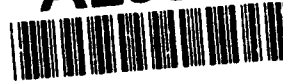


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THE DAVIS-BACON ACT:
COST IMPACT ON THE AIR FORCE

THESIS

Raymond Carpenter

AFIT/GCM/LSL/92S-2

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**THE DAVIS-BACON ACT:
COST IMPACT ON THE AIR FORCE**

THESIS

**Presented to the School of Systems and Logistics
of the Air Force Institute of Technology
Air University
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Contract Management**

Raymond Carpenter, B.S.

September 1992

Approved for public release; distribution unlimited

Preface

The purpose of this study was to perform research and gather data that would show the cost impact of the Davis-Bacon Act on Air Force construction contracts. From the research accomplished, it has been determined that the Davis-Bacon Act has a cost impact on construction contracts awarded by the Air Force.

Throughout this effort I had a great deal of assistance from others. I would like to thank my thesis advisors, Doctors Craig Brandt and Robert J. Wehrle-Einhorn for their support and guidance. I also wish to thank Capt Todd J. Pospisil for his equanimity and word processing prowess. Lastly, I wish to thank my wife Becky for her patience and understanding while I was furthering my education and she honed her home improvement skills during my absence.

Raymond Carpenter

Table of Contents

	Page
Preface	ii
List of Tables	v
List of Figures	vi
Abstract	vii
I. Introduction	1
General Issue	1
Specific Problem	1
Investigative Questions	2
Scope	2
II. Literature Search and Review	4
Introduction	4
Organization of Discussion	5
Discussion of Literature	5
Definitions	5
History of the Davis-Bacon Act	6
Determination of Prevailing Wages	11
Criticism and Support for the Act	17
Pending Changes to the Act	28
Conclusion	29
III. Methodology	30
Introduction	30
Justification of Method Selected	30
Literature Review	30
Data Collection	30
Request for Information	31
IV. Analysis	34
Introduction	34
Request for Information	34
Analysis of Data	36
Other Comments Received	43
V. Conclusions	45
Question 1	45
Question 2	46
Question 3	46
Question 4	47
Summary of Other Comments Received	48
Recommendations for Further Research	48
Appendix	50

	Page
Bibliography	58
Vita	60

. List of Tables

Table	Page
1. Impact of Act on Bids	37
2. Impact of Act on Contracts Awarded.	40

List of Figures

Figure	Page
1. Cost Impact on Solicitations.	38
2. Cost Impact on Contracts.	41

Abstract

This study was performed to determine what cost impact, if any, the Davis-Bacon Act has on the cost of Air Force construction contracts. The Davis-Bacon Act is a federal labor statute requiring the payment of pre-established wages to workers employed under Federally funded construction projects. The research found that contract award prices could be approximately 22% lower if the payment of these wages were not required. This estimate was made based on the results of a survey of bidders competing for award of construction contracts issued by bases within the former Strategic Air Command. Additional findings and survey response comments concerning the Act are also included. The results of this research are applicable to construction contracts issued at the installation level.

**THE DAVIS-BACON ACT:
COST IMPACT ON THE AIR FORCE**

I. Introduction

General Issue

The federal government spends vast portions of its annual budget on construction. As defense budgets are reduced, installation commanders must find ways to decrease spending, while still maintaining mission capabilities. Construction contracts at the installation level represent a significant but necessary expense to these installations. The Air Force construction budget for fiscal year 1992 is \$1.06 billion.

The Davis-Bacon Act, 40 USC 276a, passed in 1931, requires that workers under federally funded construction contracts be paid a "prevailing wage" established by the U S Department of Labor (DOL). These wages are a result of surveys conducted by DOL in specific areas and are intended to be reflective of the average wage paid in that area for each particular job classification.

Specific Problem

In a study by the General Accounting Office (GAO) in 1979, the Act resulted in wage increases of 5.2 to 122.6 percent (18:73). The purpose of the present research is to

determine what, if any, impact the Davis-Bacon Act has on Air Force construction projects and whether it hinders, fosters, or has no effect on the availability of competition for these contracts. This research will concentrate on how prevailing wages are established by DOL, the monetary impact of these wages on resultant contracts, and what influence the Act has had on the competition for these contracts.

Investigative Questions

1. How does the Department of Labor establish prevailing wages?
2. What effect do these wages have on the price offered by bidders?
3. What is the cost impact on the Air Force as a result of the Act?
4. How do established wage rates affect the availability of competition?

Scope

The main purpose of this research is to determine the cost and competition impact of the Act on Air Force construction contracts. The research will consist of a literature search of available information relating to the establishment of wages by DOL and previous studies on the Act, and analysis of actual contract data from files currently maintained at the Directorate of Contracting of the former Strategic Air Command. As a part of the analysis

of contract data, both contractors and unsuccessful bidders will be solicited to provide information concerning any effect required wage rates had on the price offered. This research effort will not discuss the continued need for the Act, nor will it attempt to evaluate any societal benefits the Act may offer.

II. Literature Search and Review

Introduction

The establishment of required wages to be paid on federal construction contracts has been the subject of continuing discussion, since before the Act was enacted in 1931, throughout the Congress and the construction industry (2:2). Particularly, the Act has been said by some to cost excessive federal tax dollars to the benefit of only the construction workers and contractors (17:259). The Act has also been perceived as a factor that results in less competition for federally funded construction contracts (18:74). Others argue the Act is not only essential for the construction industry, but it also assists in the security of the nation (2:1). Construction trade groups, such as the Building and Trades Division of the AFL-CIO, contend the Act not only fosters increased competition but also aids minority firms engaged in the construction business (2:1). These matters will be discussed in this chapter.

The effects of the Act are important to the Air Force. Military construction programs represent a large portion of the total defense budget. The budget for fiscal year 1992 includes over \$8.5 billion for defense related construction projects. The Air Force share of the construction budget is \$1.06 billion. This does not include several billion dollars in construction that occurs through the use of operation and maintenance funds (15:119).

Organization of Discussion

In order to accurately describe the issues relating to the impact of the Act, some common terms will be defined. After defining these terms, a brief history of the Act will be presented. After a brief history, both sides of several of the perceived impacts of the Act will be discussed. Finally, current proposed changes to the Act will be presented.

Discussion of Literature

Definitions. The following definitions, taken from Department of Labor regulations, are provided in order to establish a common ground for discussion.

1. A "prevailing wage" is the wage rate paid to more than 50 percent of the laborers in specified job classifications within a designated area. If a majority of laborers in a specified job classification do not receive the same wage, a weighted average of the wages paid to the total laborers in the classification is deemed to be the prevailing wage (29 CFR 1.2(a)(1)).

2. "Workers" covered by the Act, and used in this study, are laborers and mechanics engaged in construction activity entered into or financed by or with the assistance of the federal government (29 CFR 1.1(a)).

3. "Federally funded projects" are those projects funded in whole or in part by funds provided by the federal

government specifically for the maintenance, alteration, or repair of real property (29 CFR 1.1(a)).

4. The term "area" for the purposes of determining wage rates under the Act is the city, town, village, county, or other civil subdivision of a state in which the work is to be performed (29 CFR 1.2(b)).

History of the Davis-Bacon Act. The Davis-Bacon Act was passed in 1931 and was the first federal law which required the payment of a minimum wage to workers employed under contracts funded totally or partially by the federal government (18:1). Representative Robert L. Bacon, a Republican from New York, and Senator James J. Davis, a Republican from Pennsylvania, sponsored the bills in Congress that resulted in the Act (12:105).

The rationale behind the Act was to prevent contractors from taking advantage of the widespread unemployment during the Great Depression by bringing in transient workers and under bidding local contractors for the award of construction contracts (17:258). The specific project that is most often cited as the thrust behind the Act was the construction of a Veterans Hospital in New York in 1927. The contract was awarded to a firm from Alabama that brought non-union laborers to Long Island, NY to work on the project. These employees were housed on the job site, paid very low wages, and the project was completed much to the dissatisfaction of local union leaders and local

construction firms. The local union leaders argued that the practice of using non-local labor put the local firms at a competitive disadvantage (12:105). When the project was completed, Congressman Bacon stated the work had been accomplished in a satisfactory manner, but the project continued to be used as an example of the need for legislation the resultant Act provided (18:117).

