

# SWAA April 2024 Updates\*

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

8 April 2024



Latest survey wave included: March 2024

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

\* Many thanks to Mert Akan for excellent research assistance.

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

# The Survey of Working Arrangements and Attitudes



- Monthly online survey since May 2020, >200,000 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 the prior year. As of July 2023, we also now developed a dataset for 2022 and later that does not impose an earnings requirement.
- 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](http://www.WFHresearch.com).

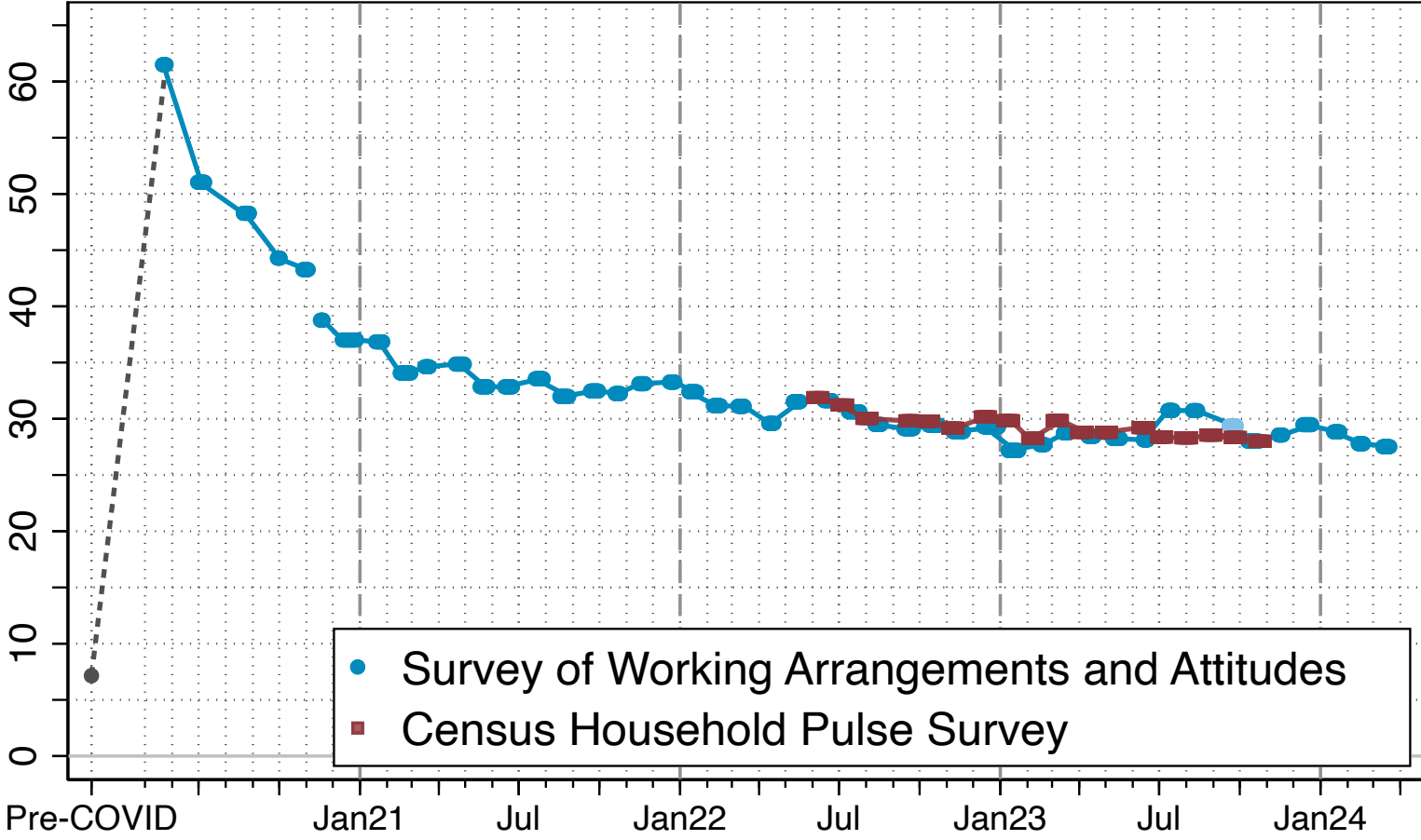
# Representativeness

- By design, we focus on persons who exhibit some attachment to the workforce, as evidenced by prior earnings. When noted, some results using 2022 and later data do not impose an earnings requirement.
- 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.

# About 28% of Paid Days in the US in March 2024 Were Work-From-Home Days



Percentage of paid full days worked from home



\*We estimate the pre-COVID rate using the 2019 American Time Use Survey  
 \*The break in the series in November 2020 reflects a change in the survey question.  
 \*The SWAA Sept. 2023 estimate averages August and October due to data quality issues in September.

**Source:** Responses to the questions:  
 - **Currently (this week) what is your work status?** (SWAA)  
 - **For each day last week, did you work a full day (6 or more hours), and if so where?** (SWAA)  
 - **In the last 7 days, have you...teleworked or worked from home?** (HHP)

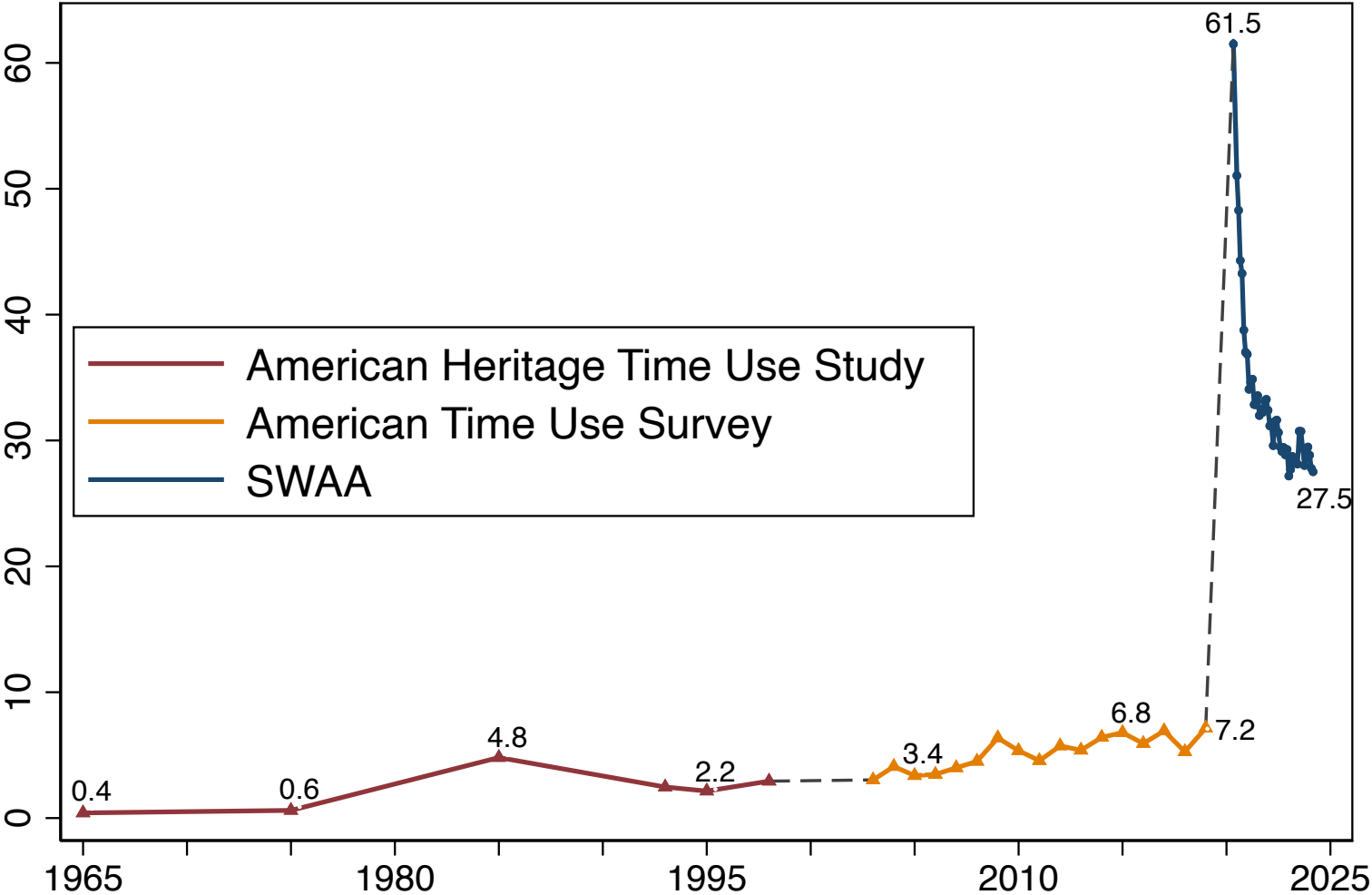
**Notes:** For each wave, we compute the percent of paid full days worked from home in the SWAA and Household Pulse Survey (HHP) and plot it on the vertical axis. The horizontal-axis location shows when the survey was in the field. The pre-COVID figure is from the 2017-2018 American Time Use Survey. SWAA: 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 based on current-question responses and another question (not shown). We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells. HHP: We focus on individuals aged 20 to 64 with household incomes above \$25,000 per year. We assign 30% of days WFH if the respondent did so for “for 1-2 days;” 70% if they did so “for 3-4 days;” 100% if “5 or more days;” and 0 for “No.”

