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GAO

Report to Congressional Requesters

September 1986

# POSTAL SERVICE TRAINING CENTER

# Oklahoma Site Selection Favored Over New York Alternative





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**United States**
**General Accounting Office**
**Washington, D.C. 20548**

**General Government Division**
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September 23, 1986

The Honorable Daniel Patrick Moynihan
The Honorable Alfonse M. D'Amato
United States Senate

The Honorable Frank Horton
The Honorable Samuel S. Stratton
House of Representatives

This report is in response to your joint letter dated April 4, 1985, in which you asked us to evaluate the Postal Service's decision to build a new Postal Service Technical Training Center in Norman, Oklahoma, rather than relocate the existing Center from Norman to the former Eisenhower College at Seneca Falls, New York. You requested that, in making our evaluation, we estimate the costs, over the next 10 years, of locating the Center at each of the two locations.

As you are aware, in June 1986 the Postal Service announced major changes in its plan for construction of a new center in Norman. The revised plan provides for a new facility about 32 percent smaller than originally planned and an investment reduction of more than 50 percent. The reduced space requirement and investment cost are the result of the Postmaster General's decision to extend the hours the facility will be used each day for training, revise the Center's curriculum, and lease—instead of construct—dormitory space. These changes, which could substantially affect the results of our cost analysis, occurred after completion of our audit work.

In performing our work, we accepted as valid and used in our calculations the Service's stated space requirements, as approved by the Service's Board of Governors in April 1985. We also accepted and used the Service's estimate of the cost to construct a new center at Norman, Oklahoma. Our cost-related report results are based on this information, which was current at the time of our work.

Because of the technical nature of the work requested, we obtained the assistance of the U.S. Army Corps of Engineers and a construction engineering consultant. Details on the results of our evaluation are contained in the appendixes and are summarized below.

In summary, based on our comparison of costs and mission-related considerations, and within the context of the Service's space requirements and plans applicable at the time of our work, we believe the Service's

decision to locate its Center at Norman rather than Seneca Falls was a reasonable one.

## Comparison of Costs

We estimated the Postal Service's major direct costs of establishing and operating the training center at both locations for both a 10-year and a 20-year period. In making our cost comparisons we accepted the Service's requirements, as approved by the Postal Service Board of Governors, as being valid. We excluded from our calculations costs, such as furnishings and student per diem, whose differences (between Norman and Seneca Falls) we believed would be too small to affect an economic choice between the two alternatives. On the basis of our estimates of costs and residual values, we determined that the net-cost difference for the two locations would be relatively small for both a 10-year and a 20-year period.

### Nonrecurring Costs

The total of nonrecurring costs, such as costs of land acquisition and building rehabilitation and construction, would be lower for a center located and operated in Seneca Falls than for a center in Norman. This is because the Service, through acquiring the existing facility at no cost and renovating existing buildings (along with some new construction) at the former Eisenhower College, would be able to keep its initial investment lower than at Norman, where it incurred a cost to acquire the land and plans to build all new buildings.

### Recurring Costs

We found that recurring costs, such as facility operating costs, would be higher for a center in Seneca Falls than in Norman because of the larger land site and facility at Seneca Falls. Renovating existing buildings and constructing new ones at Seneca Falls would result in more building space than at Norman. This would occur because the existing space at Seneca Falls could not be used as efficiently to meet the Service's training needs as could the space at Norman, which would be designed and constructed to meet specific training requirements. Because of the greater space requirement at Seneca Falls, annual costs to operate and maintain the facility would be greater than at Norman.

### Residual Values

We estimated that the residual value of the land at Eisenhower would be higher than the residual value of the land at Norman. We also estimated that the residual value of the facility at Eisenhower would initially be

higher but, after a number of years, would become lower than the residual value of the facility at Norman. This would occur because the existing buildings at Eisenhower would be nearer to the ends of their useful lives than would be the new buildings at Norman. A training center at Eisenhower would be comprised of a combination of existing and new buildings, while a center at Norman would be comprised entirely of new construction.

## Net Costs Were Compared as of Fiscal Years 1985 and 1986

We compared the net costs, that is, the total of the nonrecurring and recurring costs, reduced by the residual values, of locating and operating the Center at both locations as of

- fiscal year 1985, the year in which the Service decided to construct a new center in Norman, to determine which facility appeared to have had the economic advantage at the time the decision was made; and
- fiscal year 1986, the current fiscal year, to determine which facility would appear to have the economic advantage if the decision were being made today.

### Comparison of Net Costs Over a 10-Year Period

Our comparison of discounted costs as of both fiscal year 1985 and fiscal year 1986 showed that over a 10-year operating period, the net cost at Eisenhower would be lower than the net cost at Norman. For example, we estimate that the 10-year net cost at Eisenhower, in present value terms as of fiscal year 1986 and using a discount rate of 9.4 percent, would be about $2.6 million less than at Norman. This would occur because the lower nonrecurring costs and initially higher land-and-facility residual values at Eisenhower, compared to those at Norman, would more than offset the higher recurring-cost disadvantage for Eisenhower.

### Comparison of Net Costs Over a 20-Year Period

We found that over a 20-year operating period, the economic advantage shifts to Norman. We estimate that for a 20-year operating period, the net cost at Norman, in present-value terms as of fiscal year 1986 and using a discount rate of 9.4 percent, would be about $4.7 million less than the net cost at Eisenhower. This difference at 20 years results from the combined effects of Eisenhower's greater recurring costs and a shift to lower facility residual values, compared to those at Norman. Eisenhower's advantage of lower nonrecurring costs would not completely offset these two disadvantages.

## Mission-Related Considerations

We noted that, in addition to those factors which can be readily costed, there were certain mission-related considerations relative to the location of the Center which we felt should also be assessed in choosing between the two alternatives. As shown below, the results of our evaluation of these considerations favor locating the Center at Norman.

We evaluated several factors which the Postal Service raised as issues bearing on its decision to locate the Center at Norman. These factors, which cannot be readily evaluated in terms of costs, impact on the Center's ability to accomplish its mission. We concluded the following:

- The Postal Service's estimate that a relocation to the Eisenhower College site would delay resumption of training for an average of 4.4 weeks longer per course than would a relocation to the proposed Norman location appears reasonable.
- It appears likely that some instructors would elect not to move from Norman to Seneca Falls should the Postal Service move its Center to Seneca Falls. The loss of experienced instructors would impair accomplishment of the Center's mission while replacements were being trained.
- Some advantages of the current co-location of the mutually supporting Technical Training Center and National Maintenance Technical Support Center at Norman would be lost if the Technical Training Center were moved to Eisenhower. The Support Center develops maintenance policies, programs, methods, and standards for Postal Service buildings and equipment. Co-location of the two facilities facilitates interaction of Training Center instructors and Support Center personnel in developing the Training Center's training courses, achieving consistency in maintenance materials published by the two facilities, and sharing equipment.
- With regard to availability and convenience of air and ground transportation to Norman and Seneca Falls, neither location would have a significant advantage over the other. However, based on our discussions with New York State agencies, airport officials, and limousine service operators, it appears possible that weather conditions in the Seneca Falls area could occasionally delay air and ground transportation for students during the winter. However, it appears that because of the infrequency and short duration of these delays, they would not be likely to cause significant disruptions in training.

In accordance with your request, we did not obtain the Service's official comments on this report. As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this report. At that time we will send copies to interested parties and make copies available to others upon request.

W. J. Anderson

William J. Anderson
Assistant Comptroller General

# Contents

## Abbreviations

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| RFP | Request for Proposals |
| CBO | Congressional Budget Office |

# Introduction, Scope, and Methodology

By joint letter dated April 4, 1985, Senators Daniel Patrick Moynihan and Alfonse M. D'Amato and Representatives Frank Horton and Samuel S. Stratton asked us to evaluate the wisdom of the Postal Service's decision to construct a new technical training center in Norman, Oklahoma, rather than relocate the Center from Norman to the site of the former Eisenhower College at Seneca Falls, New York.

## The Postal Service Technical Training Center

The Postal Service established its maintenance Technical Training Center in Norman, Oklahoma, in 1969. The Center provides training to mechanics and technicians who are responsible for postal maintenance functions.

The planned fiscal year 1985 technical curriculum consisted of 105 resident courses on the maintenance, repair, and operating of all (1) mail processing, finance, customer, and delivery equipment; (2) building systems; (3) computer systems; and (4) motor vehicles. Courses are oriented to practical exercises and operational theory and vary in length from 2 days to 12 weeks.

During the past 5 years, the number of students receiving training at the Center has tripled. In fiscal year 1980, 4,824 students attended the Center. The Postal Service estimates that 15,500 students, with about 825 students in residence daily, attended the Center during fiscal year 1985.

Currently, the Center occupies 576,819 square feet of building space in nine facilities leased at an annual cost of about $2.5 million. The facilities are decentralized within a 20 square mile area.

## Postal Service Plans to Relocate the Center

Management problems and costs associated with training program growth and decentralized facilities prompted the Service to initiate a project in 1983 to centralize the Technical Training Center's operations. The Service identified Norman, Oklahoma, as the preferred area for the new Center.

