Technical Report

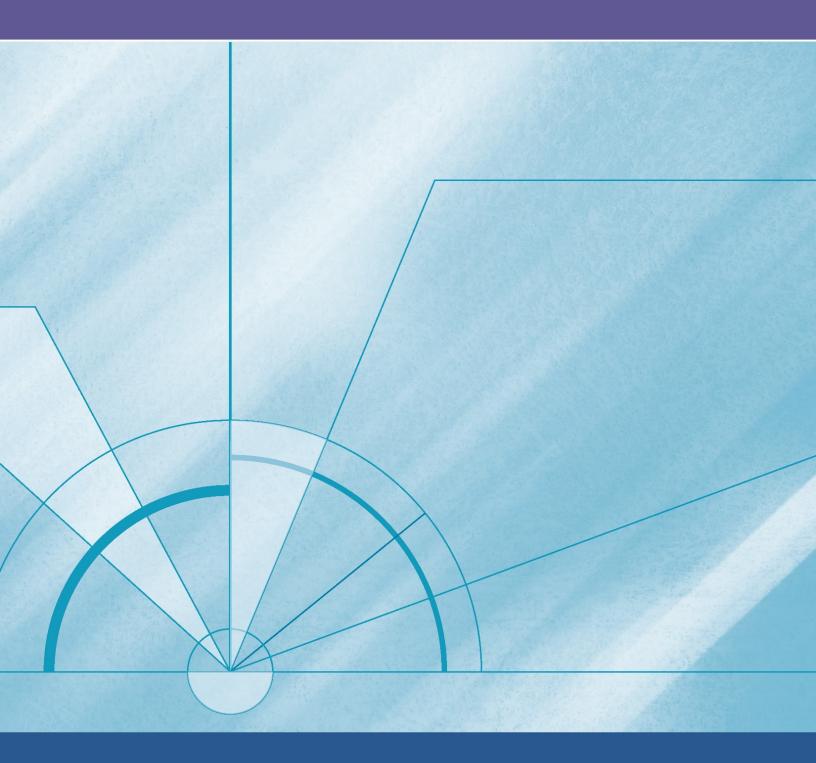


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Chapter 1: Survey Introduction

Overview

This report provides a description of the survey instrument, sample design, administration, analysis, and reporting procedures for the 2020 U.S. Office of Personnel Management (OPM) Federal Employee Viewpoint Survey (FEVS). The U.S. OPM has conducted the OPM FEVS since 2002. The survey was conducted biennially between 2002 and 2010, and annually thereafter. Westat, a research company based in Rockville, MD, has been the primary contractor for the survey since 2004. They provide technical expertise and support for the OPM FEVS.

The OPM FEVS is a climate survey designed to capture Federal employees' perceptions of organizational policies, practices, and procedures, and subsequent patterns of interactions and behaviors that support organizational performance. As a construct, climate is a surface manifestation of organizational culture.² Climate assessments like the OPM FEVS are, consequently, important to organizational improvement largely because of the key role culture plays in directing organizational performance.

The OPM FEVS is designed to provide agencies with employee feedback on dimensions critical to organizational performance: conditions for engagement, perceptions of leadership organizational effectiveness, outcomes related to climate (e.g., job satisfaction), and more.

¹ Prior to 2010, the survey was called the Federal Human Capital Survey (FHCS).

² Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., et al. (2005). Validating the organizational climate measure: Links to managerial practices, productivity and innovation. *Journal of Organizational Behavior*, *26*, 379–408.

Parker, C. P., Baltes, B. B., Young, S. A., Huff, J. W., Altmann, R. A., Lacost, H. A., & Roberts, J. E. (2003). Relationships between psychological climate perceptions and work outcomes: A meta-analytic review. *Journal of Organizational Behavior*, *24*, 389–416.

Schulte, M., Ostroff, C., & Kinicki, A. J. (2006). Organizational climate systems and psychological climate perceptions: A cross level study of climate-satisfaction relationships. *Journal of Occupational and Organizational Psychology*, 79, 645–671. Schneider, B. (2000). The psychological life of organizations. In N. M. Ashkanasy, C. P. M. Wilderom, & M. F. Peterson (Eds.), Handbook of organizational culture and climate: xvii–xxii. Thousand Oaks, CA: Sage.

Schneider, B., Brief, A. P., & Guzzo, R. A. (1996). Creating a climate and culture for sustainable organizational change. *Organizational Dynamics*, *24*, 7–19.

The 88-item survey covers the following dimensions, topic areas, programs, and demographics:

- Personal Work Experiences,
- Work Unit,
- Agency,
- Supervisor,
- Leadership,
- Satisfaction,
- COVID-19 Pandemic,
- Work-Life Programs,
- Employment Demographics, and
- Personal Demographics.

Goals for the OPM FEVS and program include:

- A responsive survey with a leading-edge design and contemporary content capable of informing leadership priorities.
- Data of the highest possible quality (e.g., reliable, valid) to support effective organizational development decisions.
- An agile survey and reporting process to support timely and substantive change actions within agencies and across government.

In keeping with responsiveness goals, items have been added as needed (e.g., work-life program assessment items in 2011, demographic questions to assess sexual orientation in 2012, partial government shutdown items in 2019) to allow assessment of the impact of relevant and timely topics that may impact the Federal workforce. Similarly, in 2020, an extensive section with multiple subparts was added to allow evaluation of the influence of the COVID-19 pandemic on the Federal workforce (see Survey Content on page 6 for details).

Aligning with goals to achieve high-quality data to drive decisions, the sample design and statistical weighting for the OPM FEVS ensures that the survey results are statistically representative. Not only at the overall Federal workforce (i.e., governmentwide) level, but also at the agency level.

Uses of Survey Results

Federal leaders use OPM FEVS results to identify organizational development and improvement strategies, evaluate development actions, and highlight important agency successes. OPM FEVS findings allow agencies and subagencies to assess trends, where applicable, by comparing results from previous years. Agencies can compare their results with the governmentwide trends, to identify current strengths and challenges, and to focus on short-term and long-term action targets that will help agencies reach their strategic human resource management goals. The recommended approach for assessing and driving change in agencies is to utilize OPM FEVS results in conjunction with other resources, such as results from other internal agency surveys, administrative data, focus groups, exit interviews, and other methods to collect contextual, agency-specific information.

For 2020, OPM recommends that any comparisons made to prior years be done judiciously. Substantial changes to the survey content (e.g., streamlined core content, new COVID-19 sections), item resequencing due to the removal of some items from prior years, and survey administration timing (e.g., survey delay from a spring administration to fall) all may have affected scores. Many other factors may have contributed to changes in scores unrelated to employee perceptions, and results comparisons between 2020 and prior years should be made on a limited basis, if at all.

Chapter 2: Sample Design and Selection

Sample Design

The OPM FEVS sample design reflects OPM's commitment to providing Federal agency leaders with representative information about their employees' perceptions of workplace management practices, policies, and procedures. The survey population for the 2020 OPM FEVS included permanently employed, non-political, non-seasonal, full- or part-time and phase retirement Federal employees who were employed as of October 2019. The 2020 OPM FEVS was a census administration that included all eligible employees from 82 Executive Branch agencies. The other years that the OPM FEVS was a census for all agencies was in 2012, 2018, and 2019.

The total sample size for the 2020 OPM FEVS was 1,555,717 employees compared to 1,543,992 in 2019 and 1,537,139 in 2018. The 2020 sample size was more than sufficient to ensure a 95 percent chance that the true population value would be between plus or minus 1 percent of any estimated percentage for the total Federal workforce.³ Agencies that participated in previous surveys, but did not participate in the 2020 OPM FEVS, include the Department of Veterans Affairs (VA) and the U.S. Security and Exchange Commission (SEC).

Sampling Frame and Stratification Variables

The sampling frame is a comprehensive list of all persons in the Federal employee population eligible for selection in the survey. For the 2020 OPM FEVS, the sampling frame consisted of all 1,555,717 permanently employed, non-political, non-seasonal, full- or part-time Federal employees in pay status as of October 2019 in the agencies participating in the survey. Apart from a few exceptions, 4 this list originated from the personnel database managed by OPM as part of the Statistical Data Mart of

³ That is, reflecting any imprecision in estimates attributable to nonresponse etc., given the Census approach for 2020.

⁴ At the time of sample selection, a separate data submission was arranged because EHRI-SDM did not maintain information on the following employee types eligible to participate in the survey: (1) Department of State Foreign Service; (2) Health and Human Services Commissioned Corps; (3) Employees of the Postal Regulatory Commission, (4) DoD-DFAS Foreign Nationals, (5) Department of Homeland Security Commissioned Corps; (6) Department of Agriculture Farm Service Agency County Employees; (7) Environmental Protection Agency Commissioned Corps; and (8) U.S. Army Corps of Engineers employees on administrative leave.

the Enterprise Human Resources Integration (EHRI-SDM).⁵ OPM contacted participating agencies for employee email addresses and supplemental organizational information. This information provides the hierarchical work unit(s) designation for each employee and provides more detailed information than available from the EHRI-SDM. The total survey population size was 1,555,717 employees, but after cleaning procedures, including removing people who were no longer an employee of an agency, the final population size was 1,410,610 Federal employees.

⁵ http://www.fedscope.opm.gov/datadefn/aehri sdm.asp.

Chapter 3: Survey Instrument

Survey Content

The OPM FEVS instrument is designed to assess the climate of Federal agencies. Climate *is a multi-dimensional construct.* ⁶ It is exhibited through workplace tangibles such as behaviors and practices, which employees can perceive and describe in response to survey items developed to describe aspects of climate. ⁷ Like other organizational climate instruments, the OPM FEVS captures employee perspectives regarding workplace conditions. Research suggests that climate perceptions are associated with effectiveness-related outcomes, such as turnover intentions, job satisfaction, and organizational performance. ⁸ Accordingly, additional constructs, such as Global Satisfaction, are assessed in the survey to provide dependent variables or outcome measures.

The 2020 survey instrument was revised from the version administered in 2019. A section was added related to the COVID-19 pandemic to ensure a survey responsive to unprecedented workplace changes. Due to the number of questions related to COVID-19, some questions asked on previous surveys were removed to limit the burden of an overly long survey on respondents and to support response rates.

⁶ Organizational climate is a theoretical construct with specific outcomes (dependent variables) featured in climate models, especially employee satisfaction and productivity. It is a multi-dimensional construct comprised of discreet dimensions, capturing how employees jointly experience the policies, practices, and procedures of their organizations. Employee perceptions of climate, influence organizational effectiveness by shaping, for example, employee engagement, satisfaction, motivation, commitment, and turnover.

⁷ James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin*, *81*, 1096–1112.

Schneider, B. (2000). The psychological life of organizations. In N. M. Ashkanasy, C. P. M. Wilderom, & M. F. Peterson (Eds.), Handbook of organizational culture and climate: xvii-xxii. Thousand Oaks, CA: Sage.

Schneider, B., Brief, A. P., & Guzzo, R. A. (1996). Creating a climate and culture for sustainable organizational change. *Organizational Dynamics*, *24*, 7–19.

⁸ Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., Robinson, D. L, & Wallace, A. M. (2005). Validating the organizational climate measure: Links to managerial practices, productivity and innovation. *Journal of Organizational Behavior*, *26*(4), 379–408.

Parker, C. P., Baltes, B. B., Young, S. A., Huff, J. W., Altmann, R. A., Lacost, H. A., & Roberts, J. E. (2003). Relationships between psychological climate perceptions and work outcomes: A meta-analytic review. *Journal of Organizational Behavior*, 24, 389–416.

Questions related to the COVID-19 pandemic were added to achieve multiple goals, such as informing policy and guidance, understanding how Federal employees continued to work and deliver critical services during an emergency, and providing data for both future crisis planning and gathering insights useful to the future of work planning. Item development was based on a review of:

- relevant health and safety and emergency management literature;⁹
- health, emergency management, and COVID-19 pandemic guidance, including from the Occupational Safety and Health Administration, Federal Emergency Management Agency, Centers for Disease Control and Prevention, Office of Management and Budget, and Office of Personnel Management;¹⁰
- existing COVID-19 surveys (e.g., World Bank, Gallup, other agency surveys).

A complete list of item changes, including COVID-19 items, to the 2020 OPM FEVS is available in Appendix A.

The 2020 OPM FEVS was conducted via the Web and was 508 compliant. ¹¹ The 88-item survey included 20 demographic questions and 68 items that were grouped into eleven topic headings intended to organize the instruments and facilitate respondent comprehension. Below is a summary of the questions within topics. See Appendix B for a copy of the 2020 OPM FEVS survey.

⁹ Examples of research publications consulted include:

Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, *116*, 183–187.

DeJoy, D. M, Smith, T. D., Woldu, H. Dyal, M. A., Steege, A. L., & Boiano, J. M. (2017). Effects of organizational safety practices and perceived safety climate on PPE usage, engineering controls, and adverse events involving liquid antineoplastic drugs among nurses. *Journal of Occupational and Environmental Hygiene*, 14(7), 485–493.

Feng, Z., & Savani, K. (2020). Covid-19 created a gender gap in perceived work productivity and job satisfaction: Implications for dual-career parents working from home. *Gender in Management: An International Journal*, *35*(7/8), 719–736.

Linnan, L. A., Cluff, L., Lang, J. E., Penne, M., & Leff, M. S. (2019). Results of the workplace health in America survey. *American Journal of Health Promotion*, 33(5), 652–665.

Venkatesh, V. (2020). Impacts of COVID-19: A research agenda to support people in their fight. *International Journal of Information Management*, *55*, 102–197.

¹⁰ See especially, *Guidance for Business and Employers Responding to Coronavirus Disease 2019 (COVID-19)*, detailing practices and procedures employers should implement to limit COVID-19 contagion in workplaces (https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html#anchor_1609682970029).

¹¹508 compliant refers to Section 508, an amendment of the U.S. Workforce Rehabilitation Act, mandating that all documents used by the Federal government are accessible to people with disabilities.

2020 OPM FEVS topic areas:

- **Personal Work Experience:** Items 1-8 addressed employees' personal work experiences and opinions.
- Work Unit: Items 9-13 addressed employees' opinions regarding cooperation, recruitment, quality, and performance management in their work unit.
- **Agency:** Items 14-18 covered agency policies and practices related to job performance, performance appraisals, workplace diversity and fairness, as well as perceptions of employees' personal empowerment, safety, and preparedness. This section also addressed employees' views of their agency.
- **Supervisor:** Items 19-25 addressed employees' perceptions of their supervisor. For instance, this section asked whether supervisors support work-life balance, provide opportunities to demonstrate leadership skills, and promote a workplace culture that supports staff development.
- **Leadership:** Items 26-32 asked about the effectiveness of the agency's senior leaders and managers, overall, and in motivating employees, maintaining high ethical standards, communicating organizational policies, and generating respect.
- **Satisfaction:** Items 33-38 addressed employee satisfaction with various aspects of their jobs, including pay, job training, opportunities for advancement, recognition for work well done, and the policies and practices of senior leaders.
- COVID-19 Pandemic: Items 39-57 addressed the impact of the COVID-19 pandemic. The section was broken down into the following categories:
 - Background
 - Employee Supports
 - Work Supports
 - Work Effects
 - Work-Life (COVID-19 pandemic-specific programs)
- Work-Life: Items 58-68 asked employees about programs like teleworking and alternate work schedules, and if they participate in and are satisfied with work-life programs like health, assistance, and family care programs.
- **Employment Demographics:** 69-80 covered employee information, such as location of employment (headquarters vs. field), supervisory status, pay category/grade, military service status, Federal employment tenure, agency tenure, and separation intentions from government such as retirement.
- **Demographics:** Items 81-88 covered personal information, such as ethnicity, race, age group, education, disability status, gender, sexual orientation, and transgender identity.

In addition to the 88 survey items administered to all employees on the OPM FEVS, agencies were provided an opportunity to add up to eight extra items tailored specifically to issues of interest to the agency. A total of 57 agencies opted to add agency-specific items, for a total of 351 questions.

Chapter 4: Data Collection

In this chapter, we describe the data collection procedures OPM used to administer the Webbased surveys, including details on the disposition codes used during data collection and for the calculation of response rates. This chapter concludes with a description of the procedures used during the data collection period to address questions received from Federal employees.

Web-Based Data Collection Procedures

The 2020 OPM FEVS was a Web-based, self-administered survey. OPM sent emails to employees with an invitation to participate in the survey. The invitation email included instructions for accessing the survey (see Appendix C for the invitation). To improve response rates, OPM sent weekly reminder emails to non-respondents, including a final reminder sent the day before the final day of the data collection period, indicating the survey would close the next day (see Appendix C for examples of the reminder emails). OPM also provided agencies with sample communication materials to promote the survey and encourage participation.

Estimates indicated the time for survey completion was no more than 30 minutes for the core items. The actual total survey completion times varied from agency to agency depending upon the number and complexity of any included agency-specific items. Employees were informed that official work time could be used to complete the survey.

