

April 1989

# PUBLIC BUILDINGS SERVICE

## GSA's Projection of Lease Costs in the 1990s



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## GSA's Current Model Approach for Projecting Lease Costs Is Realistic

The original \$2-billion estimate of lease costs was made in 1985 on the basis of a straight-line projection that did not adequately consider certain lease provisions affecting the rate of cost increases. Since that time, GSA has developed a model that more realistically reflects the way lease costs increase each year. In December 1987, using this model, GSA estimated the annual cost of leasing current space in fiscal year 1995 at around \$1.6 billion. The rate of increase predicted by this model is closer than was the previous projection to the historical rate of lease costs increase, suggesting that future increases may not be as high as GSA estimated using its 1985 model.

The current model was developed in response to a 1986 Administrator's task force recommendation and GSA officials' recognition that lease costs projections could be improved. The Administrator's task force recommended improvements in the development and execution of the space rental budget. One recommendation was to strengthen the projection techniques to ensure that annual budget estimates would be based on market analyses of each lease in the GSA inventory, and that 5-year projections of the total costs of each year's lease inventory would be made. These projections were to provide the cost of the current leased inventory and express the impact of lease turnovers, lease renewals, and operating expense and property tax escalations for the projection period.

The current model's projections are updated annually and used for internal budgetary purposes. In 1987, GSA prepared at our request a 10-year lease costs projection using the November 1987 lease inventory, which projected that lease costs would reach \$1.6 billion in fiscal year 1995. This contrasts with the \$2 billion the first model projected. Using the current model, GSA subsequently estimated that lease costs would reach \$1.56 billion in fiscal year 1994. This was based on a projection of its December 1988 leased inventory.

The Commissioner of GSA's Public Buildings Service (PBS) told us in August 1988 that both the \$2 billion projected in 1985 for fiscal year 1995 and the \$1.6 billion annual lease costs projected in 1987 for fiscal year 1995 were merely estimates prepared with the best tools and knowledge available at the time. The Commissioner said that the current model and the old model disagreed only as to when annual lease costs would reach \$2 billion. The current model projected that the \$2-billion mark would be reached 2 to 3 years after fiscal year 1995. The Commissioner also said that the current model uses existing leases and is static

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and that the lease inventory has recently been growing because of the expanding programs of certain agencies.

In our opinion, GSA's current model is a better and more realistic approach to estimating the overall increase in lease costs and could be used for policy decisionmaking once its data are verified as accurate. We found, however, that some of the data the current model used in making the lease cost projections were inaccurate and not verifiable. This situation will need to be corrected before the projections can be considered reliable. Minor computer programming errors will also need to be corrected.

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## Problems With the Database

We identified problems with incorrect and missing data in the current model's database that affect the reliability of the \$1.6-billion projection. After reviewing a statistically valid random sample of 382 leases in GSA's five largest regions, we estimate that 20 percent of the data from those five regions in the database is inaccurate or not verifiable due to missing source documents or incorrect data. On the basis of our sample results, we estimate that 13 percent of the data from the five regions in the database cannot be verified because of missing and incomplete files. In addition, on the basis of the data that could be verified, we estimate that 7 percent of the database for the five regions is inaccurate.

We also noted weaknesses in GSA's internal controls over the accuracy of the database, such as insufficient testing procedures or internal audits to ensure data accuracy. The PBS Commissioner told us in August 1988 that they will review the database to correct errors. The Commissioner also said that PBS will reinforce existing procedures to tighten and improve database quality control to ensure the availability of document files.

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## Agency Comments

The Acting Administrator of GSA provided written comments on a draft of this report. He said that GSA will try to enhance the reliability of the current model for projecting lease costs by strengthening GSA's database procedures and oversight activities. The data used in the current model is drawn from GSA's Public Buildings Service Information System (PBS/IS). The PBS/IS is a computerized database used for GSA regional and headquarters management purposes. The Acting Administrator said that the current model for projecting lease costs will be made a formal and permanent part of the PBS/IS.

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In his comments, the Acting Administrator maintained that annual lease costs would reach \$2 billion by fiscal year 1995. He said that the \$2 billion is attributable to the difference between (1) the current model projection of \$1.6 billion lease costs for the current amount of leased space and (2) the estimated cost of a net growth in the leased inventory and the estimated cost of space leased from the U.S. Postal Service, which is not included in the database used by the projection model.

