



Audit of the NRC's Strategic Workforce Planning Process

OIG-22-A-13
September 26, 2022



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MEMORANDUM

DATE: September 26, 2022

TO: Daniel H. Dorman
Executive Director for Operations

FROM: Hruta Virkar /*RA*/
Assistant Inspector General for Audits

SUBJECT: AUDIT OF THE NRC'S STRATEGIC WORKFORCE PLANNING
PROCESS (OIG-22-A-13)

Attached is the Office of the Inspector General's (OIG) audit report titled *Audit of the NRC's Strategic Workforce Planning Process*.

The report presents the results of the subject audit. Following the September 13, 2022, exit conference, NRC staff indicated that they had no formal comments for inclusion in this report.

Please provide information on actions taken or planned on each of the recommendations within 30 days of the date of this memorandum.

We appreciate the cooperation extended to us by members of your staff during the audit. If you have any questions or comments about our report, please contact me at (301) 415-5915 or Paul Rades, Acting Team Leader, at (301) 415-6228.

Attachment: As stated

cc: M. Bailey, OEDO
J. Jolicoeur, OEDO



Results in Brief

Why We Did This Review

The U.S. Nuclear Regulatory Commission (NRC) Office of the Inspector General (OIG) conducted this audit for several reasons: (1) strategic human capital management has been a governmentwide high risk area since 2019; (2) the OIG identified Strategic Workforce Planning (SWP) as one of the NRC's most serious management challenges since 2019; and, (3) SWP and strategic human capital management issues have been discussed in previous NRC OIG and U.S. Government Accountability Office audits.

The NRC established an agencywide SWP process that addresses two critical needs: (1) aligning the agency's human capital program with its current and emerging mission and programmatic goals; and, (2) developing long-term strategies for acquiring, developing, and retaining staff to achieve programmatic goals.

After piloting a phased SWP approach, the NRC implemented the annual, agencywide, Enhanced SWP process to help the agency plan for its workforce needs five years beyond the current fiscal year.

The objective of this audit was to assess the effectiveness of the NRC's SWP process.

Audit of the NRC's Strategic Workforce Planning Process

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What We Found

The NRC's SWP process effectiveness can be optimized. Specifically, the Enhanced SWP process needs consistent and complete information, and timely human capital planning.

The Enhanced SWP Process Information Could be More Consistent and Complete

The NRC does not use consistent workforce analysis and complete attrition rate information in the Enhanced SWP process. This occurs because the *Enhanced Strategic Workforce Planning: Office Director and Regional Administrator Guidance* lacks the level of specific detail required by staff for SWP analysis. As a result, Enhanced SWP information is rendered less reliable for informed decision making.

There Was No Human Capital Operating Plan for Over a Year

The Office of the Chief Human Capital Officer did not have a Human Capital Operating Plan (HCOP) for over a year, although federal regulations, guidance, and instructions required a valid and promptly updated HCOP. There was no HCOP for this time period because agency policy and procedures do not address the HCOP. Consequently, the NRC's hiring and training workforce strategies were less effective.

What We Recommend

This report makes three recommendations to update NRC guidance for managing the Enhanced SWP process.

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ABBREVIATIONS AND ACRONYMS

| | |
|--------|---|
| C.F.R. | Code of Federal Regulations |
| CHCO | Chief Human Capital Officer |
| FY | Fiscal Year |
| GAO | U.S. Government Accountability Office |
| GPRAMA | GPRA [Government Performance Results Act] Modernization Act of 2010 |
| HCOP | Human Capital Operating Plan |
| NRC | U.S. Nuclear Regulatory Commission |
| OCHCO | Office of the Chief Human Capital Officer |
| OEDO | Office of the Executive Director for Operations |
| OIG | Office of the Inspector General |
| OMB | U.S. Office of Management and Budget |
| OPM | U.S. Office of Personnel Management |
| SWP | Strategic Workforce Planning |

I. BACKGROUND

Strategic Workforce Planning (SWP), also called human capital planning, is the development of long-term strategies for acquiring, developing, and retaining an organization's total workforce to meet the needs of the future. SWP aligns an organization's human capital program with its current and emerging mission and programmatic goals. SWP aids in the development of long-term strategies for acquiring, developing, and retaining staff to achieve programmatic goals.

Laws, Regulations, and Federal Instructions

The U.S. Nuclear Regulatory Commission (NRC) created its SWP process from the human capital requirements stipulated in laws, regulations, and federal instructions, which provide an integrated approach to strategic human capital management.

Laws

Public Law 107-296, Title 13, Subtitle A, *Chief Human Capital Officers Act of 2002* (CHCO Act), tasks Chief Human Capital Officers (CHCOs) with aligning an agency's human resources policies and programs with the agency mission, strategic goals, and performance outcomes. In addition, Public Law 111-352, *GPRAMA* [Government Performance Results Act] *Modernization Act of 2010* (GPRAMA) requires federal agencies to establish strategic plans, performance plans, and performance reporting in the submission of the agency's budget. GPRAMA also calls for the agency CHCO to serve a key role in agency performance planning.

Regulations

Furthermore, Title 5 of the Code of Federal Regulations Part 250, *Personnel Management in Agencies*, subpart B, *Strategic Human Capital Management* (5 C.F.R. Part 250, subpart B) requires alignment of the agency human capital management practices with the agency mission, strategic goals, and strategic planning activities. The rules in 5 C.F.R. Part 250, subpart B:

- Set forth the actions and practices that will better position human capital management to prove its contribution to the agency mission;

- Require agencies to develop their Human Capital Operating Plan (HCOP);¹ and,
- Mandate that agencies conduct a strategic human capital performance evaluation review called HRStat.

The HCOP is an agency’s human capital planning and implementation document, which instructs staff on how to execute the human capital elements named within the agency strategic plan and Annual Performance Plan. The HCOP includes human capital performance goals and measures that will support the evaluation of the agency’s human capital strategies through HRStat reviews and align to support mission accomplishment. HRStat is a quarterly, data driven strategic human capital performance evaluation review process that identifies, measures, and analyzes human capital data to inform the impact of an agency’s human capital management on organizational results with the intent to improve human capital outcomes.

