Ivy Planning Group LLC
Testimony Before
The Committee on Oversight and Government Reform
House of Representatives
Subcommittee on Federal Workforce, Post Service,
and the District of Columbia

On U.S. Government Accountability Office (GAO) African American Performance Assessment Study Tasks 1 and 2

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Chairman Davis and Members of the Subcommittee:

I am pleased to be here today to discuss the U.S. Government Accountability Office (GAO) African American and Caucasian Analysts' Performance Assessment Study, Tasks 1 and 2.

In 2007, GAO issued a solicitation seeking a third party assessment of the factors influencing the rating average differences between African Americans and Caucasians. On the basis of the contractor's analysis and findings, GAO requested recommendations to address any non-merit-based issues. The assessment was to include an analysis of existing GAO data and outreach to the various stakeholders (e.g., the Executive Committee, Employee Advisory Council, Managing Directors and other managers, Designated Performance Managers who are responsible for developing staff and assessing performance, and employees) for their perspective and experience using GAO's validated competency-based performance appraisal system. The contractor was to:

- Assess the demographic rating differences among and within teams, identify current related best practices within GAO's teams and outside GAO
- Recommend, as necessary and appropriate, specific steps that GAO should take to address the contractor's findings
- Understand and determine what factors may or may not be influencing rating average differences that GAO has identified, GAO required assessments of the assumption that all new hires and onboard staff are comparable in terms of skills, education, background, engagement roles, and other major performance-related factors.
- Assess the causes of 2002–2006 rating average differences, including providing reasonable assurance that there is equity and non-discrimination in the implementation of the competency-based performance appraisal system (CBPS), and helping to ensure that any rating average differences are merit based
- Provide findings and make any related recommendations it deems to be appropriate.

Ivy Planning Group was retained by GAO as the prime contractor for this solicitation. SRA International is a subcontractor to Ivy Planning Group. Together we are the Ivy Team. *Chart 1 (Appendix) outlines the Ivy Team's Project Overview.*

This project was divided into three tasks.

- Task One is an analysis of 2002-2006 performance data for African American and Caucasian Analysts. The purpose of this task is to confirm that there were differences between the ratings between African American and Caucasian analysts. The outcome is an analysis of 2002-2006 performance ratings data for African American analysts and Caucasian analysts. The Ivy Team performed a statistical analysis to determine if there are significant differences in the performance ratings of the two groups. Task One was conducted in September and October of 2007. We presented a briefing to GAO in October 2007.
- Task Two is an assessment and comparison of abilities, education, engagement roles, and performance of new GAO hires and onboard employees rated from 2002-2006. The purpose of this task is to determine if African American analysts and

Caucasian analysts have the same abilities and background when they arrive at GAO and to begin to look at what happens to them during their tenure at GAO. The outcome is an independent assessment of the comparability of the capabilities of African American and Caucasian analysts upon hire; a review of data to determine if access to training and engagement assignments influence performance ratings; and an assessment of human capital processes to determine if they contribute to rating differences. The Ivy Team evaluated key characteristics to determine if both groups are equal at time of hire; controlled statistically for differences in education, experience, skills, key roles, and gender; assessed rater demographics on outcomes; and reviewed human capital processes for consistency with agency goals. Task Two was conducted September through December of 2007. We presented a briefing to GAO in January 2008.

• Task Three is an assessment of internal and external best practices in implementing performance management systems; and preparation of a final report that brings Tasks One, Two and Three together. The purpose is to determine what happens to analysts during their tenure at GAO that may contribute to differences in performance ratings; outline the factors that may contribute to the differences; and present recommendations to mitigate the differences in performance ratings and remove barriers. Task Three involves researching best practices in performance management in the Federal and private sectors and within GAO and collecting qualitative data from African American and Caucasian analysts and raters at GAO. We are scheduled to present the final report at the end of April 2008.

I will discuss Tasks One and Two today. However, as the project is really the culmination of all three tasks, I look forward to having an opportunity to discuss Task Three and the Final Report with you in the future. The final report will provide our full synthesis and analysis of the data in the context of our overall findings and more importantly, our recommendations. Today I will report where we are in the project and what we have learned thus far.

Summary

- 1. Yes, there are differences in ratings between African American analysts and Caucasian analysts in general, by competency, pay band, team, location, and regardless of the race of the rater, and the differences are statistically significant.
- 2. There are some differences between African American analysts and Caucasian analysts at their time of hire. They come from different schools and proportionally do not have the same level of education. Please note that our data on school and degree are based on the highest degree earned by the analyst, and that while most analysts earned their highest degree prior to being hired, some analysts may have earned their highest degree after joining GAO.

