2001 Update of the Plan for Implementing the Federal IT Workforce Challenge Recommendations
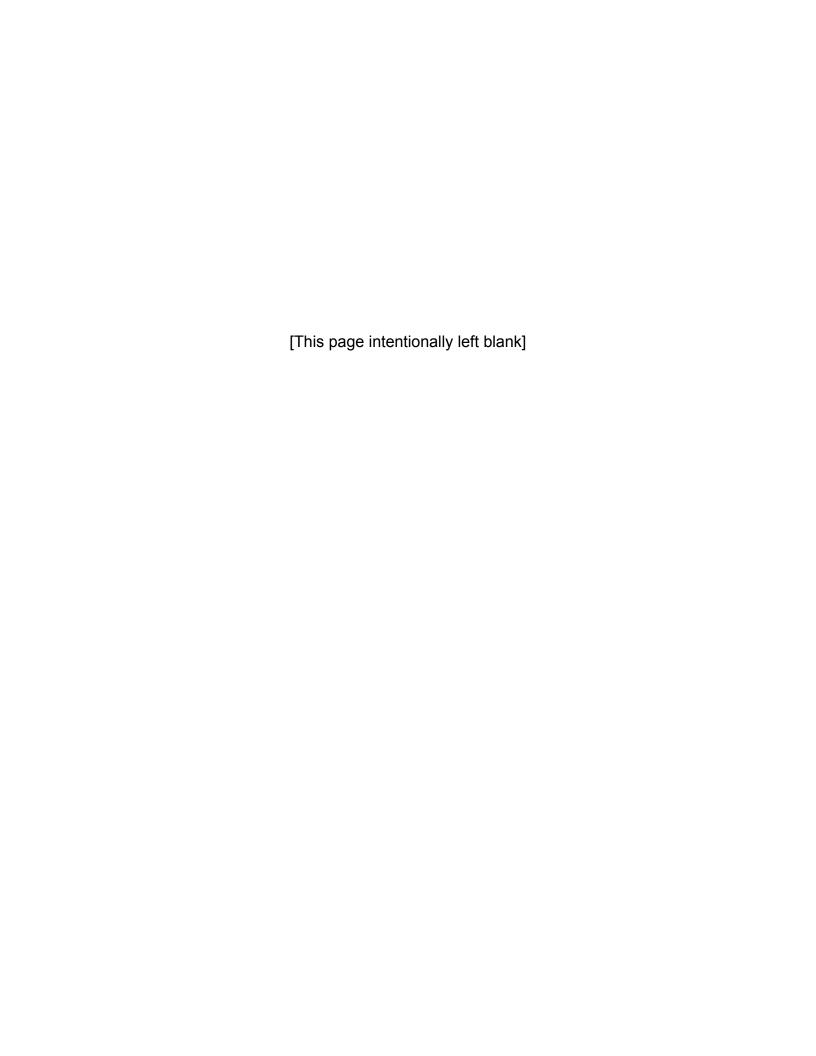
**Developed by the
Federal CIO Council IT Workforce Committee**

Submitted by

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1. Background

As we near the end of 2001, the demand for highly skilled IT workers continues to exceed supply despite the dot-com shakeout and economic slowdown. The Bureau of Labor Statistics projects that demand for computer systems analysts, programmers and engineers will increase for the foreseeable future. Employers around the country — including the Federal government — are struggling to meet their needs for these workers. The tight IT labor market has been well documented and reflected in rising salaries. For the second consecutive year, Federal Chief Information Officers (CIOs) have identified the need for skilled IT workers as their most critical issue.

Congress is also focusing on workforce issues. In July 2001, David Walker, Comptroller General, General Accounting Office (GAO), testified before the House Subcommittee on Technology and Procurement Policy. He identified the shortage of skilled workers and staff training/development as significant challenges facing Federal agencies. The GAO added "strategic human capital management" to their "high-risk list" for 2001.

Through its "Federal IT Workforce Challenge" initiative, the Federal CIO Council IT Workforce Committee has been a key advocate for strategies to develop and maintain an effective Federal IT workforce. The Committee's agenda encompasses the full employment life cycle: workforce planning, recruitment and retention, and career development. The Committee's successful partnerships with key agencies, organizations, and individuals have enabled many of the Committee's recommendations to be implemented as Governmentwide policies and programs that are now showing results.

The co-chairs of the CIO Council IT Workforce Committee, Gloria R. Parker and Ira L. Hobbs, are staunch supporters of the actions being taken by the Committee in response to the Federal IT Workforce Challenge. Both co-chairs are invited regularly to make presentations at conferences and meetings throughout the country in order to stress the importance of this effort. The co-chairs and Committee maintain close contact with officials at the Office of Personnel Management (OPM), the Office of Management and Budget (OMB), and other Federal agencies.

The accomplishments of the Committee would not have been possible without the tireless pursuit of the Committee's objectives by its individual members. The Committee, comprised of representatives from approximately 35 Federal agencies and organizations, serve on a volunteer basis for the benefit of the Federal IT workforce. They illustrate what can be achieved when Federal employees are empowered, allotted the required resources and given the opportunity to succeed.

The Committee maintains an active website at http://www.cio.gov. The website includes presentations given by the Committee co-chairs as well as by other members of the Committee in all areas of IT workforce improvement. Reports produced by the Committee are also available on this website.

The IT Workforce Committee and its partners look forward to a continuing role as a champion of current initiatives, such as the National Academy of Public Administration's (NAPA) IT Pay Study. The Committee will work to ensure that a talented and effective IT workforce is in place to support the missions and business objectives of Federal agencies now and in the future.

2. Introduction

In its June 1999 report, "Meeting the Federal IT Workforce Challenge," the Federal CIO Council's Education and Training Committee (since renamed the Federal IT Workforce Committee) presented 13 recommendations to address the complex challenges of maintaining an effective Federal IT workforce, including planning, recruitment, retention, and development strategies. The Committee followed up in 2000 with the release of "Plan for Implementing the Federal IT Workforce Challenge Recommendations". Since this time, the Committee has continued to make significant progress in meeting these IT workforce challenges.

This report, "2001 Update of the Plan for Implementing the Federal IT Workforce Challenge Recommendations," details the Committee's FY2001 accomplishments and continuing efforts. Some of these accomplishments and actions occurred in response to the report's recommendations and others were initiated independently in the spirit of the recommendations.

In addition to the Background and Introduction information provided in Sections 1 and 2, Section 3 of this report groups the original recommendations into three categories: workforce planning and management, recruitment and retention, and career development. Each category includes recommendations and background information, details the current status of activities to implement the recommendation, and describes the short-term plans for continuing activities for this recommendation. Each category also contains a detailed table of actions and plans, showing current and planned tasks with milestones. Section 4 presents several initiatives that the Committee is considering for future action.

