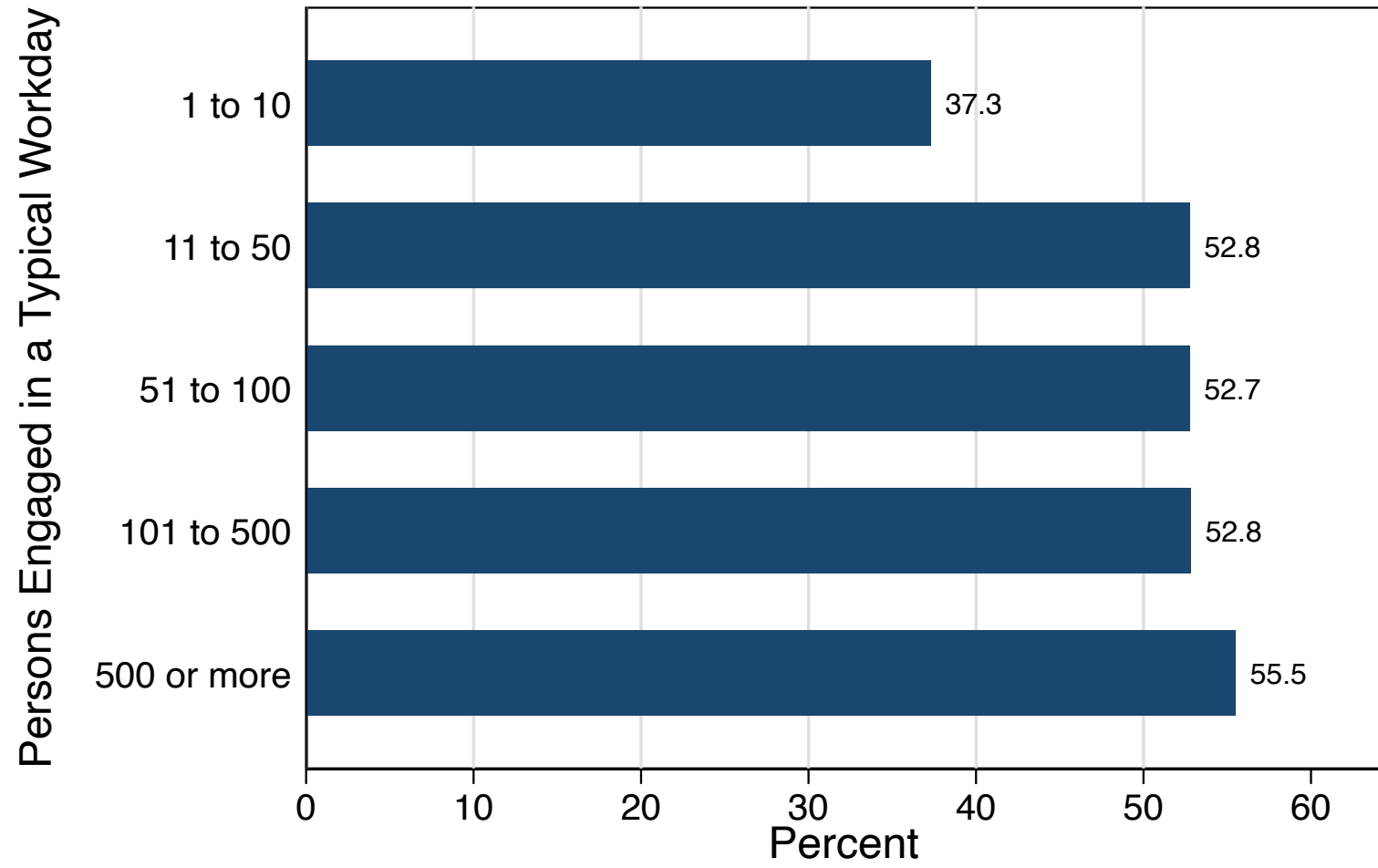
Notes: The chart shows the percent of respondents choosing each option for the question above. The sample includes responses from the June 2022 SWAA wave, focusing respondents who reported working for pay during the survey’s reference week. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

N = 3,540

Our typical respondent spends more than 40% of their typical work day meeting or talking to people



What percentage of your typical workday do you spend meeting or talking to people?



Responses to the questions:

