



March 2018

FEDERAL REAL PROPERTY

Agencies Make Some Use of Telework in Space Planning but Need Additional Guidance

Accessible Version

GAO Highlights

Highlights of [GAO-18-319](#), a report to congressional requesters

Why GAO Did This Study

Federal agencies are exploring ways to use telework as a tool to reduce the federal footprint and use space more efficiently. GAO was asked to examine the effects of telework on agencies' space-planning efforts. In this report, GAO reviewed: (1) how the 23 civilian CFO Act agencies reported using telework in office space planning; (2) the specific ways selected agencies and GSA used telework in their office space planning; and (3) any challenges the civilian CFO Act agencies faced in using telework in office space planning.

GAO surveyed all 23 civilian CFO Act agencies, analyzed each agency's space-planning documents, and *Real Property Efficiency Plans*. GAO reviewed four agencies in greater detail based on analysis of telework data and other factors. For those four agencies GAO conducted site visits, interviewed officials, and analyzed agency documents. GAO also identified challenges agencies faced in using telework in space planning, based on survey results, agency documents, and interviews.

What GAO Recommends

GSA concurred with recommendations that GSA should: (1) develop guidance on how agencies can use telework as a strategic space-planning tool and make this guidance readily available and (2) complete and make the Workplace Investment and Feasibility Tool available to federal agencies for use in assessing the benefits and costs of telework.

View [GAO-18-319](#). For more information, contact Lori Rectanus at (202) 512-2834 or rectanusl@gao.gov.

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Agencies Make Some Use of Telework in Space Planning but Need Additional Guidance

What GAO Found

The 23 civilian Chief Financial Officer (CFO) Act agencies reported various ways of considering and using telework as a space-planning tool, by, for example, implementing desk-sharing for employees who telework in order to relinquish leased space, or increasing the number of staff working in an existing space without increasing its size. All of the 23 agencies discussed telework in the context of space planning and achieving greater space efficiencies in either their space-planning documents or *Real Property Efficiency Plans*. The agencies that used telework as a space-planning tool generally reported implementing smaller or unassigned workstations.

Three of the four agencies GAO reviewed in greater detail—the General Services Administration (GSA); the Office of Justice Programs at the Department of Justice; the Centers for Disease Control at the Department of Health and Human Services; and the Bureau of the Fiscal Service at the Department of the Treasury—leveraged telework to reduce or use office space more efficiently. For example, GSA and the Office of Justice Programs used telework to accommodate more employees in a smaller office space as illustrated in figure 1 below. The Centers for Disease Control used telework to accommodate more employees in the same amount of space. The Bureau of the Fiscal Service reduced space without telework by reducing the size of individual workstations.

Figure 1: A Telework Scenario That Can Increase Space Efficiency or Reduce Space



Source: GAO. | GAO-18-319

The 23 civilian CFO Act agencies reported several challenges in using telework to reduce space including human capital issues, mission suitability, and measuring cost savings attributable to telework. About two-thirds of the agencies said they would find it helpful to have additional information, assistance, or resources in using telework as a space-planning tool. GSA provides guidance to improve space utilization. However, GAO found that GSA last developed relevant formal guidance in 2006. This information, and that on GSA's telework and space-planning websites, was neither specific nor detailed and therefore of limited assistance to agencies that would like to use telework as a space-planning tool. Additionally, GSA's space-planning tool—the Workplace Investment and Feasibility Tool, intended to help agencies quantify the benefits and costs of telework—remains under development after more than 4 years, and GSA officials have not decided whether to make the tool available to other federal agencies. As such, agencies reported that they lack adequate guidance to determine how best to reduce space or use it more efficiently, and how to assess the benefits and costs of using telework in space planning.

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Abbreviations

CDC	Centers for Disease Control and Prevention
CFO	Chief Financial Officer
DOJ	Department of Justice
DOT	Department of Transportation
Fiscal Service	Bureau of the Fiscal Service
GSA	General Services Administration
HHS	Department of Health and Human Services
HUD	Department of Housing and Urban Development
NCHS	National Center for Health Statistics
OJP	Office of Justice Programs
OMB	Office of Management and Budget
OPM	Office of Personnel Management

SBA	Small Business Administration
SSA	Social Security Administration
the Act	the Telework Enhancement Act of 2010
USF	useable square feet

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March 22, 2018

Congressional Requesters:

The federal government is committed to the goal of reducing its real property footprint. As part of achieving this goal, the Office of Management and Budget's (OMB) *Reduce the Footprint Policy* requires that federal agencies explore alternatives to acquiring more office space. One such alternative is telework, which can be used to reduce the number of personnel using onsite workspace,¹ thereby reducing agencies' space needs while continuing to fulfill missions. Already, nearly half of all eligible federal employees participate in telework programs.

You asked us to examine the impact of telework on space planning, including how agencies use telework to reduce space or realize other benefits. This report addresses:

- how the 23 civilian Chief Financial Officers (CFO) Act agencies reported using telework in office space planning;
- the specific ways selected agencies and the General Services Administration (GSA) used telework in their office space planning; and
- any challenges the 23 civilian CFO Act agencies faced in using telework in office space planning.

To determine how the civilian CFO Act agencies² reported using telework in office space planning, we surveyed these agencies and analyzed their responses. We also obtained and analyzed these agencies' space-planning documents and *Real Property Efficiency Plans*³ to identify

¹ OMB, *Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint*, Management Procedures Memorandum No. 2015-01 (Washington, D.C.: March 25, 2015).

² "CFO Act agencies" refers to the 24 agencies listed in the Chief Financial Officers (CFO) Act of 1990, as amended. 31 U.S.C. § 901(b). We surveyed the 23 civilian CFO Act agencies. The Department of Defense is the 24th CFO Act agency—a non-civilian agency.

³ OMB's *Reduce the Footprint* policy requires CFO Act agencies to prepare *Five-Year Real Property Efficiency Plans* on a rolling annual basis. According to the policy, these plans should describe agencies' overall strategic and tactical approaches for managing their real property portfolios, including providing rationales and justifications for optimum portfolio size, identifying properties for disposal, improvements, and cost savings measures. OMB, *Implementation of OMB Memorandum M-12-12 Section 3, Reduce the Footprint*, Management Procedures Memorandum No. 2015-01 (Washington, D.C.: Mar. 25, 2015).

common themes and references to telework. To determine the specific ways agencies included telework in their office space planning, we selected and reviewed four agencies in greater detail. We selected a non-generalizable sample of three sub-agencies⁴ as illustrative case studies with criteria such as an agency-level goal of using telework to reduce real estate costs, the rate of telework among employees, and range of size. The selected sub-agencies include: (1) Bureau of the Fiscal Service (Fiscal Service)—Department of the Treasury (Treasury); (2) Centers for Disease Control and Prevention (CDC)—Department of Health and Human Services (HHS); and (3) Office of Justice Programs (OJP)—Department of Justice (DOJ). We also selected GSA as a comparative example since it is responsible for providing space-planning guidance to client agencies and has experience using telework in space planning. For each of these case studies, we reviewed telework and space-planning documents; visited seven office locations with recent space reductions in New York City, Philadelphia, and the Washington, D.C., area; and interviewed knowledgeable agency officials. Information from these case studies is not generalizable to the universe of federal agencies.

To identify challenges agencies face in using telework in space planning, we reviewed agencies' *Real Property Efficiency Plans* and analyzed responses to survey questions. Additionally, we selected two outside experts and four entities from the private sector for informational interviews based in part on our literature review and their experience with telework and the space-planning process. Statements made by knowledgeable federal officials, outside experts, and private sector entities are not generalizable to the universe of civilian CFO Act agencies. Because GSA bears responsibility for government-wide space-planning guidance, we also reviewed and analyzed the guidance it has developed and available information on its telework and space-planning websites. We compared GSA's guidance and website information to relevant statutory requirements and federal internal controls standards related to external communication (see app. 1 for additional details on our scope and methodology).

⁴ For the purpose of case study selection, we analyzed data from the Office of Personnel Management's (OPM) Public Use 2014-2015 Telework Data Call. This data distinguishes between "agencies" (e.g., Department of Health and Human Services) and "sub-agencies" (e.g., Centers for Disease Control and Prevention), which are sometimes referred to as "agency components." For the purposes of this report, we refer to the selected sub-agencies as "selected agencies."

We conducted this performance audit from January 2017 to March 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained for this review provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Federal Requirements for Implementing Telework and Reducing Space

Implementing Telework: The Telework Enhancement Act of 2010 (the Act) establishes telework implementation requirements for agencies, including, for example, that each agency designate a Telework Managing Officer and that each agency incorporate telework into its continuity of operations plans.⁵ The Act does not mention telework specifically in the context of space planning. The Act also requires the Office of Personnel Management (OPM) to assess whether agencies have met agency-established telework outcome goals such as real estate savings.⁶ It also requires OPM to

- submit reports that include executive agencies' goals for increasing telework participation to the extent practicable,
- assist each agency with developing qualitative- and quantitative-teleworking measures and goals, and
- track telework eligibility and participation rates across the government.

