

ODP-0-6488

30 Sept. 1980

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MEMORANDUM FOR: Director of Data Processing  
Director of Personnel Policy, Planning, and Management

FROM:

[REDACTED]

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Deputy Director for Applications, ODP

SUBJECT: Estimated Annual Savings as a Result of the Human Resource  
Systems Development Effort

1. The extensive effort that went into the recently implemented Human Resources System (most noticeably the PERSIGN II system) has prompted an interest in the potential savings (if any) in introducing this system versus the estimated cost of developing the system. A team of people from both OPPPM and ODP was asked to categorize, as accurately as possible, the cost versus savings in this effort. Their findings are the subject of this memorandum.

2. The findings of the team were that the three and a half year development effort for the HRS system required an expenditure of some \$2.9 million, and will result in an annual savings of approximately \$763,100 as compared to the cost of former personnel processes.

3. The analysis of these savings was developed by a joint effort of [REDACTED]

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[REDACTED] or OPPPM. During their analysis of savings, if there was any question as to the total savings for a line item, only a modest savings was indicated or the item was categorized as intangible. Additional details are available for each of the items identified in Attachment A.

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4. The standard methodologies that were used to compute savings were:

a. \$25 (the ODP standard) was used for each ODP staff hour saved, and \$12.13 was used as the standard non-ODP figure, which is the Agency standard, without benefits.

b. The number of Agency components that would benefit from the new enhancement was arbitrarily set at 50. Although we recognize that there are over 60 components in the Agency, there are some that do not have an EP careerist assigned.

c. \$756 was used for the average cost of each computer hour saved.

5. The following is a summary of the estimated savings, by HRS project. Attachment A is a more detailed description of the source of these estimates. Attachment B is a list of the intangible savings introduced in this development effort.

<u>Project Name</u>	<u>Ref. Para. in Att. A for details</u>	<u>Estimated Annual Savings</u>
PERSIGN	A	\$ 592,380
PERSTEP	B	\$ 10,670
STAFFING	C	\$ 53,665
MINI-GAP	D	\$ 12,050
PERSEAS	E	\$ 12,095
PERCIARDS	F	\$ 730
CENQUAL	G	\$ 54,845
COMVAD	H	\$ 2,340
PERFIT	I	\$ 11,425
BATCHGIM II	J	\$ 12,900

Total	\$ 763,100
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ATTACHMENT A  
Individual Savings within each HRS Project

## A. PERSIGN (Personnel Assignment Project).

\$192,382	Reduction in time for Agency components and OPPPM to process Personnel Actions.
\$ 3,745	Reduction in 500 square feet floor space needed by TRB/OPPPM for equipment and personnel.
\$ 27,132	Elimination of the rental and maintenance contract for IBM 3641 terminals in TRB.
\$ 5,822	No need for Bi-Weekly and End-of-Month balancing of three different Personnel Systems (501, PERCON, PERSIGN I).
\$ 1,092	Capability to process data on one action versus having to complete and process two different actions.
\$ 1,820	Increased capabilities of Mass Transfer Action reduces need to process approximately 1500 actions annually.
\$ 14,556	Comprehensive User Manual reduces training of personnel in each Agency component.
\$ 27,529	Automated Mass Update of Personnel records because of dictionary code and text changes reduces need for special computer programs.
\$165,000	Increased ad-hoc reporting capability reduces need for special computer programs.
\$ 4,076	New and combined data on personnel actions (e.g. Handicap, FLSA, etc.) reduces need for manually processing data and/or processing separate personnel actions.
\$ 2,911	New Reports for Detailed individuals eliminates need for manually researching the data.
\$ 4,367	New on-line STRENGTH eliminates need for manually maintaining daily counts.
\$ 15,000	Automated cross-references in the new HRS Documentation System reduces maintenance effort.
\$ 10,800	Quick turn-around of new system eliminates need for overtime spent on reproducing reports.
\$ 1,500	No need for Production Division to monitor SIMJOB (501) runs.

