Timely Access to Data and Workforce Analysis of Federal Human Resources

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT

Message from the President

"The Act will also assist in expanding the use of the Internet and computer resources in order to deliver Government services, consistent with the reform principles I outlined on July 10, 2002, for a citizen-centered, results-oriented, and market-based Government."

- George W. Bush

Referring to eGov Act

Message from the Director

"President George W. Bush is committed to streamlined, customer oriented government. OPM is quickly moving toward a true 'e-Government', one that uses technology to improve procedures for moving federal workers through the employee lifecycle - beginning with recruitment and background investigations, continuing through all aspects of employment and training, and culminating with retirement.
Some merely imagine a world where information moves at the speed of light - OPM is creating it."
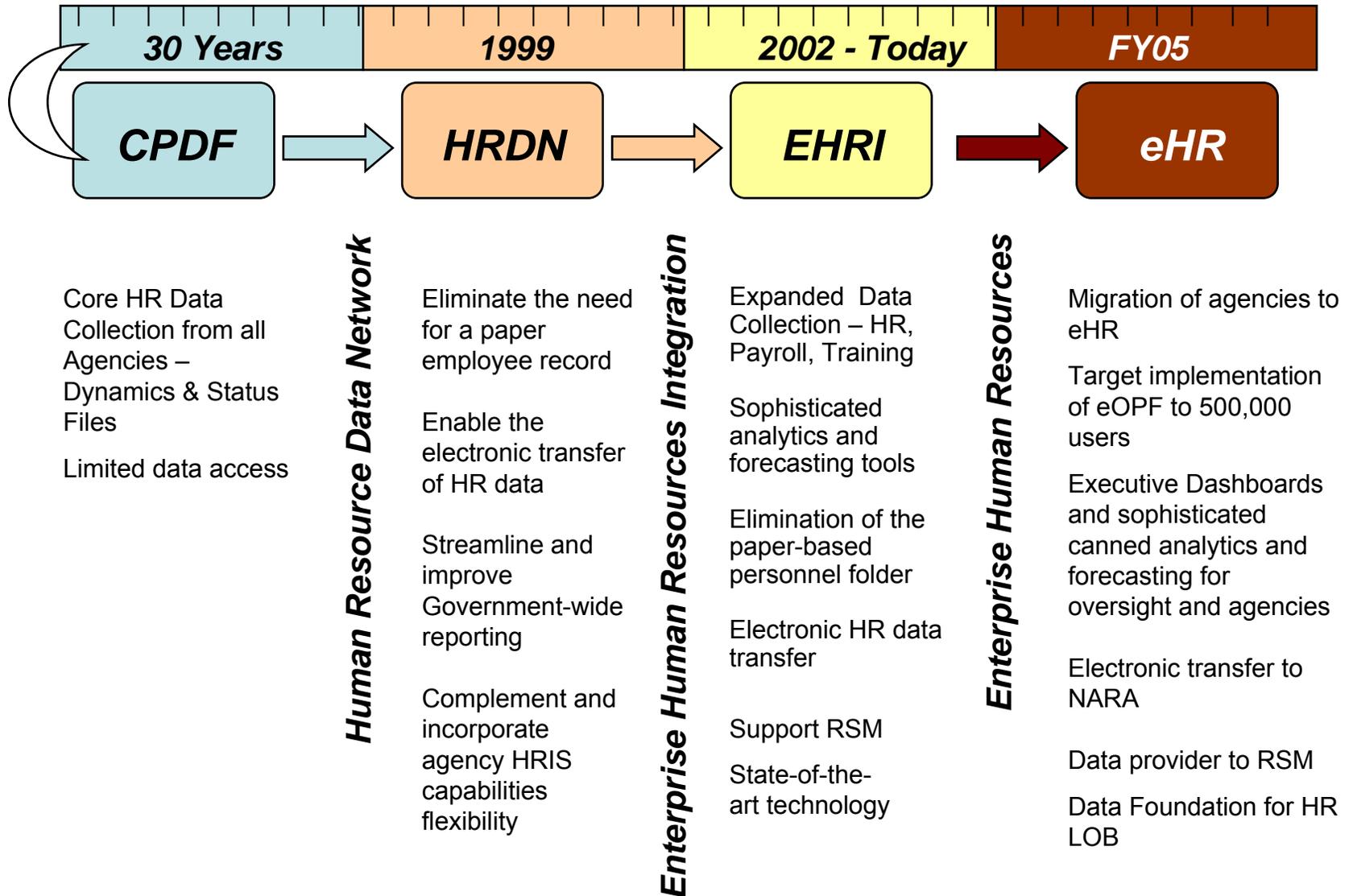
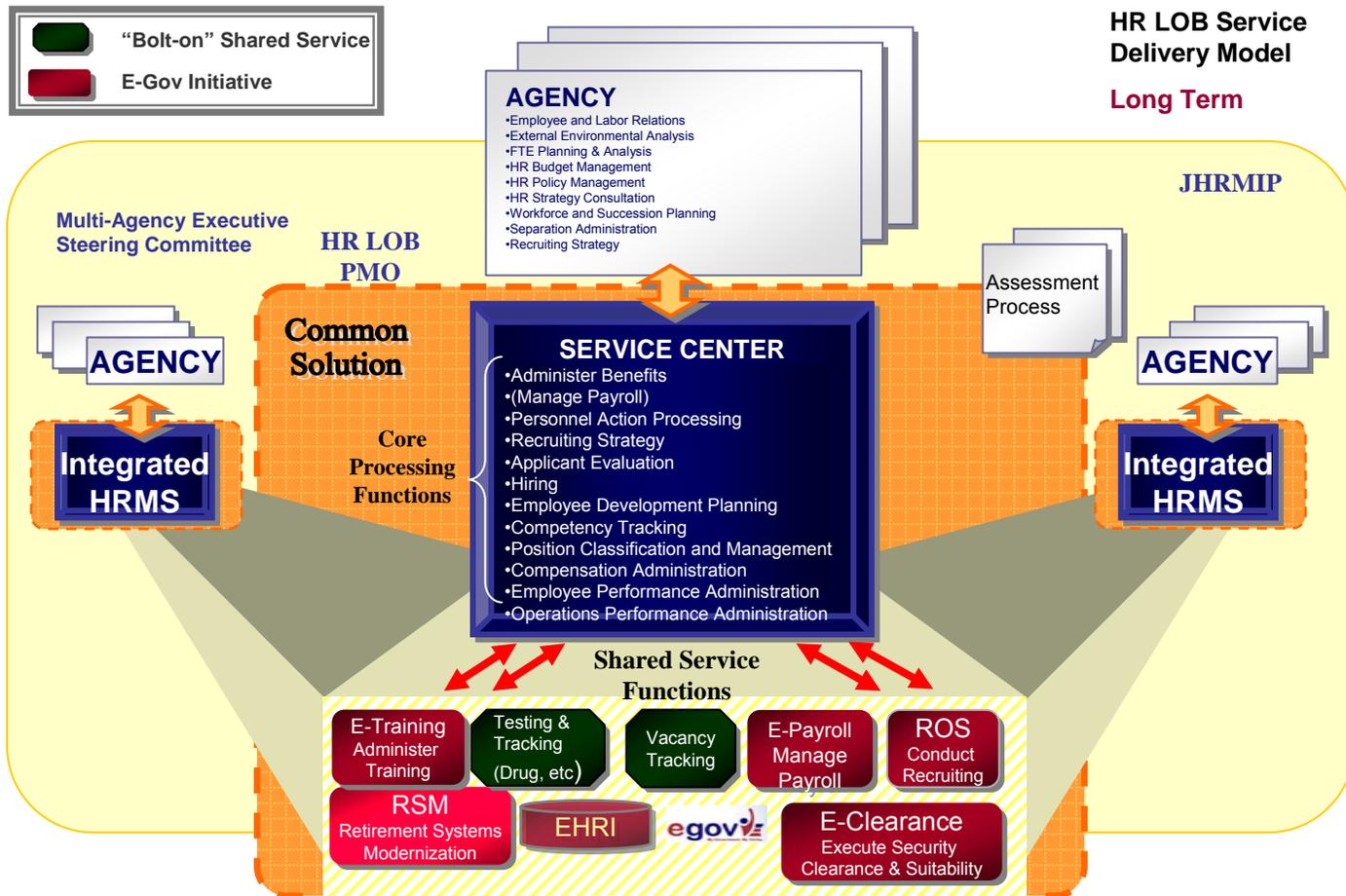*- Kay Coles James*

