THE CHILLING EFFECT REVISITED:
THE PERFORMANCE OF IMPASSE PROCEDURES
IN OHIO'S PUBLIC SECTOR

A Thesis

Presented in Partial Fulfillment of the Requirements for
the Degree of Master of Science in the
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by

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* * * * * *

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TABLE OF CONTENTS

Vita .................................................................................. ii

List of Tables ..................................................................... v

Introduction ......................................................................... 1

  Statement of the Problem ..................................................... 1
  Research Questions ............................................................... 2
  Significance of the Study ....................................................... 3
  Assumptions of the Study ...................................................... 5
  Limitations of the Study ....................................................... 6
  Organization of the Study ..................................................... 7

Part I. The Chilling Effect Defined ........................................ 10

  Conventional Arbitration ..................................................... 10
  Fact-Finding ........................................................................ 12
  Final Offer Arbitration ........................................................ 14
  All Impasse Procedures ....................................................... 15

Part II. Review of the Literature ........................................... 16

  The Existence of the Chilling Effect ....................................... 16
  Impact of the Chilling Effect .................................................. 21

Part III. Dispute Settlement in Ohio ....................................... 26

  Frequency of Impasses ......................................................... 26
  Patterns of Impasse Procedure Use ...................................... 28
  Summary .............................................................................. 32
Part IV. Research Methodology ........................................... 33

The Data Source ......................................................... 33
Hypothesis and Data Analysis ......................................... 34
The Dependent Variable ................................................. 36
Independent Variables .................................................. 43

Experience ................................................................. 44
Outside Negotiator ....................................................... 50
Year .............................................................................. 53
Negotiation Type .......................................................... 54
Size .............................................................................. 55
Neutral’s Mediation Efforts .............................................. 56
Unit Type ........................................................................ 57
Alternate Dispute Settlement Procedure ............................. 58

Part V. Research Findings .................................................. 60

Part VI. Summary and Recommendations .......................... 75

Conclusions ................................................................. 75
Implications ................................................................. 76
Recommendations ........................................................ 77

Appendix A  Regression Equation:
Fact-Finding - All Reports .............................................. 87

Appendix B  Regression Equation:
Fact-Finding - Strike Permitted ....................................... 89

Appendix C  Regression Equation:
Fact-Finding - Strike Prohibited ..................................... 91

Appendix D  Regression Equation:
Conciliation .................................................................. 93

References ....................................................................... 95
LIST OF TABLES

Table 1  Frequency of Impasse Under Ohio’s Statutory Dispute Settlement Procedure ................. 27
Table 2  Fact-Finding Acceptability By Number of Issues at Impasse (Negotiations Initiated Between 1988 and 1993) ........................................ 39
Table 3  Independent Variable Means .......................................................... 59
Table 4  Regression Coefficients (t Statistics) ............................................. 73
INTRODUCTION

Statement of the Problem

The chilling effect is a phenomenon that is thought to occur in public sector collective bargaining systems where the right to strike is prohibited, or greatly restricted, and negotiation stalemates are subject to the provisions of impasse procedures that call for the intervention of third-party neutrals. In such systems employers and unions may come to view arbitration outcomes, whether binding or advisory, as being more favorable than settlements reached from bi-lateral negotiations. If this occurs, there will be a tendency for parties to engage in less meaningful bargaining. That is, parties will become increasingly reliant on compulsory dispute resolution procedures to reach settlement, thus, resulting in a chilling of pre-impasse bargaining.

Dispute resolution is typically the cornerstone of public sector bargaining statutes. Since public employee strikes are generally regarded as being detrimental to public welfare, legislatures incorporate impasse procedures into bargaining laws to provide alternative means of settling contract disputes. However, if these procedures result in a decline in genuine bargaining, then
some serious problems will arise. The chilling effect is likely to have some of the following undesirable consequences:

- A rise in labor disputes including more and longer strikes
- An emphasize on litigation, not communication, to resolve conflicts between labor and management
- The perpetuation of the traditional adversarial labor relations system
- An over-use of public monies for dispute resolution purposes
- A contradiction in the notion that collective bargaining ought be a voluntary process

Each of these problems will be addressed in some detail in Part II.

Research Questions

The chilling effect has proven to be a complex phenomenon. Over the years it has been defined in both narrow and broad terms. There is no consensus as how best to substantiate its existence. There is little evidence demonstrating the conditions under which the chilling effect is most pronounced. In order to clarify these issues the following questions are posed as needing to be
answered in order to better understand the phenomenon known as the chilling effect:

- Is the chilling effect associated with conventional arbitration only?
- How does one determine the existence of the chilling effect?
- What factors contribute to a decline in genuine bargaining?

The research model developed for this study provides a mechanism for answering these questions.

Significance of the Study

Since becoming institutionalized within the American labor relations system, voluminous research has been conducted on topics relating to public sector collective bargaining. As noted by Anderson (1981) the subject that has gained the greatest amount of attention is the chilling effect that is thought to be associated with the arbitration of negotiation disputes. However, at this time no meaningful research has been conducted exploring whether there exists a chilling effect in Ohio's public sector.

In 1983 the Ohio Public Employee Collective Bargaining Act was passed granting public employees in the state the right to organize and join unions and to engage in collective bargaining with their employers. Included among the
provisions of the comprehensive law are procedures that guide the resolution of bargaining disputes. Specifically, the act mandates mediation (which will not be addressed in this study), fact-finding, and conciliation; i.e., binding interest arbitration, when parties are unable to reach settlement as the result of bilateral negotiations.

The effectiveness of dispute resolution procedures is often brought into question. Several states have amended their statutes eliminating certain procedures and replacing them with others. Dispute resolution under the Ohio law has also been subject to a great deal of criticism. Therefore, with more than a decade of impasse procedure experience in Ohio, now would seem an appropriate time to critically evaluate the performance of these procedures. One performance criterion is the extent to which impasse procedures facilitate or deter genuine bargaining.

While much research has been conducted on the subject of the chilling effect, it is not necessarily appropriate to draw conclusions concerning impasse procedure performance in Ohio based on what has occurred in other states. Differences in bargaining laws as well as variations in political, social, and economic conditions make it extremely difficult to make cross-jurisdictional comparisons. To this end it is imperative that we resist the temptation to form opinions based solely on how impasse procedures have performed in other
states. It is preferable to conduct meaningful research on the chilling effect as it pertains to dispute settlement in Ohio.

Assumptions of the Study

Like any research effort, it is assumed that the appropriate research tool is developed and the necessary variables are selected in order to ensure reliable and valid results. The assumption of reliability is strengthened by the fact only primary data were used and the data were recorded and interpreted by a single individual. The data used in this research come from actual fact-finding reports and conciliation awards, and, when necessary, negotiation case files. This maintains the richness of the data that might otherwise be lost if it came from a secondary source. Having only one person review and interpret the documents and record the data guarantees a level of consistency that is jeopardized when more than one individual is responsible for these tasks.

With regard to validity, the following assumptions are made. First, it is assumed that the chilling effect can be measured by analyzing the variation in the number of issues decided upon by fact-finders and conciliators. The selection of the number of issues at impasse as the dependent variable has been a common practice in research on the chilling effect. Also, the number of issues provides insight with respect to the relative strength of the chilling
effect. That is, it shows the degree that bargaining is chilled under various conditions.

Second, it is assumed the chilling effect is a function of party and negotiator experience. The concept of the chilling effect is generally derived from expectancy theory where bargaining behavior is thought to be influenced by expected outcomes. This researcher concludes that as individuals and parties gain experience with impasse procedures, they will develop certain expectations which will result in either chilled bargaining or meaningful negotiations. The relationship between experience and the chilling effect has been established in previous research on the subject.

Limitations of the Study

Labor relations is a multi-disciplinary field. It is influenced by the more pure disciplines such as economics, sociology, psychology, political science, and anthropology. Given the complexity of its nature, it is difficult to control for all the constructs that are likely to influence a dependent variable. Because of this, there will be much unexplained variation in the dependent variable. Specifically, a regression of the number at issues at impasse on the selected independent variables will yield a low $R^2$. Ideally, all explanatory variables would be included. However, such a study would exceed reasonable time and cost restrictions.
Organization of the Study

The first step in examining the chilling effect is to clearly define what is meant by this phrase. Historically, the chilling effect has been identified as a byproduct of conventional arbitration. It has been asserted that while conventional arbitrators are free to fashion an award of their own choosing, they typically do little else than award a compromise between the offers of the parties. Because of this splitting-the-difference behavior, it is presumed parties will expect, with reasonable certainty, a more favorable, or less risky, outcome in arbitration than could be achieved as the result of bi-lateral negotiations. However, as will be shown in Part I the ideas of arbitral compromise, uncertainty, and risk can be extended to other forms of third-party intervention as well, thus, broadening the scope of the chilling effect to also include fact-finding and conciliation.

Once the chilling effect has been defined for the purposes of this study, a more formal literature review will be conducted. In Part II the author will summarize previous efforts to prove the existence of the chilling effect and will attempt to show the impact a lack of real bargaining might have on a labor relations system.

Following the literature review is a descriptive summary of dispute settlement in Ohio during the first ten years under the collective bargaining law. In this
section, Part III, impasse procedure utilization frequencies are presented in tabular form. Also, patterns of dispute settlement procedure usage are analyzed and discussed. The questions raised by the descriptive statistics lead to a discussion of the research methodology.

Part IV, the research methodology section, begins with a description of the data and the data source. Next, the hypothesis is posed that the chilling effect is a function of impasse procedure experience. After this, regression analysis is established as the means of empirically testing the hypothesis. The dependent variable is then introduced. The determination of the existence of the chilling effect in Ohio’s public sector is based upon the number of issues decided upon by outside neutrals. Once the dependent variable is explained, the independent constructs, referred to as chilling factors, are identified. The variables of greatest interest are proxies for impasse procedure experience in that it is assumed the chilling effect manifests itself over time as parties and individuals become familiar with the procedures.

The results of the regression analysis are discussed in Part V. It is shown how the chilling effect occurs in both fact-finding and conciliation. For fact-finding the chilling effect is also distinguished in terms of its association with disputes involving strike permitted and strike prohibited bargaining units. The findings suggest when impasses involve units prohibited from striking, experience with
fact-finding results in chilled bargaining.

The results of the study are summarized in Part VI. Implications and recommendations are included in this section.
PART I. THE CHILLING EFFECT DEFINED

Conventional Arbitration

The nature of the chilling effect is explained by expectancy theory, whereby behavior is thought to be influenced by expected outcomes. In defining the chilling effect as it relates to conventional arbitration Feuille wrote:

If either party . . . anticipates that it will get more from the arbitrator than from a negotiated settlement, it will have an incentive to avoid the trade-offs of good-faith bargaining and will cling to excessive or unrealistic positions in the hope of tilting the arbitration outcome in its favor. This lack of hard bargaining will occur because of a significant reduction in the costs of disagreement. Not only will there be no strike costs, the uncertainties associated with continued disagreement are reduced because of the usual compromise outcome: the arbitrator gives less than the union asked for and more than the employer has offered. In other words, since conventional arbitration imposes much smaller costs of disagreement than strikes, there is little incentive to avoid it (Feuille 1975, p. 304).