Federal Instructions

U.S. Office of Management and Budget (OMB) Circular A-11, *Preparation, Submission, and Execution of the Budget*, implements the GPRAMA by requiring agencies to submit an Annual Performance Plan and Report that ties to the agency strategic plan through the submission of the agency budget request. OMB Circular A-11 outlines CHCO responsibilities for aligning human capital management with strategic planning, establishing and updating the HCOP promptly, and coordinating HRStat data driven reviews with senior leaders.

Finally, the CHCO Council² advises and coordinates agency activities, including those involved in the human capital requirements of the GPRAMA and 5 C.F.R. Part 250, subpart B, which provides an integrated approach to strategic human capital management.

The NRC’s Integrated Approach to Strategic Human Capital Management

The NRC implements the CHCO Act, the GPRAMA, and OMB Circular A-11 through the agency mission, goals, objectives, and indicators publicly reported in the

¹ Supporting the cyclical Human Capital Business Process and the Human Capital Framework, the U.S. Office of Personnel Management (OPM) requires the HCOP, HRStat, Independent Audit Program, and Human Capital Review.

² The CHCO Council is the principal interagency forum to advise and coordinate the activities of the federal government on matters of modernization of human resource systems, improved quality of human resources information, and legislation affecting human resource operations and organizations.

agency's Congressional Budget Justification. Responding to the strategic human capital management requirements of OMB Circular A-11 and 5 C.F.R. Part 250, subpart B, the NRC interconnected the HCOP and HRStat within the agency's Enhanced SWP process.

The NRC's Mission, Goals, Objectives, and Indicators

The NRC's mission is to "License and regulate the Nation's civilian use of radioactive material to provide reasonable assurance of adequate protection of public health and safety, to promote the common defense and security, and to protect the environment." To support this mission, the NRC established two strategic goals: (1) ensuring the safe use of radioactive materials, and, (2) ensuring the secure use of radioactive materials.

To ensure the success of the strategic goals, the Office of the Chief Human Capital Officer (OCHCO) set an objective to "Attract, develop, and retain a high-performing, diverse, and engaged workforce with the skills needed to carry out the NRC's mission now and in the future." The OCHCO tracks this objective quarterly by measuring the Congressional Budget Justification indicator³ of the "percentage of human capital indicators that are met," such as for hiring, training, and retention.

Strategic Human Capital Management Support for Congressional Budget Justification Indicator

The NRC supports the Congressional Budget Justification indicator by interconnecting the HCOP and HRStat strategic human capital management requirements of OMB Circular A-11 and 5 C.F.R. Part 250, subpart B, within the NRC's Enhanced SWP process.

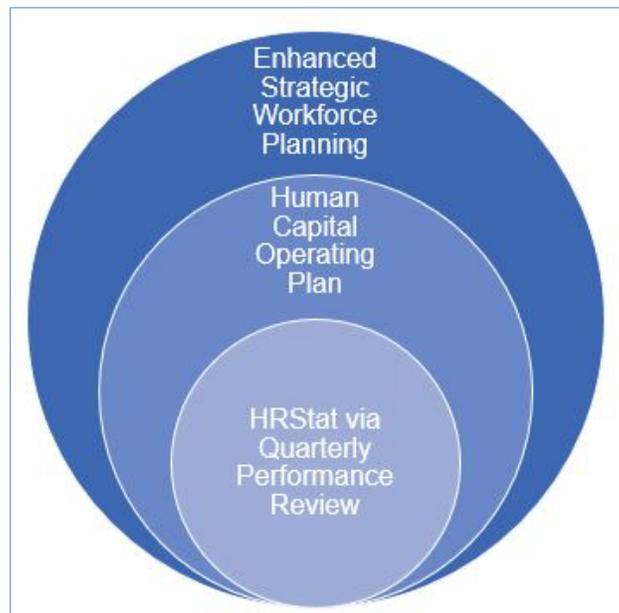
The Enhanced SWP process helps the agency plan for the workforce five years beyond the current FY. Included within the Enhanced SWP process is the update to the HCOP, which plans the yearly human capital strategies. HRStat measures the progress of the human capital strategies planned in the HCOP,⁴ which the NRC

³ The mission, goals, objective, and indicator listed in this audit report correspond to the audit timeline, and are sourced from documents such as the agency's fiscal year (FY) 2018-FY 2022 strategic plan and Congressional Budget Justifications for FY 2018 through FY 2021.

⁴ The OPM uses both the HCOP and HRStat as data points for the Human Capital Review.

reviews through the Quarterly Performance Review⁵ meetings. Figure 1 illustrates how the NRC’s Enhanced SWP process relates to the HCOP and HRStat.

Figure 1: Relationship of the Enhanced SWP Process to the HCOP and HRStat



Source: OIG-generated

The NRC’s Enhanced SWP Process

The Enhanced SWP process is the NRC’s annual, agencywide six-step process that helps the agency plan five years beyond the current FY. The NRC piloted a phased approach to implement the Enhanced SWP process, following a 2017 U.S. Government Accountability Office (GAO) strategic human capital management audit report.⁶ In FY 2020, the NRC implemented the Enhanced SWP process agencywide.

⁵ The OPM allows agencies the flexibility to combine the HRStat quarterly reviews with the agency’s quarterly performance management reviews conducted under the GPRAMA. The NRC’s Quarterly Performance Review meetings address the multiple facets of GPRAMA compliance, including budgeting, agency performance management, enterprise risk management, and strategic human capital management.

⁶ [GAO-17-233, Strategic Human Capital Management: NRC Could Better Manage the Size and Composition of Its Workforce by Further Incorporating Leading Practices.](#)

Roles in the NRC’s Enhanced SWP Process

The NRC Office of the Executive Director for Operations (OEDO), the OCHCO, NRC headquarters and regional offices, and business and product lines⁷ each carry out roles and responsibilities in the NRC’s Enhanced SWP process, with the OCHCO serving as the lead.