Although this project took place in 1927, it spurred much debate over the next several years concerning the need for some form of wage protection for local workers and contractors. Fourteen bills were introduced into the Congress, four in the Senate and ten in the House, between 1927 and 1930. During this time the effects of the depression were widening, resulting in increased unemployment. The Government had begun an extensive construction program in an attempt to lessen the economic impacts that were occurring at the time. The depressed working environment made workers eager for employment at any wage they could receive. Contractors quickly reacted by hiring workers at low pay, thus taking advantage of the situation (18:117).

In 1930, Congressional leaders led by Bacon and Davis passed a bill entitled "Rate of wages for laborers and mechanics," which became known as the Davis-Bacon Act when signed into law in 1931. This Act provided for the establishment of a minimum wage for construction workers

employed under a federal or federally funded project. Specifically, the Act required each federal or federally funded construction contract to "contain a provision stating the minimum wages to be paid various classes of laborers and mechanics which shall be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work" in the area where the work is to be performed. This minimum wage was to be the average or majority wage paid to workers employed in the local area in the same or similar work classification or trade -- or the local "prevailing" wage (29 CFR 1.2(a)(1)). The Act initially applied to any federal or federally funded construction contract that exceeded \$5,000. This threshold was reduced to \$2,000 in 1935 and remains at this level today (9:303).

When the Act first went into effect, wages were set after the bids had been received and opened, by negotiations between the contracting agency and the low bidder. This resulted in the establishment of wages that were in excess or below what the bidder had initially decided to pay employees. Since these negotiations took place after bid opening, the bidder was unable to amend the price offered, profit potential was affected. Because of this situation and construction firms' reluctance to bid under these conditions, in 1935 the Act was amended to require the

Department of Labor to establish prevailing wage rates in advance of the issuance of invitations for bids on federal projects (9:303).

The Act has had several changes over its history. Dissatisfaction with portions of the Act began almost immediately after it became law. During the first year the law was in effect, over 200 separate disputes arose over the amount of wages to be paid to workers. These disputes were submitted to the Department of Labor for resolution. The dissatisfaction primarily concerned two specific issues--the establishment of wages after contract award and the lack of any effective enforcement mechanism (18:121).

In an article appearing in the June 1977 issue of the Labor Law Journal, Donald Elisburg, then Assistant Secretary of Labor for Employment Standards, discussed an Executive Order issued by President Hoover in 1932. This order required weekly payments to workers without reductions or rebates taken by the contractors. Contractors had begun treating employees as subcontractors, calling their employment arrangements subcontracts. This was done because the Act did not initially appear to require payment of prevailing wages to subcontractors. The order applied the Act to all laborers and to all subcontractors. Prevailing wage rates were required to be posted at the job site and the contracting agency was permitted to inspect payrolls. The other major change resulting from this order was that

contracts could now be terminated if a contractor was found not to be in compliance with the wage provisions of the Act (7:324).

Congress revised the Act in 1935. In addition to incorporating the contents of Hoover's Executive Order, the Congress lowered the threshold to \$2,000 and required the Department of Labor to determine wage rates prior to the issuance of solicitations (as previously described). This amendment also added painting and decorating and public works, in addition to public buildings, to the scope of the Act's applicability and gave the contracting officer the authority to withhold, from contract payments, the amount of under payments to workers, in addition to termination of the contract for violating the Act (18:122).

There have been other amendments to the Act. In 1940 coverage of the Act was extended to include the territories of Alaska and Hawaii; however, specific reference to them was dropped in 1960 when they received statehood. In 1941, the Act was changed to state more clearly that the Act was applicable to contracts awarded through methods other than advertising (i.e. negotiated and cost type contracts). The most recent change occurred in 1964, when the Act was changed to add the payment of prevailing fringe benefits to the wages required to be paid. These fringe benefits would also be established by the Department of Labor based on what

prevails in the location of the construction project (18:123).

Through the years, the requirement to pay prevailing wages to workers employed under partially or totally federally funded projects has been included in many statutes. Among these are the Safe Drinking Water Act, the Postal Reorganization Act, the Juvenile Delinquency Prevention Act, and the Domestic Volunteer Service Act of 1973 (18:128). Each of the Acts provides federal grants or contracts to perform studies or to perform some social function. Each Act also includes specific reference to the Davis-Bacon Act in the event any of the monies provided under the grants or contracts is used for construction. The Domestic Volunteer Service Act specifically requires the payment of Davis-Bacon prevailing wages to anyone involved in painting and decorating, as well as other tasks normally associated with construction. Appendix A contains a more comprehensive listing of the statutes requiring payment of predetermined wages for laborers.

Determination of Prevailing Wages. It is important to note that prevailing wages are issued in two separate forms. The first and most widely used is the "area" or "general" wage determination. This type of determination is issued when the wage pattern for a particular area and particular type of construction is well settled and the Department of Labor can reasonably anticipate a certain volume of this

type of construction to be federally funded within the area. These determinations are publicized for use by all contracting agencies within the prescribed area. This type of determination does not expire but is revised from time to time to remain current with changes within the area industry (7:326).

The second form of wage determination issued by the Department of Labor is the "project" determination. These determinations are issued for a specific project only and remain in effect for not more than 180 days. This type of determination is made for construction trades not typically found in the area in which the project will take place (7:327).

Wage determinations in one or the other form cover at least one construction job classification in nearly all of the nation's nearly 3,120 counties (7:327). Some counties are covered by multiple determinations since they may be issued for cities or other subdivision of the county.

According to Department of Labor regulations, 29 CFR 1.3(d), when compiling the data to be used in determining the prevailing wages for an area, wage data from federally funded projects subject to the Davis-Bacon Act are to be excluded. This data can only be used when there is insufficient data available from other sources for the determination of the prevailing wages within the area (5:1).

The Secretary of Labor has assigned the responsibility for determining prevailing wages and for defining the "area" for which they apply to two divisions within the Department of Labor. The Branch of Wage Determination is responsible for the establishment of the wage determinations and the Branch of Coordination and Enforcement is responsible for ensuring these wage guidelines are adhered to (9:304).

The procedures for establishing prevailing wages are not specified by statute but are left to the discretion of the Secretary of Labor through the issuance of regulations. The Code of Federal Regulations, Part I, Title 29-Labor contains these procedures. Within these regulations, there are definitions of the term "prevailing wage." There is the "majority rule" in which the prevailing wage is that wage paid to a majority of those employed in the area within a specific classification. Where less than 50 percent receive the same rate of pay, the "average rule" or "weighted average rule" establishes the prevailing wage based on the average rate of all workers employed in the area. This rate is determined by weighting the wage rate based on the percentage of workers receiving that wage. There was previously another rule -- the "thirty percent rule." The "thirty percent rule" was defined as the rate of pay to the greatest number of employees provided this number exceeded thirty percent of the total, when no majority of those employed received the same rate of pay (9:304).

The Code of Federal Regulations outlines the procedures used by DOL to gather data used to set prevailing wages. The primary method is through the encouragement of voluntary submission of wage rate information by construction contractors, trade associations, labor organizations, and other interested parties. Other information may also be obtained and used. This other information includes signed collective bargaining agreements, state and local wage rate determinations, information submitted by contracting agencies, and other forms of wage information (29 CFR 1.3).

Disputes and complaints concerning wage rates set by DOL may be appealed to the Wage Appeals Board of the DOL. Wage rates are not subject to judicial review (Tennessee Roadbuilders Association v. Marshall, 446 F. Supp. 399 (D.C. Tenn 1977)). Complaints have been routinely thrown out of court when construction firms or associations sought remedies through the judicial system (9:304).

