

COMMUTER CONNECTIONS
A SMARTER WAY TO WORK

2019 STATE OF THE COMMUTE

“AT-A-GLANCE” SURVEY SECTION

FROM THE
WASHINGTON DC
METROPOLITAN REGION

National Capital Region
Transportation Planning Board

Metropolitan Washington
Council of Governments



TELEWORK



 National Capital Region
Transportation Planning Board

 Metropolitan Washington
Council of Governments



This is a “At a Glance” section from the 2019 State of the Commute (SOC) Report shows key figures and tables on Telework in the Washington, DC metropolitan region. To view the full report, go to www.commuterconnections.org

Telework

The SOC survey also explored respondents’ telework experience. For purposes of this survey, teleworkers were defined as “wage and salary employees who at least occasionally work at home or at a telework or satellite center **during an entire work day**, instead of traveling to their regular work place.”

This definition specifically excluded workers who worked at client sites outside of the Washington region and workers, such as sales or equipment repair staff, who traveled to multiple customer locations during the course of the day. The definition also excluded respondents who worked a portion of the normal workday at home, for example while waiting for a delivery, but traveled to the regular workplace for another part of the day. These situations are not generally considered telework for transportation-related purposes, because the commuter still makes commute trips on that day. This section presents telework results for 2019 and, in some tables, results for previous SOC surveys.

Current and Potential Telework

RESPONDENTS WHO CURRENTLY TELEWORK

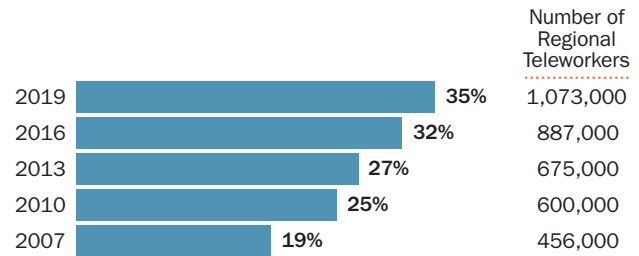
Respondents were shown the above definition of telework and asked if they would consider themselves teleworkers based on this definition. One-third (34%) of regional workers said they teleworked, either regularly or occasionally. When extrapolated to the regional worker population, this represented about 1,073,000 workers region-wide.

Teleworkers accounted for a higher percentage, 35%, of “commuters,” where commuters were defined as regional workers who would otherwise travel to a main work location on non-telework days. Using the commuter base excludes self-employed workers for whom home was their only workplace. These workers would not make commute trips to an outside work location, thus, excluding them from the calculation of teleworkers reflects a more realistic assessment of the role of telework in eliminating commute trips.

The 35% telework percentage represents a steady growth over the percentage from the 2007 survey, when only 19% of employees teleworked. The percentage growth also equals a more than two-fold growth in the total number of teleworkers, from 456,000 in 2007 to 1,073,000 in 2019.

Percentage of Commuters who Telework – 2007 to 2019

(2007 n = 6,168, 2010 n = 6,050, 2013 n = 5,892, 2016 n = 5,503, 2019 n = 8,107)



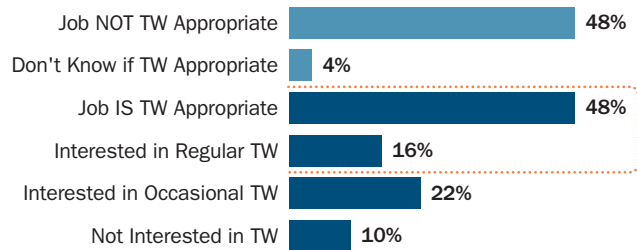
INTEREST IN TELEWORK

Commuters who worked at a location outside their homes and who did not telework at the time of the survey were asked if their job responsibilities would allow them to work at a location other than their main work place, at least occasionally. Almost half (48%) said they had telework-appropriate job responsibilities.

These respondents were then asked if they would want to telework. Eight in ten of the respondents with telework-appropriate jobs said they would be interested in telework on either an occasional basis or a regular basis. These interested respondents equaled about 771,000 commuters or 25% of all commuters region-wide.

