



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

General Government Division

B-266153

April 11, 1996

The Honorable Doug Bereuter
House of Representatives

Dear Congressman Bereuter:

This letter provides information on several factors that contributed to the government's costs to construct a small Federal Aviation Administration (FAA) office building at the Lincoln, NE, airport. We developed this information in response to your request in which you expressed concerns that the federal government seems to be paying more than the private sector to construct small buildings, such as the one in Lincoln. As you requested, we are also providing information describing recent major legislative and related administrative initiatives to reform the federal procurement process.

APPROACH

The information in this letter was developed from our on-site visit to the Lincoln building; reviews of FAA's contract and project files on this building; data and observations provided by the contractor that constructed the building, other contractors in the Lincoln area, the Lincoln Builder's Bureau, and a national company that specializes in construction-cost publishing and consulting; and interviews of responsible FAA officials in Washington, D.C.; Kansas City, MO; and at the Lincoln airport. We also reviewed the applicable federal procurement laws and regulations and FAA's implementing policies and procedures. We identified major procurement reform legislation enacted since the Lincoln building was constructed in 1994 and discussed this legislation and related administrative reform efforts with cognizant officials of FAA, the Office of Federal Procurement Policy (OFPP), and the General Services Administration (GSA).

We did our work between September 1995 and February 1996 in accordance with generally accepted government auditing standards. We requested oral comments on a draft of this letter from the Secretary of Transportation and the Administrator of FAA or their designees and the prime

GAO/GGD-96-7R Lincoln NE Building

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contractor. We met with program officials from these agencies on March 28, 1996. They said that this document presented the information fairly and accurately and had no comments. The prime contractor chose not to provide comments.

RESULTS IN BRIEF

The 2,500 square foot office building that FAA constructed at the Lincoln, NE, airport cost \$554,000, or \$220 per square foot. According to FAA officials, the Lincoln building is similar in size, features, and cost to many of FAA's administrative office buildings at other airports. The contractor that constructed the Lincoln building said that commercial office buildings in that area typically cost about \$100 per square foot.

FAA and the contractor identified several factors that they believe contributed to the higher costs of the Lincoln building. These factors included (1) more stringent and prescriptive FAA construction standards and specifications, such as heavily reinforced exterior walls, upgraded electrical systems, premium windows, and a special metal roof; (2) local market conditions at that time, which resulted in only one responsive bid on the FAA building and shortages of available subcontractors in several trade areas; and (3) other aspects of the procurement action, such as the relatively small size of the building and short construction time frame, that provided limited opportunities for the contractor to realize economies through volume discounts or buying needed materials and supplies when and where more favorable prices were available.

In addition, FAA, the building contractor, and other local contractors and construction industry representatives we contacted said that the federal procurement process and its many requirements tend to limit competition for federal projects and to increase the government's costs.

Since this building at the Lincoln airport was constructed in 1994, both Congress and the Clinton Administration have taken several actions to reform the federal procurement process. For example, the Federal Acquisition Streamlining Act of 1994 was enacted, which, among other things, (1) authorized simplified procedures for acquisitions below a specified dollar threshold; (2) established a preference for the acquisition of commercial items; (3) provided for the use of electronic commerce in federal acquisitions; and (4) authorized tests of new, innovative procurement procedures in several areas, including FAA's airway modernization program. Additional governmentwide procurement system reforms were included in the National Defense Authorization Act for Fiscal Year 1996, which contained the Federal Acquisition Reform Act of 1996 and the Information

Management Reform Act of 1996. Also, the fiscal year 1996 Appropriations Act for the Department of Transportation and related agencies (1) exempted FAA from most federal procurement laws and regulations, such as the Competition in Contracting Act (CICA) and the Federal Acquisition Regulation (FAR) and (2) authorized FAA to develop and implement a new procurement system to better meet its unique needs and promote more timely and more cost-effective procurements. FAA has preliminary efforts under way to begin implementing this new authority. In response to the National Performance Review (NPR), our earlier work, and other studies, the executive branch has many overall reform efforts under way that may provide additional ideas for improving the federal procurement process and reducing procurement costs.