**N = 147,412 (SWAA) N = 625,415 (HHP)**

# The Pandemic Permanently Increased WFH, Equivalent to Almost 40 Years of Pre-Pandemic Growth



Full Days Worked at Home, Percent of Paid Workdays



**Source:** Responses to the questions:

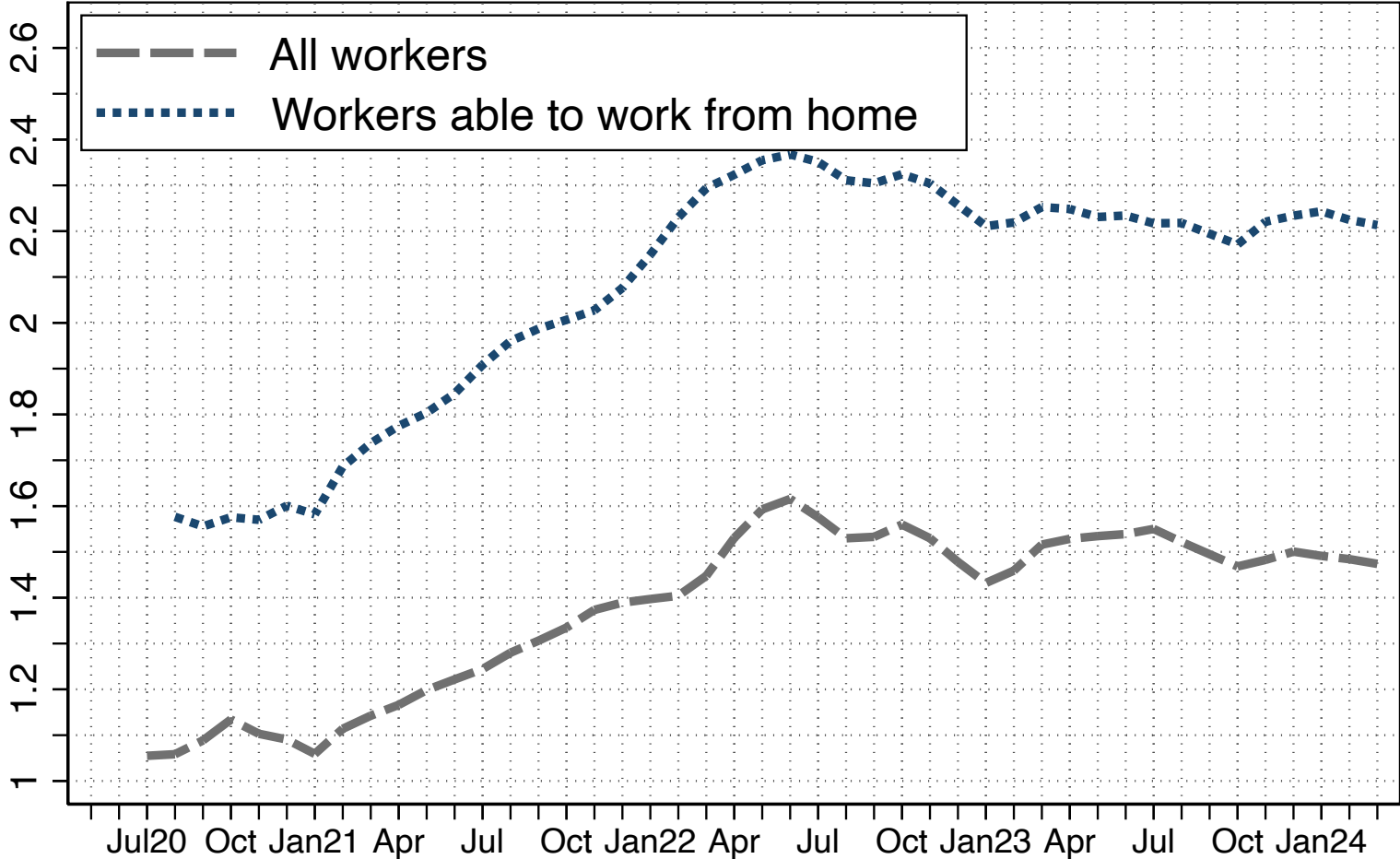
- In their time diary the respondent listed the activity "Paid work at home" for **6 or more hours.** (AHTUS)
- How did this person **usually** get to work last week? (ACS)
- For each day last week, did you **work a full day (6 or more hours)**, and, if so, **where?** (SWAA)

**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. We impute the September 2023 data point as the average of August and October due to data quality issues.

# Employer Plans for WFH Trend Near 2.2 Days per Week for Persons Able to Work From Home



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



**Responses to the question:**

- *Looking one year ahead, how often is your employer planning for you to work full days at home?*

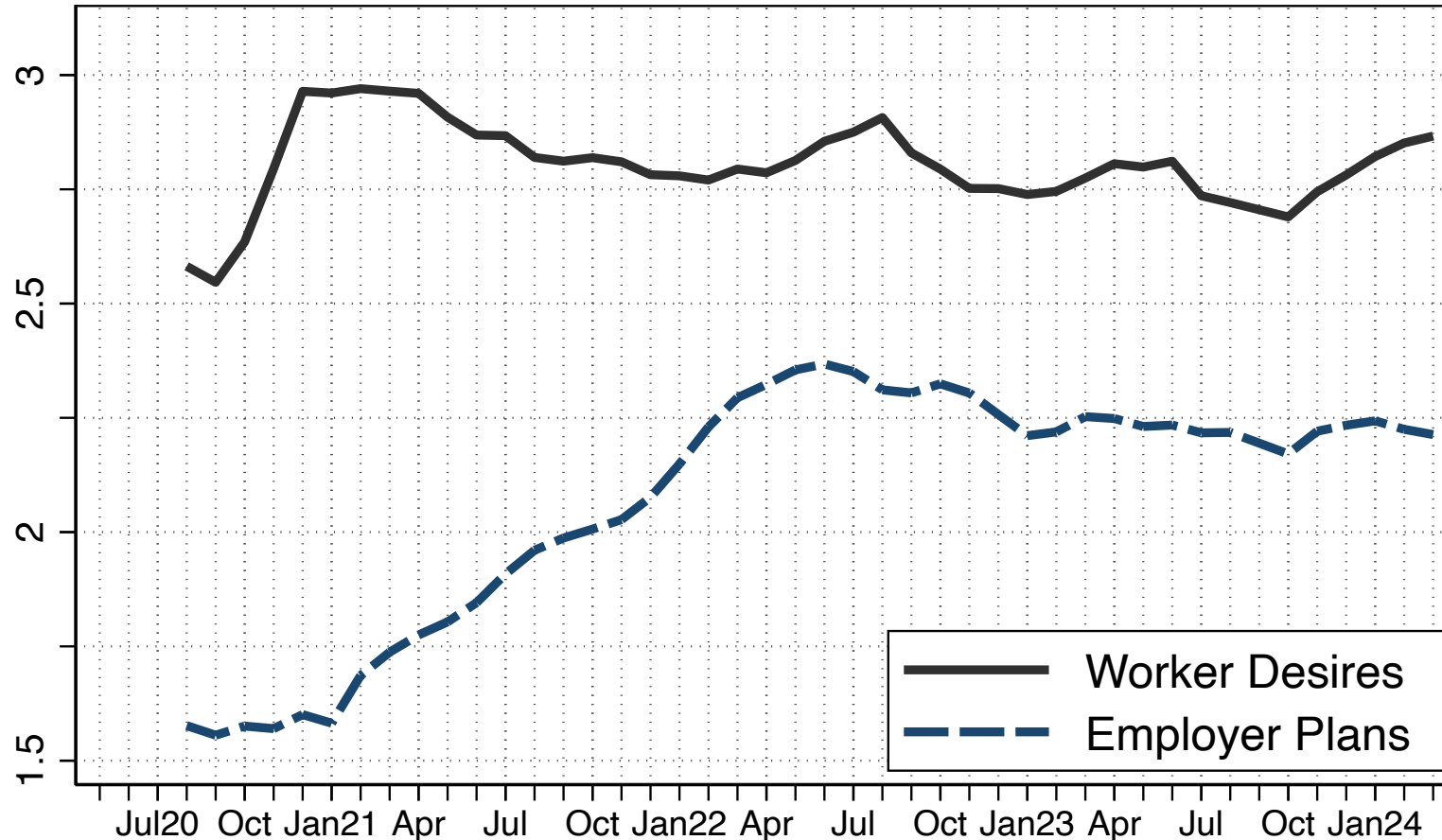
**Sample:** Data are from all SWAA waves, covering July 2020 to March 2024. The sample includes all respondents who reported their employer’s plans for WFH as the pandemic ends (“All workers” series), but the series labeled “Workers able to work from home” restricts attention to workers who have work-from-home experience during the pandemic. In both cases, 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 a prior year to match Current Population Survey on age, sex, education, and earnings. We impute September 2023 data as the average between August and October due to data quality issues.

**N = 210,639 (all respondents) and 151,854 (able to work from home)**

# The Gap Between How Much Employees Want to Work from Home and Employer Plans Fluctuates Near 0.5 Days



## 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:

- Looking one year ahead, how often would you like to have full paid days at home?
- Looking one year ahead, 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 March 2024. 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. We impute September 2023 data as the average between August and October due to data quality issues.

**N = 151,854** (employer plans, able to work from home)

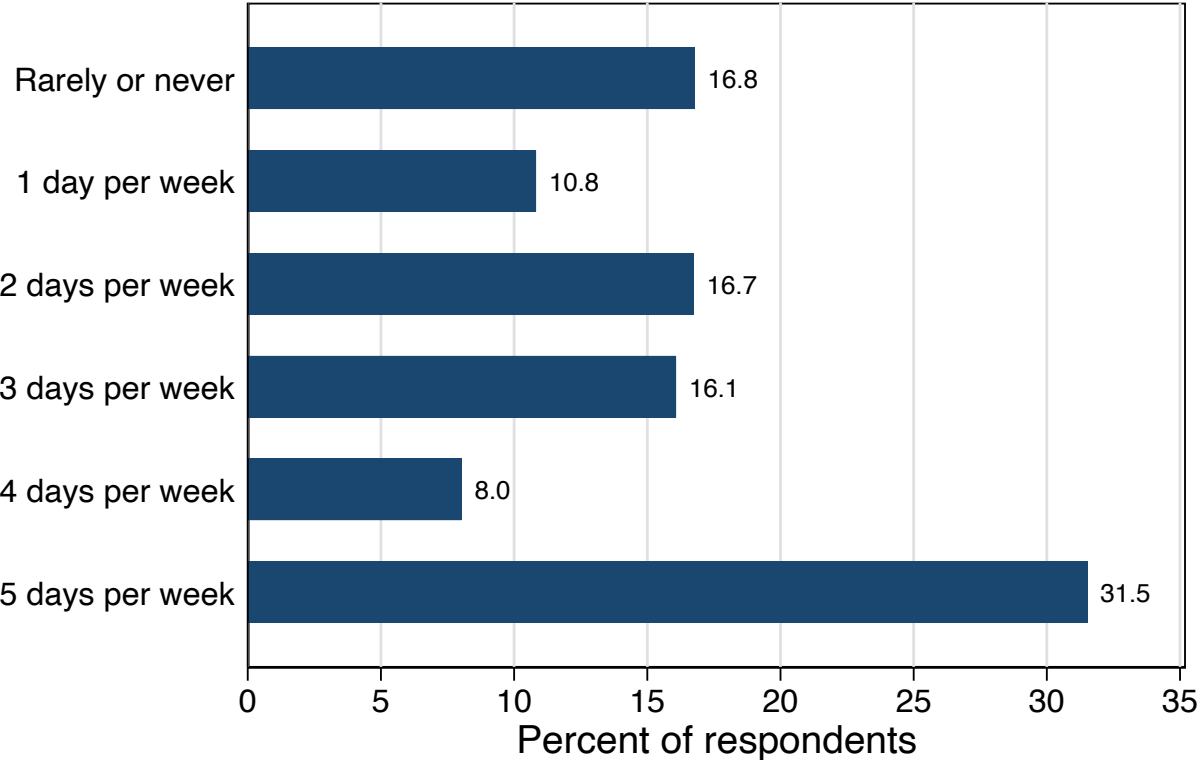
**N = 163,229** (worker desires, able to work from home)



