

MICROCOPY RESOLUTION TEST CHART
 NATIONAL BUREAU OF STANDARDS - 1963 - A

AD-A169 842

An Analysis of Selected Provisions
in Construction Labor Agreements

by

JIMMY SPENCER HIRAKAWA

A report submitted in partial fulfillment
of the requirements for the degree of

Master of Science in Engineering

University of Washington

1986

N0228-856-3363

Program Authorized
to Offer Degree Construction Engineering and Management

Date 9 June 1986

DISTRIBUTION STATEMENT A
Approved for public release
Distribution Unlimited

TABLE OF CONTENTS

	Page
List of Tables	iv
List of Figures	vi
Chapter 1: Introduction	1
Statement of Problem	1
Scope and Purpose	2
Development of the Report	3
Chapter 2: Contemporary Trends in Labor-Management Relationships	5
Economic Trends	5
Decline in Union Membership	6
The Growth of Open Shop Construction	8
The Decline of Multiemployer Bargaining	10
Multiskilled Unions, Project Pacts, and National Agreements	11
Labor Regulation, Politics, and Court Decisions	14
Studies of Labor Agreements	18
Chapter 3: Methodology	19
Research Formulation.	19
Data Analysis	20
Difficulties Encountered	21
Chapter 4: Analysis of Labor Agreement Provisions	22
Contract Duration	22
Month of Expiration	24
Subcontractor Provision	25
No Strike-No Lockout Provision	29
COLA Provisions	32
Shift Provisions	34
Overtime	37
Saturday Make-up Provision	41
Travel Pay Provisions	44
Work Through Lunch Provision	47
Coffee Break Provisions	50

Chapter 5: Results and Conclusions 54

 Summary of Results 54

 Conclusions 58

List of References 61

Appendix A: Request for Agreements 66



Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By <i>Per Form 50</i>	
Distribution / <i>XX</i>	
Availability Codes	
Dist	Avail ar.d/or Special
<i>A-1</i>	

LIST OF TABLES

Number	Page
1. Duration of Contract by Craft	23
2. Contract Duration in Union Shop and Right to Work States	24
3. Frequency of the Inclusion of Subcontractor Provisions by Craft	28
4. Comparison of the Inclusion of Subcontractor Provisions Between Union Shop and Right to Work States	29
5. Frequency of the Inclusion of No Strike-No Lockout Provisions by Craft	31
6. Comparison of the Inclusion of No Strike-No Lockout Provisions Between Union Shop and Right to Work States	32
7. Frequency of the Inclusion of COLA Provisions by Craft	33
8. Comparison of the Inclusion of COLA Provisions Between Union Shop and Right to Work States	34
9. Frequency of the Inclusion of Shift Provisions by Craft	36
10. Comparison of the Inclusion of Shift Provisions Between Union Shop and Right to Work States	37
11. Frequency of the Inclusion of Overtime Provisions by Craft	39
12. Frequency of the Inclusion of Overtime Provisions by Craft, Miller 1978 (54)	40

13.	Comparison of the Inclusion of Overtime Provisions Between Union Shop and Right to Work States	41
14.	Frequency of the Inclusion of Saturday Make-up Day Provisions by Craft	42
15.	Frequency of the Inclusion of Saturday Make-up Day Provisions by Craft, Miller 1978 (54)	43
16.	Comparison of the Inclusion of Saturday Make-up Day Provisions Between Union Shop and Right to Work States	44
17.	Frequency of the Inclusion of Travel Pay Provisions by Craft	46
18.	Frequency of the Inclusion of Travel Pay Provisions by Craft, Miller 1978 (54)	46
19.	Comparison of the Inclusion of Travel Pay Provisions Between Union Shop and Right to Work States	47
20.	Frequency of the Inclusion of Work Through Lunch Provisions by Craft	49
21.	Comparison of the Inclusion of Work Through Lunch Provisions Between Union Shop and Right to Work States	50
22.	Frequency of the Inclusion of Coffee Break Provisions by Craft	52
23.	Comparison of the Inclusion of Coffee Break Provisions Between Union Shop and Right to Work States	53
24.	Frequency of Occurrence of Provisions	56
25.	Variations in the Frequency of Occurrence of a Provision Between Crafts	57
26.	Variations in the Frequency of Occurrence of a Provision, US vs RTW	57

LIST OF FIGURES

Number	Page
1. Frequency of Agreements by Month	26

ACKNOWLEDGMENTS

The author wishes to express sincere appreciation to Professor Hinze for his guidance in the preparation of this report. In addition, special thanks to the local chapters of the Associated General Contractors of America who provided the labor agreements used in this study.

CHAPTER 1

INTRODUCTION

Statement of Problem

Labor relations is a dynamic factor of ever increasing importance in the construction industry. Often contractors feel they have little control over their workers or over labor costs, yet labor costs represent a large portion of the total cost of construction. The guidance document for labor-management relations is the labor union agreement. The provisions in the agreements indicate the relative strengths of labor and management. Contemporary political, economic, and social trends are prompting craft unions into modernizing their position on numerous provisions in their labor agreements. The frequency of occurrence of provisions favorable to workers but costly for employers is a good indication of the strength of a union. Although there are hopeful indications of the willingness of organized labor to adopt practices in their union agreements that are healthy for both contractors and workers, it is believed that changes generally occur when unions are under duress (1,2).

It is desirable to know the success realized by unions of the various crafts in negotiating for desirable

provisions in recent labor agreements. This can provide valuable insights to the current state of labor-management relations in the construction industry.

Scope and Purpose

→ The purpose of this research effort is to investigate some of the pressures facing the modern day construction craft union and to try to determine the effects those pressures have had on labor-management negotiations. The objective is to determine the relative strengths of unions of each craft in the construction industry through an analysis of selected provisions in union agreements.

The data for this study was collected from union agreements between multiemployer organizations, such as the Associated General Contractors of America, and six basic construction crafts: carpenters, cement masons, iron workers, laborers, operating engineers, and teamsters. A comparison will be made of the frequency of occurrence of selected provisions in the agreements of each of the crafts. Since a serious threat to union security comes from open shop competition (3,4), further comparisons will be made between agreements from Union Shop states and Right to Work states. In general, labor agreements in Right to Work states would be expected to be more favorable to management than the agreements occurring in Union Shop states.

Union contract provisions selected for analysis include overtime, Saturday make-up days, shift provisions,

work through lunch provisions, coffee breaks, travel compensation, provisions that tie future wage and benefit increases to cost of living indices (COLA's), no strike-no lockout provisions, and subcontractor provisions. Data on the duration of contracts and the month of expiration will also be collected.

Development of the Report

Chapter two will provide a literature review of contemporary problems facing construction unions. For each issue, an attempt was made to present a balanced view of both the employers and unions. It is believed that changes in the provisions of labor agreements are, in part, a reaction to these problems.

The methodology used in gathering the data and the technique used to determine the statistical relevance of the findings will be presented in chapter three. Problems that occurred during research will also be discussed.

An analysis of data from the review of the construction labor agreements will be provided in Chapter four. The selected provisions will be analyzed for variations in the frequency of occurrence in the agreements of the different crafts and between the agreements from Union Shop states and Right to Work states.

A summary of the results will be presented in chapter five. Conclusions concerning the relative strengths and weaknesses of the unions of each craft will be made.

Significant differences found in the frequency of inclusion of a provision in the agreements of Union Shop states and Right to Work states will also be discussed.

CHAPTER 2

CONTEMPORARY TRENDS IN LABOR-MANAGEMENT RELATIONSHIPS

Economic Trends

The construction industry has been particularly susceptible to changes in the national economy. Since the 1981-1983 recession, the industry has experienced a general recovery. Construction activity rose an estimated 17 percent in 1983, the largest yearly increase in more than three decades (5). Construction continued to rise in 1984 and reached a record high of \$227 billion dollars in 1985 (6,7). The increases are largely contributed to the decline in interest rates that started in 1982 (8,9,10).

Although the economy has experienced a recovery over the past few years, the influence the recovery has had on construction labor agreement bargaining has not been dramatic. During the economic recovery, construction pay increases have lagged far behind pay increases for other industrial trades (11). Estimates by the Bureau of Labor Statistics indicate that building trade unions have negotiated for less than half of the wage and benefit increases of other crafts (12). This trend can be partially

contributed to the pragmatism of the owners of union shop construction companies. High failure rates, competition from open shop companies, and the fear of a return to higher interest rates, continue to curb any upward pressure on construction costs.

Not all areas of the country have experienced a construction boom. For example, the Houston market, where the economy is heavily dependent on oil, has had very slow building in recent years (13). Similarly, in Alaska the completion of four major hydroelectric projects has attributed to a decrease in construction employment (11).

Residential construction usually feels the effects of economic changes quickly. Commercial construction is generally much slower to respond to economic changes since its ties to fixed union labor costs are generally much stronger (14). Unlike the response of housing, the influence an economic recovery has on labor agreements is often delayed until the next round of negotiations, which can be a year or more later.