- 3. The same factor impacts African American and Caucasian analysts' ratings differently. For example:
 - a. Having a PhD. has a statistically significant positive effect for Caucasian analysts but no effect for African American analysts
 - b. Caucasian analysts receive a ratings benefit from being assigned to high risk projects compared to African American analysts who receive no statistically significant effect of being assigned to a high risk project
 - c. African American analysts with some college, but no degree, receive no statistically significant negative ratings correlation compared to Caucasian analysts with some college, but no degree, who do.

Data Collection

The Ivy Team assembled data from GAO-supplied systems; created a unified analysis file containing data over time and across systems; and conducted analyses to understand performance rating differences across various dimensions. We requested and received the following data from GAO:

- Performance Assessment Data
 - Five On-Cycle (annual) review files spanning years 2002-2006 with a total of 8.640 records
 - Two Off-Cycle review files for the 2002-2004 and 2005 Competency Based Performance Systems (CBPS)
 - 2,049 (out of 3,560) Off-Cycle review records correspond to Professional Development Program (PDP) reviews between 2002 and 2006
 - Files also contain Ratee demographic information and scores for each competency
- Demographic Data files including: Identifier, Pay Plan, Race, Band, Gender, Employee Type (e.g., full-time permanent), Date of Birth, Date of Last Appointment, GAO Start Date, Salary, Education Level, Title, Job Series, Location, Rater demographic information, and Off-Cycle Ratee demographic information
- Knowledge and Skills Inventory System (KSIS) including: Skills, Certifications, Publications and Education data (Most advanced degree, Major, and Institution attended)
- Management and Assignment Tracking System (MATS) data: How many hours each analyst worked on a project, and Project Risk Level
- Internship Data (information on interns between 1998 and 2006, some of whom may still be in the PDP)
- Separation Data

GAO Performance Rating Scale

Ratings and Corresponding Scores	
Rating	Score
Below Expectations	0.0
Meets Expectations	1.5
Exceeds Expectations	3.0
Role Model	5.0

Note: There are some limitations to the data that were available. They are outlined in the appendix.

Are there differences between the performance ratings of African American analysts and Caucasian analysts?

Yes, there are differences in general, by competency, pay band, team, location, and regardless of the race of the rater.

African American analysts' mean scores were lower than Caucasian analysts' mean scores in all years. The difference is statistically significant for 2002, 2003, 2004, 2005, and 2006

See Chart 2. Performance Ratings Comparisons 2002-2006 African American vs. Caucasian analysts.

The difference in performance ratings begins during the PDP. Interestingly, over the course of the PDP, the average performance ratings for African American and Caucasian analysts increase. However, the average performance rating for Caucasian analysts increases more than that of African Americans (African American analysts improve .13 while Caucasian analysts improve .32)

Ratings Comparisons by Competency

With the exception of the average rating for Improving Professional Competence, African American analysts' mean scores were lower than Caucasian Analysts' mean scores across all competencies. Two of the three competencies that were dropped in 2004 (Improving Professional Competence and Facilitating and Implementing Change) are two of the three competencies for which the difference was not statistically significant. While not statistically significant, they are the competencies for which African American analysts performed better. *See Chart 3. Performance Ratings Comparisons by Competency*

The largest gaps are for the Maintaining Client and Customer Focus, Thinking Critically, and Presenting Information in Writing competencies. African American analysts score highest on Collaborating with Others; Caucasian analysts score highest on Maintaining Client and Customer Focus. The differences for Improving Professional Competence, Facilitating and Implementing Change, and Developing People are not statistically significant.

Leading Others, Developing People, and Investing Resources are not used for analysts in the PDP and are used for Band III only.

Ratings Comparisons by Pay Band

African American Analysts' mean scores were lower than Caucasian Analysts' mean scores across all Pay Bands. Band III differences are smallest, but are still generally statistically significant. See Chart 4. Performance Ratings Comparisons by Pay Band

Effect of Review Year

From 2002-2006, African American analysts' mean scores were lower than Caucasian analysts' mean scores. They were lower every year. The difference grew each year, with the most significant increase in 2005 and 2006. *See Chart 5. Regression by Review Year*

Ratings Comparisons by Location

With one exception, and this was not statistically significant, African American analysts' mean scores were lower than Caucasian analysts' mean scores across all locations. The ratings differences are statistically significant in eight of the thirteen locations.

Ratings Comparisons by Race of Rater

On average, raters of all races rated African American analysts lower than Caucasian analysts. The differences were statistically significant when the rater was African American, Hispanic or Caucasian. Based on these data, rater race demographics did not influence African American or Caucasian analyst ratings. See Chart 6. Performance Ratings Comparisons by Race of Rater

Do African American and Caucasian analysts have the same abilities and background when they arrive at GAO?