BACKGROUND

As the federal government's principal real estate agent, GSA acquires and provides general purpose office space to federal agencies. However, several federal agencies are authorized to acquire special-purpose facilities that are needed to carry out their missions. Within the Department of Transportation, for example, FAA has authority under the Federal Aviation Act of 1958, as amended, to construct facilities at airports.

FAA's regional offices plan, develop, and propose airport construction projects that are then reviewed within FAA, Transportation, and the Office of Management and Budget (OMB) before being sent individually or collectively to Congress for authorization and appropriation. FAA's practice has been to custom design its administrative office facilities to meet what it considered to be its special needs at each airport location. FAA engineers in Kansas City designed the Lincoln building. FAA's general guidance called for all designs to be consistent with nationally recognized codes and regulations and to minimize life-cycle costs. Although FAA policy allowed its engineers some discretion in choosing standards and specifications for these buildings, the engineer who designed the Lincoln building said that its design generally conformed to the standard used for FAA airport control towers.

When the Lincoln building was constructed in 1994, FAA was required to follow the procurement process and procedures outlined in the FAR. Basically, this involved soliciting bids for the project, publicly opening the bids, and awarding the contract to the lowest responsive bidder. FAA generally followed this established process for the Lincoln building.

FACTORS THAT INFLUENCED THE COSTS OF THE LINCOLN BUILDING

FAA and the contractor that constructed the Lincoln building identified several factors that they believe accounted for at least some of the higher costs of the building. These factors included (1) FAA's construction standards and specifications; (2) local market conditions at that time, and (3) other aspects of the procurement action, such as the relatively small size of the building and short construction time frame. In addition, FAA, the building contractor, and other local contractors and construction industry representatives we contacted said that the federal procurement process and its many requirements tend to limit competition for federal projects and to increase the government's costs.

FAA's Construction Standards and Specifications

According to FAA and the contractor that constructed the Lincoln building, it was designed to meet standards and specifications that were more stringent and prescriptive than those typically used to construct a commercial office building. The contractor said that FAA's standards and specifications for this building's exterior walls; electrical circuitry; heating, ventilation, and air conditioning system duct work; metal roof; premium windows; and upgraded interior paint were the best examples.

The Lincoln building has concrete block exterior walls that are heavily reinforced with steel rods and grout and are covered with brick. The brick exterior covering was required by the local airport authority so that the building would match the appearance of other airport buildings. FAA knew that the specifications for the building's wall exceeded those required to meet the minimum seismic, wind, and other strength requirements of the commercial building code. Because of limitations in its in-house, on-site building inspection capability, FAA said it chose the more stringent wall specification rather than incurring the costs of contracting with a qualified private firm to inspect the wall to ensure that it met minimum building standards.

Both FAA and the building's contractor said that FAA's design included more extensive electrical grounding than that typically used in commercial buildings. FAA used a standard comparable with one that it uses for air traffic control towers, which is designed to minimize electrical hazards to personnel and damage to facilities and electronic equipment from lightning and power faults and minimize electromagnetic interference levels. An FAA official said that FAA used this more stringent electrical standard in the Lincoln building to allow it to reconfigure the

building later, if needed, to house sensitive air traffic control equipment without having to do an expensive building retrofit.

FAA officials said that FAA's more stringent standards and specifications for the Lincoln building have provided or will provide more durability, better safety, and lower maintenance. As discussed earlier, FAA's general guidance calls for all of its airport office space designs to be consistent with nationally recognized building standards and codes, modified to the extent necessary to meet any special FAA needs. FAA recognized that the Lincoln building's construction standards and specifications exceeded those of the typical commercial office building. A FAA engineer who helped design the building said that these special needs increased the costs of the building by 15 to 20 percent, or roughly \$75,000 to \$100,000. He said FAA believed that these incremental costs were reasonable because they likely would be offset by their life-cycle savings. However, he said that he had no studies or analyses to substantiate the expected life-cycle savings that FAA believed would result from these upgraded features. For example, he said that FAA chose windows with built-in miniblinds because the miniblind feature provided life-cycle cost benefits, such as a longer life because of less exposure to damage and no maintenance costs to clean them, but that FAA had no empirical evidence to substantiate these cost benefits.