Enterprise Human Resources Integration (EHRI)

Goals and Objectives:

- Eliminate the need for a paper Official Personnel Folder (OPF).
- Streamline and improve Government-wide workforce reporting and data analyses.
- Provide the capability for comprehensive knowledge management and workforce analysis, forecasting, and reporting (to further strategic management of human capital) across the Executive Branch.
- Enable expanded electronic exchange of standardized human resources data within and across agencies.

EHRI Evolution

30 Years	1999	2002 - Today	FY05
CPDF	**HRDN**	**EHRI**	**eHR**

Human Resource Data Network

Enterprise Human Resources Integration

Enterprise Human Resources

CPDF

Core HR Data Collection from all Agencies – Dynamics & Status Files

Limited data access

HRDN

Eliminate the need for a paper employee record

Enable the electronic transfer of HR data

Streamline and improve Government-wide reporting

Complement and incorporate agency HRIS capabilities flexibility

EHRI

Expanded Data Collection – HR, Payroll, Training

Sophisticated analytics and forecasting tools

Elimination of the paper-based personnel folder

Electronic HR data transfer

Support RSM

State-of-the-art technology

eHR

Migration of agencies to eHR

Target implementation of eOPF to 500,000 users

Executive Dashboards and sophisticated canned analytics and forecasting for oversight and agencies

Electronic transfer to NARA

Data provider to RSM

Data Foundation for HR LOB

Shared Services Model, the Concept of Operations for the HR LOB

HR LOB Service Delivery Model

Long Term

JHRMIP

"Bolt-on" Shared Service
E-Gov Initiative

AGENCY
- Employee and Labor Relations
- External Environmental Analysis
- FTE Planning & Analysis
- HR Budget Management
- HR Policy Management
- HR Strategy Consultation
- Workforce and Succession Planning
- Separation Administration
- Recruiting Strategy

Assessment Process

Multi-Agency Executive Steering Committee

HR LOB PMO

AGENCY

Integrated HRMS

Common Solution

Core Processing Functions

SERVICE CENTER
- Administer Benefits
- (Manage Payroll)
- Personnel Action Processing
- Recruiting Strategy
- Applicant Evaluation
- Hiring
- Employee Development Planning
- Competency Tracking
- Position Classification and Management
- Compensation Administration
- Employee Performance Administration
- Operations Performance Administration

AGENCY

Integrated HRMS

Shared Service Functions

- **E-Training** Administer Training
- **Testing & Tracking** (Drug, etc)
- **Vacancy Tracking**
- **E-Payroll** Manage Payroll
- **ROS** Conduct Recruiting
- **RSM** Retirement Systems Modernization
- **EHRI**
- **egov**
- **E-Clearance** Execute Security Clearance & Suitability

- Multiple shared Service Centers
- IT hosting services including hardware, software and infrastructure support
- Governance structure - multi-agency executive steering committee
- Joint Human Resources Management Improvement Program (J-HRMIP)
- Standardize policies, procedures and requirements (functional, technical, and data requirements) for all HR LOB functions

Key Questions in Analysis of Federal Human Resources

- **Turnover (past, current, future)**
  - *Is there a problem? If so which occupations? What impacts turnover?*
- **Workforce Composition**
  - *How has it changed over time and where is it headed?*
- **Retirement Bubble**
  - *What does it look like? At what age do people really retire? How long do they stay in retirement eligibility status before retiring?*
  - *What are the key types of gains vs losses that drive the age distribution of a workforce?*
  - *Can age distributions be brought back into balance?*
- **Hiring Needs & Planning**
  - *How must hiring rates change to stabilize the workforce?*
  - *Is there an experience gap in an agency or occupation?*
  - *Is there a correlation between experience and education?*

The EHRI Analytic Tools

(WASS) Workforce Analysis and Support System

(WASS)
8 Years of History
71+ million strength records
& 62 million plus
transaction records

Combines analytics & data warehouse capabilities for simple to complex historical analyses

(CIVFORS) Civilian Forecasting System

(CIVFORS)
3.3 million strength records in history & projections & 16+ million transactions
Reports 5 yrs of historical data & 7-year forecasts current,budget, five year defense program years)

Forecasts based on past and/or future assumptions about the workforce

Business Intelligence
Data on the current workforce

On-demand user define query and drill down reporting capabilities

Standard Government-wide Reports

New capabilities in process for FY05-06

Diagnostics
Menu Driven Guidance on Analytic Based HR Area Info
Recruitment, Turnover, Training, Customer Satisfaction, Demographics, HR Work Performance, Budget Execution, Automation, Awards & Incentives, Succession Planning Management & Employee Relations

Revitalization
Web-site of forecasted/anticipated Hiring Needs across Federal Government

By agency, sub-agency, and occupational level of detail

Additional standard reports for workforce planning

Drag and drop report building; Graphing capability; Summary to detail drill down capability; Dashboards and Executive Summaries.

Business Intelligence (BI)

- Integrated ad hoc query, reporting, and analysis capabilities

- Employee demographics report

- Employee separations report

- Length of service report

- Dashboards and executive summaries

Uses of the tools - some examples

Analytics Tool (WASS)

Purpose: Understanding workforce dynamics

↗Hypothesis testing ground

↗Reality check

↗If we had the tool and could look back 25 years ago, we may have made an entirely different set of decisions

Basic Questions:

When do people retire? - through upsizing, downsizing, flat sizing

↗What happens to actual number of retirements when retirement eligibility increases?

↗What do the retirement bubbles look like?

↗What are the key relationships between gains & losses needed to maintain workforce continuity?

Uses in planning/policy:

↗Should we offer incentives or not?

↗What replacement ratios maintain continuity in the workforce?