The goal of the Federal IT Workforce Committee is to illuminate as many agency actions as possible that promote the needs of the Federal IT workplace, so that other Federal agencies may become aware of them and consider them for adoption. In this light, Section 5 highlights Best Practices of both industry and Government that may merit consideration by Federal agencies for local implementation. Section 6 contains useful workforce references including reports, books, articles, laws and regulations and websites.

3. Recommendations

3.1 Workforce Planning and Management

The Committee's first area of initiatives is focused on creating and implementing solutions to the tremendous challenges the Federal government faces in employing and paying its civilian IT workforce. Chief among them are disparate pay levels and an inflexible, outdated occupational standard. In response to these challenges, the Committee, in partnership with the OPM, continues to support the study of the IT occupation and pay flexibilities.

3.1.1 New IT Parenthetical Specialty Job Titles

Background:
In response to the IT Workforce Committee's concern that the GS-334 Computer Specialist series did not describe the current state of technology nor the work performed by IT professionals, OPM developed new IT Parenthetical Specialty Job Titles. OPM conducted focus groups in partnership with the Committee and agency subject matter experts. In October 1999, OPM issued a draft framework of new parenthetical specialty titles that more accurately describe

the Federal IT work covered by the GS-334 series.

In March 2000, OPM released the new parenthetical specialty titles for immediate use. OPM provided benchmark and structured interview materials as well as training in structured interview techniques and web-based assessment tools to agencies participating in an OPM-sponsored project pilot.

Current Status:
In June 2001, OPM released the new GS-2210 IT Management Series to replace the GS-334 series. This new series uses the parenthetical specialty titles to further define the specific IT profession job functions within the new series**.**

Short-Term Plans:
OPM will allow agencies time to implement the new titles before seeking feedback. Because of the rapidly changing technological environment, OPM will update specialty job titles periodically and may rely on stakeholders, including Federal agencies and the IT Workforce Committee, to request a review of these job titles.

3.1.2 IT Professional Classification Standard

Background:
In July 2000, OPM issued the new "Draft Job Family Position Classification Standard for Administrative Work in the Information Technology Group", GS-2200A. The draft standard was designed to cover all positions currently assigned to the GS-334 Computer Specialist series, as well as positions classified in other series where IT knowledge is paramount.

Current Status:
Over the past year, significant progress has been made toward the issuance of a new job family standard for classifying IT positions. In June 2001, the GS-2210 Classification standard was issued by OPM as the first series in the newly established GS-2200 Job Family. The GS-2210 standard includes new classification titles and updated job evaluation criteria that reflect the dramatic changes in technology that affect work performed by IT employees. This standard uses the new Parenthetical Specialty Job Titles to further describe the job responsibilities. It covers all Federal employees currently classified by the GS-334 series as well as other employees currently classified under other standards if their jobs are primarily related to the use and management of IT. Any new Federal IT jobs will be classified by this standard.

Short-Term Plans:
Because of the rapidly changing technological environment, OPM will update specialty job titles and classification standards periodically and may rely on stakeholders, such as Federal agencies and the IT Workforce Committee, to request a review of the standard.

OPM plans to study other IT-oriented job families in the near future, including GS-1550, Computer Scientists, GS-854 Computer Engineers, GS-332 Computer Operations, GS-335 Computer Clerks and Assistants, and other IT support occupations.

3.1.3 IT Job Family Qualification Standard

Background:
OPM, in close cooperation with the CIO Council IT Workforce Committee, developed a new IT job family qualification standard. The standard allows management who is hiring IT workers the flexibility to consider an applicant's competencies and skills in addition to the

applicant's education and experience. In addition to technical skills, the new standards allow hiring managers to consider non-technical skills, e.g., oral communications and teamwork skills, when evaluating prospective employees.

Current Status:
A new competency-based IT job profile was developed based on the CIO Council-endorsed Clinger-Cohen core competencies and has been piloted by 11 agencies. The new model for qualification standards captures the full range of general and technical competencies required by IT positions from entry level through senior expert. Agencies can hire applicants at a grade level that matches an applicant's competencies rather than basing their decision solely on an applicant's experience.

Agencies piloting the new IT competency-based job profile were able to use a number of new and innovative tools and strategies for recruiting high quality applicants, including web-based assessment tools. OPM is now evaluating the benefits of the competency-based job profile approach. Further information is available at http://www.opm.gov/fedclass/html/whatsnew.htm.

Short-Term Plans:
OPM is currently evaluating the competency-based approach and will release its results in early 2002.

3.1.4 Special Rate Studies for IT Professionals

Background:
By law, OPM may establish special salary rates to address situations in which the Government's recruitment or retention efforts are, or are likely to become, significantly handicapped because of its inability to compete with the private sector. In 2000, two studies by OPM and the CIO Council addressed Federal civilian IT workforce pay to examine the possibility of establishing special rate schedules for categories of IT workers to address recruitment and retention problems.

Current Status:
Using the authority granted under 5 U.S.C. 5305, OPM established new pay rates for GS-334 Computer Specialists between GS-5 and GS-12, effective January 2001. This action boosted the pay of approximately 33,000 current Federal IT workers. The rates were developed with the support of the CIO Council. Further information on this initiative is available on the OPM website at http://www.opm.gov/oca/compmemo/2000/2000-13.htm. The rates are designed to help agencies recruit high quality entry and developmental level Federal workers.

Short-Term Plans:
OPM will continue to monitor the IT staffing situation to determine if the special rates should be expanded. The new rates will be reviewed during the next normal review period in the first quarter of FY2002.

3.1.5 IT Pay System Study

Background:
In Fiscal Year 2000, the CIO Council sponsored an independent study by the National Academy for Public Administration (NAPA) to look at the current federal approach to IT compensation, examine best practices in the public and private sectors and recommend changes that would make the federal IT workforce more effective. Improved and more competitive IT pay

systems can result in better IT management and improved service to citizens. This was a comprehensive study that involved the sponsorship or participation of the Executive, Judicial and Legislative branches of government.

Current Status:

NAPA assembled a first rate NAPA Fellows Panel and a cross-disciplinary executive Project Leadership Committee (PLC) to oversee the study. It contacted a large number of organizations and conducted in-depth discussions with those that demonstrated best practices and innovative solutions to the IT workforce crisis. In March 2001, at the 5th Annual Association for Federal Information Resources Management (AFFIRM) / FOSE breakfast, NAPA released the executive summary of its initial research findings.

In April 2001, the NAPA team presented three proposed pay system alternatives to focus groups of Federal managers and employees. There were 81 focus group participants which included 60 IT participants, 11 HR participants, and 10 financial participants. The focus group participants provided useful feedback on the models and provided helpful suggestions for modification. None of the three models presented was judged to be "best" for resolving the issues, though each had useful features. Discussions with the focus group participants revealed that any change from the current system would require significant change management efforts by all parties.