Data Collection Period

The data collection period for the 2020 OPM FEVS was September 19, 2020, to November 5, 2020. The survey was postponed twice by OPM from the normal spring schedule to allow agencies to focus on core missions and adjust to the demands of the COVID-19 pandemic. To spread the workload more evenly over that period, OPM released the surveys to agencies in two waves, beginning either Monday, September 19th or Monday, September 21st (see Table 1). The data collection period for each agency spanned six workweeks. Table 1 shows the launch and close dates by agency.

Table 1. 2020 OPM FEVS survey launch and close out dates, by agency

Agency	Launch Date	Close Date
Court Services & Offender Supervision Agency	September 16	October 28
Department of Agriculture	September 16	October 28
Department of Commerce	September 21	November 2
Department of Defense		
Department of the Air Force	September 16	October 28
Department of the Army	September 15	October 27
U.S. Army Corps of Engineers	September 15	October 27
Department of the Navy	September 14	October 26
U.S. Marine Corps	September 14	October 26
DoD 4 th Estate	September 23	November 4
Department of Education	September 23	November 4
Department of Energy	September 17	October 29
Department of Health and Human Services	September 21	November 2
Department of Homeland Security	September 24	November 5
Department of Housing and Urban Development	September 24	November 5
Department of Justice	September 15	October 27
Department of Labor	September 17	October 29
Department of State	September 23	November 4
Department of the Interior	September 24	November 5
Department of the Treasury	September 15	October 27
Department of Transportation	September 14	October 26
Environmental Protection Agency	September 17	October 29
Equal Employment Opportunity Commission	September 16	October 28
Federal Communications Commission	September 22	November 3
Federal Energy Regulatory Commission	September 17	October 29
Federal Trade Commission	September 16	October 28
General Services Administration	September 15	October 27
National Aeronautics and Space Administration	September 24	November 5
National Archives and Records Administration	September 24	November 5
National Credit Union Administration	September 15	October 27
National Labor Relations Board	September 16	October 28
National Science Foundation	September 22	November 3
Nuclear Regulatory Commission	September 17	October 29
Office of Management and Budget	September 22	November 3
Office of Personnel Management	September 24	November 5
Pension Benefit Guaranty Corporation	September 16	October 28
Railroad Retirement Board	September 17	October 29
Small Business Administration	September 17	October 29
Social Security Administration	September 22	November 3
U.S. Agency for Global Media	September 22	November 3
U.S. Agency for International Development	September 17	October 29
Small/Independent Agencies	September 24	November 5

Survey Disposition Codes

Determining survey disposition codes is a two-step process with an interim code and a final code assigned. Each case in the sample frame receives interim disposition codes to indicate the result of specific survey contact attempts (e.g., pending, out of office, no email address) during the survey period. At the end of the survey period, each case receives one final disposition code.

Interim Disposition Codes

Throughout data collection, each case received an interim disposition code when the case was not yet assessed as closed. Table 2 shows the interim disposition codes.

Table 2. 2020 OPM FEVS interim disposition codes

Interim Code	Description of Interim Disposition Code
00	Pending, non-response
CO	Complete
IE	Ineligible (e.g., deceased, retired, no longer with agency)
Undeliverable	
11	1 st Undeliverable
12	2 nd Undeliverable
13	3 rd Undeliverable
14	4 th Undeliverable
15	5 th Undeliverable
16	6 th Undeliverable
17	7 th Undeliverable
18	8 th or more Undeliverable
20	No longer at email address, no forwarding information
NE	No email address
Out of office	
41	1 st Out of office
42	2 nd Out of office
43	3 rd Out of office
44	4 th Out of office
45	5 th Out of office
46	6 th Out of office
47	7 th Out of office
48	8 th or more Out of office

Interim Code	Description of Interim Disposition Code
Other	
80	Opted Out
90	Request Reset URL
RF	Refusal
UA	Unavailable during the field period
NP	Not in Population
NS	Not Sampled

Starting in 2018, respondents who emailed to refuse participation were immediately coded as a refusal and unsubscribed from future communications. For 2020, an opt-out link was included with the weekly reminders sent from OPM to participants who had not yet completed their survey. These participants had a separate interim disposition code while the survey was in the field. However, once the survey closed, they were included with the disposition code for refusals.

During data collection, if the respondent's out-of-office email indicated that they were out of the office during the entire data collection period, the case received an interim disposition code of unavailable (UA).

Converting Interim Codes to Final Disposition Codes

Each case used the following rules when converting interim disposition codes to a final disposition code.

Survey Completes and Incompletes. All respondents who submitted surveys received an interim complete. However, to receive a final disposition code as a complete (CO), a respondent had to provide answers to at least 25 of the non-demographic items. That is, they needed to complete over 25 percent of the non-demographic survey items. If the respondent answered fewer than the required 25 percent of the non-demographic items, the case was an incomplete (IN).

Five items in the COVID-19 pandemic section consisted of long matrix items, specifically, survey items 40, 43, 50, 54, and 55. In the survey, these matrices had a lead-in question but were numbered as one item. For example, item 43 asks, "How has your organization supported your well-being needs during the COVID-19 pandemic?" with 14 different topics listed, to which a participant could respond. For the purposes of determining a completed survey, each topic listed under matrices like item 43

counted as a separate item. ¹² The total count of survey items used to determine a complete response was 97. A case received a no response (NR) code if the respondent did not respond to any of the 97 items.

Once the cases received codes as completes or incompletes, the final disposition process applied the following rules in hierarchical order:

- **Refusals.** Cases coded as a refusal (code RF) remained unless the employee completed the survey. If a case coded as a refusal, completed the survey, the case received a complete (CO).
- **Ineligibles.** Cases coded as ineligible (code IE) were based on the following criteria; the person was discovered after sampling to be:
 - retired;
 - no longer with the agency;
 - unavailable during the data collection period (UA) (i.e., out on maternity leave, out of the country, on leave for any other reason during the entire data collection period);
 - determined to be active duty, activated military, a political appointee, or a contractor; or
 - deceased.

Undeliverable Emails. If a respondent had an undeliverable email bounce back, we counted the number of undeliverable messages received, and this number provided the interim undeliverable code of 11 through 18 (i.e., 1 through 8 or more undeliverable messages). The following rule applied to determine the respondent's undeliverable (code UD) status: if the total number of contacts with the respondent's agency equaled at least ½ the number of undeliverable bounce backs, then the case received a UD. If less than ½ the number of total contacts were undeliverable bounce backs, the case received a NR. In 2020, every person had 5 potential contacts (invitations and reminders), any case with at least 3 (5 contacts divided by 2 = 2.5 rounded up) interim undeliverable emails (interim codes 14 through 18) would be coded as UD; otherwise, they would be designated as no response (code NR).

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¹² Items 40, 43, 50, 54, and 55.

Final Disposition Codes

Table 3 lists the final disposition codes with the number of cases per code for the 2020 OPM FEVS. The codes abide by the American Association of Public Opinion Research's (AAPOR) 2016 guidelines for internet surveys of specifically named persons. The calculation of survey response rates and survey analysis weights used final disposition codes. The final analysis dataset only includes cases with a final disposition code of complete (CO); no other disposition codes are retained in the dataset.

Table 3. 2020 OPM FEVS final disposition codes and case count per disposition code

Final Disposition Codes	Description	Number of Cases
СО	Complete – respondent answered at least 25 of the 97 non-demographic items	624,800
IN	Incomplete – respondent answered at least 1 but less than 25 of the 97 non-demographic items	17,383
RF	Refusal (including Opt-Out)	1,351
NR	No response	767,076
ΙΕ	Ineligible (e.g., deceased or no longer with agency)	94,209
NE	No email address	20,234
UA	Unavailable during the fielding period	278
UD	Undeliverable email	30,386
	Total	1,555,717

Response Rates

Westat calculated response rates in two ways: 1) using the formula reported in previous administrations of the OPM FEVS, and 2) using AAPOR's Response Rate 3 formula, an industry-standard method that allows a better comparison to other surveys as shown in Appendix E. The two formulas lead to different results due to differences in the allocations of final disposition codes among the four main groupings of survey cases:

- Eligible respondents (ER = surveyed and responded),
- Eligible non-respondents (ENR = known eligible cases that did not return completed surveys),

¹³The American Association for Public Opinion Research. (2016). *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys.* (9th ed.) AAPOR. Last retrieved December 12, 2019: https://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf.

- Unknown eligibility (UNK), and
- Ineligible cases (IE).

Table 4 shows the distributions of final disposition codes among these four groupings. The governmentwide and agency response rates, which were calculated using the OPM FEVS formula, are in Table 5.

Table 4. Case assignment allocation to response rate groups

Response Rate (RR) Group	OPM FEVS Allocation	OPM FEVS Counts
Eligible Respondents (ER)	CO	624,800
Eligible Non-respondents (ENR)	NR, RF, IN	785,810
Unknown Eligibility (UNK)		
Ineligible (IE)	IE, UD, NE, UA	145,107
	Total	1,555,717

Using the counts in Table 4, the response rates in final reporting follows:

OPM FEVS formula:

Number of eligible employees returning completed surveys / Number of eligible employees:

$$RR = ER / (ER + ENR) * 100$$

RR = 624,800/ (624,800 + 785,810) * 100

RR = (624,800/1,410,610) * 100

RR = 44.3 percent (up from 42.6 percent in 2019)

 Table 5.
 2020 OPM FEVS agency response rate by employee population size categories

Agency	Number of Completed Surveys	Response Rate
Governmentwide	624,800	44.3%
Very Large Agencies (> 75,000 employees)	·	
Department of Agriculture	33,399	45.9%
Department of Defense, Overall	206,219	35.3%
United States Department of the Air Force	35,476	27.8%
United States Department of the Army*	82,155	44.5%
United States Department of the Navy**	52,153	28.3%
OSD, Joint Staff, Defense Agencies, and Field Activities	36,435	41.7%
Department of Health and Human Services	50,393	70.6%
Department of Homeland Security	84,704	45.8%
Department of Justice	29,013	27.7%
Department of the Treasury	40,347	55.8%
Large Agencies (10,000 – 74,999 employees)		
Department of Commerce	21,310	57.2%
Department of Energy	8,904	76.9%
Department of Labor	7,187	56.4%
Department of State	10,933	50.3%
Department of the Interior	26,114	57.2%
Department of Transportation	22,246	43.6%
Environmental Protection Agency	8,115	63.1%
General Services Administration	7,332	70.9%
National Aeronautics and Space Administration	10,588	64.0%
Social Security Administration	28,651	49.6%
Medium Agencies (1,000 – 9,999 employees)		
Court Services and Offender Supervision Agency	523	49.8%
Department of Education	2,367	71.7%
Department of Housing and Urban Development	4,509	67.4%
Equal Employment Opportunity Commission	1,311	71.7%
Federal Communications Commission	622	46.5%
Federal Energy Regulatory Commission	1,148	85.6%
Federal Trade Commission	722	72.2%
National Archives and Records Administration	1,494	62.4%
National Credit Union Administration	926	86.6%
National Labor Relations Board	776	65.3%
National Science Foundation	927	77.9%
Nuclear Regulatory Commission	2,166	80.6%
Office of Personnel Management	1,343	57.9%
Small Business Administration	1,333	67.4%
U.S. Agency for Global Media	612	48.5%
U.S. Agency for International Development	2,097	62.5%

Agency	Number of Completed Surveys	Response Rate
Small Agencies (100 – 999 employees)		
American Battle Monuments Commission	106	48.8%
Commodity Futures Trading Commission	459	73.1%
Consumer Product Safety Commission	326	73.3%
Corporation for National and Community Service	242	70.8%
Export-Import Bank of the United States	213	64.7%
Farm Credit Administration	226	81.6%
Federal Election Commission	201	71.8%
Federal Housing Finance Agency	502	90.3%
Federal Labor Relations Authority	48	55.8%
Federal Maritime Commission	59	60.2%
Federal Mediation and Conciliation Service	148	69.5%
Federal Retirement Thrift Investment Board	183	74.4%
International Boundary and Water Commission	76	39.6%
Merit Systems Protection Board	125	71.0%
National Endowment for the Arts	65	60.7%
National Endowment for the Humanities	62	54.4%
National Gallery of Art	438	61.9%
National Indian Gaming Commission	67	67.0%
National Transportation Safety Board	300	82.0%
Office of Management and Budget	305	79.4%
Office of the U.S. Trade Representative	114	61.3%
Pension Benefit Guaranty Corporation	619	73.3%
Railroad Retirement Board	412	51.4%
Selective Service System	75	79.8%
Surface Transportation Board	75	67.0%
U.S. International Development Finance Corporation	145	64.2%
U.S. International Trade Commission	318	92.2%
U.S. Office of Special Counsel	98	79.0%
Very Small Agencies (< 100 employees)		
AbilityOne Commission	11	50.0%
African Development Foundation	14	66.7%
Commission on Civil Rights	16	57.1%
Defense Nuclear Facilities Safety Board	66	82.5%
Farm Credit Insurance Corporation	<10	
Federal Mine Safety and Health Review Commission	24	49.0%
Institute of Museum and Library Services	46	90.2%
Inter-American Foundation	27	84.4%
John F. Kennedy Center for the Performing Arts	16	37.2%
Marine Mammal Commission	12	100.0%
National Capital Planning Commission	25	89.3%
National Mediation Board	12	41.4%

Agency	Number of Completed Surveys	Response Rate
Very Small Agencies (< 100 employees) (continued)		
Occupational Safety and Health Review Commission	17	41.5%
Office of Navajo and Hopi Indian Relocation	<10	_
Postal Regulatory Commission	47	94.0%
U.S. Access Board	15	65.2%
U.S. Chemical Safety and Hazard Investigation Board	19	76.0%
U.S. Office of Government Ethics	47	77.0%
U.S. Trade and Development Agency	31	73.8%

^{*}United States Department of the Army numbers include United States Army Corps of Engineers.

Help Center

As part of Westat's contractual duties, a Help Center was set up during the data collection of the OPM FEVS to assist Federal employees with questions about the survey. Providing a Help Center ensures prompt, accurate, professional, and consistent handling of all inquiries. A Help Center also supports higher response rates during data collection by allowing respondents to obtain answers to questions, voice concerns, ensure the legitimacy of the survey, and remedy any technical issues with the survey. The Help Center served as a central point for coordinating and managing reported problems and issues. Employees could email their questions and concerns to Help Center staff. Thirty email accounts were set up, one for each of the 28 large departments/agencies, one for the small/independent agencies, and one for the large independent agencies. Westat's Help Center staff included three trained team staff members, one Help Center supervisor, and two assistant Help Center supervisors, with all operations overseen by the data collection task manager. Members of the OPM FEVS staff handled email inquiries from Westat Help Center supervisors.

The Help Center opened with the launch of the first survey invitation on September 14, 2020, and closed on the last day of the fielding period, November 5, 2020. Hours of operation were 8:30 am to 5 pm Eastern Time, Monday through Friday. The Help Center was located at the Westat campus in Rockville, Maryland.

Staff Training

The Help Center supervisor conducted a 2-hour staff training session prior to the launch of the survey. The training session included an introduction to the project, a review of the 2020 OPM FEVS

^{**}United States Department of the Navy numbers include United States Marine Corps.

Contractor Answer Book prepared by OPM, a technical session on how to use the Web-based Help Center Application (see next section for details on this application), and procedures for handling emails from employees. After the technical session, all trainees used test accounts and cases that were set up in a training version Web-based application to apply what they had learned in a set of example resolution exercises. The training session closed with questions from Help Center staff.

The formal 2-hour training was followed-up with one-on-one training sessions between the Help Center supervisors and the Help Center staff. One-on-one sessions further assisted the Help Center staff understand eligibility requirements and how to code dispositions properly. During the survey administration period, the Help Center supervisors frequently reviewed the survey support inboxes, Help Center staff workload, and replies to respondents to ensure responses were not only timely, but also appropriate.

Web-Based Help Center Application

The Web-based Help Center Application, or Survey Management System (SMS), is an application that enables Help Center staff and members of the OPM FEVS staff to respond to emails, facilitate quick handling of respondent inquiries, and optimize technical assistance response times. The SMS managed email inquiries from survey participants and provided other support functions such as tracking disposition codes for the surveys, updating contact information, capturing real-time survey submissions, and generating response rate reports. The SMS was linked to the OPM survey platform, enabling Help Center staff to unsubscribe employees who explicitly refused to take the survey or who were designated as ineligible, so that they did not continue to receive reminder notifications. The SMS also automatically received response information in real-time from the survey platform to keep response rate reporting as accurate and up-to-date as possible. Cases for which the SMS could not provide real-time updates, were updated twice daily.