Uses of the tools - some examples

Forecasting Tool (CIVFORS)

Purpose: Anticipate future impacts on workforce so you can plan instead of react -

↗Get ahead of the curve
↗Play out the 'what ifs'
↗What would happen if nothing changed or if goal driven

Basic Questions:

↗Given two retirement waves and need to stabilize population size, what are the recruitment requirements?
↗How long will it take to get to a balanced workforce in age and years of service?

Uses in planning/policy:

↗Based on projected job fill needs: How many employees in what occupations by when do we need to hire?
↗Can the current personnel strategies get us there?
↗If not, what do we need to do?

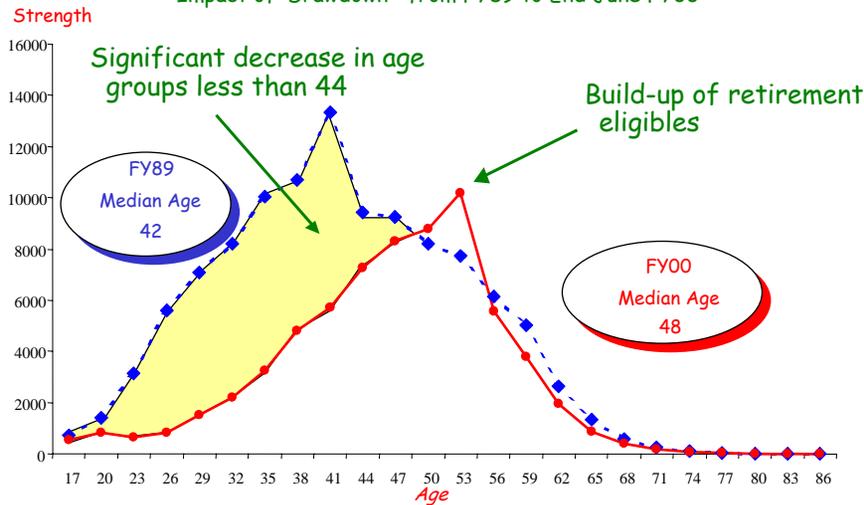# Other Applications
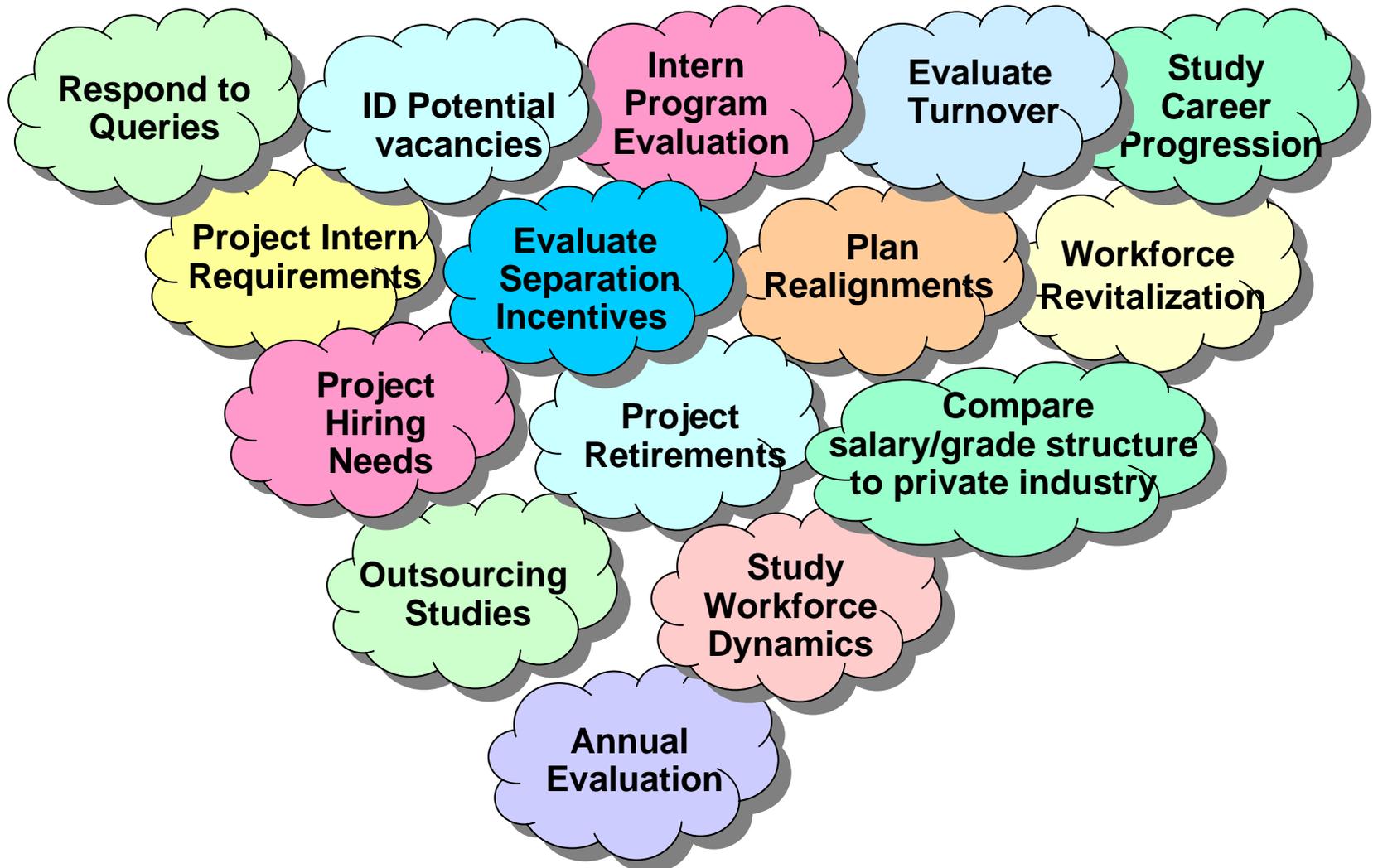
Sample of one user's actual applications