Potential for Telework Among Non-teleworkers – 2019

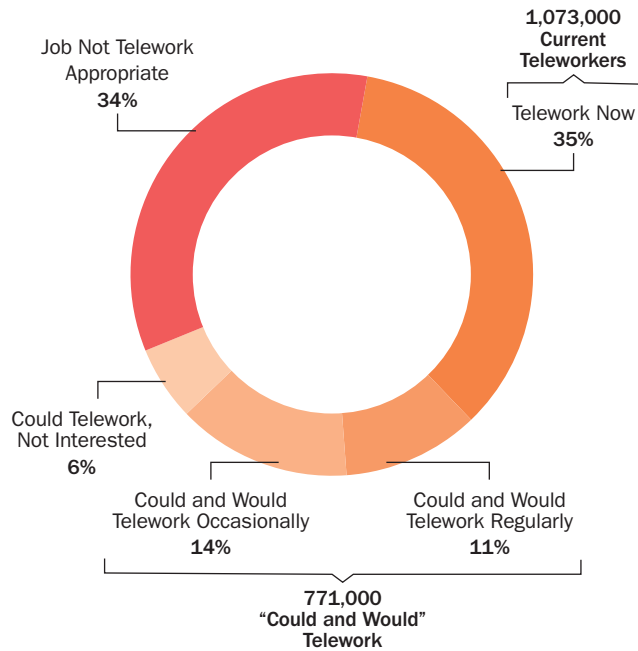
(n = 5,195)



These results suggest that even as the number of teleworkers has grown in the Washington metropolitan region, additional telework potential exists. The next figure summarizes the telework status of all respondents who were “commuters,” that is, not self-employed/work at home full-time.

About 1,073,000 regional commuters (35%) teleworked at the time of the survey. An additional 25% of commuters “could and would” telework, that is, they had job responsibilities that could be accomplished away from the main work place and they would be interested in teleworking, if given an opportunity. These commuters represented about 771,000 potential teleworkers. The remaining commuters said they would not be interested in teleworking (6%) or that their job responsibilities could only be performed at the main work place (34%).

Telework Status Distribution (n = 8,107)



Summary of Current and Potential Telework

Respondents who are not Self-Employed/Work at Home ("Commuters")

TELEWORK STATUS	2007 (n = 6,168)	2010 (n = 6,050)	2013 (n = 5,892)	2016 (n = 5,503)	2019 (n = 8,107)
Currently teleworking	19%	25%	27%	32%	35%
Not teleworking	81%	75%	73%	68%	65%
Job responsibilities allow telework and interested in telework ("could and would")	24%	21%	18%	18%	25%
Job responsibilities allow telework, but Not Interested in telework	6%	9%	11%	9%	6%
Job responsibilities would Not allow telework	51%	45%	44%	41%	34%

Telework by Personal Characteristics

Telework was not distributed equally by demographic group. The next table compares the incidence of telework by respondents' sex, race/ethnicity, age, and income. The third column shows the percentage of each demographic group who teleworked at the time of the survey (e.g., 35% of men and 34% of women). The last column shows the percentage of commuters in the group who "could and would" telework if given the opportunity (e.g., additional 25% of men and 25% of women would telework). Note that the "could and would" percentages should be compared against the 25% of all commuters in the region who "could and would" telework.

Some demographic groups teleworked more than did others. For example, 39% of Non-Hispanic Whites teleworked, compared with 27% of Non-Hispanic Blacks and 26% of Hispanics. Use of telework appeared to be approximately the same for the three age groups 25-34 years, 35-44 years, and 45-54 years, then declining as age increased further. And there was a strong pattern of increasing telework as income increased; More than four in ten respondents with household incomes of \$140,000 or more teleworked, compared with only about 5% of workers with incomes below \$30,000, 15% of workers with incomes between \$30,000 and \$59,999, and 25% of respondents with incomes of \$60,000 to \$99,999.