We questioned the basis for the Acting Administrator's comments regarding the \$2 billion lease costs projection for fiscal year 1995. GSA subsequently explained that the current model projects that lease costs will be around \$1.56 billion in fiscal year 1994 on the basis of the December 1988 leased inventory, and that an additional estimated \$457 million was added to the model's projection. The \$457 million consists of \$395 million for an estimated 25-percent increase in GSA's leased space inventory, \$42 million for space leased from the U.S. Postal Service, and \$20 million for other leasing costs. GSA is estimating that the leased space inventory will increase 25 percent over the 6-year period despite the fact that the inventory has increased less than 1 percent per year between 1975 and 1988, and despite the continuing likelihood of restricted growth in federal staffing and budgets.

The Acting Administrator attributed some of the inadequacies in the database to its development over several years and to its multiple uses. While questioning the significance of some data problems, such as missing or inconsistent source documents and rental rate discrepancies, the Acting Administrator said that GSA intends to make the lease projection model a permanent part of its information system and would review its databases and oversight to enhance the reliability of the system. He also noted recent improvements in review and certification procedures. We believe that GSA's proposed corrective actions will help make the data used in the model more accurate and verifiable.

We are sending copies of this report to the Director of the Office of Management and Budget, the Administrator of GSA, and other interested parties. Copies of this report will also be made available to others upon request.

The major contributors to this report are listed in appendix IV.

A handwritten signature in black ink that reads "L. Nye Stevens". The signature is written in a cursive style with a large, stylized initial "L".

L. Nye Stevens  
Director, Government Business  
Operations Issues

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**Abbreviations**

GSA	General Services Administration
PBS	Public Buildings Service
PBS/IS	Public Buildings Service Information System



# GSA's Projection of Lease Costs

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## Introduction

In fiscal year 1988, GSA held around 4,800 leases covering 86 million square feet of space and costing about \$1 billion annually. According to GSA officials, lease costs are accelerating as long-term leases from the 1970's expire and are replaced by more costly leases. This increase is due to the effects of inflation upon service and utility costs and upon the market value of new leases.

GSA has made two efforts to project the increase in lease costs. The first effort, using a model developed in 1985, estimated that costs for the current amount of space leased would reach about \$2 billion by 1995. GSA officials have cited the \$2-billion projection in congressional testimony and in budget justification documents. However, in 1986, GSA developed another model and projected in December 1987 that lease costs for the current inventory will rise to only \$1.6 billion by fiscal year 1995. GSA estimated in its fiscal year 1989 budget justification that its rental budget will not reach \$2 billion until the late 1990s.

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## Objective, Scope, and Methodology

We were asked to assess the extent to which GSA's lease costs projections are realistic. The original 1985 model that resulted in the \$2 billion lease costs projection for fiscal year 1995 was not well documented and is no longer being used. Therefore, we could only examine the methodology used to make that projection, which was described to us by GSA officials familiar with the general methodology and assumptions used.

We assessed the validity of GSA's 1986 model for projecting lease costs by testing the model's key assumptions, manually verifying the calculations used to make the projection for a few selected leases, and verifying the accuracy of the data used as a basis for the projection.

To assess the accuracy of the data used in making the current lease costs projection, we compared database information on a statistically valid random sample of 382 leases with supporting information in files maintained by the five largest GSA regional offices: Atlanta, Chicago, Fort Worth, the National Capital Region (Washington, D.C.), and San Francisco. We selected these regions because they represented approximately 60 percent of GSA's lease inventory (3,040 of 4,820 active leases) and about 70 percent of its estimated lease costs (\$706 million of \$968 million) in fiscal year 1988. Our estimates of the five-region database were calculated at the 95-percent confidence level.

We tested the current model's key assumptions for projecting lease costs by reviewing the lease, appraisal, and space assignment files for the

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sampled leases; obtaining estimates of inflation from two leading forecasters, Wharton Econometrics and Data Resources Incorporated; and holding discussions with the GSA officials who developed the model. We assessed the accuracy of the computer calculations by manually verifying the calculations contained in the model for a few selected leases.

We did our work between September 1987 and July 1988 and in accordance with generally accepted government auditing standards. The views of responsible agency officials were sought during the course of our work and incorporated in the report where appropriate. The Acting Administrator of GSA provided written comments on a draft of this report on December 23, 1988. His comments have been incorporated in the body of the text where appropriate and can be found in full in appendix III.

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## GSA's Current Model Approach for Projecting Lease Costs Is Realistic

By taking into account how lease costs escalate on an annual basis, GSA's current approach to projecting lease costs realistically reflects the current inventory replacement costs. Our review of a sample of leases in five regions confirmed two of the model's primary assumptions: leases typically specify a yearly increase in the cost of services and utilities, and average 5 years in length. We also found that the estimated inflation rates developed by two leading private forecasters, Wharton Econometrics and Data Resources Incorporated, ranged from 4 to 6 percent, indicating that GSA's use of a 6-percent inflation rate is consistent with other estimates. However, while GSA's current approach to projecting lease costs is realistic, problems with the database in the five regions we examined make the lease costs projections for those regions unreliable and not verifiable.

