Human Capital Management Plan

FY 2006 – 2011

Objective

The objective of the Office of Science (SC) Human Capital Management (HCM) Plan is to provide a systematic approach to develop the organizational capacity so that a fully qualified, technically competent, diverse workforce is in place to meet the current and future SC mission. Developing organizational capacity includes demonstrating the relationship between SC's strategic goals and objectives and workforce requirements; conducting skills assessments of current and future required competence; effectively utilizing human capital strategies to attract, develop and retain talent while mitigating skill and workforce gaps; and integrating current and anticipated workforce needs and succession priorities into the development of SC programmatic and operational plans.

The HCM Plan will assist SC leadership in making decisions regarding the allocation of program direction funding as a result of the significant increase in program execution funds in the FY 08 budget. The Plan will also describe specific SC initiatives in support of the following DOE FY 2006/2007 human capital priorities:

- Understand projected skills gaps and plan intelligently for an optimized future workforce;
- Establish processes to improve and sustain diversity;
- Analyze and align organizational structures;
- Build a results-oriented performance culture;
- Harness institutional knowledge through knowledge management initiatives;
- Demonstrate improvement in meeting DOE/OPM hiring time goals.

The Office of Science (SC) will exert the same levels of innovation and creativity to manage its workforce as it uses to manage its ten world class laboratories. SC management places a high priority on the ability to recruit and retain a highly skilled, diverse SC workforce that includes seasoned professionals as well as those who bring more contemporary perspectives to the workplace. SC hiring will be open to all citizens to the extent practical, and opportunities will be published nationwide through web-enabled resources to assure diverse applicant pools. Our managers and supervisors will be held to the highest standards and will use all management tools and flexibilities available to assure that SC recruits, hires, and retains a highly qualified, diverse workforce to carry out the SC mission.

Workforce Demographics

The following summary represents a compilation of workforce data and key demographics for the consolidated SC workforce. It should be noted that four SC organizational components employ staff who perform work in support of non-SC programs (and are funded accordingly).   This non-SC workforce is not included in the demographic data contained in this report. Specific illustrations applicable to individual SC organizational elements are included in Appendix A. All data is as of August 15, 2006, unless otherwise specified.

By the Numbers – A Demographic Summary of the SC Workforce

- 941 SC employees
- 49.8 is the average age of SC employees
- 40% are over age 50
- 12% are over age 60
- 53.8 is the average age of SC supervisors and managers
- 50.9 is the average age of SC team leaders
- 49% are men; 51% are women
- 22% are people of color (13% Black, 4% Hispanic, 4% Asian, 1% Native American
- 43% are eligible for voluntary retirement in the next 5 years
- 21% are currently eligible for retirement

Age Distribution

Fifty-two percent of the SC workforce is over age 50, and only four percent of the workforce under age 30. The data suggests that SC should establish internal goals for intern recruitment to assure that the SC workforce has a more balanced mix of contemporary and seasoned employees.
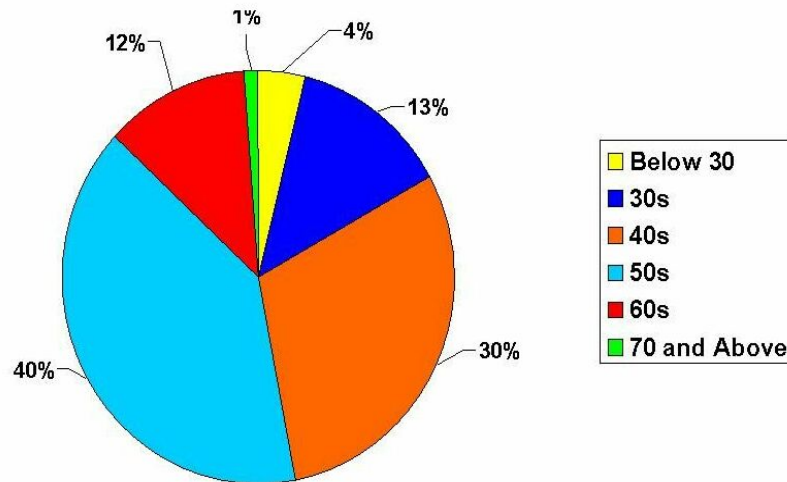
Average Age

The average age of SC employees is 49.8.
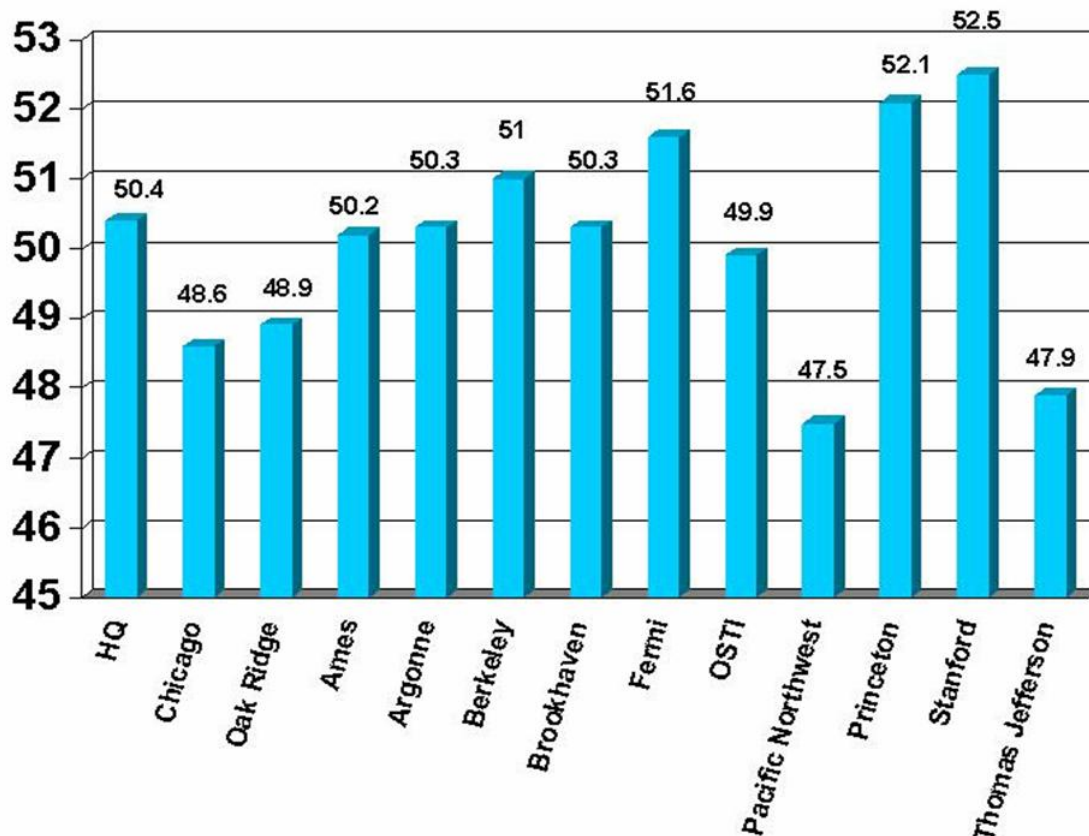
The average age of Department of Energy (DOE) employees is 48.4, slightly younger than the SC average of 49.8. The three SC organizations with the youngest staff members are the Pacific Northwest Site Office, Thomas Jefferson Site Office, and Chicago Office. The three SC organizations with the oldest staff are the Stanford, Princeton, and Fermi Site Offices.