Changes in the enforcement and administration of the Act have not been limited solely to the legislative process. Because of the responsibility assigned to the Secretary of Labor for the administration and enforcement of the Act, the Department of Labor has effected change through revisions of its regulations. A major change to the regulations occurred in 1982. Regulations concerning the administration of the Act were substantially revised, as a result of studies conducted into the Act during the Carter and Reagan

administrations. Previously, where local wage data was not available, urban area data was used to determine wages for rural areas. The new regulation abandoned this practice and established new rules for setting wages in rural areas. In addition, prior to these changes, Federally funded projects subject to the Act had been included when compiling wage data prior to these changes. Labor Department regulations now exclude the use of this type of information when making wage determinations (20:CRS-6).

Union organizations challenged these revisions and other changes proposed by DOL, as well as the authority of the Secretary of Labor to make such changes, when they were initially publicized for comment in 1981. This challenge was settled in the courts in the case of the Building and Construction Trades Department, AFL-CIO (BCTD) v. Donovan filed in the District Court for the District of Columbia. In that case, the District Court approved the abolition of the "thirty percent" rule but disapproved all other proposed changes. The Labor Department appealed this decision to the U.S. Court of Appeals for the District of Columbia, which gave approval to all changes except use of the summary compliance certification in lieu of payroll data and certain changes relating to the use of "helpers." This decision was further appealed to the U.S. Supreme Court which refused to grant certiorari, or to hear the case, in effect allowing the decision of the Court of Appeals to stand (19:1)

(Building & Construction Trades Dept., AFL-CIO v. Donovan, 712 F.2d 611, 229 U.S.App.D.C. 297 (1983), cert. denied 104 S.Ct. 975, 464 U.S. 1069, 79 L.Ed.2d 213).

The change that was struck down by the court, in connection with "helpers," would have allowed the employment of "helpers" under federal projects with a rate of pay less than that of a journeyman worker. The other change not permitted was the discontinuance of the requirement for weekly submission of employee payrolls to the contracting officer. The proposed rule would have required instead a weekly certification from the contractor that employees were by compensated in accord with the Act and applicable wage determinations. The court found on this matter that the submission of weekly payrolls is vital to the enforcement of the Act and is in addition required by the Copeland Anti-kickback Act which prohibits employers from taking rebates or other "kick-backs" as a condition of employment (20:CRS-7).

In further defining the application of the Act, DOL ruled that truck drivers making deliveries to construction job sites were subject to the requirements of the Act. The union organization (BCTD) contended that merely making deliveries to the site did not constitute the type of work intended for coverage by the Act. The Labor Department ruled that all workers performing any type of labor at a job site fall within the definition of laborers and mechanics,

for the purposes of the applicability of the Act. The Building and Construction Trades Division of the AFL-CIO, appealed the wage determination decision to the DOL Wage and Appeals Board which in turn concurred with the decision (1:11). The Building and Construction Trades Division further appealed to the federal court, which held that truck drivers transporting material and supplies to or from a job site are within the definition of the terms "construction," "prosecution," "completion," and "repair" as used in the Act (Building and Construction Trades Department, AFL-CIO v. U.S. Department of Labor Wage and Appeals Board, 829 F.2d 1186, 265 U.S. Appeals D.C. 54 (1987)).

Criticism and Support for the Act. Controversy and criticism have surrounded the Act since it went into effect. There are two main issues that are often raised when the Act is discussed. These are (1) the procedures which the Labor Department actually employs, or is perceived to use, when determining prevailing wages and (2) the alleged inflationary effects the wages have on the construction industry and federal contracts.

With respect to the first issue, it is argued that the intent of the Act is to establish a minimum wage. The Act merely states that contracts will "contain a provision stating the minimum wages to be paid various classes of laborers and mechanics which shall be based upon the wages that will be determined by the Secretary of Labor to be

prevailing..." It is argued that the practice of using the majority or average wage for such determinations establishes wages in excess of the minimum at which workers are employed in the area (22:406).

The second issue is a result of the first issue. When an average is used as a basis for determining wage rates, there are necessarily some workers receiving less than the average rate. However, when these workers are employed on contracts requiring the payment of the average wage, the next survey will result in a higher average rate of pay (22:406).

In a report to the Congress in 1979, the GAO recommended the Act be repealed as no longer being necessary and resulting in a waste of federal funds (18:7). As a part of its report, the GAO estimated that the annual administrative cost alone of the Act amounted to nearly \$228 million to the federal government. This estimate consisted of approximately \$190 million in increased expense to contractors as a result of the paperwork requirements of the Act and \$11-\$12.5 million by the Department of Labor to administer and enforce the Act. The remainder is the administrative burden to other federal departments and agencies for enforcement and surveillance required by the Act (18:76).

The GAO study was centered on the wages set by the Labor Department. The GAO compared wages set for a specific

area with wages the GAO found to be prevailing in the area from surveys conducted by GAO field personnel. The GAO found the cost impact on contracts to range from 1% to 9% higher than what would have otherwise been the contract price, had the requirements of the Act not been included. The GAO analysis was also based on contracts awarded at a lower dollar value than those analyzed in this study. Of the 12 contracts reviewed by GAO, only one exceeded \$2 million and seven, or approximately 58%, were less than \$200,000 (10:38).

The GAO study included a survey conducted in Tennessee. The results showed that many of the local construction firms refused to bid on contracts requiring the payment of Davis-Bacon wages. These firms stated that the wages were not typical in the area and were higher than normal. Workers receiving the higher wages would expect to be paid at the same rate for other projects not covered by the Act. The firms stated they could not continue to compensate workers at these levels and remain competitive on non-government work, which was their primary income (18:74).

The GAO report also suggested the Act inhibits competition for federally funded construction contracts. The report cited examples of contractors electing not to submit bids for Government projects because of the administrative burden and the effect the prevailing wages have on morale. Some contractors interviewed by GAO stated

morale is a significant problem when employee's wages are reduced after completion of federal projects and pay is lowered to the rates paid for private construction work in the area (18:73).

Conversely, the Building and Construction Trades Department of the AFL-CIO (BCTD) has reported that not only does the Act foster competition by leveling the cost of direct labor, a major portion of the prices offered, but it also encourages competition from minority businesses and the increased employment of minority workers. The BCTD report stated that, in 1978, 21 percent of the employees registered in apprentice programs were minorities. The report further contended that the increase of minority firms in the construction industry is evidence that the Act has no negative effects (2:1).

From an interview of Mr. Ray Marshall, a former U.S. Secretary of Labor, the BCTD reports that there is no impact on construction costs as a result of the Act. The BCTD was told by Mr. Marshall that the higher wages result in better quality and, if the Act were repealed and lower wages permitted, there would be increased costs for maintenance and repair after completion because the lower wages would encourage inferior quality (2:2).

Mr. Marshall also testified before the House Subcommittee on Housing and Urban Affairs in hearings held on the Act in 1979. Mr. Marshall again stated that higher

wages attract more highly trained workers which are more productive in terms of quality and efficiency (10:102).

Legislative proposals to repeal or amend the Act often cite reduced costs to the Government and reliance on the efficiencies and economies of the marketplace as a basis for the proposals. Some critics of the Act have said that employers could more effectively use their employees and use lower skilled workers at a reduced cost if the requirements of the Act did not exist. This cost savings, along with the reduced administrative expenses on the Government for enforcement, could be passed on to the Government (20:CRS-12).

Debate in the Congress over the 1964 amendment to the Act, which added the requirement for payment of fringe benefits, included lengthy discussions on the possibility of inflationary effects and the administrative costs to enforce the Act. Members of the Senate Labor and Public Affairs Committee stated that the Congress should be concerned about more than merely achieving construction contracts at the cheapest possible cost. They argued that, although construction should be carried out as economically as possible, it should not be at the expense of the local wage standard (13:2342).