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## The 1985 Model

The 1985 model made a straight-line projection of future lease costs for the total GSA lease inventory. The projection assumed that GSA would maintain a constant lease inventory and that total lease costs would increase at a constant rate of 8 percent each year.

The 1985 model did not adequately consider one factor that tends to slow the rate of increase. A typical lease has a base rent for a period of time and an escalating rate for services and utilities. Since the base rent, for the most part, remains constant, only the cost of services and utilities increases annually until the lease expires. Because the original projection was based on aggregate lease costs, the model applied the same

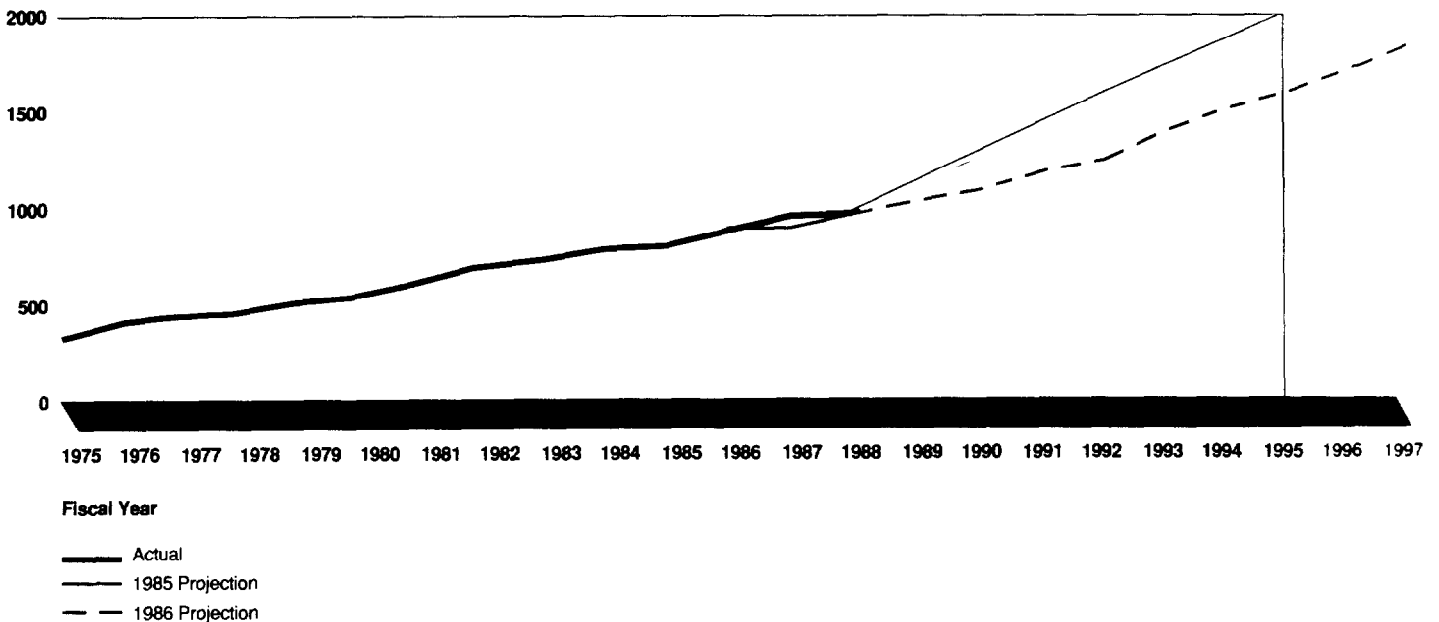
inflation factor to the base rents as it did to the costs of services and utilities. This resulted in a higher projection.

## The Current Model

A GSA Administrator's task force on the rental budget process prepared a report in 1986 containing specific recommendations for improving the formulation and execution of the space rental budget activity. The report recommended strengthening the projection techniques to ensure that annual budget estimates are based on market analyses of each lease in the inventory. It also recommended that PBS prepare annual 5-year cost projections of its lease inventory. These projections were to provide the cost of the current leased inventory, expressing the impact of lease turnovers, lease renewals, and operating expense and property tax escalations for the projection period. GSA developed the enhanced computer-supported lease costs projection model in 1986 in response to the Administrator's task force recommendation and the recognition by GSA officials that lease costs projections could be improved. The Acting Administrator of GSA told us in December 1988 that the current model incorporates many of the task force's projection recommendations.