The NRC’s Enhanced SWP Process Steps

The NRC addresses workforce analysis through the steps in the Enhanced SWP process. Workforce analysis requires examination of the current workforce and projection of future workforce needs. This analysis includes: (1) assessment of the current workforce supply and demand; (2) forecast of the future workload; and, (3) assessment of the needs of the future workforce. Agency staff perform the steps in the Enhanced SWP process to formulate strategies to address the difference between the current and future workforce needs. Figure 2 summarizes the NRC’s Enhanced SWP process steps and NRC office participation.

⁷ The NRC organizes its budget and Congressional Budget Justification around a system of business and product lines. Business lines are “A class of functions, processes, and activities that implement a significant component of a major program.” Product lines are “Categories of agency work functions performed under a business line (all of corporate support falls into product lines).”

Figure 2: The NRC's Enhanced SWP Process Steps and Participating Offices

| Steps | OEDO | OCHCO | Offices/ Regions | Business/ Product Lines |
|---|------|-------|---------------------|----------------------------|
| 1. Set Strategic Direction • Agency Environmental Scan | ✓ | | | |
| 2. Workload Forecast & Demand Analysis • Workload forecast • Workforce demand analysis | | ✓ | ✓ | |
| 3. Workforce Supply Analysis • Current and future workforce supply | | ✓ | ✓ | |
| 4. Gap/Surplus Analysis, Risk Assessment, & Prioritization • Gap/surplus analysis • Risk assessment and prioritization of gaps/surplus | | ✓ | ✓ | |
| 5. Develop & Execute Strategies • Formulate and execute workforce strategies | ✓ | ✓ | ✓ | ✓ |
| 6. Monitor, Evaluate, & Revise Strategies • Performance indicators • Communicate workforce strategy progress • Workforce strategy performance monitoring (revise, as needed) | ✓ | ✓ | ✓ | ✓ |

Source: OIG-generated

The NRC's Enhanced SWP process begins with the Agency Environmental Scan. The Agency Environmental Scan looks at the ongoing tracking of trends and occurrences in an organization's internal and external environment that bear on its success, currently and in the future. External environmental factors could relate to demographics, politics and public policy, labor market conditions, academic interests, technology, research, trends, competition, customers, the economy, and labor supply. From there, a multi-step workforce analysis⁸ is performed, which eventually identifies the gaps or surpluses between the current and projected workforce. Then, the agency implements workforce strategies to resolve the workforce gaps and surpluses. For a list of potential organizational and human capital workforce strategies that could be used to address workforce gaps or surpluses, please see [Appendix B](#).

At this point, the OCHCO updates the HCOP for the implementation of human capital strategies for the next fiscal year, and workforce gaps or surpluses that pose an

⁸ This analysis takes place in steps 2 through 4 of the Enhanced SWP process.

agency enterprise risk are discussed in the Quarterly Performance Review⁹ meeting. Finally, the NRC continues to monitor, communicate, and adjust the workforce strategies, such as by monitoring performance indicators,¹⁰ and internal and external factors impacting the workforce analyses.

II. OBJECTIVE

The audit objective was to assess the effectiveness of the NRC’s Strategic Workforce Planning process.

III. FINDINGS

The NRC’s SWP process effectiveness can be optimized. Specifically, the Enhanced SWP process needs consistent and complete information, and timely human capital planning.

A. The Enhanced SWP Process Information Could be More Consistent and Complete

The NRC does not use consistent workforce analysis and complete attrition rate information, despite requirements that information be consistent and complete to be considered “quality information.” This occurs because the agency’s *Enhanced Strategic Workforce Planning: Office Director and Regional Administrator Guidance (Enhanced SWP Guidance)* is missing the level of specific detail necessary by staff to ensure consistent and complete SWP analysis. As a result, Enhanced SWP information is less reliable for informed decision making.

What Is Required

Information for SWP Must be Consistent and Complete

According to federal guidance and standards, workforce planning information must be consistent and complete to be considered “quality information.”

⁹ Quarterly Performance Review meetings are led by the OEDO.

¹⁰ Performance indicators are discussed in the Quarterly Performance Review meetings.

Information for Informed Decision Making Must be Consistent and Complete

Federal standards require consistent and complete quality information for informed decision making. The GAO *Standards for Internal Control in the Federal Government* (GAO Green Book) states that quality information is appropriate, current, complete, accurate, accessible, and provided on a timely basis. Quality information results from agency activities that provide:

- Consistency—whereby agency management evaluates the precision for an agency activity, ensuring the consistency of performance; an activity that is performed routinely and consistently generally is more precise than one performed sporadically; and,
- Completeness—whereby agency management evaluates information necessary for agency activities, including completeness, such as ensuring that activities that occur are recorded and not understated.

The GAO Green Book further states that quality information is communicated internally and used by management to make informed decisions, communicated throughout the entity using established reporting lines, and used to evaluate the entity's performance.

Workforce Planning Information Must Include Attrition Rate to be Complete

Workforce planning information must include attrition rate¹¹ to be complete. According to 5 C.F.R. 250.204, agencies must base their human capital management strategies on “comprehensive workforce planning and analysis.” The following four federal guidance documents provide instruction on meeting this regulatory requirement:

- *OPM's Workforce Planning Model*;
- *The OPM Migration Planning Guidance Information Documents: Workforce Planning Best Practices*;
- *The OPM Guidance for Change Management in the Federal Workforce: Accelerating the Gears of Transformation*; and,

¹¹ In this audit report, the term attrition rate is used synonymously with the terms separation and turnover for calculating and tracking the rates of employee departure from the NRC.

- The GAO *Key Principles for Effective Strategic Workforce Planning*, GAO-04-39.

