2014

Federal Employee Viewpoint Survey Results

Employees Influencing Change

Technical Report

United States Office of Personnel Management

OPM.GOV/FEVS #FEVS

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Appendices

Survey Introduction

Overview

This report provides a description of the design, administration, analysis, and reporting procedures for the 2014 Federal Employee Viewpoint Survey (FEVS). The FEVS, conducted by the U.S. Office of Personnel Management (OPM), provides a snapshot of employees' perceptions of whether, and to what extent, conditions characterizing successful organization are present in their agencies. The survey is designed to provide agencies with the information critical for driving change across key areas of their work lives: areas which drive employee satisfaction, commitment, engagement, and ultimately retention in the workforce.

The 2014 FEVS marks the ninth time OPM administered the survey; prior administrations took place biennially from 2002-2010 and annually since that time. The findings from the 2014 survey offer Federal employees' perceptions of workforce management in their agencies. By looking at trends across different survey administrations, agency leaders are able to identify areas of improvement and where there is still room for improvement.

Survey Design Objectives

OPM designed the FEVS to produce statistically reliable estimates of Federal employees' perceptions about how effectively agencies are managing their workforces. The survey results are calculated to ensure representative results are reported for all pre-identified work units and senior leader status (i.e., whether a member of the Senior Executive Service (SES) or equivalent) as well as the overall Federal workforce (governmentwide).

The 98-item survey covered the following eight topic areas:

- Personal Work Experiences,
- Work Unit,
- Agency,
- Supervisor,
- Leadership,
- Satisfaction,
- Work/Life, and
- Demographics.

Uses of Survey Results

Working with the information from the survey and other index measures (e.g., employee engagement, global satisfaction), agencies can make a thorough assessment of its own progress in its strategic goals and develop a plan of action for further improvement. The FEVS findings allow agencies to assess trends by comparing earlier results with the 2014 results, to compare agency results with the governmentwide results, to identify current strengths and challenges, and to focus on short-term and longer term action targets that will help agencies reach their strategic human resource management goals.

Sample Design and Selection

Sample Design

The sample design reflects OPM's commitment to providing Federal agency leaders with representative information about their employees' perceptions of the management of their workforces. The survey population for the 2014 FEVS included full- and part-time, permanent Federal employees. The sample included departments and large agencies as well as small and independent agencies. These agencies comprise approximately 97 percent of the executive branch workforce. The sample was designed to ensure representative survey results would be reported by agency/subagency and senior leader status as well as for the overall Federal workforce. For the 2013 FEVS administration, OPM developed a new sampling strategy for agencies providing organizational codes with the goal of maximizing the number of reports to be generated while minimizing the size of the workforce being surveyed. The broad objective was to maintain the reporting breadth achieved by the 2012 FEVS census, but with a reduced burden in terms of the time and financial costs a census would incur. The sampling strategy developed for the 2013 FEVS was also used for the 2014 FEVS.

Prior to the 2013 FEVS, the FEVS employed a single-stage stratified sample design. Sample sizes were determined by solving for a margin of error (±5%) on a 95% confidence interval while assuming a conservative 40% response rate. In the process of rethinking the sampling strategy for the 2013 FEVS, it became clear that lower-level reporting capabilities were just as high of a priority as statistical precision targets. In response, the Graduated Proportional Sampling (GPS) plan was developed, which performs the following steps to select a sample for a particular agency:

1. Stratify individuals based on the lowest desired work unit or "level" to be identified using the organizational codes.
2. Identify strata with less than 10 individuals and roll these up into the next-highest applicable stratum. The reasoning here was that, even if a 100% response rate were achieved, the work unit would be too small to receive a report. If there was no applicable higher level within the agency structure, leave the stratum as is.
3. Place individuals in senior leader positions (e.g., SES) into a separate stratum.
4. Once the final stratification boundaries were set, the sampling proportion was assigned based the size of the stratum and the goal of attaining at least ten respondents assuming a conservative 30% response rate. (The exceptions were any strata in small agencies and the SES strata, which were censused.) As seen in Table 1, the minimum sampling proportion was 25%; thus, each employee had at least a one in four chance of being selected to participate.
5. After the necessary sample size is determined, examine the agency's ratio of employees to be sampled. If more than 75% or more of the workforce would be sampled, conduct a census instead.

Table 1: 2014 FEVS Stratum Sampling Rate Schedule

Work Unit Population Size*	Treatment	Sample Size
<50	Census	1 to 50
51 to 75	75% Sample	38 to 56
76 to 150	50% Sample	38 to 75
>151	25% Sample	37+

*Note: Excluding SES employees.

For agencies that use a "Where Do You Work?" survey question or otherwise do not provide organizational codes, a census was conducted so long as there were fewer than 5,000 employees. Agencies above this threshold were required to conduct a sample, although the specific method employed was customized with input from the agency point of contact. The sampling rate, population and sample counts of all agencies participating in the 2014 FEVS administration are given in Appendix A.

The total sample size for the 2014 FEVS was 872,495 employees; which was approximately five percent larger than the sample sizes for the 2013 FEVS and approximately half the size of the 2012 FEVS, which was mostly a census and had a total sample size of 1,622,375. This 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.

Sampling Frame and Stratification Variables

The sampling frame is comprehensive list of all persons (or units) in the survey population, or those eligible to be selected for a survey. For the 2014 FEVS, the sampling frame was comprised of all full-time and part-time, permanent Federal employees in the agencies participating in the survey who were employed as of October 31, 2013. Apart from a few exceptions, this list was extracted from the personnel database managed by OPM as part of the Statistical Data Mart of the Enterprise Human Resources Integration (EHRI-SDM) (http://www.fedscope.opm.gov/datadefn/aehri_sdm.asp). OPM statisticians stratified the sampling frame prior to selecting a sample of Federal employees. As noted in the previous section, OPM reached out to the participating agencies for supplemental organization code information indicating the hierarchical work unit(s) in which the employee was assigned—more detailed information than was available from within EHRI-SDM. When provided, this information, along with information about whether an employee was a Senior Leader, was used to create strata. Otherwise, strata were formed based on the comparatively much more limited information available in EHRI-SDM.

Survey Instrument

Survey Content

The content of the 2014 FEVS reflects the overall goal of measuring how effectively agencies are managing their workforces in the Federal Government. The FEVS focuses on employee perceptions regarding critical work life areas that drive employee satisfaction, commitment, engagement, and ultimately, retention in the workforce. The survey results represent a snapshot in time of Federal workforce perceptions.

The 98-item survey included 14 demographic questions and 84 items that addressed human capital management systems in three areas—Leadership and Knowledge Management, Results-Oriented Performance Culture, and Talent Management. In all, the survey items covered eight topic areas (see Appendix B for a complete list of survey items):

Personal Work Experience

Questions 1–19 addressed employees' personal work experiences and opinions.

Work Unit

Questions 20–28 addressed employees' opinions regarding cooperation, recruitment, quality, and performance management in their work unit.

Agency

Questions 29–41 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 addresses employees' views of their agency.

Supervisor

Questions 42–52 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

Questions 53–62 asked about the effectiveness of the agency's senior leaders and mangers overall, and in motivating employees, maintaining high ethical standards, communicating organizational policies, and generating respect.

Satisfaction

Questions 63-71 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.

Work/Life

Questions 72–84 asked employees about teleworking and if they are satisfied with various employment benefits and work/life programs.

Demographics

Questions 85–98 covered employee information, such as location of employment (headquarters vs. field), supervisory status, gender, ethnicity/race, education, pay category/grade, Federal employment tenure, agency tenure, disability status, veteran status, and sexual orientation.

In addition to the core survey items identified above, 52 agencies opted to add extra items tailored specifically to issues of their agency's own interest.

Changes to the 2014 FEVS

The 2014 FEVS was identical to the 2013 version with the following exceptions:

- The telework notification item and responses were revised to increase understandability.
  - 2013 Question: Have you been notified that you are eligible to telework?
    - Yes
    - No
    - Not Sure
  - 2014 Question: Have you been notified whether or not you are eligible to telework?
    - Yes, I was notified that I was eligible to telework.
    - Yes I was notified that I was not eligible to telework.
    - No, I was not notified of my telework eligibility.
    - Not sure if I was notified of my telework eligibility.
- Items which referenced "Supervisor/Team Leader" were simplified to "Supervisor."
  - 2013 Question example: "My supervisor/team leader provides me with opportunities to demonstrate my leadership skills."
  - 2014 Question example: "My supervisor provides me with opportunities to demonstrate my leadership skills."
- Items which referenced "Executive" or "Leaders" were revised to state "Senior Leaders."
  - 2013 Question example: "In my organization, leaders generate high levels of motivation and commitment in the workforce."
  - 2014 Question example: "In my organization, senior leaders generate high levels of motivation and commitment in the workforce."
- Definitions of leadership levels were revised for clarification purposes as follows:
  - 2013 Definitions:
    - Executives: Members of the Senior Executive Service or equivalent.
    - Senior Leaders: The heads of departments/agencies and their immediate leadership team. Typically these individuals would be members of the Senior Executive Service or equivalent.
    - Leaders: This is your agency's management team. This includes anyone with supervisory or managerial responsibilities.
    - Managers: Those in management positions who typically supervise one or more supervisors.
    - Supervisors: First-line supervisors who do not supervise other supervisors; typically those who are responsible for employees' performance appraisals and approval of their leave.
    - Team Leaders: Not official supervisors; those who provide employees with day-to-day guidance in work projects, but do not have supervisory responsibilities or conduct performance appraisals.
    - Non-supervisor: Anyone who does not have supervisory/team leader responsibilities.

- 2014 Definitions:
  - Senior Leaders: The heads of departments/agencies and their immediate leadership team responsible for directing the policies and priorities of the department/agency. May hold either a political or career appointment, and typically a member of the Senior Executive Service or equivalent.
  - Managers: Those in management positions who typically supervise one or more supervisors.
  - Supervisors: First-line supervisors typically responsible for employees' performance appraisals and leave approval. Does not supervise other supervisors.
  - Non-supervisor: Anyone who does not have supervisory responsibilities.

- Veteran's status (demographic item) response options were expanded.
  - 2013 Question: Have you ever served on Active Duty in the US Armed Forces (Air Force, Army, Coast Guard, Marine Corps or Navy)?
    - Yes
    - No
  - 2014 Question: What is your US military service status?
    - No Prior Military Service
    - Currently in National Guard or Reserves
    - Retired
    - Separated or Discharged
- Education (demographic item) was added to the survey.
- 2014 Question: What is your highest degree or level of education you have completed?
    - Less than High School
    - High School Diploma/GED or equivalent
    - Trade or Technical Certificate
    - Some College (no degree)
    - Associate's 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, JD)
- The Age Group item was removed from the survey since that information is already available in EHRI-SDM.

Data Collection

Field Period

The data collection period for the 2014 FEVS was April 29th to June 13th. To spread the workload more evenly over that period, OPM arranged for surveys to be released in two waves to groups of agencies, beginning either April 29th or May 6th (see Table 2). Hence, the field period for every agency spanned six work weeks.

Table 2: 2014 FEVS Survey Launch Date and Final Close-Out Date, by Agency

Agency	Launch Date	Close Date
Department of Agriculture	May 6	June 13
Department of Commerce	May 6	June 13
Department of Defense		
Department of the Army	April 29	June 6
U.S. Army Corps of Engineers	April 29	June 6
Department of the Air Force	April 29	June 6
U.S. Marine Corps	April 29	June 6
Department of the Navy	April 29	June 6
DoD 4th Estate	April 29	June 6
Department of Education	May 6	June 13
Department of Energy	May 6	June 13
Department of Health and Human Services	April 29	June 6
Department of Homeland Security	April 29	June 6
Department of Housing and Urban Development	April 29	June 6
Department of Justice	April 29	June 6
Department of Labor	April 29	June 6
Department of State	April 29	June 6
Department of the Interior	April 29	June 6
Department of the Treasury	May 6	June 13

Table 2: 2014 FEVS Survey Launch Date and Final Close-Out Date, by Agency (cont'd)

Agency	Launch Date	Close Date
Department of Transportation	May 6	June 13
Department of Veterans Affairs	May 6	June 13
Environmental Protection Agency	April 29	June 6
Farm Credit System Insurance Corporation	May 6	June 13
Federal Trade Commission	April 29	June 6
General Services Administration	April 29	June 6
National Aeronautics and Space Administration	May 6	June 13
National Archives and Records Administration	May 6	June 13
National Credit Union Administration	May 6	June 13
National Labor Relations Board	April 29	June 6
National Science Foundation	May 6	June 13
Nuclear Regulatory Commission	April 29	June 6
Office of Management and Budget	May 6	June 13
Office of Personnel Management	May 6	June 13
Railroad Retirement Board	May 6	June 13
Small Business Administration	May 6	June 13
Social Security Administration	May 6	June 13
U.S. Agency for International Development	April 29	June 6
Small/Independent Agencies	May 6	June 13

Web-Based Data Collection Procedures

The 2014 FEVS was a Web-based, self-administered survey. OPM sent emails to sampled employees inviting them to participate and providing instructions for accessing the survey (see Appendix C for sample email text). OPM also provided agencies with example survey communication materials that could be used. To improve response rates, OPM sent reminder emails weekly to nonrespondents, including one final reminder sent on the final Friday of the field period indicating the survey would close at the end of the day.

As discussed earlier, because certain agencies chose to include additional items on the survey instrument, the actual survey completion times varied somewhat from agency to agency. For all agencies, however, the survey was expected to take no more than 30 minutes. Employees were advised that they were allowed to complete the survey during official work hours.