Response Rate Reporting Website

Beginning in 2014, OPM FEVS Points of Contact for agencies have access to a Response Rate Reporting Website to view their agency's survey completion rate information, updated hourly, during the data collection period. ¹⁴ The 2020 website provided the following information: launch date of the

¹⁴The completion rate differs from the response rate as it does not take into consideration ineligible respondents and surveys submitted that do not meet completion criteria. It is the number of submitted surveys divided by the sample size.

survey, number of days in field and remaining sample size, number of completed surveys (based on an interim disposition code), and the response rate to date. It provided the final response rates for the previous survey administrations as well as the response rate to date in the same period of survey data collection for the previous year. Agency leaders could also drill down in their organization to view subagency response rates to identify where response rates were high as well as any subagencies that might be driving lower agency response rates.

Additionally, the Response Rate Reporting website provided a dashboard feature. It allowed agencies to graphically see response rates over time and in comparison to governmentwide—the top 3 and bottom 3 subagencies, the subagencies leading and trailing the previous agency response rate to date, number of daily and weekly completes, and response rates with the option to show comparative data for the previous 2 years where applicable (see Figure 1). This information was intended to allow agency managers and executives to monitor and promote participation in the OPM FEVS.

Office of Personnel Management ((1))

Federal Employee Vlewpoint Survey Empowering Employees. Inspiring Change. 2020 Governmentwide Print view Launch Date: September 14, 2020 Days in Field: 53 Days to Close: Survey Closed Number of Respondents: 591,770 Number of Surveys Administered: 1,555,716 Response Rate Comparisons Response Rate Trend Governmentwide Last Year - This Year Day 53 This Year to Date: 38% Last Year to Date: 37% 2019 Final 43% Week 1 Week 2 Week 3 Week 4 Week 5 Week 6 Week 7 0 0 Rankings Completes Table View **2018** □ 2019 2020 Daily Weekly Top / Bottom Leading Trailing 140,000 Marine Mammal Commission 100% 120,000 U.S. International Trade Commission 100,000 Postal Regulatory Commission 89% 80.000 60,000 John F. Kennedy Center for the Performing Arts 33% 40.000 Department of Defense 20,000 Department of Justice

Figure 1. Sample views in OPM FEVS Response Rate Website

Help Center Operational Procedures

This section details the Help Center operational procedures, as well as the volume and types of inquiries received.

Emails

Figure 2 illustrates the operational procedures for handling emails at the Help Center. When an email was received within the SMS, the Help Center staff had the option to reply with an appropriate response from the OPM FEVS Contractor Answer Book or flag OPM for assistance. The Help Center processed over 822,000 emails within the Help Center SMS across the 30 email accounts (see Table 6).

Of the 822,045 emails received by the Help Center, 596,665 were undeliverable notifications, 203,844 were automated out-of-office replies, and 21,536 were inquiries or comments from individuals. Of the 596,665 undeliverable notifications, 192,853 were from unique respondents. Of the 203,844 automated out-of-office replies, Westat staff worked through and programmatically processed 156,143 from unique respondents to gather information to help assign final disposition codes to cases during survey closeout. Information from these emails helped to code a small percentage of the cases as ineligible or unavailable during the data collection period. Help Center staff reviewed all inquiries and comments in the inbox and determined that 17,673 of the 21,536 emails required a response. The other 3,863 emails consisted of comments from users who did not require a response, such as letting the Help Center know that the respondent intended to complete the survey or thanking Help Center staff for their assistance. Of the 17,673 emails that required a response, 1,260 (7.13 percent of the total) were flagged for OPM for additional assistance.

Figure 2. 2020 OPM FEVS Help Center email procedures

Emails received at 1 of 30 FEVS email accounts. Emails auto-forward to 1 of 30 Westat email accounts. Westat Help Center staff checks the FEVS Contractor Answer Book. Did you locate an appropriate response to inquiry? YES NO Copy/modify approved response from What type of question is it? FEVS Contractor Answer Book. Other Technical/ Content Request Reset URL Westat Help Center staff provides appropriate response to respondent. Westat flags inquiry for Westat creates a report OPM to review and provide listing Reset User IDs for a response OPM to reset weekly. OPM provides response to respondent. Westat updates FEVS Contractor Answer Book OPM sends Westat periodic updates to and conducts refresher training among Help Center staff. FEVS Contractor Answer Book.

Table 6. Number of emails handled by Help Center and OPM, by agency

Folder					
Agency	Inbox	Out of Office	Unde- liverable	Sent	Total*
Department of Agriculture	1,612	9,219	10,835	1,417	21,666
Department of Commerce	711	4,110	7,933	569	12,754
Department of Defense					
United States Department of the Air Force	1,500	28,945	74,908	1,144	105,353
United States Department of the Army	3,566	26,834	126,412	3,063	156,812
United States Army Corps of Engineers	2,076	315	3,149	1,718	5,540
United States Department of the Navy	686	37,303	27,898	560	65,887
United States Marine Corps	68	3,571	7,392	51	11,031
OSD, Agencies and Activities	451	15,335	45,514	360	61,300
Department of Education	113	605		91	718
Department of Energy	188	2,063	11,790	140	14,041
Department of Health and Human Services	2,645	13,627	27,149	2,170	43,421
Department of Homeland Security	1,204	15,495	101,468	979	118,167
Department of Housing and Urban Development	514	1,376	2,487	385	4,377

	Folder				
Agency	Inbox	Out of Office	Unde- liverable	Sent	Total*
Department of Justice	449	8,139	29,055	339	37,643
Department of Labor	118	1,912	5,457	85	7,487
Department of State	501	4,649	6,438	420	11,588
Department of the Interior	2,082	4,349	14,912	1,776	21,343
Department of the Treasury	400	5,546	24,202	328	30,148
Department of Transportation	744	4,713	3,547	627	9,004
Environmental Protection Agency	278	2,506	5,791	216	8,575
General Services Administration	326	2,011	4,513	243	6,850
Large independent agencies	393	2,163	3,517	281	6,073
National Aeronautics and Space Administration	180	2,273	33,304	135	35,757
National Science Foundation	6	193	577	5	776
Office of Management and Budget	64	63	420	49	547
Office of Personnel Management	11	502	891	9	1,404
Small Business Administration	54	473	6	45	533
Social Security Administration	343	3,055	14,239	308	17,637
U.S. Agency for International Development	168	1,631	137	96	1,936
Small independent agencies	85	868	2,724	64	3,677
Total	21,536	203,844	596,665	17,673	822,045

^{*}Note: Overall total does not include sent items.

Types of Inquiries Received

The types of inquiries received are listed below and demonstrate the frequently asked questions that the Help Center responded to through email. The Help Center staff answered all inquiries using the appropriate response from the OPM FEVS Contractor Answer Book, which consisted of 70 questions, which mostly fell into the following categories:

- Individuals verifying the survey was legitimate;
- Individuals who had recently moved positions within the government;
- Individuals who had lost their survey URL;
- Individuals reporting they were no longer Federal employees;
- Individuals who had received a reminder from within their agency (not from OPM), who were
 not in the sample and therefore did not get a survey invitation, and were wondering how to
 take the survey;

- Individuals with questions about confidentiality, particularly for members of small subgroups;
- Individuals asking clarifying questions about survey content; and
- Individuals having difficulty accessing the survey.

Toll-Free Calls

The Help Center did not use a toll-free hotline in 2020, although the number used in previous years remained active. Mentions of the toll-free number were removed from communications with respondents. Calls would be sent directly to voicemail and messages returned within 1 business day. No calls were received during the data collection period, which were logged into the SMS.

Chapter 5: Data Cleaning and Weighting

This chapter outlines the data cleaning and recoding performed on the analysis dataset as well as weighting of survey cases to represent the Federal employee population.

Data Cleaning and Recoding

After data collection, the data cleaning and editing process involved assigning final disposition codes and recoding some of the variables for analysis purposes. Some demographic variables were recoded to report on collapsed categories, for example, the race and ethnicity variable was recoded as minority and non-minority.

Weighting

The process of weighting refers to the development of an analysis weight assigned to each respondent to the 2020 OPM FEVS. The weights are necessary to achieve the survey objective of making unbiased inferences regarding the perceptions of the entire Federal employee population. Without the weights, the OPM FEVS could result in biased population estimates. While the 2020 OPM FEVS was a census, and all eligible employees had an equal probability of being selected to participate, nonresponse remains a source of potential bias in the 2020 OPM FEVS estimates. In an ideal scenario, everyone selected to participate will complete the survey. However, in practice, not everyone participates for a variety of reasons, ranging from technical issues to personal motivation. Since the OPM FEVS is voluntary, and there are cases that cannot be located (recipient is out of the office, undeliverable invites, etc.), biases can occur when some subgroups participate more or less than other subgroups. The use of weighted data attempts to account for these nonresponse biases when calculating the survey scores. Using weighted data, results in statements that can be made about the Federal employee population as a whole, rather than limited to simply only those who responded to the survey.

For the 2020 OPM FEVS, the weighting process used the final disposition codes and information from the sampling frame. The disposition codes determined whether each employee returned a completed questionnaire, or if information obtained indicated the employee was ineligible to participate

in the OPM FEVS. Variables used from the sampling frame include the stratum identifier and a set of demographic variables known for both respondents and non-respondents.¹⁵

Statisticians used a three-step, industry-standard process to develop the full-sample weights. First, the process calculated base weights for each sampled employee equaling the reciprocal of each individual's selection probability (i.e., 1 for all employees for 2020 since it was a census). Second, statisticians adjusted the base weights for nonresponse within agency subgroups. Those adjustments inflate the weights of survey respondents to represent all employees in the subgroup, including non-respondents and ineligible employees. Third, statisticians used a procedure known as raking to ensure weighted distributions matched known population distributions by gender, sub-agency, and minority status within agencies. This technique can increase the precision of survey estimates. Unless otherwise noted, all 2020 OPM FEVS estimates use the full-sample weights. The full-sample weights were used to compute measures of precision by using Taylor linearization in all analyses. For statistical tests that may be conducted on Analysis on Demand (see Chapter 7), the measures of precision were computed by using replicate weights, which were developed using the Jackknife or JKn method. See Appendix E for more information on the 2020 OPM FEVS weighting processes and Appendix F for an illustration of the weight adjustment.

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 $^{^{15}}$ The sampling-frame variables were from administrative data in the EHRI-SDM database.

Chapter 6: Data Analysis

This chapter outlines the statistical methodology used to analyze the 2020 OPM FEVS survey responses received from all 624,800 respondents.

Frequency Distributions

As in prior administrations, the primary data analysis in 2020 included calculating governmentwide, agency, and subagency frequency distributions for each survey question. In addition, analysts calculated frequency distributions for demographic groups and work-related characteristics.

All percentages and statistical analyses used weighted data unless noted otherwise.

Distributions of Positive, Negative, and Neutral Responses

Many of the OPM FEVS items were on 5-point Likert-type response scales. Three such scales used: (a) Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree; (b) Very Satisfied, Satisfied, Neither Satisfied nor Dissatisfied, Dissatisfied, Very Dissatisfied; and (c) Very Good, Good, Fair, Poor, Very Poor.

Analysts collapsed the positive and negative response options to facilitate managers' use of the data. Analysts produced governmentwide, agency, subagency, and other subgroup estimates of the collapsed positive and negative responses. The proportion of positive, neutral, and negative responses are as follows:

- **Percent Positive:** The combined percentages of respondents who answered Strongly Agree or Agree; Very Satisfied or Satisfied; or Very Good or Good, depending on the item's response categories.
- **Percent Neutral:** The percentage of respondents choosing the middle response option in the 5-point scale (Neither Agree nor Disagree, Neither Satisfied nor Dissatisfied, Fair).
- Percent Negative: The combined percentages of respondents answering Strongly Disagree or Disagree; Very Dissatisfied or Dissatisfied; or Very Poor or Poor, depending on the item's response categories.

Do Not Know and No Basis to Judge Responses

For items 5-8, 10-16, 18-21, 26-32, 44-49, 52-57 of the survey, respondents had the additional option of answering Do Not Know or No Basis to Judge. The responses Do Not Know or No Basis to Judge were not included in the calculation of response percentages for those items.

Work-Life Program Participation Responses

The work-life items (58-64) had, in addition to the satisfaction responses, three additional response options—"I choose not to participate in these programs," "These programs are not available to me," and "I am unaware of these programs." Response percentages for the work-life items were calculated with and without the participation response options. For 2020, four additional questions (65-68) were added. These questions ask about child care and adult/elder care arrangements (65 and 66) used by employees during the COVID-19 pandemic, as well as the disruptiveness of school and day care closures (67 and 68). Response percentages for items 67 and 68 do not include the answer options "Does not apply" and "I do not have responsibility for school-aged children/children who need daycare."

COVID-19 Pandemic Section Responses

The extensive COVID-19 pandemic section was included in 2020 to allow evaluation of the existing workforce context and its impact on employee experiences and perceptions. Few of the items used the Likert-type score response options typically applied to core OPM FEVS survey items (in 2020, items 1-38). Most of the pandemic assessment items used unique response options. For details, please see Appendix A.

Missing Data

Responses to all OPM FEVS items are voluntary. Since a survey is considered complete if only 25 percent or more of the non-demographic items have a response, there may be a number of cases with missing data. Any missing data, or unanswered items by respondents, were not included in the calculation of response percentages for those items.

Data Suppression

To maintain respondent confidentiality, all demographic results used suppression rules in 2020. If there were fewer than four responses for a single demographic response option, all results for that question were suppressed (see Table 7a). If there were fewer than four responses in multiple response options for a given demographic item, only those results were suppressed, and the remaining data were displayed (see Table 7b). Note, while the number of respondents (N) is shown in the Tables 7a and 7b for illustrative purposes, they were not shown in the reports to protect confidentiality.

Table 7a. Sample full data suppression

What is your supervisory status?	N	%
Non-Supervisor	50	
Team Leader	25	
Supervisor	15	
Manager	8	
Senior Leader	2	
Total	100	

Table 7b. Sample partial data suppression

What is your supervisory status?	N	%
Non-Supervisor	60	60%
Team Leader	25	25%
Supervisor	10	10%
Manager	3	
Senior Leader	2	
Total	100	

Indices

The 2020 OPM FEVS reported three indices. These composite measures join specific observations (i.e., individual survey items) into more general dimensions or constructs, and include: Employee Engagement Index, the Global Satisfaction Index, and a Performance Confidence Index. The next sections review each index in turn. The New Inclusion Quotient (New IQ) Index was not calculated, since not all index items were included on the 2020 survey.

Employee Engagement Index

The Employee Engagement Index is a measure of the conditions conducive to engagement. The index consists of 15 items grouped into three subindices: Leaders Lead, Supervisors, and Intrinsic Work Experience (see Table 8).

Analysts calculated subindex scores by averaging the unrounded percent positive of each of the items in the subindex. Averaging the three unrounded subindex scores created the overall Employee Engagement score. Index and subindex scores were rounded for reporting purposes.

Table 8. Employee Engagement Index (15 items)

Employ	Employee Engagement Index (3 Subindices)		
Leader	Leaders Lead (5 items)		
26	In my organization, senior leaders generate high levels of motivation and commitment in the workforce.		
27	My organization's senior leaders maintain high standards of honesty and integrity.		
28	Managers communicate the goals of the organization.		
30	Overall, how good a job do you feel is being done by the manager directly above your immediate supervisor?		
31	I have a high level of respect for my organization's senior leaders.		
Supervisors (5 items)			
21	Supervisors in my work unit support employee development.		
22	My supervisor listens to what I have to say.		
23	My supervisor treats me with respect.		
24	I have trust and confidence in my supervisor.		
25	Overall, how good a job do you feel is being done by your immediate supervisor?		
Intrinsi	Intrinsic Work Experience (5 items)		
2	I feel encouraged to come up with new and better ways of doing things.		
3	My work gives me a feeling of personal accomplishment.		
4	I know what is expected of me on the job.		
6	My talents are used well in the workplace.		
7	I know how my work relates to the agency's goals.		

Global Satisfaction Index

Global Satisfaction Index is a combination of four items assessing employees' satisfaction with their job, their pay, and their organization, plus their willingness to recommend their organization as a good place to work (see Table 9).

Analysts calculated the overall Global Satisfaction Index scores by averaging the unrounded percent positive of each of the four items. Index scores were rounded for reporting purposes.

Table 9. Global Satisfaction Index (4 items)

Global Satisfaction (4 items)		
17	I recommend my organization as a good place to work.	
36	Considering everything, how satisfied are you with your job?	
37	Considering everything, how satisfied are you with your pay?	
38	Considering everything, how satisfied are you with your organization?	

Performance Confidence Index

The Performance Confidence Index is a combination of five items assessing employees' perception of their work unit's ability to achieve goals and produce work at a high level (see Table 10). In the Governmentwide Management Report it is discussed as workplace effectiveness. The construct of Performance Confidence, defined as "The extent to which employees believe their organization has an outstanding competitive future, based on innovative, high quality products and services that are highly regarded by the marketplace." The OPM Survey Analysis team leveraged Wiley's Performance Confidence Index as a starting point to develop a Performance Confidence Index for the OPM FEVS to capture the key perceptions Federal employees have regarding the performance of their agencies. A survey of Chief Human Capital Officers (CHCO) in 2017 and 2018 confirmed Performance Confidence as a critical dimension to include on future OPM FEVS administrations.