Under a conventional arbitration system the arbitrator in rendering a decision is not bound to award the final offer of one party or the other. She is free to fashion an award to her own choosing. Often the award represents a compromise between the final positions of the parties. As parties come to expect arbitrators to split the difference between the final offers, they will be
reluctant to engage in compromise activity since to do so would hinder their chances of gaining a favorable decision in arbitration. Concerning this ability of conventional arbitrators to split the difference between the proposals of the parties Stevens offered the following:

The impact of the compromise criterion will depend somewhat on what difference is to be split. But whatever the precise nature of the compromise formula, it is hard to avoid the conclusion that its use under a system of strong compulsory arbitration will not be consonant with genuine prearbitration negotiation. Hence, each party must be concerned with what is passed on to arbitration from prearbitration negotiation. Each party may feel that if he makes large demands and no concessions, this will tend to influence the arbitration award favorably (Stevens 1966, p. 45).

Stevens recognized that the tendency for arbitrable compromise would have an effect on the bargaining process. He wrote: "Generally speaking, then, different expectations and/or uncertainty about the arbitration award are needed to generate prearbitration negotiation" (Stevens 1966, p. 43). Farber and Katz further developed this idea that the perceived lack of uncertainty concerning arbitration outcomes would serve as a deterrent to meaningful bargaining (Farber and Katz 1979). They argued that certainty with respect to arbitration outcomes coupled with a propensity toward risk aversion are the underlying determinants of the chilling effect.

Farber and Katz developed a model of bargaining behavior showing arbitration to be most effective, meaning, least used, when parties are risk averse and are
uncertain of the arbitrated outcome. They argued that under these conditions there exists a large contract zone, or the range of settlements preferable to arbitration, which increases the likelihood of the parties reaching a voluntary settlement. However, as Farber and Katz warned: "It is likely that as the parties become familiar with arbitrators and the arbitration procedure, the uncertainty surrounding the procedure will be reduced. This may result in increased usage of the procedure as the contract zone shrinks" (Farber and Katz 1979, p. 63).

Though theories on the existence of the chilling effect are generally associated with conventional arbitration, they can be extended to include other dispute settlement procedures as well. If Farber and Katz are correct in their assumption that certainty and risk aversion drive negotiation behavior, then any impasse procedure, where the outcome is perceived as fairly certain and the risk associated with its use is considered to be relatively low, is likely to chill good faith bargaining.

Fact-Finding

One can logically argue there is a chilling effect associated with fact-finding. Like conventional arbitration, fact-finding permits neutrals to fashion recommendations of their own choosing. Consequently, fact-finder recommendations may represent a compromise between the parties' proposals.
Therefore, the same incentive for parties to hold onto extreme positions thought to exist under a conventional arbitration system should also be applicable to a dispute resolution system that calls for fact-finding.

Also, fact-finding, which has often been viewed as a misnomer, is essentially advisory arbitration. The parties are not bound by fact-finder recommendations. This means either side, or both, can enter the proceeding with "wish list" positions without suffering any negative consequences if they "lose" at fact-finding. Therefore, there is no real incentive for the parties to resolve issues, or to narrow their differences, before fact-finding.

Finally, fact-finding lacks finality. Under the Ohio law, and pursuant to many other states' bargaining statutes as well, fact-finding is an intermediate step of the impasse procedure with the right to strike or the option to go to conciliation; i.e., final-offer arbitration, to follow. In such a system there is little pressure on the parties to settle before fact-finding because the cost associated with using the procedure is low. Other than the fees of the fact-finder, of which each party only pays a quarter, and the expenses incurred when professional advocates are retained, the cost of going to fact-finding is nominal. Due to these characteristics there is reason to believe expectations of a splitting-the-difference outcome (as advanced by Stevens) reduces the uncertainty associated with this low risk procedure (according to the principles
developed by Farber and Katz) explaining how the availability of fact-finding is likely to have a chilling effect on bargaining.

Final-Offer Arbitration

There is also cause to suspect a chilling effect resulting from final-offer arbitration. In Ohio arbitrators make awards on an issue-by-issue basis. Therefore, a party may consider it to be advantageous to take several items to conciliation in the hope the conciliator will decide in its favor on at least some of the issues. The behavior resulting from an assumption of arbitral compromise is analogous to the splitting-the-difference effect believed to occur under conventional arbitration.

Also, as parties gain experience with the process they are likely to develop certain expectations of what the outcome of a final-offer procedure will be, especially when fact-finding precedes final-offer arbitration, as is the case in Ohio. A multi-step dispute settlement procedure allows parties to use the results of earlier steps to gauge how neutrals in subsequent steps might rule. Farber and Katz wrote:

To the degree that arbitrators rely on the results of the factfinding in making their awards, factfinding provides information to the parties concerning the arbitrator’s behavior. This reduces the uncertainty inherent in the arbitration procedure and constrains the range of negotiated outcomes (Farber and Katz 1979, p. 63).
Olson argued that under the Farber and Katz model of certainty and risk aversion there is little difference between conventional arbitration and final-offer arbitration in terms of either procedure’s ability to induce parties to reach voluntary settlement before impasse (Olson 1988).

All Impasse Procedures

Based on the above, it is offered that the chilling effect can be associated with virtually any type of procedure that calls for the intervention of a disinterested third party to make a recommendation or render an award on disputed matters. With this premise in mind, the chilling effect is defined as follows:

The failure of labor and management to engage in meaningful collective bargaining before impasse where it is expected that a more favorable, or less costly, outcome can be gained as a result of a third-party neutral’s recommendation or award, than would be achieved through voluntary settlement.

The next section reviews some of the previous research that has been conducted in an effort to prove the existence of the chilling effect and to measure its impact on collective bargaining.
PART II. REVIEW OF THE LITERATURE

The Existence of the Chilling Effect

As mentioned, the chilling effect is generally identified with conventional arbitration. Because of the perceived tendency of neutrals to render a compromise award under a conventional arbitration system, it is thought parties will be reluctant to engage in give-and-take activity before arbitration. A lack of good faith bargaining leads to both a high rate of arbitration usage and a large divergence in positions taken to impasse.

In a study on the experience with dispute settlement procedures in the Canadian federal service, a system where parties were free to select from one of two impasse procedures, Anderson and Kochan found that over four rounds of bargaining there was a marked increase in the percentage of bargaining cases that went to arbitration (Anderson and Kochan 1977). In this system where parties had a choice between submitting disputes to conventional arbitration or following a route including fact-finding and culminating with the right to strike, over the four bargaining rounds there was a greater tendency for parties following the former to reach the terminal step of the impasse procedure than there was for the latter. These findings suggest not only were parties
becoming increasingly reliant on arbitration to settle their differences, but, the
cost of going to arbitration was also perceived as being lower than the risk
associated with a strike.

In a study of negotiations involving fire fighter units of 370 municipalities under
different dispute settlement systems, Wheeler was able to tentatively conclude
conventional arbitration does have a chilling effect on pre-impasse collective
bargaining (Wheeler 1978). His data showed the gap between union and
management wage positions to be larger under conventional arbitration than it
was under fact-finding. Wheeler’s study indicated that the least compromise
activity, as measured by the differences in wage proposals, took place when
conventional arbitration was the terminal step of the dispute settlement
procedure.

Feuille also found evidence in support of the contention conventional arbitration
chills bargaining (Feuille 1975). His research showed conventional arbitration
was less effective than final-offer procedures with entire package selection in
encouraging movement toward settlement. This assessment resulted from a
comparison of the average number of issues decided upon under different
impasse procedures.
Feuille, however, was not able to demonstrate any significant difference in the number of issues at impasse between conventional arbitration and final-offer issue-by-issue arbitration. This finding adds credence to the aforementioned theory that parties may perceive there to be an opportunity for arbitral compromise under final-offer issue-by-issue arbitration in the form of "splitting the difference" across issues. Such a perception could serve to reduce the amount of hard bargaining under an impasse procedure that culminates with final-offer issue-by-issue interest arbitration because parties will wish to enter into arbitration with a large number of items remaining on the table in the hope of winning a few.

Olson, in questioning whether final-offer arbitration procedures were truly superior to conventional arbitration at stifling the chilling effect, mused: "If the final-offer process encourages bilateral bargaining more than does conventional arbitration because of the greater risks, then the parties in states that offer a choice of procedures should be selecting conventional arbitration more often" (Olson 1988, p. 177). However, he cited examples for New Jersey and Wisconsin where final-offer arbitration was far and away the preferred choice among parties in resolving bargaining impasses even though the option to use conventional arbitration was available.
Fact-finding has also been identified as a possible obstruction to genuine bargaining. In 1969 McKelvey found early experience with fact-finding showed the procedure to have had a positive impact on collective bargaining. However, she was dubious as to procedure's long-term effectiveness. She concluded:

[Under] some circumstances ... fact-finding has performed both an educational and dispute-resolving function well beyond what the precepts of orthodox teaching would leave one to expect. In this sense it has shown promise. It has been useful, if not entirely successful. In another and more profound sense, however, it may prove ultimately to be not only an illusion, but what is worse, an exercise in futility" (McKelvey 1969 at p. 543).

The existence of a chilling effect associated with fact-finding was addressed by Word. His study of fact-finding in New York and Wisconsin showed there to be a perception among the representatives of public employers and employee organizations that very little good faith bargaining took place prior to fact-finding (Word 1972). Similar opinions have been expressed by public employer and employee representatives in Ohio. Responses to a recent survey reveal a large portion of those employers and employee representatives who are critical of the fact-finding process claim the procedure is merely a "posturing step for conciliation" (Spirn 1994, p. 13). The Spirn study also found that even among those who express favorable views of the fact-finding process many consider it to be merely a helpful aid in their preparations for conciliation.
As previously stated, the lack of meaningful negotiations prior to fact-finding may in part be explained by its non-binding nature. In Wisconsin fact-finding was replaced by a mediation-arbitration procedure in 1977. It was reported that while mediation-arbitration was initiated less frequently in the first two years after the 1977 amendments than was fact-finding during the several years prior to the change in the law, there was a lower rate of pre-decision settlement under the fact-finding statute than there was under the mediation-arbitration statute (Wisconsin Center for Public Policy 1980). From this finding, it could be argued that the threat of fact-finding, once the process is initiated, does not provide a sufficient stimulus to pressure parties into reaching a voluntary settlement short of third-party intervention.

As mentioned, Anderson and Kochan's study of the Canadian federal service revealed that negotiations conducted under the fact-finding--strike dispute settlement procedure were less likely to reach the terminal step of the impasse procedure than were those that concluded with arbitration. However, their research also showed negotiations that took place under the procedure calling for fact-finding followed by the right to strike were more likely to reach impasse; that is, less likely to settle without any third-party intervention, than were those pursuant to the procedure that directed disputes to arbitration (Anderson and Kochan 1977). In New York state it was found that over time there was an increase in the frequency of impasse under fact-finding among
city police and fire units (Kochan and Baderschneider 1978).