In December 1983, the Service published a Request for Proposals (RFP) designed to obtain cost estimates for alternatives such as leasing existing facilities, buying or leasing land on which the Service could construct a center, and contracting for new facility design and construction. The Service received 11 proposals in response to the RFP, which closed in March 1984. The Service rejected all proposals for land and/or building

space on the basis of unacceptability of location, topography, size, and/or price.

When the Service issued its RFP it reserved the right, without liability, to search for and acquire a site and facilities outside of the RFP process. The Service also reserved the right to search for facilities outside of the preferred area.

The Service conducted a search for sites suitable for its training center within the preferred area. It also considered 10 existing facilities in various areas of the continental United States. However, the Service determined the facilities were unsatisfactory because of size, location, condition, and/or estimated renovation costs.

After evaluating proposals submitted during the RFP process, and reviewing sites and existing facilities, the Service determined the preferred alternative was to construct a new training center on a site to be acquired by the Service. The Service estimated the maximum project costs to be about $66.4 million.

On April 2, 1985, the Postal Service Board of Governors provided contingent approval of about $66.4 million for the training center project funds. The funds included about $64.6 million for site acquisition, design and construction of a 771,000 square foot training center, and equipment acquisition in Norman, Oklahoma; and about $1.8 million for moving costs and furnishings. The Governors approved the funds with the contingency that the Service, before entering a commitment for a final facility design, would conduct a study to determine whether some training functions could be decentralized rather than being located at the new training center.

In July 1985, a Service task force completed the training decentralization study. The task force concluded that high technology courses related to mail processing equipment should be offered at the new training center and that most of the remaining courses should be offered at the regional or local level. The task force concluded that the size of the planned training center could be reduced, resulting in project cost reductions of about $20 to $30 million.

Postal Service training officials generally agreed that training should be decentralized but determined that only 25 of 97 courses should be decentralized. The Service plans to decentralize retail equipment, building-related, and some automotive courses.

Training officials updated forecasts of student enrollments and determined that increases in other training requirements partially offset the reduction effect of the planned decentralization on the total training requirement. In September 1985, the Service advised the Board of Governors that the size of the planned facility would be reduced by about 45,000 square feet and that project costs would be reduced by about $3.5 million. As of September 1985, the Service planned to construct a 726,000 square foot training center at an estimated maximum cost of $62.9 million.[1]

## Former Eisenhower College Facility

The former Eisenhower College is located in Seneca Falls, New York. It functioned as a liberal arts college, as a part of the Rochester Institute of Technology, until its closing in 1982. The Institute functioned as a caretaker for the former college after its closing until 1985, when the Department of Education assumed ownership of the facilities.

The former college campus is comprised of about 286 acres of land and 15 facilities containing about 502,000 square feet of space. The facilities, constructed between 1968 and 1976, include instructional, administrative, and athletic/fieldhouse buildings; a library; and dormitories.

In October 1984, Service officials surveyed the former college to determine its potential as a replacement for the present Technical Training Center in Norman, Oklahoma. The officials found the facilities to be well maintained and in excellent condition. However, they initially estimated it would cost about $71.8 million to adapt the site for the Technical Training Center. The estimate included costs for site acquisition, rehabilitating existing facilities, and constructing new facilities. They also determined that the former college's geographic location presents severe weather conditions and serious limitations in airline transportation that are not conducive to the operation of a national maintenance technical

[1]In June 1986, after the completion of our audit work, the Postal Service announced major changes in its plan for construction of a new center in Norman. The Service's scaled-down plan provides for (1) construction of 240,000 square feet of classrooms and laboratories at a cost of about $25 million, (2) continued leasing of a building at the University of Oklahoma as a dormitory (instead of new construction of a dormitory), and (3) renovation of the dormitory building at a cost of about $4.6 million to increase the building's bed space.

The Service said that the reduced space requirements reflect a decision by the Postmaster General to extend the hours the facility will be used each day for training and to revise the Center's curriculum to focus more completely on high technology courses. According to the Service, these measures will enable it to meet its needs with a facility about 32 percent smaller than that originally planned and at an investment reduction from about $66.4 million (approved by the Service's Board of Governors in 1985) to about $30 million.

training center. Service officials concluded that the former Eisenhower College did not offer any unique economic or operational benefits to the Postal Service.

In April 1985, the Department of Education assumed ownership of the former Eisenhower College. In June 1985, Education officials stated that the Postal Service could acquire the former college at no cost.[2]

The Service refined its initial cost estimate for adapting the former college to the Technical Training Center, recognizing it would not incur site acquisition costs. As of June 1985, the Service estimated it would cost $61.3 million to relocate the training center to the former Eisenhower College. The cost estimate included $53.6 million for facility rehabilitation and construction, $1.6 million for furnishings, and $6.1 million for relocating personnel and equipment. The Service concluded that the former college was not the optimum site for the new training center.

## Previous GAO Testimony

On June 18, 1985, at the request of the Chairman of the House Subcommittee on Postal Operations and Services, we testified on our preliminary observations regarding the Postal Service's decision to construct a new training center in Oklahoma rather than use the vacant Eisenhower College site in New York.

In our testimony, we stated that our tentative observations were that

- the Service had not evaluated the costs of locating the Center at the Eisenhower College site in nearly the depth in which it had evaluated the costs for construction in Norman, and
- the estimated costs developed by the Service for locating at the College may have been overstated.

We stated that we planned to develop comparative cost data for the two relocation alternatives.

[2]In March 1986, after completion of our audit work, a Department of Education official told us that Education had reconsidered its offer to provide the College to the Service at no cost. He said that Education had requested that the Service provide about $2 million in funds or comparable mail services in exchange for transferring the College to the Service. A Service official told us that the Service is making a comprehensive review of its training program, including training facilities, and that the Service did not have a position concerning Education's revised offer.

## Objectives, Scope, and Methodology

In the April 4, 1985, joint letter received from Senators Moynihan and D'Amato and Representatives Horton and Stratton, we were requested to evaluate the Postal Service's decision to build a new technical training center at Norman, Oklahoma, rather than to relocate the existing center from Norman to the former Eisenhower College in Seneca Falls, New York. Further, in making our evaluation, we were requested to estimate the costs, over the next 10 years, of locating the training center at each of these two locations. Also, the Postal Service testified during a congressional hearing that there were mission-related factors, other than costs, which made the Norman location the preferred location. In order to evaluate the Service's decision to build in Norman, we decided that we also needed to evaluate these factors.

To accomplish these objectives, we examined Postal Service records and interviewed Service officials and staff at Service headquarters and the current Technical Training Center at Norman. We examined records of the former Eisenhower College and interviewed the College's former physical plant manager, who was still at the site in a caretaker role. We toured both the current Center at Norman and the site of the proposed Center at Norman and we inspected the Eisenhower facilities.

In developing 10- and 20-year estimates of costs to renovate existing facilities and to construct new ones at the former Eisenhower College to meet the training center facilities requirements, we were assisted by the U. S. Army Corps of Engineers and a construction engineering consultant with expertise in computer applications in engineering.

## Methodology Used to Estimate and Compare Costs

We estimated the major costs of locating and operating the Service's Technical Training Center in both Norman, Oklahoma, and Seneca Falls, New York, using net present value analysis. Net present value analysis is a technique for converting cash flows occurring over time to equivalent values at a common point in time.

We completed analyses which discount major costs to the beginning of fiscal years 1985 and 1986. Our analyses included both selected investment costs and selected future operating costs for 10-year and 20-year periods. By agreement with the congressional requesters subsequent to the April 4, 1985, request, our analyses included only major costs, such as fuel and utilities, which differed significantly for the two locations. Our analyses did not include costs, such as furnishings, student per diem, self-insurance, and police and fire protection, which we believed would be relatively small or whose differences (between Norman and

Seneca Falls) would likely be too small to affect an economic choice between the two locations.

While we were performing our audit work, Department of Education officials told us that Education, which owns Eisenhower, was willing to provide the Eisenhower land and buildings to the Service at no cost.[3] On the basis of this information, we excluded acquisition costs for the Eisenhower land and buildings from our analyses.

## Identifying Net Present Values as of Fiscal Year 1985

Our analyses identifying net present values as of fiscal year 1985 identified the costs for locating and operating the training center at both locations at about the time the Service decided to construct a new center in Norman, Oklahoma. This enabled us to answer the question, "Which facility appears to have had the economic advantage at the time the decision was made?"

Investment costs were allocated over the life of the construction projects based on estimates of when the project funds would be spent. Since the Service plans to occupy a new Center in fiscal year 1989, we used fiscal year 1989 as the first year the Service would incur operating costs at a new location.

Cost elements for both locations were adjusted to reflect the effects of inflation. We increased fuel and utilities by 8 percent and other costs by 6 percent for each year of our analyses because these are the same factors used by the Service when it estimated the costs of several alternatives for meeting its training space requirements.

Using fiscal year 1985 as the base year, we discounted future costs of both options to account for the time value of money. We used three discount rates to reflect the sensitivity of the costs to variable discount rates.