Survey Disposition Codes

Two types of disposition codes were assigned to indicate the status of a survey case: interim disposition codes and final disposition codes. Descriptions of the codes and case counts by final disposition code are provided in this section. Final disposition codes are used when calculating survey response rates and survey analysis weights.

Interim Disposition Codes

Throughout data collection, each Web survey case was assigned a numeric interim disposition code if the case was not yet considered closed (see Table 3).

Table 3: 2014 FEVS Interim Disposition Codes

Interim code	Description of Interim Disposition Code
00	Pending
CO	Complete
IE	Ineligible (e.g., deceased, retired, no longer with agency)
NP	Not in population (i.e., employees from agencies or components not participating in the 2014 FEVS)
NS	Not sampled (i.e., employees from participating agencies who were not sampled)
Undeliverable	
11	1st Undeliverable
12	2nd Undeliverable
13	3rd Undeliverable
14	4th Undeliverable
15	5th Undeliverable
16	6th Undeliverable

Table 3: 2014 FEVS Interim Disposition Codes (cont'd)

Interim code	Description of Interim Disposition Code
17	7th Undeliverable
18	8th or more undeliverable messages
20	Wrong email address (reported by recipient)
NE	No email address
Out of Office	
41	1st Out of Office
42	2nd Out of Office
43	3rd Out of Office
44	4th Out of Office
45	5th Out of Office
46	6th Out of Office
47	7th Out of Office
48	8th Out of Office
49	9th or More Out of Office
Other	
30	Invitation returned with forwarding information
50	Other survey notification status
70	Other response status
80	Refusal conversion attempt made
RF	Refusal
DU	Duplicate entry

Translating Interim Codes to Final Disposition Codes

This section reviews the rules that were applied when translating interim to final disposition codes.

Survey Completes and Incompletes. All respondents who viewed the survey were considered an interim complete. However, to be considered a final complete (CO), a respondent had to provide at least 21 answers for the first 84 non-demographic items. That is, they needed to complete at least 25% of the survey. If the respondent answered 1 but less than 21 items of the first 84 items the respondent was coded as an Incomplete (IN). If the respondent did not respond to any of the first 84 items, they were coded as a No response (NR).

Once the respondents were coded into completes or incompletes, the following rules were applied to the survey population in hierarchical order:

Refusals. Once a case was designated as a refusal, it remained so even if the respondent completed the survey. On the other hand, respondents who completed a survey and were coded as a Refusal Conversion (code 80) (meaning they contacted us to refuse but we attempted to obtain their participation anyway) were considered a complete. Other than for refusals, a completed survey always remained coded as a complete.

Ineligibles. Cases were coded as ineligible based on the following criteria; the person was:

- retired;
- no longer with the agency;
- unavailable during the field period;
- determined to be active duty, activated military, a political appointee or a contractor;
- deceased;
- listed as being employed simultaneously in two separate agencies; or
- classified in EHRI-SDM as no longer employed with the agency as of February 28, 2014.

Out of Office Emails. If the respondent's out of office email indicated that they were out of the office during the entire field period, they were coded as unavailable (UA); otherwise, they were considered a no response (NR).

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 UD status: if the total number of contacts with the respondent's agency during the field period equaled at least ½ the number of undeliverable bounce backs then the respondent was considered UD. Otherwise, if there was less than ½ the number of undeliverable bounce backs, the case was designated as NR. For example, if OPM had 7 potential contacts (invitations or reminders), any OPM respondent with at least 4 (3.5 rounded up) interim undeliverable emails (codes 14 through 18) would be coded as UD, otherwise they would be designated NR.

Final Disposition Codes

Table 4 lists the final disposition codes that OPM assigned to survey cases in the 2014 FEVS along with the number of cases per code. The codes abide by the American Association of Public Opinion Research's (AAPOR) 2011 guidelines for Internet surveys of specifically named persons (AAPOR, 2011). Only cases with a disposition code of complete (CO) were maintained in the survey's ultimate analysis data set. All other cases were removed.

Table 4: 2014 FEVS Final Disposition Codes and Case Count per Disposition Code

Final Disposition Codes	Description	Nunber of Cases
CO	Complete – respondent answered at least 21 of the first 84 non-demographic items	392,752
IN	Incomplete – respondent answered at least 1 but less than 21 of the first 84 non-demographic items	8,643
RF	Refusal	155
NR	No response	438,238
IE	Ineligible (e.g., deceased or no longer with agency)	21,643
NE	No email address	7,633
UA	Unavailable during the fielding period	116
UD	Undeliverable email	3,315
Total		**872,495**

Response Rates

Information about the final disposition code of each case was used to calculate the response rate. Westat calculated response rates in two ways for the 2014 FEVS. First, Westat used the traditional formula that has been used in previous administrations of the survey. Second, Westat used AAPOR's Response Rate 3 formula. The two formulas lead to different results because of differences in the allocations of final disposition codes among the four main groupings of survey cases:

- Eligible respondents (ER = surveyed and responded),
- Eligible nonrespondents (ENR = known eligible cases that did not return completed surveys),
- Unknown eligibility (UNK), and
- Ineligible cases (IE).

The distributions of final disposition codes among the four groups are summarized in Table 5.

The agency response rates are presented in Table 6.

Table 5: Case Assignment Allocation to Response Rate Groups, by the Traditional FEVS Method, and by the AAPOR RR3 Method

Response Rate (RR) Group	Traditional Method Allocation	Traditional Method Counts	AAPOR RR3 Method Allocation	AAPOR RR3 Method Counts
Eligible Respondents (ER)	CO	392,752	CO	392,752
Eligible Nonrespondents (ENR)	NR, RF, IN	447,036	UA, RF, IN	8,914
Unknown Eligibility (UNK)	---	---	UD, NR, NE	449,186
Ineligible (IE)	IE, UD, NE, UA	32,707	IE	21,643
Total		**872,495**		**872,495**

Using the numbers provided in the third column of Table 5 for the traditional FEVS response rate formula and the numbers in the last column for the AAPOR Response Rate 3 formula leads to the following results:

1. Traditional FEVS formula:

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

   RR = ER / (ER + ENR) * 100

   RR = 392,752 / (392,752 + 447,036) * 100

   RR = (392,752 / 839,788) * 100

   RR = 46.8 percent (down from 48 percent in 2013, up from 46 percent in 2012)

2. 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
   $P_{elig} = (392{,}752 + 8{,}914) / (392{,}752 + 8{,}914 + 21{,}643)$
   $P_{elig} = 0.94887186$
   $UNK_{elig} = P_{elig} * UNK = 0.94887186 * 449{,}186 = 426{,}220$

   Thus,

   $RR3_{AAPOR} = 392{,}752 / (392{,}752 + 8{,}914 + 426{,}220) * 100$

   $RR3_{AAPOR} = 392{,}752 / 827{,}886 * 100$

   $RR3_{AAPOR}$ = 47.4 percent

Table 6: 2014 FEVS Agency Response Rates

	Number of Completed Surveys	Response Rate
Governmentwide	392,752	46.8%
Department/Large Agency		
Department of Agriculture	20,162	68.8%
Department of Commerce	9,892	56.8%
Department of Defense	75,025	35.3%
United States Department of the Air Force	19,168	30.1%
United States Department of the Army	22,414	36.2%
United States Department of the Navy	17,745	34.8%
United States Army Corps of Engineers	2,433	30.9%
United States Marine Corps	1,716	35.1%
OSD, Joint Staff, Defense Agencies, and Field Activities	13,982	45.0%
Department of Education	2,415	63.3%
Department of Energy	6,515	50.2%
Department of Health and Human Services	32,806	46.4%
Department of Homeland Security	42,798	45.8%
Department of Housing and Urban Development	3,890	51.5%
Department of Justice	17,213	40.0%
Department of Labor	10,953	71.7%
Department of State	3,776	50.0%
Department of Transportation	11,673	49.4%
Department of Veterans Affairs	27,639	32.6%
Department of the Interior	18,384	53.0%
Department of the Treasury	51,038	58.8%
Environmental Protection Agency	3,863	53.9%

Table 6: 2014 FEVS Agency Response Rates (cont'd)

	Number of Completed Surveys	Response Rate
Governmentwide	392,752	46.8%
Department/Large Agency (cont'd)		
General Services Administration	8,567	75.9%
National Aeronautics and Space Administration	9,430	54.4%
National Science Foundation	917	77.3%
Office of Management and Budget	304	76.2%
Office of Personnel Management	3,596	73.6%
Small Business Administration	1,395	63.4%
Social Security Administration	9,540	54.3%
U.S. Agency for International Development	2,045	56.0%
Small/Independent Agency		
Advisory Council on Historic Preservation	21	61.8%
African Development Foundation	10	38.5%
American Battle Monuments Commission	37	62.7%
Broadcasting Board of Governors	1,051	68.7%
Chemical Safety and Hazard Investigation Board	32	94.1%
Commission on Civil Rights	14	58.3%
Committee for Purchase From People Who Are Blind or Severely Disabled	23	88.5%
Commodity Futures Trading Commission	397	63.3%
Consumer Product Safety Commission	303	63.4%
Corporation for National and Community Service	418	70.1%
Court Services and Offender Supervision Agency	722	62.1%
Defense Nuclear Facilities Safety Board	73	73.0%
Equal Employment Opportunity Commission	1,129	55.1%

Table 6: 2014 FEVS Agency Response Rates (cont'd)

	Number of Completed Surveys	Response Rate
Governmentwide	392,752	46.8%
Small/Independent Agency (cont'd)		
Export-Import Bank of the United States	185	49.2%
Farm Credit System Insurance Corporation	8	80.0%
Federal Communications Commission	702	42.8%
Federal Election Commission	194	64.0%
Federal Energy Regulatory Commission	896	66.3%
Federal Housing Finance Agency	393	69.2%
Federal Labor Relations Authority	90	82.6%
Federal Maritime Commission	86	81.1%
Federal Mediation and Conciliation Service	128	57.4%
Federal Retirement Thrift Investment Board	133	83.1%
Federal Trade Commission	518	50.0%
Institute of Museum and Library Services	47	79.7%
Inter-American Foundation	36	100.0%
International Boundary and Water Commission	150	65.8%
Marine Mammal Commission	7	77.8%
Merit Systems Protection Board	124	68.9%
National Archives and Records Administration	1,686	67.4%
National Capital Planning Commission	26	76.5%
National Council on Disability	6	75.0%
National Credit Union Administration	809	68.0%
National Endowment for the Arts	73	56.2%
National Endowment for the Humanities	71	57.3%

Table 6: 2014 FEVS Agency Response Rates (cont'd)

	Number of Completed Surveys	Response Rate
Governmentwide	392,752	46.8%
Small/Independent Agency (cont'd)		
National Gallery of Art	323	41.9%
National Indian Gaming Commission	61	64.2%
National Labor Relations Board	696	48.1%
National Mediation Board	17	42.5%
National Transportation Safety Board	245	63.6%
Nuclear Regulatory Commission	2,467	68.1%
Nuclear Waste Technical Review Board	5	50.0%
Occupational Safety and Health Review Commission	41	82.0%
Office of Navajo and Hopi Indian Relocation	31	93.9%
Office of the U.S. Trade Representative	107	64.1%
Overseas Private Investment Corporation	157	81.3%
Pension Benefit Guaranty Corporation	481	53.5%
Postal Regulatory Commission	40	65.6%
Railroad Retirement Board	526	60.2%
Securities and Exchange Commission	2,472	62.9%
Selective Service System	73	66.4%
Surface Transportation Board	78	63.4%
U.S. Access Board	22	78.6%
U.S. International Trade Commission	289	92.9%
U.S. Office of Government Ethics	53	93.0%
U.S. Office of Special Counsel	84	84.8%
U.S. Trade and Development Agency	34	85.0%
Woodrow Wilson International Center for Scholars	16	45.7%

Help Center

A Help Center was set up to assist Federal employees with questions about the survey to ensure that all inquiries were handled promptly, accurately, and consistently. Utilizing a Help Center also helps achieve higher response rates during data collection. The Help Center served as a central point for coordinating and managing reported problems and issues. Employees could email their questions/concerns or call a toll-free number to contact Help Center staff. Thirty-one email accounts were set up, one for each of 29 large departments/agencies, one for the small/independent agencies, and one for the large independent agencies. Help Center staff included two trained Westat team staff members, one Help Center Supervisor, and one assistant Help Center Supervisor; operations were overseen by the Data Collection Task Manager.