| Org.	# of Staff	Avg. Age	Age Groups (Percentage of Organization)*					
			Below 30	30-39	40-49	50-59	60-69	70+
HQ	256	51.7	3	12	25	38	19	3
Chicago	186	48.6	3	19	25	42	9	1
Oak Ridge	287	48.9	6	9	36	41	7	0
Ames	4	50.7	0	0	25	75	0	0
Argonne	24	50.3	0	8	42	32	13	0
Berkeley	22	50.9	5	5	32	41	18	0
Brookhaven	21	50.3	0	19	38	24	19	0
Fermi	14	51.6	0	7	36	36	14	7
OSTI	57	49.9	2	16	28	42	12	0
Pacific Northwest	36	47.5	0	25	39	22	14	0
Princeton	12	52.1	0	17	17	58	8	0
Stanford	11	52.5	0	0	27	55	18	0
Thomas	11	47.9	0	9	55	27	9	0

Jefferson										

*Row percentage may totals may not equal 100 due to rounding

Gender and Diversity Distributions

SC employs 483 (51percent) women and 458 (49 percent) men. This compares favorably to the DOE rates of 37.4 percent and 62.6 percent, respectively.

Gender Distribution
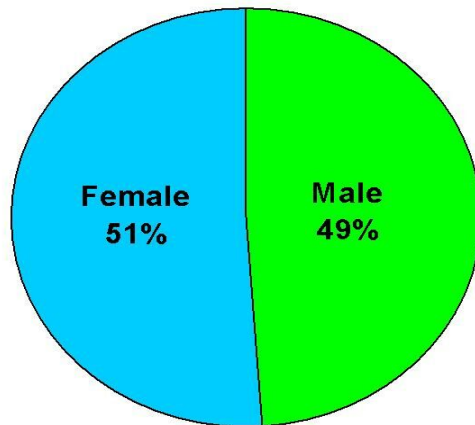
Persons of color represent 22% of the SC workforce. This is comparable to the DOE rate of 22.8%. The following table depicts diversity by grade level. Additional charts summarizing diversity statistics and diversity of new hires over the last five years follow.

SC Diversity by Grade Level										
Grade	Black	Black	Hisp.	Hisp.	Asian	Asian	Amer I.	Amer I.	White	White	Total
	F	M	F	M	F	M	F	M	F	M	
1	1									2	3
2									4	1	5
3	1								3	1	5
4	3	4							6	7	20
5				1					4	5	10
6	4		1						20	1	26
7	12				1		1		32	1	47
8	1									15	16
9	5	2	3		1				40	2	53
10											0
11	5	1	1		2				30	4	43
12	9	1	5	2					46	29	92
13	32	13	4	5	2	9	1	1	76	99	242
14	11	4	4	7	2	5	1		43	81	158
15	3	4		5	4	14		1	33	114	178

ES*	1	1	1	3			2		7	28	43
Total	88	30	19	23	12	28	5	2	344	390	941

*ES – Senior Executive Service

Diversity Distribution
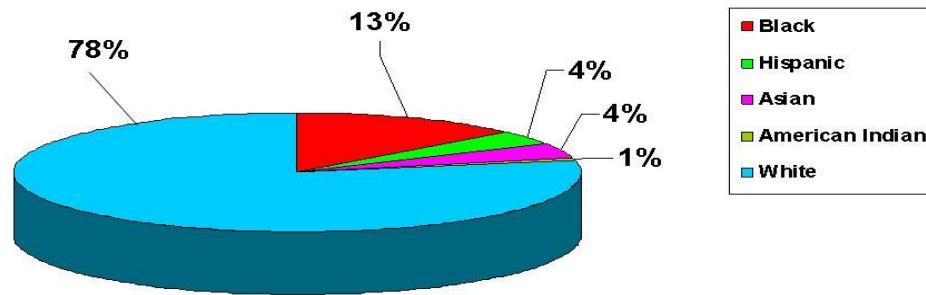
Diversity Notes:

61% of all employees are in GS-13 and above positions
23% of all women are employed in GS-13 and above positions
23% of people of color are in GS-13 and above positions

Diversity of SC New Hires between FY 2002 – 2006

FY	Total	Male	Female	White	Black	Hispanic	Asian	Amer. I.
2002	34	12(35%)	22(65%)	22(65%)	5(15%)	1(3%)	6(18%)	0(0%)
2003	23	11(48%)	12(52%)	13(57%)	7(30%)	0(0%)	3(13%)	0(0%)
2004	44	25(57%)	19(43%)	25(57%)	13(30%)	3(7%)	3(7%)	0(0%)
2005	50	24(48%)	26(52%)	38(76%)	9(18%)	1(2%)	1(2%)	1(2%)
2006	45	28(62%)	17(38%)	33(73%)	6(13%)	2(4%)	3(7%)	1(2%)
Total	196	100(51%)	96(49%)	131(67%)	40(20%)	7(3%)	16(8%)	2(1%)

During the five year period of FY 2002 through FY 2006, 82 percent of SC new hires were women or people of color.

Retirement Eligibility

406 (43%) of SC employees are eligible to exercise their option for voluntary retirement through 2011. "Eligible" is defined as the earliest optional or voluntary retirement dates for employees in either the Federal Employees Retirement System (FERS) or the Civil Service Retirement System (CSRS).

These numbers are significantly higher than the combined eligibility of DOE employees under both CSRS and FERS of 20%. Three organizations, highlighted below, have at least half of their staff who are or will be eligible to retire in the next five years. All except three organizations have at least one third of their staff who are or will be eligible to retire in the next five years. This projected loss of staff represents potential gaps in vital or critical functions over the next five years, and indicate a need to establish a formal plan of action to address the projected loss of corporate knowledge and the potentially adverse impact on the diversity of the workforce. (Note that the impact of retirement eligibility on diversity statistics was not specifically reviewed for the purposes of this Plan.)