We used an 11.9 percent discount rate, which was the discount rate as of October 1, 1984, the start of fiscal year 1985, the year in which the Service made its decision. The rate is based on the average yield of government securities maturing during the periods October 1985 through September 1998 and October 1985 through September 2008; that is,

[3]The federal government—specifically, the Department of Education—would incur an opportunity cost by providing the land and buildings at no cost to the Service. While the Service's acquisition cost would be zero, the federal government, in providing a subsidy to the Service, would incur a cost in the form of an economic opportunity forgone.

from October 1985 to the end points of our analyses. In accordance with our policy for computing discount rates, the computations excluded securities callable during the first year, or fiscal year 1985, and also excluded securities yielding 4.25 percent or less.

To obtain a discount rate more current at the time of our review, we used the same methodology as above. We computed the average yield on government securities as of October 1, 1985, or the start of fiscal year 1986, to be 9.30 percent during the period October 1986 through September 1998, and 9.54 percent during the period October 1986 through September 2008. To simplify our analysis, we averaged the yields on government securities that we computed for the two time periods and used the rate of 9.4 percent as the discount rate prevalent during our review. We discounted costs using this more current rate of 9.4 percent and the rate of 14.0 percent, the rate used by the Postal Service.

## Identifying Net Present Values as of Fiscal Year 1986

We also analyzed the cost of locating and operating the training center at both locations by discounting costs to the current year, fiscal year 1986, the same period during which we completed our review. Costs were escalated at a rate of 4.3 percent, based on a forecast of the inflation rate through 1990 made by the Congressional Budget Office (CBO) in August 1985. Although this estimate of the inflation rate does not extend through the full time periods of our analysis, we believe the rate provides a reasonable indication of future economic conditions.

We discounted costs using a rate of 9.4 percent. As discussed above, this was the approximate discount rate prevalent during our review. We also discounted costs using the rate of 14.0 percent, the rate used by the Service in its fiscal year 1985 analysis.

Since our cost estimates discounted to the current fiscal year were based on a more current discount rate and a more current projection of the inflation rate than were our cost estimates discounted to fiscal year 1985, we believe they should provide a more realistic basis for comparing the two alternatives. They enabled us to answer the question, "If the decision were being made today, which facility would appear to have the economic advantage?"

Our analyses included the same investment and operating cost elements used in our analyses discounting costs to fiscal year 1985. However, when discounting costs to fiscal year 1986, our Norman-alternative analyses excluded about $2,505,000 in sunk costs. This sum represents

funds spent prior to the starting point of our analyses which cannot be recovered, such as funds spent for architect-engineer services.

Our Norman-alternative analyses, however, did include about $1,578,000 in recoverable land costs. This sum represents the Service's expenditures for land and site improvements, by the end of fiscal year 1985, that we assumed would be recoverable at the beginning of fiscal year 1986.

### Undiscounted Costs

Our analyses include estimates of the undiscounted costs, as of fiscal years 1985 and 1986, of locating the Center at Norman, Oklahoma, and Seneca Falls, New York. The undiscounted costs represent our estimates of the funds that would be spent, during the periods of our analyses, on the cost elements we reviewed. The undiscounted costs are expressed in current dollars; that is, the costs have been escalated to reflect the estimated rate of inflation, or increase in general price levels, during the periods of our analyses. Costs in our fiscal year 1985 analyses were escalated by using the same escalation factors used by the Service. Costs in our fiscal year 1986 analyses were escalated at a rate of 4.3 percent, based on a forecast of the inflation rate through 1990 made by the CBO in August 1985.

## Bases for Costs Used in Our Cost Comparisons

The bases for the cost estimates for nonrecurring and recurring costs that we used in developing and comparing total costs for locating and operating the Service's training center in either Norman or at the former Eisenhower College are discussed below.

### Land and Construction Costs

We accepted the Service's space requirements, as approved by the Board of Governors, as being valid. For the new training center to be built in Norman, we used the Service's estimate of about $64 million as the cost to acquire land and construct its Center. To compute the cost of converting Eisenhower College to meet the Service's training needs, we obtained the assistance of the U. S. Army Corps of Engineers. We determined that it would cost about $53.7 million to provide the needed facilities through renovation of existing facilities and some new construction at the College.

## Relocation Costs

We used the Service's cost estimate, which we determined to be reasonable, to relocate the Center from existing facilities in Norman to the proposed new facility in Norman. For relocation to Seneca Falls, we obtained the assistance of the General Services Administration to help us compute equipment relocation costs. We estimated staff relocation costs on the basis of the Service's previously experienced relocation costs.

## Lost-Staff-Time Costs

During relocation of the Center to a new site, training would be suspended and the training services of the Center's professional staff would be lost. The Service estimated that it would take about 3 weeks to relocate to a new Center in Norman and about 7.4 weeks to relocate the Center from Norman to Seneca Falls. We believe the Service's estimates are reasonable. We estimated lost-staff-time costs based on the salaries that would be paid to the professional staff during the relocation period.

## Facility Operating Costs

For facility operating costs we used the Service's estimates for the new Norman facility where we were able to determine their reasonableness. We made adjustments to the Service's cost estimates for fuel, utilities, and custodial services. Adjustments were made to the estimates to correct the Service's use of erroneous square footages to be contained in the new facility. For the former Eisenhower College, as renovated to meet the Service's needs, we estimated operational costs by projecting costs for gas, electric, and refuse services, based on the College's last full year of operations. For communications, utilities (water and sewer), housing, and custodial services we estimated costs by correlating operations at the current and projected Norman facilities to a similar level of operation at the College.

## Facility Maintenance Costs

We used the Service's estimated maintenance cost for the new Norman facility after making adjustments to reflect the proper proposed number of square feet to be maintained. We estimated maintenance costs at the College to be comparable to those at the new Norman facility except that we increased the variable maintenance costs by about 22.4 percent because we estimated that the facility space to be maintained at the College would be about 22.4 percent greater than at Norman.

## Student Transportation Costs

Using statistical sampling, we projected student air transportation costs from the students' points of origin to Oklahoma City, Oklahoma, and Rochester and Syracuse, New York. We selected Oklahoma City because its airport would, as it does now, serve students attending a Center located at Norman. We selected Rochester and Syracuse because their airports would be the most likely to serve students attending a training center located at Eisenhower. The Rochester and Syracuse airports are about 57 and 50 miles, respectively, from Seneca Falls.

We projected that the annual costs would be about the same for transporting students to the three locations. The cost differences were relatively small and were not statistically significant in our analyses.

We also attempted to estimate ground transportation costs for student travel between the airports and the training center site. However, we could not accurately or reasonably quantify several variables, such as the number of students that would use ground transportation services, that would significantly affect transportation fares. Therefore, we did not include estimates of the student ground transportation costs.

## Residual Values Used in Our Cost Comparisons

We estimated the residual values for both locations by using essentially the methodology used by the Service to calculate the residual values of the land and facilities for the new Center in Norman. Residual values are the estimated future values of land and facilities at the end of our periods of analyses.

The Service estimated the residual values of the land and facilities for the new Center based on the following assumptions:

- The market value of the land would be equivalent to the cost of acquiring and improving the land.
- The land would increase in value each year but would not experience a reduction in value for depreciation, or use, of the land.
- The market value of the facility immediately after its construction would be estimated as about 83 percent of its original construction cost.
- The residual value of the facility would be affected by the inflation rate, which would increase the value of the facility over time; and by use, which would decrease the value of the facility over time. The Service estimated the training center would have a life of 40 years.

The Service's methodology for estimating the residual values of land and facilities appears reasonable. However, we included the costs of the

communications system when we computed the market values of the facilities at both locations. We believe that a communications system is a capital asset that, over its extended useful life, contributes to the value of a facility.

## Estimated Residual Values of the Land and Planned Facility at Norman

We used the Service's estimate of about $1.6 million as the value for land and land improvements at Norman. We escalated this land value, as appropriate for each year of our analyses, to estimate the residual value of the land at the end of our periods of analyses.

For our fiscal year 1985 analysis, we used the Service's estimate of about $63.5 million as the cost for constructing a new Center in Norman and for acquiring a communications system. We estimated the market value of the new Center immediately after construction would be about $52.7 million, or 83 percent of the cost to construct the Center and to acquire a communications system. We escalated the market value of the Center, as appropriate for each year of our analyses, and estimated depreciation based on a facility life of 40 years. We estimated the residual value of the Center based on its depreciated value at the end of our periods of analyses.

For our fiscal year 1986 analysis, we essentially used the same methodology to estimate the residual value of the new Center. However, we reduced the Service's construction cost estimate by $2.5 million when we estimated the market value of the new Center. The $2.5 million represents unrecoverable costs incurred prior to fiscal year 1986.

## Estimated Residual Values of the Land and Facilities at Eisenhower

We used the Service's methodology for estimating residual values to estimate the current and future values of the existing land and facilities and the future value of the facilities renovation and new construction that would be required to adapt Eisenhower for the Service's Center.