In April 2001, Costis Toregas, the NAPA Panel Chair, and Myra Shiplett, the NAPA Project Director, presented the study and the compensation alternatives to NAPA's Public Service Panel, a group of NAPA Fellows. The need to balance outsourcing IT functions and retaining these jobs "in house" evoked significant discussion. The research in Phase 1 of the study clearly showed that Federal agencies make decisions on the issues based on legislative mandates, the type of IT work performed, and their ability to attract and retain the talent they require.

The NAPA Team met with the PLC in June 2001 to discuss the alternative IT pay models and to get the PLC's final comments. The business case for change was an area of particular scrutiny.

Short-Term Plans:

The final NAPA report will be presented at the Interagency Resources Management Conference (IRMCO) on September 5, 2001 by Costis Toregas (Public Technology, Inc.), Gloria Parker (HUD), Ira Hobbs (USDA), Myra Shiplett (NAPA), Anne Altman (IBM), Ed DeSeve (American Government Management) and Renny DiPentima (SRA International). The report recommends specific compensation principles for the Federal government and outlines approaches for implementing these principles.

3.1.6 Workforce Planning

Background:

Accurate, specific, and timely information about the Federal IT workforce is essential for management to understand trends and plan accordingly. OPM, in cooperation with the Human Resources Management Council, developed a five-step workforce planning model. The model, available on the OPM website http://www.opm.gov/workforceplanning/index.htm, links human capital planning with mission and strategic plans.

Current Status:

OPM is developing a systematic methodology for workforce planning and staff analysis. The purpose of this initiative is to provide Federal agencies with a single, integrated interface to a vast array of tools to facilitate their workforce planning. OPM has identified sets of data sources (e.g., Civilian Personnel Data File, Educational Pipeline for Post Secondary Educational Institutions, Census) to be incorporated in a full-scale version of this automated tool.

The Department of the Army asked the Interagency Requirements Group to sponsor expanding an internet-based Workforce Planning and Forecasting System that had been developed for them. Agencies banded together to support the expanded use of this tool. Technical requirements to use the system, such as data lines, security and hardware platforms, have been identified and shared. Processes for establishing and maintaining this system have been proposed. These include the establishment of the common database and basic functionality by the group. Agencies could customize or enhance the application and will share any resulting capabilities with other agencies.

Short-Term Plans:

OPM plans to develop an automated system to support workforce planning by the end of FY2002.

Table 1 identifies the current and planned tasks and milestones for actions necessary to implement the recommendations in the June 1999 report in the area of workforce planning and management.

Table 14: Actions and Plans for Workforce Planning and Management

1. New IT Parenthetical Specialty Job Titles	
Action: Identify and implement new IT parenthetical specialty job titles	
Responsible Agency: OPM **Contact:** Judith A. Davis, Chief, Classification Programs Division, 202-606-2950	
Tasks:	**Milestones:**
Conduct extensive literature review	Completed
Develop IT job titling model	Completed
Conduct focus groups with Federal, academic, and private sector representatives to review job titling model	Completed
Distribute draft parenthetical specialty titles for 30-day review	Completed
Issue new parenthetical specialty titles for optional use	Completed
Begin pilot of new titles with competency-based job profile	Completed
Issue final titles with new IT job family classification standard	Completed
Issue new parenthetical specialty titles as technology requires	On-going
2. IT Professional Classification Standard	
Action: Develop and implement a new IT job family classification standard	
Responsible Agency: OPM **Contact:** Judith A. Davis, Chief, Classification Programs Division, 202-606-2950	
Tasks	**Milestones:**

Study IT occupations	Completed
Distribute draft IT job family classification standard for 90-day review	Completed
Publish new IT job family classification standard	Completed
Study other IT oriented work	TBD
Update Classification standards	As Required

3. IT Job Family Qualification Standard

Action: Develop and implement a new IT job family qualification standard

Responsible Agency: OPM *Contact:* Donna Gregory, 202-606-0820

Tasks:	*Milestones:*
Study IT occupations	Completed
Distribute draft competency-based job profile for GS-334 series for 30-day review	Completed
Develop competency guidance for Information Security Specialty	Completed
Begin pilot of competency-based job profile	Completed
Distribute Governmentwide IT survey	Completed
Issue new competency-based job profile	Completed
Analyze responses to survey, issue technical report	Fall 2001

4. Special Rate Studies for IT Professionals

Action: Identify and implement new compensation/special rates (Special Rate Study for IT Workers)

Responsible Agency: CIO Council, OPM

Contact: Donald Winstead, 202-606-2858

Tasks:	*Milestones:*
Memo to agency Director of Personnel requesting assistance	Completed
Submission of agency recruitment and retention information	Completed
Implementation of new pay rates	Completed
Consider expansion of Special Rates (OPM)	TBD

5. IT Pay System Study

Action: Identify and implement new compensation/special rates (NAPA study of IT pay structure and proposed salary structure)

Responsible Agency: CIO Council IT Workforce Committee *Contact:* Fred Thompson, 202-622-1557

Tasks:	*Milestones:*
Award contract	Completed
Conduct research/ briefing on findings	Completed

Draft report for review and comment	Completed
Release Final Report	September 5, 2001
Publish and post to website	September 2001
Execute Communications and Marketing effort	September – December 2001

6. Workforce Planning

Action: Establish workforce planning capability

Responsible Agency: OPM *Contact: Mary Ellen Beach*, 202-606-1040

Tasks:	*Milestones:*
Develop systematic methodology for workforce planning and staff analysis	Completed
Identify automated tools and data sources	Completed
Complete development of an operational prototype workforce planning and analysis model and accompanying automated system	Completed
Begin prototype testing with selected agencies and stakeholders	Completed
Complete evaluation of prototype model and system	Completed
Complete technical requirements and specifications for "beta" version of model and system	TBD
Complete SOW for design and development of "beta" version	TBD
Award contract	TBD
Begin development of "beta" version and collect feedback from test agencies	TBD
Complete work on "beta" version of the workforce planning model and accompanying automated system	TBD
Provide model and system for Governmentwide use; initiate plans for continuing system maintenance and technical assistance	TBD
Implementation and program management	TBD

3.2   Recruitment and Retention

The Committee's second area of initiatives is focused on IT workforce recruitment and retention. Many recruitment and retention strategies have been used by agencies on a limited basis and need to be expanded. These strategies include recruitment and retention bonuses, telecommuting, paying for the costs of academic degrees and other types of training and professional development, and using direct hire authority. U.S. Representative Tom Davis and others have proposed legislation to change rules for recruiting and retaining Federal IT employees, such as short-term appointments for critical IT positions. Many other of these measures are discussed in this section of the report. More information on the recruitment and retention bonuses is available on OPM's website, http://www.opm.gov/oca/pay/HTML/Q&ARRR.HTM.