It has often been contended that the Labor Department relies too heavily on union wage agreements when determining prevailing wages for an area. One study, conducted by a

doctoral candidate at the University of Chicago, reviewed 372 wage determinations. It was found that 85 percent of the residential wage determinations and 67 percent of the industrial wage determinations were the same as the union wages found in the local areas. The study concluded that the Labor Department "establishes union wage rates as a matter of course" (9:307). This was also the conclusion reached by the GAO in its study published in April 1979.

Construction trade associations, such as the Association of General Contractors (AGC), have insisted that the Labor Department does not follow the established rules for determining prevailing wages. The AGC believes the Labor Department has relied on union wages and that the resultant determinations do not conform to the actual wages prevailing in the areas for which they apply. These trade groups urge repeal of the Act and insist the construction marketplace will ensure adequate protection of the workers as well as producing lower and more competitive prices for federal construction projects (4:8).

The GAO has been critical of the methods used by the Labor Department to establish prevailing wages. In its report, the GAO cited inefficiencies and a less than adequate number of staff personnel as primary reasons for DOL's acceptance of union wage agreements as the basis for determining wages for an area. The GAO report also provided detailed information of examples where DOL added, changed,

or deleted wage data received from surveys without basis or rationale (18:141).

The GAO stated that it is of the opinion that it is questionable whether DOL can ever issue accurate wage determinations within the intent of the Act. The GAO considers the task of conducting wage surveys for every job classification and for each area of the country to be outside the capabilities of DOL, given the geographical and budgetary constraints the Department faces (18:134).

Labor organizations argue against tampering with the Act, stating that in times of recession unemployment within the construction industry increases. These groups believe this opens the way for exploitation of these workers. Thus, the protections provided by the Act must continue to be preserved (4:8).

Regardless of the manner in which wage rates are established, opponents of the Act criticize it as being highly inflationary. The Act's opponents feel this has an upward spiraling effect on construction labor costs that are ultimately caused by and passed on to the Government. By continually setting wages above what is the minimum in an area, the results lead to higher wages for workers in that area (22:406).

The GAO study previously discussed described this "upward spiraling" effect on wages as follows: since the established wage rates are based on the majority or an

average wage, not the minimum wage, there are contractors that employ workers at wages that are less than the DOL established wage for that area. If one of these contractors receives the award of a federally funded contract, the contractor is compelled to pay the higher wage and this "inflated" labor cost is passed on to the Government (18:98).

The Associated Builders and Contractors organization believes that the government's establishment of wages fuels inflation and upsets the collective bargaining process. It further believes that the Act institutionalizes higher union wages and their inflationary effects (4:9).

If the Act were to be repealed, contractors would be free to hire workers at a lower wage, initially from nonunion pools. This increase in employment at lower wages would have a spillover effect into the union bargaining area. The result, it is contended, would be that both union and nonunion wages would decrease based on availability and other typical marketplace factors (20:CRS-13).

Supporters of the Act argue that if costs would be reduced, it would be only for the short term. In the long term, employment at reduced wages would result in an increasingly inefficient workforce, more "fly-by-night" contractors that would move in and underbid local contractors. Repeal of the Act would also result in increased costs and recurrence of repairs and maintenance,

and disruption within the construction industry and others relating to construction (20:CRS-13).

Construction labor union organizations also argue that the Act must be preserved to provide equality of opportunity for firms vying for government construction contracts. These groups contend that contract awards should continue to be based on qualifications and efficiencies of operation and not by exploitation of workers through lower wage rates (4:8).

There have been many other criticisms of the Act. Opponents of the Act have stated the Act provides wage protection for highly paid construction workers for which protection is not needed. A repeal of the Act would not only provide more funds to complete other projects, but it would also eliminate the need for Government compliance and enforcement employees. These positions could then be eliminated or used elsewhere within the Government, resulting in more savings to the Government (16:120).

The Associated Builders and Contractors (ABC) organization contends that the Act causes increased unemployment for the construction industry, by limiting the federal construction projects. This group believes that funds saved from a repeal of the Act could be used toward other construction projects providing more jobs to the industry, as well as preventing the cancellation of many planned projects (4:9).

ABC asked President George H. W. Bush to suspend the Act for one year. The group stated, in its request to Bush, that approximately \$1.3 billion could be saved annually on construction projects. This estimated savings is based on ABC's contention that wages set by DOL do not accurately reflect the prevailing local wages. ABC has long been a critic of methods used by DOL to establish wage rates. The President has the authority under Public Law 74-403 to suspend the Act (14:174).

The Act has been suspended only twice since it was enacted. The first time was by President Franklin D. Roosevelt. The suspension was in 1933 and lasted 25 days. The second suspension was in February 1971, by President Richard M. Nixon. Nixon suspended the Act stating the excessive wage settlements and increased wage demands in the construction industry were spilling over into other industries creating a "national emergency." This suspension was lifted after only one week (11:13). Bush decided, on April 22, 1992, not to suspend the Act (3:647).

The GAO concluded that wage protection through issuance of local prevailing wages is not necessary to protect workers. Its report cites two other prevailing wage laws, the Walsh-Healy Public Contracts Act of 1936 for supply type contracts and the Service Contract Act of 1965 for service contracts. These Acts also require the establishment of wages applicable to contracts awarded by the federal

government. However, the methods used to establish wages under these acts are dissimilar to that used for the Davis-Bacon Act.

The Walsh-Healy Public Contracts Act of 1936, 41 USC 35 et seq., requires the Secretary of Labor to determine minimum local prevailing wages for workers employed under federal contracts for supplies. DOL regulations, 41 CFR 50-201 et seq., covering the establishment of these wages require only that the federal minimum wage set forth by the Fair Labor Standards Act be the minimum wage for covered employees. There is one exception and that is for persons employed in the mining industry.

The McNamara-O'Hara Service Contract Act of 1965, 41 USC 351 et seq., provides for a minimum local prevailing wage to be established by the Secretary of Labor for workers employed under federal contracts for services. The Labor Department regulations, 29 CFR 4.1 et seq., state that the "process of establishing wage and fringe benefits that bear a reasonable relationship" to those in a local area "cannot be reduced to any single formula." The Labor Department regulations require consideration of wages that would be paid if the worker(s) were federally employed, General Schedule pay rates, and several other factors when establishing wage rates for service contracts.

The GAO contends that adequate protection is provided to workers under these and other Acts. It maintains Davis-

Bacon Act regulations should be amended, if the Act is not repealed, to be more consistent with administration of other Acts (18:25).

Pending Changes to the Act. As discussed previously, since the Act went into effect, it has been the subject of much debate in the Congress. Although the Act has been amended from time to time, it has remained essentially unchanged. The few amendments merely expanded the Acts coverage into other areas and programs.

During the 1970s, nearly 30 separate bills were introduced in the Congress concerning the Act. The majority of these bills called for the outright repeal of the Act (18:124).

At the present time there are at least two separate bills before the House for consideration. House Resolution (HR) 1755, introduced by Representative Stenholm of Texas, et al., on April 11, 1991, calls for repeal of the Act. H.R. 1987 was introduced on April 23, 1991. This bill, introduced by Representative Murphy of Pennsylvania, would require an increase in the dollar threshold at which the Act becomes effective. The Murphy Amendment would also, in part, change weekly payroll data submissions to monthly and provide for judicial review of wage determinations. Senator Kennedy of Massachusetts introduced a bill on August 2, 1991 into the U.S. Senate, S.1689, that is essentially the same as H.R. 1987.

Other bills are currently under consideration which relate to the Act and its applicability to other programs or further expansion to the Act, such as H.R. 1281 which more broadly defines "helpers" and their use under the Act (21:CRS-9). This "helpers" bill may not now be required. The Department of Labor issued a rule change on June 26, 1992 removing the maximum number of two helpers allowed for every three journeymen. This action was a result of a court decision finding the rule as arbitrary and capricious in the case Building and Construction Trades Department, AFL-CIO v. Martin, Civ. No. 90-5345, D.C.Cir., April 21, 1992 (6:21).