Decline in Union Membership

A decrease in union membership has further weakened the bargaining position of unions. Total union membership has dropped below 20 million for the first time since 1968 when membership data was first recorded (15). A spokesperson for The United Brotherhood of Carpenters and Joiners admitted that over the past 10 years they have missed a

potential 500,000 new members that could have been added to the ranks (16).

Employment in union shop companies is particularly affected by an economic recession. Membership suffers since unions have no real power to prevent layoffs. Open shop companies are often better able to take advantage of the slightest differences in costs during industry downturns when competition is fierce (17).

As a measure to curb the loss of apprenticeship graduates, the Sheet Metal Workers' International is requiring workers to repay the cost of training if they leave the union ranks within 10 years of graduation. Other unions are considering adopting similar plans (18).

Some labor unions have used mergers as a way to increase their membership. A recent merger combined the Cement Workers and the Boilermakers Union (19). Mergers offer cost savings by combining union staffs, increasing the financial ability of the union to endure protracted negotiations, and increasing the political influence of the organization. Mergers can cause substantial problems if there are differences in philosophies or interests between the unions. Success is often dependent upon skillful internal negotiation and compromise.

An AFL-CIO program designed to attract membership, creates a new category of "associate" union members (20). Associate members receive benefits such as low cost

insurance, credit cards and other discount services, but do not have full union representation. The program is targeted for workers that are former union members who desire to continue receiving union benefits.

The Growth of Open Shop Construction

Open shop construction is estimated to have grown from a 30 percent market share in 1970 to an estimated 60 percent market share in 1980 (1). The rate of growth of open shop construction has varied with geographic location and market segment. Residential construction has been the traditional center of open shop construction. It is estimated that over 90 percent of residential construction is built open shop. Union shop construction has retained a stronger hold on the construction of multiple unit dwellings, although it is estimated that over 65 percent of the multiple unit projects are now constructed open shop. Open shop construction has spread to commercial and industrial construction at a slower rate. It is estimated that 60 percent of industrial construction projects remain unionized. Highway and heavy construction remain dominated by union shop contractors. Since many highway and heavy projects are federally funded, prevailing wage legislation is believed to be a primary factor slowing the growth of open shop construction.

Open shop construction advances have been largest in areas where the unions are weakest, spreading fastest in

suburbs and in rural areas. The South is also an open shop stronghold.

Open shop construction is not without problems. Studies have shown a significant deficiency in the ability of managers in open shop firms to motivate workers (21). Problems noted include the failure to use positive incentive programs to motivate workers and failure to instill the sense of pride in workmanship associated with being a union craftsman.

Another problem facing open shop contractors is the difficulty in obtaining skilled workers without the benefit of a union hiring hall. With significant labor shortages projected for the near future (22), and since open shop construction labor comprises an estimated 70 percent of all construction labor (23), the labor shortage problem is likely to get worse. Open shop contractors are acting to address the labor shortage. A serious problem they face is that most existing training programs are union affiliated. It is estimated that less than 10 percent of the funds available for training in the construction industry are for open shop programs (24). In order to maintain quality standards, open shop contractors must make advances to expand training programs and to obtain certification for task and other nontraditional apprenticeship programs.

Several chapters of the Associated General Contractors of America have established worker referral programs in an

effort to increase the information about the pool of available workers (23,25). The program had been moderately successful, but it is believed that long range needs can only be satisfied through an increase in training.

Dual shop or "double-breasted" operations exist when a contractor operates two separate enterprises, one union shop and the other nonunion. The rapid increase in the number of double-breasted operations is especially troublesome for the unions (26). Although double-breasting with the sole purpose of avoiding a union contract is not allowed, the owners commitment to the success of the union shop company will be divided when a contractor chooses to double-breast. Double-breasting may allow the contractor to compete more freely in open shop markets, but is not without problems. The operation must follow narrowly-defined legal requirements to insure proper separation of the union and nonunion companies. Questionable practices are likely to be challenged by the unions.

The Decline of Multiemployer Bargaining

Multiemployer collective bargaining is in decline (27). Contractors are finding that free-lance negotiating offers the advantage of independence and freedom of action. Many contractors are reluctant to risk entering into multiemployer negotiations that may result with agreements that are too restrictive or too costly for them. In Southern

California, the Associated General Contractors of America (AGC) has recently ended its multiemployer agreements with the teamsters and operating engineers and as an alternative, have formed smaller bargaining units where members can choose to accept or reject an agreement and are not obligated beforehand (28). The Arkansas Chapter of the AGC has been in an impasse with the construction unions since 1984 and no longer considers itself a multiemployer bargaining agent (29).

The decline in the number of multiemployer collective bargaining units has lead to an increase in the number of individual agreements and has encouraged the formation of project pacts. Unions prefer the stability of bargaining with multiemployer agencies and believe that the spread of individual agreements only adds strength to the competition of open shop construction (30).

Multiskilled Unions, Project Pacts,
and National Agreements

The formation of Multiskilled unions is another trend confronting the traditional craft unions. Construction employees building oil and gas production facilities on Alaska's North Slope voted to form their own multiskilled union after rejecting organization efforts by the traditional craft unions (31). Employers can find many advantages to negotiating with a multiskilled union. Jurisdictional disputes can be settled quickly, average

wages can be lower, and day to day management-union interfacing is simpler with only one union to deal with. However there are problems associated with multiskilled unions. They facing difficulties in obtaining skilled workers since they do not have the training programs of the traditional single craft unions. Multiskilled unions are opposed by all of the single craft unions. Therefore, they cannot rely on cooperation from them. A multicraft union must have sufficient membership representation from each crafts in order to complete a project or they will not be considered an effective alternative for employers.

There is an increasing trend towards the use of project pacts. Project pacts are temporary labor agreements negotiated for a specific project. They are seen as a way for unions to gain employment in areas where open shop construction is thought to have an economic advantage. A project agreement was recently negotiated to build the General Motor Corporations' \$3.5 billion dollar Saturn manufacturing plant in Tennessee, where typically about 95 percent of the construction is nonunion (32). A project pact can be negotiated to cover all of the crafts. Many of the provisions apply equally to all the crafts with addenda to address provisions unique to a single craft. When the project pact is in effect, all other labor agreements are temporarily overridden. Cost cutting measures found in project pacts have included agreement for the increase in

use of subjourneymen, changes in overtime premiums, and inclusion of a Saturday make-up day provision.

Project pact agreements can allow union companies to be more competitive with open shop contractors but are seen as a short term aid. In the long term, project pacts tend to fragment the unions and decrease union stability (30).

National union agreements that have been negotiated generally have been restricted in scope and have applied only to individual contractors or contractor associations for specific types of projects. National agreements are often desired by large industrial contractors who work in many different locations. Under an unusual multicraft national agreement, union contractors were recently awarded a \$40 million dollar contract to build oil platforms (33). Nine unions agreed to unify wages and many other provisions on projects under the jurisdiction of the General Presidents' Onshore Fabrication Agreement. National agreements have been negotiated for the construction of bridges by the iron workers and operating engineers (34). The National Bridge Project Agreement and the National Industrial Construction Agreement are seen as major factors in improving the position of union shop contractors against open shop competition in building bridges. Provisions in the agreements include limitation of overtime to time and one half, an increase in the use of trainees, and other concessions to increase management flexibility. The

agreements also allow the addition of addenda to add local flexibility.

Labor Regulations, Politics,
and Court Decisions

The National Labor Relations Act, the Taft-Hartley Act, and the Landrum-Griffin Act combine to create the framework for all labor-management relations. It is the interpretation of these labor laws that creates a balance between the rights of employers, workers, and the labor unions. Politics and court decisions act to shift that balance. Recent conservative labor policy is believed to be causing substantial erosion in the influence of the building trades unions. Recent court decisions in favor of the rights of individual workers and the rights of employers have also weakened union influence.

The National Labor Relations Board (NLRB) has the responsibility for the administration of the labor laws. Primary functions of the NLRB include resolving over unfair labor practice disputes and deciding if groups of employees desire representation by a particular labor union. Appointment to the five-member board is a Presidential political action that can have far reaching affects on labor activities.

The present conservative nature of the NLRB is evidenced by recent key decisions that have been in favor of the employers (35). The NLRB decided in favor of an employer

concerning the control of an employee who solicited during working time. Employers were given greater flexibility to make unilateral plant relocations decisions. A decision was made to require individual employees to exhaust all means of arbitration available to them before filing an unfair labor practice charge with the NLRB. All of these decisions are seen to increase the discretion of the employers. The NLRB is currently challenging union demands for work preservation clauses in labor contracts that would essentially eliminate double-breasting (36,37,38).

Union concerns over the current political nature of the NLRB appear well justified. However, the history of the NLRB has been one of shifting policy. Equally loud cries were heard from employers during liberal years.