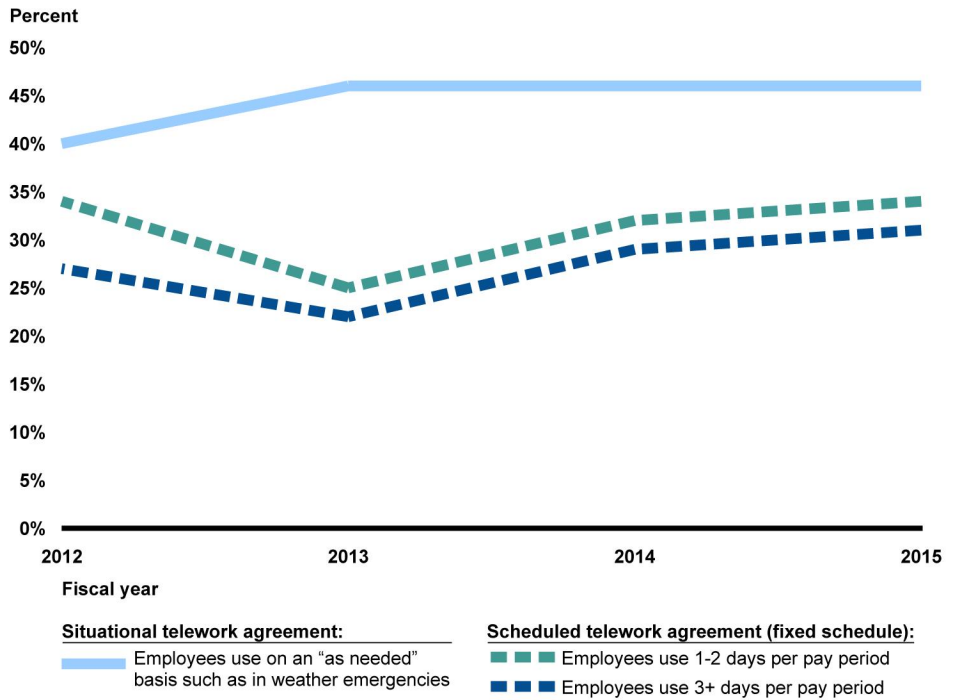
According to OPM telework information from fiscal year 2012 through fiscal year 2015, the percentage of federal workers eligible to telework

⁵ Telework Enhancement Act of 2010, Pub. L. No. 111-292, 124 Stat. 3165.

⁶ Legislation enacted in 2000 (Pub. L. No. 106-346, 114 Stat. 1356, 1356A-36 (2000)) required executive agencies "to establish a policy under which eligible employees of the agency may participate in telecommuting to the greatest extent possible without diminished employee performance." In addition, legislation enacted in 2004 (Pub. L. No. 108-199, 118 Stat. 3, 99 (2004)) required Commerce, Justice, State, the Judiciary and the Small Business Administration to "each establish a policy under which eligible employees may participate in telecommuting to the maximum extent possible without diminished employee performance."

remained stable at about 45 percent, on average. However, during the same period, the percentage of eligible employees who participated in telework increased from 29 percent to 46 percent.⁷ Figure 1 shows the frequency of telework across the federal government from fiscal years 2012 through 2015 by type of telework.⁸

Figure 1: Federal Executive Agencies' Telework Participation Rates by Type of Telework Agreement, Fiscal Years 2012 through 2015



Source: GAO review of Office of Personnel Management telework information for fiscal years 2012 through 2015. | GAO-18-319

Reducing Space: OMB issued the *National Strategy for the Efficient Use of Real Property* and the *Reduce the Footprint* policy in 2015, which require all CFO Act agencies to improve the efficiency of real property

⁷ These figures include telework under all forms of telework agreements such as those for situational and scheduled telework agreements.

⁸ The 2010 Act requires OPM to report on the progress and status each executive agency is making in implementing the Act.

use, control costs, and reduce holdings.⁹ These OMB initiatives also required agencies to

- develop *Five-Year Real Property Efficiency Plans* annually;
- develop office space standards that specify maximum square footage for office workstations;
- identify reduction targets for office space in square feet; and
- freeze the footprint (i.e., not increase square footage of office space).

OMB's *National Strategy* noted that employee telework has changed the dynamic of the federal real property portfolio and resulted in a need for less space. OMB's *Reduce the Footprint* guidance memo states that agencies' 5-year plans should include an explanation of actions the agency is taking to increase space efficiency, including cost-effective alternatives to acquisition of additional office space, such as consolidation, colocation, teleworking, and "hoteling." Federal statute also requires that agencies consider whether space needs can be met using alternative workplace arrangements when deciding whether to acquire new space.¹⁰

Mobility as a Space-Planning Tool

GSA defines mobility as an overarching term describing the ability of employees, enabled by information technology (IT) and workplace policies to perform work both within and outside the agency worksite. Under this definition, mobility includes telework, desk-sharing, site work, and travel. Agencies can strategically use telework—one form of mobility—combined with desk-sharing and hoteling to reduce space needs and increase efficiency.¹¹ This allows agencies to plan for fewer workstations than the number of employees. Other space efficiency strategies such as smaller workstations (e.g., reduced space standards), reconfigured office space (e.g., open-office plans instead of private

⁹ OMB, *National Strategy for the Efficient Use of Real Property 2015-2020: Reducing the Federal Portfolio through Improved Space Utilization, Consolidation, and Disposal* (Washington, D.C.: Mar. 25, 2015) and OMB, *Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint*, Management Procedures Memorandum No. 2015-01 (Washington, D.C.: Mar. 25, 2015).

¹⁰ 40 U.S.C. § 587(c)(2).

¹¹ Desk-sharing and "hoteling" are situations in which mobile employees do not have permanent workstations and use unassigned workspaces when they work in the office.

offices), and mobile technology (e.g., laptops, Wi-Fi throughout the office, and smart phones) can be combined with telework and used as planning tools to reduce office space, use space more efficiently, and potentially cut costs.

GSA, in a 2010 publication,¹² described a continuum of three different scenarios for the ways agencies may use mobility, including telework. These scenarios range from limited mobility not leveraged for space planning to extensive mobility leveraged for space planning to reduce and use office space more efficiently:

(1) No space changes: Some employees telework at least 2 scheduled days per week but retain assigned workstations with no changes to the existing space configuration.

(2) No space reduction but different space allocation: Most employees telework at least 2 scheduled days per week and keep assigned workstations. Workstations are smaller and more densely organized; and space freed up by smaller workstations can be used for collaborative work spaces.

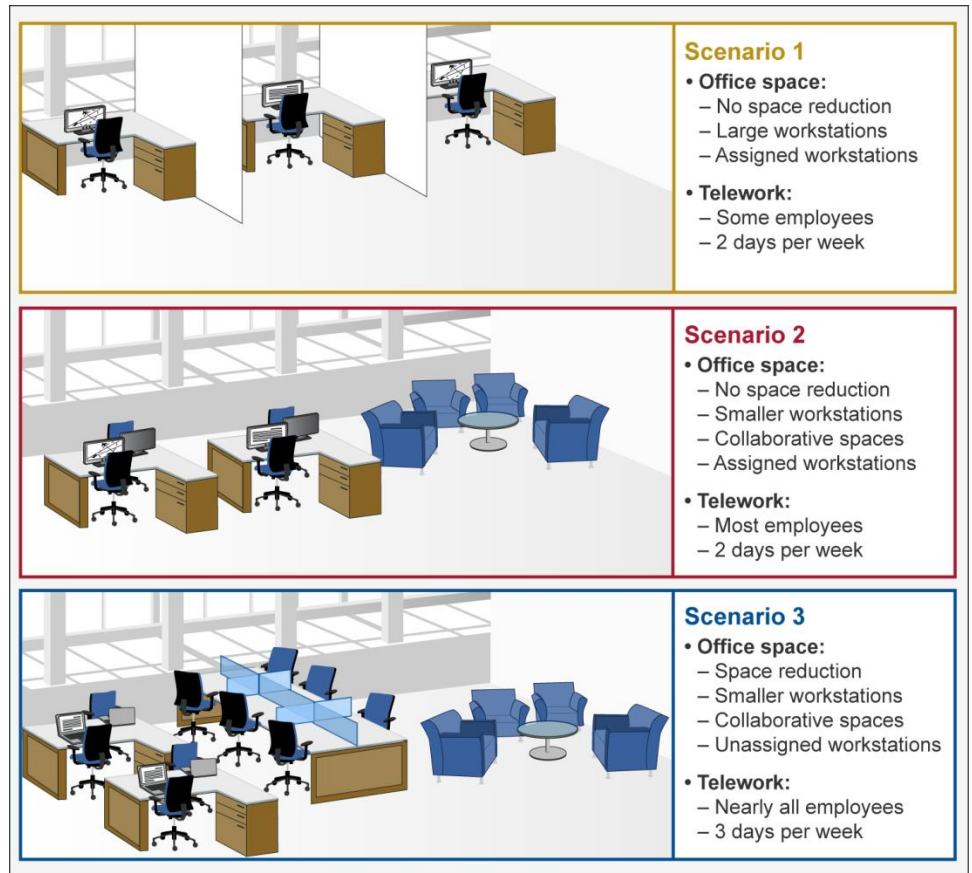
(3) Space reduction and different space allocation: Nearly all employees telework at least 3 scheduled days per week and participate in hoteling (i.e., unassigned workstations), and workstations are also smaller and more densely organized. In this scenario, according to GSA, an agency can redesign its office and potentially reduce space by up to 30 percent.

The key factors in distinguishing these scenarios illustrated in figure 2 below include the:

- level of employee participation in telework;
- changes to physical office spaces (e.g., smaller and more densely organized workstations and more emphasis on collaborative workspaces); and
- extent to which employees have assigned workstations or participate in desk-sharing.

¹² General Services Administration, *Leveraging Mobility, Managing Place: How Changing Workstyles Impact Real Estate and Carbon Footprint* (Washington, D.C.: 2010).