Conclusion

The Davis-Bacon Act is a depression era law enacted to protect local construction workers and local construction firms from contractors that would bring distant and cheaper labor into an area disrupting the local wage structure. The Act has been the subject of much criticism over its impact on the increased costs for federally funded construction projects. The Act has been called inflationary and a cause of unemployment within the construction industry. The Act has also been cited as an inhibitor of competition by taking away the ability to allow the marketplace to determine wages. Proponents of the Act contend the Act remains as necessary as ever to prevent workers from being abused by transitory contractors that would ultimately disrupt the construction industry as a whole.

III. Methodology

Introduction

To achieve the objectives described in Chapter 1, information was gathered through a review of available literature and a limited request for information was provided to selected construction firms that generally compete for government contracts. These firms were requested to provide certain information concerning their bids submitted in response to certain Invitation For Bids issued by a base within the Strategic Air Command.

Justification of Method Selected

Literature Review. A review of available literature was conducted to provide a history of the Davis-Bacon Act (Act) and to identify some of the more recent changes and proposals for change to the Act. The intent was to develop a fundamental understanding of the Act.

This review also provided the information necessary to determine the procedures used by the U.S. Department of Labor (DOL) when establishing prevailing wages for a given area. The review also aided in gaining an understanding of how DOL regulates and enforces the requirements of the Act.

Data Collection. The current construction contracts within the former Strategic Air Command (SAC) and maintained in the data base at the Directorate of Contracting, Headquarters SAC was chosen for analysis. This data base

was selected because SAC bases are located throughout the country, in both urban and rural settings, and the complexity of contract requirements range from minor renovation to intricate design and build projects. All contracts contained in the data base were chosen for inclusion in the survey.

All contracts were results of solicitations set-aside exclusively for small business participation. This is typical for construction contracts. The Federal Acquisition Regulation (FAR) paragraph 19.502-2(a) requires the contracting officer to set-aside all solicitations for small business when there is a reasonable expectation of receiving bids from two or more small business firms and the award will be at a fair market price (8:19-23). The sample is representative of typical operational level construction contracts.

A detailed listing of all bidders was compiled from the Abstracts of Bids considered in awarding each contract. The Abstracts of Bids provides the names and addresses of all firms submitting a bid on the project advertised, as well as the prices offered and other information relating to the project. Each bidder was then sent a request for information. The content of the interview is discussed later in this section.

Request for Information. A list of all bidders on each contract was established. All firms were surveyed and asked

questions designed to ascertain the general effect of the Davis-Bacon Act on the price submitted. The questions asked are as follows:

1. For the project identified, what was your total estimated cost of labor?
2. Had Davis-Bacon Act wage rates not been a part of the solicitation, how would your estimated labor costs have changed? (Please specify as a percentage.)
3. By what percentage would your total bid price change if Davis-Bacon wages not been included?
4. Has the requirement to pay Davis-Bacon Act wages ever made you consider not bidding on a project? If so, did you bid on the project? Why/why not?

The data gathered was analyzed and summarized. The analysis compared the prices offered with the alternate prices that the respondents stated they would have submitted had the clause requiring payment of predetermined wages not been included in the solicitation. The analysis also reflects those firms which said the inclusion of the clause had no impact on the amount of their bid -- that is, the respondents that typically pay prevailing wages or higher as a normal practice.

Based on the data contained in the responses, an average cost impact, or average percentage of change, was computed. This average cost impact was then applied to the Air Force construction budget for fiscal year 1992 construction programs. This provided a potential total cost impact of the Act on the Air Force. The results of this analysis are included in Chapter 4. Conclusions are

presented in Chapter 5. In addition, a sampling of the comments submitted in response to question 4 is provided at the conclusion of chapter 4.

IV. Analysis

Introduction

The purpose of this chapter is to provide some basic information into the identity of the respondents as a group and to present the data they submitted. An analysis of the data submitted is provided. Conclusions that can be drawn from these responses relating to the investigative questions will be provided in chapter 5.

Request for Information

The contract data base located at the (former) Headquarters Strategic Air Command Directorate of Contracting included 52 contracts at the time the data was gathered. These contracts ranged in magnitude of contract award amount from \$104,600 to \$7,140,050. Complexity of work to be performed under these contracts spanned from simple office renovations to the complete construction of a golf course clubhouse. The sample chosen from which to gather the data used in this study is typical of the type and complexity of construction contracts commonly encountered at the installation level throughout the Air Force.

A search of the data revealed that bids had been submitted by 106 companies. The data contained no duplicate firms. The request for information was sent to all 106 firms; however, of these only 22 replies were received for a

20.75% response rate. Of these 22 responses, four contained no quantifiable data, thus they were eliminated from the analysis. From the initial mailing, 17 were returned due to incorrect addresses with no forwarding information available. A follow-up request was sent to the 67 remaining firms that had not previously responded. No responses resulted from this second request.

The low response rate to the request for information may be attributable to several factors. The time of year, spring and early summer, may have been a major factor in the low return rate. This is the time most construction firms, especially small business firms, are at their busiest. Also, the survey was sent to 106 sources based on the award of 52 contracts. Therefore, less than half of those requested to provide information did not receive award of the contract and possibly chose not to participate as a result.

All firms that were solicited for information are small business construction firms. All contracts were set-aside, as discussed previously, exclusively for small business participation.

Of the questions asked of the respondents, one question received only a single response. That question concerned the direct cost of labor. The responses would have been used to analyze the magnitude of labor required by the project and the resultant impact on bid price changes.

Since insufficient responses were received, that determination cannot be made.

Analysis of Data

The following is the analysis of the responses received from the respondents and information obtained through a search of the literature which was provided in chapter 2. The information is provided in the same order as the investigative questions were presented in chapter 1.

1. How does the Department of Labor establish prevailing wages?

This question was not included in the request for information. Data necessary to answer this question was gathered in the literature review contained in chapter 2. No quantitative data was used.

2. What effect do these wages have on the prices offered by bidders?

Table 1, below, displays the data furnished in response to the request for information. The table provides information concerning the amount by which the bid prices would have changed in the absence of the Davis-Bacon Act. The actual price offered in response to a solicitation and the alternative price had the Act not been a requirement are presented, as well as the amount of adjustment and the percentage of change. The percentage of change is the amount of adjustment as a percentage of the actual price submitted.

TABLE 1
IMPACT OF ACT ON BIDS OFFERED

SOURCE	IMPACT %	BID PRICE	ADJ AMOUNT	ALT PRICE
1	25	978000	244500	733500
2	17	712300	121091	591209
3	15	2580000	387000	2193000
4	25	1650000	412500	1237500
5	0	1287150	0	1287150
6	12	1626960	195235	1431725
7	0	3698196	0	3698196
8	0	611430	0	611430
9	50	1715000	857500	857500
10	33.3	1986944	661652	1325292
11	0	1120770	0	1120770
12	24	1736321	416717	1319604
13	14	152800	21392	131408
14	17	356636	60628	296008
15	10	850395	85040	765355
16	15	1343880	201582	1142298
17	16	428500	68560	359940
18	10	225800	22580	203220

A graphical representation depicting the percentage of cost impact on bids by the number of responses is provided in figure 1 below.