The existing improved land and facilities at Eisenhower were acquired during the late 1960s through the mid-1970s. According to Eisenhower College records, the improved land had a value of $1,319,370 as of 1978. Using this as the value of the land in 1978, we escalated the land value as appropriate for each year of our analyses to estimate the residual value of the land at the end of our periods of analyses.

The 15 existing facilities at Eisenhower were constructed during the period 1968 through 1976, resulting in an $18.6 million investment.

Because of the extended construction period, we estimated the current and future values for each building by using the Service's methodology. We escalated the market values of the facilities as appropriate for each facility for each year of our analyses. We then depreciated the escalated market values of the facilities, based on a 40-year life after the completion of each facility's construction, and summed the resulting values to determine the total estimated residual value of the existing facilities at the end of our periods of analyses.

We essentially used the same methodology to estimate the residual values of the facility renovations and construction that would be required to adapt Eisenhower for the Service's Center, except that we considered the value of the communications system when we computed the residual values. We estimated that facility renovations and construction would be completed in 1988 and a communications system would be acquired at a total cost of about $54.6 million. We estimated that the market value of the renovations and construction and the communications system would be about $45.3 million, or 83 percent of their estimated costs. We escalated the market value as appropriate for each year of our analyses. We depreciated the escalated market value, based on straight-line depreciation and a 40-year life starting with the completion of construction in 1988, to estimate the residual value of the facility renovations and construction at the end of our periods of analyses.

We conducted our field work and analysis work during the period May 1985 to January 1986. Our work was performed in accordance with generally accepted government auditing standards.

# Comparative Cost Estimates

The Eisenhower College complex is currently comprised of 15 existing facilities containing about 502,000 square feet of building space located on about 286 acres of land. We determined that the existing facilities would have to be rehabilitated and new facilities constructed, containing about 504,000 square feet of space. Thus, a total of about 1 million square feet of space would be needed to adequately accommodate the Service's training requirements at Eisenhower.

The Service estimated that a facility containing 771,000 square feet of space, constructed on about 50 acres of land, would be needed to adequately accommodate its training requirements in Norman. The additional facility space at Eisenhower would be needed because the space in the existing facilities could not be used as efficiently for the Service's training requirements as the space contained in the new facilities at Norman, which would be designed and constructed to meet specific training requirements.

We determined that the larger amount of space required to accommodate the Service's Center at Eisenhower would cause the Center's operational costs, such as fuel, utilities, and facility maintenance costs, to be higher at Eisenhower than in Norman. However, because of the larger land site and greater facility space at Eisenhower, the initial value of these assets would be greater at that location than at the Norman location. We estimated that the residual values of the land and facilities at Eisenhower at the end of our 10-year period of analysis would be higher than the residual values at Norman. We estimated that the residual value of the land at Eisenhower at the end of our 20-year period of analysis would be higher than the residual value of the land at Norman. However, we estimated that the residual value of the facilities at Eisenhower at the end of our 20-year period of analysis would be lower than the residual value of the facility at Norman. This would occur because the existing facilities at Eisenhower would be nearer to the end of their useful lives than would be the new facility at Norman. This would reduce their contribution to the residual value of the Eisenhower location.

We estimated the costs of locating and operating the Center at both locations for 10-year and 20-year periods. We discounted costs to account for the time value of money, using rates of 11.9 percent and 9.4 percent, and included the estimated discounted residual value of the land and facilities in our analyses. We reduced our estimated costs for each location by our estimates of the residual values of each location's land and

facilities at the end of the 10- and 20-year periods of analyses to identify the net costs of locating the Center at both locations.

We concluded from the above calculations that, over a 10-year operating period, the discounted costs of relocating and operating a Center would be lower at the Eisenhower site than at the Norman site. This would occur because the lower nonrecurring costs and higher land-and-facility residual values at Eisenhower, compared to those at Norman, would more than offset the higher operating costs disadvantage for Eisenhower.

However, we concluded that, over a 20-year operating period, the discounted costs to locate and operate a Center would be lower at the Norman site. We estimated that the residual value of the facilities at Eisenhower would be lower at the end of our 20-year period of analysis compared to the residual value at the end of our 10-year period of analysis. We also estimated that the residual value of the facilities at Eisenhower would be lower than the residual value of the facility at Norman at the end of our 20-year period of analysis. The shift in economic advantage from Eisenhower to Norman during the second half of the 20-year period would occur because of the combined effects of Eisenhower's greater operating costs and lower facility residual values, compared to those at Norman. Eisenhower's advantage of lower nonrecurring costs would not completely offset these two disadvantages.

## Tables II.1 to II.8

These tables show the estimated project and operational costs, for 10-year and 20-year periods, for locating the Service's training center in Norman, Oklahoma, and at Eisenhower College.

Tables II.1 to II.4 identify these costs as of fiscal year 1985, which was about the time the Service decided to construct a new Center in Norman. Tables II.5 to II.8 identify these costs as of fiscal year 1986, which was the period during which we completed our review. The highlighted costs are the discounted costs based on the discount rates in effect as of the periods of our analyses.

**Table II.1: Proposed Norman Facility Project and 10-Year Operational Costs as of Fiscal Year 1985**

Dollars in thousands

| | Undiscounted costs | FY 1985 net present values by discount rates | | |
|---|---|---|---|---|
| | | 9.4% | 11.9% | 14.0% |
| **Nonrecurring costs** | | | | |
| Land acquisition and site development[a] | 1,578 | 1,442 | **1,410** | 1,384 |
| Building construction and site work[a] | 62,618 | 48,103 | **45,061** | 42,716 |
| Relocation[b] | | | | |
| Equipment relocation | 97 | 68 | **62** | 58 |
| Staff relocation | 0 | 0 | **0** | 0 |
| Lost staff time[b] | 489 | 341 | **312** | 289 |
| Communications system acquisition[b] | 890 | 621 | **568** | 527 |
| **Total nonrecurring costs** | **65,672** | **50,576[c]** | **47,413** | **44,974** |
| **Recurring costs[d]** | | | | |
| Facility operations | | | | |
| Communications | 1,883 | 786 | **637** | 538 |
| Fuel and utilities | 15,232 | 6,336 | **5,135** | 4,333 |
| Housing and custodial | 26,895 | 11,343 | **9,225** | 7,806 |
| Maintenance | 14,648 | 6,178 | **5,024** | 4,252 |
| Student air transportation | 110,097 | 46,433 | **37,763** | 31,956 |
| **Total recurring costs** | **168,754[c]** | **71,076** | **57,784** | **48,885** |
| **Less residual values** | | | | |
| Land | (3,366) | (957) | **(697)** | (538) |
| Buildings | (70,799) | (20,127) | **(14,669)** | (11,307) |
| **Total residual values** | **(74,165)** | **(21,084)** | **(15,367)[c]** | **(11,845)** |
| **Net costs** | **160,261** | **100,568** | **89,831[c]** | **82,014** |

[a]Costs allocated over the period of our analysis based on the Service's estimates of expenditures.

[b]Costs assumed to be incurred during fiscal year 1988.

[c]Figures do not add due to rounding.

[d]Costs which will begin accumulating during fiscal year 1989, based on the Service's plan to occupy the facility during fiscal year 1989.

**Table II.2: Eisenhower Facility Project and 10-Year Operational Costs as of Fiscal Year 1985**

Dollars in thousands

| | Undiscounted costs | FY 1985 net present values by discount rates | | |
|---|---|---|---|---|
| | | 9.4% | 11.9% | 14.0% |
| **Nonrecurring costs** | | | | |
| Land acquisition and site development | 0 | 0 | **0** | 0 |
| Building rehabilitation, construction, and site work[a] | 53,734 | 40,409 | **37,641** | 35,514 |
| Relocation[b] | | | | |
| Equipment relocation | 780 | 545 | **498** | 462 |
| Staff relocation | 2,513 | 1,755 | **1,603** | 1,488 |
| Lost staff time[b] | 1,206 | 842 | **769** | 714 |
| Communications system acquisition[b] | 890 | 621 | **568** | 527 |
| **Total nonrecurring costs** | **59,124[c]** | **44,171[c]** | **41,078[c]** | **38,705** |
| **Recurring costs[d]** | | | | |
| Facility operations | | | | |
| Communications | 1,883 | 786 | **637** | 538 |
| Fuel and utilities | 21,725 | 8,898 | **7,182** | 6,041 |
| Housing and custodial | 29,543 | 12,460 | **10,133** | 8,575 |
| Maintenance | 16,635 | 7,016 | **5,706** | 4,828 |
| Student air transportation | 113,375 | 47,816 | **38,887** | 32,908 |
| **Total recurring costs** | **183,160[c]** | **76,975[c]** | **62,546[c]** | **52,889[c]** |
| **Less residual values** | | | | |
| Land | (4,231) | (1,316) | **(981)** | (770) |
| Buildings | (84,409) | (24,625) | **(18,069)** | (14,007) |
| **Total residual values** | **(88,640)** | **(25,941)** | **(19,050)** | **(14,777)** |
| **Net costs** | **153,644** | **95,205** | **84,574** | **76,817** |

[a]Costs allocated over fiscal years 1986 through 1988 based on our estimates of expenditures during the life of the project. Project is assumed to have started in April 1986 with completion in September 1988.