3.2.1 Federal Career Intern Program

Background:

      The Federal Career Intern Program, launched in December 2000, is designed to help agencies attract and recruit exceptional individuals into a variety of occupations. It was created under Executive Order 13162, and is intended for positions at grade levels GS-5, 7, and 9. In general, individuals are appointed to a 2-year internship. Upon successful completion of the internships, the interns may be eligible for permanent placement within an agency.

Current Status:

      This program benefits both job seekers and Federal employers. Under this program, participants receive unrivaled professional experiences and training opportunities tailored to meet their professional goals. Agencies can use this program to target their recruitment efforts for specific occupations, such as the IT and information security occupations. Since there is no public notice requirement for Career Interns, agencies can quickly appoint qualified individuals into this program.

Short-Term Plans:

      The Committee will continue to support OPM's commitment to the Federal Career Intern Program. More information can be obtained from agency human resources management offices or OPM's website, http://www.opm.gov/careerintern/.

3.2.2 Non-traditional Workforce

Background:

      Non-traditional labor pools include unemployed and underemployed mid-career technical professionals; retired military technical professionals; women, minorities, and persons with disabilities, as well as part-time workers. A high priority of the Committee has been to support OPM in their ability to encourage Federal agencies to recruit from non-traditional labor pools. A July 2000 Executive Order announced that the Federal government will hire 100,000 people with disabilities. OPM has oversight of this initiative and reviews agency strategies for recruiting and hiring people with disabilities.

Current Status:

      A high priority of the IT Workforce Committee is to track closely the activities of the Access Board (an independent Federal agency devoted to accessibility for people with disabilities), the General Services Administration (GSA), and other agencies in their efforts to begin implementing the requirements of Section 508 of the Rehabilitation Act of 1973. Section 508 requires that all Federal agencies procure, develop, maintain, and use electronic and IT which is accessible to individuals with disabilities. Further information on this important legislation and its implementing standards are available at http://www.section508.gov.

Short-Term Plans:

      In September 2001, a new website to assist in developing the non-traditional workforce will be unveiled by the Human Resource Management Council, an interagency task force. The website will provide information for Human Resource managers, supervisors, Federal employees and applicants on all aspects of the non-traditional workforce. The OPM Office of Diversity provides guidance, structure and reports on actions being taken to implement the Executive Order.

3.2.3 Scholarship for Service

Background:

      According to data from OPM, the Federal government employed approximately 60,000 IT professionals at the end of FY2000. An additional 16,000 IT professionals will be needed in the next 10 years, according to the Bureau of Labor Statistics' projections. Due to the Federal government's increasing reliance on IT in emerging e-Government initiatives, many of these new IT workers will be needed in the area of cyber security. However, a variety of studies within the IT industry identified a persistent shortage of skilled IT workers and a critical deficiency in the number of IT workers with specific information assurance skills. The critical shortage of cyber security specialists is caused by a combination of the general shortage of IT professionals coupled with the increased special knowledge that an IT security worker needs. To be maintained, this special knowledge requires continuing education and training as technology rapidly changes.

      The Federal government has addressed this critical shortage of cyber security professionals. "The National Plan for Information Systems Protection, Version 1.0: An Invitation to a Dialogue," released in January 2000, addressed a complex interagency process for approaching critical infrastructure and cyber-related issues in the Federal government. Created at the direction of the President, and coordinated by the National Coordinator for Security, Infrastructure Protection, and Counter-Terrorism and the Critical Infrastructure Assurance Office (CIAO), the National Plan includes an education and training initiative that addresses education and recruitment of new cyber security workers for the Federal government. Entitled the Federal Cyber Service, this initiative includes the Scholarship for Service (SFS) program that provides scholarships to junior and senior year undergraduate or master's degree students who include an emphasis in the field of information assurance in their studies. In return for the scholarship, students will have up to a two-year commitment to work for the Federal government.

Current Status:

      The SFS program was established with $11.2M in FY2001 funding included in the National Science Foundation (NSF) budget. Based on this funding, NSF posted the SFS grant opportunities for colleges and universities with an excellent academic program in information assurance (http://www.nsf.gov/cgi-bin/getpub?nsf0111). Grant applications, received by NSF in January 2001, were evaluated through application peer review and campus program evaluations. Six institution grant awards were announced at the National Colloquium for Information Systems Security Education in May 2001. Institutions awarded grant money were: Carnegie Mellon University, Iowa State University, Purdue University, University of Idaho, University of Tulsa and Naval Post Graduate School, Monterey, CA. Student applications for Fall 2001 semester scholarships through the grant universities were approved by OPM in August 2001.

Short-Term Plans:

      The program is on target with student scholarship recipients beginning their information assurance studies in the Fall 2001 semester. A meeting with Federal agencies is planned by NSF and OPM for 1st Quarter FY2002 to provide more information on the program as well as student resumes. Federal agencies will review student resumes for recruitment, and provide summer employment for selected students. Additional funding will be forthcoming in FY2002 in the NSF budget for more scholarship awards.

3.2.4 Student Outreach

Background:

      In October 2000, the Federal CIO Council's IT Workforce Committee initiated a High School Outreach Team for Information Technology (HOT-IT) to promote high school students'

interests and preparation for IT careers. Since this time, HOT-IT has sponsored two job-shadowing events where students from local D.C. area high schools visited various Federal agencies' IT offices. Since its inception, the team has also worked closely with the Industry Advisory Council's IT PACE (Partnership for Academic and Career Enhancement) Committee.

Current Status:

The HOT-IT Team's most recent Job Shadow Day in May 2001 was geared to students in DC high schools. Approximately 45 IT professionals from five Federal agencies volunteered to host the students. In June 2001, the IT Workforce Committee presented the students and their counselors with Certificates of Appreciation for their participation.

Short-term Plans:

Future Job Shadow Days are being planned to include students from suburban Maryland and Virginia.

3.2.5 IT Career Academy Partnership

Background:

The Committee promotes high school students' interests in and preparation for IT careers. In addition to sponsoring shadow days and internships, the Committee plans to initiate a formal partnership with the National Academy Foundation (NAF). In July 1999, the NAF launched a new Academy of Information Technology (AoIT). The program provides a ninth through twelfth grade curriculum, with opportunities to partner with community colleges, universities, and businesses. The Committee assisted in the development of the curriculum for the AoIT.

Current Status:

The Committee will develop a national Memorandum of Understanding (MOU) in Fall 2001 to frame and promote partnership efforts of Federal CIO Council agencies around the country with NAF AoITs. These partnerships will include job shadowing, summer internships, mentoring, and support of academy advisory boards.

