In practice, the FFB serves as an intermediary (middleman) for the financing of loans issued, sold or guaranteed by on-budget Federal agencies.

The FFB generally operates in two ways:

(1) It purchases loans which have been made by Federal agencies; this converts what would have been on-budget loans by Federal agencies into off-budget FFB loans; and

(2) It makes direct loans to institutions, but only when these loans have been guaranteed by a Federal agency. This converts what would otherwise be on-budget guaranteed loans into off-budget direct loans.

FFB operations of these kinds involved obligations of $44.8 billion in FY 1982, none of which was included in the Federal Government's budgeted outlay figure for the year.

In essence, the FFB arranges financing for Federal agencies through the "back door" to the U.S. Treasury. The effect of the off-budget Federal entities, particularly the FFB, is to give the appearance that money is not being spent when in fact it is, and to reduce the size of the deficit by transferring on-budget spending to off-budget entities.

Q. Has the FFB accomplished its original goal of consolidating all Federal borrowing?

A. The FFB has fulfilled its intended function of marketing Federal loans more effectively by consolidating into one agency the various financing operations of other Federal agencies. However, its off-budget status has made it more difficult for the Government to control credit activities under Federal direction.

Q. Why is it more difficult to control credit with the FFB off-budget than it would be on-budget?

A. Congress originally made the FFB off-budget under the premise that no other Federal agency's budget would be increased as a result. The FFB was only intended to be a financial clearinghouse. In reality, however, the FFB has made it possible for agencies to make more loans and still stay within budget ceilings. They do this by selling their loans to the FFB. An example of a Federal agency that has accelerated its lending activity is the Farmers Home Administration (FmHA). In 1974, the FmHA had $3.2 billion in direct loans outstanding and had guaranteed another $9.8 billion in loans held by others -- for a total of $13.0

billion. By the end of 1982, it had only $1.4 billion in direct loans on its books, but it had guaranteed $53.7 billion in FFB loans -- for a total of $55.1 billion. The FmHA was thus able to more than quadruple its loans and guarantees outstanding without showing any increase in net outlays for new loans over the 1974-1982 period.

Q. What is the impact of FFB lending activities on Federal borrowing?

A. Although the FFB's loans are not included in the Federal budget totals, and thus are not part of the official deficit, they do increase the amount of money being borrowed by the Government -- since all the FFB funds come from the Treasury.

In turn, this increased borrowing by the Government creates a situation in which private sector borrowers are subject to being "crowded out" or have to pay higher interest rates. This is shown in the following:

Federal Borrowing Monopolizing Savings
($ Billions)

		(1)	(2)	(3)	(4)	(5)
		Federal Borrowing				
	FYs	Direct Federal Borrowing	Federally Guaranteed Borrowing	Total	Net Total Savings	Total Federal Borrowings As % Net Total Savings
(1)	1974	$ 18	$ 21	$ 39	$100	39.0%
(2)	1977	77	27	104	173	60.1
(3)	1980	81	56	137	167	82.0
(4)	1981	90	46	136	203	67.0
(5)	1982	143	66	209	212	98.6
(6)	1983E First Half Oct.'82-Mar.'83 Annualized	205	109	314	226	138.9
(7)	1983E First Half As Multiple of 1974	11.4X	5.2X	8.1X	2.3X	3.6X

Result is historically high real interest rate -- prime rate of 7.0% after adjusting for inflation

Since 1974, Federal borrowing has grown faster than the pool of savings available to finance the borrowing.

Federal borrowing as a percent of net total savings increased from 39.0% in 1974 to 98.6% in 1982, and is estimated to be 138.9% in 1983 -- which leaves nothing for private sector borrowers.

New Guaranteed Loans and Government-Sponsored Enterprises

The size of the Federal Government and its influence on the U.S. economy extend beyond the on- and off-budget obligations discussed above. They include guarantees of private sector loans and lending by Government-sponsored enterprises, both of which contribute to Federal involvement in credit markets. A guarantee of a loan occurs when a Government agency makes a pledge that commits the Federal Government to repay a private lender in the event that a particular borrower defaults. Since no Federal expenditures are involved unless a default occurs, the guarantee commitments themselves are not included in budget outlays nor in future contingencies. By contrast, direct Federal loans are considered as outlays in the year they are made. Most of the guaranteed loan activity occurs in the areas of housing, education, energy, and income security (for example, subsidized low-rent housing).

Government-sponsored enterprises are privately owned financial institutions which were originally founded and funded by the Government to provide credit to selected segments of the economy -- primarily agriculture, housing and education. They are subject to Federal supervision and they consult with the Treasury Department when they issue debt securities to raise funds. These enterprises include the Student Loan Marketing Association (SLMA), the Federal National Mortgage Association (FNMA), the Farm Credit Administration and the Federal Home Loan Bank System (FHLBS). Activities are primarily funded through the issuance of debt securities, which are not guaranteed by the U.S. Government, although they are referred to as "agency loans." The Government has given these loans special characteristics which differentiate them in the credit market. Certain tax exemptions exist, and the financial instruments may be used as investments by Federally-regulated institutions. These advantages allow the enterprises to borrow at rates only slightly higher than those available to the Treasury and, of course, at considerably lower interest rates than would otherwise be possible.

The following table shows the total credit extended through Federal or Federally-sponsored programs in 1982, including direct loans, guaranteed loans, and loans made by Government-sponsored enterprises:

[Table on following page]

Federal Lending FYs 1974 and 1982
($ Billions)

	(1)	(2)	(3)	(4)	(5)	(6)
	New Loans		Repayments		Net Loans	
	1974	1982	1974	1982	1974	1982
Direct Loans						
(1) On Budget Agencies	$14.8	$ 13.8	$(11.5)	$ (4.7)	$ 3.3	$ 9.1
(2) Off-Budget Agencies	1.0	14.8	(0.2)	(0.5)	0.8	14.3
(3) Subtotal	$15.8	$ 28.6	$(11.7)	$ (5.2)	$ 4.1	$23.4
(4) Guaranteed Loans	26.0	85.8	(15.7)	(64.9)	10.3	20.9
(5) Loans by Government Sponsored Enterprises	38.4	133.2	(27.3)	(89.9)	11.1	43.3
(6) Total Lending under Federal Auspices	$80.2	$247.6	$(54.7)	$(160.0)	$25.5	$87.6

Of the $247.6 billion in new loans made in 1982 only $13.8 billion (5.6%) were carried by on-budget agencies. Moreover, because the on-budget loan expenditures were offset by loan repayments, only the $9.1 billion "net loans" figure was part of the official budget outlays.

Budgeted loan expenditures in FY 1982 of $9.1 billion greatly distort the true amount of Federal lending. In addition, current budgetary treatment of Federal lending activities, and consequent borrowing to finance these actions, disguises the extent of Federal participation in U.S. credit markets.

PPSS recommended that Government-sponsored enterprises and all new guaranteed loan activities be fully disclosed in the Federal budget. The obligations of these entities already exist, but they are not acknowledged as Federal commitments. It should be noted that PPSS is not recommending greater Federal participation in the operation of these Federally-sponsored enterprises. We are not questioning their management philosophy, nor are we suggesting increased Federal oversight. Rather, our comments and recommendations focus on the impact that the financial transactions of these agencies have on U.S. credit markets and the accounting treatment of these transactions in the Federal budget. Federally guaranteed loans and Government-sponsored enterprise activities receive a favorable rate in U.S. credit markets -- substantially better than others could receive. Reflecting these activities in the budget would provide a truer representation of the financial obligations of the Federal Government.

Q. You mentioned that Federal borrowing creates a crowding-out effect in the U.S. credit market. How does this occur?

A. Total Federal participation in the country's capital markets has two major components: funds it directly borrows to cover on-budget and off-budget activities; and funds borrowed by Government-sponsored enterprises and others to cover their lending activities. When the Government's on-budget outlays are greater than its revenues -- as they have been in every year but one over the past two decades -- it has to borrow money to make up the difference. This borrowing is handled by the Treasury, which issues securities that are purchased by individuals, by pension funds, and by other investors who want to put their money in a safe investment. In addition, private institutions whose loans carry Federal guarantees and Government- sponsored enterprises also borrow funds from investors.

However, individuals and institutions only have so much money (i.e., their savings) to invest. If the Government and associated entities are getting a large share of those funds to cover their programs, there is less to go around for others at affordable interest rates. This is what is called "crowding out." It means, for example, that corporations and small businesses that need to borrow money to replace worn-out equipment, to make technological improvements, or to expand their operations -- all things that increase employment and productivity and make the economy stronger -- may have difficulty obtaining all the money they need at an interest rate that is reasonable. Alternatively, interest rates may wind up increasing in order to entice people to save more money rather than spend it, thus increasing the pool of funds available to meet everyone else's borrowing needs. Smaller companies and less financially secure coporations may not be in a position to borrow at these higher interest rates. Once again, therefore, they are "priced out." Moreover, because overall interest rates have increased to help generate the funds required by all those who want to borrow, everyone winds up paying higher interest rates than they would otherwise -- and that includes individuals who are obtaining car loans; home mortgages, and credit lines on their credit cards.

Q. How serious is the problem of crowding-out? Is Federal participation in credit markets increasing?

A. The extent of crowding-out caused by Government direct lending and guarantees has been increasing over the past decade. The following shows the amount of net new credit advanced in the U.S. credit market in 1974 and 1982, and the proportion which has been lent under Federal auspices.

[Table on following page]

	($ Billions)	(1) 1974	(2) 1982	(3) 1983E
(1)	Net Federal Loans (a)	$ 25.5	$ 87.6	$130.9
(2)	All Other Net Lending	202.2	400.9	420.1
(3)	Total Net Credit Advanced in U.S. Credit Market	$227.7	$488.5	$551.0
(4)	Federal Net Lending as a % of Total Net Credit Advanced	11.2%	17.9%	23.8%

(a) Includes on- and off-budget loans, guaranteed loans, and loans of Government-sponsored enterprises.

The proportion of loans related to Federal Government activities grew from 11.2% in 1974 to 17.9% in 1982, and in the FY just ended, the participation is estimated to have increased by 5.9% points more, to 23.8%. The key consideration in evaluating the Government's role in preempting almost one-fourth of net new lending -- as opposed to this credit being allocated by free market forces -- is how well the Government chooses the programs and individuals/institutions that receive credit. This is why it is critical that, at a minimum, all Government credit activities be formally and stringently reviewed, which can only be accomplished if all credit activities are included in the budget.