According to FAA, some of the special features that increased the costs of the Lincoln building, such as the metal roof, premium windows, and resilient interior paint, were chosen to reduce maintenance costs. For example, the building's standing-seam metal roof cost almost \$23,000--several times more than a shingle roof. FAA said that it chose this more costly metal roof because it would last longer, require fewer repairs, and match the appearance of the airport control tower. The building contractor agreed that this roof should need fewer repairs and last longer. However, the contractor noted that the metal roof that was used is a relatively new product and that its life span has not yet been demonstrated. Also, the contractor said that FAA's requirement for a standing-seam metal roof, which FAA said has a 50-year estimated life span, may be questionable because some of the building's other components and systems likely will have a shorter life span. We noted that FAA's guidance for estimating life-cycle costs specifies a 15- to 25-year facility life.

The contractor for the Lincoln building said that he constructed the building to FAA's specifications and did not know whether the extra costs associated with its reinforced exterior walls, premium windows, electrical system upgrades, metal roof, and special interior paint were justified. According to the contractor, he was not aware of FAA's rationale for its

construction standards and specifications and thus could not assess the merits and costs of these special features or determine if less costly construction options were available that could meet FAA's needs. However, the contractor said that the highly prescriptive nature of FAA's specifications limited his ability to control costs. As an example, he cited FAA's requirement for premium storm windows with built-in miniblinds between the two panes of glass. Because only one supplier in the Lincoln area had a window that met FAA's specification, the contractor said that there were no alternative products or prices. The contractor said that these special windows cost \$21,000, which was significantly more than the cost of comparable quality windows without the miniblind feature.

Market Factors

Market factors also may have contributed to the higher costs of the Lincoln building. FAA, local contractors, the Lincoln Builder's Bureau, and a national construction consultant all said that the Lincoln area was experiencing a building boom at the time FAA constructed this building. According to them, this contributed to limited competition for the FAA building contract and reduced the number of available subcontractors in some areas.

Although we were not able to determine whether local market conditions at that time actually increased the government's costs to construct the building, there was limited competition for the Lincoln building contract. When FAA solicited bids for the Lincoln contract in January 1994, it believed that there were several prospective bidders. However, FAA received only one responsive bid and accepted it in March 1994. Also, the construction industry representatives we contacted said that the high demand for subcontractors in the Lincoln area at that particular time created shortages in the masonry, electrical, plumbing, dry wall, and heating and air conditioning trades that may have resulted in higher prices for those services.

Other Aspects of the Procurement Action

Other aspects of the FAA Lincoln building procurement action, such as the relatively small size of the building and short construction time frame, also may have contributed to the higher costs of the building.

According to FAA officials, all construction projects have some fixed costs, such as the contractor renting, equipping, and operating a mobile trailer to use as an on-site construction office, that are unrelated to the size of the project but that have a greater impact on the costs of small projects. They said that small buildings with short construction time frames, such as

the FAA building at the Lincoln airport, typically cost more per square foot than larger buildings because their fixed costs represent a larger percentage of total project costs, and contractors have fewer opportunities for volume purchase discounts and other economies of scale. Also, FAA officials said that the 4-month time frame for constructing the building limited the contractor's ability to price needed materials and supplies at levels that reflected the lowest available prices.

Federal Procurement Process

FAA, the building contractor, and other local contractors and construction industry representatives we contacted also said that the federal procurement process and its many requirements tend to limit competition for federal projects and to increase the government's costs to construct facilities. According to the Lincoln area contractors and a professional trade association we contacted, the federal process for constructing small office buildings is more complex, rigid, and prescriptive than the process typically used in the private sector. They said that a more businesslike procurement process, which could result in increased competition, is the key to ensuring that the government gets the best available construction value for taxpayers.