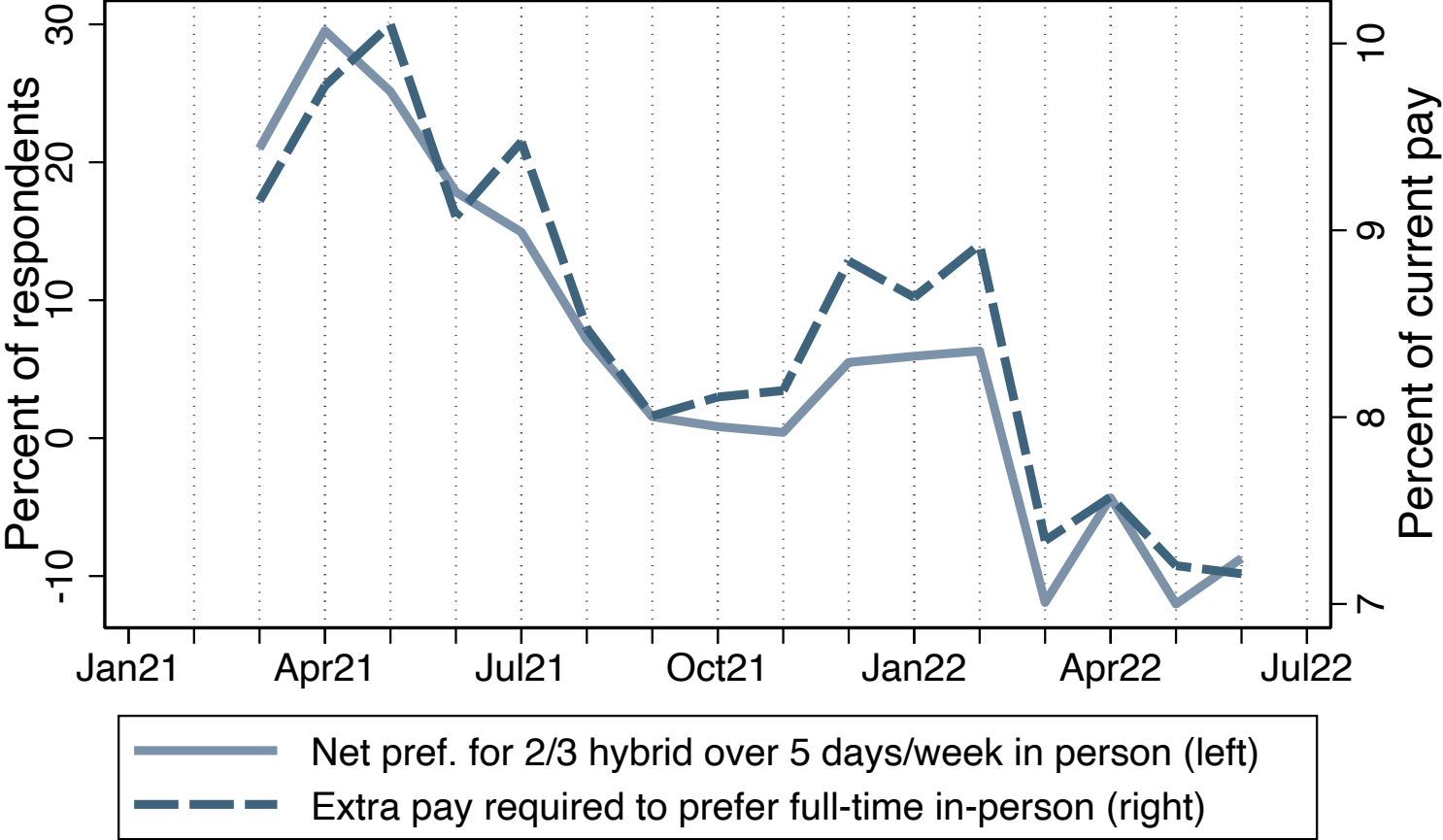
- *During a typical workday, how many coworkers, customers, and clients do you engage in person or by video?*
- *What percentage of your typical workday do you spend meeting or talking to people?*

Notes: The chart shows the average percent of the typical workday spent meeting and talking to people conditional on the number of people engaged in the typical workday. The sample includes responses from the June 2022 SWAA wave, focusing respondents who reported working for pay during the survey's reference week and excluding responses that failed the attention-check questions. 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 = 3,958**

Preferences for Hybrid (Over Full-Time In-Person) Work Have Declined Since Early 2021



Amenity Value of Working From Home Has Declined: Respondents Able to Work From Home



*Sample: Full-time workers able to work from home.

Responses to the questions:

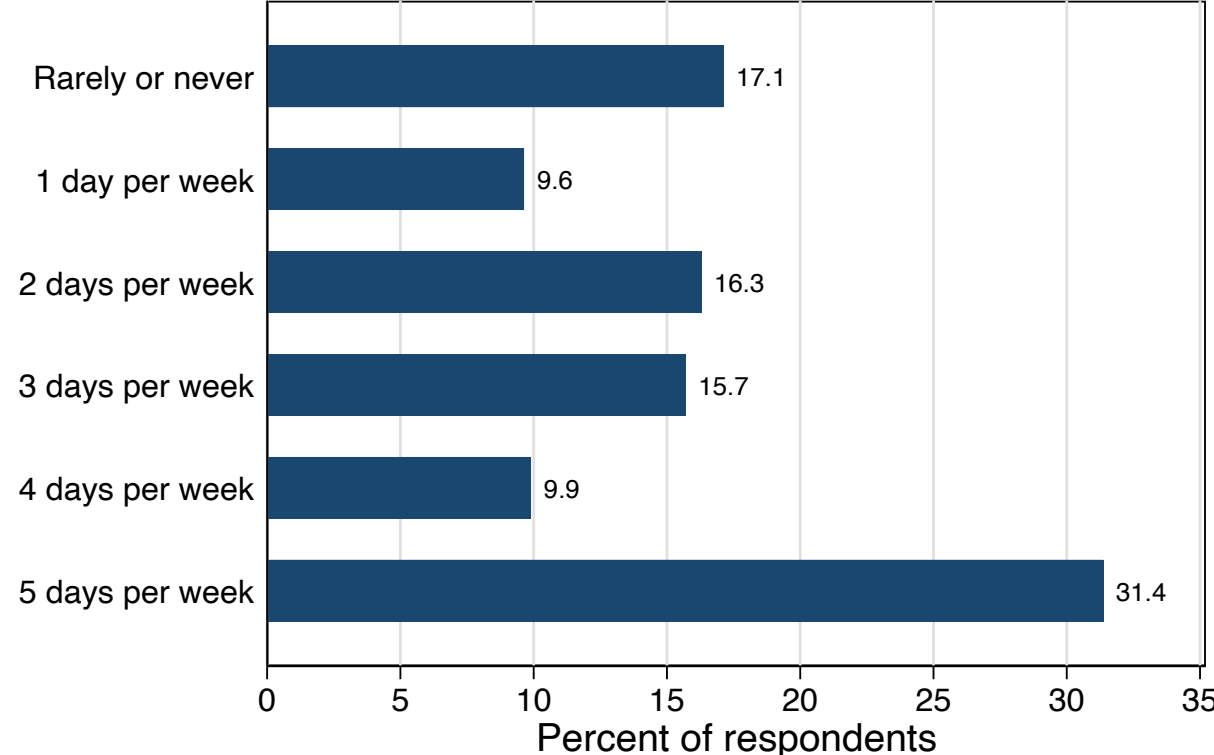
- Assuming it **doesn't matter for your pay**, which working arrangements would you prefer after COVID is under control?
 - Working 5 days a week on my employer's premises
 - Working 3 days a week on my employer's premises and 2 days at home
 - I don't prefer one over the other
- How much **extra pay** would it take for you to prefer working **5 days a week on your employer's premises** after COVID is under control? [Follow up for those who prefer 3 days a week on premises and 2 days at home]