In summary, the Federal budget does not accurately reflect the financial condition of the Government. Offsetting collections are used to distort true spending levels; off-budget entities such as the FFB conceal spending by on-budget agencies; and guaranteed loans and Government-sponsored enterprises receive favorable treatment in credit markets as implied obligations of the U.S. Government, but are not acknowledged as such.

As shown here, the official budget understates Federal commitments by more than half -- $848 billion per the FY 1984 budget vs $1.8 trillion actual commitments.

Automating for Efficiency -- Doing More with Less

PPSS found Federal automated data processing activities to be disorganized and inefficient, falling far short of the potential for productivity improvements and consequent savings that exist in state of the art computer systems. More than half of all Federal ADP systems are obsolete, with an average age about twice that in the private sector. Further, ADP systems are not acquired with coordinated planning and the Government's computer systems are, therefore, generally incompatible. In addition, the Government's ADP performance has been impaired by the inability to attract and retain qualified personnel. PPSS recommendations center on the establishment of a Federal Information Resources Manager who would direct a coordinated government-wide effort to upgrade and replace existing systems and, along with the Office of Personnel Management and the General Services Administration, develop incentives to recruit and retain qualified ADP personnel.

In FY 1983, the Government spent $53.6 billion in the specific areas covered by PPSS recommendations, with spending estimated to increase to $266.3 billion by the year 2000 if present policies are continued. Implementing PPSS recommendations would reduce spending to $192.9 billion in 2000, a saving of $73.4 billion, or 27.6%.

The Federal Government is by far the world's largest user of computer and automated office equipment. PPSS identified over 17,000 computers in the Government and a workforce of more than 250,000 people who operate them -- a workforce exceeding the entire population of St. Petersburg, Florida. Operating costs of government-wide automated data processing (ADP), including teleprocessing and office automation (OA), are at least $12 billion annually. ADP improvements, however, could potentially result in savings far in excess of the related expenditures. PPSS identified $29.5 billion in three-year ADP related savings before adjusting for duplication that could be achieved by improved utilization of ADP systems. PPSS found that, in general, the Government's ADP efforts were handicapped by:

- Obsolete equipment -- over 50% of Federal ADP hardware is obsolete.

- Incompatible systems -- the majority of Federal ADP systems are incapable of interfacing or communicating with other systems government-wide.

- High turnover of qualified ADP personnel.

As a result, Federal ADP systems are generally unresponsive to user needs and inhibit attempts to improve the level of operating efficiency.

Attainment of the goal of increased efficiency in the Federal Government is highly dependent on substantial new investment in computer-driven management systems. The Federal Government is falling far short of realizing the full productivity and cost savings potential of ADP/OA, despite the ready availability and proven value of feasible, installable, state of the art computer systems.

PPSS concluded that a flexible, well-coordinated, and integrated government-wide ADP/OA strategy linked to department and agency goals could play a major role in increasing productivity and reducing the costs of Government. However, a void currently exists in the central direction of Federal ADP activities and PPSS, therefore, recommended:

- The position of Federal Information Resource Manager (FIRM) should be established as a first step in changing the Federal ADP environment. FIRM should be a facilitator, expeditor, coordinator, and leader in the development of both short- and long-term government-wide plans for information technology. FIRM should have the authority to expedite funding for cost-effective systems and should also be able to deny funding for agency systems which are not compatible or cost justified. This position should not add another layer to the ADP bureaucracy but rather it should act to cut vertically through the bureaucracy to allow improvements in ADP systems to be achieved expeditiously.

- The Office of Personnel Management and the General Services Administration should seek ways to speed up the hiring cycle for ADP personnel. In addition, to retain qualified personnel, the use of bonuses for rewarding good performance should be increased.

The discussion that follows indicates how these improvements can affect specific departments and agencies.

Q. Does the Government spend too much on computers?

A. Generally, PPSS found that Federal ADP problems cannot be simply categorized as a matter of spending too much, but

rather spending in a manner that is not achieving the productivity increases which are typical of private sector experience. Federal spending on computer activities of over $12 billion annually represents a huge expenditure in absolute terms, yet relatively it represents only 1.4% of total 1984B Federal spending of $848 billion. Effective use of even this $12 billion could save the Government many more billions of dollars by increasing productivity and by providing the means for better managing its finances. In the case of computers, it doesn't pay to be penny wise when potential results prove that you are being very pound foolish.

Q. How can you tell that the Government's spending on ADP is inefficient?

A. There are many indicators. For example, the average age of the Government's computer equipment -- or hardware -- is 6.7 years, which is roughly twice the average age of equipment in the private sector. The capability of a new, state of the art computer could be many times greater than that of one that's 6.7 years old. The relatively advanced age of Federal ADP equipment highlights the Government's propensity to buy rather than lease its systems. In view of rapidly changing technology, leasing is common practice in the private sector.

In addition, some of the Government's computers are so old that their manufacturers no longer service them; the Government thus is forced to keep on its staff employees specially trained to maintain these obsolete computers.

Q. It was mentioned previously that many Government ADP systems are incompatible. Why does the Government buy incompatible computers?

A. Mainly because there is a lack of coordinated planning at both the agency level and government-wide. As a result, when new computers are purchased, their compatibility with existing computers is seldom considered. As an example of the consequences of poor planning at the agency level, the regional Office of Health and Human Services in New York alone uses ten different brands of incompatible equipment.

During the 1960's, the Federal Government was considered a leader in the efficient application of computer technology. Congress virtually assured an end to the Government's leadership position by passing the Brooks Act in 1966, which was intended to control the acquisition of computers. In practice, however, the Act merely slowed the acquisition process to an average of two and a half to four years -- by which time the computer, which may have been state of the art in the acquisition planning stage, is well on its way to obsolescence. This Act is an excellent illustration of what PPSS does not want to happen as a

result of its recommendations -- another layer of bureaucracy. Central direction by FIRM should not imply central control of ADP purchases.

At the same time, PPSS recommended that the Office of Management and Budget undertake a thorough review of the Brooks Act to determine which of its provisions are appropriate to ensure efficient ADP procurement, and which merely act to delay unnecessarily the procurement process.

Q. How, specifically, do ADP improvements save money?

A. In four major ways:

- By providing managers with the timely and accurate information necessary to make informed decisions.
- By increasing the productivity of workers, i.e., the amount of work each worker is able to accomplish in a given period of time.
- By providing a means of improving performance in such mechanical tasks as checking errors on tax returns and eliminating duplicate payments to Social Security recipients.
- By providing access to outside information which enables managers to orient themselves in evaluating how well they have performed in relation to other managers.

The Social Security Administration's (SSA) automated data processing operation is a good example of a system that is grossly inadequate to meet user needs. For example, consider the following data for 1982:

Social Security Administration

		(1) Average Monthly Workload	(2) Available Capacity	(3) Workload As Multiple of Capacity
(1)	Hours of Processing Required	4,500	2,000	2.3X
(2)	Daily Teleprocessing Transactions	700,000	410,000	1.7

SSA processing requirements, which are greater than the total claims operations of the six largest insurance

companies, were 2.3 times as great as its available capacity in 1982. In an effort to meet its user needs, SSA is undertaking a $479 million five-year effort to modernize its system. SSA's modernization plan will make significant and necessary improvements in SSA's operations only if it continues to receive management attention and uninterrupted financial support. PPSS concluded, however, that it is unlikely the plan can be implemented in the expected time-frame.

The Defense Department's inventory management is another good example of significant savings which could be realized through ADP improvements. Inadequacies in computer support result in larger than necessary inventories, while improved systems would reduce inventory levels and the associated holding costs. In addition, a more efficient inventory information system could increase weapons availability by 5% to 15%. Thus the Defense Department could, for example, field an additional 40 to 50 aircraft at all times.

Q. How much would a better system save?

A. PPSS estimated a state of the art inventory system could allow purchases of inventory in monthly lot sizes, thereby reducing the total amount of inventory that would have to be maintained. Three-year savings of $6.074 billion include a one-time reduction in inventory size as well as ongoing efficiencies, and are net of $1.4 billion in implementation costs.

Another ADP-related problem in the Defense Department was found in the Navy, where the implementation cycle for ADP projects is so long that the potential for timely cost savings is eliminated and most systems are virtually obsolete by the time they are brought on line. This is illustrated by consideration of some of the major ADP projects on which the Navy is now working:

- The Naval Aviation Logistics Command Management Information System (NALCOMIS) project. Begun in 1970, it is scheduled for completion in 1990.

- The Shipboard Non-Tactical ADP Support Systems project. Begun in the early 1970's, it is targeted for completion in 1988.

- The Integrated Disbursing and Accounting Financial Management System project. Begun in 1976, it is targeted for completion in 1988.

With some projects taking as long as 20 years to be fully operational, the Navy does not appear to be acquiring ADP resources in an expeditious and cost-effective manner.

In the private sector, when a company makes an investment in ADP, it typically recovers its investment in cost savings within three years. Now, if the Navy takes ten years to complete a project, it does not start realizing the full savings potential of that project for at least ten years, and that's not efficient. PPSS found that the Navy could shorten considerably the total time necessary to have a new ADP system in operation by:

- Consolidating the current acquisition review process.
- Acquiring general purpose computers instead of specially designed computers.
- Anticipating certain ADP needs before they are specifically identified based on experience and general planning factors.

By more expeditiously and effectively acquiring ADP resources, savings from ADP investments could be realized sooner. The Navy could save an average of about $500 million per year over a ten-year period, or about $1.5 billion over three years.

Q. What about the Army's computers?

A. The Army by itself is one of the world's largest users of general purpose computers, spending $2-$3 billion on ADP related activities annually at 900 computer installations. In addition, the Army operates 700 different software (the actual computer program) systems for personnel management. Despite its spending on ADP, over 50% of the Army's computer hardware is of 1975 vintage or earlier. As a result, there is still widespread use of inefficient and costly punch-card entry systems.

Q. Why are such systems costly to the Army?

A. As an example, the cost to the Army of issuing one payroll check is $4.20, about four times the cost of issuing a payroll check in the private sector. It therefore costs the Army $40 million extra per year just to process its payroll checks.

PPSS also found that the ineffective application of the Army's ADP resources is worsened by the lack of career potential for ADP personnel in the Army.