[b]Costs assumed to be incurred during fiscal year 1988.

[c]Figures do not add due to rounding.

[d]Costs which will begin accumulating during fiscal year 1989 based on the assumption that the Service would occupy the facility in fiscal year 1989.

**Table II.3 Proposed Norman Facility Project and 20-Year Operational Costs as of Fiscal Year 1985**

Dollars in thousands

| | Undiscounted costs | FY 1985 net present values by discount rates | | |
|---|---|---|---|---|
| | | 9.4% | 11.9% | 14.0% |
| **Nonrecurring costs** | | | | |
| Land acquisition and site development[a] | 1,578 | 1,442 | **1,410** | 1,384 |
| Building construction and site work[a] | 62,618 | 48,103 | **45,061** | 42,716 |
| Relocation[b] | | | | |
| Equipment relocation | 97 | 68 | **62** | 58 |
| Staff relocation | 0 | 0 | **0** | 0 |
| Lost staff time[b] | 489 | 341 | **312** | 289 |
| Communications system acquisition[b] | 890 | 621 | **568** | 527 |
| **Total nonrecurring costs** | **65,672** | **50,576[c]** | **47,413** | **44,974** |
| **Recurring costs[d]** | | | | |
| Facility operations | | | | |
| Communications | 5,323 | 1,377 | **1,021** | 807 |
| Fuel and utilities | 48,116 | 11,907 | **8,737** | 6,857 |
| Housing and custodial | 75,059 | 19,615 | **14,592** | 11,577 |
| Maintenance | 40,879 | 10,683 | **7,947** | 6,305 |
| Student air transportation | 307,263 | 80,295 | **59,733** | 47,393 |
| **Total recurring costs** | **476,640** | **123,876[c]** | **92,029[c]** | **72,940[c]** |
| **Less residual values** | | | | |
| Land | (6,028) | (698) | **(406)** | (260) |
| Buildings | (84,527) | (9,785) | **(5,689)** | (3,641) |
| **Total residual values** | **(90,554)[c]** | **(10,483)** | **(6,095)** | **(3,901)** |
| **Net costs** | **451,758** | **163,969** | **133,347** | **114,013** |

[a]Costs allocated over the period of our analysis based on the Service's estimates of expenditures.

[b]Costs assumed to be incurred during fiscal year 1988.

[c]Figures do not add due to rounding.

[d]Costs which will begin accumulating during fiscal year 1989, based on the Service's plan to occupy the facility during fiscal year 1989.

**Table II.4: Eisenhower Facility Project and 20-Year Operational Costs as of Fiscal Year 1985**

Dollars in thousands

| | Undiscounted costs | FY 1985 net present values by discount rates | | |
|---|---|---|---|---|
| | | 9.4% | 11.9% | 14.0% |
| **Nonrecurring costs** | | | | |
| Land acquisition and site development | 0 | 0 | **0** | 0 |
| Building rehabilitation, construction, and site work[a] | 53,734 | 40,409 | **37,641** | 35,514 |
| Relocation[b] | | | | |
| Equipment relocation | 780 | 545 | **498** | 462 |
| Staff relocation | 2,513 | 1,755 | **1,603** | 1,488 |
| Lost staff time[b] | 1,206 | 842 | **769** | 714 |
| Communications system acquisition[b] | 890 | 621 | **568** | 527 |
| **Total nonrecurring costs** | **59,124[c]** | **44,171[c]** | **41,078[c]** | **38,705** |
| **Recurring costs[d]** | | | | |
| Facility operations | | | | |
| Communications | 5,323 | 1,377 | **1,021** | 807 |
| Fuel and utilities | 70,864 | 17,226 | **12,568** | 9,814 |
| Housing and custodial | 82,449 | 21,546 | **16,028** | 12,717 |
| Maintenance | 46,426 | 12,132 | **9,025** | 7,161 |
| Student air transportation | 316,411 | 82,686 | **61,511** | 48,804 |
| **Total recurring costs** | **521,473** | **134,967** | **100,153** | **79,304[c]** |
| **Less residual values** | | | | |
| Land | (7,578) | (960) | **(571)** | (372) |
| Buildings | (80,293) | (9,378) | **(5,465)** | (3,505) |
| **Total residual values** | **(87,871)** | **(10,338)** | **(6,036)** | **(3,877)** |
| **Net costs** | **492,726** | **168,800** | **135,195** | **114,132** |

[a]Costs allocated over fiscal years 1986 through 1988 based on our estimates of expenditures during the life of the project. Project is assumed to have started in April 1986 with completion in September 1988.

[b]Costs assumed to be incurred during fiscal year 1988.

[c]Figures do not add due to rounding.

[d]Costs which will begin accumulating during fiscal year 1989 based on the assumption that the Service would occupy the facility in fiscal year 1989.

**Table II.5: Proposed Norman Facility Project and 10-Year Operational Costs as of Fiscal Year 1986**

Dollars in thousands

| | Undiscounted costs | FY 1986 net present values by discount rates | |
|---|---|---|---|
| | | 9.4% | 14.0% |
| **Nonrecurring costs** | | | |
| Recoverable land acquisition costs[a] | 1,578 | **1,578** | 1,578 |
| Building construction and site work[b] | 60,113 | **50,120** | 46,191 |
| Relocation[c] | | | |
| Equipment relocation | 93 | **71** | 62 |
| Staff relocation | 0 | **0** | 0 |
| Lost staff time[c] | 466 | **356** | 314 |
| Communications system acquisition[c] | 890 | **680** | 601 |
| **Total nonrecurring costs** | **63,139[d]** | **52,804[d]** | **48,747[d]** |
| **Recurring costs[e]** | | | |
| Facility operations | | | |
| Communications | 1,743 | **805** | 577 |
| Fuel and utilities | 10,753 | **5,021** | 3,620 |
| Housing and custodial | 22,912 | **10,698** | 7,714 |
| Maintenance | 12,889 | **6,018** | 4,339 |
| Student air transportation | 96,876 | **45,235** | 32,616 |
| **Total recurring costs** | **145,174[d]** | **67,778[d]** | **48,867[d]** |
| **Less residual values** | | | |
| Land | (2,728) | **(848)** | (497) |
| Buildings | (57,854) | **(17,993)** | (10,533) |
| **Total residual values** | **(60,582)** | **(18,842)[d]** | **(11,030)** |
| **Net costs** | **147,731** | **101,741[d]** | **86,583[d]** |

[a]Excludes about $2.5 million for unrecoverable sunk costs, such as architect-engineer services, incurred prior to fiscal year 1986.

[b]Costs allocated over the period of our analysis based on the Service's estimates of expenditures.

[c]Costs assumed to be incurred during fiscal year 1988.

[d]Figures do not add due to rounding.

[e]Costs which will begin accumulating during fiscal year 1989, based on the Service's plan to occupy the facility during fiscal year 1989.

**Table II.6: Eisenhower Facility Project and 10-Year Operational Costs as of Fiscal Year 1986**

Dollars in thousands

| | Undiscounted costs | FY 1986 net present values by discount rates 9.4% | 14.0% |
|---|---|---|---|
| **Nonrecurring costs** | | | |
| Land acquisition and site development | 0 | **0** | 0 |
| Building rehabilitation, construction, and site work[a] | 53,734 | **44,207** | 40,486 |
| Relocation[b] | | | |
| Equipment relocation | 744 | **568** | 502 |
| Staff relocation | 2,394 | **1,829** | 1,616 |
| Lost staff time[b] | 1,149 | **877** | 775 |
| Communications system acquisition[b] | 890 | **680** | 601 |
| **Total nonrecurring costs** | **58,911** | **48,160[c]** | **43,980** |
| **Recurring costs[d]** | | | |
| Facility operations | | | |
| Communications | 1,743 | **805** | 577 |
| Fuel and utilities | 16,269 | **7,460** | 5,334 |
| Housing and custodial | 24,765 | **11,563** | 8,338 |
| Maintenance | 14,637 | **6,835** | 4,928 |
| Student air transportation | 99,761 | **46,582** | 33,587 |
| **Total recurring costs** | **157,175** | **73,245** | **52,764** |
| **Less residual values** | | | |
| Land | (3,062) | **(1,042)** | (636) |
| Buildings | (66,921) | **(21,255)** | (12,570) |
| **Total residual values** | **(69,984)[c]** | **(22,297)** | **(13,205)[c]** |
| **Net costs** | **146,101[c]** | **99,108** | **83,539** |

[a]Costs allocated over fiscal years 1986 through 1988 based on our estimates of expenditures during the life of the project. Project is assumed to have started in April 1986 with completion in September 1988.

[b]Costs assumed to be incurred during fiscal year 1988.

[c]Figures do not add due to rounding.

[d]Costs which will begin accumulating during fiscal year 1989 based on the assumption that the Service would occupy the facility in fiscal year 1989.