The next table summarizes the 2019 results shown above, with additional comparisons for previous SOC surveys. The percentage of current plus potential telework has grown dramatically from 43% in 2007 to 60% in 2016. Interestingly, as indicated by the bottom row of the next table, the percentage of commuters who said their jobs were incompatible with telework has steadily dropped from 51% in 2007 to 34% in 2019. It seems unlikely that the composition of jobs in the region changed radically from 2007 to 2019. Therefore, this results suggests a shift in commuters' belief that they could telework: either their ability and/or their perception of that ability to work away from their primary workplace changed. This could be related to increasing availability of communication, computer, and networking technology or perhaps from greater understanding of telework options and a broader definition of what responsibilities were "telework-compatible."



Telework by Demographic Characteristics

DEMOGRAPHIC CHARACTERISTIC	ALL COMMUTERS		
	(n = __)*	PERCENTAGE WHO TELEWORKED	PERCENTAGE WHO "COULD AND WOULD" TELEWORK**
SEX			
Male	*3,859	35%	25%
Female	3,806	34%	25%
RACE/ETHNICITY			
Non-Hispanic White	5,466	39%	24%
Non-Hispanic Black	1,351	27%	24%
Hispanic	502	26%	26%
AGE			
Under 25 years	205	19%	31%
25 – 34	1,520	35%	27%
35 – 44	1,795	37%	26%
45 – 54	1,998	36%	24%
55 – 64	1,883	32%	23%
65 or older	614	27%	17%
INCOME			
Less than \$30,000	123	5%	15%
\$30,000 – \$59,999	510	15%	27%
\$60,000 – \$99,999	1,234	25%	27%
\$100,000 – \$139,999	1,267	36%	25%
\$140,000 – \$179,999	1,013	45%	23%
\$180,000 – \$249,999	957	48%	27%
\$250,000+	580	53%	27%

* All respondents in the group, both teleworkers and non-teleworkers

** Respondents whose job responsibilities would allow telework and who would be interested in telework

The next table also illustrates the potential for additional telework; that is, the percentages of non-teleworkers who would telework in the future, if given the opportunity. In general, with only a few exceptions, additional potential was within one or two percentage points of the 25% regional average for most groups.

Use of telework increased with increasing commute distance. Only about three in ten respondents who lived less than 15 miles from work teleworked, while four in ten (41%) respondents who commuted 40 miles or more teleworked. Among respondents who lived between 15 and 39 miles away, 36% teleworked.

Respondents who lived in the Inner Core (37%) or Middle Ring (35%) areas teleworked at higher rates than did Outer Ring respondents (31%). A similar pattern was observed for telework by work area; respondents who worked in the Inner Core and Middle Ring teleworked at higher rates than did respondents who worked in the Outer Ring.

Telework by Commute Distance, Home/Work Area, and Home/Work State

COMMUTE CHARACTERISTIC	ALL COMMUTERS		
	(n = __)*	PERCENTAGE WHO TELEWORKED	PERCENTAGE WHO "COULD AND WOULD" TELEWORK**
COMMUTE DISTANCE			
Less than 5 miles	1,070	31%	28%
5 – 14 miles	2,317	29%	27%
15 – 29 miles	2,110	36%	24%
30 – 39 miles	1,012	36%	28%
40 miles +	903	41%	22%
HOME AREA (CORE/RING)			
Inner Core	2,198	37%	28%
Middle Ring	2,421	35%	24%
Outer Ring	3,488	31%	24%
WORK AREA (CORE/RING)			
Inner Core	3,843	39%	26%
Middle Ring	2,828	32%	24%
Outer Ring	1,375	23%	21%
HOME STATE			
District of Columbia	751	35%	27%
Maryland	3,876	35%	23%
Virginia	3,592	35%	26%
WORK STATE			
District of Columbia	2,720	41%	26%
Maryland	2,447	31%	23%
Virginia	2,846	31%	26%

* All respondents in the group, both teleworkers and non-teleworkers

** Respondents whose job responsibilities would allow telework and who would be interested in telework

The use of telework appeared unrelated to residents' home states; 35% of District of Columbia residents teleworked, the same percentage as for Maryland (35%) and Virginia (35%) residents. But telework was much higher among respondents who worked in the District of Columbia; 41% of District workers teleworked, compared with just 31% of Maryland and Virginia workers.