Figure 2: Three Telework Scenarios and Office Space Impacts



Source: GAO. | GAO-18-319

GSA Provides Space-Planning Guidance and Assistance to Agencies

Under federal statute, GSA has a role in promulgating rules and developing guidance promoting the efficient use of real property.¹³ For example, the GSA Administrator may provide guidance, assistance, and oversight to client agencies regarding the establishment and operation of alternative workplace arrangements, which include leveraging telework to

¹³ Under 40 U.S.C. § 587(c)(3), the Administrator may provide guidance, assistance, and oversight to any person regarding the establishment and operation of alternative workplace arrangements.

reduce space needs. GSA also directly assists client agencies with identifying and prioritizing opportunities to improve and implement real-property efficiency measures.¹⁴

Agencies Reported Various Ways of Considering and Using Telework as a Space Planning Tool

In reviewing planning documents, policies, and survey data, we found that the 23 civilian CFO Act agencies reported using telework to reduce or use space more efficiently. Specifically, our analysis of (1) agency-wide space-planning policies and procedures and (2) *Real Property Efficiency Plans* found that all of the agencies discussed telework in the context of space planning and achieving greater space efficiencies. Agencies also provided examples in survey responses of how they have used telework to increase operational effectiveness while optimizing their use of space.

Agencies Use Telework in Space Planning, and Most Include It in Their Agency-Wide Policies

Fifteen agencies' space-planning policies and procedures included provisions for using telework and other mobility strategies, such as hoteling and desk-sharing, as a strategic space-planning tool. Three of the agencies mentioned these strategies only in the context of space planning, and five agencies did not mention them at all (see table 1).

Table 1: Civilian Chief Financial Officer Act Agencies that Reference Telework in Space Planning Documents

	Number of Agencies
Incorporated Telework by expressly stating that telework should be used in space planning, by providing guidance for using telework, or by issuing standards for integrating telework in agency-wide space planning	15

¹⁴ For example, according to GSA, its Total Workplace Program office assists client agencies in government-owned and commercially leased space to use space more efficiently. Most recently, this program assisted 16 federal clients in rightsizing their office space in fiscal year 2016.

	Number of Agencies
Mentioned Telework in policies and procedures without further requirements, guidance or standards	3
Did not mention telework	5

Source: GAO analysis of agency space planning policies and procedures. | GAO-18-319

For the fifteen agencies with space planning policies that incorporated telework, the documents either expressly directed agency planners to include telework, hoteling, or desk-sharing in space planning; provided instructions and guidance for using these in space planning; or issued space allocation standards for their implementation. Several agency-wide space plans identify space reduction goals based on using telework strategically. For example, the Department of Transportation (DOT) documents identify a goal of at least a 10 percent workspace reduction in new acquisitions as a result of compressed work schedules and telework, and specifically state that employees who telework six or more days per pay period should not have a permanent workspace.

Agency-wide space planning documents from three civilian CFO Act agencies mentioned telework, hoteling or desk-sharing as strategies in the context of space planning. For example, DOJ's agency-wide policy notes that telework and hoteling could increase the efficient use of space and directs each sub-agency to maintain its own space design guidelines within agency-wide policy office space standards. The other two agencies, the Department of State and the Nuclear Regulatory Commission, either had a short provisional agency-wide space planning document that laid out space standards or mentioned telework, hoteling and desk-sharing as a tool for creating sustainable space. Five agencies' space planning documents made no reference to telework; however, one agency, OPM, developed a maximum office space utilization rate and criteria for determining which positions require a private office.

Real Property Efficiency Plans Provide Information on Agencies' Efforts to Use Telework

As noted above, OMB's *Reduce the Footprint* policy (2015) requires agencies to establish *Real Property Efficiency Plans*.¹⁵ In our analysis of the agencies' fiscal year 2016 or 2017 plans, we found that 19 of the 23 civilian CFO Act agencies discussed telework in the context of space planning.¹⁶ A few agencies' *Real Property Efficiency Plans* explicitly stated that the agency reduced space as a result of telework. For example, GSA used telework to reduce space in its Heartland, Rocky Mountain, and National Capital Region offices.

Some (5 of 23) *Real Property Efficiency Plans* discussed the telework pilot programs agencies have initiated. For example, the Department of Education's plans reported using a pilot program to acclimate employees to teleworking and desk-sharing; as a result, the agency intends to incorporate hoteling or space-sharing opportunities into proposed space designs in future projects. The Social Security Administration (SSA) plans also reported initiating a pilot program to experiment with smaller "hoteling" workspaces. Similarly, the Nuclear Regulatory Commission's plan reported conducting a pilot program at its headquarters offices to identify challenges, better understand telework, and evaluate the potential of shared workspaces.

¹⁵ Pursuant to OMB's *Reduce the Footprint* policy, these plans describe an agency's overall strategic and tactical approaches to managing real property as well as identify efficiency improvements, general usage, and cost savings measures. Agency plans must address any administrative initiatives agencies are undertaking at a portfolio-wide level to increase space efficiency, including cost effective alternatives to acquiring additional office space such as telework and "hoteling," among others.

¹⁶ A workstation is an office, cubicle, or open workspace counted by individual seat.

Agencies Reported Using Telework to Reduce Space and Achieve Space Efficiencies

In response to our survey,¹⁷ about three-quarters of agencies reported space-planning policies that use telework to reduce office space, lower real estate costs, or reduce the size of individual workstations.¹⁸ Agencies reported accomplishing this by using desk-sharing and hoteling for employees who have relinquished permanent workspaces. For example, several agencies discussed strategies to reduce space in their responses to our survey.¹⁹

- The Department of Labor reported using telework to close some small offices resulting in overall space reductions of about 16,000 square feet.²⁰
- OPM reported that it both reduced space and created space efficiencies by transitioning staff in its Eastern Management Development Center to full-time telework and terminating the lease, resulting in a space reduction of about 32,000 square feet. OPM's Human Resource Solutions Program also achieved a 47 percent space reduction when it instituted desk-sharing and freed the vacated space for use by another program office.
- The Department of the Treasury reported that its sub-agency, the Internal Revenue Service, has aggressively used telework to help reduce its real property portfolio, while other Treasury units have

¹⁷ The survey question asked respondents, "Does your agency have agency-wide office space planning policies and procedures? And, if "yes," the second part of the question asked respondents to answer either "Yes" or "No" to "Do your agency-wide office space planning policies and procedures consider telework in the following ways: (1) Reduce office space (Yes = 18 of 23); (2) Reduce the amount of square feet per employee (Yes = 18 of 23); (3) Lower real estate costs (Yes = 16 of 23).

¹⁸ Space utilization is typically measured by dividing total usable square feet by the number of personnel in the space.

¹⁹ The survey included several opportunities for respondents to provide narrative responses. For example, the survey asked for narratives on: (1) how telework programs achieved cost savings or cost avoidances; (2) additional information, assistance, or resources that would be helpful in using telework in space planning; (3) specific challenges agencies face in using telework as a space-planning tool; (4) identifying space reduction as a result of telework; and (5) identifying cost savings as a result of telework.

²⁰ Agency-reported cost savings included throughout this report are not net cost savings (i.e., they are not offset by costs related to using telework for space planning, such as renovation costs or IT investments).

leveraged telework to achieve significant space reductions. At the end of fiscal year 2016, Treasury reported agency-wide reductions of about 484,000 square feet at a cost savings of about \$10 million.

Two agencies—Department of Homeland Security, and the National Science Foundation—reported using telework to increase the efficiency of existing office space in sub-agencies by increasing staff without increasing the size of offices, for example:

- The Department of Homeland Security reported that one of its sub-agencies used telework in the planning and design of a new office, resulting in both a space reduction and more efficient use of the space. The new office is 57,573 square feet smaller than the prior office while personnel assigned to the office increased from 315 to 394.
- The National Science Foundation reported that it used teleworking, among other workspace strategies such as new space standards and virtual technologies, to increase staff numbers without increasing its real estate footprint.

Three of the Four Agencies We Reviewed in Depth Leveraged Telework to Reduce or Use Office Space More Efficiently

Among the agencies we reviewed in detail—GSA, OJP, CDC, and the Fiscal Service—the use of telework in office space planning varied from emerging consideration to extensive implementation.²¹ GSA and OJP have used telework extensively to both reduce space and increase space efficiency in their office spaces. CDC has leveraged telework to reduce space or use space more efficiently in more limited cases while the Fiscal Service has begun to consider telework in future space planning. Appendix II provides additional details on office spaces where these agencies reduced space or used space more efficiently, including the role of telework, if any.

²¹ The agencies we selected for review include three CFO Act sub-agencies as well as GSA, which we reviewed as a comparative example.

Table 2: Four Selected Agencies' Use of Telework in Space Planning

Use of telework	General Services Administration	Office of Justice Programs	Centers for Disease Control and Prevention	Bureau of the Fiscal Service
Percentage of employees eligible to telework (fiscal year 2015)	93	98	79	75
Percentage of all employees who teleworked 3 or more days per pay period (fiscal year 2015)	48	48	26	27
Used telework to reduce space	Yes	Yes	No	No
Used telework to increase space efficiency	Yes	Yes	Yes	No

Source: GAO analysis of Office of Personnel Management (OPM) 2015 telework data and agencies' telework and space documents. | GAO-18-319

GSA Used Telework Extensively as a Space-Planning Tool

GSA has leveraged telework to reduce space by implementing unassigned workstations in nearly all of its regional and headquarters offices, along with other forms of “employee mobility,”²² complementary IT, and smaller space standards. GSA adopted telework as early as 1999 and by fiscal year 2015, more than 90 percent of all eligible GSA employees teleworked, and nearly half of all employees teleworked 3 or more days per pay period, according to OPM data.²³ GSA’s space policy cites desk-sharing (e.g., hoteling, “hot-desking,”²⁴ or other arrangements)

²² GSA considers telework one form of “employee mobility,” which is the ability of employees, enabled by IT and progressive workplace policies, to perform work both within and outside the agency worksite. Other forms of employee mobility include, for example, conference attendance, travel, and site work.