**Figure I.1: Actual and Projected Costs of Rental Space**

2500 Millions of Dollars



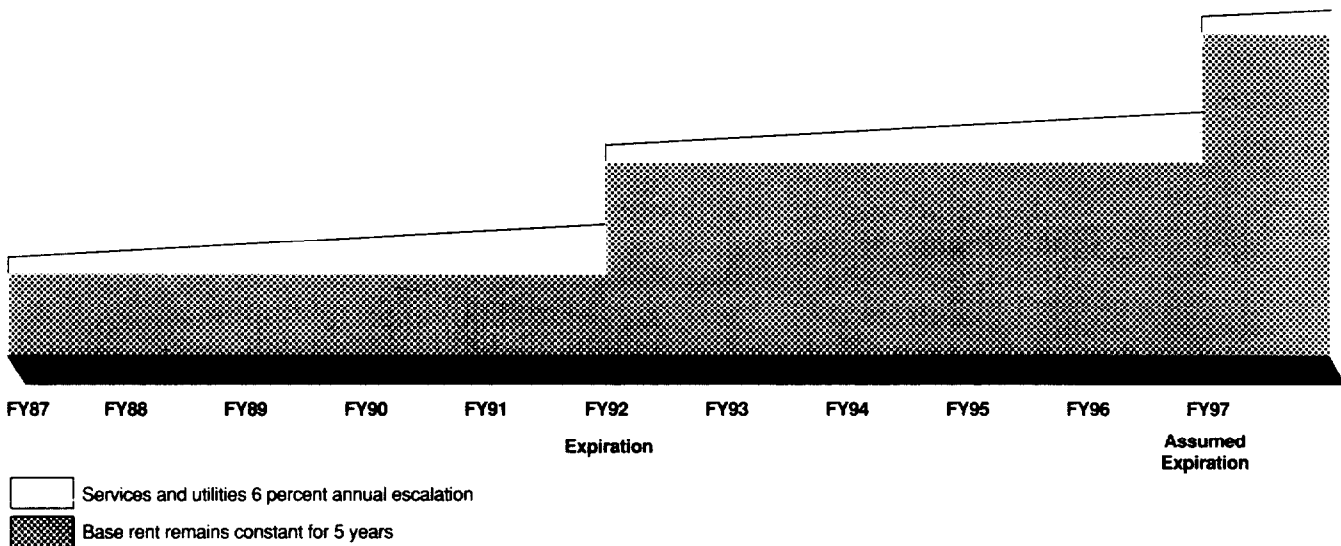
GSA, using the new model and the November 1987 lease inventory, projected that lease costs will rise to \$1.6 billion by fiscal year 1995, rather than the \$2 billion predicted by the 1985 model. This increase is in keeping with the rate of increase experienced during the last 10 years, as shown in figure I.1.

The 1986 model improves on the 1985 model in several ways:

- it projects the costs of individual leases and combines these projections to get an overall projection,
- it recognizes that the base rent is held constant, and
- it estimates the replacement rent increase for each lease at the time it expires.

The 1986 model also assumes an average 5-year life for each replacement lease and a 6-percent rate of inflation, which it uses to escalate both the cost of services and utilities and the market value for replacement leases. The model escalates the market value of leased space through the life of each lease, then uses the escalated value as the replacement rent when the current lease expires. Figure I.2 illustrates

Figure I.2: Projection Model - Escalation of Rental Cost for a Typical Lease



how the model projects the rental costs during the life of the lease and shows the increased cost of renting the space when the lease expires.

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### Results of Current Model Adjusted to Reflect \$2 Billion Lease Costs

While the Acting Administrator said that the President's fiscal year 1990 budget projects a \$2 billion leased space budget by 1995, we later learned that GSA, using the current model, projects that lease costs will be around \$1.56 billion in fiscal year 1994 on the basis of the December 1988 leased inventory. While this projection is very close to the \$1.6-billion projection we obtained using the November 1987 leased inventory, GSA estimated an additional \$457 million for leased space not included in the model's database, yielding a total projected lease cost of \$2.02 billion in fiscal year 1994. The \$457-million estimate consists of a \$395 million estimated increase in GSA's space inventory between fiscal years 1989 and 1994, \$42 million for space leased from the U.S. Postal Service, and \$20 million for other leasing costs. GSA notes in its budget justification for fiscal year 1990 that the inventory of GSA controlled leased space has increased less than 1 percent per year between 1975 and 1988. GSA is estimating leasing costs on the assumption that the leased space inventory will increase 25 percent over the 6-year period, although the federal budget deficits and restricted federal staffing and budget growth is likely to continue.