Org	Total Staff	Retirement Eligibility (by fiscal year) (Percentages shown by FY are cumulative.)						Total Number of Retirement Eligibles through FY 2011	Cumulative Percent of Org.
		2006 and Prior	2007	2008	2009	2010	2011		
HQ	256	63(25%)	7(27%)	10(31%)	10(35%)	18(42%)	6(45%)	114	45
Chicago	186	45(24%)	2(25%)	8(30%)	8(34%)	11(40%)	5(42%)	79	42
Oak Ridge	287	44(15%)	12(19%)	25(28%)	17(34%)	13(39%)	11(42%)	122	42
Ames	4	0(0%)	0(0%)	1(25%)	0(25%)	0(25%)	0(25%)	1	25
Argonne	24	3(12%)	0(12%)	2(21%)	0(21%)	0(21%)	2(29%)	7	29
Berkeley	22	6(27%)	4(45%)	2(54%)	0(54%)	1(59%)	0(59)	13	59
Brookhaven	21	5(24%)	0(24%)	2(33%)	1(38%)	0(38%)	1(43%)	9	43
Fermi	14	3(21%)	1(28%)	1(35%)	0(35%)	0(35%)	0(35%)	5	35
OSTI	57	14(24%)	4(31%)	3(37%)	3(42%)	2(45%)	4(52%)	30	52
Pacific Northwest	36	3(8%)	3(16%)	2(22%)	0(22%)	2(27%)	1(30%)	11	30
Princeton	12	5(41%)	0(41%)	1(50%)	0(50%)	1(58%)	0(58%)	7	58
Stanford	11	3(27%)	1(36%)	0(36%)	0(36%)	0(36%)	1(45%)	5	45
Thomas Jefferson	11	2(18%)	0(18%)	0(18%)	0(18%	0(18%)	1(27%)	3	27
Total	941	196(21%)	34(24%	57(30%)	39(35%)	48(40%)	32(43%)	406	43

Workforce Occupations by Retirement Eligibility

The following table reflects the spread of the SC workforce by occupational series. Highlighted columns indicate those occupations where at least one third of the SC workforce is currently or will be eligible to retire by FY 2011. Succession planning activities are vital to the continued ability of SC to meet projected milestones and stated goals and objectives given these projections.

Series	Occupational Title	# of positions in series	# eligible to retire by 2011	% eligible to retire
	SC Workforce Occupations by Retirement Eligibility (as of August 1, 2006)			
0018	Safety & Occupational Health Spec	10	2	20
0028	Environmental Protection Specialist	1	1	100
0080	Security Specialist	26	12	46
0086	Security Assistant	3	0	0
0201	Human Resources Specialist	25	9	36
0203	Human Resources Assistant	2	0	0
0260	Equal Employment Opportunity Specialist	1	1	100
0299	Student Trainee (Human Resources)	1	0	0
0301	Various	96	40	42
0303	Various Clerk/Assistant	41	11	27
0318	Secretary	24	10	42
0326	Office Automation Clerk	2	0	0
0340	Program Manager	22	13	59
0341	Administrative Officer	6	3	50
0342	Support Services Specialist	10	5	50
0343	Management/Program Analyst	72	31	43
0344	Management/Program Assistant	1	1	100
0391	Telecommunications Specialist	4	2	50
0399	Student Trainee (Administration)	1	0	0
0401	Biologist/Environmental Scientist	13	4	31
0403	Microbiologist	2	0	0
0408	Ecologist	1	0	0
0501	Financial Administrator	5	3	60
0503	Financial Assistant	1	0	0
0505	Financial Manager	2	2	100
0510	Accountant	51	18	35
0525	Accounting Technician	4	1	25
0540	Voucher Examiner	4	2	50
0560	Budget Analyst	37	15	41
0561	Budget Technician	3	0	0
0599	Student Trainee (Budget Analysis)	4	0	0
0602	Medical Officer	1	1	100
0610	Nurse	1	0	0
0690	Industrial Hygienist	4	1	25
0801	General/Quality Assurance Engineer	101	41	41
0803	Safety Engineer	6	4	67
0804	Fire Protection Engineer	2	0	0
0808	Architect	1	0	0
0819	Environmental Engineer	11	6	55
0840	Nuclear Engineer	7	6	88
0850	Electrical Engineer	1	0	0
0855	Electronics Engineer	1	0	0
0892	Ceramic Engineer	1	0	0
0893	Chemical Engineer	2	2	100
0899	Student Trainee (Engineering)	1	7	44
0905	Attorney	16	7	44
0950	Paralegal Specialist	2	1	50
0963	Legal Instruments Examiner	3	1	33
0986	Legal Assistant	4	1	25

1035	Public Affairs Specialist	9	3	33
1084	Visual Information Specialist	2	1	50
1101	General Business and Industry Spec.	16	7	44
1102	Contract Specialist/Procurement Anal	75	30	40
1103	Ind. Property Management Spec.	6	1	17
1105	Purchasing Agent	2	0	0
1106	Procurement Assistant	8	1	13
1170	Realty Specialist	5	2	40
1199	Student Trainee (Business)	2	0	0
1222	Patent Attorney	11	3	27
1301	Physical Scientist	74	34	49
1306	Health Physicist	8	3	38
1310	Physicist	35	20	57
1320	Chemist	13	7	54
1340	Meteorologist	1	0	0
1412	Technical Information Specialist	7	3	43
1550	Computer Scientist	5	4	80
1640	Facility Manager	1	1	100
1701	Training Specialist	2	0	0
2210	Information Technology Specialist	19	12	63

Mitigating Skills Gaps

The SC Field organizations completed comprehensive workforce planning efforts during FY 06 to include the identification of five-year succession management, staffing and training priorities. A summary of the results for the SC Field organizations (by servicing HR Office) are provided as Appendix A and B to this Plan. Initial staffing analyses and skill mix identification for SC Headquarters organizations have also been completed. This information is included in the 4th Quarter-FY 06 SC Critical Skills Gap Analysis Spreadsheet at Appendix C.

As a result of the HR reengineering efforts, SC has developed draft procedures that provide a consistent approach to workforce planning across SC and will facilitate an understanding of our skills mix; identify senior management positions for succession planning; establish a business case for increased human capital funding, etc. These standard procedures will be used by all SC organizations when conducting future workforce analyses.