Q. How can the Army adjust to make better use of its ADP resources?

A. First, PPSS recommended that a major command be established to maximize ADP productivity potential throughout the Army. To highlight the importance of ADP, it should be

accorded specific and formal budget recognition. With these changes, ADP strategy should be developed Army-wide.

Secondly, the Army Chief of Staff should upgrade the current limited potential for an ADP career in the Army. This would encourage qualified ADP personnel to stay in the Army rather than leave for higher paying jobs in the private sector.

Over three years, our recommendations will save the Army $828 million, which would be enough money to buy 339 new M-1 tanks, 26% of the number of M-1 tanks currently in service.

Q. Retaining qualified ADP personnel is a serious concern in the private sector. What experience has the Government had in this regard?

A. PPSS found that there is a chronic shortage of qualified, experienced data processing personnel throughout the Federal Government. The two major reasons for this shortage are noncompetitive Federal salaries for ADP personnel and the deteriorating work environment -- i.e., ADP personnel prefer to work with state of the art equipment so their skills will not become obsolete. An additional factor contributing to the Government's poor success in attracting qualified ADP professionals is the cumbersome job classification process, which sometimes results in prospective candidates taking other jobs before Government employment can be finalized. To illustrate the seriousness of the problem, a recent recruiting effort by the Social Security Administration to fill 600 ADP positions resulted in only a handful of applicants.

To improve the Government's ability to attract or retain ADP personnel, the Office of Personnel Management and the General Services Administration should modify the job classification system to allow more timely hiring and maximize the use of cash incentives to retain qualified personnel. Other PPSS recommendations discussed in this section would act to improve the work environment for ADP personnel by modernizing equipment, thereby eliminating the disincentives resulting from the likely erosion of skills associated with work on antiquated equipment.

Q. What ADP areas did PPSS analyze outside of the Defense Department?

A. PPSS reviewed activities in major departments and agencies throughout Government. For example, efforts to dismantle the Education Department included a hiring freeze which resulted in an exodus of qualified ADP personnel. In addition, the organizational structure which came about when the Department was formed in 1980 resulted in there being several ADP staffs with unclear divisions of

responsibility. Further, obsolete equipment continues to be used. Needless to say, the Education Department is not getting its money's worth for its ADP spending of $60-70 million per year.

PPSS recommended that responsibility for ADP functions be assigned to a separate staff unit reporting directly to the Under Secretary. The new ADP staff unit should be responsible for upgrading the current ADP system to one appropriate to the Department's needs. Closer attention should also be paid to ADP work that is contracted out to see that technical, cost, and schedule performance is as agreed.

Q. How much would these actions save the Education Department?

A. In the Education Department alone, with total ADP spending representing less than 1% of total Federal ADP spending, savings would be $19 million over three years, which is enough to pay the average salaries of 342 elementary school teachers for three years.

Q. Aren't there cases where the level of ADP spending in an agency is too high?

A. Yes. A good example of that is in the Census Bureau of the Commerce Department, where PPSS found that a major system acquisition which is currently in progress is too large in scope and includes unnecessary costs. A more appropriate acquisition strategy would save $15 million over three years.

Q. How else can better information save the Government money?

A. Another good example is in the Department of Housing and Urban Development (HUD). HUD is a financial organization which currently has no consolidated financial control. Reflecting this lack of control, accounting systems within HUD are primarily updated manually, even though the $2.4 billion investment fund portfolio of the Federal Housing Authority (FHA) places it among the top five funds in the private sector. HUD has been attempting to design the hardware and software for an improved accounting system since 1970 without success. The deficient accounting system is costing HUD approximately $173 million per year.

In addition, more funds are wasted because HUD has no effective automated system to verify the eligibility of program beneficiaries. One study found that 12% to 17% of tenants applying for HUD funds are not eligible and file false information to obtain benefits.

Improving the capabilities of HUD's automated information systems, as well as other management improvements, would save HUD $185 million over three years and would result in

a $351 million increase in revenues over the same period, for a total favorable three-year impact of $536 million on HUD's budget.

Q. How can ADP improvements help increase productivity?

A. The Customs Bureau in the Treasury Department handled 4.6 million shipments of merchandise into the United States in 1981. This was up 84% from 2.5 million shipments in 1969, while staff levels have remained fairly constant. Since staff is not increasing, each worker is expected to do almost twice as much. PPSS recommended rapid implementation of systems currently being tested that reduce paperwork and allow for selective examination of international shipments so that time is not wasted examining domestic shipments. Savings are estimated at $84 million over three years.

Q. Are there any other general problems with Federal management of its ADP resources?

A. Yes. One other problem was identified by several Task Forces -- the sharing of computer resources among and within agencies is generally inadequate. With over 17,000 computers currently being used by the Government, it is clear that some are being used at more efficient rates than others. Sharing computer resources means that an agency which has too much work for its own computer to handle could share the computer of another agency that is underutilizing its computer resources. This would save money by allowing the first agency to meet its demand for more computer resources without having to expand its current system or buy a new system.

Q. Any specific examples to illustrate the potential for cost reduction through the sharing of computer resources?

A. The Department of Transportation (DOT) is a highly decentralized organization with nine separate administrations. Several small administrations -- e.g., the National Highway Traffic Safety Administration and the Maritime Administration -- do not have adequate personnel resources to procure ADP equipment cost effectively. As a result, ADP quality and compatibility within DOT is inconsistent and uncontrolled. If the ADP functions of DOT's administration were consolidated as PPSS recommended, savings of $46 million over three years would result. This would allow DOT's ADP equipment to be procured more cost effectively and would increase the sharing of resources within DOT, reducing the use of costly commercial services.

Further, if ADP resource sharing were increased at the Department of Energy (DOE) facilities, savings of $38 million could be achieved over three years.

Q. Do all ADP savings fall into the categories of resource sharing and productivity improvements?

A. Most, but not all. Federally-funded highway construction projects must meet certain noise level requirements and this is accomplished by constructing noise barriers at a current cost of about $565,000 per mile (in 1980 dollars). PPSS found that by using computer analyses, the cost of meeting noise level limits could be significantly reduced, with three-year savings estimated at $703 million. That's enough to build 100 miles of new interstate highways in rural areas.

PPSS recommended another unique application of ADP resources in the U.S. Postal Service. Computer studies should be made on the optimum methods of moving mail, i.e., surface versus air transportation. Based on experience with similar studies in the private sector, net savings are conservatively estimated at $179 million over three years.

As noted above, the savings potential is tremendous and wide-ranging.

Q. How does office automation differ from automated data processing?

A. The basic difference is that office automation focuses on the activities of people in the office -- white collar, clerical, and professional workers. Over 50% of the workforce is now employed in offices and about 80% of them handle information. Office automation results in improvements in obtaining, analyzing, storing, retrieving, and communicating information. Specifically, these improvements reflect better information handling by making maximum use of conferencing, activity management, personnel processing, and information retrieval.

Until very recently, managers and other professionals, despite their mounting information needs, have had to rely on the same resources -- pen, paper, typewriter, telephone, mail -- as those of previous generations. Rapidly advancing information technology is likely to yield enhanced productivity.

Q. What are some examples?

A. Here are some ways PPSS found that office automation could aid the professional employee:

Report preparation. In the conventional method of report preparation, an author uses different types of personnel (typist, graphics developer, clerical staff) and does a substantial amount of coordination of these personnel. With a reasonably sophisticated professional work station, all of these steps can be performed by the author

unassisted, with cost savings in both professional and clerical time.

Internal mail. Transmission of memoranda typically requires typing, proofing, and distribution and involves a total elapsed time of two to five business days from drafting to receipt. Communications sent by an electronic mail network can be received in an hour following drafting.

Information storage and retrieval. Automated storage of information allows rapid retrieval, access by any authorized individual from any location, immediate availability of critical data, compact storage of voluminous information, minimum reformatting of data for different users, and minimum handling of documents.

Personal computer functions. Automated office systems may make available personal computer functions such as an electronic spreadsheet for budgeting and financial tracking, list keepers (e.g., for distribution of information), an appointment calendar, etc.

The above would save time for both the professional and clerical employee.

Q. How much could this save the Government?

A. If office automation were effectively implemented throughout the Government, PPSS estimated savings at $6.537 billion over the first three years.

Other areas not specifically developed in the preceding discussion but where PPSS identified significant ADP related savings opportunities include:

- Replacement of obsolete hardware -- three year savings estimated at $4.612 billion.
- Implementation of hardware systems where none exist currently -- three year savings estimated at $3.249 billion.
- Implementation of income verification systems -- three year savings $3.249 billion. Improved ADP capabilities are key to more effective management of subsidy programs. For more on this topic see the Subsidized Programs section of this report.
- Improved managment of ADP resources -- three year savings estimated at $413 million.
- Implementation of office automation where none exists currently -- three year savings estimated at $46 million.

The speed and accuracy with which the Federal Government processes information are measures of its efficiency, whether it is collecting taxes, registering pesticides, or issuing Social Security checks. The loss of the Government's previous position of leadership in managing state of the art ADP/OA is a source of serious concern.

While establishment of a Federal Information Resource Manager would be a significant step toward resolving many of the problems discussed in the preceding pages, it will take a firm commitment from the White House and all department and agency heads to ensure that modern systems are implemented in a timely and cost-effective manner.

The three-year total of all the recommendations in this section, after elimination of duplication and overlap among issues, is $22.633 billion -- equal to the three-year taxes of 3.4 million median income families.

The Impact of Not Buying Prudently

The Federal Government purchased $159 billion in goods and services in FY 1982. More than 130,000 Federal employees were involved in these purchases which were governed by millions of individual contracts.

Despite the massive scale of Government procurement, PPSS found that purchases were neither efficiently nor cost-effectively handled because of excessive and inconsistent regulations; limited and often inaccurate information; decentralized, uncoordinated, and poorly-planned acquisitions; and disincentives to good management.

PPSS recommendations would centralize and coordinate policy and oversight responsibilities, increase competition for Federal contracts, and improve contractor efficiency while eliminating managerial disincentives.

In FY 1983, the Government spent $56.3 billion in the specific areas covered by PPSS recommendations, with spending estimated to increase to $406.4 billion by the year 2000 if present policies are continued. Implementing PPSS recommendations would reduce spending to $247.6 billion in 2000, a saving of $158.8 billion or 39.1%.

