



# Blueprint for a World-Class IT Talent Pipeline

Office of the Chief  
Information Officer  
National Oceanic and  
Atmospheric Administration  
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**EXECUTIVE BRIEFING**

**ESTABLISHING A TALENT PIPELINE FOR IT**

Our ability to fulfill NOAA’s mission requires thoughtful attention to recruitment, hiring and retention of talented entry-level IT professionals. Establishing a program for entry-level IT recruitment, with the championing of NOAA’s corporate and line office leadership, would infuse NOAA with the talent needed to excel at meeting our next round of challenges. A program designed to hire entry-level talent would provide leading-edge skills and the opportunity to develop and foster NOAA specific knowledge and technical skills. Hiring at the entry-level creates a sustainable, balanced workforce in terms of age, grade, cost, and new technology skills. To succeed, top-down support and an emphasis on succession planning are vital.

*“The government has the oldest workforce of any sector and therefore will experience the baby boom retirement wave earlier and faster than any of the other sectors.”*

*Max Stier, Partnership for Public Service CEO*

One out of every ten NOAA employees (about 1,300) is in the GS-2210 IT Specialist occupational series. Of these workers, 31% are retirement eligible within five years.<sup>1</sup> However, NOAA lacks established IT talent pipelines—only five percent of our IT workforce is in developmental positions (GS 5, 7, 9). Better succession planning is sorely needed and would provide the opportunity for substantial cost savings. The average salary for IT Specialists at NOAA is \$103,491.<sup>2</sup> In comparison, the salary for a GS-7 (with the special rate for entry-level IT) is only \$45,872. It is possible to hire two entry-level positions with cutting-edge skills for the price of one seasoned employee.

*Initial Cost Savings of Hiring  
Two GS-7 IT Specialists  
Instead of One GS-14 IT Specialist<sup>3</sup>*

|                     |                  |
|---------------------|------------------|
| GS-14/1 Cost        | 138,000          |
| GS-7/1 Cost         | (62,000)         |
| GS-7/1 Cost         | (62,000)         |
| <b>Cost Savings</b> | <b>\$ 14,000</b> |

There are several strategic requirements and leadership mandates that also drive the need to address IT talent requirements, including: the cross-cutting Enterprise Objectives for both IT Infrastructure and NOAA’s Workforce in the Next Generation Strategic Plan; the FY11

IT Implementation Plan, Strategic IT Goal 5: Skilled IT Workforce; DoC IT Security Certification; OPM human capital planning requirements; and the Federal CIO’s 25 Point Implementation Plan to Reform Federal Information Technology Management (Strengthen Program Management—Points 13 and 14).

A workgroup, jointly sponsored by OCIO and WFMO, was formed with representatives from Line and Staff Offices to participate in the Partnership for Public Service’s FedRecruit program. FedRecruit was designed to assist federal agencies with building their capacity to recruit, hire and retain top entry-level talent in Information Technology. The workgroup developed a proposed program to guide the recruitment and onboarding of entry-level IT talent. A high-level overview of

<sup>1</sup> Data current as of November 2010.

<sup>2</sup> Data current as of April 2011.

<sup>3</sup> Costs calculated using DC locality pay for the GS-14 salary, special rate salary for the GS-7, a benefits rate of 25.5%, training rate of 1.5%, awards rate of 1.5%, and a helpdesk fee of \$3,200. Final calculations rounded to the nearest thousand.

the program is presented over the next few pages. The workgroup also drafted a hiring managers' guide which is contained in a separate document.

## PROPOSED PROGRAM

This proposed program would attract and retain the best and brightest entry-level IT Specialists by creating university relationships, meaningful internships and team building cohort events. An organized program to attract and develop entry-level employees represents a lasting investment in NOAA's future.

The desired outcome of an IT talent pipeline for NOAA is to gradually develop a professionalized talent pool to support both day-to-day operations and to develop candidates for future leadership positions. Over time, and through the successful onboarding and development of program participants, NOAA can reap positive changes in the demographic profile and capabilities of its IT workforce.

Achieving a steady state of ten percent of the IT workforce in developmental positions would ensure adequate human capital refreshment, provide a continuous influx of cutting edge skills and achieve cost savings. Currently, only 4.8% of NOAA's IT workforce is at the entry level (grades 5, 7, or 9). To reach this state, the suggested goal would be to double the number of IT employees (part-time, full-time or co-op) in the entry-level grades over a five-year period. NOAA managers would need to recruit for twelve positions a year at a lower level.

## HOW DOES THE PROGRAM WORK?

The program would operate through workforce planning, recruiting, cohort management, day-to-day managerial activities and program evaluation. During these steps, a program team would be available to assist hiring managers. In addition, many aspects of the program would be centrally managed so that participants are part of a cohesive cohort and gain a greater understanding of issues that affect NOAA.



June 28, 2011

Each of the program elements, executed successfully, increases NOAA's return on investment in entry-level talent. Program oversight would facilitate opportunities for:

- Real, meaningful, important and useful work assignments
- Making a difference and identifying with NOAA's mission
- Structured learning
- Interaction with other interns and new hires
- Meeting senior leaders
- Positive impressions of NOAA and good stories to share

## WORKFORCE PLANNING

Workforce planning involves understanding the organization's long-term goals and objectives, identifying the workforce's developmental needs, and determining workforce trends and predictions. The program would establish a process that recruits entry-level employees, student interns, and co-ops; develops their skills and abilities; and prepares them for advancement. Program participants would have state-of-the-art skills that can be further enhanced and shaped with additional on-the-job training and education to meet NOAA's needs.

## RECRUITING

Colleges and universities are eager to work with agencies to connect their best and brightest students with good jobs. Building a quality relationship takes time, and the program team will build relationships with top universities and colleges through participation in events such as Career Fairs. Established relationships will be crucial in the ever-increasing competitive environment for IT talent.

## COHORT MANAGEMENT

Cohort management would be facilitated by the program team. Cohort management would include developmental activities, such as on-the-job and offsite training, cohort events, and cross-discipline experiences. Cohort events could include an orientation and SSMC tour; meeting with top NOAA management at HCHB; attending CIO Council meetings; participating in a NOAA-wide, cross-office and/or cross-discipline assignment or activity; brown bag lunches; and site visits, such as touring the NOC, NCEP (Suitland, MD), NSOF (College Park, MD), Telecom Gateway or SOC/HPC (Fairmont, WV).

## DAY-TO-DAY MANAGERIAL ACTIVITIES

A draft hiring managers' guide was developed. In the guide, checklists and feedback forms are included to aid in assessment of interns and entry-level hires. Further, additional information is provided on recruiting, onboarding, employee development, and employee assessment.

## PROGRAM EVALUATION

It is important to frequently review and revise intern and entry-level recruitment strategies. By collecting this information, trends can be identified and problems resolved. Feedback surveys have been drafted and are included in the hiring managers' guide. The program team would collect feedback and analyze the data to improve the program.

June 28, 2011

## NEXT STEPS

NOAA's approximately 1,300 IT Specialists are spread across roughly 360 different organizational units. This structure presents a challenge in creating a centralized program for entry-level IT Specialists. The success of this program necessitates effective collaboration between many different NOAA groups across dispersed organizational units.

To initiate an IT talent pipeline program, top leadership needs to identify positions and monetary resources. WFMO and OCIO would partner to lead the program. Line Offices and Staff Offices must designate representatives to participate and facilitate communication. The Workforce Management Office, the Office of the Chief Information Officer, LO/SO CIOs, the program team and coordinator, hiring managers and the participant have to all work together.

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