The original items used by Wiley were reviewed and modified to ensure meaningfulness for Federal employees. First was an extensive review of the literature, followed by a series of internal expert reviews that resulted in proposed revisions. To vet and refine the proposed content, a feedback survey and a series of virtual meetings were held with the Interagency OPM FEVS Improvements Workgroup, whose members span 15 Federal agencies. This input was crucial to ensure the relevance,

¹⁶ Wiley, J. W., & Lake, F. (2014). Inspire, Respect, Reward: Re-framing leadership assessment and development. *Strategic HR Review*, 13(6), 221–226.

Wiley, J. W. & Davis, S. L. (SIOP April 2017). Leaders Employees Absolutely Love: Assessing and Developing the Next Generation of Successful Leaders. Accessed at https://www.siop.org/Research-Publications/TIP/TIP-Back-Issues/2016/October/ArtMID/20267/ArticleID/902/Announcing-SIOP-2017-Preconference-Workshops-New-Half-Day-Option.
Wiley, J. W. (2014). Using employee opinions about organizational performance to enhance employee engagement surveys: Model building and validation. People and Strategy, 36(4), 38.

applicability, and usability of the new index to the broad base of OPM FEVS constituents. Lastly, a series of cognitive interviews were conducted with OPM employees on items comprising the new index to identify and address any issues in item wording/clarity and response option selection.

The Performance Confidence items were tested as a part of the 2018 pilot survey data collection and finalized items were included on the 2019 and 2020 OPM FEVS (modified for COVID-19 pandemic). This index was new for the 2020 OPM FEVS. It was included in the COVID-19 pandemic section of questions and asked about a work unit's performance before and during the pandemic. For simplicity, only the item numbers for the question related to pre-pandemic work unit performance are listed in Table 10.

Table 10. Performance Confidence Index (5 items)

Performance Confidence (5 items)*		
54a	My work unit met the needs of our customers.	
54b	My work unit contributed positively to my agency's performance.	
54c	My work unit produced high-quality work.	
54d	My work unit adapted to changing priorities.	
54f	My work unit achieved our goals.	

^{*54}e is skipped because the item, "My work unit successfully collaborated," is not a part of the Performance Confidence index.

Index Rankings

Agencies were ranked on each of the indices using their index scores rounded to a whole number. For these rankings, agencies were grouped in two ways. First, the 35 departments, large, and medium agencies were grouped together while the other small/independent agencies were grouped together (see Table 11). Second, agencies were grouped into five different size categories: (1) Very Small agencies with less than 100 employees, (2) Small agencies with 100-999 employees, (3) Medium agencies with 1,000-9,999 employees, (4) Large agencies with 10,000-74,999 employees, and (5) Very Large agencies with 75,000 employees or more.

In the ranking group Department, Large, & Medium Agencies, an overall Department of Defense (DoD) ranking is provided, which is created by combining populations of the six DoD agencies (Department of the Army, Department of the Navy, Department of the Air Force, U.S. Army Corps of Engineers, U.S. Marine Corps, and other Defense Agencies/Activities). For the individual Army and Navy

rankings, note that Army includes the U.S. Army Corps of Engineers population and Navy includes the U.S. Marine Corps population.

Ties were possible with the rounded Index scores used for ranking. Agency rankings are presented in the Agency Management Reports (AMRs) and the Small Agency Management Reports (SAMs). Agencies with fewer than 10 responses were excluded from the rankings to maintain participant confidentiality.

Table 11. The 35 departments, large, and medium agencies

Departments/Large Agencies	Medium Agencies
Department of Agriculture	Court Services & Offender Supervision Agency
Department of Commerce	Department of Education
Department of Defense	Department of Housing and Urban Development
Department of Energy	Equal Employment Opportunity Commission
Department of Health and Human Services	Federal Communications Commission
Department of Homeland Security	Federal Energy Regulatory Commission
Department of Justice	Federal Trade Commission
Department of Labor	National Archives and Records Administration
Department of State	National Credit Union Administration
Department of Transportation	National Labor Relations Board
Department of the Interior	National Science Foundation
Department of the Treasury	Nuclear Regulatory Commission
Environmental Protection Agency	Office of Personnel Management
General Services Administration	Small Business Administration
National Aeronautics and Space Administration	U.S. Agency for Global Media
Office of Management and Budget	U.S. Agency of International Development
Pension Benefit Guaranty Corporation	
Railroad Retirement Board	
Social Security Administration	

Chapter 7: Public Release Data Files

Data Masking Methodology for Disclosure Avoidance

Starting in 2016, the OPM FEVS Public Release Data Files (PRDF) uses a new method to identify at-risk individuals, and an optimized masking process to reduce the risk of re-identification and disclosure of confidential survey responses while maximizing the amount of demographic data that can be kept intact. There are two key elements in the OPM FEVS data that can be used to identify individuals: where the employee works, and their demographic data. The combination of these two elements is what the Public Release Data File seeks to protect, and it does so in several steps.

- Collapses agencies and work units that do not meet a minimum number of respondents, into "all other" categories. For 2020, we limited the work unit identifier to just the agency level, and only for agencies with at least 750 respondents.
- Collapses categories to reduce the distinctiveness in the demographic data. For instance, collapsing the multiple age categories into a dichotomous Over/Under 40 variable helps protect the very small groups at the younger and older ends of the age groups.
- 3. Collapses at-risk groups into groups that are not at-risk by masking one or more of their demographic responses. For 2020, a group is considered at-risk if there are fewer than 5 respondents with the exact combination of demographics and work unit.

The combination of work unit and demographics creates what is called a "cell," and it allows us to identify at-risk groups. The diagram below provides a depiction of a cell and its parts:

cell →				OMBABXB		
breakdown \rightarrow	ОМ	В	Α	В	X	В
key →	Agency Code	Minority Status	Sex	Disability Status	Supervisory Status	Veteran Status

A cell is compiled for every respondent. Frequencies are then run to identify which cells are atrisk and which ones are not. At-risk cells have subsequent cycles of masking applied until they either collapse into a cell that is not at risk, or all of the demographic information is masked, as demonstrated next.

Data Masking Procedure

Once the at-risk cells and not-at-risk cells are identified and separated, the masking procedure can begin. On the at-risk list, the original cell is copied with a modification—for a cell made up of five demographics, that means there are five copies, each modified to "mask" one of the demographic values, meaning it is changed to missing (see Table 12).

Table 12. Masking procedure of demographic variables

Original	Demographic 1	Demographic 2	Demographic 3	Demographic 4	Demographic 5
OMBABXB	OM <u>X</u> ABXB	OMB <u>X</u> BXB	OMBA <u>X</u> XB	OMBAB <u>x</u> B	OMBABX <u>X</u>

Each of these five modified cells is checked against the not-at-risk list of cells for a match. If a modified cell appears on the not-at-risk list, then the original cell that was at-risk will be replaced with that modified cell. By doing this, the respondents in the at-risk cell get added to the respondents in the not-at-risk cell, and they will not be considered at-risk going forward. In the case of multiple modified at-risk cells matching to multiple cells from the not-at-risk list, the not-at-risk cell with the smallest number of respondents is chosen as the replacement. The more people in a cell the more difficult it is to re-identify someone, so adding them to the smaller cell is the logical choice. In the case of a tie, the left-most modified cell is chosen.

For example, if modified cell 1 (OMXABXB) and modified cell 5 (OMBABXX) both have a match to not-at-risk cells, but modified cell 1 matches to a not-at-risk cell of seven people and modified cell 5 matches to a not-at-risk cell of eleven people, then modified cell 1 will be chosen to replace the original cell. In this example, the original cell, **OMBABXB** would be replaced with **OMXABXB**.

If there are no matches between any of the modified cells and the not-at-risk cells, then a default masking step is made—the left-most remaining demographic value will be masked.

Once all of the original at-risk cells are replaced with a newly masked cell, all cells are recounted, and at-risk and not-at-risk cells are divided again. The process repeats like this, with the sequentially modified cells and the default masking steps replacing demographics values until either a not-at-risk match is found, or all of the demographics are masked and there's no more risk (see Table 13).

Table 13. Masking procedure iterations

Original	Iteration 1	Iteration 2	Iteration 3	Iteration 4	Iteration 5
OMBABXB	OM X ABXB	OM <u>XX</u> BXB	ОМ <u>ХХХ</u> ХВ	ОМ <u>ХХХХ</u> В	OM <u>XXXXX</u>

Once there are no more at-risk cells, the final cell is broken back out into the individual demographic components that make it up, and all "X" values are removed. This is the data that appears in the final dataset. From here, anyone who attempts to identify an individual record using work unit and demographic information will be met with at least five identical individuals who meet that description.

Chapter 8: Presentation of Results

This chapter details the six types of reports that were produced from the 2020 OPM FEVS, as well as the tools for report dissemination and performing online analyses on demand. OPM distributed survey findings in the following six reports:

- Governmentwide reports
- All Levels, All Indices, All Items reports
- Annual Employee Survey (AES) reports
- Management reports
- Subagency reports
- Demographic Comparison reports

Table 14 shows a listing of the reports with the approximate number of each type produced. The Governmentwide reports are on the 2020 FEVS public website (www.opm.gov/FEVS), and individual agency reports were distributed via the FEVS Online Analysis and Reporting Tool (WesDaX hosted by Westat). These reports are outlined in more detail in the sections below.

Table 14. 2020 OPM FEVS reports

		Number of Reports				
Re	port Type	2017	2018	2019	2020	
1.	Governmentwide Reports (508 compliant)	4	4	1	1	
	Governmentwide Management Report	1	1	1	1	
2.	All Levels, All Indices, All Items Reports	*	785	775	765	
	Agency level All Levels Reports	*	83	84	83	
	1 st level All Levels Reports	*	702	691	682	
3.	Annual Employee Survey (AES) Reports	802	785	775	765	
	Agency level AES Reports	86	85	86	85	
	1 st level AES Reports	716	700	689	680	
4.	Management Reports	83	83	84	83	
	Agency Management Reports	43	42	42	41	
	Small Agency Management Reports	40	41	42	42	

			Number of Reports				
Re	port Type		2017	2018	2019	2020	
5.	Subagency Reports		33,780	29,879	29,516	30,077	
	1 st level comparison		60	62	59	60	
	1 st level breakout		584	566	555	553	
	2 nd level comparison		423	413	406	400	
	2 nd level breakout		2,321	2,247	2,284	2,249	
	3 rd level comparison		1,429	1,403	1,309	1,304	
	3 rd level breakout		6,313	5,914	5,621	5,520	
	4 th level comparison		2,109	2,038	1,951	1,944	
	4 th level breakout		8,281	6,748	6,476	7,066	
	5 th level comparison		2,364	1,413	1,426	1,389	
	5 th level breakout		5,091	3,684	3,874	3,854	
	6 th level comparison		739	887	919	986	
	6 th level breakout		2,016	2,112	2,091	2,205	
	7 th level comparison		294	373	416	476	
	7 th level breakout		802	998	1,060	1,069	
	8 th level comparison		229	268	245	274	
	8 th level breakout		446	495	484	523	
	9 th level comparison		92	90	107	83	
	9 th level breakout		187	168	231	122	
6.	Demographic Comparison Reports	S	960	892	876	1,118	
7.	WesDaX		Unlimited	Unlimited	Unlimited	Unlimited	
		Total	35,690	32,460	31,151	32,089	

^{*} In 2017, the All Levels, All Indices, All Items reports were only generated electronically via the pre-configured option within the OPM FEVS Online Analysis and Reporting Tool (discussed below).

Governmentwide Reports

The 2020 Government Management Report includes an overview of the respondents compared to the total Federal workforce, response rates over time, highlights from the 2020 OPM FEVS, trending of the AES item results from 2016 to 2020, top-performing agencies on the Employee Engagement, and key results from the COVID-19 pandemic questions added to the survey. The report has seven appendices which include participating agencies by employee population size and response rates, analytic methods, and additional OPM FEVS resources, trend analyses, COVID-19 pandemic results,

work-life program results, respondent characteristics, and OPM FEVS index results. Appendices in the Governmentwide Management Report also contain a link to download them in Microsoft® Excel.

Other governmentwide data reports generated include:

- Report by Agency: Displays question-by-question counts and percentages for each response
 option for the 2020, 2019, and 2018 OPM FEVS, by participating agency and
 governmentwide. Counts of respondents are unweighted, but the percentage estimates for
 each question are weighted.
- Report by Demographics: Displays question-by-question counts and percentages for each
 response option for the 2020, 2019, and 2018 OPM FEVS, by demographic groups and
 governmentwide. Counts of respondents are unweighted, but the percentage estimates for
 each response category are weighted.
- Report on Demographic Questions by Agency (Unweighted): Displays counts and percentages by participating agencies' demographic and workforce profile (e.g., work location, supervisory status, sex, age, pay category, intention to retire) for 2020, 2019, and 2018. Both respondent counts and percentage estimates are unweighted.
- COVID-19 Report by Agency: Displays question-by-question counts and percentages for each response option for the COVID-19 items, by participating agency and governmentwide. Counts of respondents are unweighted, but the percentage estimates for each question are weighted.
- COVID-19 Report by Demographics: Displays question by question counts and percentages
 for each response option for the COVID-19 items, by demographic groups and
 governmentwide. Counts of respondents are unweighted, but the percentage estimates for
 each response category are weighted.

All Levels, All Indices, All Items Reports

The All Levels, All Indices, All Items Reports provide a comprehensive summary of all OPM FEVS non-demographic items and index scores for agencies and their subcomponents with at least 10 respondents. It includes index and subindex scores for the Employee Engagement Index and Global Satisfaction Index. It also includes the percent positive, neutral, and negative results for each non-demographic item across the subagencies. Results were weighted and can be benchmarked against the Governmentwide and agency size numbers. These reports were produced in Microsoft® Excel and were generated for agencies and subcomponents with at least 10 respondents.

Annual Employee Survey Reports

The Annual Employee Survey (AES) Report provides weighted agency data for all non-demographic items on the FEVS, with the 16 items mandated by 5 CFR Part 250 Subpart C denoted with an asterisk. These reports include the following:

- number and proportion of responses in each response category,
- the proportion of positive and negative responses to each survey item (where relevant),
- the proportion of positive, neutral, and negative responses to each survey item (where relevant) for 2013 to 2020 historical data for trending,
- new items for 2020, including veteran spousal hiring and the COVID-19 pandemic,
- proportions of responses for telework and work-life programs,
- agency-specific items,
- the unweighted percentages to the demographic questions.

The AES reports include a dashboard interface to allow users to select and display highest and lowest percent positive or negative items, as well as highlight how many items were identified as strengths or challenges. The dashboard also includes background information, such as the survey field period, the number of respondents, response rate, and if the agency frame was a census or sample. A second dashboard, available for agencies that administered demographic items, spotlights the respondent demographic profile. A third dashboard allows users to select and display the largest increases or decreases in percent positive between 2017 or 2018 or 2019 and 2020 for comparison. It displays the percentage point change for the top five increases or decreases and the total number of items that increased or decreased between the selected year and 2020. Finally, for the 57 agencies that added agency-specific items to the OPM FEVS, the results for these items were also included in the AES. The AES report was produced in Microsoft® Excel and generated for each of the participating agencies with at least 4 respondents, and for each of the 680 1st level subagencies with at least 10 respondents.

Management Reports

For the 2020 OPM FEVS, OPM's data presentation for the Management Reports included:

- 41 Agency Management Reports for the Departments, large, and medium agencies
- 42 Small Agency Management Reports for the small and independent agencies

The Agency Management Report (AMR) and Small Agency Management (SAM) Reports provide similar content—the AMRs for large and medium agencies and the SAMs for the small agencies. These reports were only provided to agencies with at least 10 responses. The following sections provide more information about these reports.

Agency Management Report (AMR)

The AMRs were designed to help agency directors and managers identify what they can do to improve management in their agencies. The agency management reports included the following information:

- A guide to understanding and using the results from the OPM FEVS;
- A section titled "Respondent Overview." This section provides survey administration information (data collection period, sample size, agency and subagency response rates, agency results margin of error), and highlights of the 2020 OPM FEVS agency respondent characteristics;
- A series of sections that display scores, rankings, and trends governmentwide and by agency size for:
 - Employee Engagement Index
 - Global Satisfaction
- A series of Decision Aid tables that present all items that increased, decreased, or did not change since 2019, as well as items considered a strength, challenge or caution item, when items became a new strength or were a past strength, and a feature highlighting if the question was in the top 10 positive or negative items;
- Four appendices showing results for all items benchmarked against the governmentwide percent positive, COVID-19 pandemic results, the agency's work-life programs and demographic results, and a list of all participating agencies by employee population size.