In 1982, the Federal Government wrote 18.9 million procurement contracts totaling more than $159 billion which accounted for 22% of total Federal spending. Total 1982 procurement was up by 18.2% from the $134.5 billion spent in 1981. In addition, Government agencies held more than $88 billion worth of inventories stored in hundreds of locations.

Compared with the private sector, the Government spends more on procurement than the total sales of the big three auto makers -- General Motors, Ford, and Chrysler -- and the two largest chemical companies -- Dupont and Dow -- combined.

The process by which these purchases are made is extremely complex, both because of the wide variety of goods and services obtained and because of the statutory and regulatory environment in which the more than 130,000 Federal procurement personnel operate. There are more than 80,000 pages of instructions governing Federal procurement, with more than 20,000 new or revised pages produced each year.

The potential for waste, fraud, and abuse in current Federal procurement systems can be seen in the results of a November 1983 Senate Committee on Governmental Affairs investigation. The committee noted that a contract for spare parts for the F-16 fighter aircraft had been cancelled because of excessive costs. The contractor, which only channeled the sale of spare parts through its offices, increased subcontractor prices by 70.8% to 84.6%, as shown below:

		(1)	(2)	(3)
		Per Item Cost		
	Spare Part	Subcontractor Price to Contractor	Contractor Price to Air Force	Percent Markup
(1)	Antenna Hexagon Wrench	$5,205	$ 9,609	84.6%
(2)	Antenna Clamp Alignment Tool	5,618	10,137	80.4
(3)	Antenna Pulley Puller Tool	6,005	10,630	77.0
(4)	Antenna Puller Height Gauge	6,972	11,911	70.8

In reference to the above, the November 20 New York Times quoted a Pentagon official as follows:

> The horrible truth, however, is that everything is priced about the same way. The rip-off of taxpayers on the big items -- weapons, engines, aircraft -- is as bad as on spares.
>
> Everyone in the system responds in a totally rational fashion to the incentives in the system ... the military procurement system has inverted punishments and rewards.

The result is inefficiency and waste. As the article noted:

> ...five experienced Defense Department auditors expressed the belief that it would be possible to save as much as half of the $84.4 billion set aside in the next Defense budget for procurement, plus more money on other parts of the total $247 billion military spending bill.

PPSS recommendations for the procurement process are directed at reducing costs, overlap, and duplication, as well as correcting poorly managed systems and procedures.

The largest single procurement activity in the Federal Government ($60 billion annually) is the acquisition of major weapons systems (e.g., planes, tanks, submarines, and missiles). Weapons needs are generally determined by each military service, which is responsible for design, contractor selection, research, and full-scale development and production. In limited cases of common need, joint systems are developed, such as the Sidewinder missile used by the Army, Air Force, and Navy. It is not uncommon for a weapons system to take 10 to 20 years to develop.

The remainder of DOD's procurement activities relate to non-weapon items and services. The FY 1983 DOD budget request for these goods and services exceeded $95 billion.

As of September 1981, DOD reported a total inventory value of $88 billion. This included $47 billion in items associated with weapons systems and fuel. The remaining $41 billion consisted of repairables and other consumables (consumables are all items except explosive ordnance, major end-use equipment, and repairable equipment).

Civilian agency procurement ($34 billion) is conducted by many agencies, including, centrally, the General Services Administration (GSA), and the Departments of Energy, Transportation, and Agriculture, the Veterans Administration, the Tennessee Valley Authority, and the National Aeronautics and Space Administration.

GSA influences all civilian procurement through its policy-making authority in two basic ways: by establishing regulations for procurement practices and by mandating when GSA is the required source of supply for procurement needs.

GSA provides supplies to non-defense agencies as well as to DOD, with the latter accounting for more than 70% of GSA business. GSA currently has an average of about $250 million in inventory in its warehouses.

In order to provide procurement policy coordination and improved buying efficiency in both military and civilian agencies, Congress created the Office of Federal Procurement Policy (OFPP) in 1974. OFPP was created in response to a perceived lack of leadership in procurement policy and the corresponding fragmentation in procurement practices across departments and agencies. The goal of a strong OFPP presiding over a working, uniform Government procurement system has not, however, been realized.

Management of Executive Branch procurement is shared by many agencies.

- The Office of Federal Procurement Policy (OFPP) in OMB provides overall guidance and direction in government-wide procurement.

- The General Services Administration (GSA) establishes government-wide policies for civilian agencies and administers Federal Procurement Regulations and Federal Property Management Regulations. GSA also provides centralized buying and distribution functions for common-use items, including items for DOD.

- The Department of Defense (with NASA and the Coast Guard) administers the Defense Acquisition Regulations which govern defense purchases.

Limited government-wide information is available to support effective overall management of procurement. GAO noted in a recent study that "better reporting is essential to controlling cost growth ... and that accurate information on the status of major acquisitions would provide a first step for measuring progress and early identification of real and potential problems." GAO also found that:

- The cost of 376 projects reviewed increased 140.0%, from $226.8 billion to $544.4 billion, or by $317.6 billion, over the agencies' initial budget justifications;

- The cost of 465 additional projects reviewed increased 78.7%, from $327.2 billion to $584.7 billion, or by $257.5 billion, over the initial agency budget estimates adjusted for changes in scope; and

- Over 130 of the 170 projects reviewed for schedule data exceeded their completion dates by more than six months.

In another study, the GAO found that the Defense Department and the Armed Services can "improve their processes for determining requirements for supplies and spare parts ... [because] oftentimes, computed requirements were not based on accurate data. As a result, the requirements were overstated and understated by millions of dollars."

Even when data are collected, they may not provide good information. PPSS found that GSA collects information on the timeliness of its procurement operations (e.g., fill-rates, work-in-process, back orders), rather than information on the efficiency of operations (e.g., discounts negotiated in the current year versus the prior year).

Procurement regulations are excessive and, in some cases, inconsistent. A survey of nineteen agencies conducted by OFPP in 1978 and 1979 found 485 offices which regularly issued procurement regulations, as well as 877 different sets of procurement regulations (including directives, bulletins, instructions, and similar documents).

Also, during legislative hearings on procurement and the creation of OFPP, evidence was cited that 110 different provisions exist in the Government on the use of experts and consultants, and 80 separate provisions exist on access to records.

The Commission on Government Procurement noted 30 discrepancies between the two major Government procurement statutes: the Armed Services Procurement Act (ASPA) and the Federal Property and Administrative Services Act (FPASA).

The preceding procurement patterns have produced duplicated efforts, inconsistent and excessive regulations, limited control, and excessive costs.

Q. PPSS recommendations regarding procurement appear to concentrate mainly on Defense spending. Is PPSS proposing cuts in the Defense budget?

A. PPSS has not recommended cuts in defense systems, nor has it taken any stand on policy. PPSS recommended ways to manage procurement in DOD and all other Government agencies with increased efficiency and reduced costs.

Major weapons systems represent the largest single procurement activity in the Federal Government (13 million of the Federal Government's 18.9 million contracts in 1982). The 1983 DOD budget projected over $60 billion in outlays on major weapons systems procurement, equivalent to about 8% of the total Federal budget and over one-fourth of the total DOD budget. Thus, DOD is a major consideration whenever the Federal procurement process is studied.

Overall Procurement Issues -- Strengthening and Centralizing the Procurement Process

Insufficient action has been taken to integrate OFPP into the existing budget and program review processes of the Office of Management and Budget (OMB). PPSS recommended that this be done in order to strengthen OFPP's policy role. When OFPP was established, it was intended to have regulatory authority in the area of procurement. As it has evolved, however, OFPP has established little authority to implement changes in the procurement process.

In 1982, OFPP submitted a proposal for a Uniform Federal Procurement System (UFPS) designed to unify Government procurement policies, streamline the process, introduce greater competition, improve professionalism, and clarify responsibility and accountability in the procurement management structure. PPSS supports the proposed UFPS, with the additional improvement of

multiyear procurement (purchasing goods or services over a period of years under a single contract).

PPSS also concluded that the acquisition and distribution responsibilities of the General Services Administration (GSA) for civilian agencies should be enhanced by enforcing the policy that civilian agencies use GSA facilities, where and when feasible. The policy-making role of GSA in this area should be shifted to OFPP so that GSA can concentrate on providing efficient and effective support to other Government agencies.

PPSS also found that the vast volume buying power of the Federal Government is not being adequately used to obtain the lowest possible prices. By negotiating volume purchases, the Government should be able to centrally purchase a wide variety of goods and services at bulk discount rates.

Non-weapons procurement for DOD is generally centralized in the Defense Logistics Agency (DLA), with the individual services responsible for procurement of weapons systems. Civilian agency procurement, however, is conducted by many agencies. Even within agencies, procurement may be decentralized. For example, in the Department of Agriculture, all items except for ADP equipment are procured on an individual basis by over 4,000 Agriculture offices throughout the country.

Q. What is the volume of common use, or general purpose, items purchased centrally through GSA?

A. In FY 1981, total Government procurement was $134.5 billion, of which $14.9 billion, or 11.1%, were common use items. Of this $14.9 billion, only $5.2 billion, or 34.9%, was procured centrally through GSA. PPSS estimated that the Government could save $242 million annually upon full implementation by increasing the number of civilian agency common use items purchased centrally through GSA.

Q. Since there are so many diverse agencies in the Federal Government, how can one organization know what to buy for so many different kinds of users?

A. One of the main reasons large organizations centralize purchasing operations is to gain economies from volume purchases. Increasing centralization, however, often leads to a decline in the quality of service and distribution. The trade-off between economy and service quality, therefore, is normally limited to an organization's "common use" items. These items include such things as office supplies, certain ADP equipment, automobiles, and other items in common use in most organizations.

PPSS recommended that GSA identify items which could be more efficiently and economically purchased through a

centralized procurement process. PPSS estimated that an increase in centralized purchasing of common use items could save civilian agencies $312 million over three years.

Q. A central coordinating point regarding Federal purchases is required because of the need for the Government to purchase goods and services in a more economical and cost-effective manner and to present uniform rules, regulations, and practices to the private sector. How does the proposed Uniform Federal Procurement System (UFPS) address these issues?

