

DESCRIBING CANDIDATE ASSESSMENTS AND HIRING OUTCOMES AT DOI



Exploring means and proportions of recruitment success, time-to-hire, and candidate characteristics for hiring efforts at the Department of the Interior

Target a Priority Outcome

[Executive Order 13932](#) calls for the increased use of skills- and competency-based assessments in the federal hiring process and requires agencies to use alternative methods to assess applicants' qualifications for federal jobs. Describing adoption of EO-compliant assessment methods and summarizing six priority hiring outcomes for hiring actions over the past two years can provide a baseline understanding of the Department of the Interior's (DOI) implementation of EO 13932.

Priority outcomes include the duration of time for key milestones in the recruitment process, the rate of hiring success, and the representation of applicants with different characteristics at each stage of the recruitment process across.

Design Evaluation

OES and DOI collaborated to design a descriptive evaluation to answer three research questions:

1. *How are candidate assessments being implemented at DOI?*
2. *How long does the hiring process take and how often are positions filled for each candidate assessment method?*
3. *Does the representation of female, people of color, and Veteran candidates change at key stages of the recruitment process within each assessment method?*

Hiring actions used one of three methods to assess applicant qualifications: *Self-assessments*, where applicants self-report their experience, expertise, and competencies using a questionnaire; *Manual assessments* by subject-matter experts who assess applicants' qualifications; and *USA Hire scored assessments*, which provide a numerical score measuring general competencies such as decision-making ability, and reasoning, math, and interpersonal skills.

OES tabulated the number of hiring actions that used each assessment method over time and summarized means and frequencies of priority outcomes. The study included hiring actions

(N=1,154) and applications (N=115,727) for permanent, non-supervisory positions from five bureaus and 10 occupational series posted between July 2020 and July 2022.¹

Analyze Using Existing Data

Data on hiring actions and applications were compiled by DOI from the USA Staffing Applicant Flow Data system. Vacancy records were used to identify the assessment method used for each hiring action and to observe the following outcomes:

Certification time: Duration of time (in days) between the closing of the application period and the date that a certificate of eligible applicants (the "cert list") is created.

Post-certification time to selection: Duration of time (in days) between the issuance of the cert list and the first offer made to a candidate (for successful searches) or cancellation of the search (for unsuccessful searches).

Recruitment success: Binary indicator of whether or not an offer was made to a candidate from the cert list. Success indicates at least one offer was made; failure indicates no offer was made or the search was canceled.

Application records associated with each hiring action indicated reported demographic characteristics (sex, race, and ethnicity, if reported), Veteran's preference, and whether each applicant was among the cert list or selected candidates. These records were used to tabulate the representation of candidates at each stage of the recruitment process for three groups:

Female applicants: Proportion of applicants that identify as female among completed

¹ Bureaus included: U.S. Geological Survey, National Park Service, Bureau of Land Management, Fish and Wildlife Service, Bureau of Reclamation. Occupational series included: 0401: General Natural Resources Management and Biological Sciences Series; 0025: Park Ranger; 0462: Forestry Technicians; 1315: Hydrology; 0810: Civil Engineering; 1801: General Inspection, Investigation, Enforcement, and Compliance Series; 1350: Geology series; 1811: Criminal Investigations; 0028: Environmental Protection Specialist; 0802: Engineering Technical.

applications, certified eligible list, and those selected for the position.

Applicants of color: Proportion of applicants who identify as non-White or Hispanic among completed applications, certified eligible list, and those selected for the position.

Veteran applicants: Proportion of applicants adjudicated with Veteran's preference among completed applications, certified eligible list, and those selected for the position.

Results

After January 2021, the use of self-assessments decreased in frequency as the department more frequently implemented a multiple hurdle approach by using manual and USA Hire assessments. The use of the three assessment methods over time varies across the five DOI bureaus included in the study.

The time from the close of vacancy announcements to the cert list being issued averages about 12 days for self-assessments, 27 days for manual assessments, and 15 days for USA Hire assessments. The majority of the recruitment time is accounted for in the post-certification period for all assessment methods. The average time from the cert list being issued to selection is 37 days for self-assessments, 34 days for manual assessments, and 39 days for USA Hire assessments.

Overall, recruitment success for DOI ranges between 60% and 70%. Self-report assessments have the highest recruitment rates with 72% of hiring actions resulting in a selection, followed by hiring actions using USA Hire (67%) and those using manual assessments (62%).

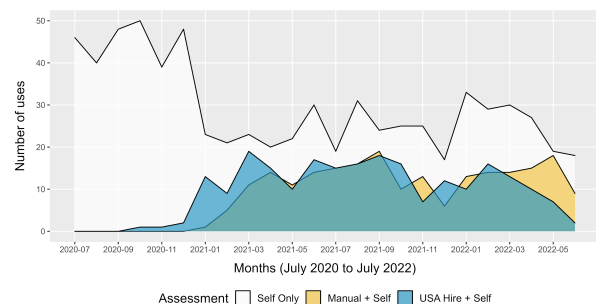
For self-assessments, the representation of women and non-White or Hispanic applicants decreased at each stage of the recruitment process. Veteran representation increased at the cert list stage, but decreased at the selection stage.

For manual assessments, the representation of women increased between the application and selection stages. Representation of non-White or

Hispanic applicants decreased at each stage of the recruitment process. Representation of Veterans increased at the cert list and selection stage compared with the application stage.

For USA Hire assessments, the representation of women increased between the application and cert list stages, and representation of non-White or Hispanic applicants decreased between those stages. Representation of Veterans increased between the application and selection stages.

Figure 1. Implementation of Hiring Assessments Across DOI



Build Evidence

The results provide a baseline understanding of DOI's implementation of EO-compliant assessments. Although the findings do not support any causal inferences about the effects of assessment methods on recruitment outcomes, they help describe the implementation of the three candidate assessment tools at DOI.

Future exploration in this area could examine reasons that self-reported assessments are still used relatively frequently or why manual assessments or USA Hire assessments are more commonly used in some hiring situations.

Future work could also examine the impact of candidate assessment tools on the hiring process through a randomized evaluation. This type of study could provide insights into whether any differences in hiring outcomes are likely due to the use of one assessment method over another, rather than being driven by hiring officials' preferences or other parts of the hiring process.