²³ OPM telework data for fiscal year 2015 are the most comprehensive and current information available on telework in the executive branch. We have previously reported on the limitations of these data. See: GAO, *Federal Telework: Additional Controls Could Strengthen Telework Program Compliance and Data Reporting*, [GAO-17-247](#) (Washington, D.C.: Feb. 17, 2017); GAO, *Federal Telework: Better Guidance Could Help Agencies Calculate Benefits and Costs*, [GAO-16-551](#) (Washington D.C.: July 15, 2016); and GAO, *Federal Telework: Program Measurement Continues to Confront Data Reliability Issues*, [GAO-12-519](#) (Washington D.C.: Apr. 19, 2012).

²⁴ “Hot-desking” differs from hoteling in that employees may use non-dedicated workspaces on an unreserved first-come, first-serve basis.

as one strategy to help meet its space standard of 136 useable square feet (USF) per person. GSA employees may telework full-time, but may be required to give up dedicated workstations if they are on site 2 or fewer days per week.

GSA has gradually transitioned to unassigned workstations at headquarters and in its regional offices, allowing the agency to implement desk-sharing and calculate space needs at less than one desk per employee. The agency also assigned laptops and mobile or soft phones to employees to further maximize mobility. The three GSA sites we visited used space-planning strategies to achieve, or nearly achieve, GSA's space standard of 136 USF per person. For example, at its Philadelphia Regional Office, GSA leveraged existing telework levels to meet reduced space standards and move to a smaller leased space by accommodating about 600 employees in fewer than 500 workstations. According to GSA, this allowed the office to achieve a utilization rate of 139 USF per person and realize a reported annual rent cost savings of about \$2 million. Similarly, at its New York Regional Office, GSA also leveraged existing telework levels to meet reduced space standards and move to a smaller leased space. This step allowed the office to achieve a utilization rate of 119 USF per person and realize a reported total rent cost savings of nearly \$11 million.

Figure 3: General Services Administration's (GSA) Headquarters Office prior to (left) and after (right) New Space Standards



Source: GSA (left); GAO (right). | GAO-18-319

GSA also leveraged telework as part of its headquarters consolidation. GSA reports that it was able to move approximately 1,000 additional employees to the headquarters building by implementing a hoteling system and planning for less than one workstation per employee. This allowed GSA to achieve a utilization rate of 138 USF per person at its headquarters and realize a reported annual rent-cost savings of approximately \$24 million.

OJP Leveraged Telework to Consolidate Its Offices

Similar to GSA, OJP used telework, along with complementary tools, to reduce space and use space more efficiently at its consolidated office. More than 90 percent of eligible employees teleworked in fiscal year 2015, and nearly half of all employees teleworked 3 or more days per pay period, according to OPM data. More recently, OJP reported that around 70 percent of its employees teleworked in August 2017, with just less than 40 percent doing so three or more days per pay period. At the departmental level, DOJ's plans to improve space utilization include reduced space requirements, and, in some cases, alternative workplace

strategies.²⁵ DOJ's space utilization policy mentions telework with hoteling as one way to increase efficient use of space, and DOJ's telework policy mentions the potential of telework to create cost savings by decreasing space needs.²⁶ While most OJP employees are eligible to telework, a few federal staff occupying administrative positions are not eligible.

OJP took the opportunity to examine and improve its space use as three of its leases approached expiration in 2013. It leased space in two adjacent buildings under three separate leases. OJP worked with GSA to analyze space-planning options, contracting a study of the office that recommended ways to improve space utilization. This study included a survey of all employees, a complete physical space survey, and interviews with leadership. The results of this study not only indicated OJP employees' openness to more mobility but also that they had concerns such as loss of privacy and social connectedness. For example, more than 80 percent of survey respondents said they could work off-site more often with proper tools and support, and almost half said they would give up dedicated space to work remotely more often. Furthermore, interviews with the leadership of several OJP units indicated a willingness to support increased mobility but also a need to maintain privacy and improve mobile IT. According to OJP, it alleviated these concerns by encouraging participation in the planning process, highlighting opportunities for positive changes, and maintaining open communication (e.g., communicating changes and expected benefits).

Based on the analysis of space-planning options, OJP retained one of the three previous leases and leveraged telework to accommodate all employees into less space overall in one building. OJP achieved this objective by targeting 25 percent employee mobility²⁷ and implementing hoteling. Concurrently, OJP officials explained that they introduced

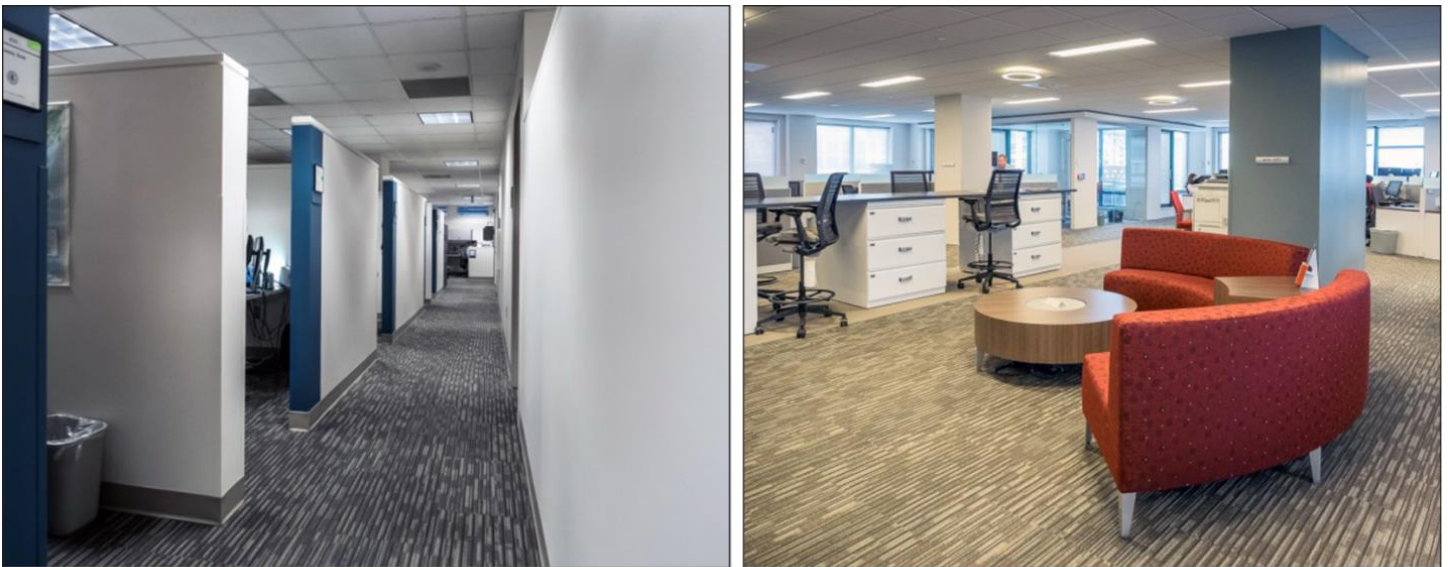
²⁵ DOJ set its target office utilization rate at 130 square feet per person, but each component maintains its own prescriptive space design guidelines due to the challenges of setting a single space standard across DOJ's unique mission requirements. According to DOJ policy, no office may exceed 300 square feet per person.

²⁶ According to OJP, it is finalizing its own telework policy.

²⁷ "Employee mobility" refers to the portion of OJP's workforce that works off-site at any given time. For example, this could mean that 25 percent of employees' telework full-time or that a larger percentage telework less than full-time.

smaller workstations and used tenant-improvement allowance funds²⁸ to reconfigure space for more flexible use. Physical reconfigurations included changing hard-walled office spaces with dedicated workstations to a primarily open office with few walls or dedicated workstations.²⁹

Figure 4: Office of Justice Programs' Office Space prior to (left) and after (right) New Space Standards



Source: GAO. | GAO-18-319

According to OJP, it complemented these changes with investments in mobile IT for individual employees, improved IT capabilities in conference rooms and other collaborative spaces, and an emphasis on training employees to work well in a mobile office environment. For example, OJP officials said they installed Wi-Fi throughout the space, issued laptops and smart phones to employees, upgraded video-conferencing capabilities in conference rooms and collaborative spaces, and expanded tools for informal employee communication. According to OJP officials, through the consolidation, they said they achieved a utilization rate of 190 USF per person—a decrease of 30 USF per person from the prior 220

²⁸ Tenant improvement allowance funds enable agencies to design, configure, and build-out space to support their program operations in space leased from GSA or private sector entities. Although the building owners provide the funding, the cost is amortized over a specified period of time and added to the rent agencies pay for the space.

²⁹ OJP fully implemented these changes on two floors of OJP's consolidated headquarters; the remaining floors saw more minor changes such as some glass walls, fresh paint, carpet, and improved IT capabilities.

utilization rate. This rate remained higher than DOJ's overall target and housed the same total number of employees—about 1,000—in about 50,000 fewer USF. OJP reports that the consolidation resulted in an estimated \$3 million annual lease-cost savings. OJP also estimates additional savings from reduced transit subsidies, carbon emissions, and continuity of operations.

CDC Used Telework to Achieve Space Efficiencies in Limited Cases

Relative to GSA and OJP, CDC has made more limited use of telework in office space-planning. CDC officials told us that they have leveraged telework as a space-planning tool in many locations, but they have only documented doing so in one case. HHS expects each sub-agency to comply with its 170 USF per-person utilization-rate policy, and this policy suggests that planned space reductions should take telework into account. As a component of HHS, CDC has its own space policy, which states that telework, desk-sharing, and hoteling can help CDC's units meet HHS's utilization rate policy of 170 USF per person. CDC's telework policy requires employees who telework frequently to agree to participate in desk-sharing, but according to CDC officials, how and to what extent this portion of the broader policy is implemented is up to the discretion of management. CDC officials cited two limitations to further implementing space sharing techniques: (1) the large number of employees' who may be unable to telework on certain days based upon their job responsibilities and (2) the voluntary nature of telework. Some CDC employees cannot work off-site at least some of the time due to confidential data or lab-based work. Approximately 60 percent of eligible CDC employees teleworked in fiscal year 2015 and about one-quarter of all employees teleworked 3 or more days per pay period, according to OPM data. CDC officials told us that telework participation ranges from 49 to 86 percent across CDC units.