**Table II.7: Proposed Norman Facility Project and 20-Year Operational Costs as of Fiscal Year 1986**

Dollars in thousands

| | Undiscounted costs | FY 1986 net present values by discount rates 9.4% | 14.0% |
|---|---|---|---|
| **Nonrecurring costs** | | | |
| Recoverable land acquisition costs[a] | 1,578 | **1,578** | 1,578 |
| Building construction and site work[b] | 60,113 | **50,120** | 46,191 |
| Relocation[c] | | | |
| Equipment relocation | 93 | **71** | 63 |
| Staff relocation | 0 | **0** | 0 |
| Lost staff time[c] | 466 | **356** | 314 |
| Communications system acquisition[c] | 890 | **680** | 601 |
| **Total nonrecurring costs** | **63,139[d]** | **52,804[d]** | **48,747** |
| **Recurring costs[e]** | | | |
| Facility operations | | | |
| Communications | 4,458 | **1,321** | 824 |
| Fuel and utilities | 27,136 | **8,136** | 5,108 |
| Housing and custodial | 57,819 | **17,336** | 10,884 |
| Maintenance | 32,525 | **9,752** | 6,123 |
| Student air transportation | 244,468 | **73,299** | 46,020 |
| **Total recurring costs** | **366,405[d]** | **109,844** | **68,958[d]** |
| **Less residual values** | | | |
| Land | (4,156) | **(526)** | (204) |
| Buildings | (58,760) | **(7,442)** | (2,886) |
| **Total residual values** | **(62,916)** | **(7,968)** | **(3,090)** |
| **Net costs** | **366,628** | **154,680** | **114,615** |

[a]Excludes about $2.5 million for unrecoverable sunk costs, such as architect-engineer services, incurred prior to fiscal year 1986.

[b]Costs allocated over the period of our analysis based on the Service's estimates of expenditures.

[c]Costs assumed to be incurred during fiscal year 1988.

[d]Figures do not add due to rounding.

[e]Costs which will begin accumulating during fiscal year 1989, based on the Service's plan to occupy the facility during fiscal year 1989.

**Table II.8: Eisenhower Facility Project and 20-Year Operational Costs as of Fiscal Year 1986**

Dollars in thousands

| | Undiscounted costs | FY 1986 net present values by discount rates | |
|---|---|---|---|
| | | 9.4% | 14.0% |
| **Nonrecurring costs** | | | |
| Land acquisition and site development | 0 | **0** | 0 |
| Building rehabilitation, construction and site work[a] | 53,734 | **44,207** | 40,486 |
| Relocation[b] | | | |
| Equipment relocation | 744 | **568** | 502 |
| Staff relocation | 2,394 | **1,829** | 1,616 |
| Lost staff time[b] | 1,149 | **877** | 775 |
| Communications system acquisition[b] | 890 | **680** | 601 |
| **Total nonrecurring costs** | **58,911** | **48,160[c]** | **43,980** |
| **Recurring costs[d]** | | | |
| Facility operations | | | |
| Communications | 4,458 | **1,321** | 824 |
| Fuel and utilities | 42,683 | **12,484** | 7,735 |
| Housing and custodial | 62,493 | **18,737** | 11,764 |
| Maintenance | 36,938 | **11,075** | 6,953 |
| Student air transportation | 251,746 | **75,481** | 47,390 |
| **Total recurring costs** | **398,318** | **119,099[c]** | **74,665[c]** |
| **Less residual values** | | | |
| Land | (4,665) | **(646)** | (261) |
| Buildings | (56,900) | **(7,257)** | (2,824) |
| **Total residual values** | **(61,565)** | **(7,904)[c]** | **(3,085)** |
| **Net costs** | **395,663[c]** | **159,356[c]** | **115,560** |

[a]Costs allocated over fiscal years 1986 through 1988 based on our estimates of expenditures during the life of the project. Project is assumed to have started in April 1986 with completion in September 1988.

[b]Costs assumed to be incurred during fiscal year 1988.

[c]Figures do not add due to rounding.

[d]Costs which will begin accumulating during fiscal year 1989 based on the assumption that the Service would occupy the facility in fiscal year 1989.

## Tables II.9 to II.15

These tables show the cost advantages and disadvantages, over 10-year and 20-year operating periods, of locating and operating the Center at Eisenhower rather than at Norman.

Tables II.9 to II.12 identify Eisenhower's cost advantages and disadvantages as of fiscal year 1985, which was about the time the Service decided to construct a new Center in Norman. Table II.11 identifies the present values of the cost advantages and disadvantages based on the discount rate in effect as of the period of our fiscal year 1985 analysis.

Tables II.13 to II.15 identify Eisenhower's cost advantages and disadvantages as of fiscal year 1986, which was the period during which we completed our review. Table II.14 identifies the present values of the cost advantages and disadvantages based on the discount rate in effect as of the period of our fiscal year 1986 analysis.

**Table II.9: Eisenhower Alternative Cost Advantages and Disadvantages Based on Undiscounted Costs as of Fiscal Year 1985**

Dollars in thousands

| | Eisenhower (a) | Norman (b) | Difference (a) less (b) |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Nonrecurring costs | 59,124 | 65,672 | (6,548) |
| Recurring costs | 183,160 | 168,754 | 14,406 |
| Total costs | 242,284 | 234,426 | 7,858 |
| Less residual values | (88,640) | (74,165) | (14,475) |
| **Net costs** | **153,644** | **160,261** | **(6,617)** |
| **20-year operating period:** | | | |
| Nonrecurring costs | 59,124 | 65,672 | (6,548) |
| Recurring costs | 521,473 | 476,640 | 44,833 |
| Total costs | 580,597 | 542,312 | 38,285 |
| Less residual values | (87,871) | (90,554) | 2,683[a] |
| **Net costs** | **492,726** | **451,758** | **40,968** |

[a]Residual values are lower for the Eisenhower location compared to the Norman location. Therefore, this difference in residual values increases, rather than decreases, the total cost difference between Eisenhower and Norman. This constitutes an increase in the Eisenhower alternative's cost disadvantage.

**Table II.10: Eisenhower Alternative Cost Advantages and Disadvantages Based on Costs Discounted at 9.4 Percent as of Fiscal Year 1985**

Dollars in thousands

| | Eisenhower (a) | Norman (b) | Difference (a) less (b) |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Nonrecurring costs | 44,171 | 50,576 | (6,405) |
| Recurring costs | 76,975 | 71,076 | 5,899 |
| Total costs | 121,146 | 121,652 | (506) |
| Less residual values | (25,941) | (21,084) | (4,857) |
| **Net costs** | **95,205** | **100,568** | **(5,363)** |
| **20-year operating period:** | | | |
| Nonrecurring costs | 44,171 | 50,576 | (6,405) |
| Recurring costs | 134,967 | 123,876 | 11,091 |
| Total costs | 179,138 | 174,452 | 4,686 |
| Less residual values | (10,338) | (10,483) | 146[a,b] |
| **Net costs** | **168,800** | **163,969** | **4,831[a]** |

[a]Figures do not add due to rounding.

[b]Residual values are lower for the Eisenhower location compared to the Norman location. Therefore, this difference in residual values increases, rather than decreases, the total cost difference between Eisenhower and Norman. This constitutes an increase in the Eisenhower alternative's cost disadvantage.

**Table II.11: Eisenhower Alternative Cost Advantages and Disadvantages Based on Costs Discounted at 11.9 Percent as of Fiscal Year 1985**

Dollars in thousands

| | Eisenhower (a) | Norman (b) | Difference (a) less (b) |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Nonrecurring costs | 41,078 | 47,413 | (6,335) |
| Recurring costs | 62,546 | 57,784 | 4,761[a] |
| Total costs | 103,624 | 105,197 | (1,573)[a] |
| Less residual values | (19,050) | (15,367) | (3,683) |
| **Net costs** | **84,574** | **89,831[a]** | **(5,257)[a]** |
| **20-year operating period:** | | | |
| Nonrecurring costs | 41,078 | 47,413 | (6,335) |
| Recurring costs | 100,153 | 92,029 | 8,124 |
| Total costs | 141,231 | 139,442 | 1,790[a] |
| Less residual values | (6,036) | (6,095) | 59[b] |
| **Net costs** | **135,195** | **133,347** | **1,849[a]** |

[a]Figures do not add/crossadd due to rounding.

[b]Residual values are lower for the Eisenhower location compared to the Norman location. Therefore, this difference in residual values increases, rather than decreases, the total cost difference between Eisenhower and Norman. This constitutes an increase in the Eisenhower alternative's cost disadvantage.