Supreme Court decisions often have a significant effect on management-labor relations. The Supreme Court recently ruled to uphold a NLRB decision forbidding unions from fining members who quit the union during a strike and went back to work (39). The decision could have a significant impact on the ability of unions to maintain solidarity during a strike (40). The Supreme Court recently overturned a NLRB decision that held a company guilty of an unfair labor practice when it chose to ignore its labor contract upon filing for reorganization under Chapter 11 of the Bankruptcy Code (41,42). It is unlikely that healthy companies will file Chapter 11 just to break a labor

contract, but with the large number of construction companies that fail annually, estimated to be 2,740 building construction firms and 420 highway-heavy construction firms in 1985 (43), this issue can be of great significance for the unions. The impact of this ruling on future failures and the resultant dispositions of union agreements is yet to be seen, but the perceived threat of bankruptcy now imposes added pressure to unions during negotiations (44).

An example of a government policy change that has affected labor relations is a change in the method the Department of Labor uses to establish the prevailing wage for Davis-Bacon projects (45,46). The Davis-Bacon law guarantees to workers on federal construction projects over \$2,000 dollars, a minimum wage based on local prevailing wage rates. The revised procedure defines the prevailing wage as the wage paid to the majority of the workers in a particular craft, or if a majority wage does not exist, a weighted average wage is to be used. The old method of establishing the prevailing wage was based on the wage paid to at least 30 percent of the workers of a craft in the local area. The 30 percent wage was often the local union wage and its use tended to favor union shop companies in bidding for federally-funded projects.

Several items of legislative action with potential impact on construction labor are actively being debated.

Congressional bill H.R. 281 is a bill that would apply the terms of a union labor agreement to the nonunion portion of a double-breasted operation. The bill has recently passed in the House of Representatives but still faces stiff opposition in the Senate (47). A bill to amend the Walsh-Healey Act will become effective in January 1987 (48). This bill stipulates that overtime for federal contractor employees is to be based on hours in excess of forty hours in the work week, and removes provisions that base overtime on an eight hour work day. A bill to amend the Hobbs Act to make union violence a federal crime, and a bill to weaken the Davis-Bacon Act were recently rejected (47,49). Proposed tax-law changes that are still being debated include a provision that would include employee fringe benefits as taxable income and a provision that would allow deductions for travel expenses to remote sites (50).

Local politics is also a concern for labor unions. The Idaho governor's veto was necessary to stop a bill that would have eliminated the requirement to pay prevailing wage rates on the construction of Idaho school and college buildings (51,52). In Illinois, a \$2.3 billion dollar project to rebuild the states infrastructure was passed with a requirement for contractors to use only union workers (53). The requirement is an example of politicians trying to support union construction, although its' legality is likely to be challenged by open shop contractors.

A most significant state level political issue is the decision to be an Union Shop state or a Right to Work state. Union Shop states allow provisions in union agreements that require new employees to join the union within a specified length of time after starting work, typically seven or eight days. Right to Work states have legislation that disallows such provisions. There are currently twenty Right to Work states; Alabama, Arizona, Arkansas, Florida, Georgia, Iowa, Kansas, Louisiana, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming.

Studies of Labor Agreements

A literature review was conducted to obtain information relevant to this study. Although there are many studies gathering data on wages in the construction industry, only two studies could be found concerning the frequency of occurrence of specific provisions in union agreements. A study was conducted by G. N. Miller in 1978 (54) analyzing data from labor agreements of the six basic trades on overtime rates, shift provisions, and travel allowance. A study was conducted by C. E. Peabody in 1980 for agreements of carpenters and laborers, analyzing data on work through lunch, travel, and coffee break provisions (55). An attempt will be made to compare the results of this study with the results of the studies conducted by Miller and Peabody to identify trends that may have developed over the years.

CHAPTER 3

METHODOLOGY

Research Formulation

Requests for copies of agreements between contractors and the six construction crafts were send out to local chapters of Associated General Contractors of America (AGC). The letter requesting the agreements is in appendix A. The mailing list was generated from the annual directory of the AGC as given in the July 1985 issue of Constructor magazine (56).

An attempt was made to achieve an even distribution of agreements from across the United States, equally balanced between Union Shop states and Right to Work states. Of the 62 requests for union agreements sent, 44 responses were received (71 percent response rate). Of the 44 total responses, 38 respondents provided agreements. Negative responses were received from 6 organizations stating that they did not negotiate labor agreements for their members. When multiple contracts were received for a single craft from an association, data was used from only one of the contracts unless there was a significant difference between the contracts in one of the provisions selected for review. The resultant data base contained 117 agreements from Right

to Work states and 133 agreements from Union Shop states. Data was gathered from a total of 250 union agreements from the six basic construction crafts.

The reports of Miller (54) and Peabody (55) were reviewed to ascertain what labor agreement provisions were studied in previous research projects of similar scope. The provisions analyzed in this project include several provisions studied by Miller or Peabody. By comparing their results with the results of this study, it is hoped to determine if trends in negotiations have developed since the late 1970's.

Data Analysis

The data was analyzed to identify significant differences in the frequency of occurrence of the provisions between the agreements of the various crafts. Further comparison was made between the frequency of occurrence of specific provisions in agreements from Union Shop and Right to Work states. Variations in the frequency of occurrence of these provisions were analyzed for significance using a two by two chi-square test for relevance with a degree of freedom of one. The chi-square test was used to compare two sets of numbers to produce the likelihood that variations between the numbers could have occurred by random chance. A level of significance of .05 was chosen to identify a significant deviation. At $p < .05$ there is less than a 5 percent chance that the variation is due to chance. A

smaller number would imply a stronger result.

Difficulties Encountered

An attempt was made to gather data on wages and fringe benefit costs from the labor agreements. It was found that accurate wage data could not be obtained since it was possible for a wage freeze to be agreed to simply by allowing a contract to continue past its expiration date (57). Such wage freezes were not detectable with the data collection method used.

CHAPTER 4

ANALYSIS OF LABOR AGREEMENT PROVISIONS

Contract Duration

The length of time a labor agreement is in effect can vary greatly with typical durations ranging from one to five years. There are advantages and disadvantages to longer contracts. Longer contracts add stability to the management-labor relationship. The turmoil that often accompanies contract renegotiation occurs less often. If there is an imbalance in the agreement favoring one of the parties, the party that believes it has the advantage is more likely to desire a long contract.

A disadvantage to a long contract is that both parties must yield a degree of freedom. A longer contract requires a greater commitment. In an industry with many self-made entrepreneurs who tend to be optimistic that the next year will bring better tidings, long range commitments are sometimes difficult to agree to.

Craft Comparison

As shown in table 1, contracts of three year duration are more frequent than one or two year contracts. Very few agreements were found to have a duration of four or more

years. Many construction contract agreements contain an automatic renewal provision that stipulates a continuation of the agreement on a year to year basis beyond the contract termination date. Renegotiations would only open if either party issued a written notice requesting to do so (58). Allowing an agreement to continue unchanged in such a manner is, in effect, an acceptance of a freeze in the contract (57).

TABLE 1
Duration of Contract by Craft

craft	total	Duration in Years			
		1	2	3	4+
carpenters	50	10 (20%)	10 (20%)	27 (54%)	3 (6%)
cement masons	44	11 (25%)	10 (23%)	22 (50%)	1 (2%)
iron workers	30	7 (23%)	9 (30%)	14 (47%)	0 (0%)
laborers	47	11 (23%)	11 (23%)	24 (51%)	1 (2%)
op engineers	46	8 (17%)	12 (26%)	25 (54%)	1 (2%)
teamsters	33	3 (9%)	7 (21%)	22 (67%)	1 (3%)
total	250	50 (20%)	59 (24%)	134 (54%)	9 (4%)

Union Shop vs Right to Work States

As shown in table 2, the frequency of three year agreements is much higher in the Union Shop states than in the Right to Work states ($p < .001$). Single year agreements are more common in the Right to Work states ($p < .001$).

TABLE 2

Contract Duration in Union Shop
and Right to Work States

	total	Duration in Years			
		1	2	3	4+
RTW	117	37 (32%)	26 (22%)	49 (42%)	5 (4%)
Union	133	13 (10%)	33 (25%)	85 (64%)	2 (2%)

Month of Expiration

The timing of the expiration of a labor agreement can have a significant impact on the negotiation process. Unions generally prefer to have a contract expire during the spring and early summer months when construction is at its peak. Contractors are more likely to agree to concessions to avoid a strike if many projects are in progress. Unions may also find an advantage in having a contract expiration date that is close to the expiration dates of the contracts of other crafts. Forcing employers to bargain with many crafts at the same time can wear the employers down and reduce their bargaining stamina. Contract expiration dates that coincide with union election dates can be undesirable for both the employers and unions officials (1). The elections can add extra pressure to the contract negotiation. Incumbent union officials may be in a very undesirable position having to face the realities of a negotiation while their election opponents are raising expectations that may or may not be reasonable.