Given some of the data limitations, such as not having grade point averages and usable data related to skills to more accurately compare abilities, we are primarily able to answer this question based on two data points:

- Highest degree obtained
- Third-party ranking (*U.S. News & World Report*) of the schools from which analysts earned their highest degree

Note: These two data points do not allow us to adequately answer this question because some analysts received their highest degree **after arriving at GAO**.

Based on these data, African American and Caucasian analysts are not the same when they arrive. They come from different schools and proportionally do not have the same level of education.

In this section, we not only answer the question are they the "same" when they arrive, but also look at the impact of these factors on average ratings for Caucasians and African American analysts.

The Ivy Team performed regression analyses, a statistical technique applied to data to determine if there is a strong or weak correlation of variables. In this case, the analysis was to control for individual characteristics that may contribute to performance ratings. This included analyses of performance ratings against demographic, education, experience, and organizational variables for African Americans only, Caucasians only, and both Caucasians and African Americans (All). The "All" results are similar to the Caucasian results because Caucasians are almost 86% of the data (African Americans are 14.4% of the total).

Effect of Education (Most advanced degree earned)

A higher percentage of Caucasian analysts have graduate degrees (Master's and Doctorates) – 75 percent versus 66 percent. African American analysts are more likely to have only a Bachelor's degree or less (34 percent versus 25.6 percent of Caucasian analysts). See Chart 7. Highest Degrees Earned by Analysts

Having a Ph.D. has a statistically significant positive effect for Caucasian analysts but no effect for African Americans. In other words, if a Caucasian analyst has a PhD, there is a probability that it will have a positive impact on his or her performance rating. If an African American analyst has a PhD, there is a probability that it will have no impact on his or her performance rating.

Caucasian analysts with some college, but no degree, receive performance ratings significantly lower than those with Bachelors degrees. For African American analysts there is no statistically significant negative correlation. See Chart 8. Regression by Highest Degree of Analysts by Race

Effect of Education (Institution)

KSIS provided information on educational institution attended. This analysis uses the institution associated with the analyst's most advanced degree. US News and World Report's 2007 Ranking of 130 Colleges and Universities was divided into five equal groups (quintiles). Those schools that were not ranked by the magazine are captured by the "Institution – Not Ranked" variable. Those analysts who have not entered the relevant information in KSIS are captured as "Institution – Not Provided."

Caucasian Analysts are 1.5 times more likely than African American analysts to attend an institution in the top 3 quintiles for their most advanced degree. African American Analysts are 33% more likely to attend an institution not ranked by US News and World Report for their most advanced degree as compared to Caucasian analysts. *See Chart 9. School Ranking – U.S. News and World Report*

The effects of educational institution are measured relative to the top quintile. If the best performers come from the top ranked 26 schools, the coefficients for lower ranked quintiles would all be negative. While the coefficients for the second through fifth quintiles in the All and Caucasian regressions are all negative, they are not all statistically significant. However, the Not Ranked group (schools below the top 130), which accounts for 41% of African American analysts and 31% of Caucasian analysts, is negative and statistically significant. African

American analysts who attended historically black colleges or universities (HBCU), all but one of which are unranked, get a positive effect relative to other African American analysts. Thus there is a probability that African American analysts who attended a HBCU will have a higher performance rating than those who did not. *See Chart 10. Regression by School Ranking*

In addition to education, we also examined other factors.

Years of Prior Work Experience

Caucasian Analysts on average have approximately six years of work experience outside of GAO while African American analysts have about 4.5 years of outside experiences. Years of experience have a small positive effect on the performance ratings of Caucasians and virtually no effect on the ratings of African Americans.

Effect of Having Been a GAO Intern

Those African American Analysts who had been a GAO intern prior to becoming a full-time GAO employee seem to benefit from the experience. The effect of having been an intern has a statistically significant positive effect on the ratings of African American analysts.

What happens to African American and Caucasian analysts after they arrive at GAO that may contribute to differences in their performance ratings?

The data below begins to answer this question. We believe we will be able to answer it more fully once we complete the analysis of the qualitative data in Task 3 which will help us better understand: 1) how the human capital processes that impact performance ratings actually work and, 2) any differences in the experiences of African American and Caucasian Analysts. Nonetheless, what we know now suggests that pay band, rating team, and project risk level impact the performance rating difference.

Effect of Pay Band

Being in bands 2b and 3 have a positive effect on ratings for both African American and Caucasian analysts. Band 2a has a negative effect on the performance ratings of both African Americans and Caucasians.

Effect of Rating Team

African American Analysts' mean scores were lower than Caucasian Analysts' mean scores across all Rating Teams. However the differences were not always statistically significant.

Effect of Project Risk Level

Caucasian analysts benefit from being assigned to high risk projects, but for African American analysts the effect of being assigned to a high risk project is not statistically significant. See Chart 11. Project Risk

Human Capital Process Analysis

As part of the Ivy Team's work in Task 2, we began to review the human capital processes that impact performance ratings – workforce planning, recruiting, PDP, training, the assignment process, and the performance evaluation process.