To best understand the needs of our six scientific programs, SC engaged the assistance of its Committees of Visitors (COV)—independent advisory groups analogous to its Scientific Advisory Committees, but used by the Office of Science to evaluate its program's management practices rather than its scientific portfolios. The findings of the Basic Energy Sciences COV were typical: "expanded recruiting of program managers and support staff is a necessity, especially if high quality program managers are to be recruited and retained. The number of Program Managers in the *Energy Biosciences, Chemical Physics*, and *Catalysis & Chemical Transformation* programs was found to be too few and jeopardizes the future quality of these programs, given the large number of funded proposals, the complex, multi-disciplinary nature of the portfolio elements, and their importance to DOE missions and long-term BES goals." For each of SC's six scientific programs, the COVs identified the number of additional necessary program and project managers and the particular programs for which they are needed. The summary table containing this information is included in Appendix C.

Formal and on-the-job training, rotational assignments, details, and developmental assignments will be used to prepare employees for progressively responsible positions. Continuous learning and employee development programs are paramount to retaining a high-quality staff, and ample opportunities will be made available to SC staff as funding permits.

Succession Management and Leveraging Diversity

SC will utilize a variety of succession management strategies to develop the pipeline for critical occupations at all levels of the organization. In addition to utilizing the four formal developmental programs administered by the US Department of Agriculture Graduate School, the DOE Senior Executive Service Career Development Program, and other existing structured programs, SC employees will be provided opportunities through details to new and/or existing vacant Headquarters and Field positions.

A Voluntary Solicitation Database can be used to support succession planning through rotational assignments and details:

- At OR, employees interested in lateral reassignment or detail to another organization or position can register their interest on line through a password protected link available on the OR Human Resources Division website. In order to keep the database current, registrations are archived on an annual basis. Registration is always open, and those who no longer have an interest in reassignment or details may request to have their information removed from the database at any time by contacting the Human Resources Division.

- As needed, Selecting Officials may request a list of interested employees from this voluntary solicitation database. After qualifications are reviewed by the HR staff, selecting officials are provided with resumes submitted by each qualifying employee. A memorandum is published by DOECAST to all employees when an opportunity for a reassignment or detail arises to provide notice to employees who may wish to participate in the database.

- Use of this database on an SC-wide basis will allow employees to volunteer for developmental assignments and provide a means for supervisors and managers to consider the pool of interested staff and select those with the most promise.

A similar initiative is the CH Job Jar Program that has been used successfully for several years to fill vacant supervisory and nonsupervisory positions at the Site Offices as well as CH staff organizations. Selecting officials post Job Opportunity Notices for lateral reassignments or temporary promotions, and interested employees are instructed to contact the respective manager before the closing date to indicate their interest.

Recruitment Initiatives

The Office of Science (SC) will plan an aggressive college recruitment season beginning in the fall of 2006 with a goal of securing acceptance of employment offers from the best and brightest intern candidates possible. With an average employee age of 49.8 and 43 percent of the SC workforce eligible for retirement within the next five years, SC has a pressing need to infuse the Federal workforce with new employees who possess contemporary skills. SC can enhance the diversity of its workforce by focusing recruitment efforts on educational institutions with large minority populations.

The following are examples of innovative diversity options that are under consideration by SC leadership for implementation by the Office of Workforce Development:

- Establish an SC Intern program to facilitate entry-level recruitment of underrepresented groups as a succession planning tool. Utilize the Nuclear Regulatory Commission model in which high-potential students are identified during their sophomore/junior years to populate hard-to-fill scientific occupations. SC would provide summer internships and tuition reimbursement with the stipulation that they will accept permanent jobs upon graduation.

- Establish (Memoranda of Understanding) MOUs with the United Negro College Fund, Hispanic Association of Colleges & Universities, American Indian Science & Engineering Association, and students with disabilities for the purpose of establishing SC summer internships. This would include stipends, travel and living expenses for students.

- Establish Office of Science endowed chairs at selected Historically Black Colleges and Universities (HBCUs) and Hispanic Serving Institutions (HSIs) which are modeled after the Office of Environmental Management (EM) Massie Chairs of Excellence. The Chairs would be designed to assist the institutions to produce top-level graduates in the math and science disciplines as well as produce groundbreaking science research. To drastically reduce the learning curve created by entry-level hires, these students could be oriented prior to their graduation to be acclimated to the DOE workforce.

- Establish an SC equipment loan program with the United Negro College Fund to enhance the science & technology curriculum and institutional capacity of HBCUs to conduct energy R&D.

- Provide specific funding to promote involvement of PI's from HBCUs, HSIs, and Tribal Colleges in energy R&D at SC National Labs.

- Provide SC funding to existing successful DOE programs in need of funding; e.g., the Thurgood Marshall Scholarship Program and the Mickey Leland Scholars Program.

- Expand upon the Annual Day of Science (currently at ORO and ORNL) to an SC-wide initiative. The Annual Day of Science is a Fair about Careers and Opportunities in Science for Undergraduates and faculty. SC could target HBCUs, HSIs, Tribal colleges and students with disabilities. Lab representatives talk about opportunities for internships, co-op positions, and full-time positions; scientists talk about their research and opportunities for collaboration; DOE and lab discuss careers in science.

- Establish an SC pool of FTEs specifically for the Student Career Experience Program (College Co-op Program) with the stipulation that the FTE goes back to the pool after two years.

The Excepted Service appointment authorities provided by the DOE Policy Act can be used to attract desirable intern candidates into pay band 1 and 2 positions. To compete with higher private sector starting salaries, the salary for entry-level administrative candidates should be established at the same level within the pay band as that established for engineering interns under special salary schedules for engineers. This

proven approach has provided the Oak Ridge Office (OR) the competitive edge needed to attract the candidates with the highest grades and most promising futures.

Through creative and innovative use of the administrative flexibilities provided to us under current regulations, SC will meet diversity goals, fulfill the staffing needs of the organization, and comply with the DOE goals to "build and maintain a diverse, well-trained, highly qualified, and motivated workforce to achieve current and future programmatic missions."

Results-Oriented Performance Culture

SC leadership participated in the Performance Management Summit that was convened by the DOE Chief Human Capital Officer in the second quarter of FY 06. SC employees are held accountable for their performance and the highest performers are recognized and rewarded commensurate with their contributions. Accomplishment of the SC mission is a central theme in the performance standards of each employee and each employee's performance appraisal plan includes mission objectives and goals that cascade from the highest levels of the organization.

In fiscal year 2007, all SC organizations will use the DOE or HQ multi-level performance management systems to provide timely, candid performance feedback to employees. The SC Field organizations transitioned to the new four-tier Departmental nonsupervisory performance management system from their former pass/fail systems in accordance with guidance provided by the Office of Personnel Management. HQ implementation of the new system is pending negotiations with the National Treasury Employees Union in FY 07.

SC managers will assure that staff members know how their positions and organizations contribute to achieving the SC mission. Poor performers will receive developmental guidance and an ample opportunity to demonstrate improvement. Administrative actions needed to address employee performance or conduct issues will be taken as a last resort in accordance with regulatory provisions and the terms of collective bargaining agreements.