TELEWORK BY EMPLOYMENT CHARACTERISTICS

The survey data also showed some differences in the telework and potential telework distribution by employment characteristics. Federal agency employees teleworked at a much higher rate (48%) than the regional average and much higher than did employees who worked for non-profit organizations (36%), private employers (30%), and state/local agencies (14%).

Telework by Employment Characteristics

EMPLOYMENT CHARACTERISTIC	ALL COMMUTERS		
	(n = ___)*	PERCENTAGE WHO TELEWORKED	PERCENTAGE WHO "COULD AND WOULD" TELEWORK**
EMPLOYER TYPE			
Federal agency	2,435	48%	21%
Non-profit organization	1,152	36%	32%
Private employer	3,480	30%	26%
State/local agency	848	14%	26%
EMPLOYEE SIZE			
1 – 25 employees	1,390	24%	22%
26 – 100	1,578	26%	26%
101 – 250	1,031	34%	27%
251 – 999	1,414	41%	27%
1,000+	2,174	42%	27%
OCCUPATION			
Executive, manager	1,796	41%	30%
Professional	4,006	38%	26%
Sales	228	25%	24%
Administrative support	527	20%	21%
Technicians/related support	152	19%	13%
Protective services	184	15%	23%
Precision craft, production	74	14%	6%
Military	90	9%	25%
Other service	101	2%	14%

* All respondents in the group, both teleworkers and non-teleworkers

** Respondents whose job responsibilities would allow telework and who would be interested in telework

Generally, use of telework increased with increasing employer size. About four in ten respondents who worked for employers with 251 to 999 employees (41%) or 1,000 or more employees (42%) teleworked, compared with only one-quarter of respondents who worked for employers with between 1 and 100 employees.

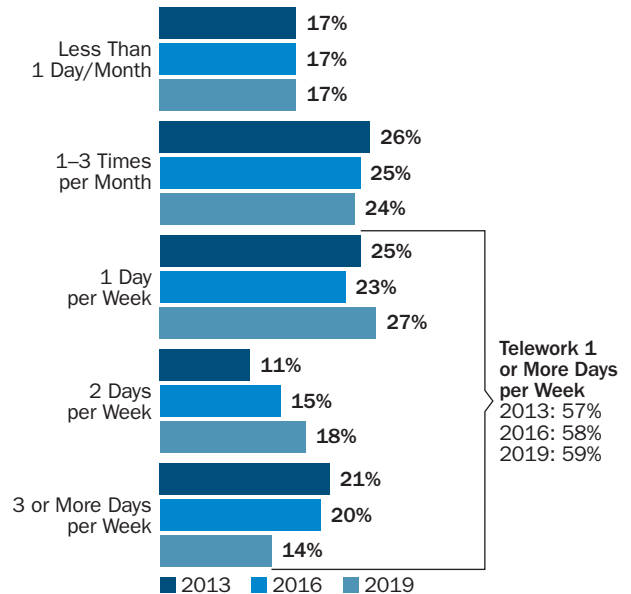
Some occupations also had higher telework rates than average, including executive/managerial (41%) and professional (38%). Common occupations with below average telework rates included sales (25%), administrative support (20%), technicians/related support (19%), protective services (15%), precision craft/production (14%), military (9%) and other service, such as restaurant workers (2%).

Again, the relative percentages of non-teleworkers who could and would telework if given the opportunity generally mirrored the relative percentages of respondents who teleworked in each group. Two groups with statistically higher potential than the 25% regional average included non-profit organization employees (32%) and respondents who worked in in executive/management occupations (30%).

Telework/Work at Home Frequency and "Episodic" Telework

The frequency with which respondents teleworked is detailed in the next figure. About 17% of respondents who said they teleworked did so infrequently, less than one time per month. One-quarter (24%) said they teleworked a few times each month. The remaining six in ten (59%) said they teleworked at least one day per week. On average, teleworkers used this arrangement about 1.20 days per week.

Frequency of Telework – 2013 to 2019
(2013 n = 1,559, 2016 n = 1,874, 2019 n = 2,856)



The overall average frequency of 1.20 in 2019 was lower than the 1.38 day frequency observed in the 2016 survey, primarily by the shift from "three or more days" telework to one or two days per week; in 2019, 14% teleworked three or more days per week, compared with 20% who teleworked this often in 2016.