A. In February 1982, OFPP submitted to Congress the Reagan Administration's proposal for procurement reform -- incorporated in the UFPS. Its four major goals are:

- o streamlining and simplifying the procurement process through a single set of Federal Acquisition Regulations and increased use of simplified bid specifications,
- o emphasizing new concepts of competition based on total program costs,
- o establishing new standards of professionalism in the procurement work force through career management and development programs, and
- o creating in each agency an executive position responsible for procurement activities.

Achieving these goals requires:

- o a management structure with clear lines of authority and accountability, a simplified procurement process, a professional workforce, and performance standards and feedback mechanisms;
- o OFPP responsibility to put the new procurement system into operation;
- o legislation to bring Federal procurement practices into line with modern methods and requirements, ensuring that current policies are formalized and followed; and
- o OFPP policy authority over all agency procurement, authority to rescind agency regulations that do not conform to policy, and leadership responsibility to develop simplified government-wide regulations.

Q. How does PPSS propose to enhance the role of OFPP through the Uniform Federal Procurement System (UFPS)?

A. PPSS proposed the following:

- o Continue efforts for substantial reforms of the Federal procurement process through UFPS, with the addition that specific multiyear contracting authority be granted to civilian agencies (the military is already granted authority to enter into multiyear contracts).

- o Integrate OFPP fully into the budget process of the Office of Management and Budget (OMB) -- i.e., incorporate OFPP and procurement reform objectives into the annual OMB budget and program review process.

Weapons Acquisition Issues -- Department of Defense Acquisition Improvement Program (AIP) and Program Controls

In 1981, Deputy Secretary of Defense Frank C. Carlucci identified 32 actions for improving the acquisition process in the Department of Defense. This Acquisition Improvement Program (AIP), also known as the Carlucci Initiatives, focused on procedures and controls over program planning, and the inflexibility and inefficiency of the weapons procurement process. Taking into account the numerous studies of the acquisition process in recent years, the AIP was intended to emphasize solutions rather than just study problems.

PPSS recommended accelerating implementation of the most promising areas of the Carlucci Initiatives. These improvements include actions to increase use of multiyear contracting and to expand the concept to other areas, such as automated data processing, photocopying, and building services. Expanded use of multiyear contracting could save $3.415 billion over three years throughout the Government, of which $2.958 billion, or 86.6%, would occur in DOD. Moreover, program prioritization, i.e., establishing spending priorities for defense programs based on defense requirements, would result in a more efficient weapons procurement process in DOD.

PPSS further noted that $3.442 billion could be saved just in the Air Force and Navy by dual sourcing (introducing competition into the acquisition of major weapons systems by maintaining at least two competitive sources during the production life of a weapons system).

Q. The AIP was initiated over two years ago. Why is a mid-term reappraisal required? Have the services not complied with the program?

A. PPSS found that there are too many AIP initiatives to be effectively managed and implemented within a short time. The major initiatives could be more effectively implemented by focusing management attention on those that offer the greatest reward.

PPSS considered the following issues most promising, encompassing nearly half the initiatives contained in the AIP:

- o multiyear contracting;
- o improvements in cost estimating (risk management, inflation, probable costs);
- o improvements in contracting (competition, source selection, contract type);
- o program management; and
- o program stability and priorities in meeting Defense needs.

One of the major provisions of the Acquisition Improvement Program is the increased use of multiyear contracting (MYC) in place of the more common Federal Government practice of writing procurement contracts on a year-to-year basis. MYC increases stability in the procurement process, which affords contractors opportunities for long-range planning. This results in a number of major benefits to the purchaser, including lower procurement costs due to economies of scale. MYC also encourages contractors to make productivity enhancing investments, increases competition for the initial contract award, and reduces the administrative burden to the contractor and the purchaser. PPSS found, however, that current use of MYC is very limited and that only a few major weapons systems -- the primary opportunity area for MYC cost savings -- have been approved for MYC by Congress. In addition, the Defense Department is currently restricted from entering into MYCs for "commercial items."

PPSS recommended expanded use of multiyear contracting in all Federal agencies, not only in DOD. In the area of weapons procurement, PPSS noted 31 programs which met the criteria for MYC. Potential savings in procuring these systems of $1.6 billion annually are possible upon full implementation of MYC. In addition to weapons systems, PPSS found opportunities for MYC in both defense and civilian agencies in areas such as ADP equipment and photocopying leases, and building maintenance services. Over three years, increased use of MYC could save $2.958 billion in weapons system procurement and $457 million in the procurement of non-weapons items in DOD and civilian agencies.

Q. Is multiyear contracting a new concept for the Federal Government?

A. Not at all. The Government has studied and used the concept for a number of years. PPSS found, however, that legislation governing MYC is not uniform across all Federal agencies. In the Defense Department, for example, a multiyear contract, by regulation, can extend from two to five years. In general, civilian agencies cannot obligate the Government to spend money beyond the current year. Therefore, unless specifically authorized by law, civilian agencies cannot enter into multiyear contracts.

Q. If multiyear procurement has been around for a number of years and the savings are so dramatic, particularly in weapons systems acquisition, why hasn't there been more use of the process?

A. In procuring weapons systems, there are several impediments to the use of MYC.

Up-front funding for purchases of components and materials is required. Procurement of more than one year's needs must be budgeted in the current year. Thus, there is a feeling that funds used in the current year remove funds from other programs.

The services are reluctant to identify programs for MYC because of the dynamic nature of technology. MYC, therefore, may restrict future DOD and Congressional flexibility if priorities change since funds will have been committed to specific programs.

None of these problems is insurmountable if adjustments are made to current budget and procurement procedures. Not all programs are candidates for MYC. Specific criteria for selecting MYC candidates should be established (e.g., mature, stable weapons programs using well-developed technologies), and there should be strict adherence to these criteria. Borderline candidates should not receive MYC status due to cancellation possibilities which result in additional costs, unfavorable publicity, Congressional loss of confidence, and resultant increased hesitancy on the part of DOD to employ MYC in the future.

Another way to improve the acquisition of weapons systems recommended by the Acquisition Improvement Program is prioritizing weapons systems while they are still in the development stage. Prioritizing programs ranks them according to need, taking into account cost/benefit relations.

Establishing priorities and determining financial affordability of proposed new systems early in the budgetary cycle

is critical to achieving program stability and avoiding cost overruns. Before a new weapons system is approved, DOD should consider the impact of adding that system to systems currently being acquired or in production in view of the limited funds available for all weapons systems.

This "weeding-out" process with weapons systems is currently almost nonexistent. PPSS found that, once underway, programs develop constituencies made up of contractors and Congressmen in addition to the services. These combined forces make it virtually impossible to cancel a program. The easier and more costly decision to "stretch out" a program is often made rather than the more politically painful decision to eliminate it. Program "stretch out" occurs when a weapons system is purchased over a greater number of years than originally planned, or when fewer items are purchased under the contract -- i.e., buying 50 tanks rather than the 100 originally contracted for.

PPSS did not quantify savings directly identified with program prioritization, but did recommend that DOD develop a Stable Programs List identifying and setting priorities for major weapon systems programs, and bringing more discipline and analysis into the decision-making process.

DOD policy does not require that a major system be demonstrated to be affordable through the full-scale development and production phases in order to obtain approval as a new start. It need only be shown to be affordable through the early development phases.

Early development phases have the lowest financial requirements and are easily funded. Therefore, far more programs are started each year than can be carried through the full-scale development and production phases. Because it is almost impossible to terminate these programs after they are started, too many programs end up competing for limited production funding. This, in turn, leads to inefficient production quantities, program stretch outs, and cost overruns. As a result, the systems may become obsolete and units may be built in insufficient numbers to meet mission requirements.

As of June 30, 1982, there were 39 programs approved for full-scale development with projected total acquisition costs of $450 billion. OMB has indicated that the total projected cost of all programs is approximately 230% of the funds that are likely to be available. PPSS proposed that DOD limit such overprogramming to 140% as of the time of the new start decision, with progressively lower percentages for later decision points. A reduction from the current average overprogramming of 230% to a level of 140% would result in a 40% reduction in Research, Testing, and Development expenditures, a three-year savings of $1.523 billion.

Q. What specific changes did PPSS recommend?

A. PPSS made the following specific recommendations:

- Require the Office of the Secretary of Defense (OSD) and the services to develop a Stable Programs List, a DOD-wide ranking for high and low priority programs. Programs at the top of the list could be candidates for multiyear contracting while marginal programs could be deleted.

- Clearly identify changes in current programs required to fund new program starts. Greater control over new programs in their early years is necessary before resources become committed. Also, the number of new programs or starts should be restricted.

- Update the budget whenever program costs deviate materially from forecast. At that time, programs that require modification should be identified, and additional funding sources required to meet initial objectives should be developed.

PPSS found three primary areas of weapons systems program management where considerable savings could be realized from improved management methods and procedures. These included improved weapons systems planning, improved contracting procedures, and improved cost estimating and scheduling.

In the area of systems planning, PPSS recommended that OSD and the services emphasize timely development of comprehensive Program Management Plans (PMPs) and Acquisition Plans (APs) at the program level. These improvements include expanding the scope of these plans and maintaining them as working documents, using the plans as the basis for cost and schedule estimates, and delegating authority to contract and manage programs on a decentralized basis. Based on these recommendations, PPSS estimated savings of $2.940 billion over three years.

In contracting for weapons systems, PPSS found insufficient emphasis on the potential total cost of major weapons programs. As a result of these findings, PPSS recommended that OSD streamline the source selection process, making it more efficient and effective by selecting contractors based on the lowest total cost. Potential cost savings of $980 million over three years were identified by PPSS from these recommendations.

In the area of cost estimating and scheduling, PPSS recommended that DOD institute more discipline over cost estimates and schedule development to produce accurate cost forecasts, and improve "early warning" indicators of cost overruns and scheduling problems. PPSS also recommended that DOD consider sharing cost overruns with contractors to encourage more realistic program estimates. PPSS estimated that savings of $2.940 billion could be realized over a three-year period.

Q. What's wrong with the current controls (Program Management Plans [PMP] and Acquisition Plans [AP]) in DOD weapons procurement?

A. PMPs are not fully effective as management tools; they are not always completely developed and sometimes do not exist at all. They frequently are not updated for changing program circumstances and often fall into disuse.

The roles, responsibilities, and authorities of the various individuals and organizations involved in the acquisition process are not always well-defined in the PMP, or followed in practice.