SC personnel contributed to the redesign of the DOE Senior Executive Service performance management system, and are currently participating on the task force to develop a new Departmentwide managerial/supervisory performance management system for implementation in FY 2008.

Improving Recruitment Timelines

One of the common criticisms of both selecting officials and applicants to Federal vacancies is the amount of time that it takes to bring a new employee on board. The three SC human resources (HR) organizations closely monitor their performance against the Office of Personnel Management (OPM) hiring timelines for SES and non-SES positions by entering data each month into the Department's Corporate Human Resource Information System (CHRIS) Standard Form (SF) 52 Tracking System. In accordance with their Delegated Examining Unit (DEU) authority, each servicing HR organization is also required to input information into a database at the OPM DEU website on a quarterly basis.

The Chicago Office (SC-CH) established customer service standards for the timely preparation of vacancy announcements and distribution of Certificates of Eligibles to selecting officials. CH tracks their performance against these standards and other metrics monthly and reviews workload indicators to make necessary adjustments in work assignments. This process has been incorporated into the draft procedures prepared by the Organizational Management – Implementation and Execution Reengineering Team under the HR Management System for implementation by the OR and SC HQ HR organizations.

The use of Excepted Service appointments for interns is not a new concept to the Department. It does present a challenge in that these interns temporarily encumber the limited number of excepted service positions available to the Department until they can be selected for competitive service General Schedule positions through a delegated examining process. To address this concern, SC will advertise positions that will offer opportunities for conversion to competitive service once interns have completed a two-year on-the-job and formal training program. Experience at OR has shown that managers and supervisors are overwhelmingly enthusiastic about the efficiency and timeliness of the recruitment process, and have voiced their appreciation for the manner in which the HR staff was able to meet their needs.

Appendix A – Conclusions/Recommendations/Staffing Plan
Oak Ridge Office

METHODOLOGY

All OR Assistant Managers and Office Directors, and the majority of the Division Directors were interviewed using an established protocol. There were two types of responses to the interview questions: those that were organizationally-specific and those that were applicable to OR as a whole. The following comments and opinions are OR-applicable and were used in part to prepare the conclusions and recommendations that follow in this Appendix.

PROJECTED MISSION

All the managers interviewed stated that the current OR missions would project into the next five years, with a few exceptions. Further, the managers expected that current staff levels and vital functions would be maintained at the same levels over the next five years.

THE NEXT GENERATION OF STAFF

There is a need to recruit and prepare the next generation of staff, find qualified persons, attract them to East Tennessee, train them, mentor them, and retain them. Some organizations recruit college graduates, while others find staff elsewhere in the Federal or contractor workforces. Some have used administrative flexibilities such as excepted service to attract new personnel.

LOSS OF ORGANIZATIONAL FUNCTIONALITY AND CORPORATE MEMORY

With the number of staff eligible for retirement over the next five years and the number who could leave today, OR easily could experience a significant "brain drain." To allow for an orderly transfer of knowledge, there should be a thorough understanding of OR capabilities and a mechanism to share that information. This would permit us to reassign and cross-train staff to replace key functions. As well, formal corporate memory transfer will soften or even avert the loss of critical and vital skills and functions.

SUCCESSION PLAN

Better succession planning will allow for a proactive approach to replacing staff who have left or have indicated they are about to leave OR. This would reduce the likelihood of having to make immediate hires or purchasing interim contractor support services. Succession planning could include an option for authority to recruit in advance of retirement.

"ONE DEEP" VITAL POSITIONS OR FUNCTIONS

There are too many positions in which we are only "one deep;" that is, having only one staff in positions that are often vital or critical to the success of the organization. Diversifying the skill mix and cross-training can minimize the effects of this situation.

STAFFING CEILINGS

Imposed staffing ceilings can restrict our ability to hire replacement staff in advance of impending retirements or attrition. If we don't have the ability to bring in staff to be mentored by the ready-to-retire incumbent, we risk the new replacements not being trained adequately, or corporate knowledge not being transferred, and potentially the replacement floundering then leaving.

ORGANIZATIONAL CROSS-TRAINING AND JOB ROTATION

As we experience peaks and valleys in staffing, we should be able to redeploy staff and do it through HR mechanisms as cross-training and job rotation. This forward-look provides a way for improving staffing efficiency, and providing training opportunities within the existing organizational structure. Use of cross-training and job rotation will counter organizational stove piping, and promote more integrated operations through informed communications and interactions.

CO-OP AND COLLEGE INTERN PROGRAMS

The co-op and college intern programs are not widely understood or used. We are developing relationships with colleges, and using co-ops particularly in the administrative areas. However, use of co-ops in the technical areas is difficult because we do technical management versus hands-on engineering work. In both cases, there is a need to formalize the mentoring process with co-ops and college interns, and give them challenging substantive work, not just "go make copies." The benefit of the co-op and college intern programs is that we can "try them out" and they us. There is a need for head room to be able to hire these persons if they are a good fit, and need the authority to recruit in advance of retirements to bridge the knowledge base.

RELOCATION FUNDING

There appears to be a need to look at the impact that offering relocation reimbursement would have on recruitment. It's not an absolute hindrance, but the lack of that capability will have some impact.

SALARIES

For some organizations, our salaries are low compared to the private sector for MBAs and many entry-level positions, but some staff salaries are competitive. Other organizations say that the Federal position offers a 40-hour work week with minimal after-hours work, and thus is very attractive. For some positions like engineering, however, it is difficult for us to compete with the private sector for high caliber candidates.

LOCAL RECRUITMENT

Hiring local persons to fill vacancies affects the diversity proportion negatively since the regional diversity is different from Headquarters and most other DOE offices. On the other hand, hiring local persons increases the probability of retention, because "they have family in the area."

ADMINISTRATIVE FLEXIBILITIES

We should selectively use the retention bonus, relocation reimbursement, student loan repayment, and excepted service authority among the other administrative flexibilities. But, regarding retention bonuses, we are just putting off the inevitable. We should add slots to backfill and train replacement staff while the retiring incumbent can gracefully exit the Office. Our organization is using the excepted service option.

CONCLUSIONS

The following significant conclusions were drawn from the analysis of the OR past and present workforce statistics and the review of the interview comments.

1. Nearly half of the OR workforce is over the age of 50 and there is not a formal OR plan (succession plan or otherwise) in place to address the replacement of this aging population.