FREQUENCY OF WORK AT HOME AMONG NON-TELEWORKERS

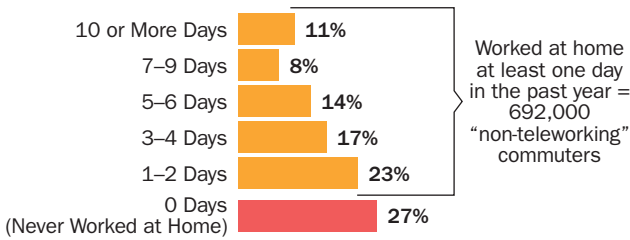
The percentage of respondents who self-defined as "teleworkers," based on the definition they were shown, likely underrepresented the true extent of telework activity in the region. The research team considered the possibility that some commuters who occasionally worked at home might not consider themselves "teleworkers." To test this premise, the survey asked respondents who said they were not "teleworkers" but who had telework-appropriate jobs the following question:

"In the past year, about how many days did you work at home all day on a regular work day, instead of traveling to your main work place?"

The purpose of the question was to determine how many actually had teleworked during the past year, even though they did not consider it telework.

Nearly three-quarters (73%) of these respondents had worked all day at home at least once in the past year. These respondents represented about 22% of all commuters region-wide or a total of 692,000 commuters. When added to the 35% of commuters who self-defined as teleworkers, the total percentage of commuters who telework/work at home at least occasionally rises to 57%.

Number of Days Worked at Home in the Past Year – Non-teleworkers
(n = 2,447)



The average work at home frequency of these "non-teleworkers" was quite low. Self-defined teleworkers teleworked an average of 1.20 days per week. By contrast, "non-teleworkers" worked at home an average of just 5.3 days per year or about 0.11 days per week (5.3 telework days per year / 50 work weeks per year = 0.11 telework days per week).

When the average telework frequency for respondents who self-identified as teleworkers and the work-at-home frequency of non-teleworkers are applied to the estimated numbers of regional commuters, it equates to approximately 272,700 regional workers teleworking/working at home on a typical workday. Nearly 6% of the telework/work at home days would be from commuters who do not consider themselves teleworkers occasionally working at home.

Total telework or work at home days per week = 1,363,700 weekly days = teleworkers + non-teleworkers who work from home:

Teleworkers = 1,073,000 teleworkers x 1.20 days per week = 1,287,600 weekly days
 Non-teleworkers work at home = 692,000 non-teleworkers x 0.11 days per week = 76,100 weekly days
Total commuters teleworking on a typical day = 272,700
 (1,363,700 weekly days / 5 days per week)

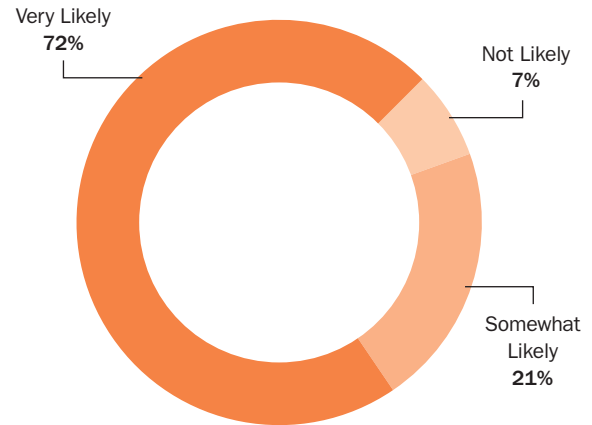
"EPISODIC" TELEWORK

The teleworking calculation above for a "typical weekday" might underestimate the true traffic-reduction benefit if commuters telework on days when traffic is likely to be heavier or more difficult than normal. To examine this situation, commuters who self-defined as teleworkers were asked the following question:

Thinking about a day when traffic in the region is likely to be disrupted due to a snowstorm or a major special event, how likely are you to telecommute to avoid the traffic? Are you very likely, somewhat likely, or not likely?

More than nine in ten teleworkers said they were likely to telework on those days; 72% said they were very likely to work at home on a major event day and 21% were somewhat likely. Thus, teleworking probably provides a higher than average benefit for regional traffic conditions on days when traffic is likely to be at its worst.