Impact of the Chilling Effect

The interest in proving the existence of the chilling effect stems from the concern that it will have a negative impact on the collective bargaining process. It is feared that if the chilling effect exists, then collective bargaining will change from an exercise in compromise and cooperation to a process rendered ineffective as the parties become steadfastly entrenched in exaggerated bargaining positions and adopt an adversarial and litigious approach to resolving their differences. In advancing this notion Stevens observed:

In general, then, with a strong compulsory arbitration system operating under the compromise criterion, we would expect prearbitration negotiation to generate a very different record from that generated by nonarbitrated negotiation. This type of compulsory arbitration is unlikely to serve simply as an adjunct to something resembling 'normal' collective bargaining. Rather, it constitutes a different kind of negotiation system—one in which the parties view themselves (from the outset) as in an adversary relationship before a tribunal (Stevens 1966, p.45).

As previously discussed, there is reason to suspect some measure of a chilling effect to be associated with any dispute settlement procedure. Therefore, this uncompromising, adversarial behavior that Stevens considered to be a manifestation of the availability of conventional arbitration should occur under any bargaining system that provides for third-party intervention as the means
of resolving bargaining disputes.

One of the startling consequences of the chilling effect, and the adversarial relationships it helps perpetuate, may be an increase in the frequency and intensity of work stoppages. This, of course, is contrary to the fundamental objective of impasse procedures, which is to serve as a substitute or deterrent to strikes. There is some evidence, however, that such a contradiction may in fact occur.

In a paper where public sector work stoppages taking place between 1979 and 1980 were analyzed, it was suggested that impasse procedures calling for various combinations of mediation, fact-finding and arbitration were ineffective in preventing or ending strikes (HirLinger and Sylvia 1988). The data analyzed in the HirLinger and Sylvia study revealed over half of the strikes that took place during the two-year period occurred in states where strikes were prohibited and where there was some type of procedure establishing different combinations of third-party involvement as the means of settling bargaining impasses.

Strike activity in jurisdictions where impasse procedures are available to resolve disputes are likely to be related to both a lack of meaningful bargaining prior to impasse and a post-impasse chilling effect as well. In a study comparing strike durations in Ohio, where fact-finding is available, to those in Illinois, a state
whose impasse procedure does not mandate fact-finding, during the first ten years of each state's public sector bargaining law, Malin discovered there to be a significant difference in the length of strikes between the two states with those occurring in Ohio having a much greater likelihood of being prolonged than those having took place in Illinois (Malin 1993).

Malin also compared the length of strikes in Ohio where fact-finding preceded the strike to those where there was no fact-finding pursuant to a mutually agreed upon dispute resolution procedure. He found that strikes in Ohio that occurred subsequent to fact-finding were more likely to be protracted than those under contractual impasse procedures that excluded fact-finding.

Malin suggested that fact-finding probably tends to "polarize" labor and management so that if a fact-finder's recommendations are rejected and a strike ensues, then the parties are likely to become firmly entrenched in their respective positions, thus, making it difficult to resolve their differences (Malin 1993, p. 383). That is, Malin implied there exists a post-fact-finding chilling effect

In extreme cases the strike may actually become a substitute for ineffective dispute resolution procedures. As mentioned, the inability of the threat of fact-finding to promote bargaining and resolve disputes can partially be explained
by its non-binding nature. Consequently, over time there may actually be a reduction in its usage as parties opt for more conclusive methods of dispute resolution. Gatewood found that between 1968 and 1974 there was a steady decline in the utilization of fact-finding for resolving bargaining disputes involving teachers (Gatewood 1974). During this same period, though prohibited under the state’s bargaining law, the frequency of strikes substantially increased. Gatewood’s findings infer that fact-finding was losing favor to a more definitive, albeit illegal, means for reaching settlement.

Even if impasse procedures have on the whole been successful in retarding strike activity, there is still cause for concern over the existence of the chilling effect. The reliance of parties on dispute resolution procedures is contrary to the notion that collective bargaining outcomes should be the result of mutual agreement. Kochan noted that "there is a deeply shared ethos among scholars, policy-makers, and practitioners that values the ability of the parties to settle without the intervention of an outside third party" (Kochan 1979, p. 170). If there is a chilling effect associated with impasse procedures, then the quid pro quo; i.e., the this for that, behavior that is essential to reaching a voluntary settlement will be undermined by take-it-or-leave-it attitudes exhibited by participants who merely engage in pre-impasse posturing.
Finally, is the matter of cost. The State Employment Relations Board budgets roughly $120,000 a year towards the state’s share of fact-finding expenses. Since the state pays half of the cost of fact-finding this means about $240,000 is accrued annually solely for the payment of fact-finder fees. Though the state pays none of the fees charged by conciliators, it is safe to guess that this amount comes to about $80,000. This figure is derived by multiplying $240,000 by one-third, which is roughly the portion of conciliator awards to fact-finder reports over the last few years.

This annual rate of $320,000 only touches the surface of total costs relating to impasse procedures. Most parties secure the services of outside negotiators whose fees can become quite lofty, especially as the bargaining process lengthens. Additional costs include public dollars spent as public employees, of both management and labor alike, spend time in fruitless bargaining. This takes away from the amount of time they devote to performing their work duties. Though no flat dollar amount can be placed on the cost of chilled bargaining, it is clear that the cost can become large.
PART III. DISPUTE SETTLEMENT IN OHIO

Frequency of Impasses

Approximately 1,200 sets of negotiations are initiated each year in Ohio's public sector (see Table 1). By initiated, it is meant that one of the parties served notice on both the State Employment Relations Board and the other party of its intention to enter into negotiations. Between 1989 and 1993 over half, 55 percent, of negotiations were conducted in accordance with the procedure delineated in the Ohio Public Employee Collective Bargaining Act. The remainder followed the provisions of a mutually agreed upon dispute resolution procedure, commonly referred to as MADs. Prior to 1989 SERB did not maintain records identifying whether negotiations were conducted pursuant to the statutory dispute settlement procedure or under the auspices of a MAD.

Most contractual dispute settlement procedures, MADs, occur in negotiations involving boards of education. Information gleaned from SERB's Clearinghouse database reveal that more than 80 percent of school contracts contain dispute settlement procedures that prevail over that which is prescribed in the statute. Usually, when parties adopt a MAD they eliminate fact-finding leaving mediation followed by the right to strike.
# Table 1

**Frequency of Impasse Under Ohio's Statutory Dispute Settlement Procedure**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases Initiated</th>
<th>Statutory Cases</th>
<th>Strike Prohibited</th>
<th>Strike Permitted</th>
<th>Conciliation Awards</th>
<th>Strikes</th>
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<tr>
<td>1984*</td>
<td>994</td>
<td>na</td>
<td>44</td>
<td>27</td>
<td>11</td>
<td>4</td>
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<td>na</td>
<td>93</td>
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<td>1,233</td>
<td>na</td>
<td>121</td>
<td>58</td>
<td>57</td>
<td>3</td>
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<td>1,254</td>
<td>na</td>
<td>128</td>
<td>80</td>
<td>27</td>
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<td>1,262</td>
<td>na</td>
<td>98</td>
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<td>46</td>
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<td>3</td>
</tr>
<tr>
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<td>696</td>
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</tr>
<tr>
<td>1991</td>
<td>1,377</td>
<td>761</td>
<td>141</td>
<td>55</td>
<td>53</td>
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</tr>
<tr>
<td>1992</td>
<td>1,205</td>
<td>698</td>
<td>117</td>
<td>42</td>
<td>41</td>
<td>3</td>
</tr>
<tr>
<td>1993</td>
<td>1,257</td>
<td>725</td>
<td>134</td>
<td>49</td>
<td>43</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,175</strong></td>
<td><strong>1,092</strong></td>
<td><strong>518</strong></td>
<td><strong>335</strong></td>
<td><strong>36</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Figures are based on the year in which negotiations were initiated. 1984 data reflects the nine month period following the opening of the State Employment Relations Board on April 1, 1984.

b The State Employment Relations Board did not begin tracking the distribution of cases by dispute settlement procedure type; statutory and contractual, until 1989.
The vast majority of negotiations conclude prior to impasse as the result of either bi-lateral or mediator assisted settlement. Fact-finders made recommendations and issued reports for only a quarter of the bargaining cases that were initiated between 1988 and 1993 and that were conducted pursuant to the statutory impasse procedure. Only six percent of these cases reached the terminal step, either conciliation or a strike, of the bargaining process. During the first ten years, over twice as many cases went to fact-finding for units prohibited from striking than did for strike permitted units. Nearly ten times more cases advanced to conciliation than ended in a strike. Unfortunately, SERB records do not reflect the distribution of total cases between those units strike permitted to strike and those prohibited from engaging in a work stoppage. Therefore, it is not possible to determine the overall frequency of impasse procedure usage on the basis of strike permitted or strike prohibited status.

Patterns of Impasse Procedure Use

There is seemingly no long-term pattern, neither a decrease nor an increase, in the frequency in which fact-finding has occurred. Between 1989 and 1993 the portion of negotiations conducted pursuant to the statutory dispute settlement procedure that resulted in the issuance of a fact-finding report ranged from a low of 21 percent in 1989 to a high of 26 percent in 1991 with no apparent
trend in utilization rates. Moreover, for all sets of negotiations conducted over the entire ten year period, irrespective of impasse procedure type, 1984 was the only year in which less than ten percent of bargaining cases resulted in statutory fact-finding. Otherwise, the frequency of use ranged from 11 percent in 1989 to 17 percent in 1987. Whether all bargaining cases are reviewed, or only those that followed the procedure specified in the law, there appears to be neither an increase nor decrease in the overall portion of cases reaching fact-finding.

There does, however, seem to be a pattern of increase in the use of fact-finding and conciliation by safety forces. Prior to 1990 about 55 percent of fact-finding reports dealt with strike prohibited units. Since then the figure has risen to 66 percent. Moreover, in only one of the first six years did more than 30 cases reach conciliation. Yet, during the last four years no fewer than 41 cases have gone to conciliation in any given year. These findings can in part be explained by the overall increase in bargaining activity among safety forces relative to other public employee groups. Police and fire units have accounted for 64 percent of the employee organizations that have gained certification since the passage of the law (Bronfenbrenner and Juravich 1994).

However, not only has the absolute frequency of conciliation risen, but so has its relative utilization. Prior to 1990 about 27 percent of the negotiations
involving safety units that went to fact-finding ended up with the issuance of a conciliation award. Since then that rate has climbed to 36 percent.

The rate of strike activity following fact-finding has remained constant over the years. In no single year has there been fewer than three or more than five work stoppages subsequent to the issuance of a fact-finding report. It is worth noting that of the 136 strikes that occurred for cases initiated between 1984 and 1993 only 36, or 26 percent, took place after fact-finding. The remainder took place pursuant to a MAD where fact-finding was not included in the impasse procedure.

Overall, there has been a marked reduction in strike activity since the passage of Ohio’s public sector bargaining law. Prior to the enactment of the bargaining statute all public sector strikes in Ohio were deemed illegal under the provisions of the Ferguson Act. Yet, between 1958 and 1980 there were a total of 696 public employee strikes, or about 30 a year (PEACE 1986). Since passage of the law strike activity has fallen by over fifty percent with an average of less than 14 work stoppages per year.