These contractors said that the federal procurement process was fair but burdensome and intimidating, especially to very small contractors and subcontractors. They said that the intimidation resulted from the complexity and bureaucratic nature of the process, such as (1) FAR's hundreds of pages of procurement rules and requirements; (2) federal building project solicitations that frequently exceed 200 pages, excluding the construction plans for the building; (3) federal construction contracts that contain many clauses not in commercial contracts; and (4) numerous federal legal requirements, such as the wage-rate requirements of the Davis-Bacon Act.

The Lincoln area contractors we contacted said that the typical private sector process is simpler, more flexible, and involves more informal communication between the parties. They said that, in the private sector, specifications usually are more general and less prescriptive, contractors generally are required to make fewer certifications and to submit fewer progress reports, and many of the federal legal requirements do not apply.

These contractors emphasized that small contractors and subcontractors are more adversely affected by the more complex federal procurement process. They said that some small contractors who have little or no understanding of the federal procurement requirements and their implications are reluctant to bid on federal projects. Some of them said that contractors'

familiarity with the federal procurement process can reduce this intimidation. However, they said that this takes time and experience and that some contractors are not willing to learn the guiding federal rules and procedures. They emphasized that this unfamiliarity with the federal process can result in few bidders for federal construction projects.

The contractor that constructed the Lincoln building and other Lincoln area contractors also said that certain socioeconomic aspects of the federal procurement process, which are not included in commercial projects, add complexity and costs to federal construction projects. For example, they said that the wage-rate requirements of the Davis-Bacon Act and the monitoring, paperwork, and reporting to comply with them increase contractors' costs and thus their bid prices on federal projects.

Under the Davis-Bacon Act, the contractor must prepare and submit to the government, for each week, a list of all employees that worked on the project, their job classification (e.g., plumber), hours worked, and hourly pay rate, deductions, and net wages. Tracking and aggregating this data can be burdensome and costly for contractors and subcontractors, especially if employees work on more than one project and not all projects involve Davis-Bacon wage rates.

In addition to the administrative burden of the Davis-Bacon Act, some of the contractors we contacted said the act can increase federal construction costs if a contractor has to raise wage rates to comply with its prevailing rate requirements. When this occurs, they said that the higher wage rates increase the contractor's costs of doing business with the government and that the contractor will increase his bid price on federal contracts. The contractor that constructed the Lincoln building said that this is more apt to occur when the defined wage area includes both urban subareas, where wages tend to be higher, and rural subareas, where wages tend to be lower. However, we noted that the required Davis-Bacon wage-rate levels, themselves, did not seem to be a significant cost factor on the FAA Lincoln project because, according to FAA's records, 65 of 80 project employees for which FAA had data were paid at wage rates that exceeded the Davis-Bacon rate.

Some contractors said that the federal procurement process is less "user friendly" than the typical commercial process. For example, they said that, in the private sector, (1) the process typically involves more open and informal communication between the buyer and seller, (2) the buyer's planning documents are made available at no cost to contractors and subcontractors, and (3) the modifications to prescribed time frames can be made without following cumbersome, bureaucratic processes. In contrast, they

said that rigid federal rules specify (1) what can be discussed and when it can be discussed, (2) that contractors and subcontractors must purchase federal project plans and specifications, and (3) how federal contracts can be modified. As a consequence, these contractors said that some contractors, especially those that have the most commercial business, question whether it is worth the extra administrative burden to compete for federal contracts when other opportunities are available.

THE FEDERAL PROCUREMENT PROCESS HAS BEEN A LONG-STANDING CONCERN

The federal government spends a total of about \$200 billion annually on facilities, goods, and services. The highly prescriptive and rigid federal procurement process has been a long-standing concern. Over the years, our office has pointed out numerous problems associated with this process and made many recommendations to reform it. For example, we have been recommending repeal of the Davis-Bacon Act since 1979.¹

Also, our recent work on GSA's traditional process-oriented approach for leasing federal office space, which also is highly prescriptive and rigid, may offer a parallel to the federal process for acquiring small office buildings, such as the one at the Lincoln, NE, airport. As we pointed out in our report and in testimonies on opportunities for cost savings in the leasing area, GSA's leasing process and the federal procurement laws and regulations that guide it have been focused on process rather than on results.² Over the years, numerous well-intended procedural controls were added to this process. Although such procedural controls are important, we emphasized that their cumulative effect was a leasing process that had become so rule focused and inflexible, complex and cumbersome, and time consuming and costly that it seemed to discourage competition for government leases and cause GSA to pay more than necessary for leased space.