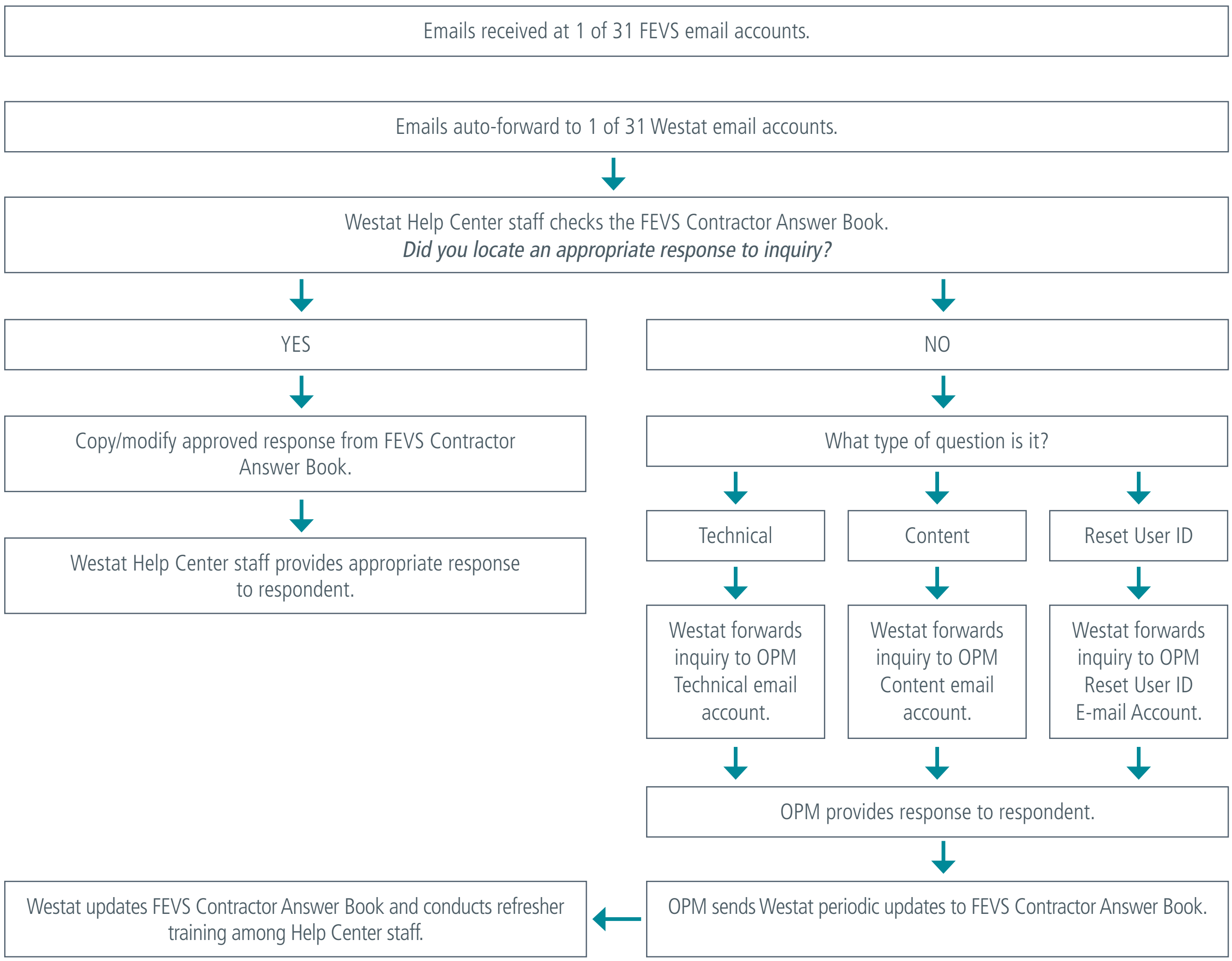
Staff Training

The Help Center Supervisor conducted a 2-hour staff training session which included an introduction to the project, a review of the 2014 FEVS Contractor Answer Book prepared by OPM, a review of frequently asked questions, a technical session on how to use the Web-based Help Center application (getting into email accounts, logging on to the survey, navigating, and using Word functions [searches, copying/pasting answers]), and procedures for handling toll-free calls from employees. After the technical session, all trainees used test accounts and cases that were set up within the Web-based application to apply what they had learned in a set of example resolution exercises. The training session closed with questions from interviewers.

Hours and Operational Procedure

The Help Center opened with the launch of the first survey invitation on April 29, 2014. Hours of operation were 8:30 a.m. to 5 p.m. Eastern Time, Monday through Friday. The Help Center was located at the Westat campus in Rockville, Maryland. Figure 1 illustrates the operational procedures for handling emails at the center.

Figure 1: 2014 FEVS Help Center Email Procedures



Emails. For 2014, the Help Center used the same Web-based application that was developed by Westat for the 2006 through 2013 administrations (in 2004, emails were handled within Microsoft Outlook), though additional functions and features were consistently added. Table 7 summarizes the number of emails the Help Center received across the 31 email accounts.

Table 7: Number of Emails Handled by Help Center and OPM, by Agency

Agency	Folder				
	Inbox	Out of Office	Undeliverable	Sent Items	Total
Department of Agriculture	340	3,825	4,941	139	9,245
Department of Commerce	164	2,596	1,980	112	4,852
Department of Defense					
Department of the Air Force	305	1,365	548	251	2,469
Department of the Army	361	12,018	9,620	137	22,136
Department of the Navy	599	10,818	5,375	189	16,981
U.S. Army Corps of Engineers	21	48	205	17	291
U.S. Marine Corps	41	219	1,441	37	1,738
DoD 4th Estate	345	3,880	2,879	97	7,201
Department of Education	16	1,147	6	19	1,188
Department of Energy	246	2,475	308	66	3,095
Department of Health and Human Services	762	16,823	4,146	463	22,194
Department of Homeland Security	646	10,042	9,978	362	21,028
Department of Housing and Urban Development	39	2,223	1,015	35	3,312
Department of Justice	443	4,445	35	128	5,051
Department of Labor	366	1,710	63	311	2,450
Department of State	710	2,592	758	45	4,105
Department of the Interior	326	5,341	12,646	96	18,409
Department of the Treasury	869	7,632	11,050	246	19,797
Department of Transportation	440	2,821	1,106	119	4,486
Department of Veterans Affairs	141	3,114	6,569	129	9,953
Environmental Protection Agency	218	1,548	2,960	22	4,748
General Services Administration	713	3,274	14	536	4,537
Large independent agencies	293	3,193	3,182	75	6,743

Table 7: Number of Emails Handled by Help Center and OPM, by Agency (cont'd)

Agency	Folder				Total
	Inbox	Out of Office	Undeliverable	Sent Items	
National Aeronautics and Space Administration	415	2,502	0	41	2,958
National Science Foundation	93	230	455	10	788
Office of Management and Budget	0	100	65	0	165
Office of Personnel Management	53	729	2,320	46	3,148
Small Business Administration	32	789	0	13	834
Small/Independent agencies	136	1,098	586	35	1,855
Social Security Administration	31	1,687	38	29	1,785
U.S. Agency for International Development	37	2,201	215	12	2,465
Totals	**9,201**	**112,485**	**84,504**	**3,817**	**210,007**

Of the 210,007 emails received by the Help Center, 84,504 were undeliverable notifications, 112,485 were automated out of office replies to the original survey invitation and reminders, and 9,201 were inquiries or comments from individuals. Of the 84,504 undeliverable notifications, 19,454 were from unique respondents. Of the 112,485 automated out of office replies, OPM staff worked through 713 out of office emails 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 field period. Help Center staff reviewed all inquiries and comments in the inbox and determined that 3,817 of the 9,201 emails required a response. The other 5,384 emails consisted of comments from users that did not require a response, such as letting the Help Center know that the respondent intended to complete the survey or an out of office notification not caught by the automated key words filter. Of the 3,817 emails that required a response, 260 (6.8 percent of the total) were sent to the OPM Technical, OPM Content, or OPM Reset User ID email box for additional assistance from the client.

Toll-Free Calls. The Help Center staff also handled calls made to the survey's toll-free hotline by respondents with questions or comments about the survey. The toll-free number was set up to go directly to the Help Center. During the Help Center hours (8:30 a.m. to 5 p.m. Eastern Time, Monday through Friday), calls were answered as they came in by Help Center staff. A voicemail box was set up for calls received outside of regular Help Center hours. All voicemail messages were returned within 1 business day. A total of 691 calls were received during the field period. A daily telephone log was maintained to record all incoming calls received.

Types of Inquiries Received

Most of the inquiries fell into one of the following categories:

- Individuals reporting they were no longer Federal employees;
- Individuals verifying the survey was legitimate;
- Individuals who had lost their survey URL;
- Individuals who had received a reminder from within their agency (not from OPM), who were not in the sample and so did not get a survey invitation and were wondering how to take the survey;
- Individuals unsure how to answer the where do you work question or what is your position questions when they did not find an applicable response options;
- Individuals with questions about confidentiality, particularly for members of small subgroups; and
- Individuals having difficulty accessing the survey.

Help Center staff relied on the 2014 FEVS Contractor Answer Book to select appropriate answers for employee questions. At the beginning of the field period, the answer book contained 86 questions and answers used to reply to emails that came in through the Web application and calls to the toll-free line. These questions were ones frequently received by the Help Desk and provided standardized answers. Four new answers were added to the Answer Book early in the data collection period, for a total of 90 frequently asked questions. These new questions pertained to troubles accessing the survey when there was a problem with the website security certificate, if they could take the survey during work hours, a question on the inclusion of the sexual orientation item on the survey, and a question on why the agency specific questions do not appear on the summary of responses to the survey items.

New Features Added for the 2014 FEVS

Two new features were added prior to the field period to make it easier for Help Center staff to provide technical assistance as well as for agencies to get information more quickly. These new features included a response rate website for agency points of contact, and expanding the population in the survey management system (SMS) to better respond to inquiries about not receiving a survey.

Westat developed a controlled-access website (https://www.FEVSResponseRates.com/) for agency points of contact to log in and view their real-time response rate(s) as often as desired. The website provided the following information: 1) Launch date for the agency, 2) sample size, 3) completes to date, 4) response rate to date, and 5) their final 2013 response rate. This information was available at the agency level and subagency level, where applicable. Users were able to export the report directly into Microsoft Excel©.

In prior years, if a Federal employee emailed or called in to the Help Center as to why they did not get a survey, all inquiries were forwarded to OPM for review. For the first time with the 2014 FEVS, OPM provided the Help Center with a comprehensive file containing information on the entire Federal workforce, including those flagged as ineligible to be sampled. This information was incorporated into the survey management system (SMS), which allowed the staff to identify the reason(s) the employee did not receive a survey and respond accordingly (with a standardized response) such that the inquiry could be settled in a more timely manner.

Two new interim dispositions codes were added to the SMS this year as a result of this additional information: Not in Population (NP) and Not Sampled (NS). The NP disposition was assigned to individuals whose agency or component did not participate in the 2014 FEVS or who was ruled ineligible, whereas the NS disposition was assigned to individuals eligible to participate but who were not sampled.

Data Cleaning and Weighting

Data Cleaning/Editing

The data cleaning and editing process generally involves accounting for each case by assigning final disposition codes and rigorously inspecting the data for range, logic, and other errors. Given the 2014 FEVS was strictly a Web-based survey, programs to inspect the data for various response errors were built into the instrument; thus, data cleaning was a continuous operation throughout the data collection period.

Weighting

The process of weighting refers to the development of an analysis weight assigned to each respondent to the 2014 FEVS. The weights are necessary to achieve the survey objective of making unbiased inferences regarding the perceptions of the full population of Federal employees. Without the weights, two characteristics of the FEVS could result in biased population estimates. First, as noted previously, the 2014 FEVS was a census in some strata and a probability sample in other strata. Hence, an employee's probability of being invited to participate in the FEVS varied across agencies and agency subgroups. Because of the variable probabilities of selection across the subgroups, sample members in, say, subgroup A each represent X number of Federal employees, whereas sample members in subgroup B each represent Y number of employees. Weights are calculated to adjust for those differences.

Another survey characteristic that is a source of potential bias in the 2014 FEVS estimates is nonresponse. In an ideal world, all members of the survey sample receive the survey invitation and complete the survey. In the real world, however, some survey cases cannot be located (e.g., emails are undeliverable) and others who receive the surveys do not complete them. Undeliverable survey invitations as well as varying response rates across subgroups of employees were experienced during the 2014 FEVS. Thus, the analysis of data from the 2014 FEVS requires the use of weights to adjust not only for variable selection probabilities but also for survey nonresponse.

For the 2014 FEVS, final disposition codes and information from the sampling frame were used to develop the weights. The disposition codes were used to determine whether each employee returned a completed questionnaire or if information was obtained indicating the employee was ineligible to participate in the FEVS. Variables utilized from the sampling frame include the stratum identifier and a set of demographic variables known for both respondents and nonrespondents.

Statisticians used a three-stage, industry-standard procedure to develop the weights. First, they calculated base weights for each sampled employee equaling the reciprocal of each individual's selection probability. 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 nonrespondents and ineligible employees. Third, statisticians used a procedure known as raking to ensure weighted distributions matched known population distributions. This technique can increase the precision of survey estimates. See Appendix D for detailed information on the 2014 FEVS weighting processes and Appendix E for an illustration of the weight adjustment operation.

Data Analysis

As noted earlier, the final analysis data set included only responses classified as complete (see Table 3 for definitions of disposition codes). A variety of analyses were conducted on this analysis dataset of 392,752 respondents.

Frequency Distributions

As in prior administrations, the primary data analysis in 2014 included calculating governmentwide, agency, and subagency frequency distributions for each survey question. In addition, frequency distributions were calculated for various demographic groups and select work-related characteristics.

Distributions of Positive, Negative, and Neutral Responses

Many of the FEVS item answer sets formed 5-point Likert-type response scales. Three such scales were 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) V*ery 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.

For all questions using these response scales, the proportion of positive, neutral, and negative responses are defined 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 questions 9-19, 21-27, 29-39, 41-47, 53-62, and 79-84 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 questions. When reporting survey data prior to 2011, all results were recalculated removing the Do Not Know or No Basis to Judge responses from the percentages.

Testing for Statistically Significant Differences Between FEVS Groups/Subgroups

Analysts tested for two types of statistically significant differences: differences between estimates for subgroups in 2014 and differences between estimates across survey administration years. The latter are described in the next section on trend analyses.

Subgroup estimates for all percent positive responses were calculated for the governmentwide by age group, gender, race/ethnicity, disability status, previous military or veteran status, and workforce attributes (supervisor status and work location). Analysts calculated the standard errors for the collapsed percent positive estimates. They then used the standard error data to calculate Student's t statistics that test for significant differences between estimates for two comparison groups. The analysts performed statistical testing to identify statistically significant differences in responses across subgroups with Ns larger than 30. To reduce the likelihood of incorrectly concluding that significant differences exist when there are multiple subgroup comparisons (such as supervisory status), analysts used SAS's Proc Multtest (the false discovery rate [FDR] method) to adjust the significance-test probability.