During the ten year period between 1984 and 1993 almost 60 percent, or 80 of 136, of work stoppages involved school districts. Of these only seven followed the issuance of a fact-finder’s report and recommendations. For
schools there is some evidence of an increase in strike activity subsequent to fact-finding over time. There were four strikes involving schools that took place under the auspices of the statutory dispute settlement procedure for cases initiated during the first seven years. During this time 136 fact-finding reports were issued for cases dealing with schools. This means that strikes occurred after fact-finding only three percent of the time for negotiation cases involving boards of education initiated prior to 1991. From 1991 through 1993 there were three school strikes subsequent to fact-finding. However, only 31 reports were issued. Therefore, during the last three years when schools have invoked fact-finding a strike took place ten percent of the time.

Additionally, between 1991 and 1993 schools accounted for only six percent of the cases in which a fact-finding report was issued. Before 1991 thirteen percent of all fact-findings dealt with schools. The data seem to indicate that over time negotiations involving boards of education have become less reliant on fact-finding to resolve disputed issues. However, when fact-finding does take place, the chance of a strike occurring has increased.

Though the data suggest some change in the rate and pattern of impasse procedure use, it must be emphasized that the overwhelming majority of negotiation cases settle without the intervention of a fact-finder or conciliator or the disruption of a strike. Between 1989 and 1993 there were 6,281 sets
of negotiations in Ohio. Of these 3,485, or 55 percent, followed the statutory dispute resolution procedure. Fact-finders issued reports and recommendations applicable to 844 cases, or 24 percent of those conducted under the statutory procedure. The terminal step of negotiations, either conciliation or a strike, was reached only 219 times. This means 94 percent of all statutory bargaining cases are conducted and resolved prior to ultimate impasse. This apparent filtering effect associated with Ohio’s public sector dispute settlement procedure ought be considered along with any critical assessment of its effectiveness.

Summary

This section has presented a rough breakdown of impasse frequency and dispute settlement procedure utilization in Ohio. The data hint at some interesting, though tentative, patterns. Over time it seems that negotiations involving public safety personnel are increasingly likely to result in impasse. However, it also appears the law has been very effective in reducing strike activity without causing an over-reliance on third-party intervention in situations where work stoppages are permitted. In order to validate these conclusions the research will attempt to ascertain whether Ohio’s dispute resolution procedure has proven to facilitate or impede good faith bargaining. That is, the research effort will hopefully answer the question as to whether there is a chilling effect associated with fact-finding and conciliation.
PART IV. RESEARCH METHODOLOGY

The Data Source

As indicated by Table 1, in the first ten years since Ohio’s public sector bargaining law was enacted fact-finders have made recommendations on 1,610 negotiation cases conducted under the statutory dispute resolution procedure. Of these 335 were eventually settled pursuant to a conciliator’s award. Since many of the disputes involved multi-unit bargaining, the actual number of fact-finding reports and conciliation awards issued pursuant the statutory procedure over the first decade is somewhat smaller standing at 1,254 and 234, respectively. In addition to the noted statutory cases, 49 conciliation awards issued pursuant to a mutually agreed upon dispute resolution procedure have been filed with the State Employment Relations Board. The actual number of MAD conciliations are not known.

These reports and awards contain a wealth of information. However, until now very little has been done to extrapolate the information and record it in a usable manner. The first step of this research effort was to develop a database from which selected information found in these reports and awards could be recorded. To this end the researcher has reviewed all of the reports and
awards issued during the first ten years and entered background data. More
detailed information has been recorded for the 760 fact-finding reports covering
cases initiated between 1988 and 1993 as well as all conciliation awards
issued during the first ten years. There were instances where data, such as
size of bargaining unit or negotiation type, were not reported by the fact-finder
or concillator. When this occurred, SERB case files were reviewed to fill in the
missing data. It is from these data that the chilling effect will be measured.

This study will analyze 616 fact-finding reports and 231 conciliation awards.
For fact-finding only the reports covering cases initiated between 1988 and
1993 are included. Some of these reports were, of course, actually issued in
1994. All conciliation awards, including those issued under the auspices of a
MAD, are included. The only exception for both fact-finding and conciliation
are cases pertaining to mid-term reopens. As will be explained in detail later,
the number of issues at impasse is central to this research effort. Since
reopens are negotiations that take place during the term of a collective
bargaining and address only selected issues (often times wages is the sole
issue), they must be excluded from the analysis.

Hypothesis and Data Analysis

If the chilling effect exists, it is the result of the expectation that impasse
procedures will yield outcomes that are more favorable than those that would
be obtained as the result of bi-lateral negotiations. The underlying assumption is there exists a perception among bargaining principles that fact-finding and conciliation are low cost, low risk methods of reaching agreement. As parties become more experienced with these procedures, they will become less likely to engage in meaningful pre-impasse bargaining. Therefore, it is offered that the chilling effect is a function of impasse procedure experience. From this hypothesis a simple equation is developed:

\[
(1) \quad C = (fE + \sum X_i)
\]

where \(C\) represents the dependent variable measuring the existence of the chilling effect, \(E\) reflects independent variables indicative of impasse procedure experience, and \(X_i\) are control variables covering negotiator status, year of issuance, negotiation type, unit size, mediation efforts, bargaining unit type, and impasse procedure type. These variables as well as the other constructs used in the research are defined in the next two sections.

To test the hypothesis that the chilling effect is a function of impasse procedure experience the null hypothesis that no significant relationship exists between meaningful pre-impasse bargaining and dispute settlement procedure experience must be rejected. To do this several regression analyses were conducted using information extracted from the database. When necessary,
these data were transformed into dichotomous or categorical variables.

The Dependent Variable

A number of criteria have been established as being determinative of chilled bargaining (for an overview see Anderson 1981). The most frequently conducted test involves an examination of the rate at which bargaining cases reach impasse. If it can be demonstrated that there is an increase in the frequency in which impasse procedures are utilized within a single jurisdiction over a period of time, then it may be concluded there is evidence of the existence of a chilling effect (for example see Anderson and Kochan 1977 and Kochan and Baderschneider 1978). Another approach has been to compare impasse rates across various jurisdictions with different dispute settlement procedures in order to show which procedures are most widely used, thus, suggesting those that might lead to chilled bargaining (see Feuille 1975).

A second, and less frequently employed measure is to estimate the amount of movement in bargaining that has taken place prior to impasse. For instance, Wheeler compared differences in employer and union initial wage proposals to their positions at fact-finding and conventional arbitration (Wheeler 1978). He theorized that a finding of a significant difference between the two procedures with respect to the level of compromise activity that took place between initial bargaining and impasse, would be the basis for accepting the existence of the
chilling effect associated with the procedure where less movement occurred. Wheeler also looked for the existence of the chilling effect on the basis of the gap between employer and union wage proposals under each procedure. The chilling effect was thought to be associated with the procedure under which the larger difference in wage offers was found.

Like Wheeler, Feuille also suggested an "operational test" that "involves the extent to which the parties move together during bargaining, even though an award is ultimately necessary" (Feuille 1975, p. 308). However, rather than examining compromise activity with regard to wage rates, he looked at the total number of issues that remained on the table when impasse was reached. Feuille attempted to identify the chilling effect by comparing the average number of issues taken to impasse under different dispute settlement procedures. Those procedures typically having the most unresolved issues were viewed as having a chilling effect on bargaining.

Similar to the approach taken by Feuille, in this study the number of issues at impasse is also selected as the dependent variable for testing for the existence of the chilling effect under Ohio's statutory dispute settlement procedures. The number of issues at impasse is a viable indicator of the existence of the chilling effect for several reasons. First of all, by evaluating the variation in the number of disputed issues an investigation of the chilling effect can go beyond simply
determining its existence and extend into understanding its magnitude. The use of a third party to make recommendations or issue an award in a particular set of negotiations may or may not suggest a lack of meaningful bargaining. However, by analyzing the number of issues at impasse it is possible to estimate the degree to which bargaining is inhibited given different sets of circumstances.

In addition to measuring the extent of the chilling effect, an assessment of the number of issues remaining unsettled at an intermediate stage of an impasse procedure, such as fact-finding, is valuable because of the relationship that exists between the number of unsettled issues and the likelihood that the parties will reach a settlement prior to the terminal step of the a dispute resolution procedure. As Table 2 demonstrates, there exists a negative correlation between the number of unresolved issues at fact-finding and both the rate of acceptance of fact-finder recommendations and the frequency in which disputes reach the terminal step of the impasse procedure.

Between 1988 and 1993 in the 44 reports where fact-finders had to rule on a single issue only 13, or 30 percent, were rejected. However, of the 140 reports where there were 15 or more issues, 113, or 81 percent, were rejected by one or both of the parties. Additionally, data reveal that in cases where fewer than five issues remained at fact-finding less than two percent of the
**Table 2**

**Fact-Finding Acceptability**

By Number of Issues at Impasse

*(Negotiations initiated between 1988 and 1993)*

<table>
<thead>
<tr>
<th>Number of Issues</th>
<th>Number of Reports *</th>
<th>Number Rejected</th>
<th>Number Going to Terminal Step</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strike Permitted</td>
<td>Strike Prohibited</td>
<td>Strike Permitted</td>
</tr>
<tr>
<td>1</td>
<td>19</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>2 - 5</td>
<td>65</td>
<td>115</td>
<td>26</td>
</tr>
<tr>
<td>6 - 9</td>
<td>57</td>
<td>112</td>
<td>34</td>
</tr>
<tr>
<td>10 - 14</td>
<td>41</td>
<td>69</td>
<td>32</td>
</tr>
<tr>
<td>15 - 24</td>
<td>29</td>
<td>65</td>
<td>21</td>
</tr>
<tr>
<td>25 or more</td>
<td>23</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>234</td>
<td>409</td>
<td>137</td>
</tr>
</tbody>
</table>

* The actual number of fact-finding reports and recommendations that were issued are reported. This differs from reporting by the number of cases in that a single report may be applicable to more than one case. Reports involving mid-term reopeners are not reported.
reports were rejected by both parties. Conversely, both labor and management have found fact-finding reports to be unacceptable 13 percent of the time where recommendations were made on at least ten items. Though it is believed that a fact-finding report will often serve as the basis for eventual settlement, even if the recommendations are rejected, an unacceptable report can be problematic for several reasons. First of all, the inability to settle a dispute at fact-finding increases the time and cost associated with bargaining.

On average, for cases involving negotiations over the terms of a successor collective bargaining agreement that reach impasse, the fact-finding report is not issued until 80 days after the expiration of the previous contract. Therefore, if the recommendations are unacceptable, then the bargaining process is prolonged sometimes to the point where there is only a minimal amount of time between negotiation rounds. A system of continuous bargaining can result in a high level of conflict between labor and management. Moreover, the longer it takes to negotiate a contract the more costly bargaining becomes. Fees for attorneys or consultants mount as does work time lost for bargaining committees. There is also a risk of adverse public reaction to a bargaining process that expends large amounts of tax dollars. For example, a local newspaper for one large Ohio municipality made frequent reference to the fact the city's obligation for legal fees were in excess of one-half million dollars and were continuing to accrue as negotiations with several units crept along.
There is also a negative image attached to unacceptable fact-finding reports. Most fact-finders take pride in their ability to settle bargaining disputes. However, over the first ten years of the Ohio law about 60 percent of all reports have been rejected. Such high rates of rejection tend to frustrate fact-finders and parties and serve to stigmatize the process. There may be low public opinion of a procedure that is perceived as being inherently ineffective in resolving labor disputes.