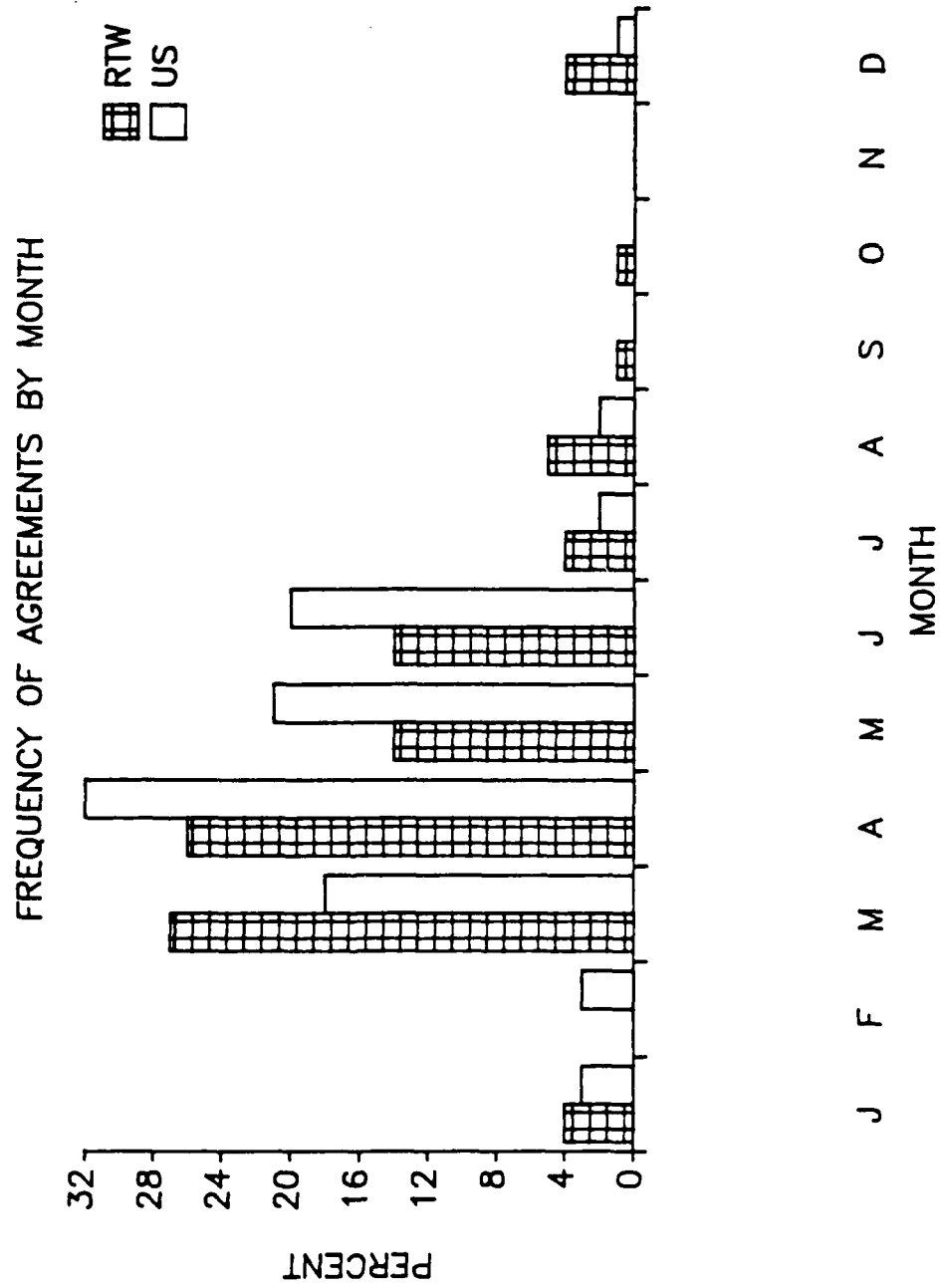
Figure 1 illustrates the distribution of the months that the agreements were found to expire in for both Union Shop and Right to Work states. The great majority of contracts were found to expire during the early construction months of March, April, May and June. Similar results were found by C. E. Peabody in his 1980 study (55). Variations in the distribution of the expiration months between the agreements in Union Shop states and Right to Work states were not found to be significant. There were also no significant variations found when a comparison was made in the distribution between the agreements of different crafts.

Subcontractor Provision

Subcontractor provisions are commonly found in two forms. The general contractor can be required to use only subcontractors that are signatory to the labor agreement, often allowing the subcontractor to sign just for the duration of the project, or the general contractor can be required to hold all subcontractors responsive to all provisions of the agreement. In the second case, subcontractors are not required to sign the agreement. The general contractor is normally held responsible for the conduct of subcontractors in all subcontractor provisions.

The significance of a subcontractor provision cannot be underestimated. Unions consider uncontrolled non-union subcontractors a severe threat to union security and have resorted to strikes to prevent their use (59). Subcontractor

FIGURE 1



employees are difficult to organize because of the large number of subcontractors and the relatively few number of workers that work for each subcontractor. Unions are resorting to legislative measures and collective bargaining to control the use of non-union subcontractors. General contractors consider use of non-union subcontractors as a method of reducing costs and as a competitive factor that tends to impose pressure on unions to agree to more favorable bargaining terms. Although a project may have both union and non-union workers at the time, there are negative aspects to this arrangement. There is a greater potential for conflict between workers (60).

Craft Comparison

The relative strength of the iron workers and teamsters in negotiating for a subcontract provision is evident from the data in table 3. However, subcontractor provisions have become somewhat common for all crafts as evidenced by the overall frequency of 70 percent.

TABLE 3

Frequency of the Inclusion of Subcontractor Provisions by Craft

craft	number of agreements	subcontractor provisions	percent
carpenters	50	31	62
cement masons	44	27	61
iron workers	30	25	83
laborers	47	31	66
op engineers	46	33	72
teamsters	33	27	82
total	250	174	70

Union Shop vs Right to Work States

Table 4 indicates a wide difference between Union Shop states and Right to Work states for this provision ($p < .001$). Subcontractor clauses occur more than twice as often in agreements for Union Shop states than in the agreements for Right to Work states. The difference exists for all crafts. These results reflect a major advantage for general contractors in Right to Work states and indicate the relative weakness of unions in those states.

TABLE 4

Comparison of the Inclusion of Subcontractor
Provisions Between Union Shop
and Right to Work States

Right to Work			
craft	number of agreements	subcontractor provisions	percent
carpenters	25	8	32
cement masons	21	8	38
iron workers	12	7	58
laborers	22	8	36
op engineers	22	10	45
teamsters	15	10	67
total	117	51	44
Union Shop			
craft	number of agreements	subcontractor provisions	percent
carpenters	25	23	92
cement masons	23	19	83
iron workers	18	18	100
laborers	25	23	92
op engineers	24	23	96
teamsters	18	17	94
total	133	123	92

No Strike-No Lockout Provision

A no strike-no lockout provision prevents a lockout by a contractor or any cessation of work by the employees. The only typical exceptions are if the contractor fails to provide the required Worker's Compensation coverage, is delinquent in the payment of fringe benefits, or otherwise fails to pay the workers. This provision is usually part of the contractual section for the settlement of disputes and grievances. When a no strike provision is in an agreement,

it is common for both parties to also agree to a binding arbitration procedure to settle disputes. Use of the Federal Mediation and Conciliation Service or the American Arbitration Association are commonly referenced (61,62). The National Joint Board for the Settlement of Jurisdictional Disputes or the parent International Unions are often called upon to settle jurisdictional disputes (63,64). It is believed to be in the interest of all parties to avoid strikes and lockouts if at all possible.

No strike-no lockout provisions do not mean the end to all strikes however. The provision does not prevent a strike or lockout at the end of a contractual period.

Craft Comparison

The no strike-no lockout provisions are prevalent for all crafts as shown in table 5. The general acceptance of this provision can be seen as an indication of the willingness of labor and management to work out problems without confrontation.

TABLE 5

Frequency of the Inclusion of
No Strike-No Lockout Provisions by Craft

craft	number of agreements	number of provisions	percent
carpenters	50	48	96
cement masons	44	40	91
iron workers	30	30	100
laborers	47	42	89
op engineers	46	45	98
teamsters	33	30	91
total	250	235	94

Union Shop vs Right to Work States

The acceptance of this provision is common for agreements in both Union Shop and Right to Work states as shown in table 6. The high occurrence of this provision suggests that eventually such provisions may become standard inclusions in all labor agreements.

TABLE 6

Comparison of the Inclusion of
No Strike-No Lockout Provisions
Between Union Shop and
Right to Work States

Right to Work			
craft	number of agreements	number of provisions	percent
carpenters	25	23	92
cement masons	21	20	95
iron workers	12	12	100
laborers	22	19	86
op engineers	22	22	100
teamsters	15	13	87
total	117	109	93
Union Shop			
craft	number of agreements	number of provisions	percent
carpenters	25	25	100
cement masons	23	20	87
iron workers	18	18	100
laborers	25	23	92
op engineers	24	23	96
teamsters	18	17	94
total	133	126	95

COLA Provisions

Cost of Living Allowance provisions or COLA's, tie future wage increases to a price index such as the U. S. All Cities Consumer Price Index for Urban Wage Earners and Clerical Workers (58). Often the escalators also apply to shift differentials, meal allowances, and other benefit payments. The total effect of the increases can be substantial. Contractors dislike COLA provisions because

they increase the uncertainty in future labor costs and because COLA provisions result in an increase in labor cost during inflationary times when contractors can least afford it (65). Contractors prefer to negotiate for fixed labor payments.