\$ 2,400	No need for Data Conversion Branch to produce Solution II listings.
\$ 20,934	Computer time saved on not having to process data for three different systems.
\$ 16,200	Manpower saved in checking results of three different production systems.
\$ 3,100	Reduction of 3,100 tape mounts by ODP annually.
\$ 18,375	Return of 1,225 computer tapes no longer needed to support old systems.
\$ 34,416	No need for eight tape drives to be allocated as when old personnel system was run.
\$ 7,500	No need for complex SIMJOB operator training.
\$ 8,723	Computer time saved in backing-up the many computer tapes.
<u>\$592,380</u>	PERSIGN Annual Savings

B. PERSTEP (Automated Step-Increase Project).

\$ 1,164	No need for OPPPM to process Pay Change Notification actions to update the PSI Master File.
\$ 2,329	No need for manual verification of each Form 560 with the Service Record Card.
\$ 582	No need for manually projecting and posting when next PSI due, since automatic in system.
\$ 1,164	No need for manual preparation of Form 560 for selected Wage Employees.
\$ 1,164	Reduction in processing error corrections.
\$ 1,456	Savings in processing Form 560 on Contract employees.
\$ 2,523	Savings by the Office of Finance Pay Clerks in processing PSIs.
\$ 97	No need to manually post Quality Step Increases for statistical purposes.
\$ 194	No need to manually produce QSI statistical reports.
<u>\$ 10,673</u>	PERSTEP Annual Savings

C. STAFFING (Staffing Authorization)

\$ 14,847	OPPPM and Agency component savings in manually maintaining records for personnel who are assigned to the new Organizational Groupings (Assignment Other & Budget Control).
\$ 2,329	Savings in manually researching Position Changes which are now maintained automatically.
\$ 30,276	New and revised data on the Staffing Complement Reports saves Agency components from manually researching the data.
\$ 1,164	New on-line edits reduces error recycle processing.
\$ 1,164	No need for the manual production of the STRENGTH Eyes Only Report since STRENGTH is maintained on-line.
\$ 3,881	The automated production of the Language Control Register saves OTE in manual research and production.
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\$ 53,664	STAFFING Annual Savings

D. MINI-GAP (Phase 1 of General Archives Project)

\$ 4,852	Increased accuracy of new converted data conforming to the new PERSIGN reduces Agency component time in balancing gains and losses within each Office.
\$ 7,200	New documentation reduces confusion maintaining the system.
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\$ 12,052	MINI-GAP Annual Savings

E. PERSEAS (Overseas Tours - PCS/TDY Project)

\$ 5,347	Reduction in coding forms, keypunching and verification.
\$ 3,493	No need for manual updating of hard-copy Overseas Master, since data on-line.
\$ 1,164	No need to manually merge Staff and Contract data from two different systems.
\$ 291	Increased accuracy because of project cross-checking and editing.
\$ 1,200	Enhanced documentation decreases time in maintaining system.
\$ 600	Automated Mass Update of records because of dictionary code/text changes eliminates need for special programs.
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\$ 12,095	PERSEAS Annual Savings

F. CIARDS (CIA Retirement and Disability System)

\$ 291	Reduction in manual processing of management requests.
\$ 437	Maintaining Active and History files on-line reduces manual effort in preparing reports.
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\$ 728	CIARDS Annual Savings

G. CENQUAL (Agency Qualification System)

\$ 2,329	No need to code data on separate coding sheets.
\$ 1,747	No longer necessary to manually update Qual Cards and post data to Language Rosters.
\$ 388	Reduced time in cross-training (Qual, Language, & Biographic) personnel.
\$ 34,934	Capability to produce automated Biographic Profiles reduces manual effort.

\$ 388	Automated project-cross checking of MAINID for MSQ, QUAL, & LANG data reduces error recycling.
\$ 582	Increased accuracy and consistency of data permits reduced time in cross training personnel.
\$ 7,200	Combined data eliminates the need for special documentation and maintenance of the four previous projects (QUAL, LANG, MSQ, & PERCON).
\$ 7,278	Eliminate manual processing for QUAL and LANG data for Contract personnel by combining all in one on-line system saves Agency components.
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\$ 54,846	CENQUAL Annual Savings

H. COMVAD (Common Validation Dictionary Project)

\$ 754	On-line update provides capability to key directly from source document as opposed to coding Form 1099.
\$ 388	Error recycle reduced because of on-line edits and by only keying changing data as opposed to the complete transaction.
\$ 400	Daily update capability reduces need for special runs of predecessor system (NPDICT) to process personnel actions.
\$ 400	No need to make RCA-501 program changes for tables that were internal to the programs.
\$ 400	Enhanced automated methods for updating Salary related dictionaries reduces previous manual effort.
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\$ 2,342	COMVAD Annual Savings