Unacceptable recommendations can also have a divisive effect on the parties' bargaining relationship. Fact-finding is a formal, quasi-judicial, adversarial process. The participants are obligated to defend the merits of their positions and discredit the arguments of the other. The party that "wins" in fact-finding; i.e., accepts the recommendations of the fact-finder, will feel vindicated and may be reluctant to engage in further quid pro quo, or this-for-that, activity. The party that "loses" in fact-finding may sense a loss of bargaining leverage with the only alternatives remaining are capitulation on the outstanding issues or advancement to the terminal step of the dispute resolution procedure in the hope of achieving a more favorable outcome. Therefore, it is possible that neither the "winner" nor the "loser" will see any utility in attempting to settle the disagreement through give-and-take bargaining once the fact-finding report has been rejected (see Malin 1993).
One of the primary objectives of fact-finding is to encourage settlement prior to the terminal step of an impasse procedure. As mentioned, frequently the parties reach a settlement prior to a strike or conciliation even when the fact-finder's recommendations have been rejected. However, when little meaningful bargaining precedes fact-finding, as demonstrated by the number of issues at fact-finding, the likelihood of a strike taking place or conciliation being invoked is greatly enhanced.

To illustrate, of the 44 reports where fact-finders addressed only a single issue just three, or seven percent, ultimately advanced to the terminal step of the dispute settlement procedure. All of these involved safety units in cases that were eventually settled at conciliation. For non-safety units, none of the 19 cases, where there was only a single issue before a fact-finder, culminated in a strike.

On the other hand, in cases involving non-safety units, where there were at least ten issues at fact-finding, a strike took place 12 percent of the time. For strike prohibited units 38 of 88, or 43 percent, of the cases where 15 or more issues remained at fact-finding eventually reached conciliation.

In summary the number of issues at impasse is a good indicator of the chilling effect because it not only reflects the amount of meaningful bargaining prior to
the intervention of a third-party neutral, but it also relates to the probability that a dispute will progress from an intermediate step of an impasse procedure to the terminal step.

Independent Variables

Among the 616 fact-finding reports and 231 conciliation awards analyzed in this research effort there averages 10.4 issues at dispute in the former and 6.4 unresolved issues in the latter. The number of issues in fact-finding ranges from a low of zero, in cases where fact-finder mediation efforts were successful in settling all issues brought to hearing, to a high of 120. In conciliation the range is from zero to 39. While many factors dictate this wide variation in issues at impasse, this report focuses on those that are both readily discernible and logically related to the hypothesis.

In this study the chilling effect will be estimated by conducting multiple regression analyses of the number of issues addressed at fact-finding and conciliation on several independent variables. These variables are referred to as "chilling factors." To the extent that significant relationships exist among the selected independent variables and the number of issues at impasse, it can be concluded whether there is a chilling effect is associated with Ohio’s statutory impasse procedure. Moreover, a comparison of regression outcomes for fact-finding and conciliation will demonstrate the dynamics of the chilling
effect as parties progress through the dispute settlement procedure.

Experience

The primary variables established as chilling factors are measures of experience with Ohio's statutory dispute settlement procedure. It is commonly held that dependence on third-party intervention increases over time as participants gain familiarity with the dispute settlement process. Generally speaking, there is thought to be some type of "narcotic effect" associated with public sector impasse procedures. It is believed that if parties use an impasse procedure in a particular set of negotiations, then there is a greater propensity to rely on the procedure in future rounds of bargaining (for analyses of the narcotic effect see for example Wheeler 1975, Kochan and Baderschneider 1978, Chelius and Extej 1985, Kleintop and Loewenberg 1990, and Graham and Pelfrey 1993).

The narcotic effect refers to the tendency for negotiators to depend on impasse, procedures to settle bargaining disputes. This notion of dispute settlement procedure "addiction" is imperative to fully understanding the chilling effect. The primary hypothesis to be tested in this study is the belief that as parties or individuals become more and more reliant on impasse procedures to reach settlement (the narcotic effect), less meaningful bargaining will occur prior to the point of impasse (the chilling effect).

In situations where an employer and union have previously faced each other in
fact-finding or conciliation there is expected to be a reduction in the level of
pre-impasse bargaining that occurs in subsequent bargaining rounds. The
variable that addresses this issue is developed by identifying for a particular
case whether the parties have previously used the procedure in earlier
bargaining rounds. For fact-finding this experience variable, which is labeled
TIMES, simply reflects in how many instances a particular employer and
employee organization have utilized the procedure during the first ten years of
the law's operation. If the parties have no previous fact-finding experience
together, then a "1" is coded. If it is the second time the union and employer
have went to fact-finding, then a "2" is coded, and so on.

For conciliation the variable is identified as PREV. It is a dummy variable with
a "1" coded when the employer and union have met previously in conciliation
and a "0" when they have not. Preliminary regression results showed the
absolute times an employer and union reached conciliation to be less influential
on the number of issues at impasse than the dichotomous measure of previous
conciliation experience—no previous conciliation experience.

A similar effect was discovered by Montgomery and Benedict, whose study on
the determinants of teacher strikes in Pennsylvania showed any prior strike
activity in a school district increased the likelihood of a work stoppage in
subsequent bargaining rounds (Montgomery and Benedict 1989). The authors
concluded "where the labor relations system failed once, it continues to deteriorate" (Montgomery and Benedict 1989, p. 385).

It is important to note the variables TIME and PREV do not reflect distinct bargaining units. Rather, they represent the experience a particular employee organization and employer have had together in using impasse procedures. For example, if the Fraternal Order of Police represents both a command and a non-command unit within a police department for a particular municipality, there will be no identification as to which bargaining unit is involved in the impasse. This lack of distinction on the bargaining unit level is not viewed problematic because when a union represents more than one employee group for a single employer, there is little variation in the terms of the different collective bargaining agreements.

Of the 231 conciliation reports 65, or 28 percent, involved disputes where the employer and union had previously met in conciliation. For fact-finding 48 percent of the 616 reports dealt with impasses between parties who had previously used the procedure. Twenty-eight percent of the reports involved parties engaged in their second fact-finding, 11 percent covered third time users, and nine percent addressed those using fact-finding for at least the fourth time.
To capture the effect that the impasse procedure experience of individuals has on bargaining, three negotiator experience variables are developed. The first, UNEXP, is a dichotomous variable indicating the union’s chief negotiator has prior experience in fact-finding or conciliation while the employer’s representative does not. It is anticipated that as representatives gain experience with dispute settlement procedures they will approach them with a perception of less uncertainty, and, therefore, be less compelled to settle issues prior to reaching impasse.

Constructs are also used to represent experience for the employer representative, EREXP, and experience of both representatives, BOTHEXP. EREXP is a dichotomous variable with a "1" indicating the employer’s principal negotiator has prior experience in fact-finding or conciliation while the union’s representative does not. BOTHEXP is also a dummy variable signifying that both parties’ principal representatives have impasse procedure experience. If both negotiators have prior experience a "1" is coded. Otherwise, a "0" is coded. If negotiator experience is associated with chilled bargaining, then one would expect the strongest chilling effect, with respect to the individual negotiator experience variables, to result when both representatives are experienced with impasse procedures.
As Table 3 shows in 82 percent of all fact-findings that took place during the study period one or both of the negotiators had used fact-finding before. This was found to be the case 76 percent of the time for conciliation. In the remaining cases neither side’s chief negotiator had previously used the specific procedure. In the regression analyses, cases where neither negotiator had prior fact-finding or conciliation experience serves as the base. Accordingly, beta coefficients for the negotiator experience variables relate to situations where both the employer and union bargainer were inexperienced.

Though the fact-finding data only cover the years 1988 through 1993, it is felt a five year period is reflective of overall fact-finding experience for individual bargainers in that they typically participate in a number of negotiations over the course of a relatively short period of time. This is especially true of professional negotiators and in-house negotiators where there are several units of organized personnel. Therefore, in a five year period most negotiators would have ample opportunity to gain dispute settlement procedure experience, thus, allowing for the development of a chilling effect, if one were to exist.

One would expect that as individual negotiators gain greater bargaining experience in general, and greater dispute resolution procedure experience in particular, there would be a tendency for these individuals to engage in less meaningful bargaining prior to the intervention of a third-party neutral.
Experienced negotiators may very well press issues to fact-finding as the perception of the risk associated with the process diminishes. Findings by Kochan and Baderschneider support this assumption (Kochan and Baderschneider 1978).

However, as disputes wind toward the terminal step of an impasse procedure, experienced negotiators desirous of avoiding binding arbitration may have a greater chance of reaching a voluntary settlement. Or, in cases where an impasse does reach interest arbitration, individuals with the greatest experience may, at the very least, be successful in reducing the number of unsettled items. Research has shown negotiator experience to be inversely related to the frequency and duration of strikes, the other terminal procedure (Montgomery and Benedict 1989).

As these two theories might suggest, it is anticipated that negotiator experience will be related to chilled bargaining before fact-finding, where conciliation is the final step of the impasse procedure. But, once a disputes reaches conciliation, the experienced negotiators will be successful in reducing the number of unsettled items.
Outside Negotiator

In the vast majority of impasse cases one or both of the parties are represented by an outside negotiator. In only 22 percent of the fact-finding cases did neither side have outside representation. For conciliation this figure decreased to 18 percent. Included are dummy variables that identify whether parties used outside negotiators to represent them in fact-finding or conciliation. These constructs are developed because the use of an outside negotiator by one or both of the parties may serve as a proxy for an adversarial bargaining relationship. The presence of outside representation might suggest that negotiations are entered into with an eye toward litigation; i.e., fact-finding or conciliation. If such an approach is taken, then the likelihood of earnest bargaining prior to impasse diminishes. Thus, resulting in a substantial number of unresolved issues before fact-finders and conciliators. Earlier research supports this theory (Kochan and Baderschneider 1978).

While the use of outside negotiators may chill bargaining before fact-finding, it may actually facilitate settlement subsequent to the issuance of a fact-finding report. It has been reported that attorney representation has an impact on grievance arbitration outcomes (Block and Stieber 1987). Block and Stieber found that over a large number of discharge cases there was a clear advantage for parties who were represented by counsel, especially when the other party did not have attorney representation. The authors suggested that attorneys
may be better equipped at screening cases before advancing to arbitration. This conclusion may be applicable to public sector impasse procedures as well. Outside negotiators, either attorneys or consultants, may "screen" bargaining issues before taking them all the way to conciliation and may actively attempt to reach a voluntary settlement on those issues which are considered being the least meritorious or having the lowest probability of being won in conciliation. Thus, the use of outside negotiators may actually have the effect of reducing the number of items that reach the terminal step of the process, the same result anticipated for experienced negotiators.

The set of independent variables representing outside negotiators include the following:

**UNATT**: A dichotomous variable with a "1" indicating that the principal representative of the union is an attorney with the employer represented by an in-house negotiator.

**ERATT**: A dichotomous variable with a "1" indicating that the primary representative of the employer is an attorney with the union represented by either a employee member or a union staff representative.
BOTHATT: A dichotomous variable with a "1" indicating that both parties have retained the services of an attorney to serve as chief negotiator.