Specifically, these federal guidance documents stipulate agencies account for the attrition rate when analyzing the workforce for SWP. Also, these documents distinguish between retirement and other agency separation for SWP implementation. As such, the attrition rate calculation is not limited to retirement. It includes all types of voluntary and involuntary departures, such as resignations, reductions in force, transfers out, terminations, and deaths.¹²

What We Found

The Enhanced SWP Process Information is Neither Consistent nor Complete

The NRC does not use consistent workforce analysis information and complete attrition rate information in the Enhanced SWP process. Staff inconsistently use the SWP Application Tool¹³ input fields for workforce analysis in the Enhanced SWP process. Inconsistent inputs specifically affect:

- Anticipated level of workload change;
- Adjusted attrition factor;
- Position risk factor; and,
- Prioritization of workforce gaps or surpluses.

Details about the SWP Application Tool input fields can be found in [Appendix C](#). Moreover, the OCHCO does not incorporate attrition rate in the Enhanced SWP process.

Anticipated Level of Workload Change

The anticipated level of workload change denotes the estimated change in specific areas of work for the agency. The OCHCO and offices/regions forecast workloads

¹² These separation types are drawn from the Society for Human Resource Management; [GAO-14-215, *Federal Workforce: Recent Trends in Federal Civilian Employment and Compensation*](#); and the Partnership for Public Service.

¹³ The SWP Application Tool is a custom-built software system designed and developed by the OCHCO to aid in the NRC's yearly Enhanced SWP process.

with a label of significant, none, or slight, increase or decrease, based on estimated change in each respective forecasted workload.

The OIG found the same areas of work were characterized differently agencywide. The OIG analysis of workload forecast change information for FY 2019 through FY 2021, obtained from the SWP Application Tool, identified 79 common or duplicate areas of work. Of those 79 duplicate areas of work, 31 (approximately 39%) have at least two different levels of anticipated workload change.

NRC management and staff across the agency generally agreed there is no measurement or scale in the guidance, or in practice, for determining the anticipated level of workload change. The OIG interviewed 12 agency management and staff members about this topic; half of these personnel indicated they were unaware of any scale or metric for determining the anticipated level of workload change. One manager stated “there is not a defined scale” for determining if a workload change is significant or slight. Another manager said the determination of workload change amounts to an “educated guess.”

Adjusted Attrition Factor

NRC staff did not consistently use the adjusted attrition factor in performing their analyses. Adjusted attrition factor¹⁴ is a likelihood ranking of an employee separating from the NRC for all known, voluntary reasons.

Consistent with the NRC’s *Enhanced SWP Guidance*, the OIG analysis of the adjusted attrition factor in the SWP Application Tool confirmed that non-retirement separations were not required to be considered in the adjusting of attrition factors in the SWP Application Tool. For the 60 agencywide common core positions¹⁵ analyzed between FY 2019 and FY 2021, staff analyses did not adjust attrition factors 54% of the time for known, voluntary reasons for separating from the NRC.

The NRC’s *Enhanced SWP Guidance* states that projecting non-retirement separations using the adjusted attrition factor is optional despite federal guidance to

¹⁴ Adjusted attrition factor is a 1 to 5 likelihood ranking of an employee separating from the NRC. This is adjusted from the estimated attrition factor, where a supervisor can adjust the ranking based on already known attrition information (i.e., employee shared plans to transfer to another agency or retire in a timeframe different from the estimated attrition factor).

¹⁵ Core positions are positions categorized based on their clear link to the agency’s mission and strategic plans. Core positions collectively define the majority (but not all) of the competencies needed to achieve the NRC’s strategic goals and objectives.

the contrary. NRC management and staff agencywide indicated that adjusted attrition factor includes projected retirement separation through the estimated attrition factor.¹⁶ Specifically, managers and staff conveyed that adjusted attrition factor is “just for retirement” and there is “no other assumption of other ways of leaving.” In interviews with the OIG, 9 of 13 management and staff mentioned that attrition, as considered within the Enhanced SWP process, is based solely on retirement eligibility.

Position Risk Factor

Position risk factor¹⁷ is the measurement of risk posed to the agency if a specific position goes unfilled. The position risk factor inputs into the SWP Application Tool varied across the NRC.

During interviews with the OIG, NRC management agencywide confirmed there is no measurement or scaling for ranking a position’s risk in the Enhanced SWP process. OCHCO management emphasized that ranking position risk was designed to incorporate subjectivity so that managers could mark a higher number for position risk factor “to put some weight into it.” In another instance, OCHCO staff familiar with the SWP Application Tool stated that position risk factor is “based on management judgment.”

For 60 common core¹⁸ positions agencywide, the position risk factor inputs into the SWP Application Tool varied. Of 60 common core positions agencywide analyzed between FY 2019 and FY 2021, no core positions had the same position risk factor in each year throughout this period. For example, NRC leadership and staff repeatedly identified the positions of health physicist and various information technology positions as core positions, but difficult to fill. Between FY 2019 and FY 2021, however, the position risk factors for these positions varied agencywide between 1 (low risk) and 5 (high risk).

¹⁶ Estimated attrition factor is a likelihood ranking of retirement separation on a scale, with 1 as unlikely to 5 as likely, that is pre-calculated by adding five years to the employee’s retirement eligibility date.

¹⁷ Position risk factor is a 1 to 5 ranking that refers to the risk posed to the agency if a specific position goes unfilled, whether the position is difficult to fill based on the significance and/or uniqueness of the position-required skills and knowledge, the time it takes for an individual to reach the necessary proficiency levels, and projected job market conditions.

¹⁸ Common core positions are the same core positions that are listed in at least two different offices within the NRC.

Prioritization of Workforce Gaps or Surpluses

In FY 2021, offices and regions inconsistently assessed workforce gap or surplus priority levels for the same position. This was the first year that NRC staff used the SWP Application Tool for gap or surplus prioritization information. In meetings with the OIG, managers and staff agencywide characterized the determination of priority levels¹⁹ for addressing core position workforce gaps or surpluses as subjective and qualitative in nature. More specifically, these managers and staff told the OIG that “offices identify the priority [of a gap or surplus] in their opinion,” and offices “prioritize the gaps that are most important.”

The OIG analyzed a set of agencywide common core positions and their associated workforce gaps or surpluses. The OIG concluded there is no indication the NRC used a scale or methodology to determine the priority levels given for these workforce gaps or surpluses.