Trend Analyses

Trend analyses were conducted for 77 items that had percent positive calculations and that were included in at least 2 consecutive years of FEVS administration from 2010 to 2014. For each of these non-demographic items, analysts calculated the percent positive responses for each year and graphically displayed whether there were statistically significant increases or decreases, or no statistically significant changes, in positive responses from 2011 to 2012, from 2012 to 2013, and 2013 to 2014. Table 8 presents a sample of the display. In the table, arrows slanting up (↗) indicate statistically significant increases, arrows slanting down (↘) indicate statistically significant decreases, and horizontal arrows (→) indicate no statistically significant changes. The first arrow in the last column of the table indicates changes status between 2011 and 2012, the second arrow indicates changes between 2012 and 2013, and the third arrow indicates changes between 2013 and 2014. Thus, for item 9 in Table 8, there was no statistically significant change in percent positive responses from 2011 to 2012, but there were statistically significant decrease from 2012 to 2013 and a statistically significant increase from 2013 to 2014.

Table 8: Sample Trend Analysis Results

	Percent Positive				
	2011	2012	2013	2014	Significant Trends
I have sufficient resources (for example, people, materials, budget) to get my job done. (Q. 9)	48	48	44	45	→ ↘ ↗
Promotions in my work unit are based on merit. (Q. 22)	36	34	31	32	↘ ↘ ↗
How satisfied are you with the following Work/Life programs in your agency? Telework (Q. 79)	70	73	76	77	↗ ↗ ↗

Indices

Four main sets of indices were reported on for the 2014 FEVS: Employee Engagement Index, Global Satisfaction Index, The New IQ Index, and HCAAF indices. The next sections review these indices.

Employee Engagement Index

The Employee Engagement Index was developed using a combination of theory and statistical analysis. Several items from the FEVS were selected based on a rationalization that they would be representative of dimensions similar to other engagement "driver" measures. Items which used a satisfaction scale were excluded so as to differentiate between satisfaction and engagement.

An initial exploratory factor analysis revealed three factors consisting of 16 items (Leaders Lead, Supervisors, and Intrinsic Work Experiences) with a single, underlying factor (Conditions Conducive to Employee Engagement). A confirmatory factor analysis was repeated with an independent dataset, which further supported the three factor model. One item was removed for theoretical and statistical reasons, resulting in the 15-item, three-factor model (see Table 9).

The index scores were calculated by first determining the percent positive for each item in the subindices. Then the unrounded percent positive scores were averaged across the items in the index to get the index score. This subindex score was then rounded for reporting purposes. To create the overall Employee Engagement Score, the unrounded subindex scores were averaged. This overall index score was then rounded for reporting purposes.

Table 9: Employee Engagement Index (15 items)

Employee Engagement Index (3 Subindices)	
Leaders Lead (5 items)	
53.	In my organization, senior leaders generate high levels of motivation and commitment in the workforce.
54.	My organization's senior leaders maintain high standards of honesty and integrity.
56.	Managers communicate the goals and priorities of the organization.
60.	Overall, how good a job do you feel is being done by the manager directly above your immediate supervisor?
61.	I have a high level of respect for my organization's senior leaders.
Supervisors (5 items)	
47.	Supervisors in my work unit support employee development.
48.	My supervisor listens to what I have to say.
49.	My supervisor treats me with respect.
51.	I have trust and confidence in my supervisor.
52.	Overall, how good a job do you feel is being done by your immediate supervisor?
Intrinsic Work Experience (5 items)	
3.	I feel encouraged to come up with new and better ways of doing things.
4.	My work gives me a feeling of personal accomplishment.
6.	I know what is expected of me on the job.
11.	My talents are used well in the workplace.
12.	I know how my work relates to the agency's goals and priorities.

Global Satisfaction Index

Global Satisfaction Index is a combination of 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 10).

The Global Satisfaction Index scores were calculated by first determining the percent positive for each item in the index. Then the unrounded percent positives scores were averaged across the items in the index to get the index score. This index score is then rounded for reporting purposes.

Table 10: Global Satisfaction Index (4 items)

Global Satisfaction (4 items)	
40.	I recommend my organization as a good place to work.
69.	Considering everything, how satisfied are you with your job?
70.	Considering everything, how satisfied are you with your pay?
71.	Considering everything, how satisfied are you with your organization?

The New IQ Quotient (The New IQ)

The New IQ was built on the concept that individual behaviors, repeated over time, form the habits that create the essential building blocks of an inclusive environment. These behaviors can be learned, practiced, and developed into habits of inclusiveness and subsequently improve the inclusive intelligence of organizational members. Workplace inclusion is a contributing factor to employee engagement and organizational performance. The New IQ consists of 20 items that are related to inclusive environments (see Table 11). These 20 items are grouped into "5 Habits of Inclusion":

- Fair,
- Open,
- Cooperative,
- Supportive, and
- Empowering.

Table 11: The New IQ Index (20 items)

The New IQ Index (5 Subindices)	
Fair (5 items)	
23.	In my work unit, steps are taken to deal with a poor performer who cannot or will not improve.
24.	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.
37.	Arbitrary action, personal favoritism and coercion for partisan political purposes are not tolerated.
38.	Prohibited Personnel Practices (for example, illegally discriminating for or against any employee/applicant, obstructing a person's right to compete for employment, knowingly violating veterans' preference requirements) are not tolerated.
Open (4 items)	
32.	Creativity and innovation are rewarded.
34.	Policies and programs promote diversity in the workplace (for example, recruiting minorities and women, training in awareness of diversity issues, mentoring).
45.	My supervisor is committed to a workforce representative of all segments of society.
55.	Supervisors work well with employees of different backgrounds.
Cooperative (2 items)	
58.	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.
Supportive (5 items)	
42.	My supervisor supports my need to balance work and other life issues.
46.	My supervisor provides me with constructive suggestions to improve my job performance.
48.	My supervisor listens to what I have to say.
49.	My supervisor treats me with respect.
50.	In the last six months, my supervisor has talked with me about my performance.
Empowering (4 items)	
2.	I have enough information to do my job well.
3.	I feel encouraged to come up with new and better ways of doing things.
11.	My talents are used well in the workplace.
30.	Employees have a feeling of personal empowerment with respect to work processes.

The index scores were calculated by first determining the percent positive for each item in the subindices. Then the unrounded percent positive scores were averaged across the items in the index to get the index score. This subindex score was then rounded for reporting purposes. To create the overall New IQ Score, the unrounded subindex scores were averaged. This overall index score was then rounded for reporting purposes.

Human Capital Assessment and Accountability Framework (HCAAF)

To guide governmentwide efforts to support agency mission results with strong human capital strategies, OPM created the Human Capital Assessment and Accountability Framework (HCAAF). As required by the Chief Human Capital Officers Act of 2002, agencies are evaluated on their progress in meeting the HCAAF standards.

The results of the FEVS provide a single source of information for evaluating success in the three HCAAF implementation systems: Leadership and Knowledge Management, Results-Oriented Performance Culture, and Talent Management. OPM developed metrics for each of these systems, including four indices based on 39 items in the FEVS:

- Leadership and Knowledge Management,
- Results-Oriented Performance Culture,
- Talent Management, and
- Job Satisfaction.

The index scores were calculated by first determining the percent positive for each item in the index (see Table 12). Then the unrounded percent positives scores were averaged across the items in the index to get the index score. The index score was then rounded for reporting purposes.

Table 12: HCAAF Indices (39 items)

Leadership & Knowledge Management Index (12 items)	
10.	My workload is reasonable.
35.	Employees are protected from health and safety hazards on the job.
36.	My organization has prepared employees for potential security threats.
51.	I have trust and confidence in my supervisor.
52.	Overall, how good a job do you feel is being done by your immediate supervisor?
53.	In my organization, senior leaders generate high levels of motivation and commitment in the workforce.
55.	Supervisors work well with employees of different backgrounds.
56.	Managers communicate the goals and priorities of the organization.`
57.	Managers review and evaluate the organization’s progress toward meeting its goals and objectives.
61.	I have a high level of respect for my organization’s senior leaders.
64.	How satisfied are you with the information you receive from management on what’s going on in your organization?
66.	How satisfied are you with the policies and practices of your senior leaders?

Table 12: HCAAF Indices (39 items) (cont'd)

Results-Oriented Performance Culture Index (13 items)	
12.	I know how my work relates to the agency's goals and priorities.
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.
20.	The people I work with cooperate to get the job done.
22.	Promotions in my work unit are based on merit.
23.	In my work unit, steps are taken to deal with a poor performer who cannot or will not improve.
24.	In my work unit, differences in performance are recognized in a meaningful way.
30.	Employees have a feeling of personal empowerment with respect to work processes.
32.	Creativity and innovation are rewarded.
33.	Pay raises depend on how well employees perform their jobs.
42.	My supervisor supports my need to balance work and other life issues.
44.	Discussions with my supervisor about my performance are worthwhile.
65.	How satisfied are you with the recognition you receive for doing a good job?
Talent Management Index (7 items)	
1.	I am given a real opportunity to improve my skills in my organization.
11.	My talents are used well in the workplace.
18.	My training needs are assessed.
21.	My work unit is able to recruit people with the right skills.
29.	The workforce has the job-relevant knowledge and skills necessary to accomplish organizational goals.
47.	Supervisors in my work unit support employee development.
68.	How satisfied are you with the training you receive for your present job?

Table 12: HCAAF Indices (39 items) (cont'd)

Job Satisfaction Index (7 items)	
4.	My work gives me a feeling of personal accomplishment.
5.	I like the kind of work I do.
13.	The work I do is important.
63.	How satisfied are you with your involvement in decisions that affect your work?
67.	How satisfied are you with your opportunity to get a better job in your organization?
69.	Considering everything, how satisfied are you with your job?
70.	Considering everything, how satisfied are you with your pay?

Index Rankings

The 37 agencies listed below were ranked on each of these indices. The rankings were calculated from the rounded percent positive results for the overall index, which allowed for ties. Each of the 37 agencies, where Army, Army Corps of Engineers, Air Force, Navy, Marine Corps, and Other Defense agencies/activities, were rolled into Department of Defense received its own ranking on the overall index. The rankings ranged from '1' for the highest percent positive (even if there was a tie) to '37' for the lowest percent positive (even if there was a tie).

The 37 Agencies Ranked on each of the Indices

Departments/Agencies
Department of Agriculture
Department of Commerce
Department of Defense
Department of Education
Department of Energy
Department of Health and Human Services
Department of Homeland Security
Department of Housing and Urban Development
Department of the Interior
Department of Justice
Department of Labor
Department of State
Department of Transportation
Department of the Treasury
Department of Veterans Affairs
Environmental Protection Agency
Farm Credit System Insurance Corporation
General Services Administration
National Aeronautics and Space Administration
National Science Foundation
Office of Management and Budget
Office of Personnel Management
Small Business Administration
Social Security Administration
U.S. Agency of International Development

Small/Independent Agencies
Broadcasting Board of Governors
Court Services & Offender Supervision Agency
Equal Employment Opportunity Commission
Federal Communications Commission
Federal Energy Regulatory Commission
Federal Trade Commission
National Archives and Records Administration
National Credit Union Administration
National Labor Relations Board
Nuclear Regulatory Commission
Pension Benefit Guaranty Corporation
Railroad Retirement Board
Securities and Exchange Commission

Public Release Data Files

This section details measures taken to protect respondent confidentiality for the release of the 2014 FEVS general version of the public-release data file (PRDF) and the lesbian, gay, bisexual, and transgender (LGBT) version. The first two sections discuss the methods used to produce these two files, while the third section discusses an additional public release data file type, the 2004 – 2014 trend file.

Procedures Undertaken to Produce the General Version of the PRDF

When considering the level of work-unit detail that could safely be reflected in the raw survey responses in the file, the first obligation was to honor the wishes of participating agencies. Specifically, the agencies were consulted to determine whether and how many levels of the organizational structure to consider for inclusion. After removing obvious personal identifiers such as name and email address as well as certain highly sensitive demographics (e.g., the LGBT indicator variable), the next step was to address the relatively rare observable demographics. To facilitate this process, we utilized a proprietary SAS® macro that uses methodology described in Li and Krenzke (2013) as the Exhaustive Tabulations Assessment. The macro conducts a systematic, comprehensive sequence of cross-tabulations of these variables, and flags survey responses that present a disclosure risk.. The traditional risk threshold used in the FEVS administrations was 4, meaning that a respondent was flagged as a potential disclosure risk if its demographic profile was shared by fewer than 3 other respondents. A rare demographic profile with respect to the set of respondents, however, does not necessarily imply a rare demographic profile with the respect to the larger population. As such, the traditional threshold was deemed overly cautious and was modified in FEVS 2014 to a weighted total of 4. Because the set of demographic variables from the sampling frame used in the weighting process aligns almost perfectly with the (observable) demographics from the survey instrument, this permits a more direct assessment of whether the particular demographic profile is truly rare in the population. In the end, if a particular demographic category had more than 25% of its cases flagged as a disclosure risk, the category was collapsed with a neighboring category or suppressed.

Once the coding structure of the demographic variables was finalized, attention was shifted to the level of work-unit detail that could safely remain identifiable in the file. Working from the lowest level of detail upwards, we utilized the same proprietary macro to identify cases posing a disclosure risk using the same threshold of a weighted total of 4 and the following set of 10 demographics:

- Telework frequency (Item 73)
- Supervisory status (Item 86)
- Gender (Item 87)
- Minority status (derived from Items 88 and 89)
- Education level (Item 90)
- Pay category (Item 91)
- Federal tenure (Item 92)
- Retirement horizon (Item 95)
- Disability status (Item 98)
- Age group (derived from EHRI-SDM)

For a work unit to be included, it required a minimum of 250 respondents and no more than 25% of its cases flagged as a potential disclosure risk, with the following exceptions:

- Small agencies that omitted the demographic section of the survey instrument were ignored.
- Agency code SI (small agencies with too few respondents collapsed together) was ignored.
- Work-units with greater than 2,000 respondents or with less than 25% of its population responding were ignored.