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### Source of Data for Rental Cost Projection

The data used in the current model are drawn from GSA's Public Buildings Service Information System (PBS/IS). The PBS/IS, a computerized and regionally segmented database serving the major areas of GSA's PBS, contains information on space assignments and occupancy, buildings, leases, and space requests. The PBS/IS data are used for GSA regional and headquarters management purposes.

The model uses PBS/IS data elements entered from the lease contract file, the appraisal file, and the space assignment file of each lease in GSA's inventory. The lease contract file shows the current figures for all active lease contracts together with the expiration date of the last renewal option. The appraisal file details GSA's appraisal of the market value of each lease. The space assignment file describes the amount and type of space included in the lease.

The projection model uses the data in the lease contract file for projecting the costs to the expiration date of the lease. The data in the appraisal file is used as the basis for projecting the costs of a new lease that replaces the current lease after its expiration. Appraised rates are

established for each type of space, such as office, storage, and parking listed in the space assignment file.

## Problems With Data Make the Projection Unreliable

We found that some of the PBS/IS database the current model uses in making the lease costs projection were inaccurate and not verifiable and will need to be corrected before the projection can be relied upon. Specific problems included (1) the database neglecting differences between the rent for a specific month and the average monthly rent over the term of each lease, resulting in either understating or overstating lease costs, and (2) errors or missing data in about 20 percent of the database we reviewed in the five regions. We estimate that supporting source documentation is missing or incomplete for 13 percent of the data and that 7 percent of the data in the database does not match data in the supporting source documents.

The PBS Commissioner told us in August 1988 that programming flaws in the model that can be corrected without altering the processing of the lease contract files on the PBS/IS will be done quickly; flaws requiring PBS/IS changes will take substantially longer. The Acting Administrator of GSA said that failure of the model to make finely tuned projections is due to the model's reliance on existing databases designed to support GSA's way of doing business. GSA never deemed it important to modify the databases to collect data that would be useful only for long-term projections. In addition, the Acting Administrator said that GSA will make the current projection model a formal and permanent part of its PBS/IS and determine what, if any, changes should be made to the system to further enhance the reliability of the model.

The PBS Commissioner also told us that the PBS/IS database will be reviewed to correct errors and that existing procedures will be reinforced to improve data quality control in the PBS/IS and to ensure supporting source document availability. In comments on a draft of this report, the Acting Administrator said that GSA will make all necessary and appropriate changes in its procedures and oversight activities to increase the reliability of the data.

The following sections discuss specific problems with the PBS/IS database that resulted in questionable lease cost projections.

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## Effective Annual Rentals Were Not Recorded in the Database

The database does not take into account differences between the rent at a specific time and the average annual rent over the term of each lease. Although some leases had a rent structure that varied from year to year, with some having specified periods of free rent, the computer inaccurately assumed the rent structure remained the same for each year of the lease. As a result, the projection tends to either understate or overstate future lease costs.

In 3 percent of the leases we reviewed, the rent during a particular year differed from the average, or effective, annual rent. The rent increased over the life of the leases. In these cases, the database records only the current annual rent, not the average annual rent over the life of the lease. As a result, depending on when GSA projects lease costs, the projection tends to either understate or overstate future lease costs. If GSA projects future lease costs using the lower annual rent for the early life of the leases, the future costs of the leases will be understated; if GSA projects lease costs using the higher annual rent for the latter life of the leases, the costs will be overstated.

In another 3 percent of the leases we reviewed, the lease specified rent-free periods of 1 or more months. Since GSA is not paying rent for a period covered by the lease, the average annual rent would be lower. In these cases, GSA's database reports only the nominal rent, which tends to result in an inflated projection for leases with rent-free months.

Regarding the problem of potentially over- or under-projecting the costs of leases having variable rent structures or periods of free rent, the Acting Administrator of GSA said that such leases represent such a small number and dollar value of the leasing program that they do not significantly affect the accuracy of long-term projections. Although GSA believes the number and dollar value to be low, it did not start to analyze the database to determine the actual number and effect on the projection of future lease costs until February 1989. We believe GSA will need to know that dollar amount and impact before deciding whether or not to refine this part of the database.