ERCON: Employers are also often represented in negotiations by professional management consulting firms. The two groups of outside negotiators, either attorney or consultant, are dealt with separately because it is felt that the use of management consultants possibly connotes extremely adversarial relations. This is a dichotomous variable with a "1" indicating that the principal representative of the employer is an outside consultant with the union represented by either a employee member or a union staff representative.

ATTCON: A dichotomous variable with a "1" indicating that the union is represented by an outside attorney, while the chief negotiator of the employer is an outside consultant.

The situation not explicitly developed in the model is that where neither side used the services of an outside bargainer. Regression results show the impact that different combinations of outside negotiators have vis-a-vis cases where neither side retained the services of an outside negotiator.
Another variable included in the study is the year, YEAR, of issuance of the dispute settlement report or award. If all other variables are held constant, then one might suspect over time the number of issues that reach impasse should diminish as bargaining relationships mature and as differences on procedural matters are resolved.

Gallagher and Veglahn sought to prove in jurisdictions where final-offer arbitration follows fact-finding employers and employee organizations may, over time, develop strategies in preparation for arbitration that would actually result in a decrease in the amount of compromise activity that takes place prior to fact-finding (Gallagher and Veglahn 1990). However, the experience variables should adequately account for this possibility. Therefore, an inverse relationship is expected to exist between YEAR and the dependent variable.
The year of issuance of fact-finding reports was transformed into categorical data. For reports issued in 1988 a "1" was assigned, followed by a "2" for 1989 reports, and so on. The breakdown of the number of fact-finding reports by year of issuance is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) 1988</td>
<td>44</td>
</tr>
<tr>
<td>(2) 1989</td>
<td>90</td>
</tr>
<tr>
<td>(3) 1990</td>
<td>88</td>
</tr>
<tr>
<td>(4) 1991</td>
<td>116</td>
</tr>
<tr>
<td>(5) 1992</td>
<td>104</td>
</tr>
<tr>
<td>(6) 1993</td>
<td>127</td>
</tr>
<tr>
<td>(7) 1994</td>
<td>47</td>
</tr>
</tbody>
</table>

Preliminary regression results showed for conciliation awards the year of issuance to be less significant than a simple distinction based on awards issued soon after the enactment of the law and those issued later. The variable EARLY was developed for conciliation to depict conciliation awards issued during the first five years of the law. This dummy variable was coded as a "1" for awards issued between 1984 and 1888 and a "0" for those released from 1989 onward. Of the 231 conciliation awards, 87 were issued during the first five years, EARLY, and 144 were issued between 1989 and 1994.

**Negotiation Type**

Also developed, is a dichotomous variable that reveals whether the parties went to impasse following negotiations over the terms of an initial agreement,
INIT, or whether the dispute resulted after they failed to voluntarily reach agreement for a successor contract. A "1" indicates that the parties were engaged in negotiations for a first contract and a "0" represents bargaining over the terms of a successor agreement. This variable is included because one would expect there to be more unresolved issues when there is no prior contract, than in instances where there is a previous collective bargaining agreement.

Slightly over one-fifth, 21 percent, of fact-finding reports involved initial rounds of bargaining. For conciliation 23 percent dealt with first time negotiations efforts.

Size

SIZE is a categorical variable that depicts the number of employees in the bargaining unit. It is anticipated that the number of issues at impasse will be directly related to the size of the unit. This is because larger units should have greater diversity, thus more complexity, with respect to expected and desired bargaining outcomes than smaller employee groups. Also, since the marginal cost of using impasse procedures is lower for larger units and employers than it is for smaller ones, there should be a direct relationship between unit size and the amount of chilled bargaining.
The categories were developed in a way that would best capture the distribution of unit size ranges. An attempt was made to balance the number of observations that would fall within each category. Equality was not entirely possible since the vast majority of bargaining units have less than 50 members. This is especially true among strike prohibited police and fire units. The categorical distributions are as follows:

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<tr>
<th>Unit Size</th>
<th>Number of Reports</th>
<th>Number of Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) less than 10</td>
<td>97</td>
<td>27</td>
</tr>
<tr>
<td>(2) 10 - 19</td>
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<td>(3) 20 - 29</td>
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<td>(8) 200 or more</td>
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<td>12</td>
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Neutral's Mediation Efforts

Fact-finders and conciliators are encouraged by statute and often do employ mediation efforts prior to the issuance of a report or award. If parties are genuinely desirous of voluntarily resolving their differences, these efforts should be effective in reducing, if not completely eliminating, the number of issues at dispute. Therefore, included in the model is the variable MED. It is a dichotomous variable that signifies whether or not the neutral attempted mediation. It is assumed that where a neutral did not expressly mention having engaged in mediation, then no mediation was attempted.
In fact-finding mediation was mentioned as having been attempted in 57 percent of the reports. Forty-seven percent of the conciliation awards state that mediation occurred. The fact mediation is used less frequently in conciliation is not surprising. It is quite possible that once a dispute reaches the terminal step, each side may feel it has truly made its final and best offers, thus, leaving little room for compromise activity. If this logic is followed further it can be theorized that mediation will be less successful in conciliation than in fact-finding. Again, the parties may deem their positions to be unmoving, thus, mediation efforts may go for naught. If this is the case, then the regression analyses should reveal that mediation during fact-finding should significantly reduce the number of issues, but have little effect in conciliation.

_Unit Type_

STK is a dichotomous variable that pertains to fact-finding only. It is coded as a "1" if the bargaining unit is permitted to engage in a strike and a "0" if the unit is prohibited from striking. Since the risk associated with a strike is greater than that which is associated with conciliation, the researcher expects that strike permitted units will enter fact-finding with fewer issues.

The majority of units that go to fact-finding are prohibited from striking. Almost two-thirds, 65 percent, of fact-finding reports address disputes involving cases where conciliation is available as the terminal step of the
impasse procedure.

Unit type should also play an important role as having a moderating effect on the dependent variable. Separate regressions will be conducted with strike permitted units being run apart from strike prohibited units. This is done because it is suspected that where conciliation follows fact-finding in the process, as opposed to a strike, there will be less meaningful bargaining prior to initial impasse. That is, it is thought that cases involving strike prohibited units will display a greater sensitivity to the chilling factors and a greater chilling effect.

*Alternate Dispute Settlement Procedure*

The final independent construct is MAD. This dummy variable pertains to conciliation only. If the parties adopted a mutually agreed upon dispute settlement procedure where fact-finding was not conducted, then a "1" is coded. If a fact-finding report was issued, then a "0" was coded. This will show whether or not there are less issues, or no significant difference in the number of issues, when fact-finding is bypassed. If it is found that a MAD yields a negative, or insignificant, coefficient, then there is evidence of a chilling effect associated with fact-finding. Sixteen percent of the conciliation awards analyzed were issued pursuant to a MAD.
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<th>Conciliation</th>
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PART V. RESEARCH FINDINGS

Several variables were found to significantly influence the number of issues decided upon by both fact-finders and conciliators (see Table 4). As hypothesized, dispute settlement procedure experience appears to give rise to a chilling effect. Regressions on the variables TIMES and PREV, measures of an employer's and union's prior experience with fact-finding and conciliation, respectively, yielded positive beta coefficients significant at a level of better than 0.01.

As mentioned, findings from a preliminary regression analysis showed while the absolute number of times an employer and union (irrespective of the particular bargaining unit) had faced each other in fact-finding influenced the number of issues before the fact-finder, it did not reveal significant results for conciliation. Rather, for conciliation a significant result was found when the variable for the joint experience of the employer and union in conciliation was transformed into a dummy variable. That is, while there is no strong correlation between the number of times that the parties had met in conciliation and the number of issues, there is a positive relationship between any prior conciliation experience and the number of unsettled items.
The finding with respect to procedure experience is critical in that it supports the widely held notion that parties who use impasse procedures tend to become increasingly reliant upon third-party intervention to resolve disputes. As labor and management gain a greater dependence on third-party neutrals for dispute resolution, the amount of serious pre-impasse bargaining that occurs seems to diminish, as seen by the direct relationship between impasse procedure usage and the number of issues at impasse.

Additionally, it seems there is a greater likelihood of a chilling effect associated with fact-finding when it is followed by conciliation, than there is when the strike option is available. When separate regressions were run for safety and non-safety units, the variable TIMES was found to significantly impact the number of issues at fact-finding only for the former. The finding of no meaningful relationship between the number of issues and fact-finding experience by the parties for strike permitted units, coupled with a strong correlation between fact-finding experience and the number of issues for strike prohibited units, suggests parties may perceive there to be little urgency to resolve issues before fact-finding where conciliation is available. If fact-finding is viewed as simply a precursor to conciliation, then there is no incentive to settle items prior to fact-finding. However, where a strike is the only option remaining if negotiations are not resolved at fact-finding, then the parties may feel tremendous pressure to settle as many items as possible, even if an
impasse is ultimately reached.

A positive relationship between experience and chilled bargaining is also found to exist among individual negotiators. While no inconclusive results are derived from the regression outcomes for UNEXP, EREXP, and BOTHEXP when all fact-finding reports are included, very clear relationships develop when separate regressions are run for safety and non-safety units.

As it is for the case of prior experience of the parties, it also appears that experience with fact-finding for individual negotiators leads to a decline in meaningful bargaining where a dispute involves strike prohibited units. For cases involving units who have conciliation available as the terminal step of the impasse procedure, the data show that all combinations of previous fact-finding experience, relative to those where neither negotiator has used fact-finding during the five year period, are indicative of chilled bargaining. Each of the three variables were found to be significant at a level no worse than 0.1.

However, for strike permitted units only union negotiator experience was found to positively and significantly influence the variation in the number of issues unresolved at fact-finding. Again, this difference in outcomes on the basis on unit type can be arguably related to the fact there is less pressure to resolve issues prior to fact-finding, when conciliation is the terminal point, than there
is when a strike is the final step of the impasse procedure.

In conciliation negotiator experience does not appear to have a determinative impact on the number of disputed items. Accordingly, the null hypothesis of no relationship cannot be rejected for this particular set of variables. However, when this outcome is compared to that which was found for fact-finding cases involving units prohibited from striking, where negotiator experience was found to significantly impact the number of issues at impasse, it reinforces the theory that fact-finding for safety forces has the effect of chilling meaningful bargaining.

If negotiator experience was found to be positively related to the number of unresolved items for both fact-finding involving safety personnel and conciliation, then it would be difficult to conclude which procedure more greatly chilled bargaining on the basis of the familiarity with impasse procedures of individual bargainers. But, this is not the case. Since the experience of negotiators significantly increases the number of issues at fact-finding for units prohibited, while having no measurable impact with respect to conciliation, then it seems there is less incentive to settle issues before fact-finding than there is prior to conciliation.
Though individual negotiator experience was not found to influence the number of issues at conciliation, the use of outside bargainers was. For conciliation the use of outside negotiators appears to reduce the level of disagreement. All variable combinations within this group are negatively related to the number of issues decided upon by conciliators. Even those not found to be sufficient to reject the null hypothesis that no relationship exists, yield fairly strong p-values.

As previously mentioned, outside representatives may be adept at screening issues to be taken to conciliation. They may seek to secure favorable outcomes in conciliation by eliminating all but those issues that are deemed to be winnable. For instance, one highly respected management attorney has successfully argued 46 of 51 issues taken to nine conciliation hearings. Moreover, each side has had its greatest success in conciliation when represented by an outside negotiator while the other side was not.