Small Agency Management Report (SAM)

The SAMs are almost identical to the AMRs but designed specifically for small agencies and provide comparisons to other small agencies rather than the governmentwide averages. The small agency management reports include:

- A guide to understanding and using the results from the OPM FEVS;
- A section for agencies that administered respondent characteristic and demographic questions titled "Respondent Overview." This section provides survey administration information (data collection period, sample size, agency and subagency response rates,

agency results margin of error), and highlights of the 2020 OPM FEVS agency respondent characteristics;

- A series of sections that displays scores, rankings, and trends for all small agencies combined and by agency size for:
 - Employee Engagement Index
 - Global Satisfaction;
- A series of Decision Aid tables that present all items that increased, decreased, or did not change since 2019, as well as items considered a strength, challenge or caution item, when items became a new strength or were a past strength, and a feature highlighting if the question was in the top 10 positive or negative items;
- Four appendices that show results for all items benchmarked against all small agencies combined, COVID-19 pandemic results, the agency's work-life program and demographic results (where applicable), and a list of all participating agencies by employee population size.

Subagency Reports

Each agency and their subcomponents or subagencies (down to the 9th level where applicable) received separate reports showing the percent positive, neutral, and negative results for OPM FEVS items across the subagencies. These results include weighted percentage data for the core OPM FEVS survey items and the unweighted demographic responses.

The subagency reports for each level (1st – 9th) include both a comparison and a breakout report.

- The Comparison Reports provide the governmentwide, agency, and the specific-level results (e.g., the 2nd level comparison had the governmentwide, agency, 1st level, and all 2nd level subagencies' results). In the reports for the 4th level subagency and lower, the higher-level results (e.g., governmentwide, agency) were dropped for simplicity.
- The Breakout Reports provide the governmentwide, agency, and one specific-level result (e.g., the 2nd level Breakout report had the governmentwide, agency, 1st level, and one 2nd level subagency results rather than comparing all 2nd level subagencies as in the comparison reports). In the reports for the 4th level subagency and lower, the higher-level results (e.g., governmentwide, agency) were dropped for simplicity. These reports also include two sections that highlighted the level's top 10 positive and negative items, as well as items in which they are leading or trailing the level directly above their level (e.g., 4th level would be compared to the 3rd level subagency).

These reports were available in two formats, PDF, and Microsoft Excel®, allowing agency leaders to sort the data as needed. No reports were produced when a subagency had fewer than 10 respondents.

Delivery of Agency Results, Reports, and Ad Hoc Analyses – WesDaX

The FEVS Online Analysis and Reporting tool is run by Westat's Data Xplorer (WesDaX) and is an online query and analysis system. It allows OPM and Federal agency users to view and download their reports by following the links as illustrated in Figure 3. The online reporting system is available for users to access their data at any time.

Office of Personnel Management 2020 Federal Employee Vlewpoint Survey Empowering Employees. Inspiring Change. Tutorial Users My Account Project: FEVS 2020 / Home Jser: Welcome to the OPM Federal Employee Viewpoint Survey (FEVS) Onlir Year: 2020 ♥ Go Project: FEVS 2020 ♥ Go At the left, you can select the different types of reports you would like to view Some of the OPM FEVS reports open in a separate window in order to view the "Pre-Configured Reports" allow you to produce a customized report that m Pre-Configured Reports "Analysis On Demand" allows you to perform your own analyses and create Analysis On Demand Please note: In 2020, the OPM FEVS included 4 skip questions. . Question 41: "What type(s) of leave have you used because of the pander to Q41, they did not receive Question 41a: "During the COVID-19 pandemi . Military Spouse item: "Are you...". If respondents answered "None of the question "Have you been hired under the Military Spouse Non-Competitive Intent to Leave item: "Are you considering leaving your organization with leaving the organization BEFORE PANDEMIC and AS OF TODAY, they did not changed because of the COVID-19 pandemic?" Retirement Plans item: "I am planning to retire:". If respondents answer receive the follow-up question "Has your retirement plan changed because

Figure 3. FEVS Online Analysis and Reporting Tool—main menu

Governmentwide Reports:

Users are able to view/download the following 508 compliant PDF reports:

Governmentwide Management Report

Agency-Level Reports:

Users are able to view/download their agency-level reports. These include the following:

- Annual Employee Survey Report,
- Agency Management Report, or Small Agency Management Report (508 compliant), and
- All Levels, All Indices, All Items Report.

1st Level Reports:

Users are able to drill down and view/download for any 1st level subagency reports provided. These include the following:

- 1st Level Annual Employee Survey (AES) Report, and
- 1st Level Subagency Comparison and Breakout Reports, and
- 1st Level All Levels All Indices All Items Reports.

Lower Level Reports:

Users are able to drill down and view/download, in PDF format, any applicable 2nd-9th level Subagency Comparison and Breakout Reports.

Preconfigured Reports:

Users are able to manually configure many of the preceding agency reports to several formats, including PDF, Excel, HTML, and RTF. The following are available via a pre-configured report:

- Agency and 1st level occupational series reports;
- All levels response rate reports;

Cart

Similar to online shopping carts, this feature allows users to add multiple reports from the different report options to a cart to download at one time. The feature zips all selected reports into one file for downloading to a location of the user's choice. In addition to being able to view and download the above reports through WesDaX, users have access to Analysis on Demand feature.

Analysis on Demand

This feature allows users to drill down into the data to explore relationships of interest. Users can subset the data by year, select variables from a list, and produce simple frequency distributions, two-way tables (cross-tabulation), three-way tables, and trend analysis (only for large agencies). A select-all feature allows users to be able to select or deselect all variables from a list.

After selecting the year(s), users can choose the type of table for a simple frequency, or twoway or three-way table or trends over time. They can also select their variables of interest, as well as types of statistics desired (e.g., weighted number of responses, cell, row, or column percentages, standard errors, confidence intervals, etc.). It should be noted that statistical analysis such as standard errors, confidence intervals, chi-square tests and significance testing for trends are only available for large agencies. Optional features are to filter the data by a subagency, demographic, or responses to an item, and/or benchmark to compare results to the entire dataset or specific agencies. A set of video tutorials facilitate use of Analysis on Demand: https://www.dataxplorer.com/Public/TutorialFEVS.aspx.

Users can tailor the type of analysis to their interests and download the analysis output. Queries are automatically saved, and users are able to view/download the results upon logging in. This feature allows users to be able to run multiple queries simultaneously and not have any time-out issues. The twenty most recent queries are automatically saved for users.

Users can share queries with all users from their agency. They can share queries with users from their own subagency or users from other subagencies within the same agency. For example, a user from the Office of the Director of OPM can share queries within their own component and with users from the Office of the Inspector General of OPM. This sharing feature helps minimize the need to recreate queries that are commonly used.

Since 2014, users can create charts from results in Analysis on Demand. Users were able to select various chart types (bar, pie, donut, line, and area), chart size, color palette, and data cells. Users could specify to include or exclude the data values within the chart. For 2020, new folders include:

- Survey item 11, Performer
- COVID-19 (Including Telework)

Figure 4 provides the main menu for Analysis on Demand displaying the new folders for 2020.

Project: FEVS 2020 / Analysis On Demand Current Selections: 1. Subset | 2. Table Type | 3. Variables | 4. Table Contents | 5. Filters (optional) | 6. Benchmark (optional) Results Saved Queries Start Over Specify the variable Click the checkbox in the Variable List, then click the ' > ' arrow button below to indicate where you want to place it. Search Go Variable List: Demographics ⊕ 🏣 Work-Life 🗄 🚞 Survey Items Pos ⊕ □ Survey Items 3-Point Pos-Neu-Neg Row: . □ Survey Items 5-Point All Response Options 🗄 🗀 Agency-Specific Survey Items >

Figure 4. FEVS Online Analysis and Reporting Tool — Analysis on Demand main menu

Account Access

⊞-©aSurvey Year ⊞-©aAgency/Subagency

All agency level and 1st level points of contacts (POC) and users were carried over from 2019 and provided access to 2020 data. POCs also have the capability to grant access to the online reporting tool to others in their agency. This access could be given for all agency results or to only certain 1st level subagencies. For 1st level access, the individual would only be able to view or review data for their 1st level subagency, the agency overall, and governmentwide results.

Summary of Quality Control Process

To ensure the highest accuracy and validity of the data, each number within each report goes through two levels of quality control (QC) by Westat. The first level of QC for the reports is the electronic quality control with the use of SAS® software. Two programmers create the numbers independently based on a set of pre-defined specifications and then electronically compared the numbers to ensure they matched. The second level of QC is performed by staff members who compare the input (SAS-produced results) to the output (the actual report with the data incorporated into it). While each type of report has a different QC process due to the different types of data, the general process is the same. Staff members are put into teams of two to ensure the highest level of accuracy when comparing data. One staff member reads off each number from the input data, and the other staff member reads off the number from the output data. If they match, a check mark is placed by the number. If they do not match, they inform the QC manager, who relays the error to the project manager and programmers to

Select Multiple

get it fixed. If the error is due to a problem with the code, the output data reports are re-run and the staff members go back and QC the new reports. The QC manager keeps all finished reports in a locked filing cabinet to ensure security in case there is a need to review them.

Appendix A: Item Change Summary

OPM FEVS items were modified in 2020 for a variety of reasons, often to improve the interpretation, understanding, or actionability of the items. These changes are in this appendix. Also included in this appendix are changes to item numbering from the 2019 to 2020 OPM FEVS for items in the core survey.

Table A-1. 2020 OPM FEVS item text changes

New Item Text (2020)	Change	Previous Item Text (2019)
Not an item or section in the 2020 OPM FEVS	Not included	Partial Government Shutdown 73. Which of the following best describes the impact of the partial government shutdown (December 22, 2018 – January 25, 2019) on your working/pay status? O The shutdown had no impact on my working /pay status O I did not work and did not receive pay until after the lapse ended O I worked some of the shutdown but did not receive pay until after the lapse ended O I worked for the entirety of the shutdown but did not receive pay until after the lapse ended O Other, not listed above
Not an item or section in the 2020 OPM FEVS	Not included	74. How was your everyday work impacted during (if you worked) or after the partial government shutdown? O It had no impact O A slightly negative impact O A wery negative impact O An extremely negative impact

New Item Text (2020)	Change	Previous Item Text (2019)
Not an item or section in the 2020 OPM FEVS	Not included	74A. In what ways did the partial government shutdown negatively affect your work? (Check all that apply) Unmanageable workload Missed deadlines Unrecoverable loss of work Reduced customer service Delayed work Reduced work quality Cutback of critical work Time lost in restarting work Unmet statutory requirements
Not an item or section in the 2020 OPM FEVS	Not included	 75. Are you looking for another job because of the partial government shutdown? O I am looking for another job specifically because of the shutdown. O I am looking for another job, but the shutdown is only one of the reasons. O I am looking for another job, but the shutdown had no influence on that decision. O I am not looking for another job currently.
Not an item or section in the 2020 OPM FEVS	Not included	76.My agency provided the support (e.g., communication, assistance, guidance) I needed during the partial government shutdown O Strongly Agree O Agree O Neither Agree nor Disagree O Disagree O Strongly Disagree O No support required

New Item Text (2020)	Change	Previous Item Text (2019)
39. During the COVID-19 pandemic, on average what percentage of your work time have you been physically present at your agency worksite (including headquarters, bureau, field offices, etc.)? O 100% of my work time O At least 75% but less than 100% O At least 50% but less than 75% O At least 25% but less than 50% O Less than 25% O I have not been physically present at my agency worksite during the pandemic	New item in new section	Not an item or section in the 2019 OPM FEVS
40. Please select the response that BEST describes your teleworking schedule (1) BEFORE the COVID-19 pandemic, (2) DURING the PEAK of the pandemic, and (3) AS OF the date you responded to this survey.	New item in new section	Not an item or section in the 2019 OPM FEVS
41.What type(s) of leave have you used because of the pandemic? (Mark all that apply) ☐ Leave under the Emergency Paid Sick Leave Act (part of the Families First Coronavirus Response Act) ☐ Annual leave ☐ Sick leave ☐ Weather and safety leave ☐ Administrative leave ☐ Other paid leave (e.g., comp time, credit hours) ☐ Unpaid leave (e.g., LWOP) ☐ I have not used leave because of the pandemic [If selected, skip 41a, this response choice is exclusive]	New item in new section	Not an item or section in the 2019 OPM FEVS
41a. During the COVID-19 pandemic, what percentage of your total work time have you used leave because of the pandemic? O 100% of my work time O At least 75% but less than 100% O At least 50% but less than 75% O At least 25% but less than 50% O Less than 25%	New item in new section	Not an item or section in the 2019 OPM FEVS

New Item Text (2020)	Change	Previous Item Text (2019)
42. How have you changed your participation in alternative work schedules (AWS) because of the COVID-19 pandemic? Examples of AWS include compressed work and flexible work schedule. O I began an alternative work schedule O I ended my usual alternative work schedule O No change because of the pandemic	New item in new section	Not an item or section in the 2019 OPM FEVS
43. How has your organization supported your well-being needs during the COVID-19 pandemic? For each support listed, choose the best response from one of the 3 columns: (1) those supports you needed and have been available to you, (2) those needed but not available to you, and (3) those supports you have not currently needed.	New item in new section	Not an item or section in the 2019 OPM FEVS
44. During the COVID-19 pandemic my organization's senior leaders have demonstrated commitment to employee health and safety.	New item in new section	Not an item or section in the 2019 OPM FEVS
45. During the COVID-19 pandemic my organization's senior leaders have supported policies and procedures to protect employee health and safety.	New item in new section	Not an item or section in the 2019 OPM FEVS
46. During the COVID-19 pandemic my organization's senior leaders have provided effective communications about the pandemic.	New item in new section	Not an item or section in the 2019 OPM FEVS
47. During the COVID-19 pandemic my supervisor has shown concern for my health and safety.	New item in new section	Not an item or section in the 2019 OPM FEVS
48. During the COVID-19 pandemic my supervisor has supported my efforts to stay healthy and safe while working.	New item in new section	Not an item or section in the 2019 OPM FEVS
49. During the COVID-19 pandemic my supervisor has created an environment where I can voice my concerns about staying healthy and safe.	New item in new section	Not an item or section in the 2019 OPM FEVS

New Item Text (2020)	Change	Previous Item Text (2019)
50. How has your organization supported your work during the COVID-19 pandemic? For each support listed choose the best response from one of the 3 columns: (1) those supports you needed and have been available to you, (2) those you needed but not available to you, and (3) those supports you have not currently needed.	New item in new section	Not an item or section in the 2019 OPM FEVS
51. Does the type of work you do require you to be physically present at a worksite? O Yes O No O Other	New item in new section	Not an item or section in the 2019 OPM FEVS
52. How disruptive has the COVID-19 pandemic been to your ability to do your work? ○ Extremely ○ Very ○ Somewhat ○ Slightly ○ Not at All ○ No Basis to Judge	New item in new section	Not an item or section in the 2019 OPM FEVS
53. How have your work demands changed because of the COVID-19 pandemic? O Greatly increased O Somewhat increased O About the same O Somewhat decreased O Greatly decreased O No Basis to Judge	New item in new section	Not an item or section in the 2019 OPM FEVS
54. Prior to the COVID-19 pandemic, my work unitmet the needs of our customerscontributed positively to my agency's performanceproduced high-quality workadapted to changing prioritiessuccessfully collaboratedachieved our goals.	New item in new section	Not an item or section in the 2019 OPM FEVS

New Item Text (2020)	Change	Previous Item Text (2019)
55. During the COVID-19 pandemic, my work unithas met the needs of our customershas contributed positively to my agency's performancehas produced high-quality workhas adapted to changing prioritieshas successfully collaboratedhas achieved our goals.	New item in new section	Not an item or section in the 2019 OPM FEVS
56.In the phased return of employees to the agency worksite (i.e., opening up government), my organization has made employee safety a top priority. O Strongly Agree O Agree O Neither Agree nor Disagree O Disagree O Strongly Disagree O No Basis to Judge	New item in new section	Not an item or section in the 2019 OPM FEVS
57. Based on my organization's handling of the COVID-19 pandemic, I believe my organization will respond effectively to future emergencies. O Strongly Agree O Agree O Neither Agree nor Disagree O Disagree O Strongly Disagree O No Basis to Judge	New item in new section	Not an item or section in the 2019 OPM FEVS

New Item Text (2020)	Change	Previous Item Text (2019)
65.Which of the following paid and unpaid child care arrangements have you used to perform your work responsibilities during the COVID-19 pandemic? (Mark all that apply) I do not have any child care responsibilities [response choice is exclusive] No arrangements needed to manage child care responsibilities (e.g., older children) [response choice is exclusive] Child care in my own home (e.g., other parent, relative, nanny, au pair) Alternative work arrangement (e.g., telework, flexible work schedule) Child Care Center Paid Leave Unpaid Leave Child care in someone else's home (e.g., relative or neighbor, professional child care provider) Respite care (temporary care of a sick or disabled child, providing relief for their usual caregiver) Agency emergency back-up care program Resource and referral services for dependent child care	New item in new section	Not an item or section in the 2019 OPM FEVS