Short-term Plans:

To determine the effectiveness of the program, the Committee will monitor the success of the partnerships. The Committee also plans to provide "how to" information on job shadowing, internships, mentoring, and career day presentations to IT offices in Federal agencies.

Table 2 identifies the current and planned tasks and milestones for actions necessary to implement the recommendations in the June 1999 report in the areas of recruitment and retention.

Table 22: Actions and Plans for Recruitment and Retention

1. Federal Career Intern Program	
Action: Encourage the use of existing hiring flexibilities	
Responsible Agency: OPM **Contact:** Suzy Barker, 202-606-2226	
Tasks:	**Milestones:**
Distribute the OPM Employment Solutions Bulletin	Completed
Periodic distribution of the OPM Employment Solutions Bulletin	Completed
Measurement of results	TBD

2. Non-traditional Labor Pools

Action: Develop program to recruit women, minorities, and people with disabilities

Responsible Agency: OPM **Contact:** Mercedes Olivieri, 202-606-2605

Tasks:	Milestones:
Reports and Guidance from OPM on a Diverse Workforce including "Building and Maintaining a Diverse, High Quality Workforce"	Completed
Release new website on non-traditional workforce development	September 2001

3. Scholarship for Service

Action: Establish a scholarship and internship program

Responsible Agency: CIAO **Contact:** Shirley Malia, 202-482-7469

Tasks:	Milestones:
Form CIAO	Completed
Begin university outreach effort to promote SFS program	Completed
Establish standards, accreditation requirements, and guidelines for a university to apply for and be selected to participate in the SFS program	Completed
Designate the universities selected to participate in the first year of the SFS program	Completed
Conduct pilot information systems training program for prospective SFS faculty. This will be the precursor to a faculty development program.	Completed
Recruit up to 100 SFS graduate and undergraduate college students for the first year beginning October 2001, and 300 students for each subsequent year	Completed
Enroll the first SFS program students	October 2001
First graduates of the SFS program enter the Federal IT workforce	May 2003
Measurement of results	November 2003

4. Student Outreach

Action: Federal CIO Council's IT Workforce Committee, Treasury, OPM and Commerce Department jointly conduct an information/outreach campaign to encourage students to pursue IT careers

Responsible Agency: Treasury, Commerce, Education, OPM, CIAO **Contact:** Dagne Fulcher, 202-622-9084

Tasks:	Milestone:
Form HOT-IT	Completed
Develop partnership with IAC's IT PACE Committee	Completed
Conduct Ground Hog Job Shadow Day – February 2001	Completed
Conduct DC Schools Job Shadow Day – May 2001	Completed
Conduct 2nd Job Shadow Day	February 2002

Conduct Baseline Assessment of Current Activities	December 2001
Design and Implement the high school and secondary school outreach programs to include conferences, summer work, and internships.	Spring 2002
Offer technical training programs to SFS and high school program students on their summer work programs.	Summer 2002
Establish summer internships for students	Summer 2002

5. IT Career Academy Partnership	
Action: Develop a partnership with NAF career academies	
Responsible Agency: Commerce, Treasury, **Contact:** Dagne Fulcher, 202-622-9084	
Tasks:	*Milestones:*
Form interagency team (Commerce, Treasury)	Completed
Attend NAF Annual Conference	Completed
Develop National Memo of Understanding with NAF	October 2001
Establish agency/school partnerships	On-going
Measurement of Results	September 2002

3.3   Career Development

The Committee's third area of initiatives is focused on developing the careers of Federal IT professionals as well as enhancing the IT skills of all Federal employees. As a recent example of Government interest in Federal IT career development, in July 2001, U.S. Representative Tom Davis introduced legislation to establish a public/private exchange program for IT professionals. The program, dubbed "Digital TechCorps," would be designed to foster innovation and partnership between government and industry.

3.3.1   Core Competencies

Background:
The Federal CIO Council initially endorsed the Clinger-Cohen Core Competencies in September 1998. These competencies serve as a baseline to assist Federal agencies in complying with Section 5125(C)(3) of the Clinger-Cohen Act and comprise the skills and knowledge that make a CIO organization successful. The competencies, available from the CIO Council website at http://www.cio.gov/Documents/lo%5Ffinal%5F2001%2Ehtml, are updated on a biennial basis by the Committee's Clinger-Cohen Core Competencies Team.

Current Status:
In September 2000, the competencies were updated to reflect the skill and knowledge requirements consistent with the current IT technologies and issues. Two new core competency areas were added, IT Security and e-Government, as well as a new sub-competency, Knowledge Management.

Short-Term Plans:
The Federal IT Workforce Committee will revise the competencies as required and

publish the updated version in September 2002.

3.3.2 IT Skills Roadmap

Background:
       A high priority of the Committee in the area of Career Development is the implementation of a web-based career planning tool, referred to as an "IT Skills Roadmap", for use by both current and prospective Federal IT employees.

Current Status:
       The intent of the IT Skills Roadmap tool is to assist IT professionals in determining job tasks and competencies for IT Management positions in the GS-2210 series as well as selected information assurance positions. It will also enable IT employees to develop career and training plans to help them achieve their career goals. More specifically, the tool will include: descriptions of the Federal IT career field, including general and technical competencies; instruments that allow individuals to assess their knowledge and skills against the competencies; a compendium of training, education, and technical materials for each competency (including information on providers); and, instruments to help users create individual training and development plans. In addition, the project team envisions providing links to other government, academic, and private sector websites that provide IT career and employment information.

Short-Term Plans:
       The Committee has reviewed numerous IT Skills Roadmap web-based tools, from both the public and private sectors, and plans to make a selection in September 2001. The goal for implementation is early 2002.

3.3.3 Student Loan Repayment

Background:
       The Committee supports OPM's efforts to allow Federal agencies to pay for employee degrees or certifications. Not only do these types of programs benefit eligible employees, but they also help agencies compete for IT employees.

Current Status:
       In January 2001, OPM issued final regulations authorizing Federal agencies to repay student loans as a recruitment or retention incentive for job candidates and current employees. Although not specifically targeted at IT employees, the loan repayment program is the latest in a series of recruitment and retention initiatives developed by OPM.

       This initiative is both a recruitment and a retention tool for Federal agencies. As a recruitment tool, agencies can offer student loan repayments once they have made an offer of employment. As a retention tool, loan repayments can be made to current employees as one of many incentives designed to keep talented employees in the Federal workforce. Agencies may repay up to $6,000 per year per individual, for a maximum of $40,000. This incentive, when combined with the Federal Career Intern Program (see Section 3.2.1), gives agencies a powerful one-two punch in the government's battle to win the war for talent.

Short-Term Plans:
       Using this authority, agencies will tailor their loan repayment programs to meet their specific human resource needs. Further information on this program can be obtained from agency human resources offices or from OPM's website, http://www.opm.gov/studentloan/.