It would appear these individuals effectively screen issues, eliminating superfluous matters or positions unlikely to be awarded. Such activity would both lead to a reduction in the number of issues remaining for final determination and improve the rate of success of the individual bargainers.

Though none were found to significantly influence the number of issues at fact-finding, four of the five outside bargainers variables for disputes involving safety
units did result in negative beta coefficients. The difference in levels of significance for the outside negotiator variables between fact-finding and conciliation quite possibly suggests, once again, when fact-finding precedes conciliation the incentive to engage in meaningful bargaining is less for the intermediate procedure than it is for the terminal one. Since these individuals seem more effective in resolving issues once a dispute reaches conciliation than they are at the fact-finding stage, there is again evidence of the existence of the chilling effect with respect to fact-finding.

For units with the right to strike significant and positive relationships exist only when the employer has an outside negotiator, either attorney or consultant, and the employees use either a union staff representative or an employee member as their chief negotiator. Of all the regressions the largest beta coefficient is associated with ERCON for fact-finding cases involving non-safety personnel. This result is interesting because it suggests a high level of tension exists when an employer uses an outside bargainer, while the union chooses internal representation. However, this does not appear to be the case when the situation is reversed, or when both parties opt for outside representation. While conclusions drawn from these findings are speculative at best, it does raise the question as to whether there exists an issue of lack of respect between attorneys and consultants who represent employers and "non-professional" union advocates.
Also found is a positive relationship between negotiation type and number of issues. As suspected, parties who are engaged in negotiations over the terms of an initial contract are quite likely to take a large number of issues to impasse. Entering into first-time bargaining means there is no previous agreement to serve as a starting point for negotiations. This no doubt hinders the parties in their ability to resolve issues. In initial negotiations rather than modifying the terms of a prior contract, negotiators have only past practices on which to build a collective bargaining agreement. Moreover, it is probable that many of these practices are what led employees to seek representation in the first place.

However, the lack of an existing contract from which to build is not the only explanation for the positive influence that initial bargaining has on the number of issues at impasse. In the research model the variable that identified negotiation type, either initial or successor, also includes negotiations where an incumbent union was displaced by a newly certified employee organization. In these situations negotiation type was also coded with a "1" indicating first-time bargaining.

Of the 143 fact-finding reports issued during the study period that dealt with disputes emanating from first time bargaining 26 were applicable to units represented by employee organizations that displaced an existing exclusive
representative. In these instances there existed a prior collective bargaining agreement that could have served as a starting point for negotiations. However, for these reports there averaged 14.5 unsettled items. This compares to an average of 13.3 issues where employees were not previously represented by any employee organization. Only five of the 52 conciliation cases dealing with first rounds of bargaining followed the raid of an existing employee organization. However, these too usually had more issues, averaging 9.2, than did those disputes where there were no prior exclusive representative, averaging 6.7.

The data suggest not only does the lack of an existing contract contribute to the number of issues addressed by third-party neutrals, but the newness of any bargaining relationship could have a chilling effect on negotiations as well. Employees may expect major changes in conditions of employment once they gain representation, or upon displacing their prior exclusive representative. Employers, on the other hand are quite likely to resist substantial alteration of past practices, or terms of employment that were established as the result of negotiations with a former employee organization. Differences in objectives and expectations are probable explanations why parties who are bargaining for the first time, even though a contract may have previously been in effect, enter into impasse with a large number of issues remaining on the table.
This variable is discussed at length because the results indicate overall bargaining experience leads to constructive negotiations, unhindered by the unrealistic and naive expectations and the high levels of distrust, suspicion, and recalcitrance that are likely to dominate early rounds of bargaining. This finding would be more conclusive if the negotiation type variable were replaced by one showing the length of the collective bargaining relationship, but such data were not readily available. The proxy for collective bargaining experience, INIT, does, however, make such an argument credible.

The results with respect to the variables YEAR and EARLY further support this notion that as negotiation relationships mature, all other things being equal, there is less chilled bargaining. For those conciliation awards issued between 1984 and 1988 it was found that almost two fewer issues were at dispute, with a p-value significant at the 0.05 level, vis-a-vis those written since 1989. For fact-finding reports issued in cases involving safety forces show an annual reduction since 1988 of approximately one-half issue per year. This finding is also significant at a level of 0.05. Again, there is indication that over time negotiations are conducted in a more efficient manner even in instances where an impasse is ultimately reached.

For strike permitted units, however, there appears to be no relationship between time and issue reduction. While this finding is bothersome, it does not
take away from the clear evidence of an inverse relationship between time and
the number of issues for conciliation and for fact-finding where strike prohibited
units are involved.

All regression outcomes prove that a strong relationship exists between the size
of the bargaining unit and the number of issues at impasse. This chilling effect
may be unavoidable due to the higher level of complexity that is associated
with large bargaining units.

Fact-finder mediation efforts appear to have been generally successful in
reducing the number of issues in which recommendations are made. Though the
finding for strike permitted units is not significant at a level sufficient to reject
the null hypothesis of no correlation, its negative beta coefficient suggests
mediation should net positive results with respect to eliminating impasse issues.

For conciliation mediation seemingly has no impact, either positive or negative,
on the number of issues. This is not surprising. Pursuant to the statute,
mediation takes place prior to fact-finding, and may be attempted by fact-
finders as well. By the time a dispute reaches conciliation, all but the most
contentious issues are likely to have been settled. Therefore, conciliators are
less likely to engage in mediation, and when they do the results are likely to be
less fruitful than would be the case earlier in the dispute resolution process.
There is some evidence that negotiations conducted in accordance with mutually agreed upon dispute resolution procedures are likely to enter into conciliation with a smaller number of unresolved items than those following the statutory procedure where fact-finding precedes conciliation. The beta coefficient for MAD was negative with a relatively strong significance level. This may be suggestive of a post-fact-finding chilling effect similar to that discussed earlier with respect to strike activity. However, this conclusion may be erroneous.

There are times when parties upon entering into fact-finding determine that the fact-finder should instead assume the role of conciliator, often times persuaded by the fact-finder/conciliation of the utility of such a transition. In these instances there are may be only a few outstanding issues, which are not likely to be settled as the result fact-finding recommendation, thus, warranting a more definitive means of dispute resolution.

This type of MAD may influence the regression results making it difficult to draw definitive conclusions with respect to the utility of fact-finding for safety forces. However, in light of the demonstrated influence that the "chilling factors" seem to have of the amount of pre-impassate bargaining for strike prohibited forces at the fact-finding stage, one can not rule out the possibility of the procedure's ineffectiveness for these type of units.
The final independent variable, STK, identifies for fact-finding whether or not the bargaining unit is permitted to strike. Though it was expected disputes involving non-safety personnel would reach fact-finding with fewer issues than those pertaining to strike prohibited workers, the negative, but insignificant, beta coefficient does not support this speculation. However, the fact unit type, either strike permitted or strike prohibited, does not seem to have any impact on the number of issues at fact-finding is less important than the established influence of the "chilling factors." As illustrated, separate regression analyses for safety and non-safety units give strong indication of a pre-fact-finding chilling effect for the former, but not for the latter.

It must be noted though the results of this research add credence to the theory there exists a chilling effect in association with dispute resolution procedures, especially with respect to fact-finding in disputes involving strike prohibited units, the findings explain only a fraction of the variation in the number of issues that reach impasse. Of the four regressions, none resulted in an $R^2$ of greater than 0.18. With $R^2$ values ranging from 0.13 to 0.18 there exists much variation in the dependent variable that was not accounted for by the selected independent variables.

Though one might be understandably reluctant to draw inferences when the independent variables fail to account for such a large degree of the variation in
the dependent variable, this does not necessarily diminish the significance of
the findings. Given the vast number of economic, political, social, and
behavioral factors that influence the extent to which parties are able to
successfully resolve bargaining issues, it is doubtful that any model could
capture a sizable minority, let alone a majority, of the explained variation.

Moreover, it should be remembered the research to a large degree replicates
previous efforts, which warrants credibility to the findings. The concept of the
chilling effect has been widely debated for nearly three decades. Most
researchers have concluded this phenomenon exists in the public sector and its
presence has been found through several research models. The model used in
this study, though limited, contains no flaws that are fatal to its function.
Also, the practical analysis of a large number of real life bargaining disputes
confirms the theoretical assumptions that guided the research effort.
<table>
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<tr>
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<th>Fact-Finding</th>
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<th>Fact-Finding Strike Prohibited</th>
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| N        | 616                           | 317                           | 299          | 231          |
| R2       | 0.13                          | 0.17                          | 0.17         | 0.18         |
| F        | 6.19                          | 3.10                          | 5.92         | 3.38         |

* Significant at a level of 0.01 for two-tailed test of significance.

** Significant at a level of 0.05 for two-tailed test of significance.

*** Significant at a level of 0.10 for two-tailed test of significance.
PART VI. SUMMARY AND RECOMMENDATIONS

Conclusions

This research effort has been an attempt to ascertain whether there is a chilling effect associated with Ohio's public sector statutory dispute settlement procedure. What is seen from the results is the existence of a strong chilling effect with respect to fact-finding where the procedure is followed by final-offer arbitration; i.e., conciliation. An analysis of variables representative of dispute settlement procedure experience indicates that as parties and individuals who take part in negotiations involving public employees prohibited from striking become more familiar with fact-finding, there is a tendency to engage in less meaningful bargaining prior to impasse.

It appears for this group the impetus for settlement does not occur until after fact-finding. Both experienced bargainers and outside negotiators demonstrate an unwillingness to settle issues until the dispute reaches conciliation. However, even at the terminal stage of the dispute settlement procedure there still remains a chilling effect if the parties have previously used conciliation.

The influence of the "chilling factors" is even more pronounced considering that
in general it seems the longevity of the overall bargaining relationship is directly related to the ability to settle issues through bi-lateral negotiations.

Implications

Under the current system it is likely there will continue to be a steady increase in the use of fact-finding for public safety units with less settlements reached as the result of voluntary agreements. As parties and their representatives taking part in safety forces bargaining gain more expertise with impasse procedures, fact-finding will become more and more a mere precursor to conciliation with third-party neutrals forced to make recommendations on an unnecessarily large number of items.

If this occurs, then the length of time and the amount of public moneys spent on activities related to bargaining, or more precisely the litigation of bargaining disputes, will dramatically increase. Moreover, there will be intense scrutiny of these processes if they are seen as impeding genuine bargaining.

If the chilling effect persists, the amount of overall litigation is likely to increase as parties come to approach their interactions from a position of adversarialism. Not unlike children who tend to rely on over-nurturing parents to settle all their differences, public employers and employee organizations may lose the ability to resolve their differences looking to outsiders to dictate the terms and
conditions of their relationship.

Recommendations

There is no single solution to eliminating the chilling effect. A number of possible alternatives are posed. These include: identifying those parties and individuals who are prone to engage in chilled bargaining and providing an opportunity for them to participate in training sessions where voluntary dispute resolution techniques are emphasized; issuing a report listing those entities and individuals who have a history of failing to engage in meaningful bargaining; increasing the emphasis on early mediation efforts; increasing the cost of going to fact-finding by eliminating the state’s share of fact-finder costs; granting mediators the authority to declare when the parties are at impasse; allowing SERB to refuse to authorize fact-finding; and, discontinuing mandatory fact-finding altogether for strike prohibited units.