Notes: The solid line shows the percent of full-time workers who are able to work from home who prefer 3 days a week on premises and 2 days at home, minus the percent who prefer 5 days on premises. The dashed line shows the amount of extra pay (as percent of current pay) required for those who prefer the hybrid arrangement to prefer full-time in-person work, assuming zero extra pay is required for those who are indifferent or already prefer full-time in-person work. 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 = 25,418**

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

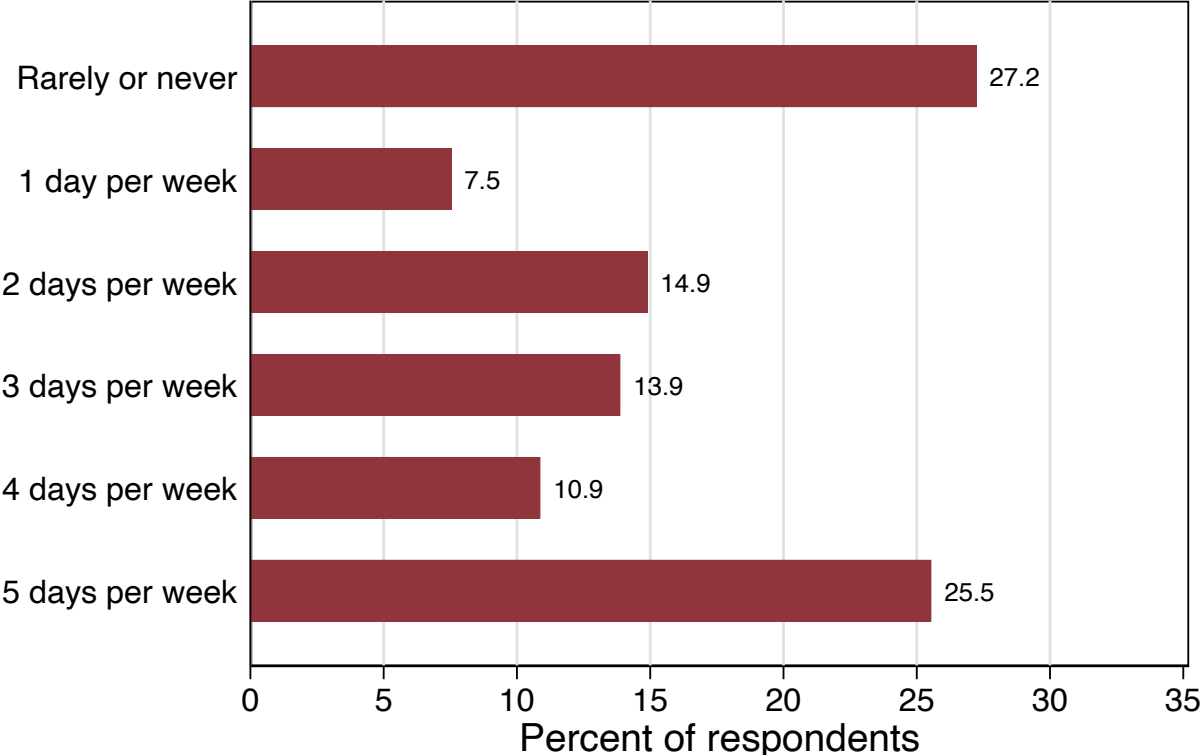


Worker desired amount of post-COVID WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 5744

Employer planned amount of post-COVID WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 5197

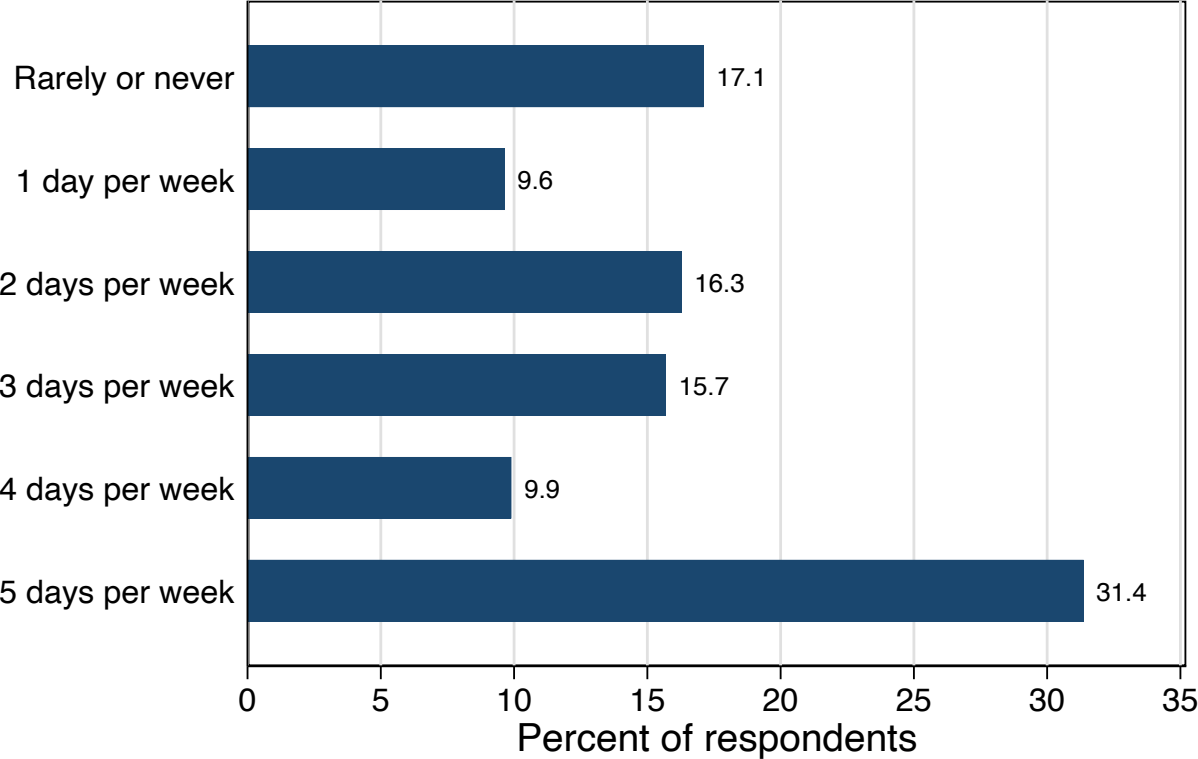
Responses to the questions: *As the pandemic ends*, how often would you **like to** have paid workdays at home? *As the pandemic ends*, how often **is your employer planning** for you to work full days at home?