In FY 2021, 12 of 13 (approximately 92%) common core positions with workforce gaps or surpluses had different priority levels assessed. For example, different NRC offices and regions prioritized the workforce gaps for the common core reactor inspector position as high and medium. At the same time, one office prioritized the reactor inspector position as medium workforce surplus as well as a workforce gap.

In a similar example, the resident inspector position had workforce gaps prioritized by different offices as high, medium, and low. Simultaneously, one office prioritized this common core position as both a medium workforce surplus and a workforce gap.

The Enhanced SWP Process is Incomplete without Incorporating Attrition Rate

The NRC does not incorporate attrition rate in the Enhanced SWP process and attrition is not an attribute used in the SWP Application Tool. The OIG performed a multi-part analysis on the anticipated level of workload change, adjusted attrition factor, position risk factor, and prioritization of workload gaps or surpluses, and concluded there was no evidence that attrition rate was incorporated or considered in the SWP Application Tool. The OCHCO confirmed that attrition rate is not an attribute the NRC uses in the SWP Application Tool.

¹⁹ Workforce gaps or surpluses are prioritized as high, medium, or low based on the potential risk to the agency and amount of time available to address the gaps or surpluses.

Why This Occurred

The *Enhanced SWP Guidance* Does Not Have the Needed Specificity

The NRC has not used consistent and complete information in the Enhanced SWP process because the *Enhanced SWP Guidance* is missing the level of specific detail staff needs to ensure consistent and complete workforce analysis in the SWP Application Tool. The NRC's *Enhanced SWP Guidance* does not specify the methodologies, detailed instructions, measurement criteria, or scales to distinguish the different anticipated levels of workload change, rank position risk factors, or prioritize workforce gaps or surpluses in the Enhanced SWP process. Nor does the *Enhanced SWP Guidance* require the NRC to consider separations other than retirement eligibility when projecting future workforce supply.

The *Enhanced SWP Guidance* does not incorporate the use of attrition rate, which would capture non-retirement separations, even though management across the NRC indicated that they use, and pay attention to, office attrition rates. These senior managers throughout NRC did, however, express interest in using attrition rates for their staffing determinations in the Enhanced SWP process.

The NRC has access to publicly available information to calculate attrition rates through the OPM website's FedScope online tool. FedScope allows federal government agencies, researchers, the media, and the public to access and analyze federal government workforce data. In addition, the NRC periodically submits non-retirement separation information through the Enterprise Human Resources Integration-Statistical Data Mart, which is the data source for FedScope.

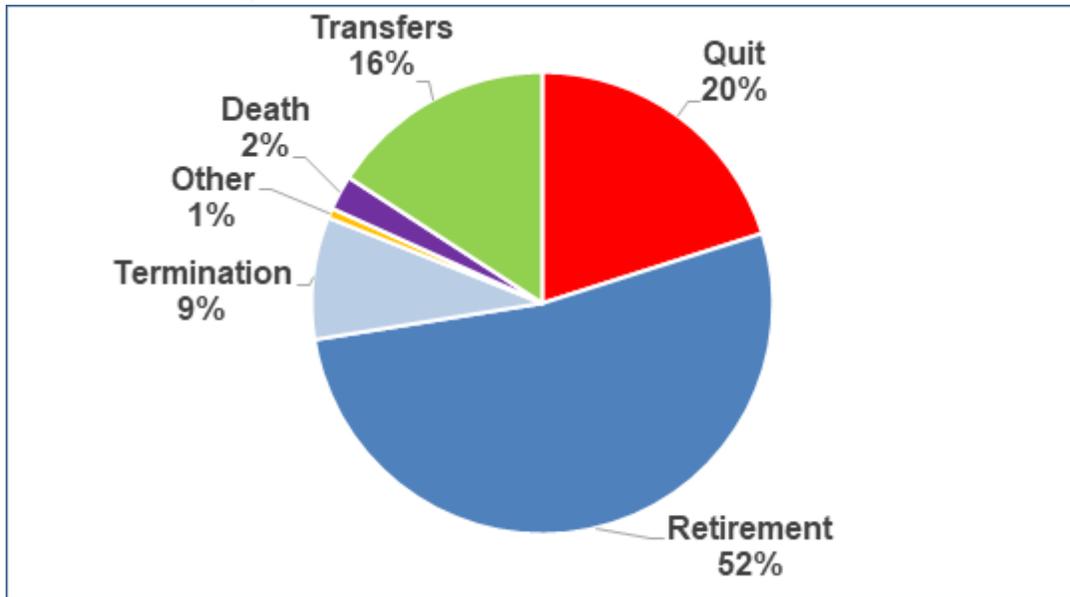
The OIG used FedScope information to determine the reasons employees departed from the NRC in FY 2018-2021. The reason categories are:

- Quit—an employee voluntarily leaving;
- Retirement—separation entitling an employee to immediate annuity;
- Termination—employee removal based on misconduct, delinquency, or unsatisfactory performance;
- Death—employee loss of life;

- Transfers—movement of an employee to another agency; and,
- Other—separations that do not fall in any of the previously mentioned categories, for example, resignation in-lieu-of termination.

The OIG calculated that, on average, roughly half of all employee departures from the NRC were from a mixture of non-retirement separations, as shown in Figure 3.

Figure 3: Reasons for FY 2018-2021 Separations



Source: OIG-generated

According to the *Enhanced SWP Guidance*, attrition ranking does not mandate the projection of all types of separations. Also stated in the *Enhanced SWP Guidance*, the adjusted attrition factor is used for calculating known attrition only. As a result, because information employees have not disclosed is unknown and not estimated, other forms of attrition are not factored into the Enhanced SWP process.

Why This Is Important

Information is Less Reliable for Informed Decision Making

Inconsistent and incomplete information is less reliable for informed decision making. In FY 2020, during the Strategic Workforce Oversight and Utilization

Panel²⁰ meetings, senior leaders noted Enhanced SWP results should drive agency decisions. Later in FY 2022, a senior manager expressed interest in incorporating full-time equivalents needed by the offices into the SWP Application Tool and Enhanced SWP process, to provide useful information for agency budget requests and future workforce strategy decisions.