The scope of the PMP is somewhat limited. It often does not cover the program's total life cycle. Program risks, i.e., those associated with the production and deployment phases are infrequently and inadequately addressed, while technical risks during the research and development phase, when considered, tend to be narrowly focused.

Program management and acquisition strategies are often developed at high levels, i.e., "top-down" planning rather than planning at the program level. As a consequence, the PMP and AP do not always consider the complete range of options available. Instead, they tend simply to record decisions which have been made.

PMPs could be improved if they were updated frequently, contained more specifically defined roles for individuals and organizations, and covered the program's total life cycle. These improvements would allow DOD to delegate authority to contract and manage programs to line management personnel.

PPSS estimated that these recommendations could save $1.5 billion annually, or approximately 2%-3% of annual spending for major weapons systems, upon full implementation.

Q. What specific problem areas were noted regarding contracting for weapons systems acquisition?

A. Some of the problems PPSS noted were:

- Insufficient consideration given to the contractor's past performance on other weapons programs when awarding contracts.
- Bidders discouraged or prevented from offering alternative proposals which might yield cost, schedule, or technical advantages.
- A source selection process that takes too long, involves too many review and approval steps, and requires too many people.

- o Subcontractors "buying-in" (i.e., submitting deliberately low bids to obtain initial contracts) with the hope of recouping losses and making a profit on subsequent contracts.

- o Depending on the prime contractor to do a good job in subcontracting and doing little to appraise or upgrade the performance of the prime contractor in its subcontracting activities.

PPSS recommended that DOD select contractors based on the lowest total cost and strengthen efforts to monitor and upgrade the prime contractor's subcontracting activities.

Annual savings are estimated at $500 million upon full implementation based on a 1% reduction in annual spending for weapons systems.

Q. The lack of effective management over contractor bids and operations contributes to problems in controlling weapons systems costs. However, why does this prevent the Government from producing realistic estimates of costs?

A. As the budgetary process is structured, there are pressures or incentives for producing low estimates: early estimates are based largely on input from technologists so there is a tendency to see only the merits of new technology and overlook implementation difficulties; program managers are judged in part by how well they convince their superiors that funding should be provided for their programs; and the services can get more programs started for a given funding level if estimates are on the optimistic side.

Based on a review of three major weapons systems, the following indices of company estimates, bids, and final costs were noted:

		(1)	(2)	(3)	(4)
	System	Company Estimate	Bid	Final Cost	Final Cost as Multiple of Bid
(1)	A	1.0	0.75	2.2	2.9X
(2)	B	1.0	0.43	4.0	9.3
(3)	C	1.0	0.45	2.0	4.4

Taking into account underbidding, company estimates of final costs are still not accurate indicators of how much weapons systems will cost.

Q. What are some of the reasons that major weapon systems prices go so far over the initial estimates?

A. The escalating costs of these programs result from "program turbulence," which includes poor initial cost estimates, stretched and delayed production schedules, engineering changes, quantity changes, and poor contractor performance. As noted before, in some cases, contractors "under-bid" to get a foot in the door. Work then proceeds on the program, and original estimates are doubled and tripled. At that point, it is too late to stop the process. PPSS found that final costs have been as much as 400% greater than inital bids.

Q. How much does program turbulence contribute to increased weapon systems costs?

A. PPSS reviewed 25 major weapons programs and found that their total costs, including inflation, were up 223% from the original estimate of $105 billion to a current estimate of $339 billion. The table below shows how these cost increases arose:

Weapons Systems Cost Increases

		(1) ($ Billions)	(2) Percent of Revised Estimate
(1)	Development Estimate	$104.8	30.9%
(2)	Inflation	42.3	12.5
(3)	Program Changes	129.4	38.1
(4)	Other Changes	62.7	18.5
(5)	Subtotal	$234.4	
(6)	Revised Estimate	$339.2	100.0%

$129.4 billion of the $234.4 billion increase in costs, or 55.2%, was due to program changes. These increases could be significantly reduced through better program management in all phases of the development and production of these weapons systems.

Q. What needs to be done to improve cost estimates?

A. Consolidate all resources within each of the services which are devoted to reviewing and checking program estimates into one unit. This would ensure that the resources of the services are concentrated on preparing estimates and would define a single point of responsibility for the quality of estimates.

Consolidate the scheduling functions with the estimating functions, recognizing the strong link between costs and scheduling.

Employ risk analysis techniques to cover potential risks during all phases of the program from research and development through production and deployment. Use this approach to produce "most likely" estimates. Use the Program Management Plan (PMP) to mitigate or eliminate the adverse effects of the risks that are identified.

Savings of $1.5 billion annually upon full implementation reflect a 2%-3% reduction in annual spending on weapons systems.

Q. Why is dual sourcing such an important issue in weapons acquisition?

A. A former Deputy Assistant Secretary of Defense for Acquisition summarized the current situation regarding dual sourcing as follows:

> Perhaps the single most important difference between defense business and civilian business stems from the all-too-frequent absence of alternatives in the military procurement process.
>
> This does not mean more of the sort of "one-time" competition presently used. It means dual sourcing throughout the program.
>
> In defense, there customarily is a fierce rivalry during the initial competition for an award of a research and development contract. After this initial competition -- frequently awarded based on a firm's "buy-in" -- the winner becomes the sole developer and producer for the military system over the next 20 years. Thus, a program -- such as a missile system -- may once have had an initial competition, but after the first step there is no alternative source for this much-needed piece of equipment. Therefore, the sole- source producer increases the price; the Government has little choice but to attempt to "negotiate" and basically to accept the cost increases.

In addition to reducing costs, dual sourcing enhances the industrial base by providing additional contractors and subcontractors to meet Defense requirements (e.g., during surges and mobilizations). It can also eliminate delays caused when an increase in the number of units needed exceeds the production capacity of a single source. Moreover, dual sourcing can provide contractors with added incentive to resolve program problems. These additional

advantages can sometimes be adequate justification for using two production sources even in the absence of cost savings.

Q. Why isn't dual sourcing used more frequently in acquiring weapons systems?

A. PPSS found that only a small percentage of weapons systems are purchased through dual sourcing, resulting in lost savings opportunities. There were three primary obstacles to using dual sourcing. These are an attitude that dual sourcing is still an exception to, rather than a normal competitive business practice; that near-term, or "up-front," costs associated with qualifying a second source can be significant, especially in the production phase; and that dual sourcing can be a very complex and time-consuming process.

PPSS found potential savings in the use of dual sourcing in the types of programs where they have been successful in the past, such as procuring missiles, electronics, and munitions. Were the dual sourcing concept expanded more fully in these areas and, to a lesser degree, into areas such as aircraft procurement, PPSS estimated that $3.442 billion could be saved over three years in the Air Force and Navy alone.

Improved Inventory Management

PPSS reviewed the ordering, controlling, and stockpiling of the approximate $41 billion of supplies, parts, and components known as consumables and repairables which the Federal Government currently has on hand, most of which is in DOD.

PPSS recommended DOD compliance with the Economic Order Quantity (EOQ) system, a method to reduce inventory carrying costs by determining the optimum quantities to be purchased and the frequency of purchases. PPSS also recommended modernizing computer systems which support inventory management, and adopting private sector inventory-taking techniques. The overall objective of these recommendations was to reduce the amount and the cost of holding the inventory while maintaining adequate supplies on hand.

Implementing these recommendations could result in an estimated one-time reduction in inventory of about $4.500 billion with a resulting $1.333 billion reduction in the carrying cost of the remaining inventory over three years.

Q. What is an economic order quantity system (EOQ) and how does it reduce costs?

A. An EOQ system is used to determine how often and how much to buy of each item. If purchasing and inventory carrying costs are correctly calculated and future demand is accurately projected, the EOQ system will result in an average inventory that minimizes purchasing costs and the costs of holding inventory in stock. It is, therefore, critical to inventory management to assess and update these costs.

Q. Why are inventory levels far higher than the EOQ system would direct?

A. PPSS found the following shortcomings in inventory management:

The EOQ system is commonly overridden by inventory managers, increasing quantities ordered and decreasing the frequency of ordering. Inventory managers override the EOQ system to reduce work loads.

Purchasing and inventory carrying costs are not assessed and adjusted regularly.

Inventory managers are evaluated according to their fill rates (percent of required inventory on hand). A high stock level factor leads to a high fill rate. Thus, there is no incentive to maintain inventories at an economical level.

Q. What solutions did PPSS propose?

A. To correct the problem in the Department of Defense, PPSS recommended that DOD require strict compliance with the EOQ system and eliminate variation in each Service with respect to forecasting demand and using EOQ. An audit program should be initiated to ensure compliance.

Further, PPSS recommended that DOD:

- establish guidelines for the services to regularly assess and adjust purchasing and inventory carrying costs.
- expedite the modernization of computer facilities to provide accurate inventory estimates and to improve the accuracy of demand forecasts.
- determine what inventory is required for readiness purposes and encode all items with a relative essentiality factor.
- include in its criteria for rating inventory managers demand forecast accuracy and stock usage as well as fill rates.

Q. One of the keys to controlling inventory levels is having accurate and timely information. Why is there insufficient data concerning DOD inventories?

A. The ADP facilities supporting inventory control in the Defense Department are well below the quality used in private industry. Inventory management decisions are less than optimal because the data are not timely and have high error rates. Current ADP facilities are outdated and the pace of modernizing them is inadequate. Modernization plans are less than ideal because it takes too long to buy the equipment (by which time it may be obsolete) and because of overly complex systems requirements.

PPSS recommended the following:

- o Use commercial ADP services and equipment where feasible and concentrate on pilot programs that can be implemented in a short period of time.

- o Emphasize existing or planned systems in DOD to avoid extended development time.

Q. How do current inventory-taking procedures in DOD differ from standard private sector practices?

A. The practice of taking "wall-to-wall" inventories, common in the private sector, is not used in DOD. This method inventories the entire facility at one time, requiring a shutdown of normal activities for a brief period and strict cutoffs on the movement of material and documentation. Not taking "wall-to-wall" inventories results in inaccurate inventory counts, unidentified obsolete inventory, and misstated records which require adjustment. In 1981, differences between DOD accounting records and inventory counts exceeded $2 billion, 4% of average inventory held.

Q. What solutions did PPSS propose?

A. DOD should initiate a program of "wall-to-wall" inventory taking on a periodic basis. PPSS believes that taking "wall-to-wall" inventories is feasible and cost effective. Since this represents a great change, however, a pilot program to establish its feasibility is needed.