3.3.4 Center for IT Excellence (CITE)

Background:
    An initiative to develop a Center for Information Technology Excellence (CITE) is just one of the training and education initiatives of the Federal Cyber Service (FCS). The CITE will identify training providers that Federal agencies can use to train current IT personnel in IT Security/Information Assurance (IA) skills and help them maintain their skill levels throughout their careers. The CITE will leverage the progress made by the Department of Defense and other Federal agencies in this critical skills area.

Current Status:
    Since no FY2001 appropriation was received in support of the CITE initiative, the CIAO is working with the Committee's IT Roadmap Team to adapt their program to fulfill the CITE objectives of providing information systems security training.

Short-Term Plans:
    See Current Status above.

3.3.5 CIO Mentoring Program

Background:
    The IT Workforce Committee launched its CIO Mentoring Program in August 2001. The program will place candidates who are looking for challenging and interesting opportunities to enhance their knowledge, skills, and abilities in the IT area. During the first year of the mentoring program, the leaders of the Federal CIO Council's five committees will serve as mentors to protégés from agencies across Government. The program offers assignments primarily to mid-level IT professionals, but Federal employees of all grade levels are welcome to apply.

Current Status:
    Members of the CIO Council have identified temporary assignments that will provide the protégé with information management experience and are compatible with CIO Council goals. Work assignments may vary in length and nature, and may include participation on committees, attending Congressional hearings and a host of enriching training experiences. Mentoring program applications and a list of rotational assignments are available at http://www.cio.gov.

Short-Term Plans:
    In response to the rotational assignments posted on the CIO Council website, interested IT professionals are encouraged to submit applications that include a resume, a statement of development plans, and sponsoring agency endorsement. Mentoring program candidates will be interviewed for positions in which they have particular interest. If a protégé is offered more than one assignment, s/he may choose the assignment that is most supportive of his/her development goals. The program is designed to include mentoring opportunities with the members of the Procurement Executives Council (PEC) and the Chief Financial Officers (CFO) Council.

3.3.6 CIO University

Background:
    The Committee determined that a virtual CIO University was needed to provide

comprehensive training for Federal IT leaders. The CIO University, administered by GSA, is a virtual consortium of universities that offers graduate level curriculums that directly address the Clinger-Cohen Core Competencies, skills and knowledge that make a CIO organization successful. The CIO University is open to SES-level individuals, GS-15s, GS-14s, and comparably ranked military and industry officials. Each participant must have an executive sponsor.

Current Status:

The current academic partners are Carnegie Mellon University, George Mason University, George Washington University, and the University of Maryland University College. They use the Clinger-Cohen Core Competencies as guidelines to model their offerings.

Currently, over 100 individuals have enrolled in curriculums offered by the CIO University's four academic partners. At the E-Gov 2001 Conference in July 2001, CIO University graduated its second class, 39 students, bringing to 57 the total alumni of the program. The next class will graduate in July 2002.

Short-Term Plans:

The Core Competencies were revised on their biennial schedule and released in September 2000. A total of 545 Learning Objectives were developed to correlate with the revised competencies, of which 159 were new objectives. These new objectives reflect the two new core competency areas, e-Government and IT Security, as well as the new sub-competency, Knowledge Management.

GSA released a Request for Information (RFI) that addressed these revised Learning Objectives to solicit academic partners for upcoming school years, 2001-2003. The existing CIO University academic partners as well as potential new partners submitted proposed offerings in response to the RFI. GSA is evaluating the proposed offerings to ensure they address all applicable Learning Objectives. The final selection of partnering universities for the upcoming school years is scheduled for the Fall of 2001. Further information is available at http://ciouniversity.cio.gov.

3.3.7 STAR Program

Background:

The Strategic and Tactical Advocates for Results (STAR) program (http://star.gsa.gov) is a graduate level program in strategic leadership. It was designed under the auspices of GSA and the CIO Council's Federal IT Workforce Committee. STAR focuses on tomorrow's Federal workplace — the highly strategic environment in which operational functions are outsourced and agency business objectives and outcomes are key. STAR emphasizes Clinger-Cohen results-based management as well as IT as a strategic resource. STAR is designed to create an optimal learning environment for the professionals who attend the seminar.

This resident seminar program is comprised of modules in program and project management, leadership, security, technology, and government. STAR follows the adult learning model, focusing on experiential learning and each student's personal and organizational goals. A key design element of the STAR program is that each student develops a business case which ultimately integrates the diverse aspects learned from each module into an immediate return to the participant, the sponsoring agency, and the sponsoring executive.

Current Status:
   The STAR program has graduated four classes of over 100 students.

Short-Term Plans:
   In cooperation with the program, participating institutions have begun efforts to streamline the program's length from two weeks to one week. The goal is not only to streamline the time investment, but also to reduce the cost of tuition while delivering the essence of the original program's content. Site visits are underway to identify a facility in the western U.S. that will accommodate a larger potential student base of Federal professionals. Three additional classes will complete the program by September 2002.

   Table 3 identifies the current and planned tasks and milestones for actions necessary to implement the recommendations in the June 1999 report in the areas of career development.

Table 33: Actions and Plans for Career Development

1. Clinger-Cohen Core Competencies	
Action: Review and revise CIO Core Competencies on a biennial basis	
Responsible Agency: CIO Council IT Workforce Committee **Contact**: Joyce France, DOD, 703-602-0980 x183	
Tasks:	**Milestones:**
Review, vet and update the Clinger-Cohen Core Competencies	Completed
Obtain the endorsement of the Federal CIO Council	Completed
Post new 2001 version on the CIO Council website	Completed
Initiate update of Clinger-Cohen competencies	Winter 2001/02
Acquire input, review/update Clinger-Cohen competencies	Summer 2002
Distribute Draft for review/concurrence by Federal agencies	Summer 2002
Obtain concurrence of CIO Council and post 2002 version to CIO Council website	Fall 2002
Review/Update of Learning Objectives	Winter 2002/03
Concurrence / Posting of revised Learning Objectives	Winter 2002/03
2. IT Skills Roadmap	
Action: Implement a web-based IT skills/career planning tool	
Responsible Agency: General Accounting Office	
Contact: Jim Bouck, 202-512-2739	
Tasks:	**Milestones:**
Research Tool	Completed
Select Tool	September 2001
Modify Tool/Kickoff Pilot	Fall 2001
Implement Governmentwide	Early 2002
3. Student Loan Repayment	
Action: Eliminate restrictions on agencies paying for degrees and certifications	

Responsible Agency: OPM, OMB Contact: Suzy Barker, 202-606-2226	
Tasks:	**Milestones:**
Repayment of Student Loans: proposed rule making	Completed
Issue guidance from OPM to agencies	Completed
Consider the elimination of other restrictions	TBD
Measurement of Results	TBD