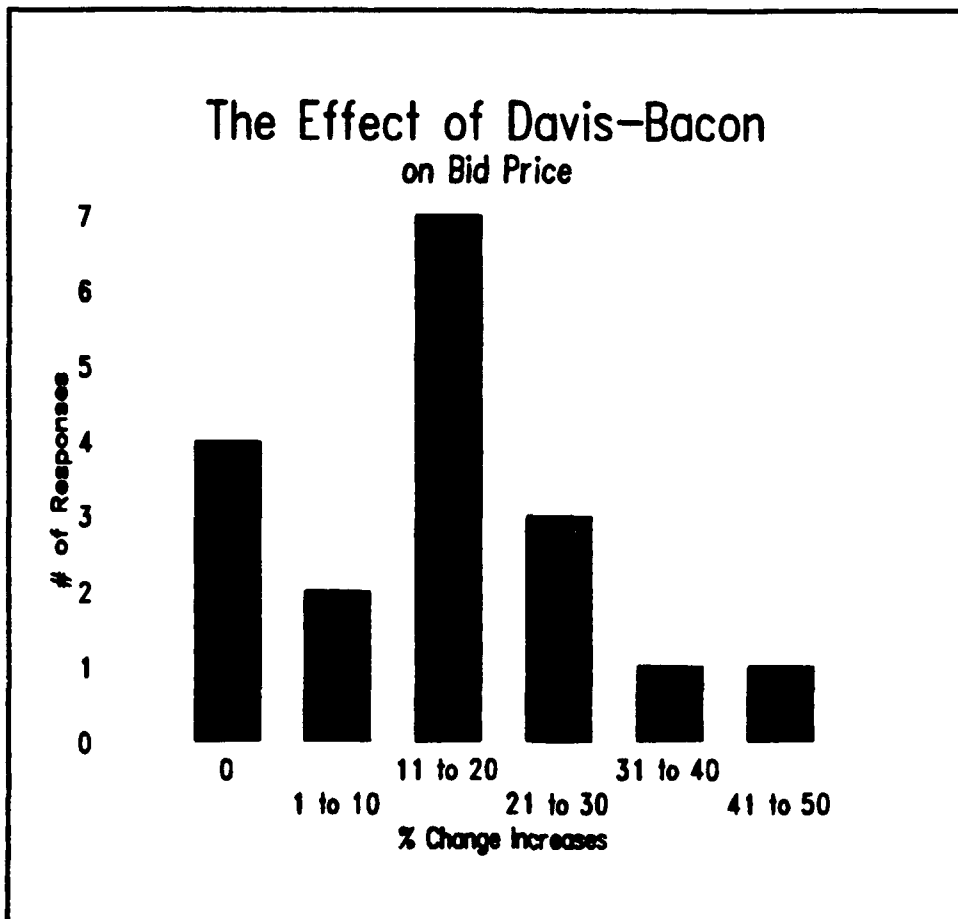


Figure 1. Cost Impact on Solicitations

Analysis of the data began with a simple computation of a mean percentage of cost impact. This was calculated based on the total percentage, or the summation of the impact column in Table 1, divided by the total number of responses. Those responses that indicated the Act had no impact on the price of bids they provided were included in the analysis. The calculation was 283.3 divided by 18. This resulted in a mean percentage of cost impact of 15.74%.

A mean or average change weighted to reflect the dollar value of the bids was then calculated. This was done using the sum of the amount of adjustment, if any, divided by the total of the bid price column shown in Table 1. The resultant figure was the percentage of change based on the total dollar volume. The calculation was 3,755,977 divided by 23,061,082. The result was an average price change of 16.29%.

Based on the above, the use of the average cost impact of the Act is used as an estimator of the cost impact of the Act on bids. Therefore, based on the sampled data, it can be concluded that the Act results in a minimum average impact of 15.74% on the price of bids submitted.

Other information was also analyzed. The responses that indicated the Act had no impact on their bids were reviewed further. All responses stated essentially they paid "union wages which are the same as the prevailing wages."

The response that indicated a 50% cost impact was analyzed to determine if any abnormality existed. It was discovered, through a review of the Abstract for Bids from which this bidder was selected, that the project was highly labor intensive. The project was for environmental cleanup requiring little material and equipment and a large percentage of labor. No other respondent had bid on this project.

3. What is the cost impact to the Air Force as a result of the Act?

Table 2, below, displays the information contained in the responses in the same manner as Table 1, but includes only the responses of bidders who actually received the contract award. The bid price is the amount at which the contract was awarded. None of the respondents that indicated the Act had no impact on their bids received a contract award.

TABLE 2
IMPACT OF ACT ON AWARDED CONTRACTS

SOURCE	IMPACT %	BID PRICE	ADJ AMOUNT	ALT PRICE
1	25	978000	244500	733500
2	15	2580000	387000	2193000
3	12	1626960	195235	1431725
4	50	1715000	857500	857500
5	15	1343880	201582	1142298
6	16	428500	68560	359940
7	10	225800	22580	203220

Figure 2 provides a graphical depiction of the percentage of cost impact on the contract price. The impact percentage is shown in ranges for ease in presentation.

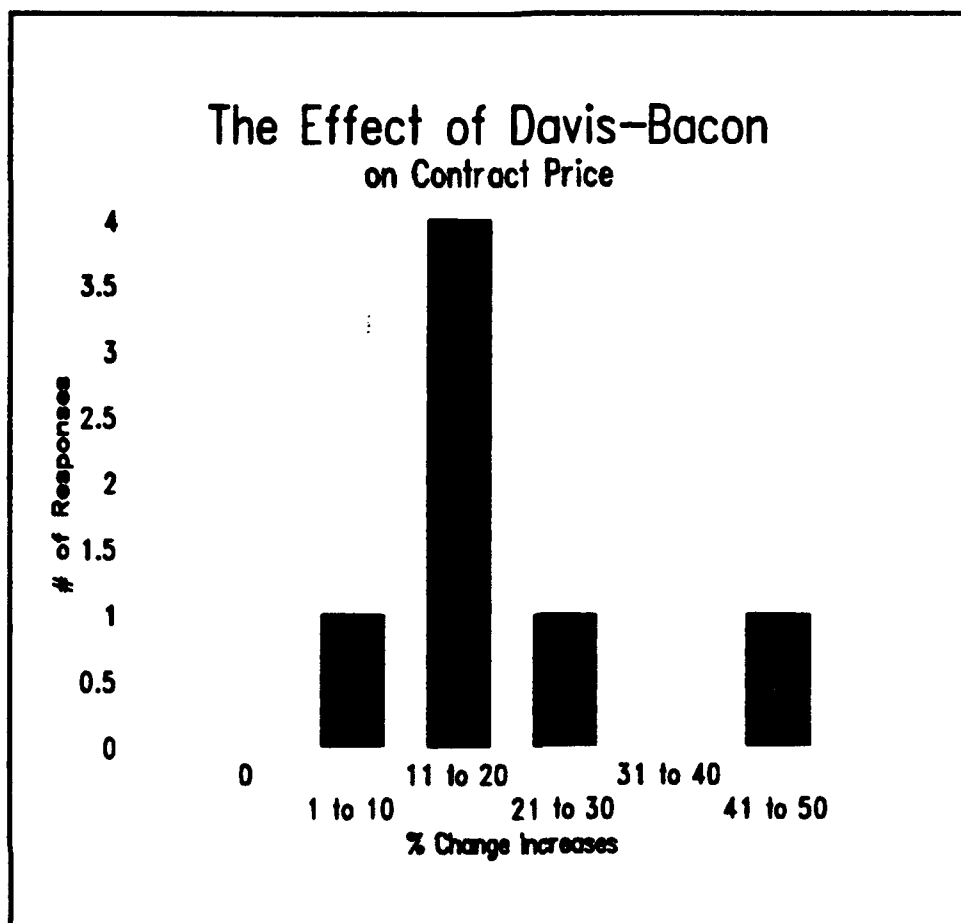


Figure 2. Cost Impact on Contracts

The mean percentage of cost impact was calculated by dividing the sum of the impact column in Table 2 divided by the number of respondents that received contract awards. The calculation was 143 divided by 7. This resulted in a mean cost impact on contract award prices of 20.43%.

A mean or average change weighted to reflect the dollar value of the contracts was then calculated. This was done using the sum of the amount of adjustment divided by the total of the bid price column contained in Figure 2. The

calculation was 1,976,957 divided by 8,898,140. The result of this calculation was an average price change of 22.22%.

Finally, based on the above table, the actual cost impact of the Act on the contracts reflected is \$1,976,957. This figure is the summation of the reported amounts of price adjustment, set forth Table 2.