# Employers Offer Fewer Fully Remote Jobs and More Fully Onsite Jobs Than Employees Want

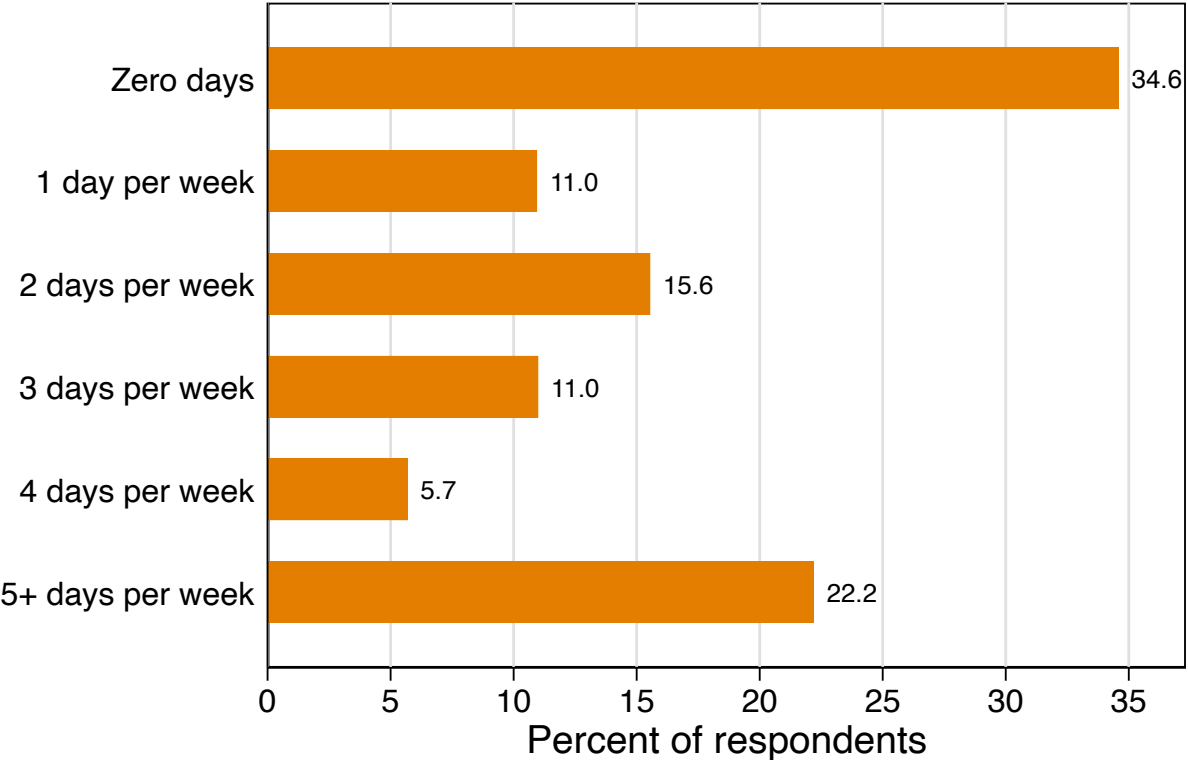


Worker desired amount of post-COVID WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 9259

Current amount of WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 8804

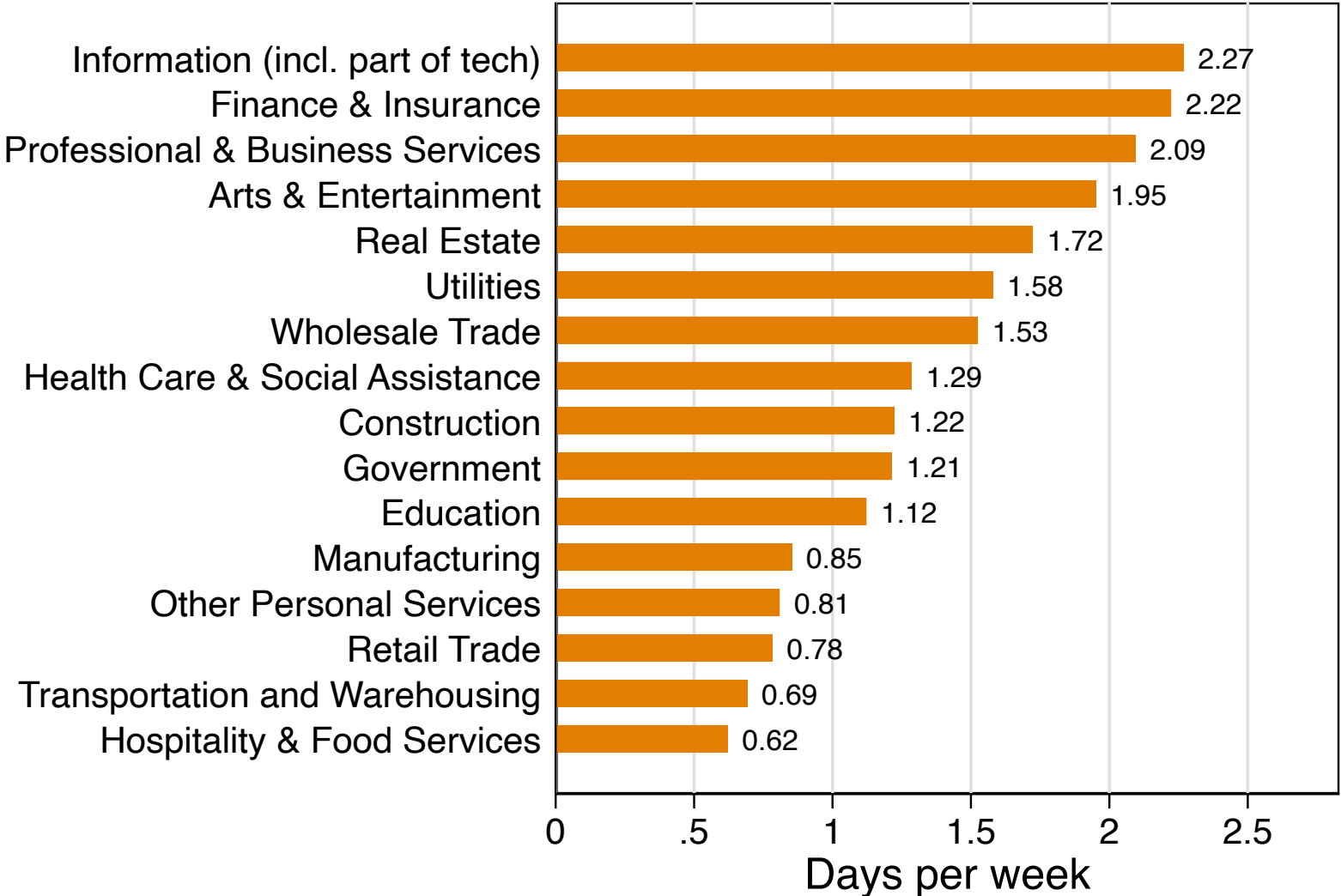
**Responses to the questions:** *As the pandemic ends*, how often would you **like to** have paid workdays at home? *For each day last week*, did you **work a full day (6 or more hours)**, and if so **where**?

**Sample:** Data are from the December 2023 to March 2024 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 a prior year to match Current Population Survey on age, sex, education, and earnings.

# Working from Home is Most Prevalent in the Tech, 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?**

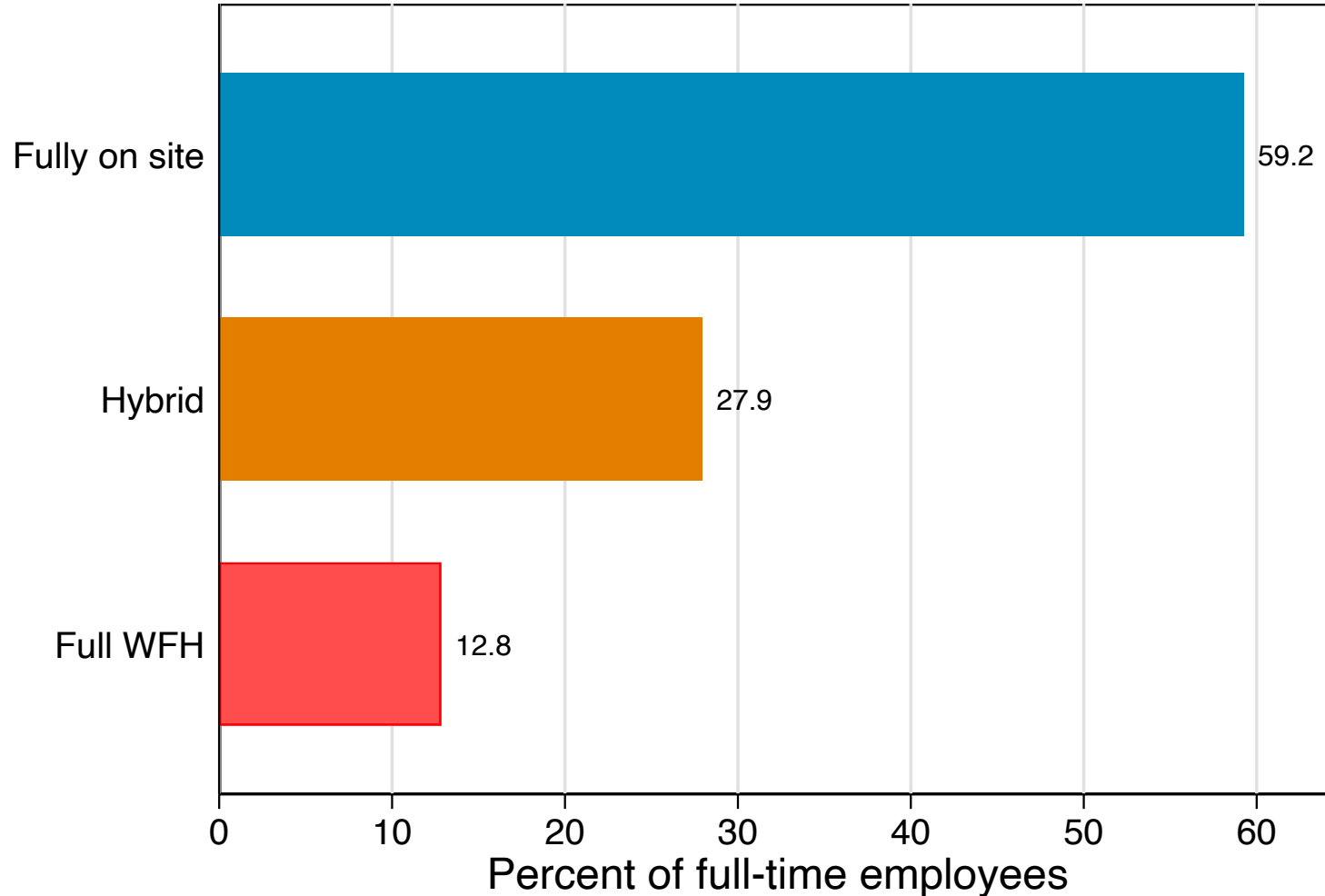
**Sample:** Data are from the November 2023 to March 2024 SWAA waves. The sample includes all wage and salary employees who pass the attention-check questions. We exclude mining due to insufficient observations and agriculture to focus on non-farm jobs. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match Current Population Survey on age, sex, education, and earnings.