CDC's National Center for Chronic Disease Prevention and Health Promotion's office in Chamblee, GA, provides the most clearly documented case of CDC's leveraging telework for space efficiency. According to CDC officials, this unit accommodated more than 300 additional employees within its existing space by implementing hoteling for employees who telework 4 or more days per pay period, and it continues to use hoteling as part of its space management strategy. In contrast, CDC's National Center for Health Statistics' (NCHS) office in

Hyattsville, MD, reduced space without leveraging telework by reconfiguring the space with smaller, soft-walled workstations.

Figure 5: Centers for Disease Control’s National Center for Health Statistics prior to (left) and after (right) New Space Standards in Hyattsville, MD



Source: GAO. | GAO-18-319

CDC officials told us that NCHS reduced its office space from seven floors to three and three-quarters floors, resulting in a reported space reduction of more than 40 percent and allowing it to achieve a 170 USF per person utilization rate. CDC officials reported that this space reduction resulted in annual rent cost savings of approximately \$1 million. Hoteling was not feasible at this location because work on confidential data limits the ability of employees to work off-site,³⁰ and NCHS employees also prefer dedicated workstations.³¹ CDC officials said that there is limited documentation of any additional cases of CDC’s leveraging telework as a

³⁰ According to the NCHS officials, pursuant to requirements to protect the confidentiality of individually identifiable information under the Confidential Information Protection and Statistical Efficiency Act of 2002 (Pub. L. No. 107-347, 116 Stat. 2962), it is NCHS policy and practice that some data cannot be accessed off-site. For example, NCHS’ manual on confidentiality specifies that no record containing personal identifiers of NCHS’s survey respondents may be electronically sent to or accessed from an employee’s or contractor’s alternative work site. According to CDC, the agency is in the process of developing a new policy to provide flexibility in accessing restricted data off-site.

³¹ During space-planning negotiations between CDC and its union as part of the most recent space reduction, NCHS employees expressed no interest in hoteling or workstations sharing—they preferred to retain dedicated workstations.

space- planning tool because, prior to our review, there had been no formal request to connect telework and space utilization data.

The Fiscal Service Has Reduced Space without Leveraging Telework

In contrast to GSA, OJP, and CDC, telework as a space-planning tool is an emerging consideration at the Fiscal Service. At the departmental level, Treasury has space standards that aim for efficient and effective offices that use increased telework and shared workstations to minimize the number of dedicated workstations. Similarly, objectives of the Fiscal Service telework policy include cost savings from reduced office space needs. Treasury's space standards specify a planned maximum utilization rate of 200 USF per person for facilities with general office space, and the Fiscal Service reported that its average office space-utilization rate was 183 USF per person at the time of our review. Treasury policy also recommends hoteling for employees who are out of the office 80 or more hours per month, but the Fiscal Service told us that it would like to conduct additional desk-sharing pilots to assess their impact before negotiating broader desk-sharing with the union. At the Fiscal Service, approximately 80 percent of eligible employees teleworked in fiscal year 2015, and about one-quarter of all employees teleworked 3 or more days per pay period, according to OPM data. The Fiscal Service reported that approximately 80 percent of Fiscal Service employees telework at its Washington, D.C., Maryland, and West Virginia locations.

At the time of our review, the Fiscal Service officials said the agency had reduced space without leveraging telework or implementing hoteling, instead relying on smaller space standards (i.e., fewer square feet per workstation) to lease smaller offices. For example, the Fiscal Service reduced space by giving up several floors at its Hyattsville, MD, office starting in 2012. According to Fiscal Service officials, they accomplished these reductions by consolidating data centers to other locations, conducting targeted buyouts of employees, and, most recently, by implementing a new space standard of 183 USF per person through smaller workstations. The officials said that the most recent space reduction at this location resulted in savings in annual rent costs not attributable to telework. Looking forward, the Fiscal Service reported that it has started taking preliminary steps to promote efficient space utilization through telework. These steps have included:

- creating an Executive Space Management Council that discussed incorporating telework and desk-sharing into space management guidelines;
- implementing a voluntary, informal desk-sharing pilot in one program area for employees who already telework 50 percent or more of the time; and
- seeking information from GSA, including discussing and visiting GSA offices that have implemented hoteling as part of their space planning model.

In addition, the Fiscal Service officials told us that the agency plans to negotiate the impact and implementation of desk-sharing and hoteling for telework employees with its union, but the Fiscal Service has not yet begun this effort.

Agencies Face Several Planning Challenges in Using Telework to Reduce Space

Our analysis of the survey responses from the 23 civilian CFO Act agencies identified three major planning challenges agencies face with using telework to reduce space:

- human capital issues such as negotiating workspace changes with collective bargaining units and managing organizational change;
- the suitability of telework to mission work requirements; and
- difficulty measuring cost savings that might result from space reductions attributable to telework.

This measuring difficulty may include both gross savings as well as savings net of costs, such as for renovations or IT investments. See table 3 for examples of space-planning challenges related to telework reported by the 23 agencies.

Table 3: Agency-Reported Challenges to Using Telework as a Space-Planning Tool

Challenge category	Specific challenge	Description
Human capital:	Collective-bargaining	Collective-bargaining agreements often require negotiation and approval of changes to the physical workspace and employees' relation to it.
Human capital:	Managing change	Using telework to reduce space often requires changes to organizational culture, including but not limited to how employees and management interact.

Challenge category	Specific challenge	Description
Mission suitability		Some agencies' missions—such as those requiring direct interaction with the public (e.g., providing medical care), work in specialized settings (e.g., laboratories), or handling classified information—may prevent or limit agencies from using telework as a space-planning tool.
Measuring the impact of telework		Directly measuring the impact of telework on reducing space and cost savings is complex because telework is often one among many factors.

Source: GAO analysis of agency documents, GAO survey responses, and interviews. . | GAO-18-319

To address these challenges, nearly two thirds of the agencies we surveyed reported they would like guidance on using telework programs or other alternatives to meet the federal goals of reducing space or using space more efficiently.

Challenges to Telework as an Office-Space-Planning Tool Include Human Capital and Mission Suitability Issues

Human Capital

Our review of agency survey responses, *Real Property Efficiency Plans*, and other agency space-planning documents, found that human capital challenges to using telework in space planning generally fell into two categories: (1) requirements to negotiate space allocation changes with collective-bargaining units; and (2) managing department workforces in adapting to new workspace designs and altered workspace allocations.

- Collective-bargaining challenges: Of the 23 civilian CFO Act agencies, 7 of 23 noted that changes to telework policy or workspace arrangements required negotiation with collective bargaining units,³² for example,
 - The Small Business Administration (SBA) reported its greatest challenge to incorporating telework in office space planning has been with negotiating and securing agreement from all parties,

³² The survey specifically asked respondents, “In your opinion, how challenging has it been for your agency to incorporate the telework program into agency-wide space planning efforts?” and it allowed them to provide scaled answers by selecting either: “Very Challenging” (4 of 23); “Somewhat challenging” (15 of 23); “Not challenging” (2 of 23); or “Have not addressed telework in space planning” (2 of 23). In addition, respondents were given the opportunity to provide explanatory narratives. We identified several themes among the narrative responses including labor and change management.

including management and its union, on establishing space standards.³³

- HUD reported that it could not implement hoteling or desk-sharing as its collective-bargaining agreements require that each employee retain an assigned workstation regardless of an employee's type of telework agreement.
- SSA reported that changing floor plans required negotiation with its three collective-bargaining units, which could extend the time needed for construction and relocation.
- DOT reported that collective-bargaining agreements posed a challenge to incorporating workforce mobility options, including telework.

In addition, the collective-bargaining agreements we reviewed from the four agencies we reviewed in detail—GSA, OJP, CDC and Fiscal Service—required negotiations or the opportunity to negotiate changes to matters relating to workspace arrangements and in some cases, to telework policy.

- **Managing change:** Using telework as a strategic space-planning tool, particularly in conjunction with complementary space-saving efforts such as desk-sharing, hoteling, or open-space designs, generally involves a cultural change. Nine of the 23 agencies we surveyed reported challenges associated with managing change.³⁴ For example, three agencies reported employees' discomfort or apprehension about desk-sharing and hoteling. In 2013, we reported that organizations may also encounter concerns from agency leaders, managers, employees, or employee organizations when introducing physical space changes associated with increased workforce mobility (telework).³⁵ More recently, we reported that management concerns

³³ SBA subsequently provided information about recent efforts to address space issues with its union. Specifically, SBA executed a memorandum of understanding with the union in October 2017 that address space allocation for teleworkers, including the number of days per period employees with scheduled telework must "hotel" when in the office and situations in which telework agreements are reduced or terminated.

³⁴ As noted above, the survey gave the agencies the opportunity to provide explanatory narratives.

³⁵ GAO, *Federal Real Property: Selected Agencies Plan to Use Workforce Mobility to Reduce Space, but Most Efforts Are Too New to Have Realized Savings*, [GAO-14-41](#) (Washington, D.C.: Oct. 17, 2013). This report did not include any recommendations for executive action.

remain the most frequently reported barrier to expanding telework.³⁶ Two private sector experts we met with underscored the importance of management “buy-in” saying it was imperative that senior executives fully support the initiative to facilitate the necessary cultural change for agencies to use telework in space planning. One noted that management needed to make the business case to employees so that each layer of the organization could understand the importance of the initiative and its potential benefits. Another suggested a change management plan tailored to the work performed within a unit. This individual said that key components of such a plan might include studying existing work practices and program requirements, surveying employee preferences, and including employees in the planning process. Further, a GSA document circulated in response to the Telework Enhancement Act of 2010 mentions obtaining supervisory “buy-in” or support as key to facilitating change.