Additional analysis was also done on those respondents not receiving award. A comparison was made to determine if the bidder would have received the contract award based on the alternate bid price the respondents provided. The alternate bid price was lower than the contract award price for four of the eleven bidders that did not receive award of the contract. The total of the four contracts awarded was \$5,265,769. The total of the alternate bids that would have been submitted had Davis-Bacon Act wages not been required was \$4,178,404. The actual impact of the Act on the awarded contracts cannot be determined since those firms did not respond to the survey. However, the Air Force would have saved a minimum of \$1,087,365 on these four contracts had wages required by the Act not been required.

4. How do established rates affect the availability of competition?

Of the responses received, only three contained any information relating to this question. No quantifiable data was provided; therefore, only the respondents comments are presented.

a. One respondent stated that not only does the Act affect his prices, but his firm has regular subcontractors that routinely refuse to be a party in an effort that includes the Act. No further information was provided. Because of this lack of information, it cannot be determined if these refusals are based on the wage rate or other administrative requirements of the Act. Nor was any information provided relating to the availability of alternate subcontractors.

b. One firm stated he initially encountered difficulty when he first began bidding on government projects subject to the Act. He said the wages were usually "too high" or "too low" based on the job skills required. He stated that it was not until he was able to "adjust" his bids, that he was able to receive contract awards. He provided no information concerning these adjustments.

c. A third response relating to this question provided only second hand information. He stated he had heard of companies that would not bid on federal construction projects if the Act was included. He offered no further information relating to these companies.

Other Comments Received

From responses to the request for information, the following are some additional comments provided by the firms:

The Act requires the classification of all workers. Often it is not possible to distinguish a worker as a laborer or a skilled craftsman. If a laborer picks up a hammer and drives a nail, he may be considered a carpenter and the Act requires the payment of a different and higher wage.

Two workers with the same experience and skill may be working on two separate projects--one subject to the Act the other not. It is impractical for an employer to pay these two workers separate wages and maintain good morale. This results in driving up the cost of labor for projects not covered by the Act.

One employee may work on many different project sites in a given pay period. As the worker transits from one project to another, the required wage rate can often change. This presents an administrative problem for the managers as they must keep track of the employee minute by minute. This practice is not uncommon in the construction industry; however, it can present problems for the worker since he cannot accurately anticipate the amount of wages earned or due. This opens the way for contractors to under pay workers.

V. Conclusions

This chapter examines the investigative questions that have been posed and recommends some areas for additional research in the future.

Question 1: How does the Department of Labor establish prevailing wages?

A review of the literature provided a detailed regulatory process which the Labor Department is required to follow when determining prevailing wages. However, this review also pointed to much criticism of the actual methods employed by the Department. For example, the Labor Department can use existing wage agreements when establishing prevailing wage rates. Critics contend that Labor relies too much, if not primarily, on the existing union negotiated wage agreements within an area which may not accurately reflect local wage conditions. Negotiated agreements are provided to the Labor Department as a part of the voluntary wage data submission process. This data then serves as a basis for the determination of wage rates for the area. It must be pointed out that the 22% of the respondents which said the Act had no impact on their bid prices also stated they were union contractors.

Question 2: What effect do these wages have on the price offered by bidders?

Based on the analysis presented in chapter 4, the Act does have an effect on the price offered by bidders. The analysis showed that if the payment of predetermined wages had not been required, prices of bids submitted would be 16% lower, on average.

Five of the respondents also explained that the added administrative burden to them, resulting from many of the other requirements of the Act, serve to increase the cost of construction to the federal government. Among these administrative requirements are weekly payroll submissions and compliance reporting. Although the research presented here deals primarily with the effects of the labor wage rates, the other associated costs cannot be ignored.

Question 3: What is the cost impact on the Air Force as a result of the Act?

The analysis accomplished provided evidence that the Act does have a cost impact on Air Force construction contracts. To determine the projected impact on the Air Force for fiscal year (FY) 92, the approved installation level construction budget figure of \$1.06 billion is used. When the estimated cost impact on awarded contracts of 20.43% is applied to the FY 92 Air Force construction budget, the projected cost impact to the Air Force as a result of the Act is in excess of \$216 million.

A study conducted by the GAO concluded that the net increased cost of construction projects completed on behalf of the Government, as a result of the Act, ranges from 10 to 15 percent. The GAO study estimated the total impact of this increase to be approximately \$513 million for all federally funded projects. This estimate includes both the increased labor costs and the administrative costs for enforcement and record keeping. This estimate was based on what the GAO called a "conservative" estimate of 3.4% of the total federal construction budget.

The methodology used by the GAO in their study was similar to that of this research. However, the GAO study concentrated primarily on the wages set by DOL with respect to results of wage surveys conducted by GAO. The emphasis of the GAO study centered on differences between DOL established wage rates and actual existing local wage trends.

Question 4: How do established wage rates affect the availability of competition?

The findings from responses to the request for information solicited for this thesis were less conclusive. Since the requests were made of firms that do business with the government, it could not be expected that they had refused to do business with the government because of the Act.

The GAO study found some evidence of the Act as a hinderance to competition. Their findings revealed that where wages are set by DOL above what is actually being paid, firms are hesitant to bid on federal projects. This is due primarily to worker demand for the same rate of pay on commercial work and the firm's inability to remain competitive if it adopted such a policy.

Summary of Other Comments Received

From the responses received, additional information was provided stating other impacts of the Act. Workers are impacted as they transit from job to job where wages and job categories differ. Employees and employers must keep track of these transfers to assure proper payment is made. Also the payment of workers employed in the same trade or craft but on different projects can vary depending on the type of work being performed.

Recommendations for Further Research

Although this research found no direct relationship between the prices bid and the percentage of cost impact of the Act, further study could be done into the complexity of the construction project. There may be some relationship between the labor intensity of the contracted work and the impact on cost. Investigative questions could be developed asking not only the percentage of cost differences between prices offered and alternative prices, but they could also

request information on the magnitude of labor involved in the project.

The effect the Act has on the availability of competition was not fully explored by this research. Further study could be accomplished with emphasis on firms that no longer compete for federal contracts. The Small Business Administration, trade associations, etc. could possibly provide useful information into this area. If it could be determined that the Act has caused a reduction in competition, specific reasons should be determined; administrative requirements, wage rates, or other causes.

Lastly, this study found in both the literature research and survey responses, charges that the Department of Labor merely relies on existing union wage agreements in some cases to establish prevailing wage rates. This matter could be further studied to determine the extent of this practice. Selected areas of the country could serve as a basis from which to gather wage data. Necessary information would include local prevailing wage rates set by the Labor Department and negotiated union wage agreements. These could then be compared to determine similarities.

Appendix: Statutes Related to the Davis-Bacon Act
Requiring Payment of Prevailing Wages
(as of April 1977)

1. Federal-Aid Highway Act of 1956 (sec. 108(b), 70 Stat. 378, recodified at 72 Stat. 895; 23 U.S.C. 113(a), as amended), see particularly the amendments in the Federal-Aid Highway Act of 1968 (Public Law 90-495, 62, Stat. 815).
2. National Housing Act (sec. 212 added to c. 847, 48 Stat. 1246 by sec. 14, 53 Stat. 807; 12 U.S.C. 1715c) and repeatedly amended.
3. Federal Airport Act (sec. 15, 60 Stat. 178; 49 U.S.C. 1114(b)).
4. Housing Act of 1949 (sec. 109, 63 Stat. 419, as amended; 42 U.S.C. 1459
5. School Survey and Construction Act of 1950 (sec. 101, 72 Stat. 551, 20 U.S.C. 636(b) (1) (E), Public Law 85-620).
6. Defense Housing and Community Facilities and Services Act of 1951 (sec. 310, 65 Stat. 307, 42 U.S.C. 15921
7. U.S. Housing Act of 1937 (sec. 16, 50 Stat. 896, as amended, 42 U.S.C. 1416).
8. Federal Civil Defense Act of 1950 (sec. 3(c), 72 Stat. 533; 50 U.S.C. App. 2281, Public Law 85-606).