I. PERFIT (Performance Appraisal System)

\$ 2,329	Performance Appraisal data onto coding sheets.
\$ 9,098	Automated printout of Employee status data on Form 45 reduces manual effort by Agency components in researching data and subsequent typing on form.
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\$ 11,427	PERFIT Annual Savings

J. BATCHGIM II (PL1 access to GIM Data Bases)

\$ 6,500	New features eliminates need for DBCC/ODP to process many batch readers.
\$ 2,500	No need to duplicate the GIM dictionary definition in each program via manual coding and verification.
\$ 2,500	No need for coding the complete record, since individual fields can be accessed by each program.
\$ 1,400	Reduced maintenance effort because of enhanced documentation.
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\$ 12,900	BATCHGIM II Annual Savings



ATTACHMENT B  
Intangible Savings for the HRS System

1. Major savings result from the compatibility of Ruffing Center Computer Systems. No need for special handling of SIMJOB related problems provides for the stability of systems and uniform methods of processing jobs.
2. Enhanced capabilities exist for statistical management reports because of the consistency of Staff and Contract data in the MINI-GAP system.
3. The elimination of approximately 35 CENQUAL reports because of consolidation will result in some savings. Some of these savings will be offset by new ad-hoc RAMIS reports.
4. Consistency of using Federal Information Processing Standard Codes, where possible, will eliminate much confusion in Agency components and also reduces the number of dictionaries maintained with the same data, but using different codes for identification.
5. New capabilities of BATCHGIM II for accessing multiple GIM data bases and processing GIM-like Security Checks will provide the Agency with the capability to design multi-database projects and greatly enhance the automated security checks previously made.
6. Additional savings may be realized by the Placement Officers when reviewing actions because of the many Federal and Agency automated regulatory checks with the PERSIGN system.
7. PERSIGN's automated interface to 19 other computer systems will provide consistency of data in all systems and result in:
  - a. Less confusion.
  - b. Fewer telephone calls from Office to Office to determine if/what/when some item of data changed on an individual.
  - c. Fewer manual checks of hard-copy records/files to determine accuracy.
  - d. Less manual processing of paper transactions and subsequent coding/keypunching to have the data changed in the respective system.
  - e. Less file space needed for storing the paper.
  - f. Fewer forms/computer listings needed.
  - g. Enhanced security

- h. Fewer special computer interface files for each of the systems resulting in reduction of computer processing needed and reduction in manpower for monitoring the computer output.
    1. Reduction in error rate all interfacing projects.
8. Daily update capability for all HRS projects will probably reduce overtime needed in Agency components previously needed to meet a processing time schedule.
9. Because of eight integrated HRS projects on one data base:
  - a. The capability exists to cross-train OPPPM personnel in the integrated data aspects and procedures, thus providing for increased morale and career development.
  - b. No need to check many places to find HRS data.
  - c. Permits on-line query capabilities that previously would have required so much manual effort that they would have been cost prohibitive and the data would have been out-of-date when received.
  - d. Elimination of data redundancy resulting in increased accuracy, less computer storage space and less updating.
  - e. Automated project cross-checking for verifying individual's status thus eliminating manual checks to see which system is correct and subsequent coding/keypunching/processing to get systems in agreement.
10. The daily update of Project Numbers from the Financial Resources Systems in the HRS2 Data Base eliminates a large error rate and subsequent manual checking/corrections of personnel actions and reprocessing of actions.
11. The modular design and documentation of the system provides:
  - a. Easy method to determine which program uses which data, thus saving manpower in looking through many listings to determine use.
  - b. Saves making multiple computer runs to determine what error will occur next.
  - c. Flexibility for change in requirements.
  - d. Data Element rootname uniformity eliminates confusion and time.
12. The establishment of a computer maintained sequence number on Request for Personnel Actions and Notification of Personnel Actions eliminates confusion to the employee and OPPPM as to whether an action was processed, and for filing purposes the sequence in which they were processed.
13. Processing both Staff and Contract employees in one system, as opposed to the three previous systems, has reduced the number of different processing procedures, user manuals, and different forms used.