- Numbers on Voluntary Separation Incentive Payments (VSIP) use to manpower for development of budget estimates
- Use of recruitment/relocation bonuses and retention allowances
- Answer Congressional inquiries (e.g., how many Reduction in Force [RIF]s at a site)
- Assess turnover
- Assess whether normal gains/losses might negate need for Voluntary Early Retirement Authority (VERA)
- To ascertain how we fill jobs (pulls by nature of action and legal authority codes) for various staffing program purposes
- To identify occupations/geographic locations for which inventory based recruitment might be advantageous
- To determine way we fill jobs (e.g., external vs. internal sources)

Examples of analysis performed by an agency

Aging Workforce
The Age Distribution

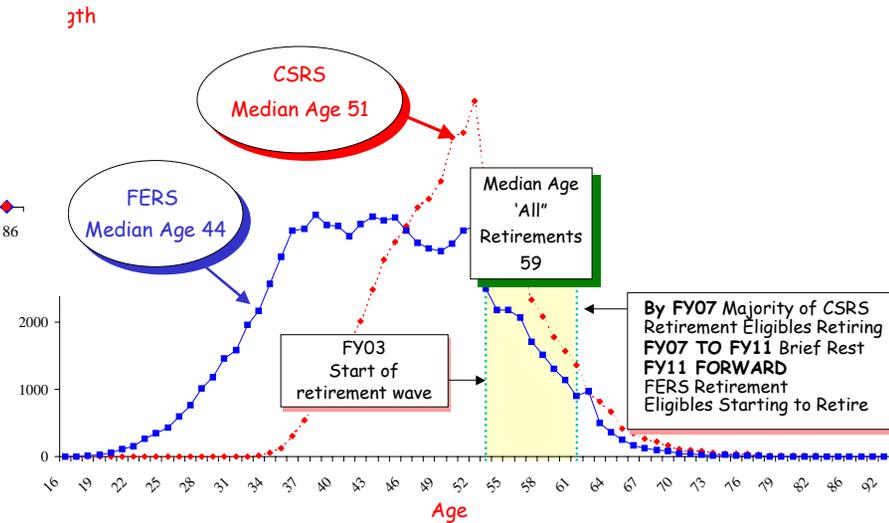Impact of Drawdown from FY89 to End June FY00

Strength

Significant decrease in age groups less than 44

Build-up of retirement eligibles

FY89 Median Age 42

FY00 Median Age 48

Age

What about the Retirements?

What was learned and what is projected

Aging Workforce Components
Age Distributions of Employees under CSRS and FERS

gth

CSRS Median Age 51

FERS Median Age 44

Median Age 'All" Retirements 59

FY03 Start of retirement wave

By FY07 Majority of CSRS Retirement Eligibles Retiring **FY07 TO FY11** Brief Rest **FY11 FORWARD** FERS Retirement Eligibles Starting to Retire

Age

Sample Agency - Actions based on forecast Civilian Recruiting, Advertising & Marketing Plans

Recruiting Situation:

↗ Tight labor market with skill shortages

Recruiting hampered by --

↙ Pay & benefits limitations

↙ Slow, cumbersome hiring system

↙ Image

Accession requirements will increase

↙ Retirement bubble

↙ End of drawdown ("1-for-1" replacement)

Accession Requirements

Actual

Projections FY01 - 06

Projections FY07 - 13

ACCESSIONS
↙ Avg 17.5K per yr

ACCESSIONS REQUIRED
↙ Project avg 25.5K per year
↙ Avg 8K increase per year
↙ 3,100 are GS-9 to 15

Losses
Accessions (210K)

Accessions - 223K?