Work units not meeting these requirements were suppressed, and then the macro was run once again to identify cases that still posed a disclosure risk. Of the 392,752 respondents, approximately 6,000 were flagged. For the flagged cases, only one of the four core observable demographics—gender, age group, supervisory status, and minority status—was maintained. A randomized mechanism was employed to select that particular demographic, and the other three were suppressed.

Procedures Undertaken to Produce the LGBT Version of the PRDF

The coding structure of the demographic variables included in the general version of the PRDF served as the initial set of demographic variables and categorizations considered for inclusion in the LGBT version. To further protect respondent confidentiality and inhibit a user from linking it to the general version of the file, the following measures were taken:

- A separate, unique respondent identifier was created.
- Any work-unit information below the agency level was suppressed, and only large, cabinet-level agencies were made identifiable
- The core survey items' five-point response scales were collapsed to a three-point scale indicating only whether the response was positive, neutral, or negative (Do Not Know or No Basis to Judge responses were maintained).
- Certain observable demographic variables included in the general version of the PRDF were removed.

As with the general version of the PRDF, the proprietary SAS macro was employed to identify respondents who posed a disclosure risk. Roughly 100 cases were flagged, far fewer than with the general version. This was to be expected, considering the much coarser level of work-unit detail, fewer observable demographics included in the file, and the suppression procedures previously applied to the core observable demographics—namely, gender, age group, supervisory status, and minority status. For the roughly 100 cases flagged, all four of these core observable demographics were suppressed.

Procedures Undertaken to Produce the 2004–2014 Trend File

New this year was the production of a third file type that involved consolidating all FEVS public release data files (PRDFs) into one all-inclusive file as a convenience for those seeking to conduct trend analyses with the data. Between 2004 and 2014, the FEVS has been administered eight times: 2004, 2006, 2008, 2010, 2011, 2012, 2013, and 2014. This file was a concatenation of those eight administrations' PRDFs. It contains a total of 2,568,389 records, each of which represents an individual survey response. The "year" variable on the file can be used to identify and extract responses from any one or more of those distinct survey administrations.

Where trending is possible with respect to particular agencies or their subcomponents, core survey items, and demographics, the variables on prior FEVS PRDFs were renamed, renumbered, or recoded to match the current FEVS 2014 coding structure. Data from prior FEVS PRDFs have been set to missing where trending is not possible. The inability to trend is generally attributable to one of the following reasons:

- The item or demographic did not appear on the prior year's survey instrument.
- A significant wording change or response option modification to an item or demographic occurred.
- An agency's organizational structure changed.
- The statistical disclosure limitation techniques applied to the survey data in development of a given administration's PRDF indicated the need to mask, recode, or omit the work unit, item, or demographic.

Accompanying the trend file was a codebook in the form of a multi-tab Excel spreadsheet containing several useful summaries documenting which items and work units can be trended and which cannot.

Presentation of Results

Many reports were created to present findings from the 2014 FEVS. OPM distributed survey findings in the following products:

- A set of four Governmentwide reports;
- A series of 82 Annual Employee Survey (AES) reports;
- A series of 43 Agency Management Reports (AMR);
- A series of 41 Small Agency Management Reports (SAM);
- A series of agency/1st level Employee Summary Feedback (ESF) reports;
- A series of 1st, 2nd, 3rd, 4th, 5th, 6th , 7th , 8th, and 9th level subagency comparison and breakout reports;
- A series of agency/1st level trend reports;
- A series of agency-specific reports; and
- A series of agency demographic comparison reports.

A listing of the products with the approximate number of reports that were produced is shown in Table 13. The Governmentwide reports were posted on the 2014 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 products and reports are described in more detail in the sections below.

Table 13: FEVS Products and Data Files Delivered to OPM

	Number of Reports		
Product	2014	2013	2012
Governmentwide Reports (508 compliant)	4	4	4
Governmentwide Management Report	1	1	1
Report by Agency	1	1	1
Report by Demographics	1	1	1
Unweighted Report by Demographics by Agency	1	1	1
Annual Employee Survey (AES) Report (Excel)	82	80	82
Agency Management Reports (AMR) (508 compliant)	43	43	43
Small Agency Management Reports (508 compliant)	41	41	42
Employee Summary Feedback (ESF) Reports	538	508	497
Agency ESF Reports (508 compliant)	78	78	79
1st level ESF Reports (508 compliant)	460	430	418

Table 13: FEVS Products and Data Files Delivered to OPM (cont'd)

Product	Number of Reports 2014	2013	2012
Subagency Reports	20,892	16,446	9,517
1st level comparison	50	46	44
1st level breakout	458	431	416
2nd level comparison	350	291	272
2nd level breakout	2,218	1,967	1,747
3rd level comparison	1,038	932	507
3rd level breakout	5,496	4,541	2,984
4th level comparison	1,070	974	443
4th level breakout	3,876	3,055	1,698
5th level comparison	779	570	342
5th level breakout	2,187	1,489	932
6th level comparison	396	254	30
6th level breakout	1,220	821	96
7th level comparison	400	324	3
7th level breakout	850	751	3
8th level comparison	178	--	--
8th level breakout	296	--	--
9th level comparison	14	--	--
9th level breakout	16	--	--
Trend Reports	645	629	469
Agency Trend Reports	82	82	82
1st level Trend Reports	563	547	387
Agency Specific Item Reports	130	115	109
Demographic Comparison Reports	841	--	--
WesDaX	Unlimited	Unlimited	Unlimited
Total	23,216	17,866	10,848

Governmentwide Reports

There are four 508 compliant Governmentwide reports. The main Governmentwide report *(Government Management Report)* includes results of the governmentwide survey findings broken out by themes: Response Rates, FEVS indices (Employee Engagement, Global Satisfaction, New Inclusion Quotient, and HCAAF), Special Topic Areas such as Employee Engagement by Education, Work/Life Programs, and Millennials in the Workforce, and Results by Veteran, LGBT, and Disability Status. The report has eight appendices providing the methods, trend analysis, participating agency response rates, respondent characteristics, and participating agency index trend results. Many of the appendices were also provided in Excel.

Three other Governmentwide data reports were:

Report by Agency

Displays question-by-question counts and percentages for each response option for the 2014, 2013, and 2012 FEVS *by participating agency* and also 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 2014, 2013, and 2012 FEVS *by demographic groups* and also 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 agency's demographic and workforce profile (e.g., work location, supervisory status, sex, age, pay category, intention to retire) for 2014, 2013, and 2012. Both respondent counts and percentage estimates are unweighted.

Annual Employee Survey Reports

The Annual Employee Survey (AES) Reports provided weighted agency-specific data for all the items on the FEVS, with the mandated AES items asterisked. These reports included the proportion of responses in each response category, the proportion of positive responses to each survey item (where relevant), and the responses to the demographic questions. The AES reports also included background information such as the counts (unweighted), whether the agency frame was a census or sample, and the response rate for the agency. An AES report in Excel was produced for the 82 of the agencies participating in the FEVS that had at least 4 respondents (All DoD agencies received one overall DoD AES report).

Agency Management Reports, Small Agency Management Reports and Employee Summary Feedback Reports

For the 2014 FEVS, OPM's data presentation included:

- 43 Agency Management Reports for the Departments/large agencies
- 41 Small Agency Management Reports for the small and independent agencies
- Employee Summary Feedback reports for the above agencies and their 1st level components.

The Agency Management Report (AMR) and Small Agency Management (SAM) Reports provided similar content, the AMRs for large agencies and the SAMs for the small agencies. The Employee Summary Feedback Reports took a subset of the information from these reports and displayed it in a two-page format for all agencies. 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:

- An introduction to the report and the FEVS, an overview of new or redesigned sections, a guide to understanding and using the Agency Management Report, followed by
- A section entitled "Respondent Overview." This section provides survey administration information (field period, sample size, agency and component response rates, agency results margin of error), and highlights of the 2014 FEVS agency respondent characteristics;
- A section displaying results for the top 10 positive and negative survey item results for the agency;
- A series of sections displaying scores and rankings along with scores for any components where applicable for:
  - Employee Engagement Index
  - Global Satisfaction Index
  - HCAAF Indices
  - A series of Decision Aid tables presenting all items that increased, decreased or did not change since the 2013 FEVS;
- A section on Work/Life Programs including participation in and satisfaction with the programs;
- A Special Topic section highlighting Engagement Index scores by selected agency characteristics (e.g., Agency tenure, most frequent Occupational families in the agency);
- Two appendices that show results for all items, benchmarked against the 37 agencies' (Of the 43 agencies receiving an AMR where Department of Defense agencies are rolled up into one agency) highest and lowest results, and an appendix presenting the agency's demographic characteristics.

Small Agency Management Report (SAM)

The SAMs are almost identical to the AMRs but were designed for the small agencies, and provided comparisons to other small agencies, rather than the governmentwide averages. Further, since almost all small agencies did not administer demographic or respondent characteristic questions, those items were not included in the SAM. The Small Agency Management reports included:

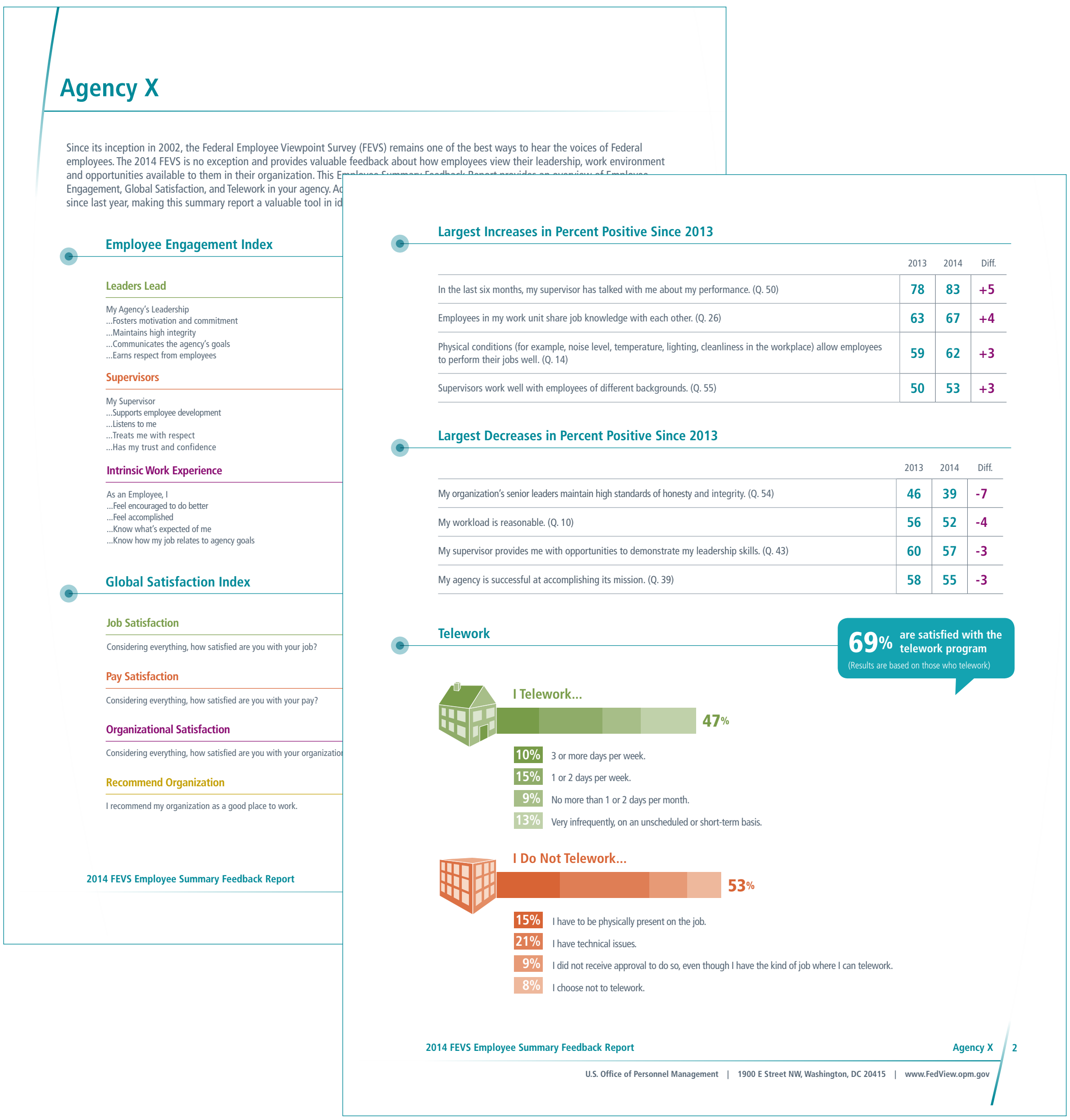
- An introduction to the report and the FEVS, an overview of new or redesigned sections, a guide to understanding and using the Small Agency Management Report including "rules of thumb" for reviewing survey results, as well as survey administration information (field period, sample size, agency and where applicable, component response rates);
- A section displaying results for the top 10 positive and negative survey item results for the agency;
- A series of sections displaying scores and rankings along with scores for any components where applicable for:
  - Employee Engagement Index
  - Global Satisfaction Index
  - HCAAF Indices
  - A series of Decision Aid tables presenting all items that increased, decreased or did not change since the 2013 FEVS;
    - Two appendices that provide results for all items, benchmarked against the small agencies' highest and lowest results, and a listing of the participating agencies.