Mission Suitability

According to survey responses, within agencies there are sub-agencies that have individual mission requirements that may or may not be suitable for telework. This makes it difficult for agencies to implement overarching telework and space planning policies that apply department-wide. Sub-agencies and units within sub-agencies must individually determine if telework is appropriate given their particular mission requirements. For example, the Veterans Administration reported that although it developed an agency-wide telework policy, each sub-agency and supervisor has the flexibility to implement telework based on operational needs. Moreover, because the agency’s core mission involves direct services to veterans, about 83 percent of agency staff positions are not suitable for telework. The Telework Enhancement Act of 2010 outlines two broad exceptions to telework participation for employees: (1) directly handling secure materials determined to be inappropriate for telework by the agency head and (2) on-site activity that cannot be handled remotely or at an alternative worksite. In cases where telework does not support an

³⁶ GAO, *Federal Telework: Better Guidance Could Help Agencies Calculate Benefits and Costs*, [GAO-16-551](#) (Washington, D.C.: July 15, 2016). This report included two recommendations for executive action to the Director of OPM of which the second remains open. Specifically, this recommendation asked OPM to provide clarifying guidance on developing supporting data for determining benefits and costs associated with agency telework programs. The first recommendation asked OPM to include costs savings questions in future telework data calls, and OPM did so in fiscal year 2017 data call.

agency's mission or where a particular mission may require increases or decreases in personnel, telework as a strategic space-planning tool may not work.

Agencies Face Challenges in Measuring the Effect of Telework on Reducing Office Space

About half (12 of 23) of the agencies we surveyed reported that office space reductions resulting from using telework in space planning led to real estate cost savings while the other half reported either that cost savings did not result or they did not know.³⁷ GSA officials told us that calculating cost savings attributable to a particular aspect of space planning is complicated as several factors contribute to savings. In particular, in survey responses, the Departments of Education, Energy, and Agriculture reiterated this point.

OMB's *National Strategy for the Efficient Use of Real Property* and its *Reduce the Footprint* policy encourage agencies to increase and maximize efficiencies in office space by implementing cost-effective strategies such as telework. For example, the *National Strategy* outlines a framework that aims to measure real property costs and utilization to improve the efficient use of federal real property. The *Reduce the Footprint* policy requires agencies to measure cost savings that result from reducing space through disposals. However, neither document offers guidance or methodologies on how to measure the costs or savings that may result from using telework. We previously reported that GSA works with client agencies to develop tools to measure office space utilization and, in 2013, was developing an Excel-based tool to help agencies quantify the benefits and costs of using telework to achieve greater office space efficiencies.³⁸ This tool—the Workplace Investment and Feasibility Tool—is aimed at helping agencies quantify the benefits and costs of increased telework participation and implementing other alternative-work arrangements. When completed, the tool will enable

³⁷ Specifically, the survey question asked respondents, "Has the telework program at your agency resulted in reductions in office space that achieved cost savings and/or cost avoidances?" and allowed them to answer by selecting among three possible answers: "Yes," "No," or "Don't know."

³⁸ GAO, *Federal Real Property: Selected Agencies Plan to Use Workforce Mobility to Reduce Space, but Most Efforts Are Too New to Have Realized Savings*, [GAO-14-41](#) (Washington, D.C.: Oct. 17, 2013).

users to quickly develop rough estimates of cost and space impacts resulting from workplace changes, particularly relating to desk-sharing, workspace reconfiguration, and consolidation. Key features include the ability to compare up to three scenarios, which in turn may be used to inform a more detailed design program.

As of January 2018, GSA had not yet completed the tool. GSA officials said mission needs, resource constraints, and developmental adjustments have contributed to delays in the time frame for completing the tool. They added that during this time, GSA has diverted resources to space calculation tools for individual agencies. For example, GSA worked with DHS on its Space Calculation Tool as a way to help determine workplace space requirements in a manner consistent with DHS space policies. In January 2018, GSA officials told us that they plan to make the Workplace Investment and Feasibility Tool available to GSA staff in March 2018 along with training on how to use it. However, GSA officials have not decided whether to make the tool available to other federal agencies to use as a space-planning tool. Instead, the officials plan to assess GSA's use of the tool and then determine in late 2018 if and how it should be released to other agencies for independent use. Given the absence of a government-wide tool, in our review, we found that some agencies had used their own resources to purchase similar tools for their space-planning needs from the private sector. Without such a government-wide resource, agencies may not be able to determine how best to reduce space or use it more efficiently.

GSA Guidance Does Not Specifically Address How to Use Telework in Space Planning

In responses to our survey, nearly two-thirds of agencies reported that they would find it helpful to have additional information, assistance, or resources to assist them in using telework as a space-planning tool.³⁹ As noted above, a key element of GSA's mission is to provide guidance and services that enable agencies to improve space utilization, reduce costs,

³⁹ The survey question asked respondents: "What additional information, assistance or resources, if any, would you find helpful?" and to answer "Yes" or "No" to the following: (1) "Considering telework in space planning?" (Yes = 14 of 23); (2) "Identifying cost savings as a result of telework programs?" (Yes = 15 of 23); (3) "Strategies for achieving real estate cost savings as a result of telework?" (Yes = 16 of 23); (4) "Measurement methodologies for determining real estate cost savings as a result of telework?" (Yes = 14 of 23).

and better achieve their missions. Moreover, under federal statute, GSA may provide guidance to executive agencies on the implementation of alternative workplace arrangements, which includes telework.⁴⁰ Federal standards for internal control also call for agencies to communicate necessary quality information such as guidance with external parties.⁴¹

In reviewing GSA's websites, we found that GSA last developed formal guidance on alternative workplace arrangements in 2006 and maintains several separate informational websites on implementing telework and optimizing space utilization. Our review of this guidance and these websites found that they do not provide specific guidance for using telework as a strategic space-planning tool. For example, the 2006 guidance is generally limited to defining the factors agency heads must contemplate when considering alternative workplace arrangements along with the equipment and technical services agencies may provide for alternative worksites.⁴² However, this guidance does not address in detail the impact of such arrangements on agency office space and resulting planning issues. Similarly, our review of GSA's teleworking and space-planning websites found that although they separately offered documented case studies along with information such as tips for implementing telework and managing a mobile workforce, GSA did not provide documents consolidating the concept of using telework as a strategic space-planning tool. For example, information on GSA's Total Workplace Program website—intended to assist agencies in using workforce mobility (including telework) to increase space efficiencies—is generally limited. Although this website includes high-level information that describes the potential benefits of using telework with office space planning and design, it lacks a practical outline of the process agencies might use to achieve them. Because the information in the 2006 guidance and the telework and space-planning websites is neither specific nor detailed, it is of limited assistance for agencies that would like to use telework as a strategic space-planning tool to meet the goals of a more efficient use of space.

⁴⁰ 40 U.S.C. § 587(c)(3).

⁴¹ GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-740G](#) (Washington, D.C.: September 2014).

⁴² General Service Administration, Federal Management Regulation. *Guidelines for Alternative Workplace Arrangements*. (FMR Bulletin 2006-B3).

Conclusions

While using telework to reduce space is not a new challenge, it has become more pressing with OMB's requirement for federal agencies to explore alternatives to acquiring more office space. Most civilian CFO Act agencies reported having a telework program in place and some reported success with using it in space planning to reduce space or accommodate more employees without increasing space. However, many of the agencies continue to face challenges and do not believe that they have adequate information, assistance, or resources to assist them in using telework as a space-planning tool or assess its costs and benefits. Until agencies have access to detailed guidance and tools to help utilize various space-planning options, they may not be able to effectively identify opportunities to use telework toward the goal of reducing their real property footprint.

Recommendations for Executive Action

We are making the following two recommendations to GSA:

The Administrator of General Services should ensure that the appropriate GSA offices develop guidance including, but not limited to, how agencies can use telework as a strategic space-planning tool for reducing and optimizing office space efficiency and that the offices make the guidance readily available. (Recommendation 1)

The Administrator of General Services should ensure the appropriate GSA offices complete the Workplace Investment and Feasibility Tool and make it available to federal agencies for use in assessing the benefits and costs of telework to achieve office space efficiencies. (Recommendation 2)

Agency Comments

We provided a draft of this report to GSA, the Department of Justice, the Department of Health and Human Services, and the Department of the Treasury. In its written comments, reproduced in Appendix III, GSA concurred with our recommendations and stated that it is developing a plan to address them. We received technical comments from the Department of Justice and the Department of Health and Human

Services, which we incorporated where appropriate. The Department of the Treasury did not have comments on our draft report.

We are sending copies of this report to the appropriate congressional committees; the Administrator of GSA; and the Secretaries of the Department of Health and Human Services and Department of the Treasury, and the Attorney General of the Department of Justice. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>. If you or your staff has any questions concerning this report, please contact me at (202) 512-2834 or rectanusl@gao.gov. Contact points for our Offices of Congressional Relations and Public

Affairs may be found on the last page of this report. GAO staff that made key contributions to this report is listed in appendix III.



Lori Rectanus
Director
Physical Infrastructure

List of Requesters

The Honorable Ron Johnson
Chairman
The Honorable Claire McCaskill
Ranking Member
Committee on Homeland Security and Government Affairs
United States Senate

The Honorable James Lankford
Chairman
The Honorable Heidi Heitkamp
Ranking Member
Subcommittee on Regulatory Affairs and Federal Management
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Thomas R. Carper
Ranking Member
Permanent Subcommittee on Investigations
Committee on Homeland Security and Governmental Affairs
United States Senate

Appendix I: Objectives, Scope, and Methodology

This report addresses: (1) how the 23 civilian Chief Financial Officer (CFO) Act agencies reported using telework in office space planning; (2) the specific ways selected agencies and GSA used telework in their office space planning; and (3) any challenges the 23 civilian CFO Act agencies faced in using telework in office space planning.