New Item Text (2020)	Change	Previous Item Text (2019)
elder/adult care arrangements have you used to perform your work responsibilities during the COVID-19 pandemic? (Mark all that apply) ☐ I do not have any elder/adult care responsibilities [response choice is exclusive] ☐ No arrangements needed to manage elder/adult care responsibilities (e.g., elder can manage tasks of everyday living) [response choice is exclusive] ☐ Alternative work arrangement (e.g., telework, flexible work schedule) ☐ Elder/adult day care center ☐ Paid Leave ☐ Unpaid Leave ☐ Long term care insurance ☐ Respite care (temporary care of a sick or disabled adult/elder, providing relief for their usual caregiver) ☐ Other services / arrangements	New item in new section	Not an item or section in the 2019 OPM FEVS
Where do you work?HeadquartersFieldFull-time telework (e.g., home office, telecenter)	Text change	Where do you work?
Are you: O The spouse of a current active duty service member of the U.S. Armed Forces O The spouse of a service member who retired or separated from active duty in the U.S. Armed Forces with a disability rating of 100 percent O The widow(er) of a service member killed while on active duty in the U.S. Armed Forces O None of the categories listed [If selected, skip the next item]	New item in demographic section	Not an item or section in the 2019 OPM FEVS
[Shown if indicated spouse or widow(er) of military service member] Have you been hired under the Military Spouse Non-Competitive Hiring Authority? O Yes No	New item in demographic section	Not an item or section in the 2019 OPM FEVS

New Item Text (2020)	Change	Previous Item Text (2019)
Please select the response that best describes your intention to leave your organization (1) before the COVID-19 pandemic and (2) today (the date you responded to this survey). Are you considering leaving your organization within the next year, and if so, why?	Text change	Are you considering leaving your organization within the next year, and if so, why?
[In the previous question if a respondent's answers differed between "Before the COVID-19 pandemic" and "Today," they be presented with the question below. If respondent's answers did not differ, this item will be skipped.] Has your intention to leave your organization within the next year changed because of the COVID-19 pandemic? O Yes O No	New item in new section	Not an item or section in the 2019 OPM FEVS
Please select the response that best describes your retirement plans (1) before the COVID-19 pandemic and (2) today (the date you responded to this survey). I am planning to retire:	Text change	Previous item did not ask about retirement plans before COVID-19 and as of today (the date the respondent took the survey).
[In the previous question if a respondent's answers differed between "Before the COVID-19 pandemic" and "Today," they be presented with the question below. If respondent's answers did not differ, this item will be skipped.] Has your retirement plan changed because of the COVID-19 pandemic? O Yes O No	New item in new section	Not an item or section in the 2019 OPM FEVS

Table A-2. 2019 vs 2020 OPM FEVS item numbering (Non-COVID)

Any item with "—" in the 2020 OPM FEVS column was not included on the 2020 OPM FEVS survey.

2019 OPM FEVS #	2020 OPM FEVS #	OPM FEVS Item (Non-COVID)
1	1	I am given a real opportunity to improve my skills in my organization.
2	_	I have enough information to do my job well.
3	2	I feel encouraged to come up with new and better ways of doing things.
4	3	My work gives me a feeling of personal accomplishment.
5	_	I like the kind of work I do.
6	4	I know what is expected of me on the job.
7	_	When needed I am willing to put in the extra effort to get a job done.
8	_	I am constantly looking for ways to do my job better.
9	_	I have sufficient resources (for example, people, materials, budget) to get my job done.
10	5	My workload is reasonable.
11	6	My talents are used well in the workplace.
12	7	I know how my work relates to the agency's goals.
13	_	The work I do is important.
14	_	Physical conditions (for example, noise level, temperature, lighting, cleanliness in the workplace) allow employees to perform their jobs well.
15	_	My performance appraisal is a fair reflection of my performance.
16	_	I am held accountable for achieving results.
17	8	I can disclose a suspected violation of any law, rule or regulation without fear of reprisal.
18	_	My training needs are assessed.
19	_	In my most recent performance appraisal, I understood what I had to do to be rated at different levels (for example, Fully Successful, Outstanding).
20	9	The people I work with cooperate to get the job done.
21	_	My work unit is able to recruit people with the right skills.
22	_	Promotions in my work unit are based on merit.
23	10	In my work unit, steps are taken to deal with a poor performer who cannot or will not improve.
New	11	In my work unit poor performers usually:
24	12	In my work unit, differences in performance are recognized in a meaningful way.
25		Awards in my work unit depend on how well employees perform their jobs.
26	_	Employees in my work unit share job knowledge with each other.

2019 OPM FEVS #	2020 OPM FEVS #	OPM FEVS Item (Non-COVID)
27	_	The skill level in my work unit has improved in the past year.
28	_	How would you rate the overall quality of work done by your work unit?
29	13	My work unit has the job-relevant knowledge and skills necessary to accomplish organizational goals.
30		Employees have a feeling of personal empowerment with respect to work processes.
31	14	Employees are recognized for providing high quality products and services.
32		Creativity and innovation are rewarded.
33		Pay raises depend on how well employees perform their jobs.
34	_	Policies and programs promote diversity in the workplace (for example, recruiting minorities and women, training in awareness of diversity issues, mentoring)
35	15	Employees are protected from health and safety hazards on the job.
36	_	My organization has prepared employees for potential security threats.
37	_	Arbitrary action, personal favoritism and coercion for partisan political purposes are not tolerated.
38	_	Prohibited Personnel Practices are not tolerated.
39	16	My agency is successful at accomplishing its mission.
40	17	I recommend my organization as a good place to work.
41	18	I believe the results of this survey will be used to make my agency a better place to work.
42	19	My supervisor supports my need to balance work and other life issues.
43	_	My supervisor provides me opportunities to demonstrate my leadership skills.
44	_	Discussions with my supervisor about my performance are worthwhile.
45	20	My supervisor is committed to a workforce representative of all segments of society.
46		My supervisor provides me with constructive suggestions to improve my job performance.
47	21	Supervisors in my work unit support employee development.
48	22	My supervisor listens to what I have to say.
49	23	My supervisor treats me with respect.
50	_	In the last six months, my supervisor has talked with me about my performance.
51	24	I have trust and confidence in my supervisor.
52	25	Overall, how good a job do you feel is being done by your immediate supervisor.
53	26	In my organization, senior leaders generate high levels of motivation and commitment in the workforce.
54	27	My organization's senior leaders maintain high standards of honesty and integrity.

2019 OPM FEVS #	2020 OPM FEVS #	OPM FEVS Item (Non-COVID)
55	_	Supervisors work well with employees of different backgrounds.
56	28	Managers communicate the goals of the organization.
57	_	Managers review and evaluate the organization's progress toward meeting its goals and objectives.
58	29	Managers promote communication among different work units (for example, about projects, goals, needed resources).
59	_	Managers support collaboration across work units to accomplish work objectives.
60	30	Overall, how good a job do you feel is being done by the manager directly above your immediate supervisor?
61	31	I have a high level of respect for my organization's senior leaders.
62	32	Senior leaders demonstrate support for work-life programs.
63	33	How satisfied are you with your involvement in decisions that affect your work?
64	34	How satisfied are you with the information you receive from management on what's going on in your organization?
65	35	How satisfied are you with the recognition you receive for doing a good job?
66	_	How satisfied are you with the policies and practices of your senior leaders?
67	_	How satisfied are you with your opportunity to get a better job in your organization?
68	_	How satisfied are you with the training you receive for your present job?
69	36	Considering everything, how satisfied are you with your job?
70	37	Considering everything, how satisfied are you with your pay?
71	38	Considering everything, how satisfied are you with your organization?

[&]quot;—" Signifies the item was not included in the 2020 OPM FEVS.

Appendix B: 2020 Federal Employee Viewpoint Survey Instrument

Core OPM FEVS: My Work Experience

When responding to the Core OPM FEVS questions 1 through 38, please share <u>your work experiences</u> <u>since the last OPM FEVS administration</u> (June 2019).

		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1.	I am given a real opportunity to improve my skills in my organization.	0	0	0	0	0
2.	I feel encouraged to come up with new and better ways of doing things.	0	0	0	0	0
3.	My work gives me a feeling of personal accomplishment.	0	0	0	0	0
4.	I know what is expected of me on the job.	0	0	0	0	0

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
5. My workload is reasonable.	0	0	0	0	0	0
6. My talents are used well in the workplace.	0	0	0	0	0	0
7. I know how my work relates to the agency's goals.	0	0	0	0	0	0
8. I can disclose a suspected violation of any law, rule or regulation without fear of reprisal.	0	0	0	0	0	0

Core OPM FEVS: My Work Unit

9.	000	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree
10.	00000	ny work unit, steps are taken to deal with a poor performer who cannot or will not improve. Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree Do Not Know
11.		Remain in the work unit and improve their performance over time Remain in the work unit and continue to underperform Leave the work unit - removed or transferred Leave the work unit - quit There are no poor performers in my work unit Do Not Know
12.		Ny work unit, differences in performance are recognized in a meaningful way. Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree Do Not Know
13.	My goal	work unit has the job-relevant knowledge and skills necessary to accomplish organizational is. Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree Do Not Know

Core OPM FEVS: My Agency

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
14.Employees are recognized for providing high quality products and services.	0	0	0	0	0	0
15.Employees are protected from health and safety hazards on the job.	0	0	0	0	0	\bigcirc
16.My agency is successful at accomplishing its mission.	0	0	0	0	0	0

17.	I rec	commend my organization as a good place to work.
	\bigcirc	Strongly Agree
	\bigcirc	Agree
	\bigcirc	Neither Agree nor Disagree
	\bigcirc	Disagree
	\bigcirc	Strongly Disagree
18.	I bel	ieve the results of this survey will be used to make my agency a better place to work.
	\bigcirc	Strongly Agree
	\bigcirc	Agree
	\bigcirc	Neither Agree nor Disagree
	\bigcirc	Disagree
	\bigcirc	Strongly Disagree
	\bigcirc	Do Not Know

Core OPM FEVS: My Supervisor

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
19.My supervisor supports my need to balance work and other life issues.	0	0	0	0	0	0
20.My supervisor is committed to a workforce representative of all segments of society.	0	0	0	0	0	0
21.Supervisors in my work unit support employee development.	0	0	0	0	0	0

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
22.My supervisor listens to what I have to say.	0	0	0	0	0
23.My supervisor treats me with respect.	0	0	0	0	0
24.I have trust and confidence in my supervisor.	0	0	0	0	0

25. Overall, how good a job do youVery GoodGoodFair	feel is bein	g done by	your immediate	supervisoi	·?	
Poor						
O Very Poor						
Core OPM FEVS: Leader	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
26.In my organization, senior leaders generate high levels of motivation and commitment in the workforce.	0	0	0	0	0	0
27.My organization's senior leaders maintain high standards of honesty and integrity.	0	0	0	0	0	0
28. Managers communicate the goals of the organization.	0	0	0	0	0	0
29. Managers promote communication among different work units (for example, about projects, goals, needed resources).	0	0	0	0	0	0
30. Overall, how good a job do you supervisor? Very Good Good Fair Poor Very Poor Do Not Know	feel is bein	g done by	the manager dir	rectly above	e your imm	ediate

3 I.	i na	ve a high level of respect for my organization's senior leaders.
	\bigcirc	Strongly Agree
	\bigcirc	Agree
	\bigcirc	Neither Agree nor Disagree
	\bigcirc	Disagree
	\bigcirc	Strongly Disagree
	\bigcirc	Do Not Know
32.	Sen	ior leaders demonstrate support for work-life programs.
	\bigcirc	Strongly Agree
	\bigcirc	Agree
	\bigcirc	Neither Agree nor Disagree
	\bigcirc	Disagree
	\bigcirc	Strongly Disagree
	\bigcirc	Do Not Know

Core OPM FEVS: My Satisfaction

	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
33. How satisfied are you with your involvement in decisions that affect your work?	0	0	0	0	0
34. How satisfied are you with the information you receive from management on what's going on in your organization?	0	0	0	0	0
35. How satisfied are you with the recognition you receive for doing a good job?	0	0	0	0	0
36.Considering everything, how satisfied are you with your job?	0	0	0	0	0
37.Considering everything, how satisfied are you with your pay?	0	0	0	0	0
38.Considering everything, how satisfied are you with your organization?	0	0	0	0	0

Coronavirus Disease 2019 Pandemic

Coronavirus Disease 2019 Pandemic and Your Workplace

We recognize that the Coronavirus Disease 2019 Pandemic (COVID-19 Pandemic) has had a substantial impact on Federal employees in many ways. Questions in this section ask for your insights about how the pandemic has affected you and your Federal work.

Please answer questions in this section *thinking of your experiences* <u>during</u> the COVID-19 Pandemic (for much of the Federal government, pandemic responses began in March 2020), unless otherwise instructed.

39. During the COVID-19 Pandemic, on average what percentage of your work time have you been physically present at your agency worksite (including headquarters, bureau, field offices, etc.)?

COVID-19 Pandemic: Background

At least 75% but less than 100%
At least 50% but less than 75%

100% of my work time

 At least 25% but less than 50% Less than 25% I have not been physically present at my agency worksite during the pandemic Please select the response that BEST describes your teleworking schedule (1) BEFORE the COVID-19 Pandemic, (2) DURING the PEAK of the pandemic, and (3) AS OF the date you responded to this survey. 									
	I telework every work day	I telework 3 or 4 days per week	I telework 1 or 2 days per week	I telework, but only about 1 or 2 days per month	I telework very infrequently, on an unscheduled or short-term basis	I do not telework because I have to be physically present on the job (e.g., law enforcement officers, TSA agent, border patrol agent, security personnel)	I do not telework because of technical issues (e.g., connectivity, inadequate equipment) that prevent me from teleworking	I do not telework because I did not receive approval to do so, even though I have the kind of job where I can telework	I do not telework because I choose not to telework
BEFORE the COVID-19 pandemic	0	0	0	0	0	0	0	0	0
DURING the PEAK of the pandemic	0	\bigcirc	0	0	0	0	0	0	\bigcirc
AS OF the date you responded to this survey	0	0	0	0	0	0	0	0	0

41.	Wha	at type(s) of leave have you used <u>because of</u> the pandemic? (Mark all that apply)
		Leave under the Emergency Paid Sick Leave Act (part of the Families First Coronavirus
		Response Act)
	Ш	Annual leave
		Sick leave
		Weather and safety leave
		Administrative leave
		Other paid leave (e.g., comp time, credit hours)
		Unpaid leave (e.g., LWOP)
		I have not used leave because of the pandemic [If selected, skip 41a; this response choice is exclusive]
41a		ing the COVID-19 Pandemic, what percentage of your <i>total</i> work time have you used leave ause of the pandemic?
	\bigcirc	100% of my work time
	\bigcirc	At least 75% but less than 100%
	\bigcirc	At least 50% but less than 75%
	\bigcirc	At least 25% but less than 50%
	\tilde{O}	Less than 25%
42.	Hov	w have you changed your participation in alternative work schedules (AWS) because of the VID-19 Pandemic? Examples of AWS include compressed work and flexible work schedule. I began an alternative work schedule I ended my usual alternative work schedule No change because of the pandemic

COVID-19 Pandemic: Employee Supports

43. How has your organization supported your well-being needs during the COVID-19 Pandemic?

For each support listed, choose the best response from one of the 3 columns: (1) those supports you needed and have been <u>available</u> to you, (2) those needed but <u>not available</u> to you, and (3) those supports you have not currently needed.

	Needed and available to me	Needed, but <u>not</u> <u>available</u> to me	Not needed by me now
Expanded telework	0	0	0
Expanded work schedule flexibilities	0	0	0
Expanded leave policies	0	0	0
More information on available leave policies	0	0	0
Expanded mental health resources (e.g., assistance with stress of COVID-19)	0	0	0

	Needed and available to me	Needed, but <u>not</u> <u>available</u> to me	Not needed by me now
Expanded physical health resources (e.g., temperature checks, COVID-19 illness testing) at my agency worksite	0	0	0
Timely communication about possible COVID-19 illness at my agency worksite	0	0	0
Protection of employees at higher risk for severe illness from COVID-19 exposure	0	0	0
Limited access to my agency worksite buildings/facilities (e.g., closures, limits on activities with external visitors/groups)	0	0	0
Social distancing (e.g., limits on group size, reduced access to common areas) in my agency worksite	0	0	0
Rearranged workspaces to maximize social distancing	0	0	0
Encouraged use of personal protective equipment (PPE) or other safety equipment in my agency worksite	0	0	0
Cleaning and sanitizing supplies available to reduce risk of illness in my agency worksite	0	0	0
Training for all employees on health and safety protocols	0	0	0

During the COVID-19 Pandemic my organization's senior leaders have	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Basis to Judge
44demonstrated commitment to employee health and safety.	0	0	0	0	0	0
45supported policies and procedures to protect employee health and safety.	0	0	0	0	0	0
46provided effective communications about the pandemic.	0	0	0	0	0	0

During the COVID-19 Pandemic my supervisor has	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Basis to Judge
47shown concern for my health and safety.	0	0	0	0	0	0
48supported my efforts to stay healthy and safe while working.	0	0	0	0	0	0
49created an environment where I can voice my concerns about staying healthy and safe.	0	0	0	0	0	0

COVID-19 Pandemic: Work Supports

50. How has your organization supported **your work** during the COVID-19 Pandemic?

For each support listed choose the best response from one of the 3 columns: (1) those supports you needed and have been <u>available</u> to you, (2) those you needed but <u>not available</u> to you, and (3) those supports you have not currently needed.