FY95 FY96 FY97 FY98 FY99 FY00 FY01 FY02 FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13
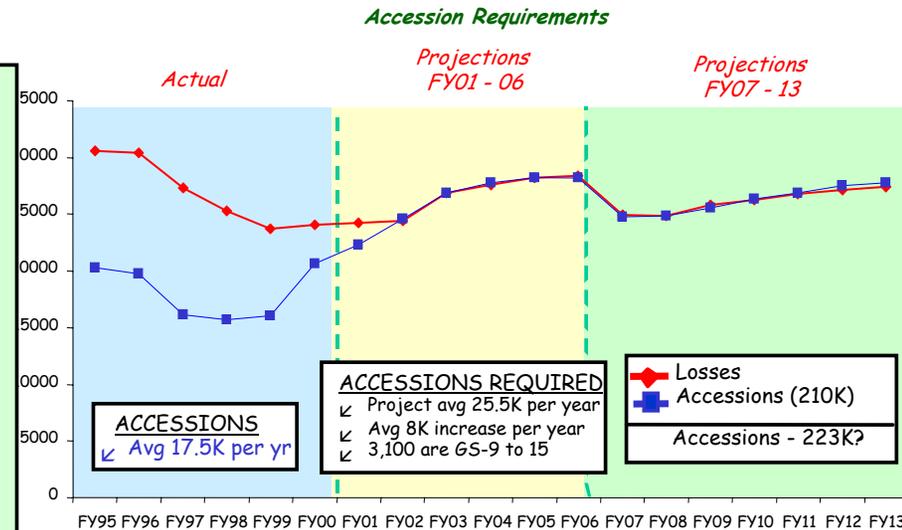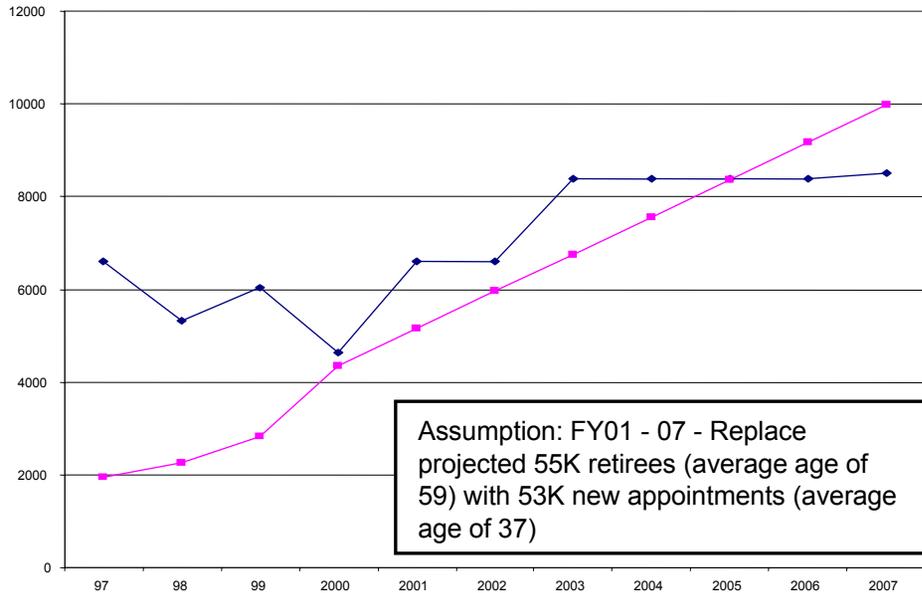
PLAN

↗ Evaluate impact of projected job fill needs on recruitment & training budgets

↗ Conduct marketing survey,

↗ Identify best recruiting practices

↗ Develop FY02 implementation plan to

↙ Support FY04-08 requirements

↙ Document accession requirements and validate approach

↙ Define metrics for success

1

Sample Agency - Actions based on forecast Plan for balancing the Aging Workforce

Projected through FY07 Retirements & Resuming New Hires

Assumption: FY01 - 07 - Replace projected 55K retirees (average age of 59) with 53K new appointments (average age of 37)

	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04			
Age	46	47	47	48	47	46	46	46	45	45	44

◆ Retirements
■ New Appointments

Examining Age Trends Over Time

• During 80s growth period median age 40-42. Hired 1.3 new appointments for every retirement

• During 90s median age 43-48. Hired 0.5 new appointments for every retirement

• If by FY 07 hire 1 new appointment for every retirement, median age will drop from current 48 to 44 or less.