4. Center for IT Excellence

Action: Develop a Center for Information Technology Excellence (CITE)	
Responsible Agency: OPM, CIAO *Contact:* Shirley Malia, 202-482-7469	
Tasks:	**Milestones:**
Complete a review of Federal-wide information systems training and education programs to identify existing programs and any gaps or redundancies	TBD
Establish the standards that institutions will have to meet to be designated as a CITE approved training provider	TBD
Identify recognized high caliber information systems training providers from the public/private sector	TBD

5. CIO Mentoring Program

Action: HUD, USDA and GSA jointly develop, implement and evaluate a Governmentwide mentoring program for IT professionals to enhance retention and recruitment efforts	
Responsible Agency: GSA, HUD, USDA	
Contact: Tom Horan, 202-208-6197 or Nora Rice, 202-501-0781	
Tasks:	*Milestone:*
Form Mentoring Program Team	Completed
Identify comparable programs and incorporate lessons learned	Completed
Design and Implement the mentoring program to include CIO Council specific assignments, CIO mentors, quarterly sessions, and recognition ceremonies.	Completed
Oversee program to manage the application and selection process, include collaboration with PEC and CFO Council	September 2002
Measurement of Results	Quarterly in FY 2002

6. CIO University

Action: Establish a CIO University	
Responsible Agency: GSA, CIO Council IT Workforce Committee	
Contact: Ginni Shaeffer, 202-501-0357	
Tasks:	*Milestones:*

Determine Competencies and Learning Objectives	Completed
RFI for Comment	Completed
Proposals Due	Completed
Select Participating Universities	Completed
Initiate and Evaluate Pilots	Completed
Establish CIO University	Completed
RFI for school years 2001 - 2003	Completed
Select participating universities for 2001 - 2003	Fall 2001
Measurement of Results	Summer 2002
Graduate Additional Classes	On-going

7. STAR Program	
Action: Establish a program to emphasize strategic leadership	
Responsible Agency: GSA, CIO Council IT Workforce Committee **Contact:** Ginni Shaeffer, 202-501-0357	
Tasks:	***Milestones:***
Develop program curriculum	Completed
Graduate first class	Completed
Streamline program to one week	Completed
Identify facility in western US for program use	Completed
Deliver three additional classes of graduates	September 2002
Measurement of Results	Summer 2002

4. Initiatives for Future Consideration

The Federal IT Workforce Committee determined that the initiatives below should be considered for future action. Current activities by OPM, recommendations made by the 21st Century Workforce Commission and the NAPA Study, are among the major forces that will likely influence progress made toward achieving these initiatives.

a. **Develop Career Roadmap and Skills Alliances**. The Committee will continue development of roadmap tools for use by Federal agencies. Federal employees will use this roadmap, which will include information on developmental opportunities, to direct their IT careers. A career roadmap will require identification of the competencies necessary, the training available, and enrichment opportunities.

b. **Advocate Project Management.** The Information Technologist of the future will require project management skills to direct the efforts of Federal IT professionals, partners, and contractors using toolsets that support business objectives and manage for results. In order to develop resources for this role, consistent standards for the Project Management competency will be created to detail specific skills competencies and the training required for this key role.

c. **Non-traditional Resources.** In the June 1999 report, the IT Workforce Committee recommended that to cope with the IT workforce shortage, the Federal government must recruit from non-traditional labor pools. These sources include unemployed and underemployed mid-career technical professionals, military technical professionals, women, minorities, and persons with disabilities, as well as part-time workers. Clearly, as evident elsewhere in this report, actions to manage a diverse workforce and specific actions to employ some of these sources of workers are underway. This initiative will remain a priority in the coming years. In support of this, the Committee will continue its High School Outreach efforts and explore partnerships with professional IT organizations, such as Women in Technology.

5. Best Practices

What is a Best Practice?

- Proven methods that contribute to superior performance
- Any practice that best meets customer requirements
- New or innovative use of human resources or technology
- A policy or process recognized by a reputable organization as one that attains results

Best Practices always have the support of a top management sponsor or champion. This indicates the organization is committed to the program and helps lessen the resistance to change by those affected. Strategic partnerships or alliances are frequently involved to leverage the knowledge and resources of both parties.

5.1 Best Practice Concepts

Workforce Planning and Management

- Develop workforce strategic and tactical management plans (both short- and long-term)
- Link the workforce management plan to corporate mission and plans
- Develop a competency-based approach to staffing as appropriate to agency mission

Recruitment and Retention

- Develop benefits to attract and retain a diverse workforce (bonuses)
- Track staff turnover and perform exit interviews
- Delegate responsibility to employees
- Set measurable goals with each employee in line with corporate mission
- Recognize and foster improvement of "soft skills" in technical employees
- Provide opportunities for two-way feedback
- Reward team participation
- Invest in training for each employee
- Develop reward programs to recognize and motivate employees
- Sponsor work-life programs and benefits, with clear policies and procedures
- Encourage a culture that embraces diversity
- Create communities of practice

Career Development

- Give high-potential employees developmental opportunities, including those requiring

interaction with upper management
- Create proving-ground opportunities for potential leaders
- Develop a training plan for each employee
- Use internal and external resources for training
- Provide flexibility in training by using various media (self study, web-based, classroom)
- Give employees assignments which reinforce newly acquired skills
- Encourage a continuous learning environment throughout the agency
- Ensure the career development program recognizes the needs of a diverse workforce
- Train managers to recognize the unique motivational "hot buttons" of the IT workforce (e.g., exciting projects, use of new technologies)

5.2   Examples of Industry Best Practices

a. CIGNA Group, a provider of employee benefits services, enables employees to study for bachelor's degrees at work. The University of Pennsylvania instructors teach courses at company facilities. The corporation pays for the instructors while employees are responsible for books. Employees enrolled in the program say it is very convenient and requires less time than attending courses on campus. Over 97 percent of the graduates of the program have remained with the company. Website: http://www.cigna.com

b. The Bank of Boston, a financial services company, provides snow day child-care. Employees may register to bring their children to the program when schools close. The program, offered at seven locations, is held in office conference rooms. The company provides materials for crafts, game and activities as well as snacks. A contract day care provider manages the program. The company benefits in greater productivity as fewer employees are forced to take time off. Website: http://www.fleetboston.com

c. Plante and Moran, an accounting and consulting firm, have developed programs for employee retention. One program designed to assist with recruiting and retention, pairs new staff members with two people: a partner for mentoring and a buddy (mid-level professional) to teach them the ropes. The buddy program lasts two years after which the employee qualifies for training to play the buddy role to an incoming new hire. Several years ago the firm recognized the retention rate for women was less than optimal. The Parental Tightrope Action committee was formed to identify special concerns in the workplace and provide feedback and suggestions on work-life and health issues. The result of these programs is an attrition rate below industry average. Working Mother Magazine also named the firm one of the "100 Best Companies for Working Mothers".