¹The Davis-Bacon Act Should Be Repealed (GAO/HRD-79-18, Apr. 27, 1979).

²Federal Office Space: More Businesslike Leasing Approach Could Reduce Costs and Improve Performance (GAO/GGD-95-48, Feb. 27, 1995); General Services Administration: Opportunities For Cost Savings and Service Improvements (GAO/T-GGD-95-96, Mar. 29, 1995); and General Services Administration: Opportunities for Cost Savings in the Public Buildings Area (GAO/T-GGD-95-149, July 13, 1995).

We have strongly supported and continue to support procurement system reforms. In our recent testimonies on proposed procurement reform legislation, we supported efforts to reform the procurement process by (1) eliminating those requirements that impede the government's ability to take advantage of available marketplace opportunities and (2) further reducing the complexity of federal procurement rules and procedures.³ We recognized that the existing process may have evolved to the point where the costs to meet its requirements outweigh their benefits. We also recognized in our testimonies that the many well-intended federal requirements that have been imposed, ranging from socioeconomic laws to government oversight tools, have resulted in marked differences between the government and commercial marketplaces.

In its September 1993 report, NPR was highly critical of the federal procurement process and characterized it as relying on "rigid rules and procedures, extensive paperwork, detailed design specifications, and multiple inspections and audits."⁴ NPR pointed out many problems with the existing federal procurement process and made several recommendations aimed at simplifying and streamlining its rules and regulations to make the process more efficient and viable.

While some of the government's unique requirements still may be needed, the House Committee on Government Reform and Oversight's August 1995 report on H.R. 1670--which subsequently was enacted in February 1996 as the Federal Acquisition Reform Act of 1996--said that the government clearly is paying an enormous premium for them--billions of dollars annually.⁵ The Committee noted that a report prepared for the Secretary of Defense in December 1994 found that, on average, the government pays an additional 18 percent on what it buys solely because of requirements that it imposes on its contractors. This report confirmed an earlier average estimate by major contractors surveyed by our office that

³Procurement Reform: H.R. 1670, Federal Acquisition Reform Act of 1995 (GAO/T-OGC-95-22) May 25, 1995; Procurement Reform: Opportunities for Change (GAO/T-OGC-95-19) Apr. 6, 1995; and Procurement Reform: Further Opportunities for Change (GAO/T-OGC-95-16) Feb. 28, 1995.

⁴See From Red Tape to Results: Creating a Government That Works Better and Costs Less, report of the National Performance Review, Vice President Al Gore, Sept. 7, 1993.

⁵See House of Representatives Report 104-222, part 1, 104th Congress, 1st session.

the additional costs incurred in selling to the government were about 19 percent. And, according to the Committee, that is only part of the government's inflated cost of doing business because it includes only what is paid to contractors, not the costs of the government's own administrative system. The Committee went on to say that government contracting officials are confronted with a daunting array of mandates of their own, often amounting to step-by-step prescriptions that increase staff and equipment needs. Although well-intentioned, the Committee said that this rigid, rule-based process leaves little room for the exercise of business judgment, initiative, and creativity and often forces the professional staff to assume the role of box-checking "robots."

RECENT MAJOR INITIATIVES TO REFORM
THE FEDERAL PROCUREMENT PROCESS

Since the Lincoln building was constructed in 1994, both Congress and the Clinton Administration have taken several actions to reform the federal procurement process. Major legislative reform initiatives are contained in the Federal Acquisition Streamlining Act of 1994 (FASA), the fiscal year 1996 Appropriations Act for the Department of Transportation and related agencies, and the National Defense Authorization Act for Fiscal Year 1996. Related ongoing efforts by the executive branch to reinvent and reengineer the way federal procurement and support-services functions are carried out may provide additional ideas for improving the federal procurement process and reducing procurement costs.