• New appointment median age = 37

• Retirement median age = 59

Average age can be reduced by resuming hiring

The Civilian Labor Force is Changing

Age of the Civilian Labor Force (CLF)

Age	CLF FY92	CLF FY98	CLF FY00	CLFProj FY06
16-19	5%	6%	6%	6%
20-24	11%	10%	10%	10%
25-34	27%	24%	23%	21%
35-44	27%	27%	27%	24%
45-54	18%	21%	22%	24%
55-64	9%	10%	10%	13%
65+	3%	3%	3%	3%

Source: Employment Outlook; 2000-10; Monthly Labor Review November 2001, BLS

U.S. Births 1945 - 2000

Births (Millions)

U.S. Households (Percent)

January 1, 1946 – December 31, 1964
Baby Boomer

January 1, 1965 – December 31, 1976
Baby Dust

January 1, 1977 – December 31, 1997
Baby Boom Echo
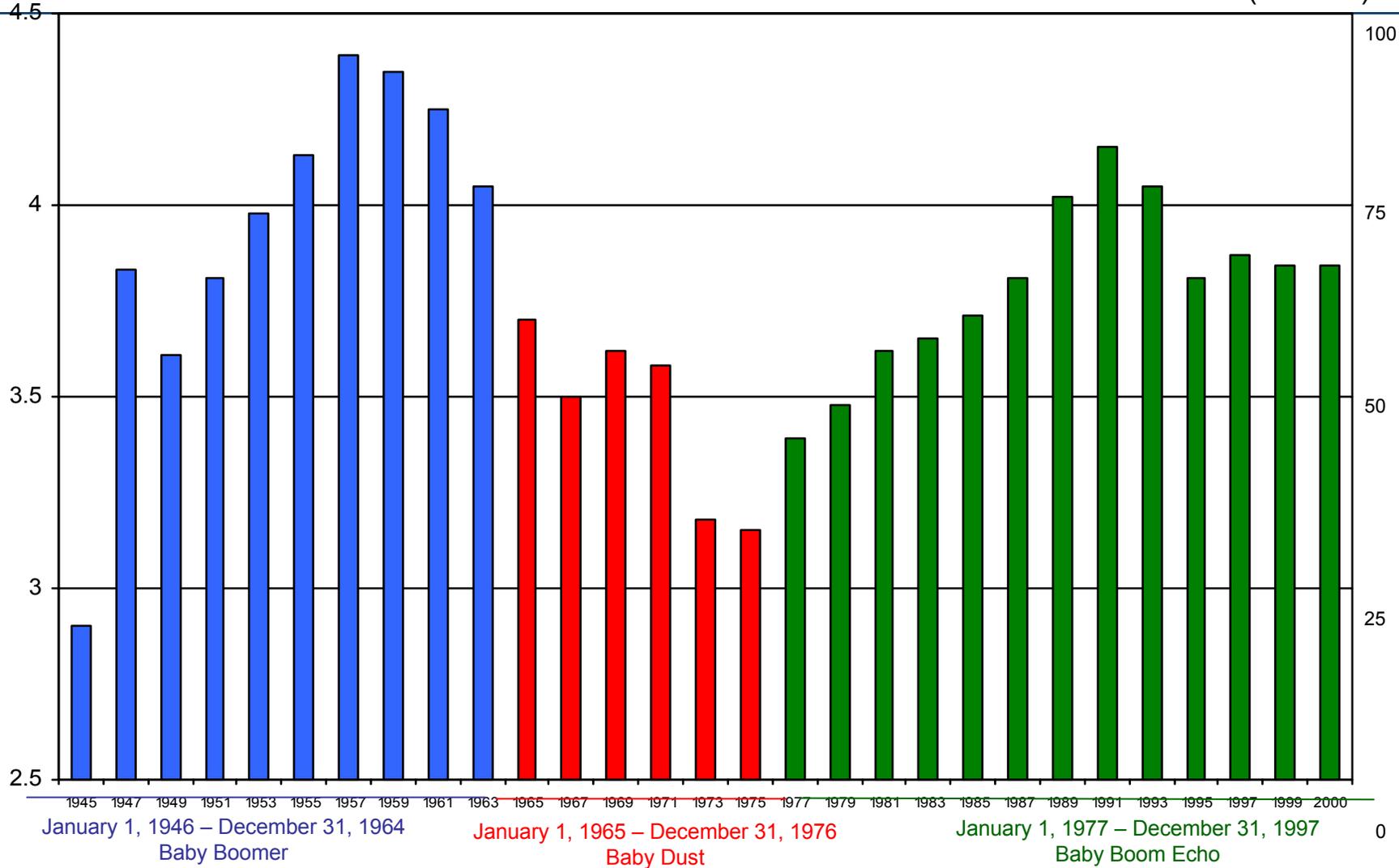
Source: Institute for the Future, Outlook Project working documents,1999; U.S. Bureau of the Census, Statistical Abstract of the United States: 1998