Sample: Data are from the April to June 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. The chart on the right excludes respondents who report having no employer or who say their employer has not given them a clear post-pandemic plan. 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.

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

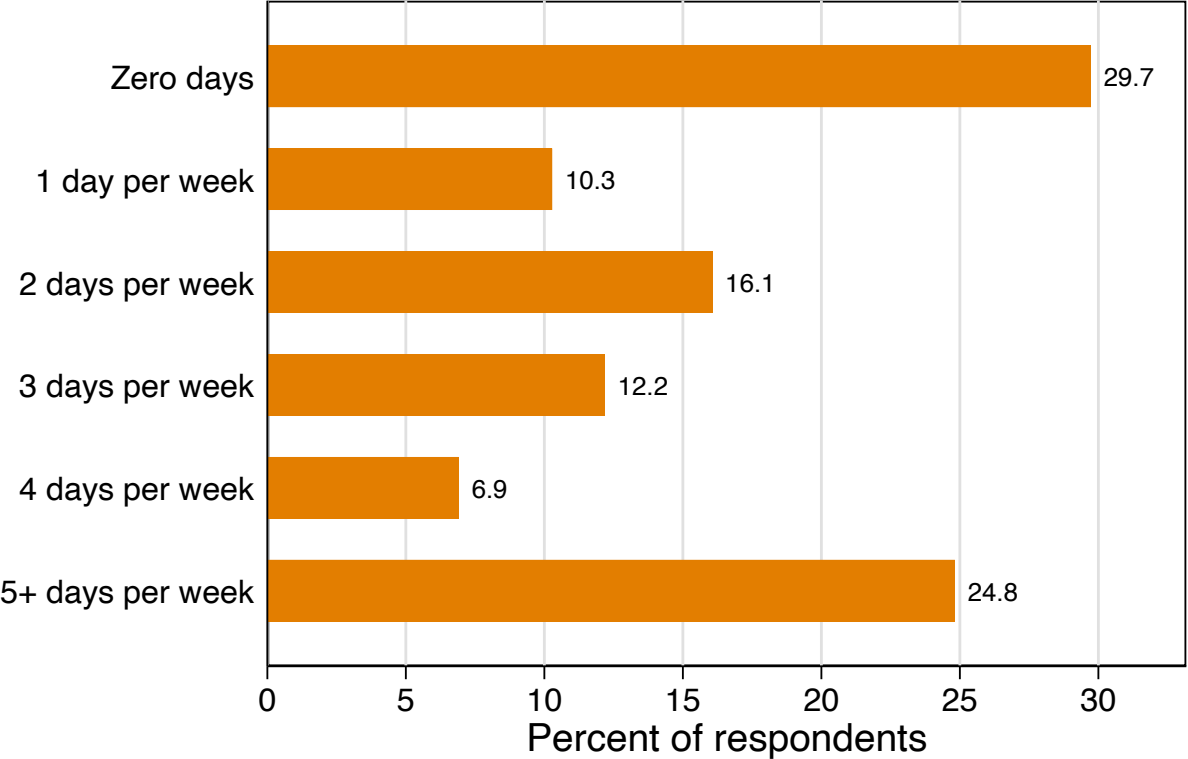


Worker desired amount of post-COVID WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 5744