Likely to Telework During Weather Events/ Major Regional Events
(n = 2,727)



Telework Patterns

Respondents who self-defined as "teleworkers" were questioned about their telework characteristics including: telework location, length of time teleworking, access mode to telework locations outside the home, use of informal or formal telework arrangement, and source of telework information.

LENGTH OF TIME TELEWORKING

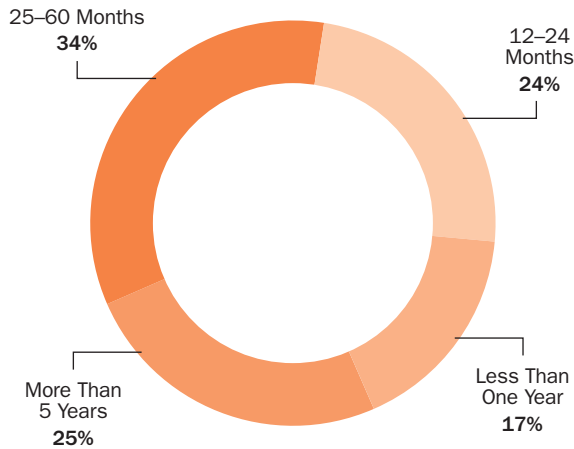
Although teleworking has been widely used in the region for many years, a sizeable share of teleworkers recently adopted this work option. Four in ten (41%) of teleworkers started teleworking within the past two years and 17% started within the past year. One-quarter (25%) had been teleworking more than five years. On average, respondents had been teleworking about 50 months. This was nearly a one-year shorter duration than that estimated in 2016 (58 months) and 2013 (59 months), but about the same duration as in the 2007 SOC survey (53 months).

FORMAL OR INFORMAL TELEWORK ARRANGEMENT

Teleworkers were asked if they teleworked under a formal program or through an informal arrangement with a supervisor. Respondents who said they were not teleworkers were asked if their employer had a telework program, even though the respondent did not use it. More than six in ten (61%) of all respondents said their employers allowed some telework, either under a formal program (34%) or an informal arrangement (27%). The remaining respondents said their employers did not have any telework program (32%) or that they did not know (DK) about any program (7%).

Length of Time Teleworking

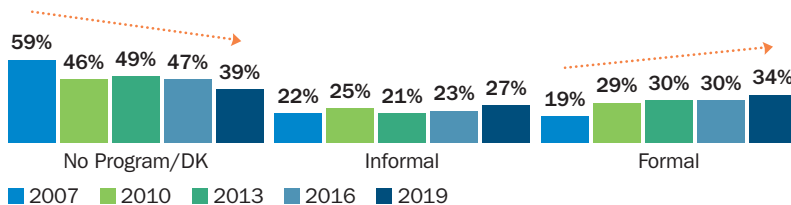
(n = 2,744)



The next figure also shows the incidence of telework arrangements for the four previous SOC surveys beginning with 2007. The share of employees that reported telework availability increased substantially between 2007 and 2010, leveled off through 2016, then increased again in 2019. In the 2007 SOC survey, only 41% of respondents noted that their employer allowed telework, either formal or informal. By 2010, more than half of respondents said their employer offered some telework option. This percentage was relatively stable through 2016, but increased to 61% in 2019.

Telework Arrangements – 2007 to 2019

(2007 n = 6,168, 2010 n = 5,854, 2013 n = 5,892, 2016 n = 5,487, 2019 n = 8,101)



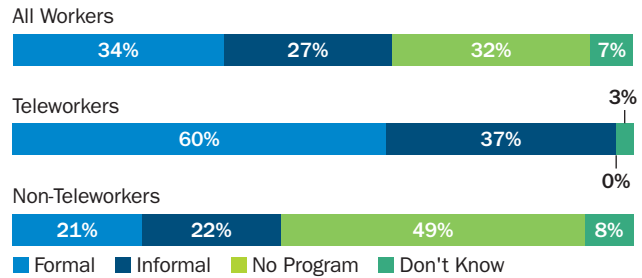
The incidence of informal telework programs has increased since 2007, but the primary growth has been in the availability of formal programs. In 2007, telework arrangements were slightly more likely to be informal (22%) than formal (19%), while by 2010, the proportions had reversed and formal telework arrangements predominated (29%) over informal arrangements (25%). By 2019, formal arrangements are even more common than informal.