**N = 21,044**

# By Early '24: 13% of Full-Time Employees Were Fully Remote, 59% Were Full-Time on Site, and 28% Were in a Hybrid Arrangement



## Working Arrangements



**Source:** Responses to the questions:

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

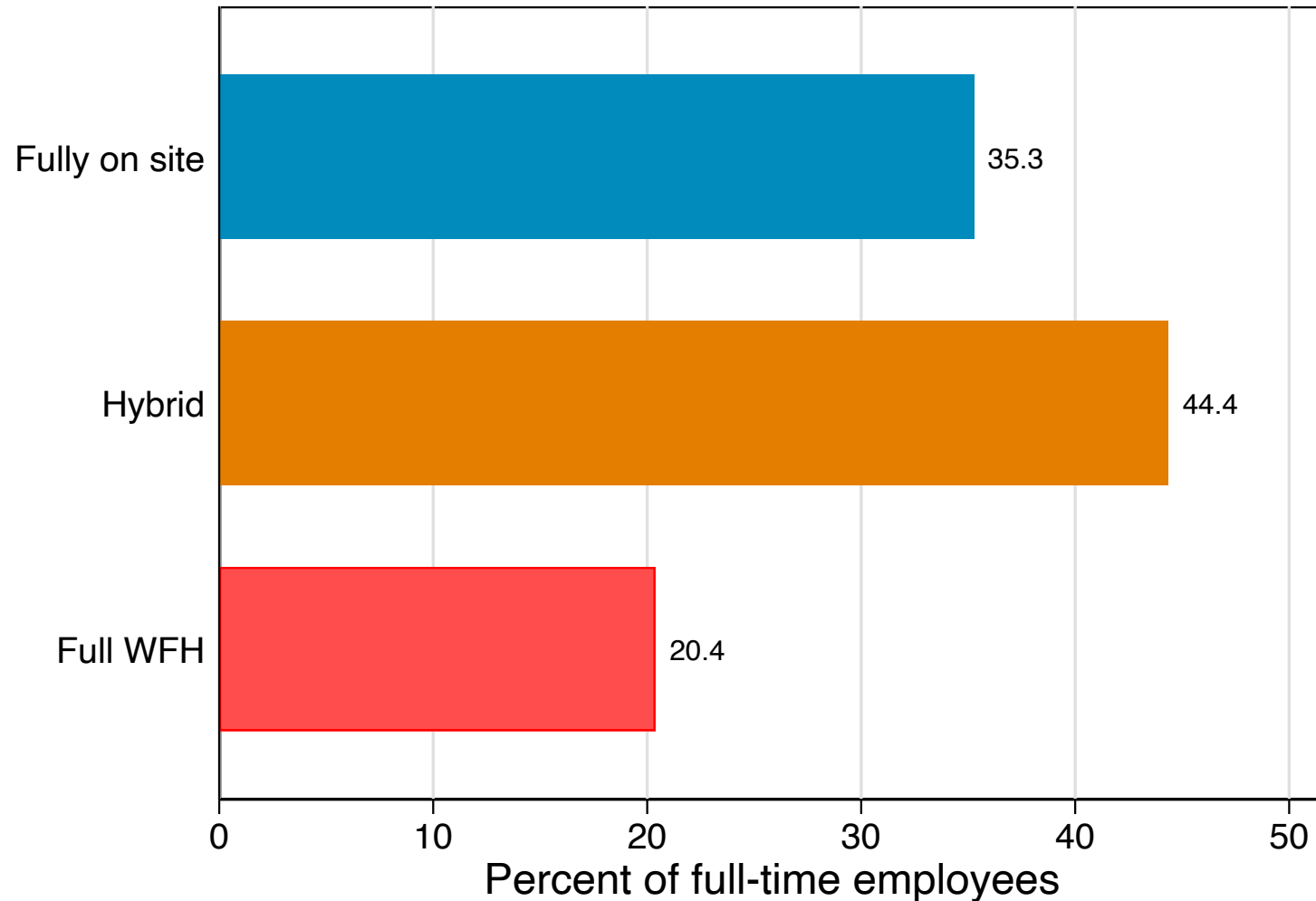
**Notes:** We compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey's reference week. Then we show the percentage for each group. The sample covers the December 2023 to March 2024 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 14,208**

# For Employees that Can Work from Home, the Most Common Practice is Hybrid



Working Arrangements of Those Able to WFH Dec 2023 to Mar 2024



**Source:** Responses to the questions:

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

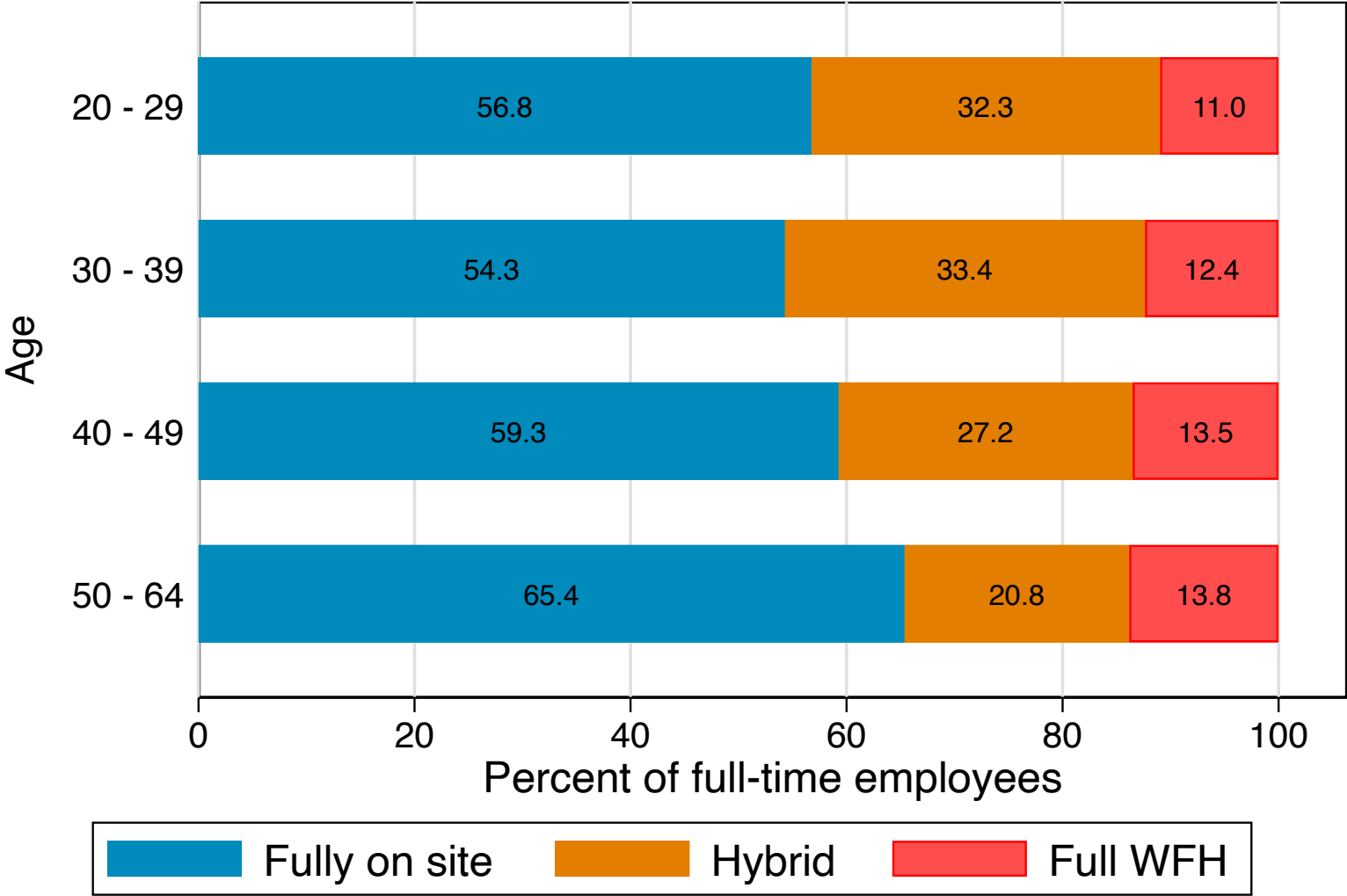
**Notes:** We compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who are able to work from home and either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey's reference week. Then we show the percentage for each group. We infer that somebody is able to work from home if they currently do so 1+ days per week, or did so at some point since the start of COVID. The sample covers the December 2023 to March 2024 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 = 10,075**

# Workers In Their 50s and 60s Are Fully Onsite More Often Than Younger Workers



Working Arrangements by Age December 2023 to March 2024



**Source:** Responses to the questions:  
 - *For each day last week, did you work a full day (6 or more hours), and if so where?*

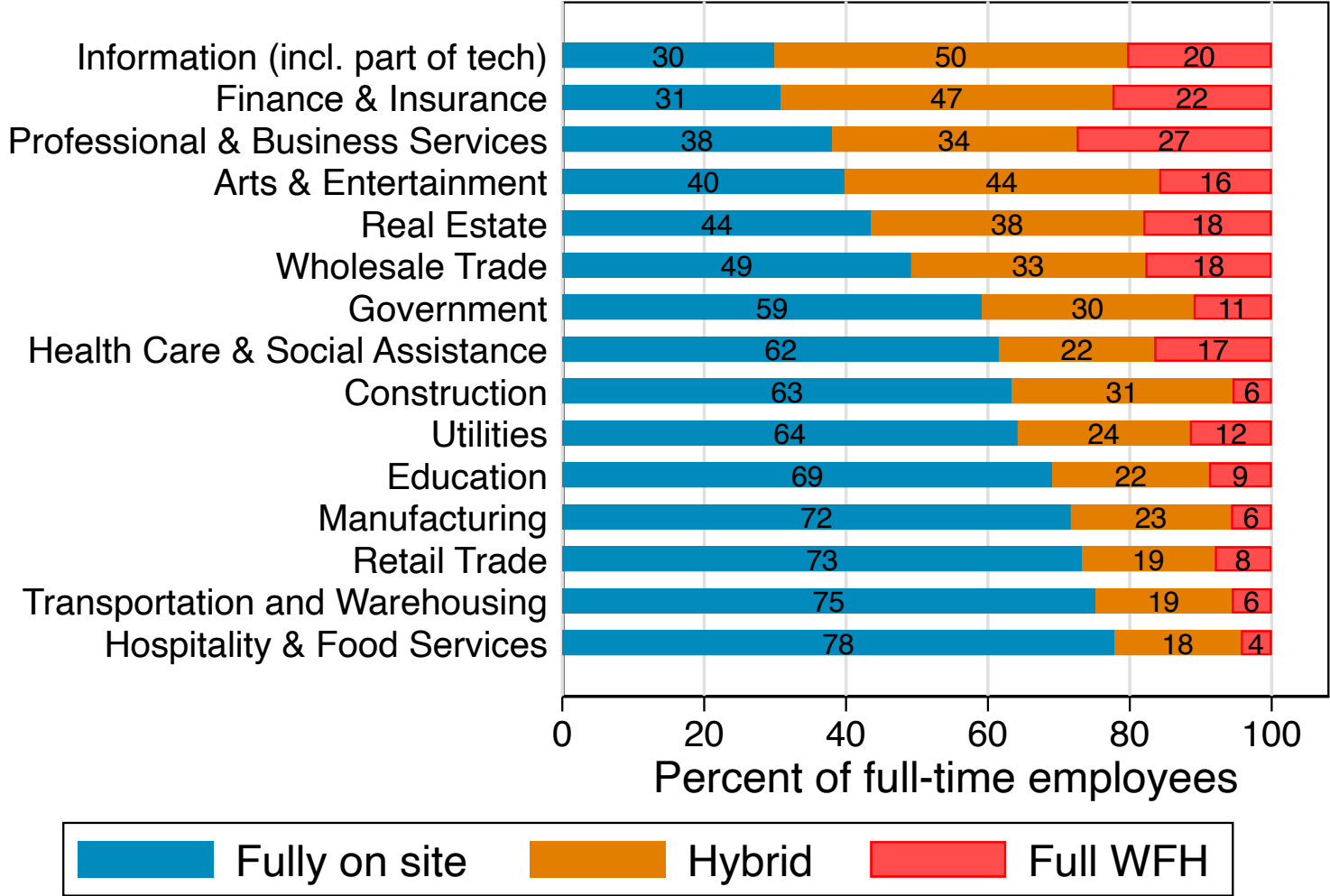
**Notes:** For each age group, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey’s reference week. Then we show the percentage for each group. The sample covers the December 2023 to March 2024 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 14,208**