9. Health Professions Educational Assistance Act of 1963 (sec. 2(a), 77 Stat. 164; 42 U.S.C. 292d (c) (4) and 42 U.S.C. 293a(c)(5), Public Law 88-129).
10. Mental Retardation Facilities Construction Act (sec. 101, 122, 135; 77 Stat. 282, 284, 288, 42 U.S.C. 295(a)(2)(D), 2662(5), 2675(a)(5), Public Law 88-164).
11. Community Mental Health Centers Act (sec. 205, 77 Stat. 292; 42 U.S.C. 2685(a)(5), Public Law 88-164).
12. Higher Educational Facilities Act of 1963 (sec. 403, 77 Stat. 379; 20 U.S.C. 753, Public Law 88-204)
13. Vocational Educational Act of 1963 (sec. 7, 77 Stat. 408; 20 U.S.C. 35f, Public Law 88-210).
14. Library Services and Construction Act (sec. 7(a), 78 Stat. 13; 20 U.S.C. 355c(a)(4), Public Law 88-269.
15. Urban Mass Transportation Act of 1964 (sec. 10, 78 Stat. 307; 49 U.S.C. 1609, Public Law 88-365).
16. Economic Opportunity Act of 1964 (Sec. 607, 78 Stat. 532; 42 U.S.C. 2947, Public Law 88-452).
17. Hospital Survey and Construction Act, as amended by the Hospital and Medical Facilities Amendments of 1964 (sec. 605(a)(5), 78 Stat. 453; 42 U.S.C. 291e(a)(5), Public Law 88-443).
18. Housing Act of 1964 (adds sec. 516(f) to Housing Act of 1949 by sec. 503, 78 Stat. 797; 42 U.S.C. 1486(f), Public Law 88-560).

19. Commercial Fisheries Research and Development Act of 1964 (sec. 7, 78 Stat. 199; 16 U.S.C. 779e(b), Public Law 88-309).
20. Nurse Training Act of 1964 (sec. 2, 78 Stat. 909; 42 U.S.C. 296a(b) (5), Public Law 88-581).
21. Appalachian Regional Development Act of 1965 (sec. 402, 79 Stat. 21; 40 U.S.C. App. 402, Public Law 90-103).
22. Act to provide Financial Assistance for Local Educational Agencies in areas effected by Federal activities (64 Stat. 1100, as amended by sec. 2, 79 Stat. 33; 20 U.S.C. 2411, Public Law 89-10).
23. Elementary and Secondary Education Act of 1965 (sec. 308, 79 Stat. 44; 20 U.S.C. 848, Public Law 89-10).
24. Cooperative Research Act of 1966 (sec. 4(c), added by sec. 403; Public Law 89-750, 79 Stat. 46; U.S.C. 332a (c)).
25. Housing Act of 1961 (sec. 707, added by sec. 907, 79 Stat. 496; 42 U.S.C. 1500c-3, Public Law 86-117).
26. Housing and Urban Development Act of 1965 (sec. 707, 79 Stat. 492; 42 U.S.C. 3107, Public Law 89-117).
27. Public Works and Economic Development Act of 1965 (sec. 712, 79 Stat. 575; 42 U.S.C. 3222, Public Law 89-136).
28. National Foundation on the Arts and Humanities Act of 1965 (sec. 5(k), 79 Stat. 846; 20 U.S.C. 954(k), Public Law 89-234).

29. Federal Water Pollution Control Act as amended by sec. 4(g) of the Water Quality Act of 1965 (79 Stat. 910; 33 U.S.C. 466e(g), Public Law 89-234).
30. Heart Disease, Cancer and Stroke Amendments of 1965 (sec. 904, as added by sec. 2, 79 Stat. 928; 42 U.S.C. 299d(b) (4), Public Law 89-239).
31. National Capital Transportation Act of 1965 (sec. 3(b) (4), 79 Stat. 644; 40 U.S.C. 682(b)(4), Public Law 89-173) Note: Repealed December 9, 1969, and labor standards incorporated in sec. 1-1431 of the District of Columbia Code.
32. Vocational Rehabilitation Act (sec. 12(b), added by sec. 3, 79 Stat. 1284; 29 U.S.C. 41a(b)(4), Public Law 89-333).
33. Medical Library Assistance Act of 1965 (sec. 2, adding sec. 393 of the Public Health Service Act, 79 Stat. 1060; 42 U.S.C. 280b-3(b)(3), Public Law 89-291).
34. Solid Waste Disposal Act (sec. 207, 79 Stat. 1000; 42 U.S.C. 3256, Public Law 89-272).
35. National Technical Institute for the Deaf Act (sec. 5(b)(5), 70 Stat. 126; 20 U.S.C. 684(b)(5), Public Law 89-36).
36. Demonstration Cities and Metropolitan Development Act 1966 (sec. 110, 311, 503, 1003, 80 Stat. 1259, 1270 1277, 1284,; 42. U.S.C. 3310; 12 U.S.C. 1715c; 42 U.S.C. 1416, Public Law 89-745).

37. Model Secondary School for the Deaf Act (sec. 4, 80 Stat. 1028, Public Law 89-695).
38. Delaware River Basin Compact (sec. 15.1, 75 Stat. 714, Public Law 87-328) (considered a statute for purposes of the plan.)
39. Alaska Purchase Centennial (sec. 2(b), 80 Stat. 8, Public Law 89-375).
40. Highway Speed Ground Transportation Study (sec. 6(b), 79 Stat. 895, 49 U.S.C. 1636(b), Public Law 89-220).
41. Allied Health Professions Personnel Training Act of 1966 (80 Stat. 1222; 42 U.S.C. 295h(b)(2)(E), Public Law 89-751).
42. Air Quality Act of 1967 (Sec. 307 added by sec. 2, 81 Stat. 506; 42 U.S.C. 1957j-3, Public Law 90-148).
43. Elementary and Secondary Education Amendments of 1967 (81 Stat. 819; 20 U.S.C. 880b-6, Public Law 90-247).
44. Vocational Rehabilitation Amendments of 1967 (81 Stat. 252, 29 U.S.C. 42a (c)(3), Public Law 90-391).
45. National Visitors Center Facilities Act of 1968 (sec. 110, 82 Stat. 45; 40 U.S.C. 808, Public Law 90-264).
46. Juvenile Delinquency Prevention and Control Act of 1968 (sec. 133, 82 Stat. 469; 42 U.S.C. 3843, Public Law 90-445).
47. New Communities Act of 1968 (sec. 410 of Public Law 90-448, 82 Stat. 516; 42 U.S.C. 3909).

48. Alcoholic and Narcotic Addict Rehabilitation Amendments of 1968 (sec. 243(d) added by sec. 301, 82 Stat. 1008; 42 U.S.C. 2688h(d), Public Law 88-164).
49. Vocational Education Amendments of 1968 (sec. 106 added by sec. 101(b), 82 Stat. 1069, 20 U.S.C. 1246, Public Law 90-576).
50. Postal Reorganization Act (30 U.S.C. 410(b)(4)(c), Public Law 91-375).
51. Developmental Disabilities Services and Facilities Construction Amendments of 1970 (84 Stat. 1316, 42 U.S.C. 2675, sec. 135(a)(5), Public Law 91-517).
52. Rail Passenger Service Act of 1970 (84 Stat. 1327, 45 U.S.C. 565, sec. 405(d), Public Law 91-518).
53. Housing and Urban Development Act of 1970 (84 Stat. 1770, Sec. 707(a) and (b), Public Law 91-609, 42 U.S.C. 1500c-3).
54. Airport and Airway Development Act of 1970 (84 Stat. 219, sec. 22(b), Public Law 91-258, 41 U.S.C. 1722 (b)) (this act provides for wage determination by the Secretary of Labor but does not subject the act to Reorganization Plan No. 14).
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57. Housing Act of 1950 (64 Stat. 78, 12 U.S.C. 1749a(f)).
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Vita

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