Current amount of post-COVID WFH days

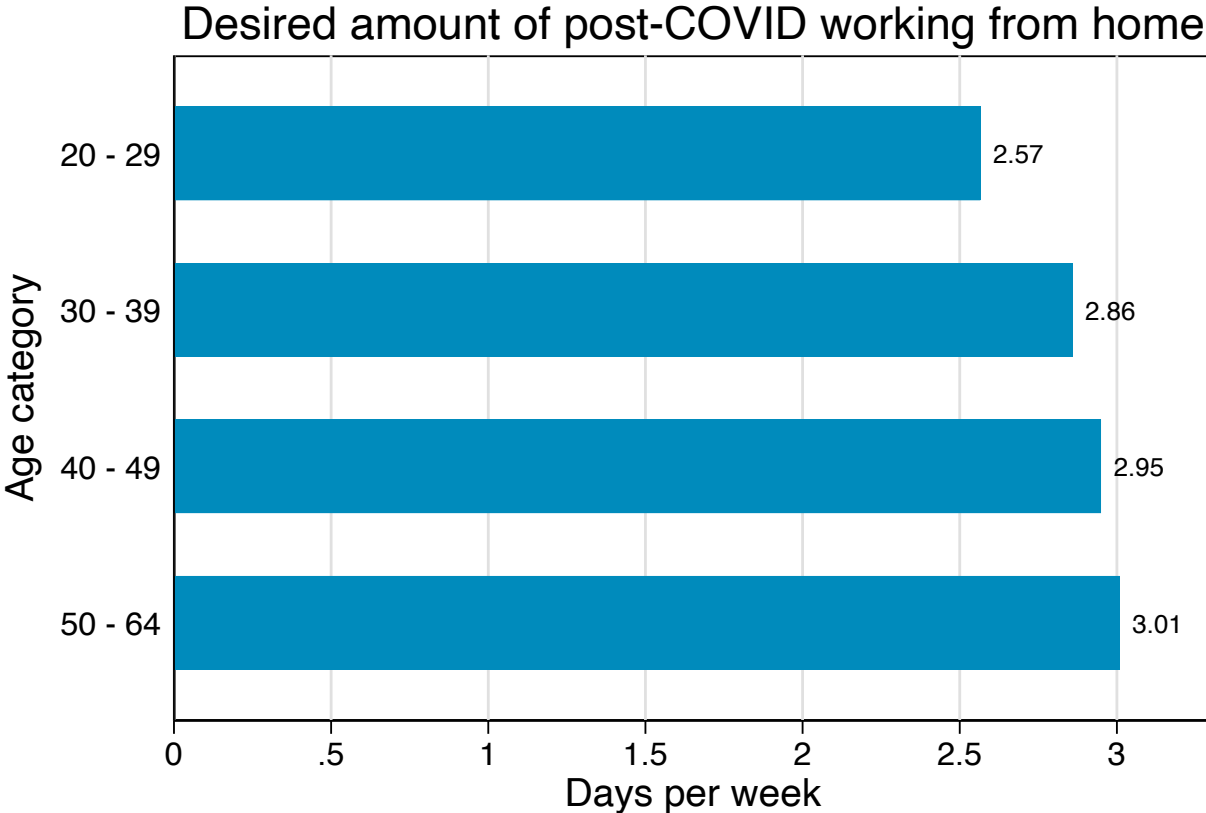


Sample: Full-time wage and salary employees who are able to WFH. N = 5517

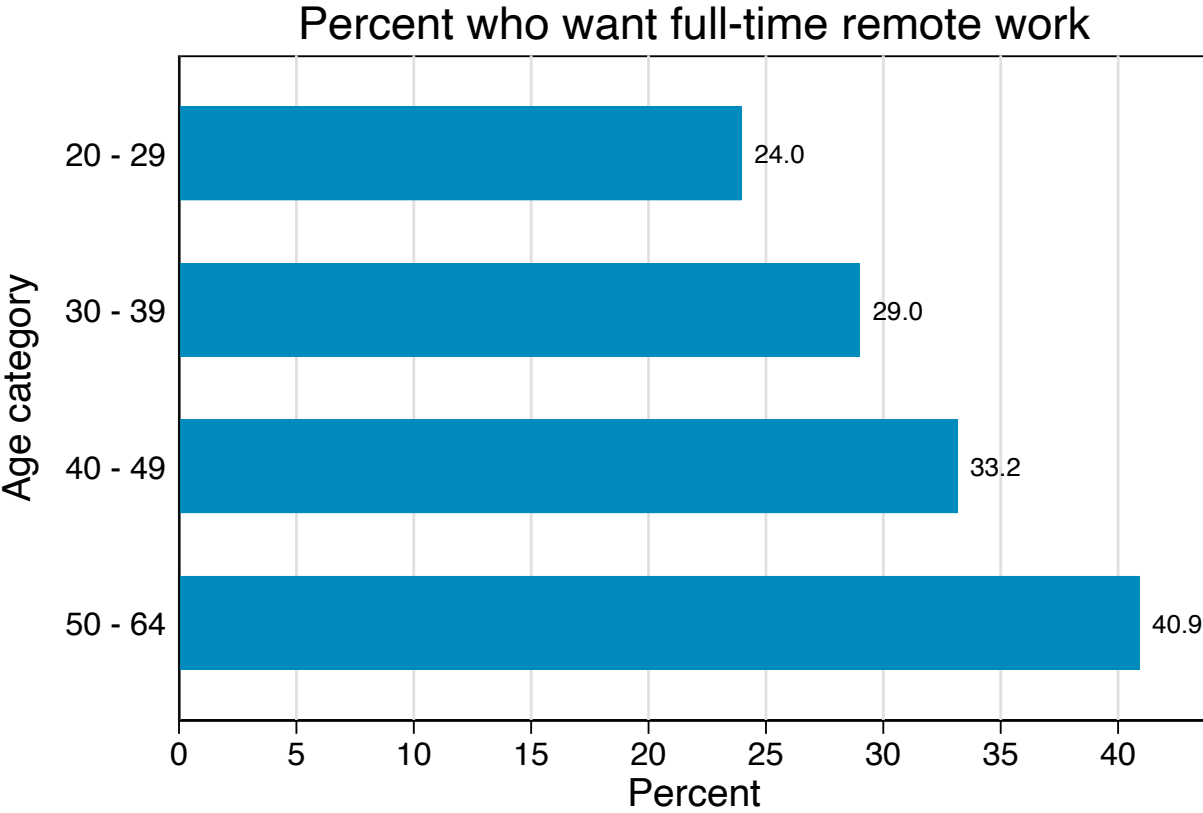
Responses to the questions: *As the pandemic ends*, how often would you **like to** have paid workdays at home? For each day last week, did you **work a full day (6 or more hours)**, and if so **where**?

Sample: Data are from the April to June 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.

The desire to work from home increases with age



*Sample: Respondents able to work from home.



*Sample: Respondents able to work from home.