# Information, Finance & Insurance, and Prof. & Business Services Have The Largest Share of Hybrid and Remote Workers



Working Arrangements by Industry Dec 2023 to Mar 2024



**Source:** Responses to the questions:  
 - For each day last week, did you **work a full day (6 or more hours)**, and if so **where?**

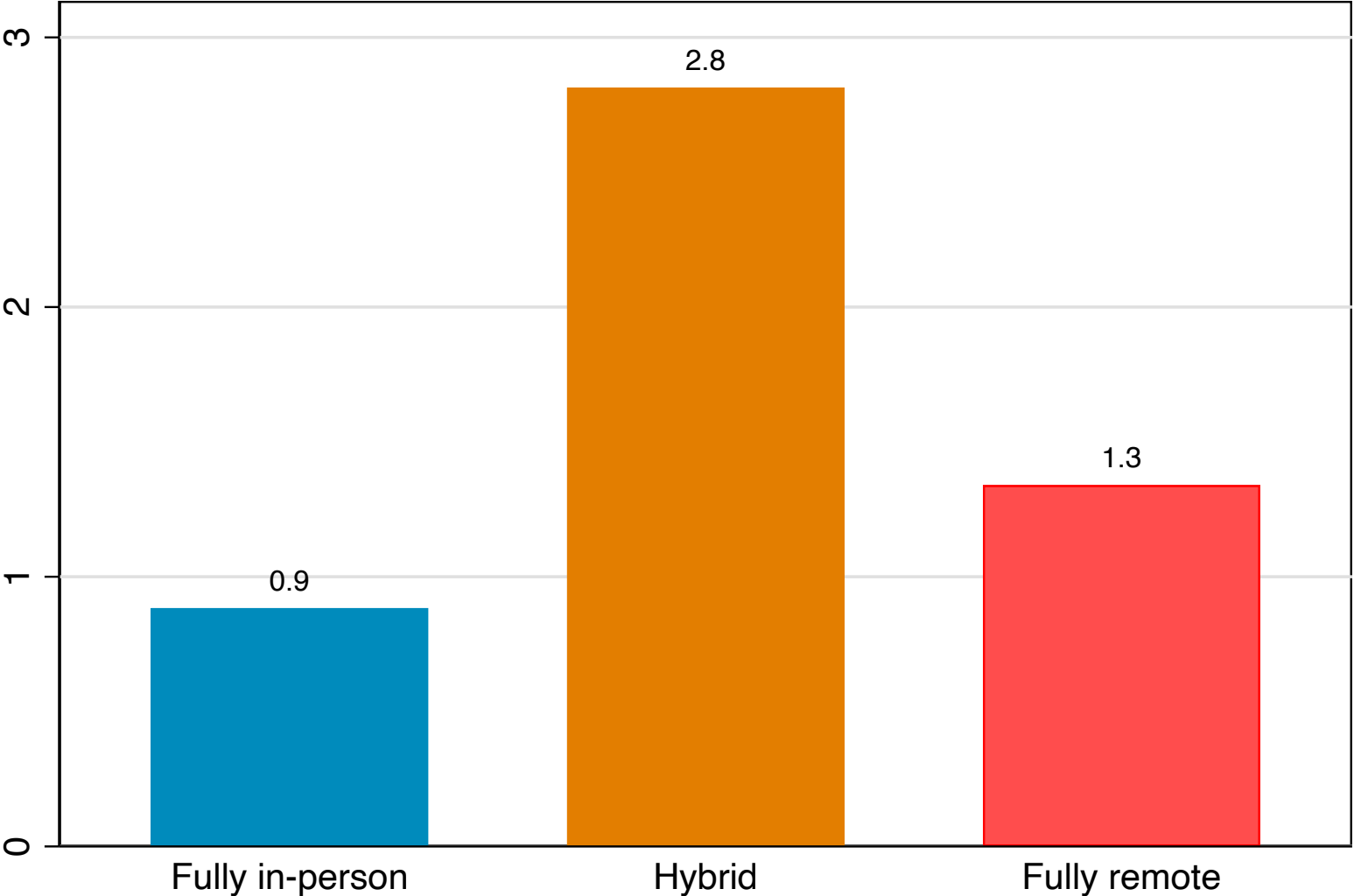
**Notes:** For each industry group, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey’s reference week. Then we show the percentage for each group. The sample covers the December 2023 to March 2024 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells. We exclude agriculture, construction, mining, and other personal services, the latter two due to insufficient observations.

**N = 13,849**

# Hybrid Workers Have More Than Twice As Many Meetings Per Day Than Fully In-Person and Fully Remote Workers



Number of Meetings By Working Arrangement



**Responses to the questions:**

- For each day last week, did you work a full day (6 or more hours), and if so where? (SWAA)
- How many work-related meetings did you have on your most recent workday?

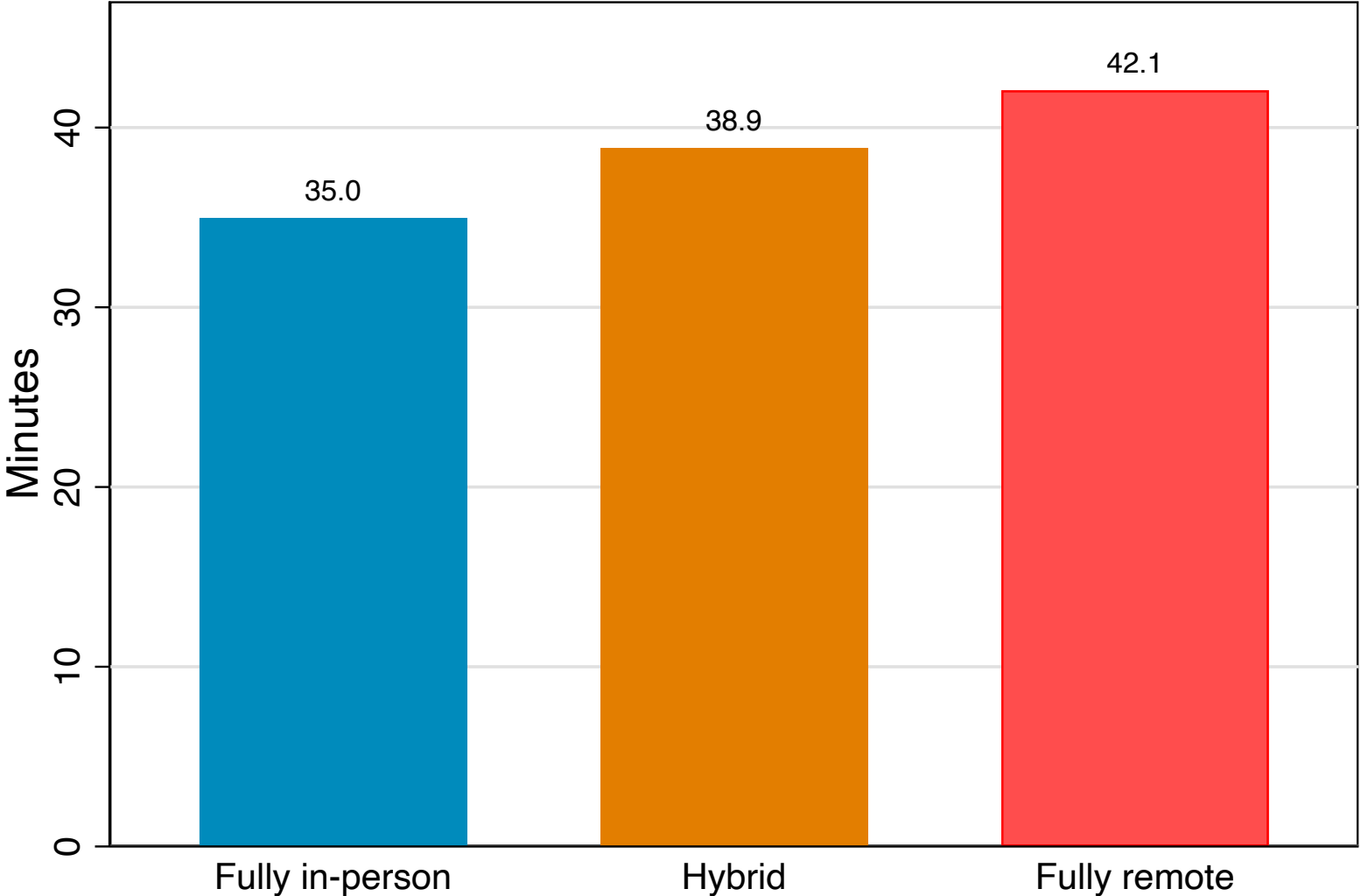
**Notes:** We sort workers by whether they worked fully in-person, fully remote, or hybrid (at least one work-from-home and one in-person workday) in the week prior to the survey. Then we compute the average number of meetings on the most recent workday for each group. The data are from the March 2024 SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 3,501**

# Meetings Are Longest On Average for Fully Remote Workers, Followed by Hybrid and Fully In-Person Workers



Meeting Duration by Working Arrangement



**Responses to the questions:**

- For each day last week, did you **work a full day (6 or more hours)**, and if so **where?** (SWAA)
- Now consider your **[randomly selected meeting]** on your **most recent workday**. ...How long did the meeting last?