Employee Summary Feedback Reports (ESF)

A subset of the information that was included in the AMR and SAM was also included in a two-page summary for the agency level as well as the 1st level component. These employee summary feedback reports provided the following information:

- Employee Engagement Index results;
- Global Satisfaction Index results;
- Items with the largest increases and decreases in percent positive response since 2013, and;
- Telework status results.

Figure 2: Sample Agency-Level ESF Report (Front and Back, data are fake)



Subagency and Trend Reports

Subagency Reports

Each agency and their components subagencies (down to the 9th level subagency) also received separate reports showing the results for each item across the subagencies. These results included weighted percentage data for all survey questions and the unweighted demographic responses.

The subagency reports for each level (1st – 9th) included both a comparison and a breakout report. In previous years reports were only generated as far down as the 7th level, but in the goal to increase information at lower levels, in 2014 reports were generated to the 9th level, where applicable.

- The Comparison Reports provided 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 were dropped for simplicity.
- The Breakout Reports provided 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). In the reports for the 4th level subagency and lower, the higher level results (e.g., governmentwide, agency) were dropped for simplicity.

No reports were produced when a subagency had fewer than 10 respondents. Also, all DoD agencies were given their own report(s) as well as a DoD overall agency report.

Trend Reports

The trend reports also provided weighted results for each item and demographic, and showed the results from 2010-2014. This year the trend reports included whether or not there was a significant increase, decrease, or no change in positive percentages from the previous year. Arrows slanting up indicate a statistically significant increase, and arrows slanting down indicate a statistically significant decrease. Horizontal arrows indicate the change was not statistically significant. For example, in the row with the 2014 results, if the arrow was slanting up (↗), there was a significant increase in positive percentages from 2013 to 2014. If there were fewer than 30 respondents for a given year, the column showing the 'Difference from previous year' will show '--' to signify that no test was performed due to small sample size. Items 72 to 78 are on a different response scale and are not included in the significance testing. 2010 response percentages were shown to provide context for the significance test from 2011 (see Figure 3 for a sample report excerpt).

Figure 3: Sample Trend Report Excerpt (data are fake)

Agency X

Trend Report

Response Summary

	Surveys Completed
2014 Governmentwide	392,752
2014 Agency X	**9,653**
2013 Agency X	7,251
2012 Agency X	9,384
2011 Agency X	6,187
2010 Agency X	6,888

This 2014 Federal Employee Viewpoint Survey Report provides summary results for your department or agency. The results include response percentages for each survey item. The definitions for the Positive, Neutral, and Negative response percentages vary in the following ways across the three primary response scales used in the survey:

Positive: *Strongly Agree* and *Agree* / *Very Satisfied* and *Satisfied* / *Very Good* and *Good*

Neutral: *Neither Agree nor Disagree* / *Neither Satisfied nor Dissatisfied* / *Fair*

Negative: *Disagree* and *Strongly Disagree* / *Dissatisfied* and *Very Dissatisfied* / *Poor* and *Very Poor*

Positive, Neutral, and Negative percentages are based on the total number of responses (N) that are in these three categories. The number of *Do Not Know (DNK)* or *No Basis to Judge (NBJ)* responses, where applicable, is listed separately.

The last column indicates whether or not there was a significant increase, decrease, or no change in positive percentages from the previous year. Arrows slanting up indicate a statistically significant increase, and arrows slanting down indicate a statistically significant decrease. Horizontal arrows indicate the change was not statistically significant. For example, in the row with the 2014 results, if the arrow was slanting up ➚, there was a significant increase in positive percentages from 2013 to 2014.

Note: The report tables that follow do not include results for any year listed in the Response Summary table (above) that had fewer than 10 completed surveys. If there were fewer than 30 respondents for a given year, the column showing the 'Difference from previous year' will show '--' to signify that no test was performed due to small sample size. Items 72 to 78 are on a different response scale and are not included in the significance testing. 2010 response percentages are shown to provide context for the significance test from 2011.

My Work Experience

1. I am given a real opportunity to improve my skills in my organization.

	N	Positive	Neutral	Negative	Difference from previous year
2014 Governmentwide	391,977	59.1%	17.4%	23.5%	
2014 Agency X	**4,417**	**63.7%**	**16.1%**	**20.2%**	➘
2013 Agency X	6,561	65.3%	15.7%	18.9%	➘
2012 Agency X	9,212	68.8%	14.8%	16.4%	➔
2011 Agency X	7,743	68.7%	14.9%	16.3%	➘
2010 Agency X	9,346	70.4%	14.5%	15.1%	

2014 Federal Employee Viewpoint Survey Page 1 of 1

Agency-Specific Item Reports

In 2014, 52 agencies administered items that were specific to their agency in addition to the core survey item. These agencies received separate agency specific item reports. There were four general types of agency specific item reports:

Agency-Specific Question Reports

These reports provided the counts and the percent of respondents answering each response option for all agency specific questions.

Area of Emphasis Reports

These reports provided the counts and the percent positive, negative, and neutral for each survey item by each area of emphasis in the agency.

Occupation Reports

These reports provided the counts and the percent positive, negative, and neutral for each survey item at the agency level for the

1st level occupation category in the agency

2nd level occupation category in the agency

Agency-Specific Work Location Reports

These reports provided the counts and the percent positive, negative, and neutral for each survey item by work location in the agency.

The counts were all unweighted and the percentages were weighted for non-demographic type items only.

Demographic Comparison Reports

The demographic comparison reports were new to the 2014 FEVS administration. It provided item level results by demographic characteristics for each of the 56 agencies that answered the demographic section of the survey. The results included weighted percentage data for all survey questions by the 16 demographic variables:

- Work Location
- Supervisory Status
- Gender
- Ethnicity
- Race
- Education Level
- Pay Category
- Federal Tenure
- Agency Tenure
- Retirement Plans
- Turnover Intentions
- Sexual Orientation
- Military Service Status
- Disability Status
- Age Group
- Generations

Note: For the demographic reports, several suppression rules applied for confidentiality reasons.

- If there were fewer than 10 respondents in a demographic response category, the results by item for that demographic category were suppressed.
- If there were fewer than 10 respondents for a demographic response category for any given item, the results for that item and that category were suppressed.

- If there would be only one demographic category (e.g., Female) with data for all the survey items based on the suppression rules, the report was not generated.
- For the sexual orientation report only, there also needed to be at least 30 respondents in the agency in order for the report to be produced. And if there were fewer than 10 respondents in the LGBT category, the report was not generated.

Web Reports and Tables

OPM posted other reports to the FEVS public website. This website provides the Governmentwide reports, response percentages by question, response rates for each agency, trend analyses from 2012, 2013, and 2014, results for the AES items, and a series of demographic comparison results.

Governmentwide Web Reports

The Governmentwide Web reports showed the number and percentage of respondents who chose each response option to each survey item. The reports presented both weighted and unweighted FEVS results. The reports also showed governmentwide responses by the demographic variables. The Web reports allowed users to view the results of statistical significance tests demonstrating nonrandom or significant differences between demographic groups. The following web reports were generated:

- Unweighted results of the survey
    - Governmentwide response percentages by item
    - Response rates for each agency
- Weighted results of the survey
    - Overall Results and Comparisons
        - Governmentwide response percentages by item
        - Items rank ordered by positive responses
        - Trend analysis (2012 vs. 2013 vs. 2014)
        - Annual Employee Survey items
    - Demographic Results
        - Age group comparison (%) by item
        - Gender comparison (%) by item
        - Hispanic comparison (%) by item
        - Race group comparison (%) by item
        - Location comparison (%) by item
        - Supervisory status group comparison (%) by item
        - Disability status comparison (%) by item
        - Military veteran status comparison (%) by item
        - Highest education level (%) by item

Delivery of 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 4.

Figure 4: FEVS Online Analysis and Reporting Tool—Main Menu

Governmentwide Reports

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

- Governmentwide Management Report
- Report by Agency
- Report by Demographics
- Unweighted Report by Demographic Questions by Agency
- 2014 FEVS Results Infographic
- 2014 FEVS Millennials Infographic
- 2014 FEVS Millennials Report
- 2014 FEVS Education Report
- 2014 FEVS Education Infographic

Agency Level Reports

Users were able to view/download their agency level reports. These included the

- Annual Employee Survey (AES) reports,
- Agency Management Report (AMR), or Small Agency Management (SAM) Report,
- Agency Employee Summary Feedback (ESF) Report, and
- Agency Trend Report.

All agency level reports except the AES and Trend Report were 508 compliant.

Demographic Comparison Reports

For the 56 agencies that answered the demographic section of the survey, users were able to view/download, in PDF format, the different types of demographic comparison reports available to them.

1st Level Reports

Users were able to drill down and view/download, in PDF format, for any 1st level subagency reports provided. These included the:

- 1st Level Employee Summary Feedback (ESF) Report (508 compliant),
- 1st Level Response Rate Report,
- 1st Level Subagency Comparison and Breakout Reports, and
- 1st Level Trend Reports.

Lower Level Reports

Users were able to drill down and view/download, in PDF format, any applicable 2nd -9th level subagency comparison, breakout, and response rate reports.

Agency-Specific Item Reports

For the 52 agencies that added agency-specific items to the end of the core FEVS, users were able to view/download, in PDF format, the different types of agency specific item reports. If an agency did not have any agency-specific items, this option did not show on the menu.

Preconfigured Reports

Users were able to manually configure many of the preceding agency reports to several formats, including PDF, Excel, HTML, and RTF. These included 1st–9th level response rate reports, 1st–9th level subagency comparison and breakout reports, agency and1st level trend reports, and agency and 1st level occupational series reports. Users were also able to create reports of the indices in the 2014 FEVS: Employee Engagement, Global Satisfaction, the New IQ index, and HCAAF Indices. Two new preconfigured reports were added in 2014:

- **Occupational Series Reports –** Users were able to generate a report of the results for all occupational series in their agency or 1st level subagency that had at least 10 respondents.
- **Employee Engagement All Levels Reports –** Users were able to output the Employee Engagement Index scores for all levels (1st–9th) where applicable in a formatted Excel only format.

Cart

Similar to online shopping carts, this feature allowed 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

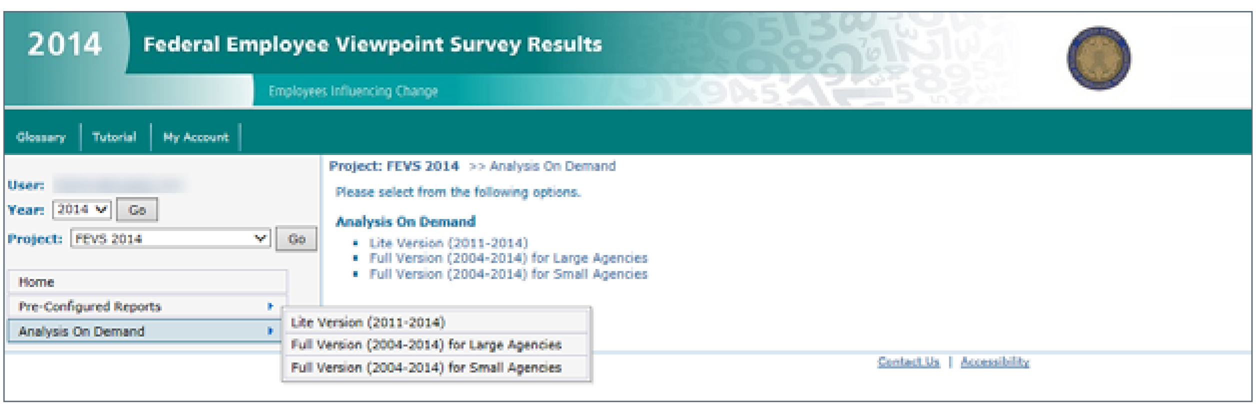
This feature allowed users to subset the data by year, select variables from a list and produce simple frequency distributions, two-way tables (cross-tabulation), three-way tables, and trend analysis, for the survey items of interest. Starting in 2013, users were able to access two versions of Analysis on Demand: Lite and Full. Figure 5 provides the main menu for this feature.

- The Lite Version provides the most recent three years of survey data and does not allow statistical difference testing. However, this version is appropriate for users requesting descriptive statistics and who want quick runs.
- The Full Version provides all years of survey data (starting in 2004) and allows those in larger organizations to request statistical tests (e.g., t-tests), confidence intervals, and chi-square statistics.

In both versions, there is a Benchmark feature that allows users to compare results to the entire dataset or specific agencies. Users were able to tailor the type of analysis to their interests and download the analysis output.

In 2014, a new feature was added which allows the user to create charts from results in Analysis on Demand. Users were able to select various chart type (bar, pie, donut, line, and area), chart size, color palette, and data cells. Users could also specify whether or not to show the data values within the chart.

Figure 5: FEVS Online Analysis and Reporting Tool—Analysis on Demand Main Menu Lite and Full Version Options



Account Access

All agency level and 1st level points of contacts and users were carried over from 2013 and provided access to 2014 data. POCs had 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 his/her 1st level subagency, the agency as a whole, and governmentwide results.

Summary of Quality Control Process

In order to ensure the highest accuracy and validity of the data, each number within each report goes through several levels of quality control (QC). The first level of QC for the reports was the electronic quality control with the use of SAS. Two programmers created the numbers independently and electronically compared the numbers to ensure they matched. The second level of QC was performed by staff members who compare the input (SAS-produced results) to the output (the actual report with the data incorporated into it). Each type of report has a streamlined process for quality control checks to ensure the highest level of accuracy.