However, the NRC is unable to use the Enhanced SWP process information to inform adjacent processes that also involve estimating the agency workforce. For example, the NRC does not use the Enhanced SWP process to, formally or directly, connect to the internal budget formulation process. The OCFO and OCHCO confirmed that the Budget Formulation System is not connected to the SWP Application Tool. As a result, the NRC performs workforce forecasting separately for the Enhanced SWP and the budget formulation processes, creating redundant workforce forecasting efforts.

Recommendations

The OIG recommends that the Executive Director for Operations:

1. Update the *Enhanced Strategic Workforce Planning: Office Director and Regional Administrator Guidance* to provide specific methodologies, detailed instructions, measurement criteria, and scales that can be used to estimate the anticipated level of workload change, ranking of position risk factors, and prioritization of workforce gaps or surpluses; and,
2. Update the *Enhanced Strategic Workforce Planning: Office Director and Regional Administrator Guidance* to incorporate attrition rates so that the NRC quantifies and considers non-retirement separations in workforce planning.

²⁰ Strategic Workforce Oversight and Utilization Panel meetings address workforce restructuring and workload balance, and determine hiring priorities and strategies limited to the existing NRC personnel as a result of congressional full-time equivalent constraints.

B. There Was No Human Capital Operating Plan for Over a Year

The OCHCO did not have an HCOP for over a year, although federal regulations, guidance, and instructions require a valid and promptly updated HCOP. There was no HCOP for this time period because agency policy and procedures do not address the HCOP. Consequently, the NRC's hiring and training human capital strategies were less effective.

What Is Required

Federal Regulations, Guidance, and Instructions Require an HCOP

Federal regulations, guidance, and instructions require the development and prompt update of an HCOP in alignment with the agency strategic plan and Annual Performance Plan. Effective April 11, 2017, pursuant to 5 C.F.R. 250, subpart B, each agency must develop and update the HCOP in alignment with the GPRAMA requirements and timelines to support the agency strategic plan and Annual Performance Plan. The OPM's guidance, *HRStat Guidance: Begin with the End in Mind*, further clarifies that agencies must update the HCOP promptly to "reflect any changes in human capital strategies necessary to fulfill emerging mission imperatives or exigent human capital issues."

Guidance from the OPM and OMB Circular A-11 expand on the need for promptly updating the HCOP due to its support of the agency Annual Performance Plan. Specifically, the OPM's guidance, *Human Capital Reviews*, describes the HCOP as an agency's human capital implementation document that communicates how an agency will execute the human capital elements stated within the agency strategic and Annual Performance Plans. These human capital elements are the human capital performance goals and measures. The OPM's HCOP website and OMB Circular A-11 further explain that through the HCOP, the agency identifies and focuses on the human capital goals and measures it needs to implement each year to achieve the strategic goals set forth in the Annual Performance Plan and agency strategic plan.

What We Found

The NRC Did Not Have an HCOP for Over One Year

The agency did not have an HCOP for over one year. The 2018 HCOP was created on February 9, 2018, was applicable for 18 months, and expired in August 2019. The OCHCO confirmed that there were no HCOPs issued in 2019 and 2020. The next HCOP was created on January 12, 2021, leaving the NRC with no HCOP addressing the agency's human capital priority areas for approximately 17 months. Figure 4 presents a timeline showing the approximately 17 months that the NRC did not have a governing HCOP.

Figure 4: HCOP Absent Approximately 17-Months



Source: OIG-generated

Why This Occurred

Agency Guidance Does Not Address the HCOP

The OCHCO did not have an HCOP for over a year because agency policy and procedures do not provide information about the HCOP. The NRC management directives are silent on the HCOP and the periodicity of updates. The OIG's NRC intranet search also resulted in no mention of the HCOP. NRC staff confirmed there were no management directives that directly address the HCOP. Furthermore, the OCHCO confirmed there are no agency procedures or instructions related to the HCOP.

During audit fieldwork, OCHCO management stated that any guidance and instructions for the HCOP come directly from the OPM. OCHCO management later explained that the NRC did not update the 2018 HCOP because the OPM HCOP

requirement is fairly new. A dedicated HCOP guidance issued by the OPM, *Human Capital Operating Plan (HCOP) Guidance: Fiscal Years 2022-2026*, was not released publicly until December 2021. The NRC is required to follow this guidance for any HCOP created after the document publication date.

Why This Is Important

Workforce Strategies Involving Hiring and Training are Less Effective

Without an HCOP, the NRC's workforce strategies involving hiring and training are less effective. Details about the workforce strategies the NRC deploys can be found in [Appendix B](#).

Hiring Challenges

The NRC faces challenges hiring new employees for the agency. During the FY 2019 Human Capital Council²¹ meetings, senior leadership anticipated uncertainty about the types and amount of work, which would impact hiring. In FY 2022, agencywide senior leadership and staff reiterated to the OIG the difficulty in hiring, such as filling health physicist positions, as well as positions in the information technology and acquisitions areas throughout the agency.

The OCHCO's New Human Capital Dashboard illustrates the NRC's continuing challenges in meeting hiring goals. This dashboard shows that the OCHCO has a goal of hiring 300 people by September 30, 2022. However, as of June 9, 2022, the NRC has hired only 196 people, illustrating the possibility that the OCHCO will fall short of their hiring goal by 104 people. The workforce strategies have not sufficiently supported the response to the hiring challenges.

Challenges Upskilling Current Employees and Training New Employees

NRC management have described challenges with upskilling current employees and training new employees. During the FY 2019 and FY 2020 Quarterly Performance Review meetings and FY 2022 OIG interviews, agency senior leadership conveyed the agency needs people in certain roles where skills cannot be developed quickly, which limits entry-level hiring into those positions. In some cases, the agency must look for resources outside of the agency instead of upskilling current employees, as noted by senior management in multiple NRC offices.