**Notes:** We sort workers by whether they worked fully in-person, fully remote, or hybrid (at least one work-from-home and one in-person workday) in the week prior to the survey. Then, for each group we compute the average duration of a randomly selected meeting on the most recent workday. We randomize the reference meeting across: (1) the first meeting of the day, (2) the last meeting before lunch, (3) the first meeting after lunch, and (4) last meeting of the day. The data are from the March 2024 SWAA, focusing on employed respondents who had at least 1 meeting on their most recent workday. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

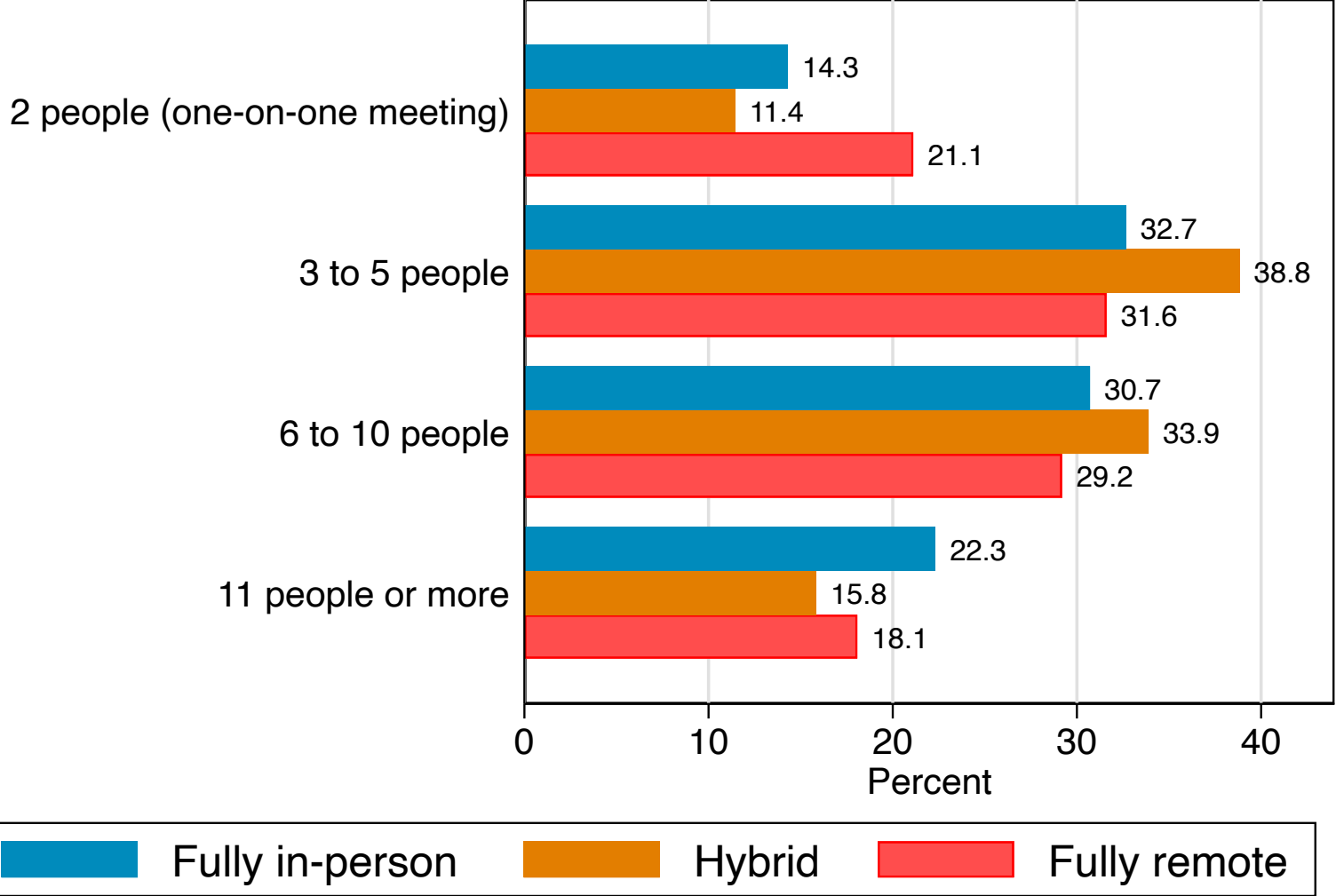
**N = 2,279**



# Fully Remote Workers Have More One-on-One Meetings, While Hybrid Workers Have More 3- to 10- Person Meetings



Distribution of Meeting Sizes by Working Arrangements



**Responses to the questions:**

- For each day last week, did you **work a full day (6 or more hours)**, and if so **where?** (SWAA)
- Now consider your **[randomly selected meeting]** on your **most recent workday**. **...How many people** (including yourself) participated in that meeting?

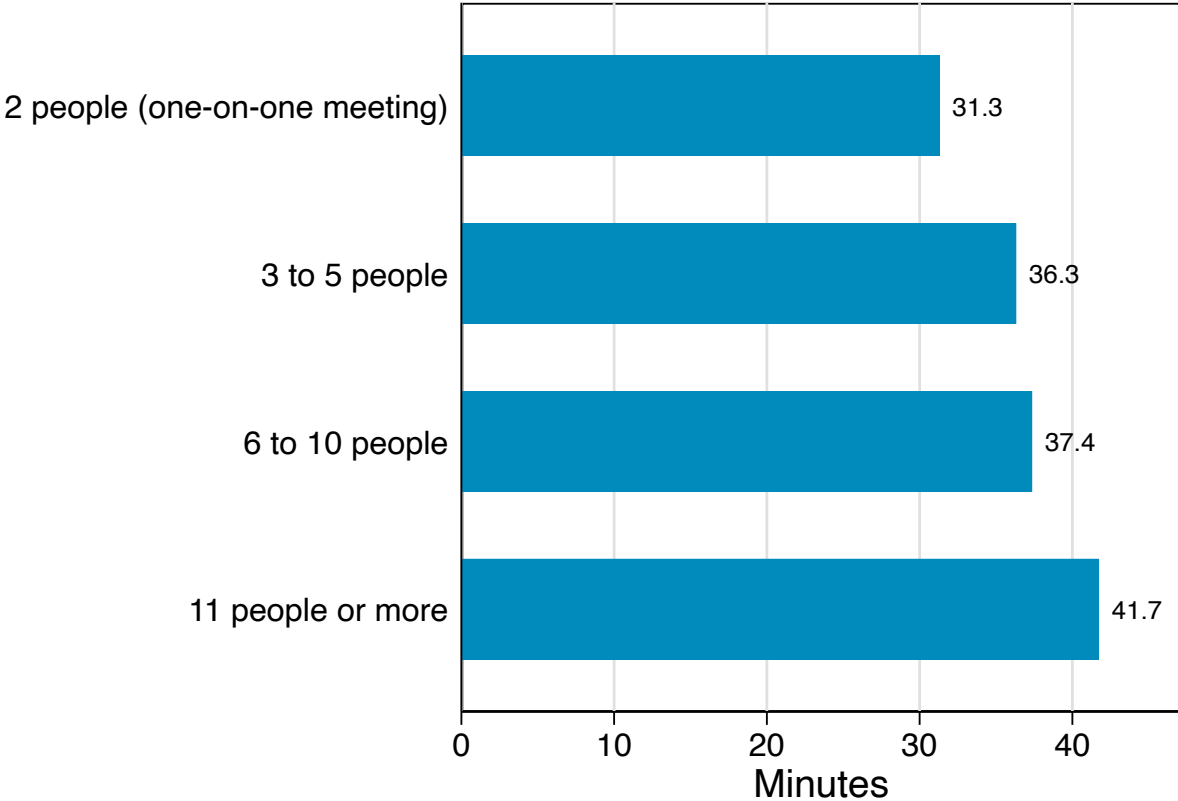
**Notes:** We sort workers by whether they worked fully in-person, fully remote, or hybrid (at least one work-from-home and one in-person workday) in the week prior to the survey. Then, for each group we compute the share of meetings that are of a given size, based on a randomly selected meeting on the most recent workday. We randomize the reference meeting across: (1) the first meeting of the day, (2) the last meeting before lunch, (3) the first meeting after lunch, and (4) last meeting of the day. The data are from the March 2024 SWAA, focusing on employed respondents who had at least 1 meeting on their most recent workday. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 2,279**

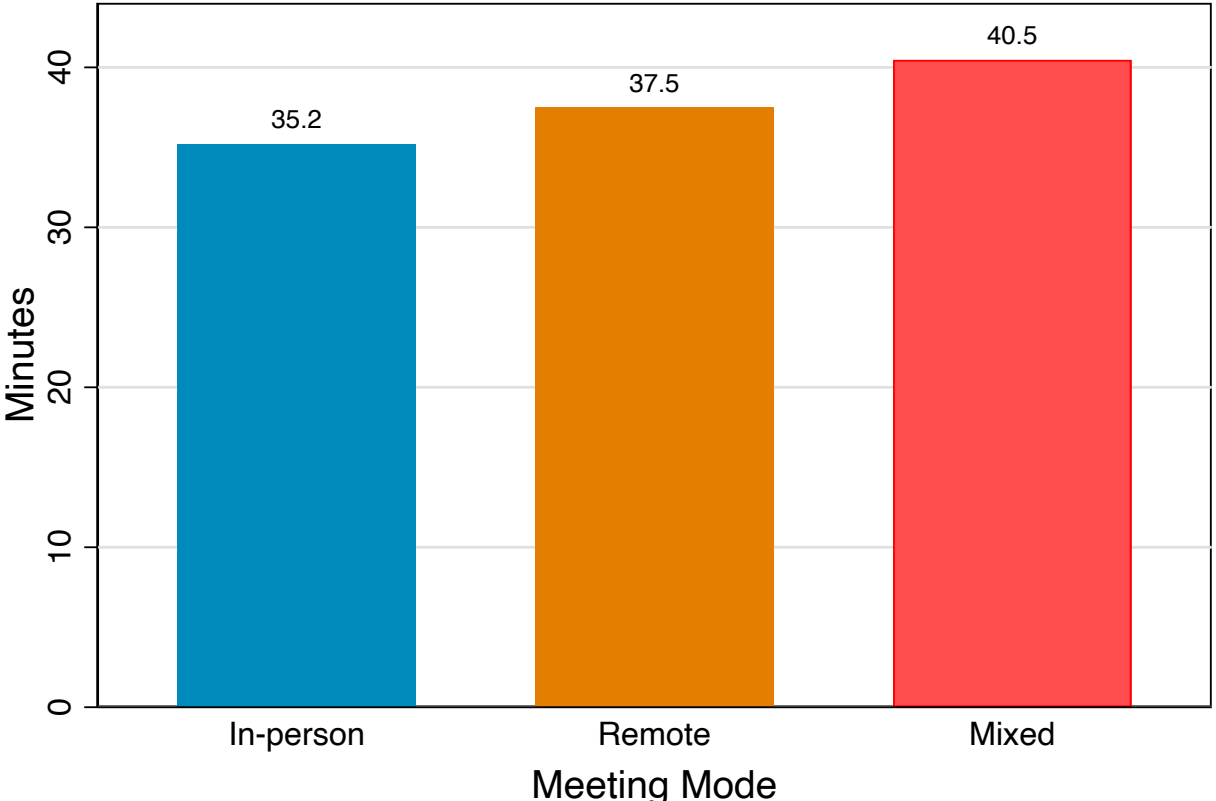
# Larger and Remote, and Mixed-Mode Meetings Are Longer On Average



### Meeting Duration by Meeting Size



### Meeting Duration by Meeting Mode



**Responses to the questions:** *Now consider your [randomly selected meeting] on your most recent workday. ...How many people (including yourself) participated in that meeting? How did meeting participants engage with one another in that meeting?*