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Appendix A

Appendix A: Sampling Rates by Agency

Agency	Population	Sample Size	Portion Sampled/ Sampling Rate	Census (Yes or No)
Presidential Management Council Agencies				
Department of Defense	637,573	222,506	34.9%	N
United States Army Corps of Engineers	31,017	8,178	26.4%	N
United States Department of the Air Force	140,733	65,095	46.3%	N
United States Department of the Army	185,795	56,133	30.2%	N
United States Department of the Navy	169,459	55,208	32.6%	N
United States Marine Corps	19,100	5,384	28.2%	N
OSD, Joint Staff, Defense Agencies, and Field Activities	91,469	32,508	35.5%	N
Department of Agriculture	74,805	30,846	41.2%	N
Department of Commerce	37,824	17,844	47.2%	N
Department of Education	3,940	3,940	100.0%	Y
Department of Energy	13,390	13,390	100.0%	Y
Department of Health and Human Services	73,821	73,821	100.0%	Y
Department of Homeland Security	181,673	95,957	52.8%	N
Department of Housing and Urban Development	7,926	7,926	100.0%	Y
Department of Justice	113,219	44,097	38.9%	N
Department of Labor	15,829	15,829	100.0%	Y
Department of State	23,535	7,895	33.5%	N
Department of Transportation	54,266	24,153	44.5%	N
Department of Veterans Affairs	315,363	88,166	28.0%	N
Department of the Interior	51,691	36,093	69.8%	N
Department of the Treasury	90,543	90,543	100.0%	Y
Environmental Protection Agency	15,872	7,630	48.1%	N

Agency	Population	Sample Size	Portion Sampled/ Sampling Rate	Census (Yes or No)
Presidential Management Council Agencies (cont'd)				
General Services Administration	11,618	11,618	100.0%	Y
National Aeronautics and Space Administration	17,754	17,754	100.0%	Y
National Science Foundation	1,259	1,259	100.0%	Y
Office of Management and Budget	417	417	100.0%	Y
Office of Personnel Management	5,188	5,188	100.0%	Y
Small Business Administration	2,368	2,368	100.0%	Y
Social Security Administration	60,466	17,933	29.7%	N
U.S. Agency for International Development	3,780	3,780	100.0%	Y
Large Agencies				
Broadcasting Board of Governors	1,551	1,551	100.0%	Y
Court Services and Offender Supervision Agency	1,206	1,206	100.0%	Y
Equal Employment Opportunity Commission	2,130	2,130	100.0%	Y
Federal Communications Commission	1,691	1,691	100.0%	Y
Federal Energy Regulatory Commission	1,419	1,419	100.0%	Y
Federal Trade Commission	1,079	1,079	100.0%	Y
National Archives and Records Administration	2,592	2,592	100.0%	Y
National Credit Union Administration	1,237	1,237	100.0%	Y
National Labor Relations Board	1,560	1,560	100.0%	Y
Nuclear Regulatory Commission	3,695	3,695	100.0%	Y
Pension Benefit Guaranty Corporation	921	921	100.0%	Y
Railroad Retirement Board	903	903	100.0%	Y
Securities and Exchange Commission	3,986	3,986	100.0%	Y

Appendix A: Sampling Rates by Agency (cont'd)

Agency	Population	Sample Size	Portion Sampled/ Sampling Rate	Census (Yes or No)
Small Agencies				
Advisory Council on Historic Preservation	34	34	100.0%	Y
African Development Foundation	26	26	100.0%	Y
American Battle Monuments Commission	60	60	100.0%	Y
Chemical Safety and Hazard Investigation Board	36	36	100.0%	Y
Commission on Civil Rights	25	25	100.0%	Y
Committee for Purchase From People Who Are Blind or Severely Disabled	26	26	100.0%	Y
Commodity Futures Trading Commission	656	656	100.0%	Y
Consumer Product Safety Commission	494	494	100.0%	Y
Corporation for National and Community Service	630	630	100.0%	Y
Defense Nuclear Facilities Safety Board	105	105	100.0%	Y
Export-Import Bank of the United States	396	396	100.0%	Y
Farm Credit System Insurance Corporation	10	10	100.0%	Y
Federal Election Commission	322	322	100.0%	Y
Federal Housing Finance Agency	584	584	100.0%	Y
Federal Labor Relations Authority	113	113	100.0%	Y
Federal Maritime Commission	112	112	100.0%	Y
Federal Mediation and Conciliation Service	232	232	100.0%	Y
Federal Retirement Thrift Investment Board	162	162	100.0%	Y
Institute of Museum and Library Services	62	62	100.0%	Y
Inter-American Foundation	39	39	100.0%	Y
International Boundary and Water Commission	238	238	100.0%	Y
Marine Mammal Commission	10	10	100.0%	Y
Merit Systems Protection Board	188	188	100.0%	Y
National Capital Planning Commission	34	34	100.0%	Y

Appendix A: Sampling Rates by Agency (cont'd)

Agency	Population	Sample Size	Portion Sampled/ Sampling Rate	Census (Yes or No)
Small Agencies (cont'd)				
National Council on Disability	8	8	100.0%	Y
National Endowment for the Arts	134	134	100.0%	Y
National Endowment for the Humanities	128	128	100.0%	Y
National Gallery of Art	793	793	100.0%	Y
National Indian Gaming Commission	96	96	100.0%	Y
National Mediation Board	43	43	100.0%	Y
National Transportation Safety Board	396	396	100.0%	Y
Nuclear Waste Technical Review Board	10	10	100.0%	Y
Occupational Safety and Health Review Commission	53	53	100.0%	Y
Office of Navajo and Hopi Indian Relocation	36	36	100.0%	Y
Office of the U.S. Trade Representative	181	181	100.0%	Y
Overseas Private Investment Corporation	199	199	100.0%	Y
Postal Regulatory Commission	61	61	100.0%	Y
Selective Service System	120	120	100.0%	Y
Surface Transportation Board	131	131	100.0%	Y
U.S. Access Board	29	29	100.0%	Y
U.S. International Trade Commission	315	315	100.0%	Y
U.S. Office of Government Ethics	63	63	100.0%	Y
U.S. Office of Special Counsel	104	104	100.0%	Y
U.S. Trade and Development Agency	43	43	100.0%	Y
Woodrow Wilson International Center for Scholars	35	35	100.0%	Y
Total	**1,845,662**	**872,495**	**47.3%**	**--**

Appendix B: 2014 Federal Employee Viewpoint Survey Instrument

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
My Work Experience					
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. I feel encouraged to come up with new and better ways of doing things.	☐	☐	☐	☐	☐
4. My work gives me a feeling of personal accomplishment.	☐	☐	☐	☐	☐
5. I like the kind of work I do.	☐	☐	☐	☐	☐
6. 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.	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
9. I have sufficient resources (for example, people, materials, budget) to get my job done.	☐	☐	☐	☐	☐	☐
10. My workload is reasonable.	☐	☐	☐	☐	☐	☐
11. My talents are used well in the workplace.	☐	☐	☐	☐	☐	☐
12. I know how my work relates to the agency's goals and priorities.	☐	☐	☐	☐	☐	☐
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.	☐	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
17. I can disclose a suspected violation of any law, rule or regulation without fear of reprisal.	☐	☐	☐	☐	☐	☐
18. My training needs are assessed.	☐	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Basis to Judge
19. In my most recent performance appraisal, I understood what I had to do to be rated at different performance levels (for example, Fully Successful, Outstanding).	☐	☐	☐	☐	☐	☐

My Work Unit

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
20. The people I work with cooperate to get the job done.	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
21. My work unit is able to recruit people with the right skills.	☐	☐	☐	☐	☐	☐
22. Promotions in my work unit are based on merit.	☐	☐	☐	☐	☐	☐
23. In my work unit, steps are taken to deal with a poor performer who cannot or will not improve.	☐	☐	☐	☐	☐	☐
24. 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.	☐	☐	☐	☐	☐	☐
27. The skill level in my work unit has improved in the past year.	☐	☐	☐	☐	☐	☐

	Very Good	Good	Fair	Poor	Very Poor
28. How would you rate the overall quality of work done by your work unit?					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
29. The workforce 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. 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. 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 (for example, illegally discriminating for or against any employee/applicant, obstructing a person's right to compete for employment, knowingly violating veterans' preference requirements) are not tolerated.						
39. My agency is successful at accomplishing its mission.						

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
40. I recommend my organization as a good place to work.					

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
41. I believe the results of this survey will be used to make my agency a better place to work.	☐	☐	☐	☐	☐	☐
My Supervisor						
42. My supervisor supports my need to balance work and other life issues.	☐	☐	☐	☐	☐	☐
43. My supervisor provides me with opportunities to demonstrate my leadership skills.	☐	☐	☐	☐	☐	☐
44. Discussions with my supervisor about my performance are worthwhile.	☐	☐	☐	☐	☐	☐
45. 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. Supervisors in my work unit support employee development.	☐	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
48. My supervisor listens to what I have to say.	☐	☐	☐	☐	☐
49. My supervisor treats me with respect.	☐	☐	☐	☐	☐
50. In the last six months, my supervisor has talked with me about my performance.	☐	☐	☐	☐	☐
51. I have trust and confidence in my supervisor.	☐	☐	☐	☐	☐

	Very Good	Good	Fair	Poor	Very Poor
52. Overall, how good a job do you feel is being done by your immediate supervisor?	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
Leadership						
53. In my organization, senior leaders generate high levels of motivation and commitment in the workforce.	☐	☐	☐	☐	☐	☐
54. My organization's senior leaders maintain high standards of honesty and integrity.	☐	☐	☐	☐	☐	☐
55. Supervisors work well with employees of different backgrounds.	☐	☐	☐	☐	☐	☐
56. Managers communicate the goals and priorities of the organization.	☐	☐	☐	☐	☐	☐
57. Managers review and evaluate the organization's progress toward meeting its goals and objectives.	☐	☐	☐	☐	☐	☐
58. 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.	☐	☐	☐	☐	☐	☐

	Very Good	Good	Fair	Poor	Very Poor
60. Overall, how good a job do you feel is being done by the manager directly above your immediate supervisor?	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Do Not Know
61. I have a high level of respect for my organization's senior leaders.	☐	☐	☐	☐	☐	☐
62. Senior leaders demonstrate support for Work/Life programs.	☐	☐	☐	☐	☐	☐

	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
My Satisfaction					
63. How satisfied are you with your involvement in decisions that affect your work?	☐	☐	☐	☐	☐
64. How satisfied are you with the information you receive from management on what's going on in your organization?	☐	☐	☐	☐	☐
65. How satisfied are you with the recognition you receive for doing a good job?	☐	☐	☐	☐	☐

	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
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. Considering everything, how satisfied are you with your job?	☐	☐	☐	☐	☐
70. Considering everything, how satisfied are you with your pay?	☐	☐	☐	☐	☐
71. Considering everything, how satisfied are you with your organization?	☐	☐	☐	☐	☐

Work/Life

72. Have you been notified whether or not you are eligible to telework?

- ☐ Yes, I was notified that I was eligible to telework.
- ☐ Yes, I was notified that I was not eligible to telework.
- ☐ No, I was not notified of my telework eligibility.
- ☐ Not sure if I was notified of my telework eligibility.

73. Please select the response below that BEST describes your current teleworking situation.

- ☐ I telework 3 or more days per week.
- ☐ I telework 1 or 2 days per week.
- ☐ I telework, but no more than 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, Park Rangers, Security Personnel).
- ☐ I do not telework because I have 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.

	Yes	No	Not Available to Me
74-78. Do you participate in the following Work/Life programs?			
74. Alternative Work Schedules (AWS)	☐	☐	☐
75. Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs)	☐	☐	☐
76. Employee Assistance Program (EAP)	☐	☐	☐
77. Child Care Programs (for example, daycare, parenting classes, parenting support groups)	☐	☐	☐
78. Elder Care Programs (for example, support groups, speakers)	☐	☐	☐

	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	No Basis to Judge
79-84. How satisfied are you with the following Work/Life programs in your agency?						
79. Telework	☐	☐	☐	☐	☐	☐
80. Alternative Work Schedules (AWS)	☐	☐	☐	☐	☐	☐
81. Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs)	☐	☐	☐	☐	☐	☐
82. Employee Assistance Program (EAP)	☐	☐	☐	☐	☐	☐
83. Child Care Programs (for example, daycare, parenting classes, parenting support groups)	☐	☐	☐	☐	☐	☐
84. Elder Care Programs (for example, support groups, speakers)	☐	☐	☐	☐	☐	☐

85. Where do you work?

- ☐ Headquarters
- ☐ Field

86. What is your supervisory status?

- ☐ Non-Supervisor: You do not supervise other employees.
- ☐ 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.
- ☐ Supervisor: You are a first-line supervisor who is responsible for employees› performance appraisals and leave approval.
- ☐ Manager: You are in a management position and supervise one or more supervisors.
- ☐ 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.

87. Are you:

- ☐ Male
- ☐ Female

88. Are you Hispanic or Latino?

- ☐ Yes
- ☐ No

89. Please select the racial category or categories with which you most closely identify (mark as many as apply).

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White

90. What is the highest degree or level of education you have completed?

- ☐ Less than High School
- ☐ High School Diploma/GED or equivalent
- ☐ Trade or Technical Certificate
- ☐ Some College (no degree)
- ☐ Associate's 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, JD)

91. What is your pay category/grade?

- ☐ Federal Wage System (for example, WB, WD, WG, WL, WM, WS, WY)
- ☐ GS 1-6
- ☐ GS 7-12
- ☐ GS 13-15
- ☐ Senior Executive Service
- ☐ Senior Level (SL) or Scientific or Professional (ST)
- ☐ Other

91. What is your pay category/grade?

- ☐ Federal Wage System (for example, WB, WD, WG, WL, WM, WS, WY)
- ☐ GS 1-6
- ☐ GS 7-12
- ☐ GS 13-15
- ☐ Senior Executive Service
- ☐ Senior Level (SL) or Scientific or Professional (ST)
- ☐ Other

92. How long have you been with the Federal Government (excluding military service)?

- ☐ Less than 1 year
- ☐ 1 to 3 years
- ☐ 4 to 5 years
- ☐ 6 to 10 years
- ☐ 11 to 14 years
- ☐ 15 to 20 years
- ☐ More than 20 years

93. How long have you been with your current agency (for example, Department of Justice, Environmental Protection Agency)?