²¹ Human Capital Council meetings discuss high priority gaps and surpluses, workforce strategies, and action plans.

The OIG *Audit of the NRC's Material Control and Accounting Inspection Program for Special Nuclear Material*,²² pointed out challenges to training. Specifically, the NRC did not account for the length of time required for training and the achievement of full qualification of new material control and accounting inspectors, nor for the impact if multiple people were to depart their current positions.

Recommendations

The OIG recommends that the Executive Director for Operations:

3. Update agency policy and procedures to include Human Capital Operating Plan information—specifically, information regarding the periodicity of the plan's review, approval, and updating—in accordance with the Office of Personnel Management's *Human Capital Operating Plan (HCOP) Guidance: Fiscal Years 2022-2026*.

²² The [*Audit of the NRC's Material Control and Accounting Inspection Program for Special Nuclear Material*](#), OIG-21-A-04, issued on March 9, 2021.

IV. CONSOLIDATED LIST OF RECOMMENDATIONS

The OIG recommends that the Executive Director for Operations:

1. Update the *Enhanced Strategic Workforce Planning: Office Director and Regional Administrator Guidance* to provide specific methodologies, detailed instructions, measurement criteria, and scales that can be used to estimate the anticipated level of workload change, ranking of position risk factors, and prioritization of workforce gaps or surpluses;
2. Update the *Enhanced Strategic Workforce Planning: Office Director and Regional Administrator Guidance* to incorporate attrition rates so that the NRC quantifies and considers non-retirement separations in workforce planning; and,
3. Update agency policy and procedures to include Human Capital Operating Plan information—specifically, information regarding the periodicity of the plan’s review, approval, and updating—in accordance with the Office of Personnel Management’s *Human Capital Operating Plan Guidance: Fiscal Years 2022-2026*.

V. NRC COMMENTS

The OIG held an exit conference with the agency on September 13, 2022. Before the exit conference, agency management reviewed and provided comments on the discussion draft version of this report, and the OIG discussed these comments with the agency during the conference. Following the conference, agency management stated their general agreement with the findings and recommendations in this report and opted not to provide additional comments. The OIG has incorporated the agency's comments into this report, as appropriate.

OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

The audit objective was to assess the effectiveness of the NRC's Strategic Workforce Planning process.

Scope

The audit focused on the NRC's Enhanced SWP process. We conducted this performance audit at the NRC headquarters (Rockville, Maryland) from December 2021 to May 2022. The audit scope was limited to fiscal years 2018 through 2021 and current NRC employees.

Information technology-specific SWP requirements such as those in the Federal Information Technology Acquisition Reform Act and Clinger-Cohen Act of 1996, were excluded from this audit.

We assessed the reliability of the Enhanced SWP process information through the data in the SWP Application Tool by (1) performing electronic testing; (2) reviewing existing information about the data and the system that produced them; and, (3) interviewing agency officials knowledgeable about the data. Any issues with the SWP Application Tool and Enhanced SWP process information are highlighted in [Finding A](#).

Internal controls related to the audit objective were reviewed and analyzed. Specifically, the OIG reviewed the components of the control environment, control activities, information and communication, and monitoring. Within these components, the OIG reviewed the principles of exercise oversight responsibility; establish structure, responsibility, and authority; demonstrate commitment to competence; design control activities; implement control activities; use of quality information; communicate internally; perform monitoring activities; and, evaluate issues and remediate deficiencies.

Methodology

Throughout this audit, the OIG reviewed relevant criteria and guidance. The OIG's document review included:

- Public Law 107-296, Title 13, Subtitle A, *the Chief Human Capital Officers Act of 2002*;
- Public Law 111-352, the *GPRRA* [Government Performance Results Act] *Modernization Act of 2010*;
- Title 5 C.F.R. Part 250, *Personnel Management in Agencies*, subpart B, *Strategic Human Capital Management*, January 1, 2011;
- OMB Circular A-11, *Preparation, Submission, and Execution of the Budget*, annual updates July 2016, July 2017, June 2018, June 2019, July 2020, and August 2021;
- *OPM's Workforce Planning Model*;
- *Migration Planning Guidance Information Documents: Workforce Planning Best Practices*, OPM, October 7, 2011;
- *Guidance for Change Management in the Federal Workforce: Accelerating the Gears of Transformation*, OPM, April 15, 2019;
- *Human Capital Operating Plan (HCOP) Guidance: Fiscal Years 2022-2026*, OPM, December 2021;
- *HRStat Guidance: Begin with the End in Mind*, OPM, June 2017;
- *Human Capital Reviews*, OPM, May 2018;
- *Key Principles for Effective Strategic Workforce Planning*, GAO-04-39, December 2003; and,
- *Standards for Internal Control in the Federal Government*, GAO-14-704G, September 2014.

The OIG also interviewed 19 current NRC personnel that have Enhanced SWP process responsibilities. These interviews included personnel in the OEDO, the OCHCO, and other offices participating in the Enhanced SWP process. The OIG also

received an OCHCO demonstration of the SWP Application Tool to observe how it is used.

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

Throughout the audit, auditors considered the possibility of fraud, waste, and abuse in the program.

The audit was conducted by Vicki Foster, Team Leader; Tincy Thomas de Colón, Audit Manager; Megan Velasquez, Senior Management Analyst; Connor McCune, Senior Management Analyst; Stephanie Dingbaum, Auditor; and, Karen Corado, Management Analyst.