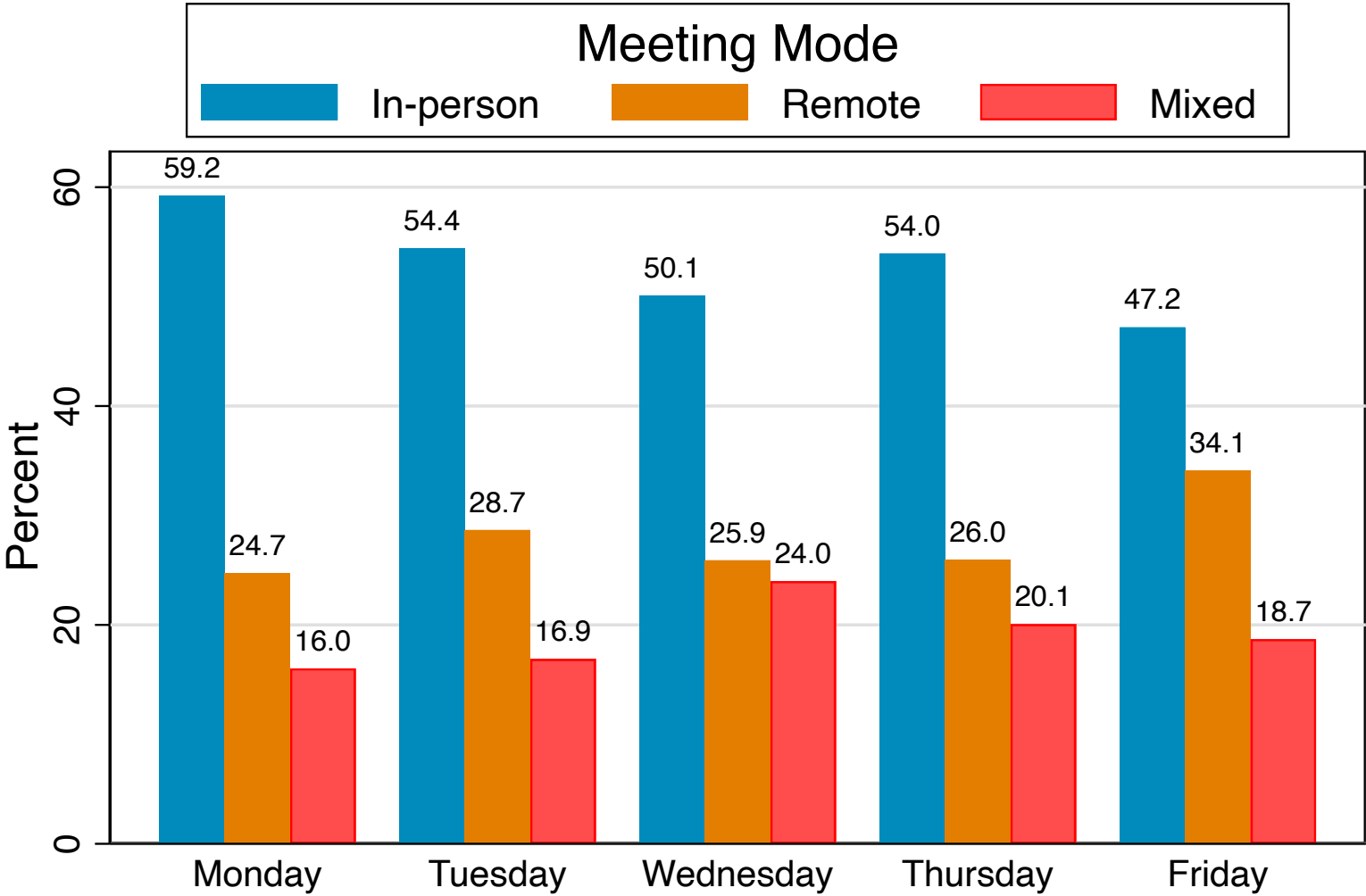
**Notes:** For the left chart, we compute the average duration of meetings by their reported size. For the right chart we compute the average duration of meetings by whether participants interacted fully in person, fully via video conference (remotely), or a mix of the first two. For each respondent, we randomize the reference meeting across: (1) the first meeting of the day, (2) the last meeting before lunch, (3) the first meeting after lunch, and (4) last meeting of the day. The data are from the March 2024 SWAA, focusing on employed respondents who had at least 1 meeting on their most recent workday. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 2,514 (both figures)**

# In-Person Meetings Are More Common Earlier In The Week. Remote (Video Conference) Meetings Are More Common on Fridays.



Share of Meetings by Mode and Day of the Week



**Responses to the questions:**

- What day of the week was your most recent workday before today?

Now consider your [*randomly selected meeting*] on your most recent workday...

- How did meeting participants engage with one another in that meeting?

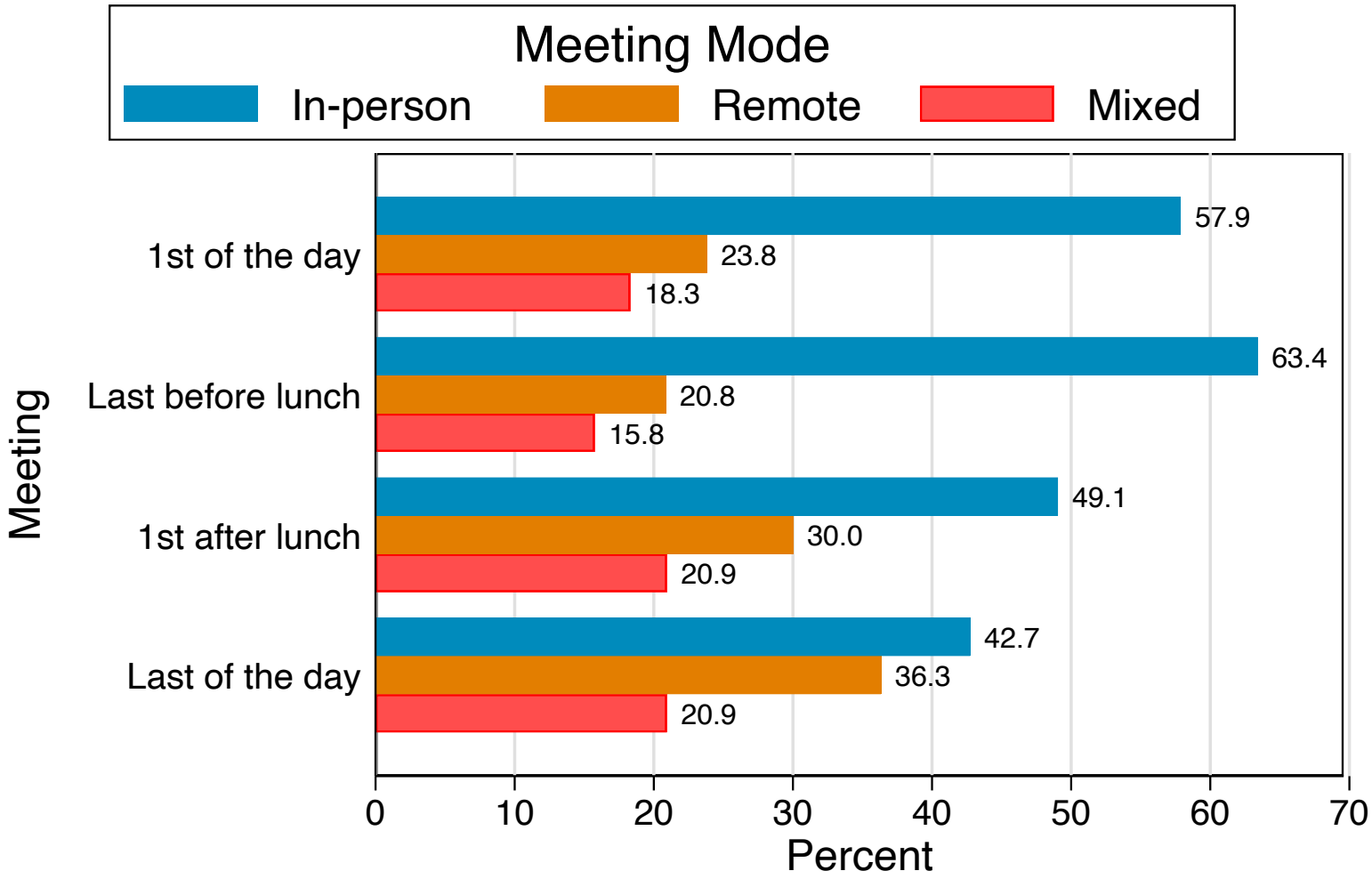
**Notes:** We compute the share of meetings in each day of the week according to whether participants interacted fully in person, fully via video conference (remotely), or a mix of the first two. For each respondent, we randomize the reference meeting across: (1) the first meeting of the day, (2) the last meeting before lunch, (3) the first meeting after lunch, and (4) last meeting of the day. The data are from the March 2024 SWAA, focusing on employed respondents who had at least 1 meeting on their most recent workday, and focusing on Monday to Friday only. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 2,352**

# In-Person Meetings Are More Common Early In The Day. Remote (Video-Conference) Meetings Are More Common After Lunch



Share of Meetings by Mode and Time of Day



**Responses to the questions:**

Now consider your *[randomly selected meeting]* on your most recent workday...

- How did meeting participants engage with one another in that meeting?

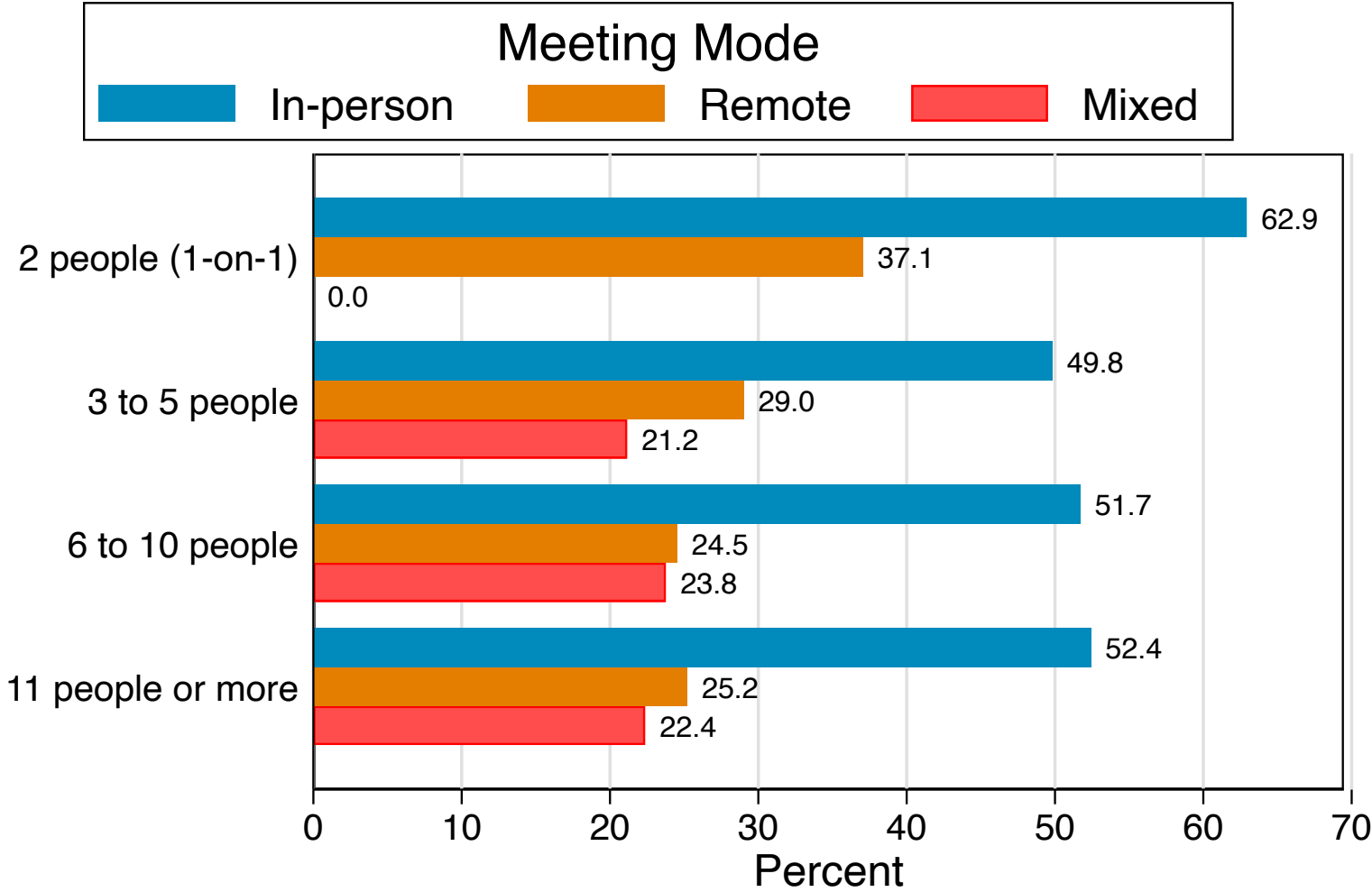
**Notes:** We compute the share of meetings in each time of the workday according to whether participants interacted fully in person, fully via video conference (remotely), or a mix of the first two. For each respondent, we randomize the reference meeting time across: (1) the first meeting of the day, (2) the last meeting before lunch, (3) the first meeting after lunch, and (4) last meeting of the day. The data are from the March 2024 SWAA, focusing on employed respondents who had at least 1 meeting on their most recent workday, and focusing on Monday to Friday only. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 2,352**

# One-on-One Meetings are More Often Done in Person.



Share of Meetings by Mode and Size



**Responses to the questions:**

Now consider your *[randomly selected meeting]* on your most recent workday...