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## Discrepancies Between Regional Documentation and Database

In assessing the accuracy of the data used as a basis for the lease costs projection, we compared GSA's headquarters PBS/IS computer data with regional office supporting documents for 24 data elements used in making the projection. Four of the data elements came from the lease contract files, eight from the appraisal files, and 12 from the assignment

files. The GSA regions were unable to provide complete supporting documentation for the PBS/IS information used by GSA's headquarters in making the lease costs projections, and we found some discrepancies between the documentation that was available and the data used to project the lease costs. We estimate, overall, that the PBS/IS database for the five regions contains about 20-percent errors and missing data. (See table II.1.)

In comments on this report, the Acting Administrator of GSA said that each of these two problem areas must be addressed. The Acting Administrator noted that GSA will solicit more detail on the nature, type, and extent of these errors and determine what corrective actions should be taken. The Acting Administrator said that GSA must determine that the paper document does represent the current condition and then verify the computer data against it. The Acting Administrator also said that the computer can do more in the area of cross checking the reasonableness of data. The details on these two problem areas are discussed in the following sections.

#### Data Missing

On the basis of our sample results, we estimate that 13 percent of the five-region PBS/IS data elements used in making the lease costs projection are unsupported due to incomplete or missing regional source documentation files. (See table II.1.) Specifically, we estimate that 3 percent of the lease file data, 5 percent of the appraisal file data, and 23 percent of the assignment file data, are unsupported. (See table II.3.) Neither we nor GSA could locate the missing files, and GSA could not account for the incomplete files it provided us. Because the source documents are missing, we do not know the extent to which the PBS/IS database is correct or incorrect.

#### Data in Error

We found some discrepancies between available source documents and the PBS/IS data used to project the lease costs. We did not identify the causes of these discrepancies. On the basis of our sample results, we estimated that 7 percent of the PBS/IS data differed from data in the source documents. (See table II.1.) Specifically, we estimated that 15 percent of the lease files, 8 percent of the appraisal files, and 3 percent of the assignment files contained data that varied by 5 percent or more from the corresponding data in the PBS/IS database. (See table II.2.)



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## Weaknesses in GSA Internal Controls Over Data Accuracy

We also noted weaknesses in GSA's internal controls over the accuracy of the data being entered into the PBS/IS database. Our review and discussions with GSA officials suggested that much of the data in the database were not systematically verified or tested for accuracy. GSA regions are responsible for data entry into the PBS/IS database and for assuring the accuracy of the data input. Although standardized procedures were used for entering source document data, according to GSA officials, there were no formal GSA-wide procedures for verifying that all data were entered correctly. We did not determine whether there were regional procedures for ensuring data accuracy.

GSA does not periodically audit the PBS/IS database to ensure the data are accurate, complete, and current. All five GSA inspectors general in the regions where we did our work were unaware of any efforts by their offices to test and verify the accuracy of the information in the PBS/IS database used to make the lease costs projections.

The Acting Administrator of GSA said that procedures do exist for data verification and data auditing, and that GSA regional office review and enforcement of the existing procedures and GSA's central office periodic on-site surveys of the regional office activities should have a measurable impact on the errors and missing data. In addition, the Acting Administrator said that a strong verification process was begun just a few months before our review was initiated, and that the process includes a complete review of all lease data for every active lease during the third quarter of each year and a review of the lease data for every lease that changed on a quarterly basis. The PBS commissioner had told us that procedures in place will be reinforced to tighten and improve the quality control of data. We believe that GSA's actions, if implemented properly, will help make the data used in the model more accurate and verifiable.

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# Sampling and Data Analysis Methodology

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To examine the accuracy of GSA's projected lease costs, we chose a sample of leases from GSA's PBS/IS computerized database and tested the accuracy of vital data elements in GSA's formula for projecting lease costs. Because of staff limitations, we selected GSA's five largest regions (San Francisco; Chicago; Atlanta; Dallas; and Washington, D.C.) for examination. Therefore, our sampling methodology allows us to project only to these regions. This appendix describes how we selected our sample and gives sampling errors for the estimates in our report.

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## Selection of Sample

We used a simple random sample to select 400 leases from an inventory of 3,040 on GSA's PBS/IS computerized database for the selected regions as of November 1987. However, during our field work, we could not verify 18 (4.5 percent) of these cases for various reasons, such as the transfer of lease authority to the occupying agency and the transfer of files to other GSA regions. Thus, we actually tested the accuracy of the data for 382 sample leases. To account for the cases not verified in our statistical calculations, the original universe of 3,040 was proportionally adjusted downward by 4.5 percent to 2,903.

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## Data Analysis

We visited the five regions and reviewed the contents of three files (lease contract, appraisal, and assignment) that contain the supporting documents for each lease. The lease contract file contains data on lease start and expiration, and renewal options. The appraisal file contains information on the spaces' market value and on the rent that GSA charges. The assignment file provides information on space assigned to the agencies.