Craft Comparison

As shown in table 7, COLA provisions occur infrequently in labor agreements for all the crafts. Significant differences could not be found between the crafts.

TABLE 7

Frequency of the Inclusion of
COLA Provisions by Craft

craft	number of agreements	COLA provisions	percent
carpenters	50	3	6
cement masons	44	2	5
iron workers	30	2	7
laborers	47	4	9
op engineers	46	5	11
teamsters	33	3	9
total	250	19	8

Union Shop vs Right to Work States

As shown in table 8, owners in Right to Work states have been far more successful in avoiding COLA provisions ($p < .001$). The provisions could only be found in agreements from Union Shop states.

TABLE 8

Comparison of the Inclusion of COLA
Provisions Between Union Shop
and Right to Work States

Right to Work			
craft	number of agreements	COLA provisions	percent
carpenters	25	0	0
cement masons	21	0	0
iron workers	12	0	0
laborers	22	0	0
op engineers	22	0	0
teamsters	15	0	0
total	117	0	0

Union Shop			
craft	number of agreements	COLA provisions	percent
carpenters	25	3	12
cement masons	23	2	9
iron workers	18	2	11
laborers	25	4	16
op engineers	24	5	21
teamsters	18	3	17
total	133	19	14

Shift Provisions

During the course of a construction project, it may become necessary to schedule work for multiple shifts. Multiple shifts may be required to make up time lost due to delays or simply to perform work that cannot be done during a day shift. Since working at night is undesirable for most workers, labor agreements usually have a provision requiring a premium to be paid to workers assigned to "back" shifts.

The shift provisions reviewed in this study are the provisions that specify the premiums to be paid when employees work in three shifts. The means by which premiums are paid tend to fall into one of the three categories that can be described as follows:

Category 1: The provision calls for a reduction in the number of hours that need to be worked on "back" shifts in order to earn eight hours of pay. A typical provision may provide eight hours of pay for seven and one half hours of work on the second shift and seven hours of work on the third shift.

Category 2: The provision calls for a reduction in the number of hours of work on "back" shifts similar to the category 1 provisions but provides for additional premium hourly wages for work on the second and third shifts.

Category 3: The provision provides premium hourly wages for work on the second and third shifts.

It is common for a shift provision to require that notification be given to the union prior to starting the shift work and that the shift work continue for a minimum number of consecutive days. The typical minimum specified duration varied between three to five days. Multiple shifts lasting for less than the specified minimum length of time would warrant premium pay at the standard overtime rate.

Of the three categories of shift provisions, category 2 provisions offer the workers the greatest benefit.

Craft Comparison

As shown in table 9, category 1 shift provisions are the most common in agreements for all the crafts. There is

a slightly higher frequency of category 1 provisions in the agreements of iron workers and laborers when compared with the other crafts. The operating engineers have a higher frequency of category 2 provisions when compared to the other crafts.

TABLE 9

Frequency of the Inclusion of Shift Provisions by Crafts

craft	total agreements	Cat 1	Cat 2	Cat 3
carpenters	50	35 (70%)	2 (4%)	6 (12%)
cement masons	44	29 (66%)	1 (2%)	6 (14%)
iron workers	30	25 (83%)	3 (10%)	1 (3%)
laborers	47	38 (81%)	4 (9%)	2 (4%)
op engineers	46	34 (74%)	7 (15%)	4 (9%)
teamsters	33	22 (67%)	2 (6%)	5 (15%)
total	250	183 (73%)	19 (8%)	24 (10%)

Union Shop vs Right to Work States

The data shown in table 10 comparing agreements from Union Shop states and Right to Work states shows that the workers in Union Shop states have had greater success in negotiating for the highly desirable category 2 provisions ($p < .001$). Agreements that offer both reduced work hours and a premium hourly wage are rare in Right to Work states.

TABLE 10

Comparison of the Inclusion of Shift Provisions
Between Union Shop and Right to Work States

Right to Work

craft	total agreements	Cat 1	Cat 2	Cat 3
carpenters	25	20 (80%)	0 (0%)	3 (12%)
cement mason	21	12 (57%)	0 (0%)	5 (24%)
iron workers	12	10 (83%)	1 (8%)	1 (8%)
laborers	22	19 (86%)	0 (0%)	1 (5%)
op engineers	22	19 (86%)	1 (5%)	2 (9%)
teamsters	15	12 (80%)	0 (0%)	1 (7%)
total	117	92 (79%)	2 (2%)	13 (11%)

Union Shop

craft	total agreements	Cat 1	Cat 2	Cat 3
carpenters	25	15 (60%)	2 (8%)	3 (12%)
cement mason	23	17 (74%)	1 (4%)	1 (4%)
iron workers	18	15 (83%)	2 (11%)	0 (0%)
laborers	25	19 (76%)	4 (16%)	1 (4%)
op engineers	24	15 (63%)	6 (25%)	2 (8%)
teamsters	18	10 (56%)	2 (11%)	4 (22%)
total	133	91 (68%)	17 (13%)	11 (8%)

Overtime

Agreements generally contain a section stipulating the working hours for the employees. Normal working hours are usually based on an eight hour work day and a forty hour work week. Work in excess of the normal hours would warrant an overtime premium. Overtime provisions typically found in agreements can be divided into the following four categories:

Category 1: Time and one half is stipulated for all work over eight hours in one day or over forty hours in one week, with double time for work performed on holidays.

Category 2: Time and one half is stipulated for all work over eight hours, Monday through Friday, and for work performed on Saturdays. Double time is stipulated for work performed on Sundays and holidays. Some provisions receive double time after the first two hours of overtime work performed Monday through Friday, and after the first eight hours of work on Saturday.

Category 3: Time and one half is stipulated for all work over eight hours, Monday through Friday. Double time is stipulated for work performed on Saturdays, Sundays, and holidays. Some provisions allow double time after the first two hours of overtime work, Monday through Friday.

Category 4: Double time is stipulated for all work over eight hours in one day, or over forty hours in one week, and for all work performed on Saturdays, Sundays, or holidays.

Category four provisions are considered the most lucrative for the workers. Category one provisions are considered most lenient for the contractors. Prudent management dictates minimizing overtime unless absolutely necessary. This is even more important when the premium is double time.

Craft Comparison

As shown in table 11, Category two provisions are most common in agreements for all crafts. The iron workers have the lowest frequency of Category two provisions and the highest frequency of Category three provisions when compared to the other crafts. Category three provisions are considered more favorable than Category two provisions

for the workers since double time is also paid on Saturdays. Comparison of the data in table 11 with findings by G. N. Miller in his 1978 study (54), shown in table 12, indicate a change in the frequency of occurrence for each category of overtime provision. The frequency of occurrence of Category two provisions has greatly increased from 41 percent to 81 percent ($p < .001$) while a decrease in frequency has occurred for Category four ($p < .001$) and Category 3 ($p < .05$) provisions. The frequency of Category 1 provisions has increased ($p < .02$). This overall trend is a shift to provisions that favor the contractors and indicates a concession by the unions.

TABLE 11

Frequency of the Inclusion of Overtime
Provisions By Crafts

craft	total agreements	Cat 1	Cat 2	Cat 3	Cat 4
carpenters	50	1 (2%)	42 (84%)	7 (14%)	0 (0%)
cement masons	44	1 (2%)	36 (82%)	5 (11%)	2 (5%)
iron workers	30	3 (10%)	19 (63%)	8 (27%)	0 (0%)
laborers	47	3 (6%)	42 (89%)	2 (4%)	0 (0%)
op engineers	46	5 (11%)	37 (80%)	1 (2%)	3 (7%)
teamsters	33	5 (15%)	26 (79%)	0 (0%)	2 (6%)
total	250	18 (7%)	202 (81%)	23 (9%)	7 (3%)

TABLE 12

Frequency of the Inclusion of Overtime
Provisions By Crafts
Miller 1978 (54)

craft	total agreements	Cat 1	Cat2	Cat3	Cat4
carpenters	24	0 (0%)	5 (21%)	9 (37%)	10 (42%)
cement masons	25	0 (0%)	5 (20%)	6 (24%)	14 (56%)
iron workers	17	0 (0%)	0 (0%)	1 (6%)	16 (94%)
laborers	18	1 (6%)	13 (78%)	1 (6%)	3 (17%)
op engineers	18	0 (0%)	11 (61%)	0 (0%)	7 (39%)
teamsters	11	0 (0%)	7 (7%)	2 (18%)	2 (18%)
total	113	1 (1%)	41 (36%)	19 (17%)	52 (46%)

Union Shop vs Right to Work States

As shown in table 13, the Category two provisions are dominant in the Right to Work states. The iron workers are the only craft to negotiate other terms with any appreciable frequency. Crafts in Union Shop states have had greater success in negotiating for more lucrative overtime provisions than crafts in Right to Work states.