- ☐ Less than 1 year
- ☐ 1 to 3 years
- ☐ 4 to 5 years
- ☐ 6 to 10 years
- ☐ 11 to 20 years
- ☐ More than 20 years

94. 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

95. I am planning to retire:

- ☐ Within one year
- ☐ Between one and three years
- ☐ Between three and five years
- ☐ Five or more years

96. Do you consider yourself to be one or more of the following? (mark as many as apply).

- ☐ Heterosexual or Straight
- ☐ Gay or Lesbian
- ☐ Bisexual
- ☐ Transgender
- ☐ I prefer not to say

97. What is your US military service status?

- ☐ No Prior Military Service
- ☐ Currently in National Guard or Reserves
- ☐ Retired
- ☐ Separated or Discharged

98. Are you an individual with a disability?

- ☐ Yes
- ☐ No

Appendix C: Sample Email Invitation

Invitation Email

Subject: 2014 Federal Employee Viewpoint Survey

2014 Federal Employee Viewpoint Survey: Employees Influencing Change

We would really appreciate your input on the Federal Employee Viewpoint Survey (FEVS). One of the biggest challenges for agency leadership is identifying which aspects of the organization to focus on improving, and your responses will help them to focus on the areas most in need of change. This process can be particularly challenging during difficult years, like this past one.

This survey allows you to voice your opinions about several critical aspects of your job in a safe and confidential way. Please take the time to complete the FEVS and help guide your agency's decision making in the coming years.

Click Here to Access Your Survey:

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

If the link does not take you directly to the survey, copy and paste the following into a browser window:

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Please DO NOT forward this e-mail, as it contains your personalized link to the survey. Answering the questions will take about 25 minutes, and you may use official time. While participation is voluntary, we hope you will respond. Your individual responses are confidential.

Reply to this message if you have any questions or difficulties accessing the survey, or call our Survey Support Center toll free at: 1-855-OPM-FEVS (1-855-676-3387).

Thank you for taking the time to complete the survey.

Appendix D: Weighting of the Survey Data

Base Weights

The base weight for a sampled employee in the FEVS is defined as the reciprocal of the employee's probability of selection into the sample. As noted in the main report, the sample frame for each agency was a list of all employees in the agency who were eligible for the survey. Within each major agency frame, employees were grouped (stratified) by the lowest desired work unit and by executive status (see Sample Design section of main report). The total number of resulting subgroups (strata) created by the stratification was 26,299, with H=26,299 representing the total number of subgroups and h indexing a particular subgroup. Thus, there were H non-overlapping groups consisting of N_h employees in each subgroup so that

$$N = \sum_{h=1}^{H} N_h$$

where N is the total frame count—that is, the number of employees listed in the agency sample frame.

Within each subgroup a random sample was selected without replacement. The probability of selection varied by subgroup to ensure adequate representation of subgroup members in the sample. Given this design, the base weight for the i^{th} sample employee in subgroup h was calculated as:

$$w_{hi} = \frac{N_h}{n_h}$$

where n_h is the sample size for the h^{th} subgroup and N_h is the frame count for the h^{th} subgroup.

For each employee classified in subgroup h, the base weight is the ratio of the total number of employees in the subgroup to the subgroup sample size (equals the inverse of the probability of selection). The base weight is attached to each sample unit (employee) in the data file. Note that n_h is the number of employees initially sampled in subgroup h—all sample members, not just survey responders, receive a base weight.

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. The base weights were adjusted to reduce bias in survey estimates that occurs when the respondent population and the survey population no longer match on important characteristics. In other words, the adjustments are generally used to increase the base weights of respondents to account for nonrespondents.

Nonresponse adjustments were calculated separately for each agency. Within each agency, weighting cells were constructed to group respondents and nonrespondents with similar characteristics into the same cells for adjustment. The variables used to form the weighting cells included 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 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. Since that time (i.e., for the 2008, 2010, 2011, 2012, 2013, and 2014 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. Search is a freeware product, available at the following website: http://www.isr.umich.edu/src/smp/search/. The advantage of the use of the chi algorithm in Search instead of using CHAID is that, unlike CHAID, Search is callable from SAS. Thus, it was not necessary to reformat the data into non-SAS files or to convert results back into a SAS format.

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

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:

where $\sum_{i \in ER_c} w_i$ is the sum of base weights for eligible respondents in weighting cell c, $\sum_{i \in ENR_c} w_i$ is the sum of base weights for eligible nonrespondents 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 nonrespondents of unknown eligibility in weighting cell c. The first adjustment factor was used to distribute the base weights of nonrespondents 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 E). This was achieved by multiplying the base weights of eligible respondents, known ineligibles, and nonrespondents known to be eligible by the first adjustment factor and setting the final weight of the nonrespondents of unknown eligibility to zero.

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

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

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 nonrespondents of known eligibility to the eligible respondents. The statisticians refer to this type of adjustment as a Type 1B adjustment. (See Appendix E.) 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 nonrespondents of known eligibility to zero. Thus, the nonresponse adjusted weights were $w_i^{nr} = f_c^{1,nr} * w_i$ for known ineligibles and $w_i^{nr} = f_c^{1\,nr} f_c^{2,nr} * w_i$ 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 FEVS sample population. For this third adjustment step, the sample file was subset to include only eligible respondents and known ineligibles.

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 five 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, 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 ith respondent was computed as:

$$\tilde{w}_i^R = \tilde{f}_i^R w_i^{nr}, \; i \in s_g$$

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 respondent weights 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 2010–2014 administrations, full-sample weights and Taylor linearization were still used for all analyses, except *replicate weights* were used for agency and Governmentwide trend analyses. 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*. Replicate weights are calculated by assigning responding cases to groups based on the sampling strata. Each set of replicate weights corresponds to deleting one group and then recalculating the weights based on the remaining groups. The nonresponse and calibration adjustments for the 2010-2014 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 sampling variability.

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 D1 shows how the population is partitioned into five strata, and strata 4 and 5 are combined. In each of the resulting four strata, the target number of completed cases is 950. The rightmost column of Table D1 contains the base weights by stratum. For example the base weight for stratum 1 is 13,470 / 950=14.179.

Table D1: Population Counts, Sample Sizes, Selection Probabilities, and Base Weights

Stratum	Population Count	Sample Size	Selection Probability	Base Weight
1	13,470	950	0.071	14.179
2	12,300	950	0.077	12.947
3	22,980	950	0.041	24.189
4	450			
4/5	1,250	950	0.760	1.316
5	800			
Total	50,000	3,800		
			950/13,470	13,470/950

Table D2 contains the number of respondents by strata and the associated response rates. The rightmost column of Table D2 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 400*14.179 = 5,672. However, this is not close to the stratum population size of 13,470 for stratum 1 shown in Table D1. 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 D2: Sample, Respondents, Response Rates, and Base Weighted Totals

Stratum	Sample Size	Number of Respondents	Response Rate	Base Weight Total for Respondents
1	950	400	0.421	5,672
2	950	350	0.368	4,532
3	950	380	0.400	9,192
4/5	950	410	0.432	539
Total	3,800	1,540	0.405	19,935
				400*14.179

One of the sampling-frame variables contains location information—that is, headquarters or field—about each case. Table D3 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 nonrespondents. The base weights are then multiplied by the adjustment factors, yielding the nonresponse-adjusted weights shown in Table D4.

Table D3: Response Rates by Location

Location	Number of Respondents	Response Rate	Nonresponse Adjustment Factor
Headquarters	952	0.500	2.000
Field	588	0.310	3.226
Total	1,540	0.405	1/0.310

Table D4: Nonresponse Adjusted Weights

		Adjustment Factor		Adjusted Weight	
Stratum	Base Weight	HQ	Field	HQ	Field
1	14.179	2.000	3.226	28.358	45.741
2	12.947	2.000	3.226	25.895	41.768
3	24.189	2.000	3.226	48.379	78.035
4/5	1.316	2.000	3.226	2.632	4.245

In Table D5, 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 D5 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 D5: 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	305	8,649	7,880
1	Field	95	4,345	5,590
Total for 1		400	12,995	13,470
2	HQ	130	3,366	3,752
2	Field	220	9,189	8,548
Total for 2		350	12,555	12,300
3	HQ	217	10,498	10,915
3	Field	163	12,720	12,065
Total for 3		380	23,218	22,980
4/5	HQ	299	787	800
4/5	Field	111	471	450
Total for 4/5		410	1,258	1,250
Grand Totals		1,540	50,026	50,000
		299*2.632		

Table D6 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 D6: Raking of Weights Using Stratum and Sex as Ranking Dimensions

Iteration 1

Stratum	Weighted Count	Population Count	Raking Factor
1	12,995	13,470	1.037
2	12,555	12,300	0.980
3	23,218	22,980	0.990
4/5	1,258	1,250	0.994
Total	50,026	50,000	

13,470/12,995

Multiply weights by raking factors to get new weights and produce distribution by sex.

Sex	Weighted Count	Population Count	Raking Factor
Male	21,900	23,500	1.073
Female	27,000	26,500	0.981
Total	48,900	50,000	

Calculate new weights using raking factors and produce distribution by group.

Iteration 2

Stratum	Weighted Count	Population Count	Raking Factor
1	13,520	13,470	0.996
2	12,250	12,300	1.004
3	23,150	22,980	0.993
4/5	1,248	1,250	1.002
Total	50,168	50,000	

Sex	Weighted Count	Population Count	Raking 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.

Reference

Kass, G. V. (1980). An exploratory technique for investigating large quantities of categorical data. Applied Statistics 29 (2), 119–127.

Appendix E: Illustration of Weight Adjustment Operations

Status Variables

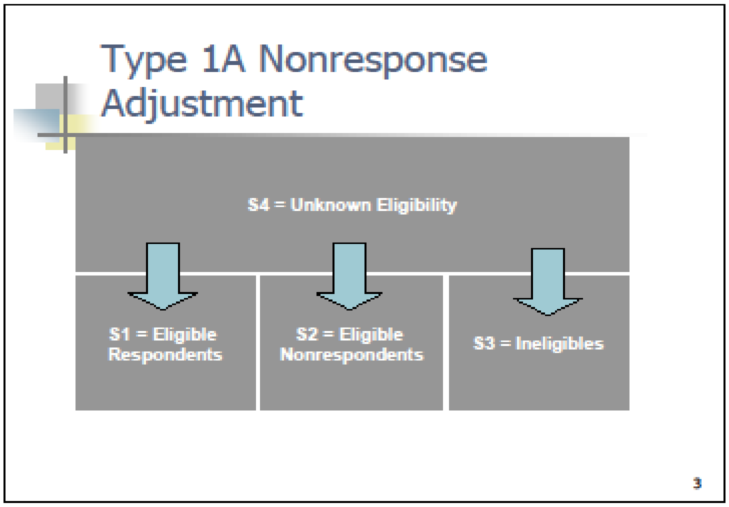
STATUS	DESCRIPTION
0	Case where the initial weight should not be changed
1	Eligible respondents
2	Eligible nonrespondents
3	Ineligible
4	Unknown eligibility status

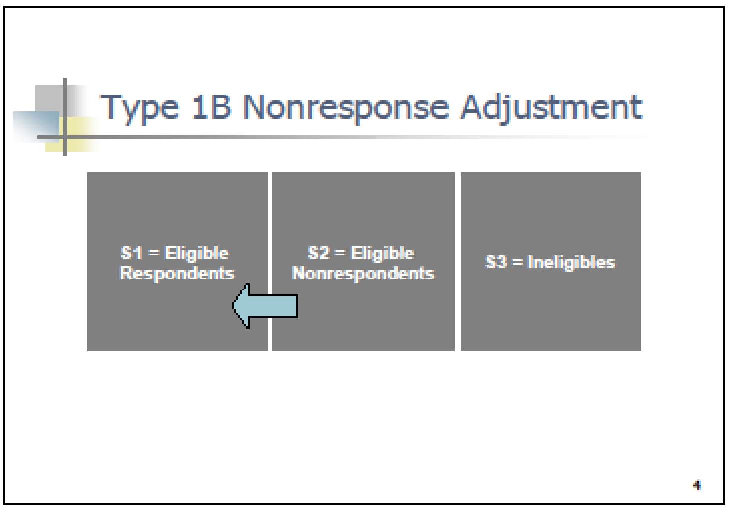
1

Type 1A/1B Nonresponse Adjustment

$S_1 = \Sigma wgt_{status=1}$	Eligible Respondents
$S_2 = \Sigma wgt_{status=2}$	Eligible Nonrespondents
$S_3 = \Sigma wgt_{status=3}$	Ineligible
$S_4 = \Sigma wgt_{status=4}$	Unknown (nonrespondents)

2


Type 1A Nonresponse Adjustment
S4 = Unknown Eligibility
S1 = Eligible Respondents
S2 = Eligible Nonrespondents
S3 = Ineligibles
3


Type 1B Nonresponse Adjustment
S1 = Eligible Respondents
S2 = Eligible Nonrespondents
S3 = Ineligibles
4

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