A total of 24 data elements relevant to GSA's model for estimating future lease costs were tested for accuracy by confirming the computer-listed data with the actual hardcopy supporting documents in the files. Four of these data elements are contained in the contract file, 8 in the appraisal file, and 12 in the assignment file.

For 23 of the data elements, we considered the elements to be an "error" if the difference between the computer data and supporting data was greater than 5 percent (plus or minus) of the supporting documents. If the computer data differed by more than 30 days (plus or minus) from the supporting documents, the remaining element (a date field) was also considered an error. If either the computer data or supporting data did not exist, we considered this element to be "missing."

## Projected Results

The calculations to determine the estimate and sampling error of the total universe were determined using a cluster sampling methodology. Each selected lease was considered a cluster that contained 24 elements. All calculations were made at the 95 percent confidence level. Overall, we estimated that the PBS/IS database of the five regions contained about 20-percent errors or missing data. About 7 percent were in error and 13 percent contained missing data, as shown in table II.1.

**Table II.1: Overall Estimates of Erroneous and Missing Data**  
(For Five Regions)

Types of problems	Estimate	Lower limit	Upper limit
Data in Error	6.7%	6.1%	7.3%
Missing Data	13.3	11.3	15.3
<b>Total</b>	<b>20.0</b>	<b>18.0</b>	<b>22.0</b>

Note: The 95-percent confidence level at the lower and upper limit for the overall total and those associated with individual files are computed independently. Therefore, sums of individual file estimates may not equal overall total estimates.

Using the cluster sampling methodology for the individual lease contract, appraisal, and assignment files, we arrived at the following estimates of errors and missing data.

**Table II.2: Estimates of Erroneous Data**  
(For Five Regions)

Unit of analysis	Estimate	Lower limit	Upper limit
Lease contract files	15.2%	13.6%	16.8%
Appraisal files	7.6	6.6	8.6
Assignment files	3.2	2.2	7.3

**Table II.3: Estimates of Missing Data**  
(For Five Regions)

Unit of analysis	Estimate	Lower limit	Upper limit
Lease contract files	2.7%	1.6%	3.8%
Appraisal files	4.6	2.8	6.4
Assignment files	22.6	18.7	26.5

**Table II.4: Aggregate Estimates of Erroneous and Missing Data**  
(For Five Regions)

Unit of analysis	Estimate	Lower limit	Upper limit
Lease contract files	18.0%	16.1%	19.9%
Appraisal files	12.2	10.4	14.0
Assignment files	25.9	22.1	29.7

## Sampling Error

Statistical sampling enables us to draw conclusions about the universe of interest on the basis of information in a sample of that universe. The

results of statistical samples are always subject to some uncertainty or sampling error because only a portion of the universe has been examined. Thus, the sampling error consists of two parts: confidence level and range. In our analysis, all estimates were calculated at the 95-percent confidence level. The confidence level indicates the degree of confidence that can be placed in the estimates derived from the sample. The range indicates that, although we do not know the true proportion for the universe, we are confident that 95 percent of the time we will be within the upper and lower limits of the estimate of the true proportion.

# GSA Comments on This Report



Administrator  
General Services Administration  
Washington, DC 20405

December 23, 1988

Mr. Richard L. Fogel  
Assistant Comptroller General  
U.S. General Accounting Office  
Washington, DC 20548

Dear Mr. Fogel:

Thank you for the opportunity to review the draft General Accounting Office (GAO) audit report, GAO/GGD-89 entitled "GSA's Projection of Lease Costs in the 1990's." We are pleased that our current computer model has been judged sound. The current model does incorporate many of the recommendations made by the General Services Administration (GSA) task force as to how these projections should be done. It should be noted that the budgetary projections contained in the FY 1990 Presidents Budget reflect a \$2 billion Rental of Space budget activity by 1995. The difference between this estimate and the \$1.6 billion projection referenced in the GAO report is attributable to: 1.) the projected cost of a 9.2 million square feet net growth in the leased inventory; and 2.) the projected cost of space leased from the U.S. Postal Service (USPS). Space leased from USPS is not included in the data base used by the PBS projection model but it is budgeted for in the same account as commercially leased space.