Q. Is it true that inventory reductions are sometimes impossible because of special interest considerations?

A. Special interests are certainly a factor affecting good inventory management. For example, legislation introduced in both the House and Senate would hamstring GSA's and the President's ability to administer the metals stockpile by forcing GSA to purchase copper from domestic producers for the National Defense Stockpile. Legislation pending in the Senate directs GSA to acquire $85 million of domestic

copper within one year while the House version specifies $300 million in purchases.

GSA opposes these bills because they blatantly violate provisions of the Stock Piling Act which stipulate that the stockpile cannot be used to subsidize specific industries -- i.e., the purpose of the pending legislation; and because they are wasteful of defense funds.

Increasing Efficiency of Government Procurement and Contracting

Savings could be realized by improving the policies and procedures for determining whether certain commercial activities should be carried out by the Government or private enterprise, as provided for in Office of Management and Budget Circular A-76. For a detailed discussion of this area see Optimizing the Use of the Private Sector, discussed elsewhere in this report.

PPSS also recommended consolidating DOD contract administration activities within a single organization (reducing staff) and modernizing Automated Data Processing (ADP) systems (improving the contract administration process, providing current and uniform data about contractor activities). Three-year savings are projected at $185 million.

Q. What benefits would result from consolidating DOD contract administration activities?

A. Consolidating contract activities within one organization would reduce headquarters personnel, facilitate better allocation of personnel, and enhance flexibility to respond to changing needs. Consolidation would also increase consistency in executing DOD policies.

Also, substantial benefits are available through greater automation of the contract administration process. The productivity of contract administration personnel would be improved if they had access via terminals to accurate, up-to-date contract data on a current basis. Greater automation of contract administration activities would reduce reconciliation efforts at various buying locations, and provide more timely and accurate data pertaining to contract status and contractor performance.

PPSS recommended consolidating all DOD contract administration activities in a single organization and making terminals available to contract administrators, providing them with accurate, up-to-date contract data.

Spare Parts and Common Parts and Standards

The services purchase over $13 billion a year in spare parts for weapons systems and other equipment. PPSS found, however, that the Air Force, the biggest buyer of spare parts ($4.8 billion in 1982), purchases less than 25% of replenishment spare parts through the use of spare parts "breakout" (purchasing parts directly from their manufacturer or from a competitor of the weapon system's contractor). PPSS estimated that savings of $689 million can be realized over three years in the Air Force alone through spare parts breakout.

In addition, PPSS noted that procurement officials are not sufficiently selective in citing military specifications (MILSPECS) requirements in contracts. MILSPECS are developed for a wide range of items being procured, including various parts, components, and material. MILSPECS define the technical characteristics required in the production of such items. Generally, it is more costly to produce an item to a MILSPEC than to a normal commercial standard.

Also, use of standard, off-the-shelf component equipment, subsystems, and field operational support systems can reduce weapons system development lead time, permitting earlier deployment of more sustainable weapons systems, and lower acquisition and life-cycle costs.

Requiring the use of common parts in weapons systems and tailoring MILSPECS for specific systems could save $7.330 billion over three years.

Q. Why don't the services insist on competitive contracts for spare parts if they can buy them so much cheaper that way?

A. One of the major problems is the legal aspect of patents, data, and copyrights. The patents and proprietary data of the contractor, developed as a result of its research and development (R&D), is the property of the contractor, even though the R&D is done at Government expense. PPSS recommended that DOD establish a formal process to obtain engineering and technical data when weapons systems are acquired. A change in the Defense Acquisition Regulations is required to gain access to this data and reduce the excessive amounts often spent for spare parts.

Q. What examples of excessive spare parts costs did PPSS note?

A. A few examples present the scope of the problem. The Pentagon has been buying screws for $91 which can be purchased for 3¢, breather caps for compressors for $100 each which can be purchased for 25¢, and silicon electric cells at $114 each when they can be purchased for 9 1/2¢. The Navy's Training Equipment Center, Orlando, Florida, has paid $511 for lamps which cost 60¢. A supplier in

Mississippi bought a gravity timer from the sole manufacturer for $11 and sold it to the Navy for $256, a tidy 2,227% markup.

Q. What is meant by "common parts"? What is the potential for savings in this area?

A. The term "common parts" has a broad meaning. It includes commercially available aircraft purchased for training purposes as well as commercially distributed machine screws.

Different weapons systems frequently include elements and parts (e.g., computers, radars, tracking devices), which serve the same purpose, but are specially developed and produced for each system. The objective in this area is for the services to use, wherever possible, elements from one weapons systems that can be modified for a particular use in other weapons systems at minimum cost.

Q. PPSS concluded that DOD has not adequately addressed the lack of common parts in weapons systems and the excessive use of military specification requirements (rather than normal commercial standards) in contracts. Aren't MILSPECS necessary to ensure quality standards in weapons systems?

A. The problem has been that if a military specification exists, it will be cited as a requirement in any contract, even though the particular item procured does not need to meet all such specifications. Procurement officials are not sufficiently selective in choosing only the particular military specifications that are truly needed in relation to the item being procured.

A landmark military-civilian study (1974-1976 Shea Task Force) concluded that the high cost of complying with MILSPECS results from a failure to use specifications in a reasonable and selective way, rather than from a fundamental problem with the specifications.

To improve the situation, PPSS recommended the following:

- DOD should carry out military hardware design standardization studies and initiate joint-service development of military hardware and software.

- DOD should consider only MILSPECS related to the item being procured. All other MILSPECS for material, parts, and components included in the end item should be simply reference documents, and not mandatory, unless individually justified and separately listed in the purchase contract. This is the reverse of present procedure which considers all MILSPECS to be contractual requirements unless formal exception is taken.

- DOD should authorize the use of financial incentives to encourage contractors to challenge unimportant or irrelevant "standard" data requirements.

In addition to the issues and agencies discussed above, PPSS reviewed other aspects of the Federal procurement process. These areas can be broadly categorized as Organizational Controls, Competition, Excessive Regulations and Specifications, and Miscellaneous Procurement Activities.

PPSS recommendations regarding organizational controls included revising the management structure for controlling procurement activities (e.g., in the Army and Department of Labor), establishing career paths for procurement personnel, and involving business and financial experts in decisions regarding production of weapons systems. PPSS also recommended increasing the number of DOD consumable items purchased by the Defense Logistics Agency since it is more efficient at procurement than the services. Implementing PPSS recommendations would save $1.955 billion over three years in this area.

Competition can be increased by requiring adherence to regulations on competitive bidding, motivating contractors to invest in more productive plants and equipment, establishing a data base on contractor performance to avoid repeat business with unsatisfactory vendors, and comparing price quotes from vendors for civilian common use items before awarding contracts. Savings of $1.885 billion over three years can be achieved by implementing PPSS recommendations.

Eliminating unnecessary specifications in civilian procurement and unnecessary contract provisions in buying petroleum products for DOD ($12.6 billion in 1981), and raising the threshold for complying with regulations covering socio-economic programs (designed to aid American workers and small and minority-owned businesses) to $25,000, could save $1.499 billion over three years.

Also, improving controls over Air Force procurement of consulting services, coal procurement practices in the Tennessee Valley Authority, and Navy training programs regarding weapons systems could save $270 million over three years.

The three-year total of all the recommendations in this section, after elimination of duplication and overlap among issues, is $34.528 billion -- equal to the three-year taxes of 5.2 million median income families.

Managing the Government's Facilities

The Federal Government owns about one-third of all the land in the United States, leases 83 million square feet of office space, controls 318,000 cars and trucks, and stores the equivalent of 111 billion letters. Despite the magnitude of the Government's real and personal property holdings, PPSS found little attention being directed at developing and applying managerial techniques to ensure efficient and effective usage. Recommendations were made accordingly.

In FY 1983, the Government spent $4.7 billion in the specific areas covered by PPSS recommendations, with spending estimated to increase to $19.8 billion by the year 2000 if present policies are continued. Implementing PPSS recommendations would reduce spending to $4.0 billion in 2000, a saving of $15.8 billion, or 79.8%.

Real Property

At the end of FY 1980, the Federal Government owned real property and structures valued at $104 billion, including 744 million acres of land valued at $10 billion, $42 billion in buildings, and $52 billion in structures (such as dams and power plants). This $104 billion appraisal is conservative since it includes Federal lands valued at an average of about $13 an acre, and the replacement value or market value of the land, buildings and structures would be substantially greater.

As a basic concern to PPSS, there is no central office within the Government specifically designated to manage real property holdings. This lack of centralized direction is exacerbated by inadequate information systems, a lack of government-wide, comprehensive planning, and a failure to establish clearly defined objectives.

For perspective, the following are indicative of the scope of the Government's property management activities and of areas for potential savings:

- During FY 1983, the General Services Administration (GSA) expects to incur approximately $300 million in utility and fuel costs ($225 million in direct costs, the balance attributable to GSA's "tenant" agencies).

The Department of Defense (DOD) spends $2.5 billion annually on utilities -- over $285,000 an hour, 365 days a year.

DOD has installed approximately 150 Energy Management Control Systems (EMCS) -- electronic data processing systems providing automated energy management capability for a building or complex of buildings. PPSS found that a three-year net savings in energy costs of $385 million could be realized if GSA were to install and DOD were to expand its use of EMCS and employ other commercially available energy management techniques.

- As of September 30, 1982, GSA was leasing 83 million square feet of office space, housing about 400,000 Federal employees. GSA's leasing authority for FY 1983 was $770 million which is expected to increase to more than $1 billion in FY 1985.

  GSA's cumbersome system of leasing, which includes detailed specifications of cleaning requirements, leasehold improvements, etc., results in rental rates as much as $7 per square foot higher than prevailing market rates. GSA has established a goal of completing lease negotiations in 283 days versus an average of 180 days in the private sector. PPSS estimated that reducing inefficiencies by more closely following private sector practices could result in three year savings of $144 million.