TABLE 13

Comparison of the Inclusion of Overtime
Provisions Between Union Shop and
Right to Work States

Right to Work						
craft	total	Cat 1	Cat 2	Cat 3	Cat 4	
	agreements					
carpenters	25	0 (0%)	24 (96%)	1 (4%)	0 (0%)	
cement masons	21	0 (0%)	19 (90%)	2 (10%)	0 (0%)	
iron workers	12	3 (25%)	7 (58%)	2 (17%)	0 (0%)	
laborers	22	0 (0%)	22 (100%)	0 (0%)	0 (0%)	
op engineers	22	1 (5%)	21 (95%)	0 (0%)	0 (0%)	
teamsters	15	1 (7%)	13 (87%)	0 (0%)	1 (7%)	
total	117	5 (4%)	106 (91%)	5 (4%)	1 (1%)	
Union Shop						
craft	total	Cat 1	Cat 2	Cat 3	Cat 4	
	agreements					
carpenters	25	1 (4%)	18 (72%)	6 (24%)	0 (0%)	
cement masons	23	1 (4%)	17 (74%)	3 (13%)	2 (9%)	
iron workers	18	0 (0%)	12 (67%)	6 (33%)	0 (0%)	
laborers	25	3 (12%)	20 (80%)	2 (8%)	0 (0%)	
op engineers	24	4 (17%)	16 (67%)	1 (4%)	3 (13%)	
teamsters	18	4 (22%)	13 (72%)	0 (0%)	1 (6%)	
total	133	13 (10%)	96 (72%)	18 (14%)	6 (5%)	

Saturday Make-up Provision

The Saturday make-up provision allows work on Saturday at the straight time rate to make up for time lost during the preceding week due to inclement weather or other reasons beyond the employer's control. The provision usually stipulates that less than forty hours have been worked between Monday and Friday. Additionally, the employees generally cannot be required to work the Saturday make-up

day. An increase in the occurrence of this provision is considered a concession by unions to employers.

Craft Comparisons:

A comparison of crafts in table 14 indicates that this provision is more frequently found in the agreements of laborers than in other crafts. This provision is least common in the agreements of iron workers. Comparison of this data to the findings of a study conducted by G. N. Miller in 1978 (54) in table 15, indicate that this provision has gained in acceptance over the years among all crafts ($p < .001$).

TABLE 14

Frequency of the Inclusion of Saturday
Make-up Provisions by Craft

craft	number of agreements	Saturday provisions	percent
carpenters	50	18	36
cement masons	44	14	32
iron workers	30	6	20
laborers	47	27	57
op engineers	46	15	33
teamsters	33	11	33
total	250	91	36

TABLE 15

Frequency of the Inclusion of Saturday
Make-up Provisions by Craft
Miller 1978 (54)

craft	number of agreements	Saturday provisions	percent
carpenters	24	4	17
cement masons	25	2	8
iron workers	17	0	0
laborers	18	3	17
op engineers	18	1	6
teamsters	11	3	27
total	113	13	12

Union Shop vs Right to Work States

Table 16 provides a comparison between agreements in Union Shop and Right to Work states. The carpenters, laborers, and operating engineers agreements have a much higher frequency of the Saturday make-up provision in the agreements of Right to Work states than in the agreements of Union Shop states. The occurrences are approximately equal between the agreements in Union Shop states and Right to Work states for teamsters and cement masons. These results indicate a greater degree of concession by unions to employers in the Right to Works states for the carpenters, laborers, and operating engineers crafts.

TABLE 16

Comparison of the Inclusion of Saturday
Make-up Provisions Between Union Shop
and Right to Work States

Right to Work				
craft	number of agreements	Saturday provisions	percent	
carpenters	25	12	48	
cement masons	21	7	33	
iron workers	12	3	25	
laborers	22	16	73	
op engineers	22	9	41	
teamsters	15	5	33	
<hr/>				
total	117	52	44	

Union Shop				
craft	number of agreements	Saturday provisions	percent	
carpenters	25	6	24	
cement masons	23	7	30	
iron workers	18	3	17	
laborers	25	11	44	
op engineers	24	6	25	
teamsters	18	6	33	
<hr/>				
total	133	39	29	

Travel Pay Provisions

Travel pay clauses provide compensation to workers for costs incurred while travelling between home and the work site. Travel pay can be in the form of a predetermined amount per mile driven from the project to a base location, the actual costs of travel, or the pay can be based on a series of zones radiating from a central location such as the union hall or county line. Employers are hesitant to

agree to travel pay provisions. It is considered pay in excess of that actually earned while being gainfully employed on the job. The occurrence of a travel pay clause in a labor agreement is a good indication of the relative strength of the union. It can be a particularly important clause in sparsely populated areas where travel distances can be great.

Craft Comparisons

An analysis of the data in table 17 indicates the relative success of the iron workers and cement masons in bargaining for this provision. The laborers have the lowest frequency of occurrence of a travel pay clause. Data collected by G. N. Miller in 1978 (54), shown in table 18, reflects similar success by the iron workers and cement masons. Comparisons with his findings indicate that recent gains have also been made by the carpenters, laborers, operating engineers, and teamsters as a group ($p < .03$). This provision appears to be a bargaining issue gained by those unions over the years.

TABLE 17

Frequency of the Inclusion of
Travel Pay Provisions
by Craft

craft	number of agreements	travel provisions	percent
carpenters	50	23	46
cement masons	44	26	59
iron workers	30	19	63
laborers	47	15	32
op engineers	46	22	48
teamsters	33	15	45
total	250	120	48

TABLE 18

Frequency of the Inclusion of
Travel Pay Provisions by
Craft, Miller 1978 (54)

craft	number of agreements	travel provisions	percent
carpenters	24	7	29
cement masons	25	13	52
iron workers	17	10	59
laborers	18	3	17
op engineers	18	7	39
teamsters	11	2	18
total	113	42	37

Union Shop vs Right to Work States

A comparison between the agreements in Union Shop states and Right to Work states is provided in table 19. The agreements in Union Shop states hold a decided increase in the incidence of travel pay provisions when compared to the agreements of the Right to Work states ($p < .005$). The difference is most noticeable for the agreements of the

ironworkers, laborers, operating engineers, and teamsters. The advantage of carpenters in Union Shop states is more modest. Cement masons actually have a higher percentage of travel pay provisions in agreements from the Right to Work states, although the provision is fairly common in all cement mason agreements.

TABLE 19

Comparison of the Inclusion of Travel Pay Provisions Between Union Shop and Right to Work States

Right to Work			
craft	number of agreements	travel provisions	percent
carpenters	25	10	40
cement masons	21	14	67
iron workers	12	4	33
laborers	22	5	23
op engineers	22	8	36
teamsters	15	4	27
total	117	45	38
Union Shop			
craft	number of agreements	travel provisions	percent
carpenters	25	13	52
cement masons	23	12	52
iron workers	18	15	83
laborers	25	10	40
op engineers	24	14	58
teamsters	18	11	61
total	133	75	56

Work Through Lunch Provision

Work through lunch provisions stipulate compensation is due workers if they are asked to work through the normal

lunch period. The compensation is usually an overtime premium for the lunch period lost and an allowance must be provided to permit workers to eat their lunch as soon as possible on the employer's time. Employers usually have flexibility in scheduling the lunch periods. It is not uncommon to have an agreement that allows employers to stagger the lunch period so work can proceed continuously (66). Often the employers are given a time window in the work day when lunch periods are to be allowed. Compensation is warranted if workers are not allowed to have a lunch break during that time window. A typical provision might stipulate that a lunch break must be provided sometime after three and one half hours after the start of the work day but not later than five hours after the start of the work day (66). Weaker work through lunch provisions only require payment to the workers at the straight time rate for the lunch period missed (67). Work through lunch provisions do not allow the shortening of the work day to avoid compensating workers for missing lunch.

Requiring workers to miss lunch can become costly. If lunch periods are missed too often due to poor planning, productivity can also be expected to suffer. This would be an added expense over and above the premium pay for working through lunch.

Craft Comparison

As shown in table 20, the majority of the agreements

studied contained a work through lunch provision. Deviations between crafts were not found to be significant.

TABLE 20

Frequency of the Inclusion of Work
Through Lunch Provisions by Craft

craft	number of agreements	work thru lunch	percent
carpenters	50	31	62
cement masons	44	34	77
iron workers	30	19	63
laborers	47	35	74
op engineers	46	28	61
teamsters	33	17	52
total	250	164	66

Union Shop vs Right to Work States

Table 21 provides a comparison of the frequency of occurrence for work through lunch provisions between agreements in Union Shop and Right to Work states. The frequency of occurrence is found to be significantly higher in the agreements of Union Shop states ($p < .001$).