2. Many organizations have vital positions or functions, among others, in which they are only "one deep," for example, below the senior management level, retirements are expected in the following occupations where there is only one person in that position.
   - Information Security Specialist
   - Audit Analysis Specialist
   - Accounting Officer
   - Budget Officer
   - Reindustrialization Specialist

3. The co-op and intern programs are not widely used by OR, although there are a few nontechnical organizations that do enlist these programs to augment or replace staff.

4. Of the 44% of the current OR population eligible for retirement through 2011, nearly one third of those eligible can retire today should they chose to do so. This presents a potential immediate and severe loss of organizational functionality and corporate memory.

5. The current average age of the 46 supervisors and managers is 52.9 years, and the average age of the 26 team leaders is 51.4 years. On face value, this could indicate a severe shortage of management talent in the near future. As well, the one and a half year difference in ages of the two groups points out a limited window or opportunity to "grow" new managers.

6. Based of the retirement statistics of the last few years, individuals are retiring sooner than later after their initial eligibility.

7. The lack of relocation funding has impeded recruitment of replacement staff from outside the region.

8. The diversity mix of staff has not changed since the 2004 – 2009 staffing report and projections.

9. While it may be easier to hire and retain staff from this region, the diversity mix will not improve significantly because of the demographics of the regional population.

10. The imposed staffing ceilings have hindered the process of hiring replacement staff in advance of retiring positions.

11. Use of the cross-training and job rotation development options has been minimal.

RECOMMENDATIONS AND STAFFING PLAN

The following specific recommendations or options, which constitute the OR Staffing Plan, are based on the conclusions drawn in the previous section and from the analysis of the OR past and present workforce statistics and the review of the interview results, and are presented in the context of standard human capital management tools and techniques. These recommendations and options are presented to Senior Management for consideration, and should be tempered by regulatory, budgetary, and operational constraints.

ENTRY-LEVEL RECRUITMENT

In order to establish and maintain a skills pipeline, and to facilitate recruitment of under-represented groups, OR will identify a group of positions to be filled at the entry level each fiscal year based on projected critical skills or functions needed to support the OR mission and succession planning goals. The College Recruitment Program and the Student Career Experience (Co-op) Program will be the primary tools used to fill these positions. To the extent that Excepted Service positions remain available, OR will continue to use the flexibilities created by the pay bands associated with these positions to compete with the private sector for highly qualified candidates. Through concentrated local recruitment, OR will target individuals who have roots in the area and thus, a potentially stronger incentive to stay in the local area, while avoiding relocation costs.

Recommendations/Options:

1. Reinvigorate the co-op and college intern programs as staffing options.
2. Encourage all organizations to take advantage of the co-op and intern programs.
3. Establish a formal plan and participate in targeted college recruitment activities.

INTERNAL RECRUITMENT

As the OR mission evolves, some organizations will experience surpluses and shortages of staff. Redeployment of persons to fill vacancies will help OR maintain a steady state staff complement. In doing so, OR will provide opportunities for reassignment through internal voluntary solicitations of interest, merit promotion procedures, and directed reassignments as needed. In addition, OR will use its Fellowship Program to provide competitively selected employees an opportunity to obtain advanced degrees in order to meet and overcome the technical, professional, and leadership challenges associated with the critical skills and functions needs and projected gaps. The Program also will further serve existing employees in gaining or maintaining skills to meet new and changing technologies.

Recommendations/Options:

4. Though most organizations expect level loading, identify and track those expected staff shortages and surpluses.
5. Redeploy and develop staff to fill expected vacancies.

6. Evaluate the effectiveness and usefulness of the Fellowship Program as a human capital management tool.

LEADERSHIP SUCCESSION

The Leadership Development (LD 21) Program will continue to be available to employees to help develop leadership skills and selected occupational discipline competencies. Additionally, ORO will use the Mentoring Program to prepare employees for future leadership positions. The Program features SES-level employees serving as mentors for a select number of GS-13, 14, or 15 level employees (i.e., protégés) who have demonstrated the potential for assuming more challenging and leadership roles.

Recommendations/Options:

7. Evaluate the effectiveness and usefulness of the LD 21 Program as a human capital management tool.
8. Implement formal mentoring programs

SES CANDIDATE DEVELOPMENT PROGRAM

Projected losses in SES positions during the next five years spell a critical need to assure that potential senior management candidates are well-prepared and ready for assignment. Career development programs, such as the Senior Executive Service Candidate Development Program, will be encouraged, as will other developmental initiatives as on-the-job training, leadership development, executive seminars, etc., to assure an adequate pool of highly qualified senior management candidates.

Recommendations/Options:

9. Identify and publicize formal training opportunities for managers.
10. Gather lessons-learned from SES incumbents to incorporate into mentoring plans.

EXTERNAL RECRUITMENT AND ADMINISTRATIVE FLEXIBILITIES

OR is committed to using recruitment strategies that target displaced employees both locally and from closure sites throughout the Department. Where external recruitment is approved, OR will use such tools and techniques as the DOE Jobs ONLINE recruitment system, OPM programs and partnerships, attendance at career fairs, corporate recruitment programs sponsored by the Department, paid advertising, networking with other Federal agencies, academic and community relations, and internships.

Administrative flexibilities are management tools for use in recruiting, hiring, and retaining high quality staff. These tools include DOE Handbook on Recruitment and Retention Incentives, the HR Administrative Flexibilities Guide, which can be found at http://www.ftcp.org/directives/Directives.asp. Such flexibilities can range from recruitment bonuses, relocation bonuses, repayment of student loans as a recruitment incentive, retention allowances, superior qualifications appointments, and excepted service appointing authorities.

Recommendations/Options:

11. Project external recruitment needs, and budget for the use of administrative flexibilities accordingly.
12. Identify potential opportunities for use of specific administrative flexibilities, and budget accordingly.
13. Establish minimum operational capacity ceilings for OR organizations and authorize AMs to staff positions within such ceilings without restriction or delay.
14. Initiate recruitment actions six months prior to an employee's departure date to allow for transfer of corporate knowledge.
15. Publicize and educate OR staff on available administrative flexibilities.
16. Develop a plan to improve representation of minorities in the workforce.

EMPLOYEE DEVELOPMENT

Effective employee development is a crucial component of OR's workforce planning efforts. The employee's Individual Development Plan forms the basis for an annual training needs assessment across OR. OR will use a variety of developmental activities such as training courses to assure that the workforce is fully prepared to meet mission objectives. The Technical Qualification Program continues to be a significant mechanism for assuring that professional and technical employees have adequate skills and competencies to meet OR's functional and safety requirements. Other developmental activities include cross-training, job rotation, on-the-job training, job shadowing, coaching, bridge and upward mobility positions, and career development programs, as those already discussed. Further, OR encourages and reimburses employees for attaining professional licenses and certifications related to their positions.