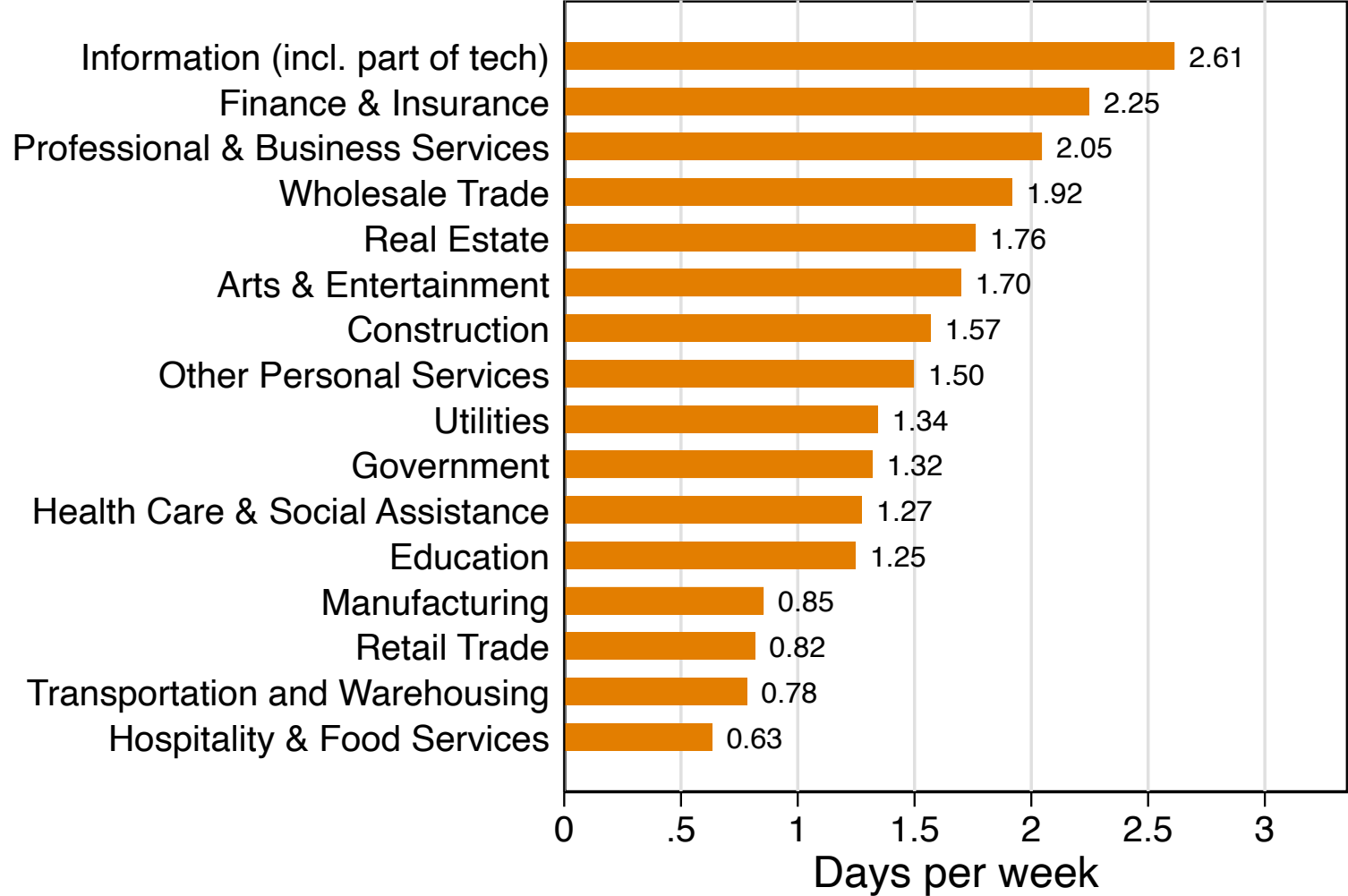
Responses to the question: *As the pandemic ends*, how often would you *like to* have paid workdays at home?

Sample: Data are from the April to June 2022 SWAA waves. The sample includes respondents who have work-from-home experience during the pandemic and pass the attention-check questions. 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 = 8,788 (both figures)**

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?

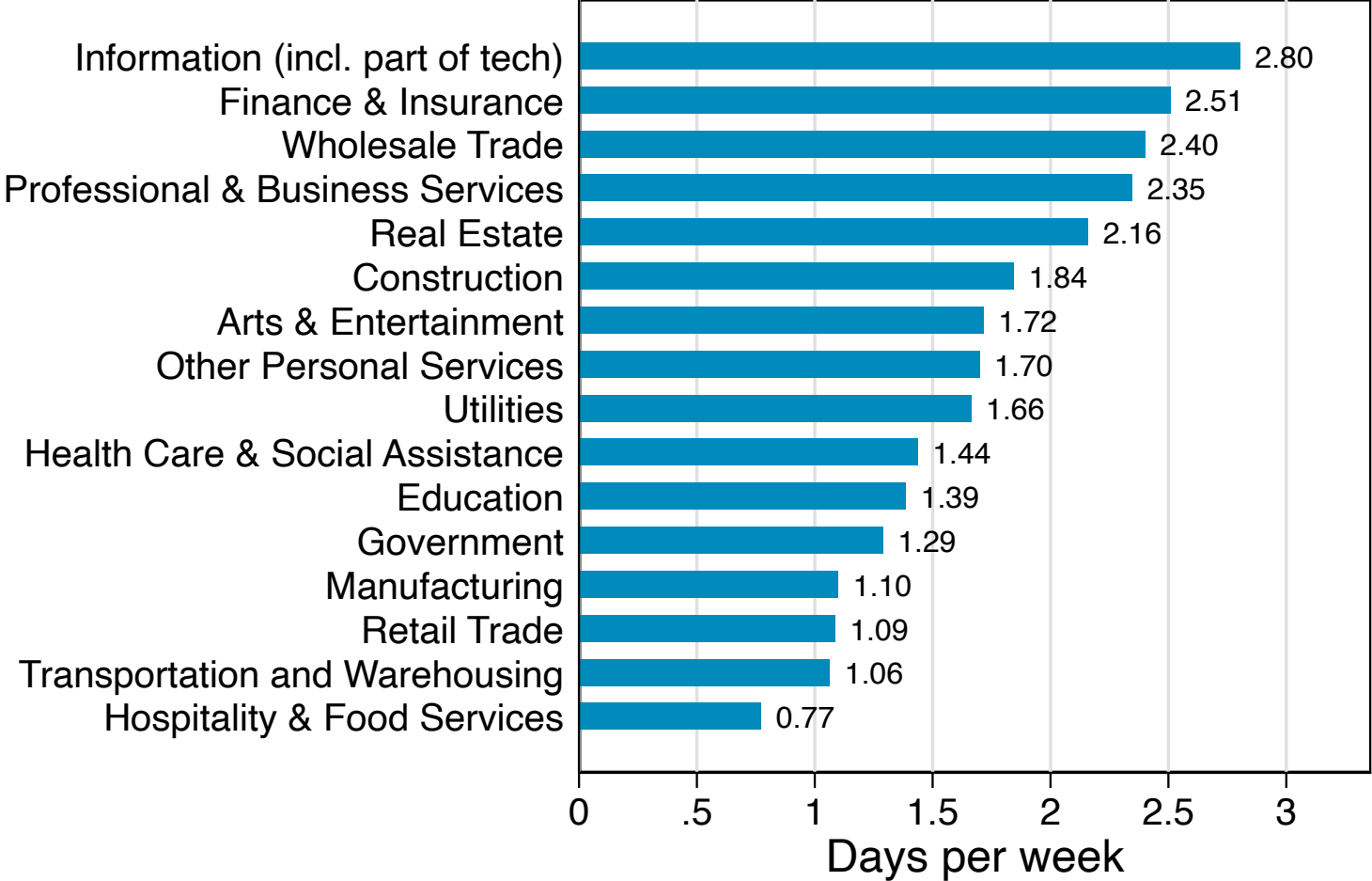
Sample: Data are from the April to June 2022 SWAA waves. The sample includes all wage and salary employees who pass the attention-check questions. We exclude mining due to insufficient observations and agriculture to focus on non-farm jobs. We re-weight the sample of US residents aged 20 to 64 earning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