Availability of Telework Arrangements at Worksites for Teleworkers and Non-teleworkers

As expected, teleworkers were much more likely than were non-teleworkers to work for an employer with a formal telework program. Six in ten (60%) teleworkers were under a formal arrangement and 37% teleworked under an informal arrangement with their supervisor. This represents a continued shift from 2007, when only 19% of teleworkers had a formal agreement. This appears to signal a greater acceptance of formal telework.

Formal and Informal Telework Arrangements Available at Work – Teleworkers and Non-Teleworkers

All respondents and Teleworkers versus Non-Teleworkers (All workers n = 8,101, Teleworkers n = 2,867, Non-teleworkers n = 5,223)



By contrast, only 21% of non-teleworkers said their employers had a formal telework program and 22% said telework was permitted under informal arrangements. Half (49%) said the employer had no program and 8% didn't know if a program existed.

Telework Arrangement by Employer Type – The availability of telework arrangements varied widely by respondents' employer types. Formal programs were most common among respondents who worked for a Federal government agency.

Nearly seven in ten (68%) respondents who worked for Federal agencies said their employers had formal programs, compared to only about 26% of respondents who worked for non-profit organizations, 17% who worked for private employers, and 24% who were employed by state/local agencies.

Respondents who worked for non-profit organizations or private employers were most likely to have informal telework: four in ten non-profit employees and

Formal or Informal Telework Arrangements By Employer Type

PROGRAM TYPE	FEDERAL AGENCIES (n = 2,434)	NON-PROFIT ORGANIZATIONS (n = 1,151)	PRIVATE EMPLOYERS (n = 3,478)	STATE/ LOCAL AGENCIES (n = 848)
No telework program / Don't know if program exists	21%	34%	46%	59%
Telework permitted	79%	66%	54%	41%
Formal program	68%	26%	17%	24%
Informal arrangement	11%	40%	34%	16%

34% of private sector employees said their employers permitted informal telework. State/local government agencies were least likely to permit telework under any arrangement. Only 41% of these respondents said their employer allowed employees to telework at all.

Telework Arrangement by Employer Size –

Respondents who worked for large employers were most likely to have access to a telework program and to have access to a formal program. Three-quarters of respondents who worked for employers with 1,000 or more employees said their employer had either a formal program (55%) or permitted informal telework (20%). By contrast, less than half of respondents who worked for employers with 50 or fewer employees had access to either formal (16%) or informal (32%) telework.

Telework Arrangement by Employer Location – Finally, access to telework programs generally and formal telework, specifically, were both more common for respondents who worked in the Inner Core of the region. Seven in ten respondents who worked in the Inner Core said their employer had either a formal program (41%) or permitted informal telework (29%). Among Middle Ring workers, about six in ten had access to either a formal program (30%) or informal program (27%). Workers in the Outer Ring were least likely to have access to telework; only 44% had any telework option and just 20% said their employer had a formal program.

Formal or Informal Telework Arrangements by Employer Size

PROGRAM TYPE	1-50 EMPLOYEES (n = 2,133)	51-100 EMPLOYEES (n = 833)	101-250 EMPLOYEES (n = 1,028)	251-999 EMPLOYEES (n = 1,414)	1,000+ EMPLOYEES (n = 2,174)
No telework program / Don't know if program exists	53%	48%	39%	27%	25%
Telework permitted	47%	52%	61%	73%	75%
Formal program	16%	20%	31%	43%	55%
Informal arrangement	32%	32%	30%	30%	20%

Formal or Informal Telework Arrangements by Employer Work Location

PROGRAM TYPE	INNER CORE (n = 3,840)	MIDDLE RING (n = 2,826)	OUTER RING (n = 1,374)
No telework program / Don't know if program exists	30%	43%	56%
Telework permitted	70%	57%	44%
Formal program	41%	30%	20%
Informal arrangement	29%	27%	24%