TABLE 21

Comparison of the Inclusion of
Work Through Lunch Provisions
Between Union Shop and
Right to Work States

Right to Work

craft	number of agreements	work thru lunch	percent
carpenters	25	10	40
cement masons	21	14	67
iron workers	12	5	42
laborers	22	15	68
op engineers	22	10	45
teamsters	15	6	40
total	117	60	51

Union Shop

craft	number of agreements	work thru lunch	percent
carpenters	25	21	84
cement masons	23	20	87
iron workers	18	14	78
laborers	25	20	80
op engineers	24	18	75
teamsters	18	11	61
total	133	104	78

Coffee Break Provisions

Typically coffee break provisions allow workers to stop work to drink coffee or some other non-alcoholic beverage, once in the morning and once in the afternoon. Provisions may contain restrictions to minimize the loss of productivity caused by a break. For example, most provisions prohibit workers from leaving the work station in order to take the coffee break. Terms commonly found include:

There is no objection to drinking coffee at the work station.

The workers shall not leave their place of work.

One worker shall be allowed to get refreshments.

Employers are not required to give all employees coffee breaks at the same time.

Coffee breaks shall not interfere with work progress.

Craft Comparisons

Coffee break provisions are found in 24 percent of the agreements. As indicated in table 22, iron worker agreements have the greatest frequency of coffee break provisions, while the teamsters have the least likelihood of this provision in their agreements. By the nature of their work, cement masons cannot routinely stop work for a break and must drink beverages as the work allows. Since teamsters and operating engineers are likely to be able to drink coffee during natural breaks during work without affecting productivity, the inclusion of such provisions in their agreements are rare.

TABLE 22

Frequency of the Inclusion of
Coffee Break Provisions
by Craft

craft	number of agreements	coffee provisions	percent
carpenters	50	15	30
cement masons	44	8	18
iron workers	30	12	40
laborers	47	16	34
op engineers	46	5	11
teamsters	33	3	9
total	250	59	24

Union Shop vs Right to Work States

The overall frequency of having coffee break provisions is about the same for agreements from Union Shop states and Right to Work states. As indicated in table 23, there is a disparity between crafts for this provision in agreements from Union Shop states. Coffee break provisions occur more often in agreements for carpenters, iron workers, and laborers, than for agreements for cement masons, operating engineers, and teamsters. The inclusion of coffee break provisions is more evenly distributed among crafts in the agreements from the Right to Work states.

TABLE 23

Comparison of the Inclusion of Coffee Break
Provisions Between Union Shop
and Right to Work States

Right to Work

craft	number of agreements	coffee provisions	percent
carpenters	25	6	24
cement masons	21	5	24
iron workers	12	5	42
laborers	22	6	27
op engineers	22	4	18
teamsters	15	2	13
total	117	28	24

Union Shop

craft	number of agreements	coffee provisions	percent
carpenters	25	9	36
cement masons	23	3	13
iron workers	18	7	39
laborers	25	10	40
op engineers	24	1	4
teamsters	18	1	6
total	133	31	23

CHAPTER 5

RESULTS AND CONCLUSIONS

Summary of Results

Frequency of Occurrence of Provisions

Table 24 is a summary of the overall frequency of occurrence of the provisions in the 250 agreements reviewed. General observations that could be made include the following:

Three year contracts are most common. This finding agrees with the results of the study done by C. E. Peabody in 1980 (55).

Subcontractor clauses occur in the majority of the agreements.

No strike-no lockout provisions occur in almost all of the agreements.

COLA provisions occur in very few agreements.

The most common shift provision stipulates a reduction in the number of hours of work required to earn eight hours of pay for work done during "back" shifts.

The most common overtime premium stipulates double time wage rates for work on Sundays and holidays, with time and one half being paid for other overtime conditions.

Most agreements do not contain a Saturday make-up provision.

Most agreements do not contain a coffee break provision.

Most agreements contain a work through lunch provision.

Travel provisions occur in about half of the agreements.

Craft Comparison

Table 25, lists the crafts that have shown a significant deviation in the frequency of occurrence for a particular provision in their agreements, when compared with the agreements of the other crafts. As shown in table 25, the iron workers have been more successful than the other crafts in negotiating for many of the desirable provisions. The agreements of the iron workers are more likely to have provisions for coffee breaks, travel allowances, double time for Saturday work, and the very important subcontractor clause. They are less likely to have the undesirable Saturday make-up day provision. The agreements of the teamsters have a relatively high frequency of subcontractor provisions. The agreements of the operating engineers have a relatively high frequency of provisions that stipulate a reduction in hours with premium pay for second and third shifts. Cement masons' agreements tend to have more travel provisions. The agreements of the laborers are more likely to have a Saturday make-up provision.

Union Shop vs Right to Work States

Table 26 provides a summary of the significant variations in the comparison of agreements between Union Shop and Right to Work states. Agreements in Union Shop states are shown to have a higher frequency of subcontractor, COLA, travel, and work through lunch provisions. They also have more three year contracts and a

higher frequency of provisions that stipulate a reduction in work hours with premium wages for back shift work. The agreements in Right to Work states have more single year contracts and more Saturday make-up provisions, than the agreements in Union Shop states.

TABLE 24

Frequency of Occurrence of Provisions

provision	agreements containing provision	percent(*)
duration 1 yr	50	20
2 yr	59	24
3 yr	134	54
4+ yr	9	4
subcontractor	174	70
strike/lockout	235	94
COLA	19	8
shifts cat-1	183	73
cat-2	19	8
cat-3	24	10
OT cat-1	18	7
cat-2	7	3
cat-3	23	9
cat-4	202	81
Sat M/U	91	36
travel	120	48
W/T lunch	164	66
coffee	59	24

* (based on 250 total agreements)

TABLE 25

Variations in the Frequency of Occurrence
of a Provision Between Crafts

<u>provision</u>	<u>craft(*)</u>
subcontractor	iron workers, teamsters
shifts cat-1	iron workers, laborers
cat-2	op engineers
OT cat-2	iron workers(min)
cat-3	iron workers
Sat M/U	laborers, iron workers(min)
travel	iron workers, cement masons, laborers(min)
coffee break	iron workers, teamsters(min), op engineers(min)

* The crafts noted have a greater frequency of occurrence for the provisions, unless indicated as a minimum.

TABLE 26

Variations in the Frequency of Occurrence
of a Provision, US vs RTW

<u>provision</u>	<u>advantage</u>	<u>significance</u>
duration 1-yr	RTW	(p<.001)
3-yr	US	(p<.001)
subcontractor	US	(p<.001)
COLA	US	(p<.001)
shifts cat-2	US	(p<.001)
OT cat-2	RTW	(p<.001)
Sat M/U	RTW	(p<.01)
travel	US	(p<.001)
W/T lunch	US	(p<.001)

Conclusions

The results of this study have shown that there are often differences in the probability of finding a particular provision in a labor agreement, depending on the craft, and on whether the agreement is from a Union Shop state or a Right to Work state. Local economic, political, and social conditions largely influence the results of negotiations in individual agreements. National issues have the potential to affect all labor negotiations.

Craft Comparison

To explain differences in agreements between crafts, it is sometimes helpful to consider working conditions peculiar to the individual crafts. For example, during contract negotiations, the teamsters and operating engineers are likely to agree to concede a provision for a coffee break if they could gain some other desirable provision, since teamster and operating engineers can usually find time to drink coffee during work anyway. For provisions that are highly desirable for all workers, such as a lucrative overtime provision, differences in the frequency of occurrence of the provisions depend primarily on the strength of the union. Thus, the iron workers are found to have the strongest unions, based on their success in negotiating for subcontractor clauses, lucrative overtime provisions, travel pay, and coffee breaks. They have also avoided the undesirable Saturday make-up day provision with

the greatest success. The laborers are found to have the weakest unions. They have not excelled in the negotiation for any desirable provisions, and have conceded Saturday make-up day provisions more often than the other crafts.

Union Shop vs Right to Work States

Unions in Union Shop states were expected to be stronger than unions in Right to Work states. The large variations found in the frequency of occurrence of some provisions, when comparing agreements from Union Shop and Right to Work states, give an indication of the magnitude of the advantage provided by legislated protection of union security. Thus, it is not surprising that unions are so resolved to fight for beneficial legislation in an effort to regain strength, and contractors so equally resolved to fight such legislation.

Trends since 1978

There are statistically significant differences in the results of this study and the results of the study conducted by G. N. Miller in 1978 (54). These differences can be due to changes in a number of factors that influence labor negotiations. Several of the key factors were discussed in chapter two. The differences in the two studies also could simply be the result of a shift in the desires of the workers. Given the adversarial nature of labor-management negotiations, shifts in the frequency of occurrence of a

provision in agreements either benefit contractors or workers. The following general statements can be made in comparing the results of this study with that of Millers' study.

Overtime provisions of greater benefit to contractors are found more often in agreements now than in 1978 ($p < .001$).

Saturday make-up day provisions have increased in frequency ($p < .001$).

Travel pay provisions have increased in frequency for the agreements of carpenters, laborers, operating engineers, and teamsters as a group ($p < .03$).

The shift in frequencies of overtime provisions and Saturday make-up provisions indicate concessions by the unions. The increase in the frequency of travel pay provisions indicates a union gain.