Recommendations/Options:

17. Target and develop potential candidates for those vital functions or positions in which OR expects to have limited human resources.
18. Develop plans for specific employee development actions.
19. Develop a database of employees holding professional licenses and certifications to aid in matching skills to needs.

KNOWLEDGE MANAGEMENT

OR employee knowledge includes not only the technical, administrative, and professional competencies required by the nature of the work, but also the "softer" competencies associated with effective management, communication and teamwork. "Traditional worker training programs have addressed ***explicit knowledge*** that is contained in written documents, policies, and procedures. However, ***tacit knowledge*** that is held in a person's mind has not typically been either captured or transferred in any formal manner. Rather, new workers have acquired such knowledge over time (if at all) through their working with those who already possess it. As those workers who are in possession of this ***tacit knowledge*** leave the workplace for retirement, the effective capture and transfer of that information becomes even more critical. Although this need has always existed as individuals transferred to other jobs or left the organization, there

have usually been others in the organization who also had the tacit knowledge to provide continuity of operation. It is the increased rate of knowledgeable worker departures, along with the decreasing numbers of qualified replacements that has made this a more significant problem." [Adapted from IAEA-TECDOC-1399, The Nuclear Power Industry's Aging Workforce: Transfer of Knowledge to the Next Generation.]

Recommendations/Options:

20. Develop a plan to capture the specific critical organizational and OR knowledge from those employees who are vital to the success of OR and are expected to retire in the next five years.

Appendix B – Conclusions/Recommendations/Staffing Plan
Chicago Office and CH-serviced Site Offices

METHODOLOGY
In December 2005 each CH organization and the seven Site Offices receiving human resource servicing from CH were asked to develop a five-year (FY 2006-2010) workforce management plan to address staffing needs, succession planning priorities and developmental needs required to maintain and enhance organizational competence and ensure mission accomplishment. The plans were required to include an overview of each organization's mission, major strategic business challenges, customer requirements, anticipated resource needs, and workload increases or decreases. In addition, the managers of each organization identified gaps in positions or competencies and described surplus skills.

MISSION
The implementation of OneSC in March 2005 has not impacted the mission and function of the Site Offices or CH staff organizations. However, the CH Manager identified several business issues emerging from the restructuring, including the need to refine roles and responsibilities in the FY 06 Integrated Support Center (ISC) Service Plan.

STRATEGIC HUMAN CAPITAL CHALLENGES
In addition to the Government-wide concerns regarding the potential impact of the impending retirements of the aging Federal workforce, the following are examples of challenges identified by the CH and Site Office Managers and were the basis of the conclusions and recommendations that follow in this Appendix.

1. A number of ongoing changes could impact FY 06-07 Site Office staffing levels, skills mix, level of training and performance:

   - Short term impact - participation in the OneSC reengineering initiative and implementation of new SCwide procedures; support to Source Evaluation Boards during Management and Operating (M&O) contract competitions; transition activities to new M&O contracts.

   - Longer term impact - new requirements stemming from DOE Order 222.1 (Implementation of DOE Oversight Policy) and 10 CFR 851(Worker Safety and Health Program Rule; certification of Federal Project Directors for continued project management oversight of existing projects and startup of major new projects; the rapidly approaching date for completion of work funded by the Office of Environmental Management.

2. The requirements to keep the current financial operations up and running, meet demands of the new workload associated with implementation of the STARS accounting system, and perform the oversight responsibilities associated with OMB Circular A-123 resulted in the identification of a need for additional Budget Analyst and Accountant positions at both the experienced and entry-level.

3. Skill shortages in the areas of safety, technical and program management were the basis for the request for six additional positions: Health Physicist, Fire Protection Engineer, Real Property Specialist, Safety Engineer, Maintenance Engineer and Electrical Engineer.

4. Increases in the SC research and development budget over the new few years will directly impact the workload of the CH Grants Management Center of Excellence. While e-Procurement and other technological initiatives will improve the efficiency and productivity of financial assistance, the Office of Acquisition and Assistance has identified four human capital solutions to the challenge of remaining competitive with similar organizations:

    *   Maximize retention of retirement-eligible certified Contract Specialists through the use of incentives that will entice them to forego retirement;
    *   Provide incentives to retain other certified Contract Specialists;
    *   Infuse the organization with highly-qualified entry level candidates;
    *   Continue to aggressively recruit experience Contract Specialists from other Agencies.

5. Support to major M&O contract actions has and will continue to increase exponentially. As Board Chairmen, the Chief Counsel and Deputy Chief Counsel anticipate being dedicated full-time to M&O contact competition activities during the rest of FY 06. Total dedication will also be required of the General Law administrative support staff, which will aggravate an existing deficiency of administrative support.

6. The new Continuing Legal Education law in Illinois has doubled the number of attorneys subject to minimum training requirements from seven to 14, and has added 140 cumulative training hours every two years. This will have a direct impact on the amount of training funds requested by the Office of Chief Counsel.

7. Training requirements for the Office of Human Resources Services staff will increase over the next two years as the Office of Personnel Management (OPM) and the Office of Human Capital Management present courses and other developmental activities designed to close the strategic competence gaps identified by the FY 06 competency assessment. The HRS Director expects to request a slight increase over the FY 06 training and travel allocation to ensure that the staff is able to perform effectively as human capital consultants to serviced organizations.

8. The implementation of the Training and Information Technology Most Efficient Organizations (MEOs) will impact the roles and responsibilities of the existing staff members in the Office of Human Resources Services and the Office of Information Management Services.

9. Increased funding for training and development will be required for staff members in the Office of Information Management Services to stay abreast of technological changes.

CONCLUSIONS

The following significant conclusions were made as a result of our analysis of the CH and Site Office workforce demographics and their staffing plans addressing their current and future mission critical needs:

- 54% of the CH and Site Office workforce are in their fifties or older. Only 17% of the CH and Site Office workforce are younger than 40. CH has no formal succession strategy to address the replacement of the aging population.

- The average age of employees within CH and the Site Offices is 50.8, which is somewhat higher than the Federal average. The CH employee average is at 48.6 with the Site Office employee average age being slightly higher at 51.2.

- 42% of the current CH and Site Office population will be eligible to retire within five years, while 21% are eligible to retire now should they choose to do so. 73% of the current SES members will be eligible to retire within five years, while more than half (55%) are eligible to retire now. This presents potential for immediate and severe loss of leadership, organizational functionality and corporate memory.

- Based on retirement statistics over the last three years, a higher percentage of CH and Site Office employees opted to retire under optional retirement, whereas, a lesser percentage of CH and Site Office employees have retired under early retirement. During 2006, 15% of the workforce retired under optional retirement, whereas only 3% of the workforce retired under the early out option.