**Table II.12: Eisenhower Alternative Cost Advantages and Disadvantages Based on Costs Discounted at 14.0 Percent as of Fiscal Year 1985**

Dollars in thousands

| | Eisenhower (a) | Norman (b) | Difference (a) less (b) |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Nonrecurring costs | 38,705 | 44,974 | (6,269) |
| Recurring costs | 52,889 | 48,885 | 4,004 |
| Total costs | 91,595[a] | 93,859 | (2,265)[a] |
| Less residual values | (14,777) | (11,845) | (2,932) |
| **Net costs** | **76,817[a]** | **82,014** | **(5,197)** |
| **20-year operating period:** | | | |
| Nonrecurring costs | 38,705 | 44,974 | (6,269) |
| Recurring costs | 79,304 | 72,940 | 6,364 |
| Total costs | 118,009 | 117,914 | 95 |
| Less residual values | (3,877) | (3,901) | 24[b] |
| **Net costs** | **114,132** | **114,013** | **119** |

[a]Figures do not add/crossadd due to rounding.

[b]Residual values are lower for the Eisenhower location compared to the Norman location. Therefore, this difference in residual values increases, rather than decreases, the total cost difference between Eisenhower and Norman. This constitutes an increase in the Eisenhower alternative's cost disadvantage.

**Table II.13: Eisenhower Alternative Cost Advantages and Disadvantages Based on Undiscounted Costs as of Fiscal Year 1986**

Dollars in thousands

| | Eisenhower (a) | Norman (b) | Difference (a) less (b) |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Nonrecurring costs | 58,911 | 63,139 | (4,229 |
| Recurring costs | 157,175 | 145,174 | 12,001 |
| Total costs | 216,085[a] | 208,313 | 7,772 |
| Less residual values | (69,984) | (60,582) | (9,402 |
| **Net costs** | **146,101** | **147,731** | **(1,630** |
| **20-Year operating period:** | | | |
| Nonrecurring costs | 58,911 | 63,139 | (4,229 |
| Recurring costs | 398,318 | 366,405 | 31,913 |
| Total costs | 457,229 | 429,544 | 27,684 |
| Less residual values | (61,565) | (62,916) | 1,351 |
| **Net costs** | **395,663[a]** | **366,628** | **29,035** |

[a]Figures do not add/crossadd due to rounding.

[b]Residual values are lower for the Eisenhower location compared to the Norman location. Therefore, this difference in residual values increases, rather than decreases, the total cost difference between Eisenhower and Norman. This constitutes an increase in the Eisenhower alternative's cost disadvantage.

**Table II.14: Eisenhower Alternative Cost Advantages and Disadvantages Based on Costs Discounted at 9.4 Percent as of Fiscal Year 1986**

Dollars in thousands

| | Eisenhower (a) | Norman (b) | Difference (a) less (b) |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Nonrecurring costs | 48,160 | 52,804 | (4,644) |
| Recurring costs | 73,245 | 67,778 | 5,467 |
| Total costs | 121,406[a] | 120,582 | 823[a] |
| Less residual values | (22,297) | (18,842) | (3,456)[a] |
| **Net costs** | **99,108[a]** | **101,741[a]** | **(2,632)[a]** |
| **20-year operating period:** | | | |
| Nonrecurring costs | 48,160 | 52,804 | (4,644) |
| Recurring costs | 119,099 | 109,844 | 9,255 |
| Total costs | 167,260[a] | 162,648 | 4,611[a] |
| Less residual values | (7,904) | (7,968) | 65[a,b] |
| **Net costs** | **159,356** | **154,680** | **4,676** |

[a]Figures do not add/crossadd due to rounding.

[b]Residual values are lower for the Eisenhower location compared to the Norman location. Therefore, this difference in residual values increases, rather than decreases, the total cost difference between Eisenhower and Norman. This constitutes an increase in the Eisenhower alternative's cost disadvantage.

**Table II.15: Eisenhower Alternative Cost Advantages and Disadvantages Based on Costs Discounted at 14.0 Percent as of Fiscal Year 1986**

Dollars in thousands

| | Eisenhower (a) | Norman (b) | Difference (a) less (b) |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Nonrecurring costs | 43,980 | 48,747 | (4,767) |
| Recurring costs | 52,764 | 48,867 | 3,898[a] |
| Total costs | 96,744 | 97,613[a] | (869) |
| Less residual values | (13,205) | (11,030) | (2,175) |
| **Net costs** | **83,539** | **86,583** | **(3,044)** |
| **20-year operating period:** | | | |
| Nonrecurring costs | 43,980 | 48,747 | (4,767) |
| Recurring costs | 74,665 | 68,958 | 5,707 |
| Total costs | 118,645 | 117,705 | 941[a] |
| Less residual values | (3,085) | (3,090) | 5[b] |
| **Net costs** | **115,560** | **114,615** | **946[a]** |

[a]Figures do not add/crossadd due to rounding.

[b]Residual values are lower for the Eisenhower location compared to the Norman location. Therefore, this difference in residual values increases, rather than decreases, the total cost difference between Eisenhower and Norman. This constitutes an increase in the Eisenhower alternative's cost disadvantage.

## Tables II.16 and II.17

These tables summarize the estimated total cost advantages of locating the Center at Eisenhower and in Norman. The highlighted figures are the present values of the cost advantages based on the effective discount rates as of the periods of our analyses.

**Table II.16: Cost Advantage Summary as of Fiscal Year 1985**

Dollars in thousands

| | | Net present value by discount rate | | |
|---|---|---|---|---|
| | Undiscounted | 9.4% | 11.9% | 14.0% |
| **10-Year operating period:** | | | | |
| Eisenhower alternative | 6,617 | 5,363 | **5,257** | 5,197 |
| Norman alternative | • | • | • | • |
| **20-Year operating period:** | | | | |
| Eisenhower alternative | • | • | • | • |
| Norman alternative | 40,968 | 4,831 | **1,849** | 119 |

Note: This table shows that, at the time the Postal Service decided to locate its training center at Norman, Oklahoma, rather than at Seneca Falls, New York, the Eisenhower facility at Seneca Falls had the economic advantage for a 10-year operating period, while the proposed Norman facility had the economic advantage for a 20-year period.

**Table II.17: Cost Advantage Summary as of Fiscal Year 1986**

Dollars in thousands

| | Undiscounted | Net present value by discount rate 9.4% | 14.0% |
|---|---|---|---|
| **10-Year operating period:** | | | |
| Eisenhower alternative | 1,630 | **2,632** | 3,044 |
| Norman alternative | • | • | • |
| **20-Year operating period:** | | | |
| Eisenhower alternative | • | • | • |
| Norman alternative | 29,035 | **4,676** | 946 |

Note: This table shows that, if the decision between the Norman and Eisenhower alternatives were being made as of the current fiscal year (1986), the Eisenhower facility would have the economic advantage for a 10-year operating period, while the proposed Norman facility would have the economic advantage for a 20-year period.

# Mission-Related Considerations

In addition to concluding that the former Eisenhower College offered no unique economic benefits to the Post Service, Postal Service officials cited several other reasons for their preference to keep the new Technical Training Center in the Norman, Oklahoma, area. The following are reasons cited in congressional testimony, in statements to the Postal Service Board of Governors, and/or to us:

- The simplified logistics of a local move would allow an orderly, phased transition to the new facility with a minimum of disruption of the training schedule.
- Staying in Norman would avoid having to replace competent instructors who chose not to move.
- Moving from Norman would disrupt the sharing of resources with the Postal Service's National Maintenance Technical Support Center, which is also located in Norman.
- Availability and convenience of student transportation are greater in Norman than they would be in the Seneca Falls, New York, area.
- Severe winter weather in the Seneca Falls area is not conducive to operating a national training center.

Although we did not attempt to calculate costs in these areas, we did examine each area to assess its potential effect on accomplishment of the Center's training mission. A discussion of each area follows.

## Disruption of Training

The Postal Service estimate states that an average training interruption of 4.4 weeks longer per course would occur if the training function were moved to Eisenhower College than if it were moved to the proposed Norman location. (See discussion, p. 16.) Our analysis of the factors supporting this estimate indicates that the timeframe is reasonable. Examples of factors contributing to the longer move time include additional over-the-road transportation time and additional disassembly, packing, crating, reassembly, and testing not required for a local move. The Service noted that the longer move time would result in an added delay of training for field personnel. It pointed out that the delay in acquiring needed skills could adversely affect the ability of field personnel to perform their mission. This would be especially true in cases where personnel were to be trained on new equipment. The Service states that training support will be critical at the time of the anticipated move in 1988 because of the current and planned deployment of new automated equipment, such as optical character readers used in the mail sorting process.

## Conclusions

We determined that the Center's training schedule is at full capacity. A recent Service study, considering decentralization of some training, noted that present field training requirements exceeded the Center's capacity for providing the needed training. Postal Service projections through 1989 show a continued growth in training requirements at the Center.

Since the Center workload is projected to continue to be at full capacity, any disruption would result in deferred training. Assuming that there is a valid need for this training and an economic benefit derived from the training, we agree that the longer disruption would cause greater loss of economic benefit.

## Loss of Experienced Professional Staff

We have found in past evaluations of relocation of federal activities that some staff elect not to relocate. Some reasons which have been given are family considerations, low mortgage payments at present location, working spouses, and financial obligations.

At the Center, we interviewed representatives from each training branch to obtain some insight on how many instructors would likely be lost, how this would affect accomplishment of the training mission in the short run, and how difficult it would be to hire and train new instructors. The following information represents a consensus of opinion of the branch personnel.