N = 9,300

Post-COVID employer plans for working from home are highest for the information, finance, wholesale, and professional and business services sectors



Employer plans for post-COVID working from home:
All wage and salary employees



Responses to the question: *As the pandemic ends*, how often would you like to have paid workdays at home?

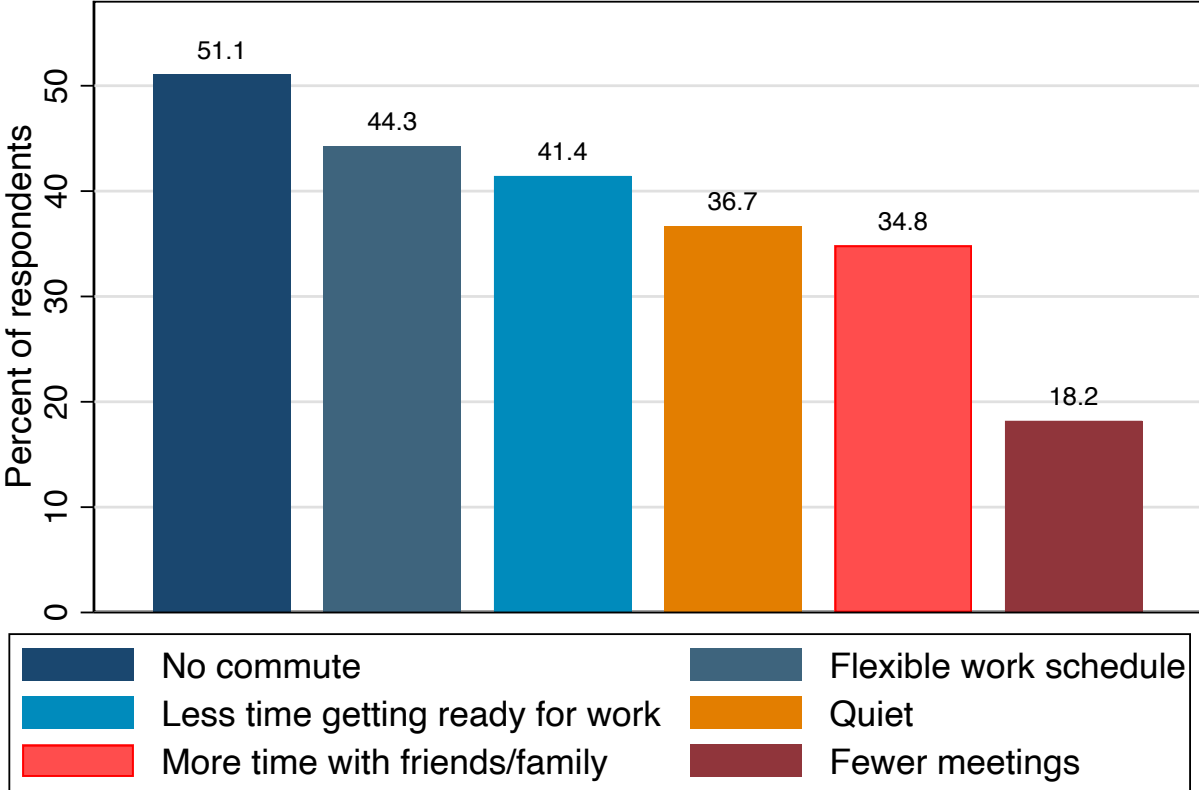
Sample: Data are from the April to June 2022 SWAA waves. The sample includes wage and salary employees who pass the attention-check questions. We exclude mining due to insufficient observations and agriculture to focus on non-farm jobs. We re-weight the sample of US residents aged 20 to 64 earning \$10,000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