d. Freddie Mac, a mortgage-backed securities secondary market provider, ensures employee retention and an abundance of highly skilled technology workers through their Career Transition Program. The program is designed to re-direct the talents of redundant employees to stay with the company in an IT position. Taught by consultants and Freddie Mac's own IT staff, the program combines classroom instruction, computer-based training, mentoring and team projects. The result is loyal employees, who are already familiar with the company's business, with knowledge and skills needed by the IT department. Website: http://www.freddiemac.com

e. Fannie Mae, the nation's largest provider of funds for home mortgages, has instituted an Elder Care option in its work-life benefits plan, as part of the company's goal to provide benefit options which meet the needs of employees in all stages of their life and career. The company partnered with a senior services company to provide the program, a large component of which is an onsite consultant who serves as a first point of contact. The consultant presents employees with elder care options and creates a plan of action specific to the circumstances utilizing other Fannie Mae work-life programs, such as flexible work schedules and the availability of take-home dinners. A survey of employees that used

program services indicated that over a quarter of them might have had to quit without the support of the program. Website: http://www.fanniemae.com

f. ASG Renaissance, a personnel staffing and project management firm, uses anonymous surveys to maximize open communications. The surveys, conducted at least semi-annually, focus on teamwork issues by department and on the whole company. The results of the survey are summarized for distribution to all employees. Individual departments use feedback to plan process improvements. They are also required to develop an action plan to address issues identified in the survey. Senior management uses the data to modify or expand benefits. Survey participation rates exceed fifty percent, which is significantly above average. The company credits open communications as a major factor behind the company's successful growth.

g. SRA International, a systems integration and consulting firm, has formed Communities of Practice to engage IT professionals in dialogs leading to knowledge sharing and professional growth. Each Community focuses on a specific IT discipline such as database management, system testing or system engineering. Special Interest Groups may evolve within the Community of Practice around specific tools used in the community (e.g., a specific database management application package). Each community is responsible to achieve a balance between on-going, tactical corporate business needs and the long-term, strategic career growth needs of each SRA member. Benefits to both the individual and corporation include knowledge transfer, organizational learning and effective individual development. Website: http://www.sra.com

5.3   Examples of Government Best Practices

a. Use of competency-based job profiles provides a clear definition of the skills required to succeed in an IT position. This empowers the IT worker to set career goals with defined paths and to work actively toward their attainment. To assist further with development of the required competencies, these profiles are supported by flexible training programs.

b. Non-Pay Benefits (e.g., flex time, family-friendly atmosphere, day/elder care) contribute to Government attracting and retaining IT personnel and recognize the diverse needs of the workforce. These work-life programs reduce the stress on employees and contribute to greater productivity.

c. Recruitment bonuses, retention allowances and the Student Loan Payment Program indicate that the Government recognizes the dynamics of the IT workforce market. The programs enable Federal agencies to compete with the private sector to recruit and retain employees for difficult to fill IT positions.

d. CIO University is a virtual consortium of universities offering programs that directly address executive core competencies. The program improves both government and private companies by enhancing the skills of current executives and providing for future leadership by developing potential executives. CIO University demonstrates the benefits of sharing Government and private sector experiences and commitment to the employee through investment in their future.

e. OPM, in cooperation with the Human Resources Management Council, developed a five-step workforce planning model. The model links human capital planning with mission and strategic plans. More information is available at the OPM website, which can be found at http://www.opm.gov/workforceplanning/index.htm.

f. The Internal Revenue Service is making effective use of websites to recruit new employees.

The IRS job announcements get exposure through partnership with "electronic recruiters". Career Mosaic, one of the recruiter sites, is the leading employment site on the web.

g. The DoD sponsors three key programs via the Information Resources Management College, NDU to educate mid and senior-level personnel regarding information technology management. These programs are:

  * Chief Information Officer Program. Sponsored by the DoD CIO to provide a source of graduate education for all Federal employees.
  * Advanced Management Program. A fourteen-week graduate-level program providing managers with an integrated understanding of new policies, legislative requirements and emerging technologies to effectively manage and use information resources.
  * National Security Telecommunications and Information Systems Security 4011 Certificate. Curriculum certified by the National Security Agency as meeting the NTISSI 4011 for information systems security professionals. Website: http://www.ndu.edu/irmc

h. The goal of the Department of State's IT Skills Incentive Pilot Program is to retain employees with critical IT skills and increase the expertise and stability of the IT workforce through financial recognition. IT professionals receive up to a 15-percent retention allowance for completing formal certification in certain technical areas. The program, in existence for 17 months, has exceeded its goals — professional certifications have grown by almost 800% and attrition rates are stable.

i. The Department of State's IT Career Development Model includes career paths, competencies, an assessment tool, a resume building function, learning maps, and action plans. The model has been converted into an interactive web-enabled career development tool, allowing State's IT employees to perform career assessment and planning at their desktops via the Department's Intranet. The IT Career Development tool has been user acceptance tested and is expected to be deployed in September 2001.

j. The Department of the Navy's "Career Path Guide for Managing Technology, Information, and Knowledge" outlines a process for employees to use in planning their careers. It describes the general and technical competencies that are key to job success, and gives employees and their supervisors a tool for helping employees to excel in current and future jobs.

k. The OPM's website, USAJOBS (http://www.usajobs.opm.gov), is the U.S. government's official site for jobs and employment information. The site provides information on Federal government jobs, has "hot" job lists for various agencies, and offers online applications. OPM has partnered with several commercial online job search sites.

l. The U.S. Army has partnered with corporate America to solve mutual recruiting challenges. The Partnership for Youth Success (PaYS) recruits for both the Army and the private sector at the same time. When a recruit joins they are asked to choose a Military Occupational Specialty (MOS). The PaYS job bank contains links between future job openings at participating companies and the skills gained in the MOS the recruit has chosen. A letter of intent is signed signaling the recruit's intention to take the corporate job listed at the end of the enlistment period. The program is one more incentive that can be offered to potential enlistees. The private sector benefits from long term workforce planning.

m. The DoD Information Assurance Scholarship Program offers scholarships to students and grants to universities that have been designated as Centers of Excellence by the National Security Agency in regards to information assurance. Once students have completed their studies they will transition to full-time positions within the Department of Defense (http://www.c3i.osd.mil/iasp).

n. Department of Labor's Federal Learning eXchange (FLX) is a one-stop electronic information center (http://www.flx.gov) for departments, agencies, and Federal employees interested in education, training, and developing skills to succeed in the changing workplace.

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