	Needed and available to me	Needed, but <u>not</u> <u>available</u> to me	Not needed by me now
Consistent communication (e.g., organizational status, what to expect)	0	0	0
Training for new/changed work or work processes because of the pandemic	0	\circ	0
Reallocation of resources (e.g., staffing, budget, materials) to support changes in work because of the pandemic	0	0	0
Help with commuting issues (e.g., alternatives to public transportation)	0	0	0
Options for work/business travel	0	0	0
Information on remote work policies, procedures, and expectations	0	0	0
Training on how to work remotely	0	0	0
Equipment and technology for working remotely (e.g., laptops, cell phone, Information Technology infrastructure)	0	0	0
Expanded collaboration tools (e.g., video conferencing, teleconferencing)	0	0	0
Expanded training for using remote work tools and applications	0	0	0
Expanded Information Technology (IT) support	0	0	0
Information about data security policies and procedures	0	0	0

	agent, TSA agent, meat inspector)?								
\bigcirc	Yes								
Ŏ	No								
\circ	Other								
COVI	COVID-19 Pandemic: Work Effects								
52. Ho	52. How disruptive has the COVID-19 Pandemic been to your ability to do your work?								
\bigcirc	Extremely								
\bigcirc	○ Very								
\bigcirc	Somewhat								
\bigcirc	Slightly								
\bigcirc	O Not at All								
\bigcirc	No Basis to Judge								
53. How have your work demands changed because of the COVID-19 Pandemic? Greatly Increased Somewhat Increased About the Same Somewhat Decreased Greatly Decreased No Basis to Judge Please answer the question below <i>thinking of your experiences prior to</i> the COVID-19 Pandemic (for much of the Federal government, pandemic responses began in March 2020).									
54. Prior to the COVID-19 Pandemic, my work unit									
	Always the Time Sometimes Rarely Never to Judge								
met t	he needs of our customers.	0	0	0	0	0	0		
	ibuted positively to my 's performance.	0	0	0	0	0	0		
produ	uced high-quality work.		\circ	\circ	\circ		\circ		

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...adapted to changing priorities.

...successfully collaborated.

...achieved our goals.

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Please answer the question below *thinking of your experiences* <u>during</u> the COVID-19 Pandemic (for much of the Federal government, pandemic responses began in March 2020).

55. <u>During the COVID-19 Pandemic, my work unit...</u>

	Always	Most of the Time	Sometimes	Rarely	Never	No Basis to Judge
has met the needs of our customers.	0	0	0	0	0	0
has contributed positively to my agency's performance.	0	0	0	0	0	0
has produced high-quality work.	0	0	0	0	0	0
has adapted to changing priorities.	0	0	0	0	0	0
has successfully collaborated.	0	0	0	0	0	0
has achieved our goals.	0	0	0	0	0	0

56.	56. In the phased return of employees to the agency worksite (i.e., opening up government), my organization has made employee safety a top priority.						
	\bigcirc	Strongly Agree					
	\bigcirc	Agree					
	\bigcirc	Neither Agree nor Disagree					
	\bigcirc	Disagree					
	\bigcirc	Strongly Disagree					
	\bigcirc	No Basis to Judge					
57.	7. Based on my organization's handling of the COVID-19 Pandemic, I believe my organization will respond effectively to future emergencies.						
	\bigcirc	Strongly Agree					
	\bigcirc	Agree					
	\bigcirc	Neither Agree nor Disagree					
	\bigcirc	Disagree					
	\bigcirc	Strongly Disagree					
	\cup						
	\circ	No Basis to Judge					

Work-Life

When responding to questions 58 through 64 about work-life programs, please share <u>your work experiences since the last OPM FEVS administration</u> (June 2019).

58.	. How satisfied are you with the Telework program in your agency?								
	Very satisfied								
	Satisfied								
	 Neither Satisfied nor Dissatisfied 								
	Dissatisfied								
	Very Dissatisfied								
	O I choose not to participate in this progra	ım							
	This program is not available to me								
	I am unaware of this program								
59.	59. Which of the following work-life programs have you participated in or used at your agency within the last 12 months? (Mark all that apply)								
	Alternative Work Schedules (for examp		•						edule)
	Health and Wellness Programs (for examples CRP training Health and well	•		exercise	, flu va	ccinatio	on, med	dical	
	screening, CPR training, Health and well Employee Assistance Program – EAP (for			ort-ter	m cour	seling	referra	al servic	202
	legal services, education services)	or Cauri	ipic, 31	iore ter	iii coui	isciiig,	reiene	ii sci vic	,
	☐ Child Care Programs (for example, child	care c	enter, _l	parenti	ng class	ses and	suppo	rt grou	ps,
	back-up care, subsidy, flexible spending								
	Elder Care Programs (for example, elder			upport	groups	s, resou	ırces)		
	None listed above [response choice is ex	kclusive	2]						
							ø		
							participate ms	not	o
							ırtic	are not	Jes
				p p		jed	o pa ams		of ti
		jed		her Satisfied Dissatisfied	р	ery Dissatisfied	not to pai programs	programs ole to me	am unaware of these rograms
		satisfied	þí		issatisfied	issa	se n e pr	prog	na W
Ho	w satisfied are you with the following	ery sa	atisfied	either or Dis	sati	уD	choose n these p	se ilab	am unaw rograms
	rk-life programs in your agency?	Ver	Sat	Neit	Dis	Ver	I choose in these	These progravailable to	l an pro
	Alternative Work Schedules (for example,	\circ							
	compressed work schedule, flexible work schedule)	\circ	\circ		\circ	0	\cup	\circ	\cup
	Health and Wellness Programs (for example,								
	onsite exercise, flu vaccination, medical	\bigcirc			\bigcirc	\bigcirc		\bigcirc	
	screening, CPR training, health and wellness	\cup							
	fair)								

How satisfied are you with the following work-life programs in your agency?	Very satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	I choose not to participate in these programs	These programs are not available to me	I am unaware of these programs
62.Employee Assistance Program - EAP (for example, short-term counseling, referral services, legal services, education services)	0	0	0	0	0	0	0	0
63. Child Care Programs (for example, child care center, parenting classes and support groups, back-up care, subsidy, flexible spending account)		0	0	0	0	0	0	0
64.Elder Care Programs (for example, elder/adult care, support groups, resources)	0	0	0	0	0	0	0	0
65. Which of the following paid and unpaid child care arrangements have you used to perform your work responsibilities during the COVID-19 Pandemic? (Mark all that apply) I do not have any child care responsibilities [response choice is exclusive] No arrangements needed to manage child care responsibilities (e.g., older children) [response choice is exclusive] Child care in my own home (e.g., other parent, relative, nanny, au pair) Alternative work arrangement (e.g., telework, flexible work schedule) Child care center Paid leave Unpaid leave Child care in someone else's home (e.g., relative or neighbor, professional child care provider) Respite care (temporary care of a sick or disabled child, providing relief for their usual caregiver) Agency emergency back-up care program Resource and referral services for dependent child care Other services/arrangements							oonse	

56.		ch of the following paid and unpaid <u>elder/adult care</u> arrangements have you used to perform r work responsibilities during the COVID-19 Pandemic? (Mark all that apply)
		I do not have any elder/adult care responsibilities [response choice is exclusive] No arrangements needed to manage elder/adult care responsibilities (e.g., elder can manage tasks of everyday living) [response choice is exclusive]
		Alternative work arrangement (e.g., telework, flexible work schedule)
		Elder/adult day care center
		Paid leave
		Unpaid leave
		Long-term care insurance
		Respite care (temporary care of a sick or disabled adult/elder, providing relief for their usual caregiver)
		Other services/arrangements
57.		ing the COVID-19 Pandemic, how disruptive have school closures/changes been to your ability o your work?
	0000000	I do not have responsibility for school-aged children Extremely Very Somewhat Slightly Not at All Does Not Apply
58.		ing the COVID-19 Pandemic, how disruptive have changes to your children's day care been to r ability to do your work? I do not have responsibility for children who need day care Extremely Very Somewhat Slightly Not at All Does Not Apply

My Employment Demographics

The Federal Government is committed to promoting a diverse and inclusive workplace. Given that policy, we are soliciting responses to the following questions. Your response is <u>voluntary</u>, <u>confidential</u>, and will be used to enhance the federal government's understanding of the diversity of its workforce.

Where d	o you work?
\bigcirc	Headquarters
\bigcirc	Field
\bigcirc	Full-time telework (e.g., home office, telecenter)
What is y	our supervisory status?
0	Senior Leader: You are the head of a department/agency or a member of the immediate leadership team responsible for directing the policies and priorities of the department/agency. May hold either a political or career appointment, and typically is a member of the Senior Executive Service or equivalent.
\bigcirc	Manager: You are in a management position and supervise one or more supervisors.
\circ	Supervisor: You are a first-line supervisor who is responsible for employees' performance appraisals and leave approval.
0	Team Leader: You are not an official supervisor; you provide employees with day-to-day guidance in work projects, but do not have supervisory responsibilities or conduct performance appraisals.
\bigcirc	Non-Supervisor: You do not supervise other employees.
What is y	our pay category/grade?
\bigcirc	Federal Wage System (for example, WB, WD, WG, WL, WM, WS, WY)
\bigcirc	GS 1-6
\bigcirc	GS 7-12
\bigcirc	GS 13-15
\bigcirc	Senior Executive Service
\bigcirc	Senior Level (SL) or Scientific or Professional (ST)
\bigcirc	Other
What is y	your US military service status?
\bigcirc	No Prior Military Service
\bigcirc	Currently in National Guard or Reserves
\bigcirc	Retired
\bigcirc	Separated or Discharged

Are you:	
\bigcirc	The spouse of a current active duty service member of the U.S. Armed Forces
\bigcirc	The spouse of a service member who retired or separated from active duty in the U.S. Armed Forces with a disability rating of 100 percent
\bigcirc	The widow(er) of a service member killed while on active duty in the U.S. Armed Forces
\bigcirc	None of the categories listed [If selected, skip the next item]
_	only if responses 1, 2, or 3 was selected for the question above] I been hired under the Military Spouse Non-Competitive Hiring Authority?
nave you	
0	Yes
\bigcirc	No
How long	g have you been with the Federal Government (excluding military service)?
\bigcirc	Less than 1 year
\bigcirc	1 to 3 years
\bigcirc	4 to 5 years
\bigcirc	6 to 10 years
\bigcirc	11 to 14 years
\bigcirc	15 to 20 years
\bigcirc	More than 20 years
	g have you been with your current agency (for example, Department of Justice, Environmental on Agency)?
\bigcirc	Less than 1 year
\bigcirc	1 to 3 years
\bigcirc	4 to 5 years
\bigcirc	6 to 10 years
\bigcirc	11 to 14 years
\bigcirc	15 to 20 years
\bigcirc	More than 20 years

Please select the response that best describes your <u>intention to leave your organization</u> (1) before the COVID-19 Pandemic **and** (2) today (the date you responded to this survey).

Are you considering leaving your organization within the next year, and if so, why?

	No	Yes, to retire	Yes, to take another job within the Federal Government	Yes, to take another job outside the Federal Government	Yes, other
Before the COVID-19 pandemic:	0	0	0	0	0
Today:	0	0	0	0	0

[In the previous question if a respondent's answers differed between "Before the COVID-19 Pandemic" and "Today," they are presented with the question below. If respondent's answers did not differ, this item is skipped.] Has your intention to leave your organization within the next year changed because of the COVID-19 Pandemic?							
○ Yes○ No							
Please select the respo and (2) today (the date	you respon		-	nent plans (1) before th	e COVID-19	pandemic
I am planning to retire:	Less than 1 year	1 year	2 years	3 years	4 years	5 years	More than 5 years
Before the COVID-19 Pandemic:	0	0	0	0	0	0	0
Today:	0	0	0	0	0	0	0
Has your retirement plan changed <u>because of</u> the COVID-19 pandemic? Yes No My Personal Demographics							
The Federal Government is committed to promoting a diverse and inclusive workplace. Given that policy, we are soliciting responses to the following questions. Your response is <u>voluntary</u> , <u>confidential</u> , and will be used to enhance the federal government's understanding of the diversity of its workforce.							
Are you of Hispanic, Latino, or Spanish origin? Yes No							
Please select the racial category or categories with which you most closely identify. (Mark all that apply) American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islander White							

What is y	your age group?
\bigcirc	25 and under
\bigcirc	26-29 years old 30-39 years old 40-49 years old 50-59 years old
\bigcirc	30-39 years old
\bigcirc	40-49 years old
\bigcirc	50-59 years old
\bigcirc	60 years or older
What is t	the highest degree or level of education you have completed?
\bigcirc	Less than High School
\bigcirc	High School Diploma/GED or equivalent Trade or Technical Certificate Some College (no degree) Associates Degree (e.g., AA, AS) Bachelor's Degree (e.g., BA, BS) Master's Degree (e.g., MA, MS, MBA) Doctoral/Professional Degree (e.g., Ph.D., MD, ID)
\bigcirc	Trade or Technical Certificate
\bigcirc	Some College (no degree)
\bigcirc	Associates Degree (e.g., AA, AS)
\bigcirc	Bachelor's Degree (e.g., BA, BS)
\bigcirc	Master's Degree (e.g., MA, MS, MBA)
\bigcirc	Doctoral/Professional Degree (e.g., Ph.D., MD, JD)
Are you	an individual with a disability?
\bigcirc	Yes
\bigcirc	No
Are you:	
\bigcirc	Male
\bigcirc	Female
Are you t	transgender?
\bigcirc	Yes
\bigcirc	No
Which o	ne of the following do you consider yourself to be?
\bigcirc	Straight, that is not gay or lesbian
\bigcirc	Gay or Lesbian
\bigcirc	Bisexual
\bigcirc	Something else

Appendix C: Email Communications

Sample Invitation Email

Subject line: The 2020 OPM FEVS: Empowering Employees. Inspiring Change.

As a Federal employee, you have experienced many unique challenges this year that may be impacting the way you do your work as well as your overall wellbeing. The 2020 Office of Personnel Management Federal Employee Viewpoint Survey (OPM FEVS) has been adapted to ensure we are responsive to the many new challenges you face. Look for shortened standard sections and a new section on how the COVID-19 Pandemic has impacted your work and wellbeing. Your participation in the survey will help agency leadership understand how employees are working through the COVID-19 Pandemic and how your agency can prepare for the future.

Today the 2020 OPM FEVS kicks off, providing you a safe and confidential way to voice your opinions. Please take 20 to 30 minutes to complete the survey. Participation is voluntary and you may use official time.

Here is your confidential link: %[Click here to access your survey]URL%

Please do not forward your email. Otherwise, someone else will be your voice!

Note: If the link above does not work or has been disabled, please COPY the following link, beginning with "https:", and PASTE it into your Web browser (try different web browsers if necessary). When copying the link, please make sure you copy the entire link from beginning to end: **%URL%**

Need help?

We are committed to providing everyone a voice. If the survey format interferes with your ability to respond due to a disability, such as assistive technology incompatibility, or if you are experiencing other difficulties accessing your survey or have questions about the OPM FEVS, please contact our Survey Support Center by replying to this message.

The OPM FEVS team thanks you!

First Reminder Email

Subject line: The 2020 OPM FEVS: Empowering Employees. Inspiring Change.

The Office of Personnel Management Federal Employee Viewpoint Survey (OPM FEVS) looks a little different this year. Items related to the COVID-19 Pandemic have been added, giving you the opportunity to share your experience with leadership. Your participation will help agency leadership understand how they can help employees and highlight any best practices for future planning.

Please take 20 to 30 minutes out of your day and let leadership hear from you by participating in the OPM FEVS. The survey is voluntary and you may use official time. After completing your survey, your responses are combined with responses from other people to create reports, so your responses are kept confidential. After you complete the survey, you will not receive any additional reminders from OPM.

Here is your confidential link: %[Click here to access your survey]URL%

Please do not forward your email. Otherwise, someone else will be your voice!

Note: If the link above does not work or has been disabled, please COPY the following link, beginning with "https:", and PASTE it into your Web browser (try different web browsers if necessary). When copying the link, please make sure you copy the entire link from beginning to end: **%URL%**

Need help?

We are committed to providing everyone a voice. If the survey format interferes with your ability to respond due to a disability, such as assistive technology incompatibility, or if you are experiencing other difficulties accessing your survey or have questions about the OPM FEVS, please contact our Survey Support Center by replying to this message.