LIST OF REFERENCES

1. More Construction for the Money, Summary Report of the Construction Industry Cost Effectiveness Project. By Robert S. Greeson, Chairman. New York, : The Business Roundtable. 1983.
2. "Labor Struggle: Realizing Their Power Has Eroded, Unions Are Adopting a Variety of Different Tactics." Wall Street Journal, 21 February 1985, p. 1.
3. "Texas Trades Pull Out Stops to Regain Work." Engineering News Record, 13 September 1984, p. 24.
4. "Northwest Firms Seek Profits Outside Union Shop Contracts." Daily Journal of Commerce (Seattle), 20 January 1986, p. 3.
5. "AGC's 1984 Market Survey and Inflation Forecast." Constructor 66 (January 1984): 22.
6. "Building Spree." New York Times, 30 September 1985, sec. 4, p. 6.
7. "Record Year in Construction." New York Times, 17 November 1985, sec. 3, p. 1.
8. "Gains Forecast in Construction." New York Times, 17 March 1983, sec. 4, p. 3.
9. "Home Construction Upturn Seen as Spotty and Fragile." New York Times, 9 April 1983, sec. 1, p. 6.
10. "Prices Under Contractors' Thumbs." Engineering News Record 216 (20 March 1986) : 67.
11. "Construction Pay Hikes Lag." Engineering News Record 215 (5 September 1985) : 61.
12. "Trades Talk Softly on Wages." Engineering News Record 215 (8 August 1985) : 59.
13. "Labor Costs Raise Few Worries." Engineering News Record 216 (20 March 1986) : 74.

14. "Industry Recovery Too Late to Affect '83 Bargaining." Engineering News Report 210 (10 March 1983) : 60.
15. "Union Membership Goes Below 20 Million." Seattle Post-Intelligencer, 25 September 1984, sec. 8, p. 6.
16. "Cost Effective Bargaining." Constructor 65 (August 1983) : 35.
17. "How Union Pay Should Vary." Engineering News Record 215 (26 September 1985) : 17.
18. "Plan Halts Apprentice Loss." Engineering News Record 215 (18 July 1985) : 91.
19. "Tying the Knot." Wall Street Journal, 18 January 1985, p. 1.
20. "AFL-CIO's Novel Program to Expand Union Membership Meets Resistance." Wall Street Journal, 30 October 1985, p. 14.
21. "Untapped Resources." Engineering News Record 215 (12 December 1985) : 17.
22. "Meeting the Future Need for Construction Labor." Constructor 67 (November 1985) : 29.
23. "Labor Notes." Constructor 67 (December 1985) : 115.
24. "Is the Open Shop Heading for a Dead End?" Builder and Contractor, May 1983, p. 10.
25. "Open-Shop Hiring Halls Grow with Business." Engineering News Record 213 (16 August 1984) : 58.
26. "Trades Facing Dual Threat." Engineering News Record 215 (15 August 1985) : 57.
27. "Collective Bargaining-Lessons Learned." Constructor 66 (January 1984) : 42.
28. "Calif. Bargaining in Trouble." Engineering News Record 214 (23 May 1985) : 56.
29. David Watts, Program Coordinator, Arkansas Chapter Associated General Contractors of America to Jimmy S. Hirakawa, n.d., Little Rock, Arkansas.

30. "Dugan Assesses Bargaining." Engineering News Record 215 (15 August 1985) : 51.
31. "Multiskill Union Joins Boilermakers." Engineering News Record 214 (30 May 1985) : 108.
32. "Saturn Project Pact Infuriates Open Shop." Engineering News Record 215 (12 December 1985) : 56.
33. "Labor Pact Gets First Test." Engineering News Record 214 (27 June 1985) : 70.
34. "National Labor Agreements Expand." Engineering News Record 210 (16 June 1983) : 50.
35. "Turnabout at the NLRB." Builder and Contractor, August 1984, p. 22.
36. "More Anti-Dual-Shop Cases Taken." Engineering News Record 215 (24 October 1985) : 46.
37. "NLRB's Collyer Attacks' Work Preservation." Engineering News Record 215 (10 October 1985) : 95.
38. "Two-Front Attack on Dual Shops." Constructor 68 (January 1986) : 49.
39. "Court Ruling Strikes Union Solidarity." Seattle Post-Intelligencer, 30 June 1985, sec. A, p. 14.
40. "Unions Can't Discipline Strikebreakers, Court Rules." Seattle Post-Intelligencer, 28 June 1985, sec. A p. 7.
41. "Labor's Pain." Wall Street Journal, 24 February 1984 p. 1.
42. "Supreme Court Rules Union Pacts May be Ignored Under Chapter 11." Wall Street Journal, 23 February 1984, p. 3.
43. "Fewer Contractors Folded in '85." Engineering News Report 216 (20 February 1986) : 58.
44. "Labor Chiefs Denounce Court Ruling." Seattle Post-Intelligencer, 23 February 1984, sec. B, p. 6.

45. "Most Labor Agency Changes on Base Wage For U.S.-Financed Building Are Upheld." Wall Street Journal, 6 July 1983, p. 10.
46. "Reagan Wins High-Court Test on Wage-Law Change." Seattle Times, 16 January 1984, sec. A, p. 2.
47. "Building Trades Fighting Back." Engineering News Record 216 (24 April 1986) : 63.
48. U.S. Congress. Senate. A Bill Entitled the Federal Contractor Employees Flextime Act. H.R. S. 1105, 99th Cong., 1st sess., 1985.
49. "Three Labor Bills Moving." Engineering News Record 215 (1 August 1985) : 60.
50. "Union Moving Back to Basics." Engineering News Record 215 (25 August 1985) : 62.
51. "Idaho Bill Would Eliminate National Wage Rate Requirement." Daily Journal of Commerce (Seattle), 27 January 1984, p. 14.
52. "Idaho Governor Vetoes Davis Bacon Bill." Daily Journal of Commerce (Seattle), 22 February 1984, p. 5.
53. "Union-Only Rule Challenged." Engineering News Record 215 (31 October 1985) : 59.
54. G. N. Miller, "Recent Trends in Construction Industry Labor Agreements." report presented to the Department of Civil Engineering, University of Missouri, 1978.
55. C. E. Peabody, "Comparison of Construction Labor Agreements in Right-to-Work and Union Shop States." report presented to the Department of Civil Engineering, University of Missouri, 1980.
56. "Annual Directory." Constructor 67 (July 1985).
57. "Freezes Fashionable in '85." Engineering News Record 214 (6 June 1985) : 68.
58. Associated General Contractors of America (Wa.) and Carpenters Piledrivers and Millwrights of the United Brotherhood of Carpenters and Joiners of America, Agreement between, 1 June 1983.

59. "Construction Workers Strike." Times (Los Angeles), 19 June 1983. sec. 2, p. 1.
60. Associated General Contractors of St Louis and Local 513 affiliated with the International Union of Operating Engineers, A.F.L.-C.I.O., 1 May 1983
61. Associated General Contractors of Illinois and International Union of Operating Engineers, Local Union No. 965-965A-965B-965C-965RA, AFL-CIO, Agreement between, 1 May 1985.
62. Associated General Contractors, New Mexico Building Branch, and New Mexico District Council of Carpenters, Agreements between, 1 April 1984.
63. Associated General Contractors of America, Inc., Michigan Chapter, Jackson Contractors Association, Lenawee County Contractors Association, and Carpenters' District Council of South Central Michigan of United Brotherhood of Carpenters and Joiners of America, AFL-CIO, Agreement between, 1 June 1984.
64. Missoula Construction Council, Inc., Montana Contractors' Association, Inc. and Ironworkers Local No. 598, International Association of Bridge, Structural, Ornamental and Reinforced Ironworkers, Agreement between, 1 July 1983.
65. "Five of the Worst Agreements You Can Make With a Union." Wall Street Journal, 10 December 1984, p. 20.
66. Arizona Chapter and Arizona Building Chapter, Associated General Contractors of America and Arizona State District Council of Carpenters, Agreement between, 2 September 1982.
67. Associated General Contractors of Mississippi, Inc. and The Central Mississippi Building and Construction Trades Council representing Bricklayers and Allied Crafts Local No. 15, Agreement between, 1 May 1984.

Appendix A

Jimmy S. Hirakawa
4850 156th Ave. NE
Apt 337
Redmond, Washington 98052

[Name]
[Organization]
[Optional][Chapter] Chapter
[Optional]P O Box [PO box]
[Optional][Address]
[Optional]Suite [Suite]
[City], [State] [Zip]

Dear [Last name],

I am a graduate student in Civil Engineering at the University of Washington. I am majoring in Construction Engineering and Management and am currently working on a research project concerning unions in the construction industry. I am attempting to analyze union contracts from a variety of locations to ascertain how various crafts have fared in recent years in bargaining with management and to attempt to establish what forces may have affected the union agreements.

To complete this project, I am gathering union contracts for the six basic crafts; carpenters, cement masons, iron workers laborers, operating engineers, and teamsters and would like to have a copy of your union agreements with those crafts.

This research project fulfills a requirement for my Masters Degree in Engineering and I would greatly appreciate your assistance.

Sincerely,

Jimmy S. Hirakawa

END

DTIC

8-86