Civilian Labor Force Age Distribution
from 2000 to 2010

	16-24	25-34	35-44	45-54	55-64
2000	35	39	45	37	24
2010	39	38	40	44	35

Age
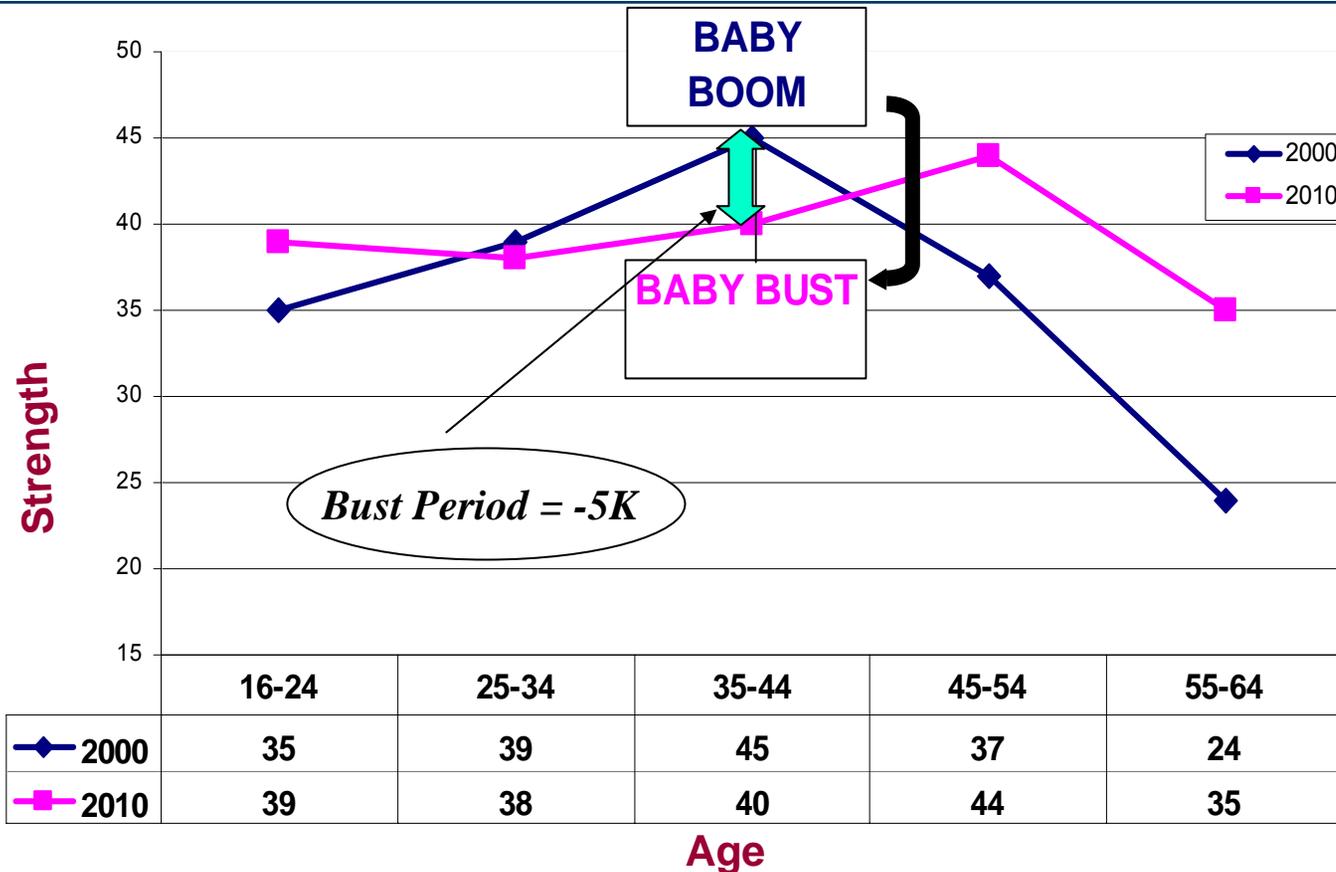
- ❖ Ratio of 34 and younger to 45 and older:
  - ➢ Year 2000 Outlook: 74 to 61 or 1.21: 1
  - ➢ Year 2010 Outlook: 77 to 79 or 1:1.02
- ❖ Shift leads to job seekers' market

Impact of New Hire needs on HR Workload have to be anticipated now!

❖ **Workload implications for HR staff**

➢ **Option 1. If Hiring Plan A then xxx staff needed next 2 years?**
➢ **Option 2. If Hiring Plan B then yyy staff needed next 2 years?**

❖ **Other Considerations**

➢ **Analyze labor supply**
➢ **Assess difficulty of staffing**

❖ **Getting ready –**

➢ **Supplement via temps or perms?**
➢ **Plan for special incentives to recruit (if types, numbers, locations)**
➢ **Start recruitment effort early (depending on availability of labor)**

DEMO

Contact Information

For more information,

visit us on the web at

www.OPM.gov

Rhonda Diaz
Project Manager
202-606-1416
Rhonda.Diaz@opm.gov