The following compares the General Services Administration's property management function with that of a private sector company:

[Table on following page]

Real Property Management Comparison

	GSA - Public Buildings Service	Property management division of a large life insurance firm
Assets:	$9 billion	$8 billion
Number of facilities:	8,600	10,000
Objective:	Provide space for Federal employees and operations	Obtain and manage property in such a way that it is financially self-sustaining and produces long-term gain
Management:	Decentralized, lacks effective information flow	Centralized, uses few people to make and implement decisions
Planning:	Projects numbers, principally for budget estimation	Forecasts positions of maximum gain; seeks ideas to improve efficiency
Data:	Incomplete, inaccurate, slow	Accurate, fast response, continual updating
Computerized information system:	$6 million annual equipment lease; hardware & software developed as needed	$1 million for commercially available hardware & software packages directed toward "landlord" management
Management personnel:	500 Central Administration 4500 professionals in leasing, construction and contracting - 5000 in total	100 Central Administration 200 contracted professionals in leasing, construction and contracting - 300 in total
Average cost/ employee:	$ 25,000	$ 30,000
Total management cost:	$125 million	$9 million

Compared to a large life insurance company with comparable assets and facilities, GSA's Public Buildings Service spends 6 times as much for relatively incomplete, inaccurate, and outdated information; has 17 times the number of administrative and professional personnel; and has a total management cost that is 14 times greater.

In order to correct the basic problem in the Government's approach to real property management, four elements need to be considered:

- goals of the management effort;
- planning (both for procedures and communication of decisions and data);
- roles and responsibilities of various segments of the Federal Government (inside and outside GSA) in the execution of all activities related to real property management; and
- measurement of performance, as compared with the stated goals and the management plan.

Within this framework, PPSS recommended that the Government:

- Establish in writing a clear, concise goal for Federal real property management. This would serve as a guide to planning and execution. At present, from a management standpoint, no one knows clearly and completely what is to be achieved, how it is to be achieved, who is responsible, or the amount of time that should be allowed to complete each part of a job.
- Correct and update the real property data base within 18 months.
- Select and obtain the most appropriate computer software and hardware for handling real property data. PPSS found that the Federal Government (GSA in particular) is years behind the private sector in the use of computerized information systems. Standard packages for property management are available for much less than the $6 million current cost of GSA's outdated systems.
- Order an in-depth internal study of duplication within GSA, culminating in a report to the Office of Management and Budget (OMB) within one year. This would identify inefficiencies and overlap and provide the detail necessary to formulate a plan to streamline operations.
- Eliminate the unnecessary duplication between GSA and tenant agencies in facility management functions. The

present situation of "mini-GSAs" forming in tenant agencies is wasteful.

The comparison between GSA and the private sector insurance company discussed previously, and the additional cost incurred by the agencies in managing property, led PPSS to conclude that by implementing the above recommendations, savings of $62 million dollars over a three-year period can be achieved -- an amount sufficient to lease approximately 2 million square feet of office space for three years.

Q. Does the Federal Government know how much real property it owns?

A. The Federal Government maintains no overall inventory of its capital assets and their current condition. GSA maintains an inventory of public buildings and their associated assets, but it is not used as part of government-wide planning. Other agencies maintain inventories of various components of total capital assets. The Department of Transportation (DOT), for example, prepares an inventory and assessment of the condition of highways. However, no complete aggregate data on Federal capital investments are available.

Q. What is the Government's goal in the management of its real property holdings?

A. There is no clearly defined goal for Federal real property management and PPSS, therefore, suggested the following:

> Manage real property and related interests in a manner consistent with valid user needs -- charging "tenants" the equivalent of fair-market rates for commercial space and maintenance, but minimizing the total expense to the Federal establishment over the long term.

Q. In one of the recommendations regarding computer software and hardware, PPSS suggested obtaining the "most appropriate system." What exactly does that mean?

A. Standardized hardware and software packages are commercially available which are superior and less costly than GSA's outdated property management system.

Q. PPSS recommended that the tenant agencies' duplication of GSA management functions be eliminated. How can that be accomplished?

A. The Office of Management and Budget should examine the existing duplication of property management functions between GSA and all Federal tenant agencies, with a goal of

eliminating all overlapping staff. The only assignments that should be left in agencies are those essential to providing management services unique to a particular agency's needs.

Personal Property

PPSS also reviewed the Government's management of personal property, defined as any property other than real property owned or leased by the Federal Government. In this area, fleet vehicle management is of particular importance.

The Federal Government has the world's largest fleet of motor vehicles. The Federal fleet, primarily automobiles and light trucks, includes over 318,000 vehicles. The General Services Administration (GSA) controls 90,000 of these vehicles. The other 228,000 vehicles are divided into more than 100 motor pools. The Department of Defense (DOD) motor fleet is the largest, with 137,000 vehicles. (While the U.S. Postal Service has an additional fleet of 118,000 vehicles, PPSS excluded it from this study because of the quasi-independent status of USPS and because of the specialized nature of its vehicles.) Average utilization of Federal vehicles is 9,000 miles per year, 64% less than the 25,000 miles per year that private rental firms consider to be effective utilization. In FY 1981, $731 million was spent on motor vehicles management -- excluding rental costs and reimbursement costs for private vehicle use.

There is inadequate cooperation and coordination among the fleet managers, resulting in inefficient, duplicative and costly vehicle operations. Further, there is a serious lack of data with which to perform meaningful cost comparisons among agencies or with private fleets. As a result, no answer is currently available to the fundamental question -- should the Federal Government maintain a vehicle fleet?

If the Government continues to maintain a fleet, PPSS recommended correction of three basic problems:

- There is no centralized, government-wide, motor fleet management, or management information system.
- GSA is not notified of any agency's vehicle requirements until after appropriations are approved. This limits the opportunity for standardization and negotiation of acquisitions based on volume purchases.
- GSA and DOD sell vehicles in lots on an "as is/where is" basis. Resale prices normally don't exceed wholesale prices because of the poor condition of the vehicles. Only GSA-owned vehicles are reconditioned prior to sale. Private sector experience indicates

that there is a $2.00 increase in value for every $1.00 spent on reconditioning.

To correct these problems, PPSS recommended that:

- The Federal fleet be immediately reduced by 100,000 vehicles, or by 31.4%, to increase average utilization to levels more in line with the private sector. GSA and DOD should increase vehicle resale revenues by implementing a reconditioning program for all decommissioned vehicles prior to sale.

- The Office of Management and Budget analyze existing reports and data within one year and propose improvements in accounting and management standards. These standards should be implemented for the entire Federal fleet under existing Executive Branch authority.

- A government-wide fleet management information system be established to address the fundamental question of the extent to which the Federal Government should be in the business of owning and operating a motor vehicle fleet.

- GSA maximize volume purchasing leverage by utilizing a competitive, once-a-year, fixed price/indefinite quantity contract for each FY's planned quantity of new vehicles.

Q. Should fleet management be centralized?

A. The case for centralization cannot be evaluated without comparison to alternative structures, and such comparisons are not possible without adequate data for analysis. That is why the PPSS recommendations stress data collection so heavily.

Q. Do the benefits of a reconditioning program for all decommissioned vehicles justify the costs?

A. The amount of reconditioning needed obviously varies depending upon the use and wear on each particular vehicle. As stated previously, a $2 increase in value can be expected for each $1 spent on reconditioning. Since the Federal fleet is older and more worn than many private sector fleets, the actual reconditioning cost per vehicle would be higher than private sector experience, although the 2 to 1 ratio could still be expected to apply. The actual increase in revenue will vary according to the size and type of each vehicle and will depend upon how well a particular vehicle has been maintained during Government use.

Implementation of these recommendations could save taxpayers a total of $1.536 billion over a three-year period.

Property Associated Functions

PPSS reviewed "Property Associated Functions," which includes space and records management.

Utilization of space within the Federal Government represents both a problem and an opportunity. The Federal Government owns 2.6 billion square feet of office space or about four times the office space in the nation's ten largest cities. A reduction of only one square foot of office space per Federal employee would save taxpayers $11 million annually. The GSA goal is to attain a 20% reduction in office space utilization to 135 square feet per employee.

PPSS also found that records storage represents a serious problem in the Federal Government. At the end of FY 1981, Federal records occupied over 37 million cubic feet of space -- roughly equal to 193 football fields of records stacked 10 feet high. With one cubic foot of storage holding approximately 3,000 pieces of letter-sized paper, the Government is storing the equivalent of 111 billion letters.

Q. What must be done to achieve the targeted 20% reduction in office space utilization?

A. PPSS made five recommendations to help achieve GSA's space utilization goal and thereby reduce costs:

- Remove the ceilings on Standard Local User Charges (SLUC), i.e., the "rent" paid by agencies in GSA-managed buildings. Termination of legislation setting a ceiling on SLUC should be sought because the present ceiling reduces the incentive for tenant agencies to use space more efficiently.
- Prepare formal plans for GSA space surveys. These surveys should cover every Federal agency and every region in the United States.
- Establish space utilization goals independently and realistically for each agency and executive department.
- Include space utilization objectives, reporting, and review as part of the budgeting process.
- Streamline the current prospectus requirement to allow GSA to take advantage of favorable leasing conditions when they arise.

Q. Where are Federal records stored now?

A. National Archives and Record Service operates 14 records centers throughout the country where low-cost storage and reference service for inactive records is provided, and where records no longer required for administrative or historical purposes are destroyed in accordance with approved schedules. About 2.3 million cubic feet, or nearly 16%, of the records stored in records centers have no disposition schedule. PPSS recommended that a disposition schedule be established for all records.

Surplus Property

PPSS also reviewed Federal activities related to the disposal of surplus real property. The General Services Administration holdings of excess property on June 30, 1982 totaled $903 million in value on a cost basis.

Q. The General Services Administration is ostensibly responsible for excess property identified by civilian agencies. How does the disposal of excess property work?

A. Periodically, all executive departments and agencies survey their real property holdings to identify surplus property. Other agencies are consulted to determine whether property, identified as surplus by one agency, can fill the "space" requirements of another agency. If not, it is classified as surplus and offered first to local and state governments and then to the public.

PPSS recommended two general actions for improving the sales and the returns on this property:

1. Extend credit assistance to buyers in order to accelerate sales and maximize the sales price.

2. Permit a portion of the sales proceeds to flow back to the selling agency to motivate decisive action.

Providing incentives to the agencies and facilitating credit arrangements for prospective purchasers would permit realistic sales goals to be met.

Q. How is excess property disposed of now?

A. Surplus property has traditionally been disposed of (1) by transferring the property at a discount from fair market price to other Federal agencies; (2) by no-cost conveyance of the property to state and local governments; and (3) by negotiated and competitive sales to the public.