The report contained certain comments regarding the accuracy or consistency of the data should be reviewed. Our concerns are as follows:

1. Page 7 - "...lack of internal audit and data verification procedures."

Procedures do exist for data verification and data auditing. The realty specialist or document clerk prepares data input sheets from data in the contract or assignment (paper) file. The input sheet is reviewed and initialed by the responsible specialist as correct. Data entry clerks input the data into the computer from the approved input sheets. The computer system performs data verification edits and produces proof lists. The proof lists are reviewed by the data input clerks, document clerks, and realty specialists and corrections are made as needed. After entry, the proof lists, letters to the client agency, and leasing documents (R620) are filed in the appropriate folders. In addition, a strong data verification process was begun just a few months before the GAO study was initiated. This process includes a complete review of all lease data for every active lease during the third quarter of each year and a review of the lease data for every lease which changed on a quarterly basis.

See p. 1.

See p. 11.

See pp. 2, 5, and 14.

Now on p. 4.

See pp. 5 and 18.

See p. 18.

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Further, when assignments are made, a computer prepared letter is sent to the occupying agency outlining the type and amount of space assigned. The agency contacts GSA if errors are discovered. Finally, the quarterly rent bills to agencies state the type, amount, effective date of occupancy, and the billing amount for each assignment. Again, agencies report errors to GSA.

For leasing actions, we have all of the above audit and verification processes plus the requirement that two individuals review and sign the R620 with their full signatures. This document is sent from GSA's Public Buildings Service (PBS) to GSA's Finance Division to generate payment to the lessor. The lessor payment and notification act as verification steps, also. Form R620 is made a permanent part of the lease contract folder.

Now on p. 16.

2. Page 18 - "...the data base does not take into account differences between the rent for a specific month and the average monthly rent over the term of each lease...."

It is true that for every lease contract there is one lease contract data record in the computer and that computer record contains the annual rent as of that day. However, that same record also contains the base rent as well as a number of other elements of data which permit any number of calculations to be made.

The lease contract history data base, a data base distinct from the lease contract data base, contains copies of every lease contract record each time a change was made. This data base is often used to make trend or historical evaluations if the data in the contract file is too limited. This data base would be especially helpful in tracking step rents in that each increase in rent and the effective date of each rent change would be seen. Of course, the history data base would only record the past steps and not future changes. A projection model would have to make some assumptions about the continuance of future steps. Regardless of the processing of graduated or step rents, the fact is that they represent a very small number and dollar value of the leasing program; small enough to not significantly affect the accuracy of any long-term projection. This data base was not referenced in the report.

Now on p. 17.

3. Page 18 - "...an estimated 20 percent of the data base contains errors or missing data."

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The report noted that supporting documentation was missing or incomplete for 13 percent of the sample, while 7 percent of the data in the computer did not match the supporting source documents.

See p. 17.

Each of these two problem areas must be addressed. We will solicit more detail on the nature, type, and extent of these "errors" and determine what corrective actions should be taken. It is important to note that the report does not state that the data in the computer is necessarily incorrect. What is stated is that the latest paper document and the computer data are different. We must determine that the paper document does represent the current condition and then verify the computer data against it. Regional office review of the existing procedures, enforcement of the procedures, and Central Office on-site periodic surveys of the regional office activities should have a measurable impact on these "errors." In addition, more can be done by the computer in the area of cross checking and reasonableness of data.

See pp. 4 and 10.

In general, the report implies that the data in the data bases may be subject to a significant number of "errors." It should be noted that the review was aimed only at the projection model and the ability of the model to arrive at a useful end product. What the report does state is that the model is basically sound given the availability and accuracy of the data which it is based upon. The report points out that for some leases (a very small number) the data base does not store data in the manner best suited for the projection system. The simple fact is that the data bases are at least 12 years old and were designed to support our way of doing business, including paying and managing current leases, projecting the current years' lease budget, managing the space inventory and assigning space to agencies, billing agencies for their space, and managing workloads. Many other important management needs are satisfied by the data bases including trend analysis, historical documentation, etc. For the most part, any failure of this projection model to project a finely tuned 8-year projection is based on the fact that this model uses the data bases as they are and we never modified the data bases to collect new data that would be useful only to long-term projections. It was never deemed vitally important to redefine the data bases and require our regions to input and maintain new elements of data in an attempt to support such very rare cases which would have very little impact on the long-term projections.

See p. 15.

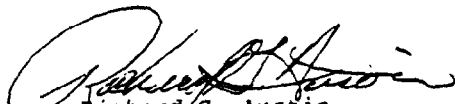
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See pp. 5 and 15.

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We will gather all of the information possible from this audit and supplement that with our review and analysis of the condition of our data bases, and make all necessary and appropriate changes in our procedures and oversight activities to increase the reliability of the data. In addition, we will make the projection model a formal and permanent part of our PBS Information System and determine what, if any, changes should be made to the system to further enhance the reliability of the model.

Sincerely,



Richard G. Austin  
Acting Administrator



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