The Federal Acquisition Streamlining Act of 1994 (P. L. 103-355, Oct. 13, 1994), among other things, authorized simplified procedures for acquisitions below a specified dollar threshold, established a preference for the acquisition of commercial items, and provided for the use of electronic commerce in federal acquisitions. It also authorized OFPP, FAA, the Department of Defense, and the National Aeronautics and Space Administration to test alternative and innovative procurement procedures. FAA's authorized tests involved acquisitions of equipment for its airway modernization program.

The fiscal year 1996 Appropriations Act for the Department of Transportation and related agencies (P. L. 104-50, Nov. 15, 1995) exempted FAA from most federal procurement laws and regulations, such as CICA and FAR, and authorized FAA to develop and implement a new procurement system to better meet its unique needs and promote more timely and cost-effective procurements. According to FAA, it has efforts under way to implement this new authority and expects to have portions of its new procurement system operational by April 1, 1996. A responsible FAA official said

that FAA's new system eventually will include simplified policies and procedures for acquiring real property but that they will not be developed and implemented until sometime later.

The National Defense Authorization Act for Fiscal Year 1996 (P. L. 104-106, Feb. 10, 1996) included several governmentwide acquisition reform provisions. Its Division D, entitled the "Federal Acquisition Reform Act of 1996 (FARA)," contains provisions to allow federal contracting officials more discretion in determining the "competitive range," provide for preaward debriefings of unsuccessful bidders, and authorize the use of special two-phase procedures for the design and construction of public building projects on which contractors are likely to incur high costs to develop their offers. In addition, FARA eliminates data and audit requirements for commercial items; establishes special, simplified procedures for certain commercial items; and revises and simplifies the procurement integrity laws. The National Defense Authorization Act's Division E provisions, entitled the "Information Technology Management Reform Act of 1996," transferred GSA's information technology acquisition authority to each of the federal agencies; provided that we will be the sole administrative bid protest forum for acquisitions by federal agencies; and authorized pilot tests of new, innovative techniques in the acquisition of information technology and for the federal supply schedules.

In response to NPR, our earlier work, and other studies, OFPP, Defense, GSA, and other executive branch agencies have actions under way to reinvent and reengineer the federal procurement and various other related support-services processes. For example, GSA has many initiatives under way to reinvent the way it does business and improve how federal agencies obtain the general-purpose facilities, goods, and services they need to support their missions. GSA's initiatives may provide ideas for further improving the federal procurement process and reducing federal procurement costs. As a part of its overall reform and reinvention efforts, GSA has contracted with a private sector firm to identify and quantify any extra procurement costs that result from its unique federal requirements. GSA said that the contractor's final report should be completed by April 30, 1996.

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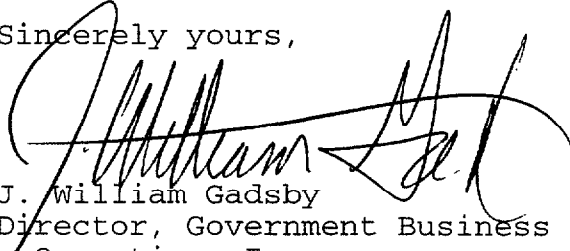
Copies of this letter are being sent to the Chairman and Ranking Minority Member of the House Committee on Government Reform and Oversight, House Committee on Transportation and Infrastructure, Senate Committee on Governmental Affairs, Senate Committee on Environment and Public Works; the Director of OMB; the Acting Administrator of GSA; the Secretary of Transportation; the

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Administrator of FAA; and the Administrator of OFPP. We will make copies available to others upon request.

The major contributors to this letter were Jerry Stankosky, Robert B. Mangum, Jr., Bill Dowdal, and Robert Sanchez. If you have questions or comments about this letter or need further information on the Lincoln building or on major procurement reform initiatives, please contact me on (202) 512-8387.

Sincerely yours,

A handwritten signature in black ink, appearing to read "J. William Gadsby". The signature is stylized with a large, sweeping initial "J" and a long horizontal stroke that extends across the middle of the signature.

J. William Gadsby
Director, Government Business
Operations Issues

(240188)

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