The OPM FEVS team thanks you!

%[Click here to unsubscribe from future OPM FEVS reminders]URL%

Example of Other Reminder Emails

Subject line: The 2020 OPM FEVS: Empowering Employees. Inspiring Change.

We understand you are very busy, but we hope you will take some time to let your agency leadership know how your work has changed as a result of the COVID-19 Pandemic. The Office of Personnel Management Federal Employee Viewpoint Survey (OPM FEVS) has been updated to reflect the challenges currently facing the Federal workforce. Your input is valuable and your feedback matters.

Please take 20 to 30 minutes from your day and participate in the OPM FEVS. The survey is voluntary and you may use official time. Once you complete the survey, you will not receive any additional reminders from OPM.

Here is your confidential link: %[Click here to access your survey]URL%

Please do not forward your email. Otherwise, someone else will be your voice!

Note: If the link above does not work or has been disabled, please COPY the following link, beginning with "https:", and PASTE it into your Web browser (try different web browsers if necessary). When copying the link, please make sure you copy the entire link from beginning to end: **%URL%**

Need help?

We are committed to providing everyone a voice. If the survey format interferes with your ability to respond due to a disability, such as assistive technology incompatibility, or if you are experiencing other difficulties accessing your survey or have questions about the OPM FEVS, please contact our Survey Support Center by replying to this message.

The OPM FEVS team thanks you!

%[Click here to unsubscribe from future OPM FEVS reminders]UNSUBSCRIBE%

Appendix D: AAPOR Response Rate

The following presents the calculation of the OPM FEVS response rate using the AAPOR Response Rate 3 (RR3) formula.

Table D1. Case assignment allocation to response rate groups, by the AAPOR RR3 method

Response Rate (RR) Group	AAPOR RR3 Method Allocation	AAPOR RR3 Method Counts
Eligible Respondents (ER)	CO	615,395
Eligible Non-respondents (ENR)	UA, RF, IN	7,240
Unknown Eligibility (UNK)	UD, NR, NE	858,078
Ineligible (IE)	IE	63,279
	Total	1,543,992

AAPOR Response Rate 3 Formula:

Number of eligible employees returning completed surveys / (Number of known eligible employees + estimated number of eligible employees among cases of unknown eligibility):

$$RR3_{AAPOR} = ER / (ER + ENR + UNK_{elig}) * 100,$$

where UNK_{elig} = the estimated number of eligible cases

among cases of unknown eligibility. It was calculated as follows:

P_{elig} = (ER + ENR) / (ER + ENR + IE) = proportion of eligible cases among cases of known eligibility

$$P_{elig} = (615,395 + 7,240) / (615,395 + 7,240 + 63,279)$$

 $P_{elig} = 0.90774499$

 $UNK_{elig} = P_{elig} * UNK = 0.90774499 * 858,078 = 778,916$

Thus,

 $RR3_{AAPOR} = 615,395 / (615,395 + 7,240 + 778,916) * 100$

 $RR3_{AAPOR} = 615,395 / 1,401,551 * 100$

 $RR3_{AAPOR} = 43.9$ percent

Appendix E: Weighting of the Survey Data

Base Weights

The base weight for a sampled employee is equal to the reciprocal of an individual's selection probability. The calculated base weights were then assigned to all employees. Since the 2020 OPM FEVS is a census of all eligible employees, the base weight is 1 for each sampled employee.

Survey Nonresponse Adjustment

Some sample members did not respond to the survey, usually because they chose not to participate, they considered themselves ineligible, or their surveys were undeliverable. Adjustments to the base weights reduce the bias in survey estimates that can occur when the respondent population and the survey population no longer match on important characteristics. In other words, the adjustments generally increase the base weights of respondents to account for non-respondents.

Nonresponse (NR) adjustments were calculated separately for individual agencies or sets of subagencies. Prior to 2015, NR adjustments were calculated separately for each agency. Since 2015 2019, nonresponse adjustments have been calculated separately for subagencies that have 2,500 or more employees and for an agency's set of subagencies that each has fewer than 2,500 employees. Within each agency, weighting cells were constructed to group respondents and non-respondents with similar characteristics into the same cells for adjustment. The variables used to form the weighting cells included a sub-agency identifier, supervisory status, sex, minority status, age group, tenure as a Federal employee, full- or part-time status, and location (headquarters vs. field office). Large subgroups were divided into smaller weighting cells to increase variation across the cells. A categorical search algorithm was used to divide the data into smaller cells, with the goal of having response rates differ as much as possible across the cells. Cells with similar response rates were combined when necessary to achieve a minimum cell size of 30 respondents.

For the 2006 survey administration, the algorithm called CHAID (Chi-squared Automatic Interaction Detector; Kass, 1980) was used to divide the data into smaller cells. For the 2008, 2010, 2011, 2012, 2013, 2014, 2015, and 2016 survey administrations, the chi algorithm in the Search software developed and maintained by the University of Michigan was used. The chi algorithm is an ancestor of

CHAID. For the 2017 - 2019 survey administration, the CHAID option of SAS's PROC HPSPLIT procedure was used to divide the data into smaller cells.

After the weighting cells were formed, statisticians calculated two nonresponse adjustment factors. The following formula was used to compute the first nonresponse adjustment factor for each weighting cell:

$$f_c^{1,nr} = \frac{\sum_{i \in ER_c} w_i + \sum_{i \in ENR_c} w_i + \sum_{i \in I_c} w_i + \sum_{i \in U_c} w_i}{\sum_{i \in ER_c} w_i + \sum_{i \in ENR_c} w_i + \sum_{i \in I_c} w_i}$$

where $\sum_{i \in ER_c} w_i$ is the sum of base weights for eligible respondents in weighting cell c, $\sum_{i \in ER_c} w_i$ is the sum of base weights for eligible non-respondents in weighting cell c, $\sum_{i \in I_c} w_i$ is the sum of base weights for known ineligibles in weighting cell c, and $\sum_{i \in U_c} w_i$ is the sum of base weights for non-respondents of unknown eligibility in weighting cell c. The first adjustment factor was used to distribute the base weights of non-respondents of unknown eligibility to units of known eligibility. The statisticians refer to this type of weight adjustment as a Type 1A weight adjustment (see Appendix F). This was achieved by multiplying the base weights of eligible respondents, known ineligibles, and non-respondents known to

The following formula was used to compute the second nonresponse adjustment factor for each weighting cell:

be eligible by the first adjustment factor and setting the final weight of the non-respondents of

$$f_c^{2,nr} = \frac{\sum_{i \in ER_c} w_i' + \sum_{i \in ENR_c} w_i'}{\sum_{i \in ER_c} w_i'}$$

unknown eligibility to zero.

where w_i' is the adjusted weight resulting from multiplying the base weight for unit i by the first adjustment factor. The second adjustment factor was used to distribute the adjusted weights of non-respondents of known eligibility to the eligible respondents. The statisticians refer to this type of

adjustment as a Type 1B adjustment. (See Appendix F) The final weights were calculated by multiplying the base weights of the eligible respondents by both adjustment factors and by setting the final weight of the non-respondents of known eligibility to zero. Thus, the nonresponse adjusted weights were $w_i^{nr} = f_c^{1,nr} \times w_i \text{ for known ineligibles and } w_i^{nr} = f_c^{1,nr} f_c^{2,nr} \times w_i \text{ for eligible respondents.}$

Raking

The precision of survey estimates is improved if known information about the total population is used during the weighting process. For the final stage of weighting, statisticians used a method called raking that incorporated available information on the demographic characteristics of the 2019 OPM FEVS sample population. For this third adjustment step, the sample file was subset to include only eligible respondents and known ineligibles. Then, the adjusted base weights were further adjusted so they sum to control totals computed from the sampling-frame variables. The known ineligibles are included in raking because the control totals computed from the sampling frame variables also include ineligibles. At the conclusion of raking, however, only the final weights of the eligible respondents are used with the collected survey data to compute weighted estimates.

The raking procedure was carried out in a sequence of alternating adjustments. Weighted counts for eligible respondents plus known ineligibles were arrayed into two dimensions. The first dimension was formed by the crossing of agency, sex, and minority status. The second dimension was formed by truncating the stratum identifier to four characters, and in some cases further collapsing the resulting stratum-based cells. The actual population count was known for each cell in those two dimensions. Weighted counts of eligible respondents plus known ineligibles were produced for the first dimension, and then the weights were adjusted to reproduce the population counts. Those adjusted weights were then used to produce counts for the second dimension. The weighted counts of eligible respondents plus known ineligibles were compared with population counts for the second dimension, and the weights were adjusted again to reproduce population counts. This process of alternately adjusting for one, then the other, dimension was repeated until the survey distributions for the two dimensions equaled the population control counts for both dimensions, within a specified level of precision. That is, the sum of the weights for each raking dimension was acceptably close to the corresponding population total.

The final raked weight for the i^{th} respondent was computed as:

$$\widetilde{w}_i^R = \widetilde{f}_i^R w_i^{nr}, i \in S_g$$

where f_i^R is the product of the iterative adjustments (in each dimension group, s_g) applied to the i^{th} sample employee. The final weight equals the number of people in the survey population the i^{th} respondent represents. The weights for the eligible respondents were added to the data file. When the weights are used in data analysis, they improve the precision and accuracy of survey estimates.

Full sample versus Replicate Weights

For the 2004, 2006, and 2008 FHCS, *full-sample weights* were used to calculate standard errors and to perform statistical tests when the Taylor linearization method is used. For the 2010-2019 administrations, full-sample weights and Taylor linearization were still used for all analyses, except *replicate weights* were used for statistical analysis conducted on Analysis on Demand. Replicate weights were used because these trend analyses were also available on demand in WesDaX, Westat's online query and analysis system.

WesDaX uses the jackknife method to determine standard errors and to perform statistical tests, which requires the calculation of sets of *replicate weights*. The replicate weights were calculated by the JKn method, which randomly assigns cases to groups, referred to as *variance units*, within sets of sampling strata, referred to as *variance strata*. The sampling strata for a particular agency were assigned to variance strata based on stratum response rates. Each set of replicate weights corresponds to deleting one variance unit and then recalculating the weights based on the remaining variance units. The nonresponse and calibration adjustments for the 2010-2019 OPM FEVS were replicated in each set of replicate weights. Consequently, standard errors calculated by using the jackknife method correctly accounts for the effects of weight adjustment on the variance of survey estimates.

Example:

The remainder of this appendix presents a numerical example of the three-step weighting procedure. For this example, we assume that all the units in the sampling frame are eligible cases. Consequently, this example does not include any adjustments for cases of unknown eligibility.

Table E1 shows how the population is partitioned into five strata, and strata 4 and 5 are combined. The rightmost column of Table E1 contains the base weights by stratum. For example, the base weight for stratum 1 is 13,470 / 950=14.179.

Population Sample Selection **Base Stratum** count size probability weight 1 13,470 13,470 2 12,300 12,300 1 3 22,980 22,980 4 450 450 1,250 4/5 1 800 5 800 Total 50,000 50,000 13,470/13,470 13,470/13,470

Table E1. Population counts, sample sizes, selection probabilities, and base weights

Table E2 contains the number of respondents by strata and the associated response rates. The rightmost column of Table E2 contains the sum of the base weights for all the respondents in each stratum. For example, for stratum 1 the sum of the base weights is $5,671 \times 1 = 5,671$. However, this is not close to the stratum population size of 13,470 for stratum 1 shown in Table E1. If the response rate were 100 percent in stratum 1, then the sum of the base weights for all respondents in a stratum would equal the stratum's population size. Because the response rate is not 100%, adjustments to the weights to compensate for nonresponse will be calculated.

Table E2. Sample, respondents, response rates, and base weighted totals

Stratum	Sample size	Number of respondents	Response rate	Base weight total for respondents
1	13,470	5,671	0.421	5,671
2	12,300	4,526	0.368	4,526
3	22,980	9,192	0.400	9,192
4/5	1,250	540	0.432	540
Total	50,000	19,929	0.405	19,929
				5,67

One of the sampling-frame variables contains location information—that is, headquarters or field—about each case. Table E3 shows how respondents can be assigned to nonresponse-adjustment cells on the basis of location and then associated response rates and nonresponse adjustment factors calculated. For example, for the Field location, the nonresponse adjustment factor would be the reciprocal of the response rate of 0.310 for a 3.226 nonresponse adjustment factor. By using the reciprocal of the response rate, the nonresponse adjustment factor will be greater than or equal to one, so multiplying the base weight for a respondent by a nonresponse adjustment factor increases it so it represents both the respondent and associated non-respondents. The base weights are then multiplied by the adjustment factors, yielding the nonresponse-adjusted weights shown in Table E4.

Table E3. Response rates by location

Location	Number of respondents	Response Rate	Nonresponse adjustment factor
Headquarters	12,320	0.500	2.000
Field	7,609	0.310	3.226
Total	19,929	0.405	1/0.310

Table E4. Nonresponse adjusted weights

Stratum	Base Weight —	Adjustment factor		Adjusted weight	
		HQ	Field	HQ	Field
1	1	2.000	3.226	2.000	3.226
2	1	2.000	3.226	2.000	3.226
3	1	2.000	3.226	2.000	3.226
4/5	1	2.000	3.226	2.000	3.226

In Table E5, the second column from the right contains the sum of the nonresponse-adjusted weights for all the respondents in the eight cells defined by stratum and location. The rightmost column of Table E5 contains the cell's population size. The corresponding entries for the stratum totals in the two columns are not equal because of the variability in response rates across the four strata within each nonresponse adjustment cell, defined by location. If there had been no cross-stratum variability of responses rates within a nonresponse adjustment cell, the corresponding stratum totals in the two columns would have been equal to each other.

Table E5. Unweighted and weighted counts for respondents and population counts by stratum and location

Stratum	Location	Unweighted count for respondents	Weighted count for respondents		Population count
1	HQ	4,324	8,648		7,880
1	Field	1,347	4,345		5,590
Total for 1		5,671	12,993	←	13,470
2	HQ	1,681	3,362		3,752
2	Field	2,845	9,178		8,548
Total for 2		4,526	12,540	←	12,300
3	HQ	5,249	10,498		10,915
3	Field	3,943	12,720		12,065
Total for 3		9,192	23,218		22,980
4/5	HQ	394	788		800
4/5	Field	146	/ 471		450
Total for 4/	5	540	/ 1,259	←	1,250
Grand Totals		19,929	50,011		50,000
		39	4*2		

Table E6 illustrates two iterations of raking of the weights using stratum and sex as raking dimensions. The objective of such raking is to adjust the weights so that the sum of the weights for all the respondents in each stratum equals the stratum's population control total and also the sum of the weights for all the respondents of each sex equals the sex's population control total.

Table E6. Raking of weights using stratum and sex as ranking dimensions

Iteration 1					
	Weighted	Population	Raking		
Stratum	Count	Count	Factor		
1	12,993	13,470	1.037	\	13,470/12,993
2	12,540	12,300	0.981		
3	23,218	22,980	0.990		
4/5	1,259	1,250	0.993		Multiply weights by raking
Total	50,011	50,000			factors to get new weights and produce distribution by sex
	Weighted	Population	Raking		
Sex	Count	Count	Factor		
Male	21,900	23,500	1.073		
Female	27,000	26,500	0.981		Calculate new weights using raking factors and
Total	48,900	50,000			produce distribution by
				/	group
Iteration 2					
Stratum	Weighted Count	Population Count	Raking		
1			Factor		
2	13,416	13,470	0.996		
3	12,325	12,300	1.002		
4/5	23,003	22,980	1.001		
-	1,253	1,250	1.002		
Total	49,996	50,000			
	Weighted	Population	Raking		
Sex	Count	Count	Factor		
Male	23,400	23,500	1.004		
Female	26,400	26,500	1.004		
Total	49,800	50,000			

Iterations continue until weighted counts are close or equal to population counts.

Appendix F: Illustration of Weight Adjustment Operations

Table F1. Values of status variables

Status	Description		
0	Case where the initial weight should not be changed		
1	Eligible respondents		
2	Eligible non-respondents		
3	Ineligible		
4	Unknown eligibility status		

Table F2. Sums of weights used to define Type 1A and Type 1B nonresponse adjustments

Sums of weights	Status		
$S_1 = \sum wgt_{status=1}$	Eligible Respondents		
$S_2 = \sum wgt_{status=2}$	Eligible Non-respondents		
$S_3 = \sum wgt_{status=3}$	Ineligible		
$S_4 = \sum wgt_{status=4}$	Unknown (non-respondents)		

Figure F1. Type 1A nonresponse adjustment

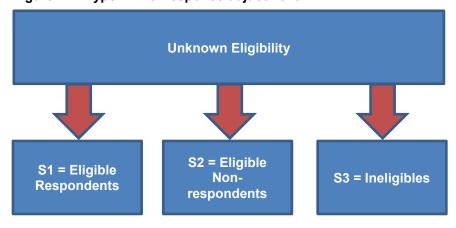


Figure F2. Type 1B nonresponse adjustment





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