N = 9,274

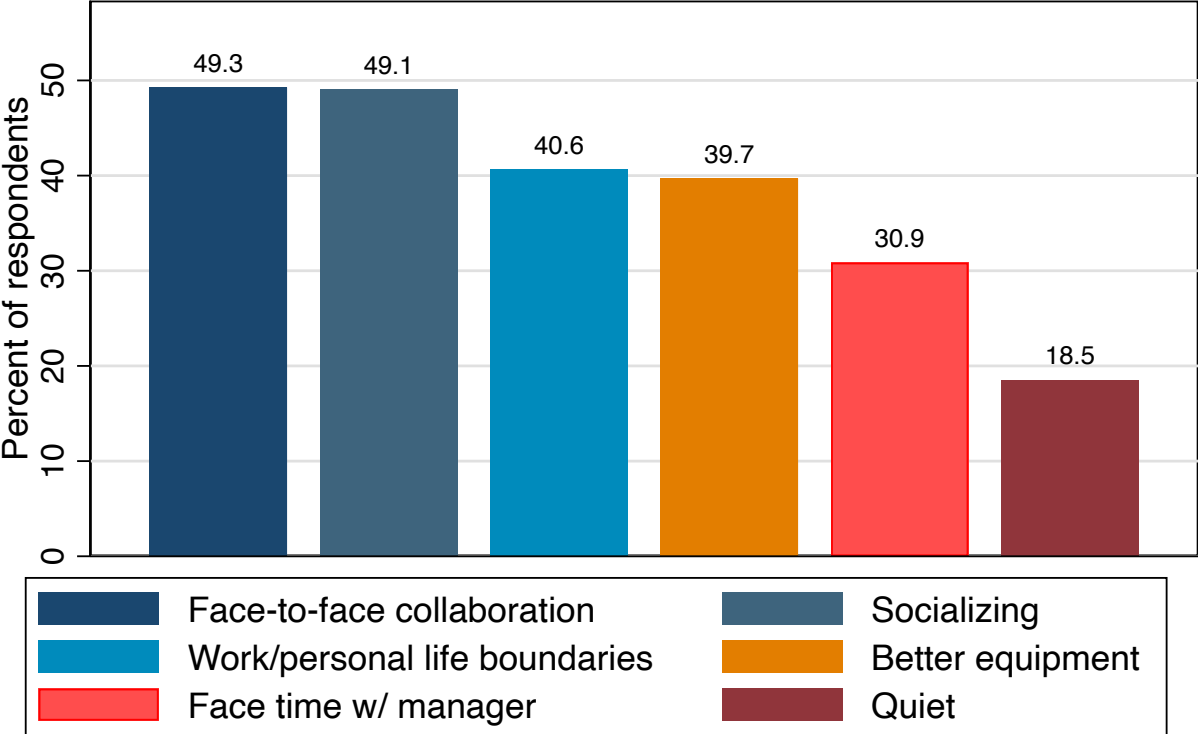
Not commuting is most-often among workers' top benefit of working from home. Face-to-face collaboration and socializing are most often among the top benefits of coming into work.



What are the top benefits of working from home?



What are the top benefits of working on your employer's business premises?

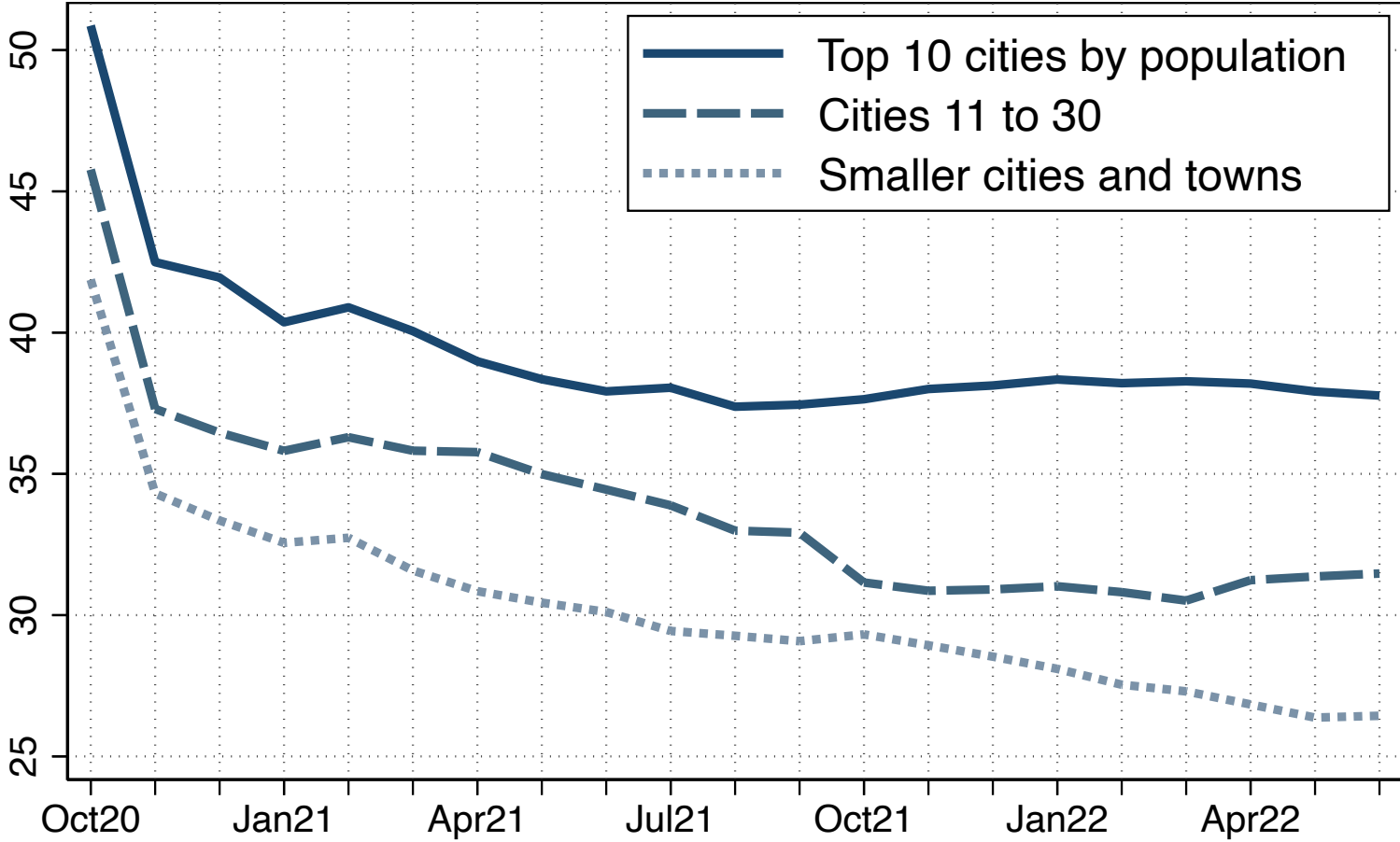


Notes: The sample includes respondents to the February to June 2022 SWAA waves who passed the attention check questions and worked from home at some point since the start of the COVID-19 pandemic. Respondents were allowed to pick at most three but at least one option for each question. The SWAA samples US residents aged 20 to 64 who earned \$10,000 or more in 2019. **N = 14,149 (both charts)**

Working From Home is Much More Common in Major Cities than in Smaller Cities and Towns



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 business premises. 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). 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 = 71,326

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.