To determine how the 23 civilian CFO Act agencies reported using telework in office space planning, we surveyed the agencies. The survey asked questions about agency-wide efforts to use telework in the human-capital and space-planning areas; whether agencies had achieved any cost savings as a result; the challenges agencies faced in using telework in space planning; and asked agencies to identify additional information, resources, or guidance that might be helpful. In addition to the survey questions, we asked each agency real property officer to provide copies of agency-wide space-planning documents and the *Real Property Efficiency Plans* agencies prepared for fiscal years 2016 and 2017 pursuant to the requirements of the Office of Management and Budget's (OMB) *Reduce the Footprint* policy.¹ We developed survey questions based on our review of the relevant literature, white papers from federal agencies and private sector entities, and past GAO reports. We pre-tested the survey instrument with three federal agencies to ascertain: (1) the clarity of survey questions; (2) the precision of language; and (3) the availability of information queried. As a result of the pre-tests we made changes to the content and format of the survey where appropriate.

We received survey responses from each of the 23 civilian CFO Act agencies in addition to requested space-planning documents and *Real Property Efficiency Plans*, and thus achieved a 100 percent response rate. We analyzed survey results by calculating the frequency of responses to dichotomous questions (i.e., questions requiring a “yes” or “no” answer). We also conducted a content analysis on the open-ended, narrative-based questions by identifying common themes and tabulating results. We also conducted a content analysis to determine the extent to which agencies referenced telework in their agency-wide space-planning

¹ OMB, *Implementation of OMB Memorandum M-12-12 Section 3: Reduce the Footprint*, Management Procedures Memorandum No. 2015-01 (Washington, D.C.: Mar. 25, 2015).

documents and in their *Real Property Efficiency Plans*. To accomplish these analyses, we developed separate coding schemes for each of the two types of documents. These were based on information obtained in our literature review, interviews with subject matter experts, and our professional judgment. We then identified relevant sections and common themes, and coded and tabulated the results. To validate the coding results, we used a second, independent coder.

To determine the specific ways agencies include telework in their office space planning, we selected a non-generalizable sample of three CFO Act agency sub-agencies as illustrative case studies. To select sub-agencies, we analyzed data from the Office of Personnel Management's (OPM) Public Use 2014-2015 Telework Data call.² First, we applied two selection criteria: (1) agency-wide progress toward a stated goal of using telework to reduce real estate costs, and (2) agency-reported data indicating that more than 25 percent of sub-agency employees teleworked 3 or more days per pay period. Next, we considered variations in sub-agency size and percentage of employees eligible to telework. Finally, we excluded candidates that had recently been selected for related GAO work and we excluded sub-agencies related to agency administration such as Offices of Inspector General or Secretary-level offices. We assessed the reliability of the OPM's data by interviews with knowledgeable officials and by reviewing prior assessments of the same data, and we found the data reliable for our purposes.

As a result of this process, we selected (1) the Department of the Treasury's Bureau of the Fiscal Service (Fiscal Service); (2) the Department of Health and Human Services' (HHS) Centers for Disease Control and Prevention (CDC); and (3) the Department of Justice's Office of Justice Programs (OJP). For each of the selected agencies, we interviewed agency officials and reviewed their telework and space-planning documents. We also visited four sub-agency office locations to determine if and how telework played a role in any space reductions or efficiencies along with any associated cost savings. In addition to these three sub-agencies, we used the General Services Administration (GSA) as a comparative example since it is responsible for providing space-

² For the purpose of case study selection, we analyzed data from the OPM's Public Use 2014-2015 Telework Data Call. These data distinguish between "agencies" (e.g., Department of Health and Human Services) and "sub-agencies" (e.g., Centers for Disease Control and Prevention), which are sometimes referred to as "agency components." For the purposes of this report, we refer to the selected sub-agencies as "selected agencies."

planning guidance to client agencies and has experience using telework in space planning. We interviewed GSA officials, reviewed relevant documents, and visited three GSA office locations with recent space reductions or efficiencies. In total, we conducted seven site visits including two Fiscal Service locations, one location each for CDC and OJP, and three GSA locations (National Headquarters, Region 2 Office, and Region 3 Office) in Washington, D.C.; New York City; and Philadelphia, respectively.

To identify any challenges the 23 civilian CFO Act agencies faced in using telework in office space planning, we analyzed results from survey questions addressed to challenges, interviewed sub-agency and GSA officials as detailed above, interviewed two private sector subject matter experts, and representatives from four private-sector entities that had reported using telework to reduce and use office space more efficiently. Statements made by knowledgeable federal officials, outside experts and private sector entities are not generalizable to the universe of civilian CFO Act agencies. We also analyzed the section of each of the 23 civilian CFO Act agencies' *Real Property Efficiency Plans* devoted to challenges agency face in reducing space. We selected the two subject matter experts—representatives from Global Workplace Analytics and Fentress Facility Planning and Analytics—based on: (1) their experience working with federal agencies to incorporate telework programs into the space planning process; (2) information compiled in our literature review; (3) prior GAO reports; (4) internal GAO recommendations; and (5) industry recommendations. We selected the four private sector entities (AT&T, Deloitte, Adobe, and CapitalOne) based on our literature review, recommendations from industry experts, and reports of having achieved space efficiencies including space reduction, cost savings, or cost avoidance(s).

To identify what guidance or information on using telework as a space-planning tool GSA makes available through its website, we reviewed the contents of multiple GSA websites including Telework, Total Workplace, Alternative Work, and GSA Telework Resources. We followed links and reviewed webpage contents for information on how agencies might use telework as a strategic tool to reduce space or use space more efficiently. We compared GSA's guidance and website information to relevant statutory requirements and federal internal controls standards related to external communication.

We conducted this performance audit from January 2017 to March 2018 in accordance with generally accepted government auditing standards.

Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Selected Agency Case Study Profiles

General Services Administration (GSA)

Figure 6: General Services Administration’s (GSA) Headquarters Office Space, Washington, D.C.

Property	GSA headquarters building
Location	Washington, D.C.
Description	GSA’s consolidated headquarters
Federally owned or commercially leased	Owned
Size	1 building (approximately 446,000 USF)
Space standard/utilization rate	138 useable square feet (USF) per person
Leveraged telework as a space planning tool	Yes
Reported cost savings	Yes
Reduced space without leveraging telework	-
Summary of reductions/efficiencies	GSA consolidated its headquarters by transitioning to a more open, mobile work environment with fewer private offices, smaller workstations, and less than one workstation per employee. This involved major physical reconfigurations of the original office space. GSA reports that about 1,000 employees were moved from leased office space to owned headquarters office space, resulting in a space reduction of about 460,000 square feet and an annual cost savings of approximately \$24 million. See below for photos of the consolidated space.



Source: GAO. | GAO-18-319

Figure 7: General Services Administration’s (GSA) Region 3 Office Space, Philadelphia, PA

Property	The Dow Building
Location	Philadelphia, PA
Description	GSA’s Region 3 Office
Federally owned or commercially leased	Leased
Size	2 1/2 floors occupied by GSA totaling 94,000 USF
Space standard/Utilization rate	139 useable square feet (USF) per person
Leveraged telework as a space planning tool	Yes
Reported cost savings	Yes
Reduced space without leveraging telework	-
Summary of reductions/efficiencies	GSA Region 3 recently moved offices under a new lease, concurrently reducing space by approximately 40,000 USF and transitioning to an open, mobile office environment. This office considered telework when developing the ratio of desks to people that would be needed in the new space, allowing it to plan for about 100 fewer workstations than employees. The impetus for this transition was a centrally mandated target utilization rate. This space reduction resulted in a reported annual rent cost savings of about \$2 million. See below for photos of the consolidated space.



Source: GAO. | GAO-18-319

Figure 8: General Services Administration’s (GSA) Region 2 Office Space, New York, NY

Property	One World Trade Center Building
Location	New York, NY
Description	GSA’s Region 2 Office
Federally owned or commercially leased	Leased
Size	1.5 floors occupied by GSA totaling about 58,000 USF
Space standard/Utilization rate	119 useable square feet (USF) per person
Leveraged telework as a space planning tool	Yes
Reported cost savings	Yes
Reduced space without leveraging telework	-
Summary of Reductions/Efficiencies	GSA Region 2 recently moved offices under a new lease, concurrently reducing space by approximately 64,000 USF and transitioning to an open, mobile office environment. This office leveraged existing telework levels to achieve reduced space standards and move to a smaller leased space for a reported total rent cost savings of nearly \$11 million, according to GSA officials. See below for photos of the consolidated space.



Source: GAO. | GAO-18-319

The Office of Justice Programs (OJP)

Figure 9: Office of Justice Programs' (OJP) Office Space, Washington, D.C.

Property	OJP office building
Location	Washington, D.C.
Description	OJP's consolidated office
Federally owned or commercially leased	Leased
Size	1 building (OJP occupies 9 floors including lobby and lower level totaling approximately 210,000 USF)
Space standard/Utilization rate	190 useable square feet (USF) per person
Leveraged telework as a space planning tool	Yes
Reported cost savings	Yes
Reduced space without leveraging telework	-
Summary of reductions/efficiencies	OJP consolidated all employees into less total space in one building under a renewed lease by targeting 25 percent employee mobility, implementing hoteling, introducing smaller workstations, and using tenant improvement funds to reconfigure the space for more flexible use. According to OJP officials, through the consolidation, OJP reduced the square feet used per employee, allowing it to house the same total number of employees in about 50,000 fewer USF. According to OJP, this resulted in an estimated \$3 million in annual lease cost savings. See below for photos of the consolidated space.