- A number of the Center's approximately 175 instructors would be lost if the Center were relocated. Estimates ranged as high as 50 percent in some branches. Most felt that all instructors eligible to retire would do so rather than move.
- Some instructors are considered experts in their field. The requirement for a combination of knowledge of Postal Service operations and instructor skills would make replacement of instructors difficult.
- Replacing an instructor would take from 4 to 5 months, usually involving a transfer from within the Service, and bringing a replacement up to full capability would take from 1 to 3 years. This would introduce considerable disruption to the training schedule.

We obtained a list of Center personnel who will be eligible for regular retirement in 1988, when the Service plans to relocate the Center, or eligible for early retirement in 1988 if the Center were moved outside their commuting area. The total number of personnel who would be eligible for regular or early retirement is 48, of whom 42 are instructors.

## Conclusions

While the exact number of staff who would be lost in a long distance relocation cannot be predetermined, it seems likely that a number of instructors and other professional staff would elect not to move. The loss of experienced staff would impair accomplishment of the Center's training mission if competent replacements were not available at the time of the move.

## Relationship Between the Technical Training Center and the Maintenance Technical Support Center

The Maintenance Technical Support Center, with 41 permanent and 27 contract support staff, is responsible for developing maintenance policies, programs, methods, and standards for Postal Service buildings and equipment. It also develops maintenance documentation, operates maintenance feedback systems, and ensures that consideration is given to the maintenance requirements when new equipment is procured.

Support Center and Training Center personnel agree that there is a high level of interface between the two organizations and that it is an advantage to have them co-located. They cited these areas as the most frequent points of contact:

- The Support Center operates a 24-hour "hot line" to assist with maintenance problems in postal facilities. At times the Support Center draws on the expertise of Training Center instructors to help identify and correct these problems.
- The Support Center technicians coordinate with Training Center instructors to provide input to training courses based on their accumulated information about specific maintenance problems.
- Support Center and Training Center staffs are part of an integrated logistics support committee which coordinates policy, training, and logistics support for the maintenance function. This coordination is considered essential to eliminate fragmentation in Service-wide maintenance.
- Equipment used in the Training Center courses is also used by the Support Center in making and testing engineering modifications to the equipment. Support Center personnel stated that it is necessary to have off-line equipment to use for this purpose. They felt that separation of the two organizations would necessitate the Support Center's acquiring duplicate equipment, at considerable cost, for its own use.
- Support Center personnel work closely with Training Center instructors to coordinate the maintenance manuals they develop with the training course material to assure that they are consistent.

## Conclusions

After examining the mission of both the Support Center and the Training Center, identifying areas of interface, and talking with staff in both organizations, we believe the separation of the two organizations could result in:

- Added difficulty in coordinating shared activities.
- Possible elimination of all but the most critical coordination.
- Added cost and inconvenience of long distance travel for staff visits.
- Fragmentation of maintenance procedures because of decreased coordination.
- Additional cost to buy equipment now shared.

The cost to procure new equipment for use at the Support Center could be significant. Additionally, we believe that if discrepancies between maintenance manuals and maintenance instruction are introduced into the maintenance process because of reduced coordination, a degradation of field maintenance capability would occur.

# Availability and Convenience of Student Transportation

We compared the availability and convenience of student air and ground transportation to and from Norman and Seneca Falls. The cost of air transportation is discussed in appendix II. Availability and convenience of both modes of travel are discussed below.

## Air Transportation

Service officials stated that peak travel times requiring the maximum availability of flight connections occur on Sunday afternoons for arriving students and on Friday afternoons for departing students. Some 89 cities in our transportation analysis accounted for the majority of students attending the Center in the 12-month period ending June 30, 1985. Using these point-of-origin cities as a basis for comparison, we had a commercial travel service identify the number of possibilities for arrivals and departures each Sunday and Friday afternoon, respectively, for Oklahoma City, Rochester, and Syracuse. Results of this analysis appear in the following table.

**Table III.1: Arrival and Departure Possibilities Available to Students**

| City | Total Possible Scheduled Arrivals and Departures | |
|---|---|---|
| | Arrivals (Sun. noon to 8 p.m.) | Departures (Fri. 1 to 6 p.m.) |
| Syracuse, NY | 483 | 624 |
| Rochester, NY | 490 | 485 |
| Oklahoma City, OK | 664 | 630 |

The numbers of possible, scheduled arrivals and departures are totals to and from the 89 origin cities and do not represent individual flights. The same arriving or departing flight could serve more than one origin city.

### Conclusions

Oklahoma City shows the greatest number of possibilities for Sunday arrivals and Friday departures. Additional analysis of our flight frequency data shows that Oklahoma City has arriving and departing flights serving all point-of-origin cities within the peak travel periods.

Syracuse has no arriving flights from 2 of the 89 points of origin within the peak travel periods. Rochester has no arriving flight from one point of origin and no departing flight to one point of origin within the peak travel periods. However, these limitations should not, in our opinion, be considered a significant disadvantage for Syracuse and Rochester.

## Ground Transportation

In its evaluation of Eisenhower College as a possible new training site for the Center, the Service considered the availability and cost of ground transportation from the Rochester and Syracuse airports to the proposed site at Seneca Falls. According to the Service's evaluation, available ground transportation was limited and could be costly and/or time consuming because of the distance from the airports. The distance to Seneca Falls is 50 miles from the Syracuse airport and 57 miles from the Rochester airport, as opposed to a distance of about 25 miles from the Oklahoma City Airport to the proposed Center at Norman. The report further noted, however, that additional ground transportation to Seneca Falls could be made available if the Center were to move there.

To independently determine the availability of ground transportation from the Rochester and Syracuse airports to Seneca Falls, we surveyed six limousine service companies in the Rochester and Syracuse areas. We

also checked bus and train schedules to determine the availability and costs of transportation to Seneca Falls via these services.

Representatives of all of the limousine service companies we visited said they were capable of and would be willing to provide transportation services for Center students. All said they would be willing to add more vehicles to their fleets if necessary to accommodate the students. However, some of them said they would want some type of written agreement or contract prior to gearing up to handle the Center's business.

Our review of bus and train schedules to determine availability showed the following:

- No scheduled bus or train service from Rochester to Seneca Falls.
- One bus company (no train service) providing service to Seneca Falls from Syracuse on a regularly scheduled basis with three departures between 8:30 a.m. and 5:10 p.m. weekdays and four departures on Sundays. Friday service to Syracuse from Seneca Falls is at 11:20 a.m., 1:20 p.m., and 7:25 p.m.

Ground transportation in Norman is provided by an established airport limousine service which provides almost continuous service for arriving students. On departure days, the limousine service has a number of vehicles stationed at the Center to transport students to the Oklahoma City Airport at the appropriate times to make departing flight connections. Center officials consider the limousine service satisfactory.

### Conclusions

We believe that enough established companies are currently in business in the Syracuse and Rochester areas to provide adequate ground transportation for the students. Although the longer distances may provide some inconvenience, they are not prohibitive.

## Impact of Winter Weather on Student Transportation

In its evaluation of the Eisenhower College complex, the Service stated that New York's severe winter weather conditions were not conducive to operating a national training center in that area. In our efforts to determine the availability of student transportation to Eisenhower College, we also made an assessment of the impact of severe weather on transportation.

We found that New York's state agencies could provide little in the way of statistical information on hazardous weather conditions affecting air

or ground transportation. Additionally, we were told that no formal records were maintained by the Rochester airport documenting either airport closures or flight delays caused by severe weather. The airport manager reported that, in the winter of 1984-1985, the Rochester airport had been closed only one time, for a period of 6 hours. The Syracuse airport manager stated that the Syracuse airport is closed very infrequently and had not been closed at all in the winter of 1984-1985. He said the airport had experienced flight delays while snow was being removed from the runways, but that there had probably been not more than 20 hours of delays in the previous 3 years.

A maintenance engineer in the New York State Department of Transportation told us that the Department does not keep records on winter highway closures but that highways in the Seneca Falls area are seldom closed and only for limited periods. A New York State Police spokesman in the area said that records of highway closures were not available but that the highways are seldom closed because of severe weather.

A Rochester limousine company owner stated that the Rochester area gets its share of snowstorms some winters, and other winters, it hardly gets any snow at all. He said that weather can be a major transportation factor in the winter and that the New York throughway (I-90) is sometimes shut down because of winter weather. He said that the throughway had been shut down three or four times in 1985 and that one of those times was for about 4 days. The Postal Service has identified the throughway as being the safest route during the winter months.

The owner of another limousine company located in Rochester stated that, although the weather gets rough in the Rochester and Syracuse areas, the road crews usually do a good job of getting the roads clear.

## Conclusion

Although weather information from some of the various sources was somewhat limited or conflicting, we believe that weather conditions in the Rochester, Seneca Falls, and Syracuse areas could occasionally delay air and ground transportation for students during the winter season. However, it appears that, because of the infrequency and short duration of these delays, they would not be likely to cause significant disruptions in training.

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