WORKFORCE STRATEGIES

| Organizational Strategies | |
|---|--|
| Potential Strategy | Definition |
| Consolidate Functions or Services | Reorganize to consolidate functions or services. Services may be consolidated to serve multiple divisions, offices, business lines, or the agency. |
| Add/Shed/Defer Procedure | Procedure to identify and disposition existing or planned work when emergent items of higher priority are assigned, when there is a shift in priorities, or when the resources needed to accomplish work are greater than what was budgeted. |
| Process Improvement | Analysis of a process to identify improvements for greater effectiveness and efficiency. |
| Administrative Efficiencies | Institutionalization of process efficiencies by updating existing procedures, providing training, etc. |
| Leverage Technology | Automate processes using existing, “off the shelf,” or new technology. |
| Utilize Strategic Sourcing of Contractors | Outsource significant portions of the work. |
| Restructure or Realignment | Restructure or realign functions in the office, division, or branch to ensure alignment. |
| Human Capital Strategies | |
| Internal Promotions and Lateral Reassignments | Solicit existing employees to fill gaps (insource). |
| Targeted Recruitment | Use of a variety of hiring strategies and authorities to attract a qualified and diverse workforce. |
| Alternative Staffing | Outsourcing of non-essential functions using a contracting firm with the specific expertise needed. |
| Retention Incentives | Incentives offered to retain current employees. |
| Succession Planning | Plans to prepare for gaps caused by attrition (internal or external) by developing new staff who can assume these responsibilities. |
| Hiring Controls | Strategies to manage positions or limit recruitment. |
| Knowledge Management and Transfer | Collecting, distributing, and effectively using knowledge. |
| Position Description Review/Updates | Review and modify position descriptions to improve accuracy, new competencies required, and to share work expectations. |
| Individual Development Plan | Written schedules or plans designed to help employees meet goals for development. |
| Career Development and Training | Provide employees with career development opportunities and training or re-training to develop new skills and knowledge for new job requirements, emerging developments, or new work requirements. |

SWP APPLICATION TOOL FIELDS

| Step | Sub-Step | Field | Field Purpose |
|------|---------------------------|---|---|
| 2 | Workload Forecast | Office | Office acronym. |
| | | Year | Year forecasting (For example, 2025). |
| | | Area of Work | A high-level description of work. |
| | | Forecasted Workload | Based on the work described workload projections are provided. Offices should consider the key factors, trends, and (office/region) key factors and potential impact on workload in projecting the workload for +5-year timeframe. Significant shifts in workload in the interim period (between current FY year and in five years) should also be highlighted to the extent they are forecasted (e.g., short-term projects, transitions) and would drive significant changes in core positions and competencies. |
| | | Anticipated Level of Workload Change | A general forecast of the level of change between your current to projected workload. The estimated workload changes are characterized as: <ul style="list-style-type: none"> • Significant decrease • Slight decrease • About the same • Slight increase • Significant increase • New workload |
| | | Impact of Effectiveness and Efficiency Improvements | Indicate if effectiveness improvements or efficiencies implemented between the current FY year and in five years are the basis for projected changes. |
| | | Impact on Skill, Competency, and Proficiency | Based on the workload forecast, identify any changes in skills, competencies, or proficiency levels that may be required. This encompasses new items that need to be considered as part of the Enhanced SWP analysis. |
| 2 | Workforce Demand Analysis | Division | Name of the office or region's division or key function. |
| | | Core Position | Core position identified to perform the work forecasted. |
| | | Number of People Needed | Number and proficiency level of the people needed to perform the workload forecasted for the identified "Division" and "Core Position." |

| Step | Sub-Step | Field | Field Purpose | | |
|------|---|---|---|--------------|---|
| 2 | Workforce Demand Analysis | Proficiency Level Factor | Offices/regions determine the proficiency level factor for each core position. It is the minimum level of skills and expertise needed to perform the workload associated with the core position. The rating is consistent with the competency model assessment rating scale. | | |
| | | | Proficiency Level Factors | | |
| | | | Factor | Label | Description |
| | | | 5 | Expert | Innovate. Develop and apply task/ skills/ knowledge in new and unique ways. Create and share expertise and best practices. Create structure. Demonstrate foresight. |
| | | | 4 | Skilled | Demonstrate advanced task/ skill/ knowledge. Handle complex situations. Apply structure. Demonstrate insight. Coach others. |
| | | | 3 | Applied | Perform task/ skill consistently, accurately, and independently. |
| | | | 2 | Basic | Understand basics of task/skill/knowledge. May perform task/skill at a basic level or perform with coaching and supervision. |
| 1 | Learning | Have limited awareness of task/ skill/ knowledge. Requires development /coaching. | | | |
| 3 | Workforce Supply Analysis | Estimated Attrition Factor | The Estimated Attrition Factor is pre-calculated by adding five years on to the employee's retirement eligibility date. | | |
| | | Adjusted Attrition Factor | Supervisor may adjust "Attrition Factor" figure based on any already known attrition information (For example, employee has shared they are planning to transfer to another agency or retire in a timeframe different from the attrition factor calculated). | | |
| | | Position Risk Factor | Identifies the risk to the agency if the position goes unfilled and whether the position is likely to be difficult to fill based on the significance and/or uniqueness of the position's required skills and knowledge, the time it takes for an individual to reach the necessary proficiency levels, and projected job market conditions. | | |
| | | Total Succession Factor | Calculated as "Adjusted Attrition Factor" multiplied by "Position Risk Factor." This factor helps to sort the data collected when producing reports for the gap analysis and risk assessment. | | |
| | | Proficiency Level Factor | Identifies the current technical/expertise proficiency level of all employees in core positions. If available, competency model assessments may assist supervisors in determining the proficiency level factor. The scale is identical to the proficiency level factor from Step 2 and consistent with the competency modeling scale. | | |
| 4 | Identify and Prioritize Gaps or Surpluses | Gaps/ Surpluses | Determine the competency gaps or workforce gaps/surpluses to address. | | |
| | | Potential Risk/ Challenge | Identify the specific risk or challenge that needs to be addressed. | | |
| | | Timeframe | Decide on the timeframe needed to address gap or surplus. | | |

| | | | |
|--|--|----------|---|
| | | Priority | Set the priority (high, medium, or low) of the gap or surplus based on the potential risk to the agency and amount of time available to address the gap or surplus. |
|--|--|----------|---|

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COMMENTS AND SUGGESTIONS

If you wish to provide comments on this report, please email the OIG using this [link](#).

In addition, if you have suggestions for future OIG audits, please provide them using this [link](#).