Source: GAO. | GAO-18-319

Centers for Disease Control and Prevention (CDC)

Figure 10: Centers for Disease Control’s (CDC) National Center for Health Statistics (NCHS) Office Space, Hyattsville, MD

Property	Hyattsville Metro IV Building
Location	Hyattsville, MD
Description	CDC’s reduced NCHS office space
Federally owned or commercially leased	Leased
Size	NCHS occupies 3 ¼ floors or about 50 percent of the building, totaling approximately 87,000 USF
Space standard/Utilization rate	170 useable square feet (USF) per person
Leveraged telework as a space planning tool	No
Reported cost savings	Yes
Reduced space without leveraging telework	Yes
Summary of reductions/efficiencies	This CDC office reduced space to meet a lower space standard without leveraging telework by reconfiguring the space with smaller, soft-walled workstations. NCHS, the CDC component that occupies this office, gave up a little more than 3 floors in this building for a reported space reduction of about 40 percent and reported annual rent cost savings of approximately \$1 million, according to CDC officials. See below for photos of the consolidated space.



Source: GAO. | GAO-18-319

The Bureau of the Fiscal Service (Fiscal Service)

Figure 11: The Bureau of the Fiscal Service’s (Fiscal Service) Office Space, Washington, D.C.

Property	Liberty Loan Building
Location	Washington, D.C.
Description	Fiscal Service office in Washington, D.C.
Federally owned or commercially leased	Owned (leased from GSA)
Size	1 building totaling about 116,000 USF
Space standard/Utilization rate	222 useable square feet (USF) per person
Leveraged telework as a space planning tool	No
Reported cost savings	No
Reduced space without leveraging telework	No
Summary of reductions/efficiencies	The Fiscal Service and its legacy bureaus have occupied this building for almost 100 years, but this space was recently reconfigured with no reported space reduction or cost savings. Employees at this office have dedicated workstations. See below for photos of the reconfigured space.



Source: GAO. | GAO-18-319

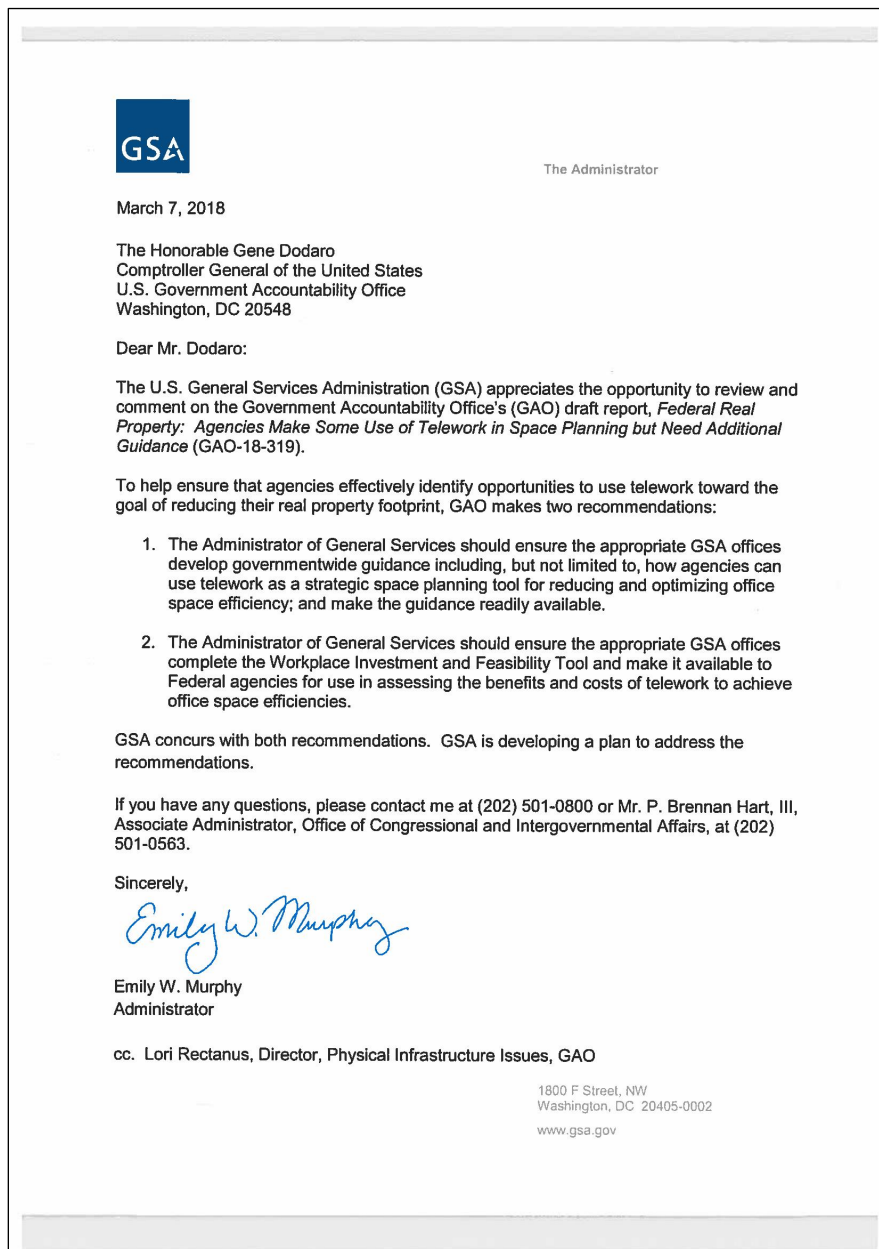
Figure 12: The Bureau of the Fiscal Service’s (Fiscal Service) Office Space, Hyattsville, MD

Property	Hyattsville Metro I Building
Location	Hyattsville, MD
Description	Fiscal Service office in Hyattsville, MD
Federally owned or commercially leased	Leased
Size	The Fiscal Service occupies 3 ½ floors totaling approximately 94,00 USF)
Space standard/Utilization rate	175 useable square feet (USF) per person
Leveraged telework as a space planning tool	No
Reported cost savings	Yes
Reduced space without leveraging telework	Yes
Summary of reductions/efficiencies	Beginning in 2012, the Fiscal Service gave up several floors in its Hyattsville office, and further reduced space when it moved from the Metro II building to the Metro I building in 2017. The most recent reductions were accomplished by implementing a new space standard of 183 useable square feet per person through smaller workstations. Employees at this office still have dedicated workstations. The Fiscal Service reported that this most recent space reduction resulted in approximately \$6 million in annual rent cost savings but this amount is not attributable to telework. See below for photos of the consolidated space.



Source: GAO. | GAO-18-319

Appendix III: Comments from the General Services Administration



Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Lori Rectanus, (202) 512-2834, or rectanusl@gao.gov

Staff Acknowledgments

In addition to the contact named above, David J. Wise (Director); Amelia Bates Shachoy (Assistant Director); Lindsay Bach (Analyst-in-Charge); Geoff Hamilton; Malika Rice; Kelly Rubin; Shelia Thorpe; Elise Vaughan Winfrey; and Amelia Michelle Weathers made key contributions to this report.

Appendix V: Accessible Data

Data Tables

Data Table for Figure 1: Federal Executive Agencies' Telework Participation Rates by Type of Telework Agreement, Fiscal Years 2012 through 2015

Fiscal year	Situational telework agreement:	Scheduled telework agreement (fixed schedule):	
	Employees use on an "as needed" basis such as in weather emergencies	Employees use 1-2 days per pay period	Employees use 3+ days per pay period
2012	40%	34%	27%
2013	46%	25%	22%
2014	46%	32%	29%
2015	46%	34%	31%

Data Table for Figure 2: Three Telework Scenarios and Office Space Impacts

	Scenario 1	Scenario 2	Scenario 3
Office space	No space reduction Large workstations Assigned workstations	No space reduction Smaller workstations Collaborative spaces Assigned workstations	Space reduction Smaller workstations Collaborative spaces Unassigned workstations
Telework	Some employees 2 days per week	Most employees 2 days per week	Nearly all employees 3 days per week

Figure 3: General Services Administration's (GSA) Headquarters Office prior to (left) and after (right) New Space Standards 13

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Agency Comment Letter

Text of Appendix III: Comments from the General Services Administration

March 7, 2018

The Honorable Gene Dodaro Comptroller General of the United States
U.S. Government Accountability Office Washington, DC 20548

Dear Mr. Dodaro:

The U.S. General Services Administration (GSA) appreciates the opportunity to review and comment on the Government Accountability Office's (GAO) draft report, *Federal Real Property: Agencies Make Some Use of Telework in Space Planning but Need Additional Guidance* (GAO-18-319).

To help ensure that agencies effectively identify opportunities to use telework toward the goal of reducing their real property footprint, GAO makes two recommendations:

1. The Administrator of General Services should ensure the appropriate GSA offices develop governmentwide guidance including, but not limited to, how agencies can use telework as a strategic space

planning tool for reducing and optimizing office space efficiency; and make the guidance readily available.

2. The Administrator of General Services should ensure the appropriate GSA offices complete the Workplace Investment and Feasibility Tool and make it available to Federal agencies for use in assessing the benefits and costs of telework to achieve office space efficiencies.

GSA concurs with both recommendations. GSA is developing a plan to address the recommendations.

If you have any questions, please contact me at (202) 501-0800 or Mr. P. Brennan Hart, 111, Associate Administrator, Office of Congressional and Intergovernmental Affairs, at (202) 501-0563.

Sincerely,

Emily W. Murphy Administrator

cc. Lori Rectanus, Director, Physical Infrastructure Issues, GAO

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