- How many people (including yourself) participated in that meeting?
- How did meeting participants engage with one another in that meeting?

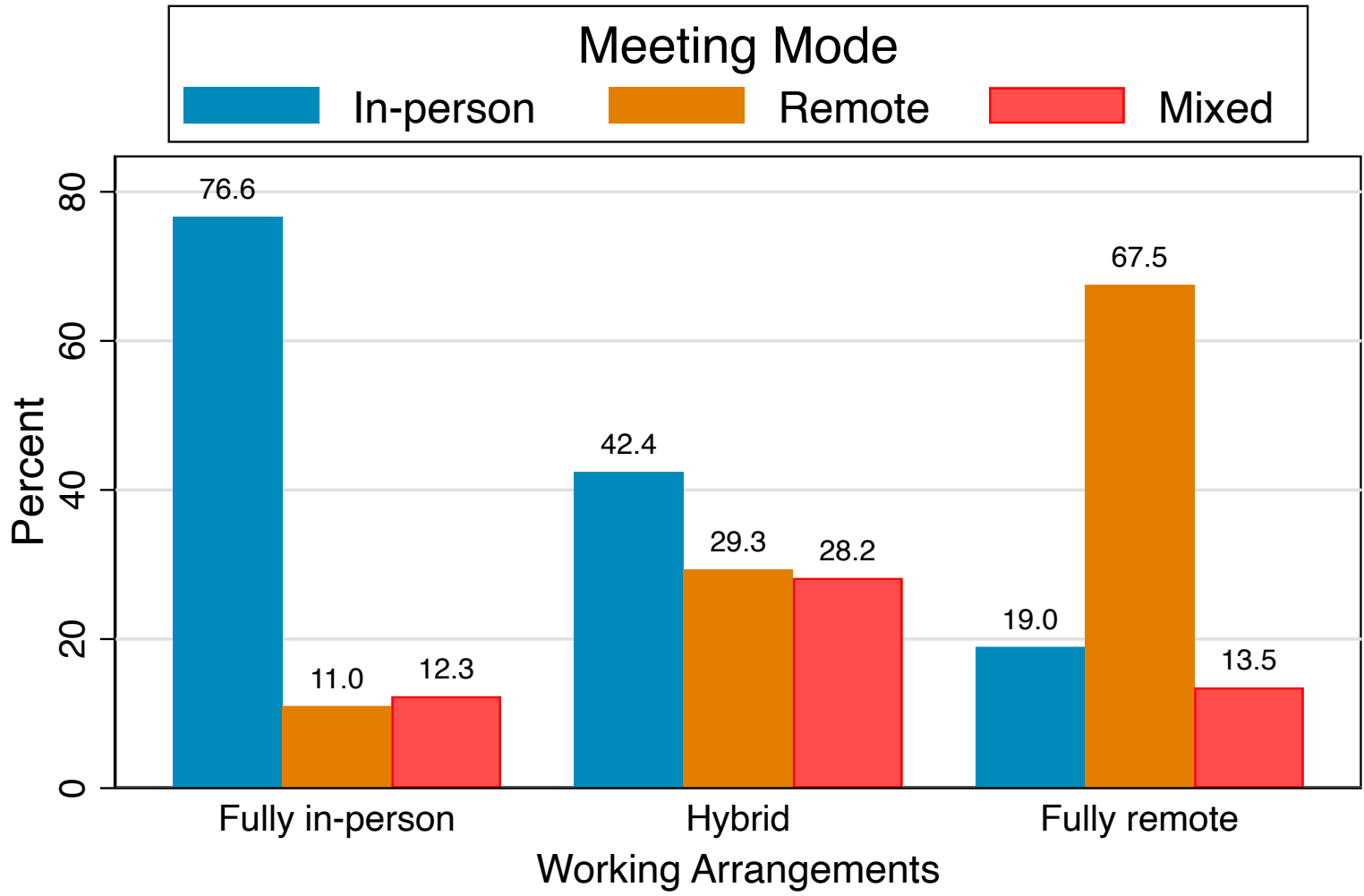
**Notes:** We compute the share of meetings by size category according to whether participants interacted fully in person, fully via video conference (remotely), or a mix of the first two. For each respondent, we randomize the reference meeting across: (1) the first meeting of the day, (2) the last meeting before lunch, (3) the first meeting after lunch, and (4) last meeting of the day. The data are from the March 2024 SWAA, focusing on employed respondents who had at least 1 meeting on their most recent workday, and focusing on Monday to Friday only. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 2,323**

# Nearly 60% of Hybrid Workers' Meetings Involve Video-Conferencing By Some or All Participants. Half of Those Are Mixed-Mode Meetings



Share of Meetings by Mode Working Arrangements



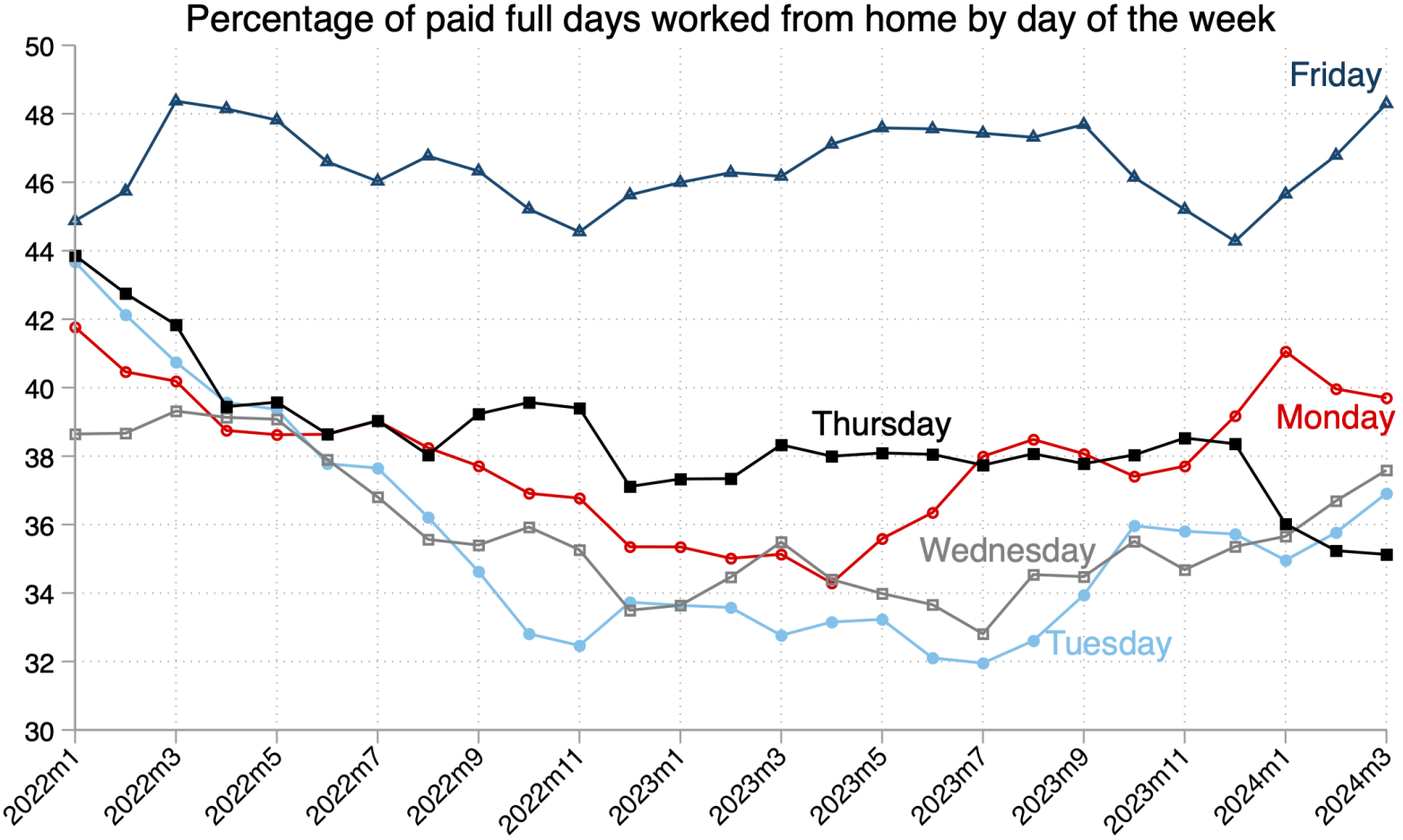
**Responses to the questions:**

- For each day last week, did you work a full day (6 or more hours), and if so where? (SWAA)
- Now consider your *[randomly selected meeting]* on your most recent workday. ...How did meeting participants engage with one another in that meeting?

**Notes:** We sort workers by whether they worked fully in-person, fully remote, or hybrid (at least one work-from-home and one in-person workday) in the week prior to the survey. Then, for each group we compute the share of meetings that are of a given mode (all in person, all remote via video conference or a mix of the two), based on a randomly selected meeting on the most recent workday. We randomize the reference meeting across: (1) the first meeting of the day, (2) the last meeting before lunch, (3) the first meeting after lunch, and (4) last meeting of the day. The data are from the March 2024 SWAA, focusing on employed respondents who had at least 1 meeting on their most recent workday. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match CPS shares by age-sex-education-earnings cells.

**N = 2,142**

# Friday is the Most Popular Day to WFH for Hybrid Workers



Sample: Full-time hybrid workers, N= 35199

**Responses to the question:**  
 - For each day last week, did you work a full day (6 or more hours), and if so where? (SWAA)

**Notes:** We compute the share of work-from-home days for each day of the workweek and month among hybrid workers. Data are from the January 2022 to March 2024 SWAA waves. The sample includes full-time wage and salary employees on hybrid work schedule who pass the attention-check questions. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in a prior year to match Current Population Survey on age, sex, education, and earnings.

# 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.