- The diversity mix of the CH and Site Office workforce has remained fairly constant over the last three years; however, we continue to be under-represented in the employment of Hispanics.

- The organizational staffing analysis reflects the possibility for severe skill gaps in the achievement of appropriate certification levels for our technical staff as well as for leadership skills.

- CH and Site Offices do not widely utilize student or intern programs to recruit and hire into entry level positions; therefore, these avenues for filling the pipeline into technical as well as leadership occupations needs to be revitalized.

WORKFORCE SUMMARY AND RECOMMENDATIONS

The following recommendations are based on the conclusions drawn from the analysis of the CH past and present workforce statistics and the review of the FY 2006-2010 staffing profiles and workforce plans prepared by each CH serviced organization.   The Office of Human Resources Services (HRS) conducted a review and analysis of the information provided in the staffing plan and identified options to fill gaps utilizing the workforce analysis data.

IDENTIFICATION OF CRITICAL HIRING NEEDS
Each CH HRS serviced organization completed an analysis of their current and future staffing requirements which will be used to identify and develop recruitment and employee development programs to provide employees with the skills and competencies needed. HRS reviewed the staffing plans which identified their mission goals and objectives, mission critical occupations and skills, skill gaps, current and future critical vacancies as well as surplus occupations or skills. This data was used to develop FY 06 and FY 07 staffing priorities for CH organizations and the Site Offices.

HRS will continue to work with CH and SC management to identify critical hiring needs and to help organizations justify financial requirements to address their needs (specifically in the areas of training, staff augmentation via support service contractors, recruitment allowances and other hiring flexibilities).

Recommendations:

1. Work with CH Manager and SC Change Control Board to articulate CH and Site Office critical hiring needs and to approve necessary funding to ensure focus is on strengthening current and future organizational capacity.
2. Ensure appropriate funding is considered and included in organizational budgets for use of various recruitment flexibilities as well as appropriate training opportunities to address skill gaps.
3. Revitalize use of student and career intern hiring programs to establish and maintain a critical skills pipeline for technical and leadership occupations, as well as to facilitate recruitment of under-represented groups.

RECRUITMENT STRATEGIES
In order to effectively utilize human capital strategies to attract, develop, and retain a highly qualified, technically competent, diverse workforce, CH will identify a group of positions to be filled at the entry level each fiscal year based on projected critical skills or functions needed to support the CH mission and succession planning goals. The Federal Career Intern Program and the Student Career Experience (Co-op) Program will be the primary tools used to fill these positions. CH will continue to use the recruitment flexibilities available to compete with the private sector for highly qualified candidates. CH will establish relationships with local colleges in order to educate faculty and students about DOE and its recruitment possibilities and target individuals in the area. In addition, CH will encourage use of new streamlined authority to increase employment of persons with disabilities.

Recommendations:

1. Educate hiring officials on flexibilities (using HRS newsletter, "Brown Bag" luncheons, one-on-one meetings with servicing HR Specialists)
2. Discuss use of flexibilities/incentives with hiring managers for filling critical vacancies
3. Examine funding of multiple Student Career Experience Program (SCEP) appointees
4. Survey hiring officials the evaluate the usage and effectiveness of recruitment flexibilities
5. Provide current employees cross training opportunities (e.g., retraining, "Job Jar" opportunities, details)
6. Encourage entry level hiring by establishing targets for positions filled at the lower levels
7. Develop and implement recruitment strategies for persons with disabilities as defined by the Equal Employment Opportunity Commission (EEOC)
8. Meet DOE wide goals for persons with disabilities and targeted disabilities
9. Establish relationships with several local colleges in order to educate faculty and students about DOE and its recruitment possibilities at CH

CLOSING SKILL GAPS

Based upon CH's comprehensive workforce planning efforts over the last several years, a crucial component was to reduce skill gaps in mission critical occupations by continuing the emphasis on certification/qualification requirements and other position-related training.

Recommendations:

- Place an emphasis on certification/qualification requirements for employees in the Acquisition Career Development Program (ACDP), Project Management Career Development Program, Federal Technical Capability Program and other certification programs
- Bring appropriate courses onsite to ensure that the certification requirements are met
- Track the progress of employees covered by each certification program
- Establish process to assess effectiveness of other position-related training
- Develop a plan to reward and retain employees in the CH Acquisitions Center of Excellence
- Conduct annual training needs assessment and use the results to develop Individual Development Plans as a mechanism for closing skill gaps.

SUCCESSION AND KNOWLEDGE MANAGEMENT

CH will utilize a variety of succession strategies to assure continuity of leadership and knowledge management (e.g. recruitment through SCEP and intern authorities, formal career development programs, details/rotational assignments, etc.). One of the major concerns of CH and the Site Offices is the age of its workforce, and the potential loss of

institutional knowledge when experienced employees retire or decide to pursue other employment opportunities.

Recommendations:

1. Educate management on the used of recruitment flexibilities and other career development programs (e.g. using the Thursday Chicago Forum, "Brown Bag" luncheons, etc.)
2. Develop standard operating procedures to retain history
3. Strongly encourage cross training for staff and provide a variety of professional growth opportunities
4. Create mentoring opportunities between managers, supervisors and employees which will allow knowledge management to occur
5. Continue to publish HRS newsletter and provide timely information and success stories
6. Expand communication with hiring officials

DIVERSITY STRATEGY

Diversity is viewed as an integral and critical part of the SC-CH Workforce Management Plan as it relates to the people and culture of SC-CH. The key to a successful organization-wide diversity effort is the direct link to the business and strategic future of SC-CH.

Recommendations:
1. Establish corporate vision and values for the federal workforce
2. Integrate diversity principles into the workforce planning process
3. Build commitment and develop awareness
4. Communicate SC-CH's vision, values, plans and events
5. Diversity training
6. Develop and implement a comprehensive education plan for executives, managers and employees to promote diversity awareness; provide a forum for employees to learn and participate in meaningful dialogue
7. Establish a workforce demographic baseline for SC-CH working toward a balanced workforce
8. Continuously track, monitor, and assess hiring, promotions, separations, awards, etc.
9. Link minority educational programs with critical skills needs
10. Create developmental opportunities based on succession planning, cross training and formal development programs
11. Develop and implement a communications campaign to build understanding and acceptance of diversity among SC-CH.
12. Establish/enhance accountability
13. Ensure managers/supervisors promote and support environment in which employees are valued, respected and included.
14. Emphasize importance of SES and managers/supervisors leadership attributes contained within their respective performance management systems
15. Develop appropriate tools to measure progress and performance

APPENDIX C
SC 4th Quarter-FY 06 Critical Skills Gap Analysis