The Ivy Team interviewed twenty-one GAO process owners and subject matter experts to understand how each process does or is intended to work. We reviewed GAO documents including: GAO website and intranet; competencies; forms, procedures, and resources; reports, strategy outlines, organization charts, and memos; training catalogues, guidelines, and materials; procedures manuals and process maps. We compiled, synthesized, and applied the Ivy Team's expertise in performance management, human capital systems, organizational effectiveness, and diversity to the qualitative information to identify findings and implications that could lead to the discrepancies between the performance ratings of African American and Caucasian analysts.

We found that the Human Capital processes are designed to be consistent and include good practices in their design; and GAO's Human Capital processes are well documented and available to supervisors and employees to assist them in implementing human capital procedures.

Task Three will provide additional, and we believe meaningful, qualitative data to inform these preliminary observations:

Structure and Process

- Many Human Capital processes have been redesigned or are undergoing redesign. These
 changes may, over time, mitigate some of the performance rating discrepancies.

 Examples include: structured learning paths, banding (2a and 2b), agency-wide
 mentoring program, campus executive recruiting training.
- There may be inconsistencies in the application of some of the Human Capital processes reviewed that may or may not impact performance ratings, e.g., field versus headquarters practices, PDP selection process differences for intern conversions versus new applicant hiring practices.
- There appears to be insufficient data management infrastructure, tracking, reporting and analysis, to permit GAO to monitor proactively differences in access to assignment opportunities and other factors that impact performance ratings. This includes limited capability for real-time reporting and limited ability to change data requests which delays timeliness of information gathering and analysis. Most metrics appear to be "lag" versus

"lead" measures that extend the time to institute changes until after results are in instead of before negative results can occur.

There may be inconsistencies in the administration of the Performance Management Process that may allow for more than the expected level of subjectivity that is inherent in performance management processes.

Professional Development and Training

- Experiences in the Professional Development Program (PDP) seem to shape an analyst's career.
- The role of the PDP advisor and his/her accessibility may impact an analyst's experience. Informal mentors seem to play an important role in the development of PDPers.
- Analysts of both races face similar challenges related to accessing training given their busy schedules.
- The project assignment process may not always work as outlined.
- Voluntary rather than required individual development planning may result in less focused attention to an analyst's developmental needs.
- GAO's environment appears to emphasize production with limited incentives for managers to develop lagging performers.

NEXT STEPS

In Tasks One and Two we answered key questions. An analysis of 2002-2006 performance data revealed that, "Yes" there were differences between the performance ratings of African American and Caucasian Analysts. The ratings gap existed for both off-cycle and on-cycle reviews. The ratings gap existed after controlling for variables including competency, rating team, pay band, location, race of the rater, education (highest degree earned), educational institution attended, ratee's average project risk, review year and other organizational indicators.

A review of GAO Human Capital Processes provides insights that may have contributed to some of these ratings differences, but additional information is required to provide a meaningful analysis.

In Task Three the Ivy Team will:

- Compare performance management-related processes with best practices and develop recommendations
- Review feeder systems to performance management (assignments, access to training) to identify any unintended barriers
- Analyze sample of approx. 16 individuals' performance reviews at years one, three, and five (approx. 48 individual performance review documents)

• Collect qualitative data to help test hypotheses and to better understand the work environment and how employees are coached, mentored, developed, and assigned work (17 focus groups in 4 locations)

The Final Report will bring the three tasks together, outlining the factors responsible for rating average differences, barriers or obstacles that may cause or perpetuate differences, and recommendations to mitigate differences and remove barriers and obstacles.

APPENDIX

Data Limitations

- Because grade point average was not available, we were limited in the variables that could be included in the regression analysis
- Because KSIS data are often incomplete or missing altogether, we are not able to measure skills prior to and after employment at GAO
- KSIS skills data are too detailed to consolidate for analysis. In addition, the self-reported skills assessments may be subjective
- Our experience variable represents years or age
- MATS risk data do not apply to all GAO analysts (e.g., those in staff offices or details in Congressional Relations)

Charts

- 1. Ivy Team's Project Overview
- 2. Performance Ratings Comparisons 2002-2006 African American vs. Caucasian analysts
- 3. Performance Ratings Comparisons by Competency
- 4. Performance Ratings Comparisons by Pay Band
- 5. Regression by Review Year
- 6. Performance Ratings Comparisons by Race of Rater
- 7. Highest Degrees Earned by Analysts
- 8. Regression by Highest Degree of Analysts by Race
- 9. School Ranking US News and World Report
- 10. Regression by School Ranking
- 11. Band and Project Risk