The Ohio law requires that SERB: "Train representatives of employee organizations and public employers in the rules and techniques of collective bargaining procedures" ORC 4117.02 (H)(4). This mandate presumably gives SERB the authority to conduct training where voluntary dispute resolution practices are emphasized in an attempt to free parties from their dependence on third-party intervention. Principles of collaborative, interest-based, win-win bargaining could be taught to practitioners.
While such training ought not be compulsory, lest those who need it the most may resent it the greatest, those employer and union representatives who tend to heavily rely on third-party intervention could be identified and encouraged to attend. Whether these individuals would take part in or gain anything from this type of training is not certain. However, since SERB is already active in the area of advocate training, developing a program on the topic of voluntary, or alternative, dispute resolution would seem a very appropriate task.

Reporting the incidence of failed bargaining also falls within the realm of possibility under current SERB practices. In the past SERB has not been reluctant to admonish parties for their tendency to over-rely on impasse procedures to settle their disputes. One former SERB executive director encouraged parties to "renounce the option to strike, the option to go to fact finding, the option to enter into arbitration" so that more good faith bargaining would occur (Menedis 1992, p. 2).

The agency’s newsletter is a perfect forum for addressing the chilling effect and exhorting more meaningful bargaining. Also, a special report on the subject could be prepared and distributed to the governor’s office, the legislature, and the media. The report could specifically identify those who seem to depend more on fact-finders and arbitrators to reach settlement than they do their own bi-lateral efforts. This action would have the effect of exerting pressure on
parties to focus on genuine bargaining, and not pre-impasse posturing. Ironically, one of the objectives behind publicizing fact-finding reports is to exert just such pressure.

It would also seem prudent to encourage greater mediation during early steps of the dispute settlement process. While the statute mandates mediation prior to fact-finding and supports mediation by fact-finders and conciliators, the practice can be more extensively used. In conjunction with practitioner training on alternative dispute resolution techniques, in which mediation would be included, neutrals, especially in their capacity as fact-finders, can also benefit from gaining a greater awareness of the utility of mediation.

Currently, fact-finding is more art than science with individual fact-finders developing styles that may or may not place a premium on mediation skills. While individuality among third-party neutrals should not be discouraged, having strong mediation skills as a group could greatly enhance the likelihood that bargaining differences be resolved, or greatly reduced, at a point prior to the issuance of a report or award.

The recommendations discussed thus far would be the simplest to implement, in that none require amendment to the collective bargaining law. The remaining recommendations would necessitate modification of the statute; a difficult,
though not unprecedented task. The National Labor Relations Act as well as the public sector bargaining laws of many states have been amended. Statutory change is often deemed necessary when the effectiveness of a law is brought into question.

Currently, the act requires the state pay one-half of the cost of fact-finding. As mentioned, this amounts to approximately $120,000 per year. If the state's share were eliminated, the cost to those parties who choose to use fact-finding to address bargaining disputes would increase, albeit modestly.

SERB records show the average cost of fact-finding, excluding cases were a fact-finder intervenes, but no report is issued, to be about $1,360. If each party were to assume the state's portion, their respective costs would increase by an average of roughly $340. While, this amount may at first blush appear insignificant, it would have steep financial implications for those who most use the procedure.

Labor organizations, that represent many employee groups, would have to absorb this additional cost burden for not one, but many sets of negotiations that reach impasse. For instance, about 29 percent of all fact-finding costs stem from cases where bargaining units are represented by the Fraternal Order of Police (FOP) for either state and lodge affiliated employee organizations.
Fifty-one percent of total fact-finding costs are incurred from disputes where employees are affiliated with the following exclusive representatives: American Federation of State County and Municipal Employees (AFSCME); International Association of Fire Fighters (IAFF); Ohio Education Association (CEA); and, Ohio Patrolmen’s Benevolent Association (OPBA).

This means 80 percent of all fact-finding costs result from cases involving only five employee organizations. The aggregate effect of eliminating the state’s portion on these particular unions would be quite substantial.

Though unions would be most dramatically impacted if both parties were required to pay half of the cost of fact-finding, there is also a cost consideration for employers, or at least those who represent them. Nine percent of all fact-finding costs are incurred in cases where Clemans, Neslon & Associates (CNA), a management consulting firm, is the employer representative. Moreover, the average fact-finding bill for CNA cases is somewhat higher, by about $140, than it is for non-CNA related cases. Also, one experienced management attorney has been involved in two percent of all fact-finding cases for cases initiated between 1988 and 1993. The mean cost of fact-finding for disputes where this individual serves as the employer’s chief negotiator, stands at $2,098, or $758 dollars more than the average for cases where he is not an active participant.
It could be argued that professional negotiators only resort to fact-finding if it is of benefit to the party they represent. Also, it is possible that any extra cost associated with their representation are more than offset by the overall savings they are able to secure employers as a result of thie skill at bargaining contracts. On the other hand, if relatively few representatives are involved with a significant portion of negotiations that reach fact-finding, and these disputes are usually rather costly vis-a-vis the norm, then there may be some pressure on these advocates to avoid such frequent use of the procedure, especially if the parties are responsible for a larger share of the cost. Ultimately, they may be held accountable for rendering pre-impasse bargaining meaningless.

Another recommendation is to require declarations of impasse to come from mediators. Here, the parties would not be allowed to advance to fact-finding until the mediator released them to do so. If it appeared that little meaningful bargaining had taken place, the mediator assigned to the case could insist that the parties return to the negotiation table or could require additional mediation. Whatever the case, the parties would not be free to proceed to fact-finding without first demonstrating their willingness to attempt to reach an agreement either through bi-lateral or mediator assisted efforts.
The drawback of this recommendation is it places a heavy burden on mediators. The objective of mediation is facilitated, not compulsory, settlement. The more authority mediators are given, the more they will resemble fact-finders and conciliators. Parties may come to focus their efforts on attempting to convince mediators that genuine bargaining had occurred and impasse had truly been reached. This behavior could have the effect of transforming mediation into a quasi-litigious procedure, especially if one party is adamant about proceeding to fact-finding while the other insists on further bargaining or mediation.

The State Employment Relations Board could also refuse to allow parties to advance to fact-finding. Under this recommendation the parties, either singularly or jointly, would be required to notify SERB that an impasse had been reached and request the services of a fact-finder. SERB would evaluate the merits of the request, and determine if the parties had engaged in sufficient bargaining so as to justify the claim of impasse. SERB could base its determination on such factors as the number of bargaining sessions, the number of issues remaining in dispute, and mediator reports or recommendations.

This authority would obviously provide the state with much control over the use of fact-finding. However, it also imposes a bureaucratic layer, which may prove bothersome to both the parties and SERB, alike. Those representing
labor and management would likely view this as an intrusion by the state. Employer and union advocates would have the dual responsibility of achieving the best possible bargaining outcome for those they represent and satisfying the implicit command of the state that additional compromise activity be undertaken. SERB, on the other hand, would have an added burden, screening fact-finding requests, without necessarily being provided additional staff or resources.

Finally, fact-finding could be eliminated altogether for negotiations involving strike prohibited units. As the data suggest, the presence of a pre-fact-finding chilling effect is much more likely exist when negotiations involve strike prohibited units than it is when cases involve strike permitted personnel. If fact-finding has largely become simply a precursor to conciliation, then as a procedure it is redundant and essentially ineffective. If fact-finding was not available, then parties may be more inclined to engage in serious bargaining early on in the process because there would be no buffer, except for mediation, between bi-lateral negotiations and binding arbitration.

However, eliminating fact-finding could have undesirable results. Some scholars have noted that fact-finding has a "filtering effect." That is, it has been suggested that the presence of fact-finding decreases the use of arbitration, or at the very least reduces the number of issues that remain for
final resolution (Gallagher and Pegnetter 1979). The primary role of fact-finding is to settle bargaining disputes prior to reaching the terminal step of the impasse resolution procedure. It has been observed that in Ohio fact-finding has "performed this role with distinction" (Sharpe and Tawil 1987, p. 329). If fact-finder were no longer available to a large portion of those involved in the negotiation process, there could in fact be a rise in the use of conciliation.

Currently, only about three of every ten sets of negotiations pertaining to safety forces that reach fact-finding eventually proceed to conciliation. The vast majority are settled either directly as the result of acceptance, or deemed acceptance, of the recommendations, or indirectly, where the report is used as the basis for eventual settlement. It is impossible to predict how the absence of fact-finding would effect the rate at which disputes go to conciliation.

Moreover, conciliators rule on an average of 5.2 issues. The fact-finders who precede them make an average of 11.0 recommendations. The difference in the number of issues suggests genuine bargaining takes place subsequent to fact-finding, and it is quite likely the resolution of many of the issues before conciliation can be attributed to the report and recommendation of the fact-finder. Without fact-finding, it is possible that a large number of contractual terms will be decided upon by conciliators.
It is clear that under the present system fact-finding serves a filtering role. However, as the regression outcome suggests, there is some basis for expecting little difference in the number of cases going to conciliation, as well as the number of issues addressed by conciliators, if fact-finding was not available. Put another way, it is possible that the filtering effect associated with fact-finding is more of a function of a pre-fact-finding chilling effect than it is of the procedure's effectiveness at narrowing or settling disputes. If this is true, than without fact-finding genuine bargaining will occur throughout the negotiation process even if impasse is ultimately reached.
APPENDIX A

Regression Equation: Fact-Finding - All Reports:

\[ Y(\text{ISSUES}) = \alpha_1 + \beta_1(\text{TIMES}) + \alpha_3(\text{UNEXP}) + \alpha_4(\text{EREXP}) + \alpha_4(\text{BOTHEXP}) + \alpha_5(\text{UNATT}) + \alpha_6(\text{ERATT}) + \alpha_7(\text{BOTHATT}) + \alpha_8(\text{ERCON}) + \alpha_9(\text{ATTCON}) + \beta_2(\text{YEAR}) + \alpha_{10}(\text{INIT}) + \beta_3(\text{SIZE}) + \alpha_{11}(\text{MED}) + \alpha_{12}(\text{STK}) + \mu \]

Where:

ISSUES = issues at impasse
TIMES = times employer and union have used procedure
UNEXP = 1 union negotiator (procedure experience); employer negotiator (none)
        = 0 otherwise
EREXP = 1 employer negotiator (procedure experience); union negotiator (none)
        = 0 otherwise
BOTHEXP = 1 union negotiator (procedure experience); employer negotiator (procedure experience)
         = 0 otherwise
UNATT = 1 union negotiator (outside attorney); employer negotiator (internal)
       = 0 otherwise
ERATT = 1 employer negotiator (outside attorney); union negotiator (internal)
       = 0 otherwise
BOTHATT = 1 union negotiator (outside attorney); employer negotiator (outside attorney)
         = 0 otherwise
ERCON = 1 employer negotiator (outside consultant); union negotiator (internal)  
= 0 otherwise

ATTCON = 1 union negotiator (outside attorney); employer negotiator (outside consultant)  
= 0 otherwise

YEAR = 1 report issued in 1988  
= 2 report issued in 1989  
= 3 report issued in 1990  
= 4 report issued in 1991  
= 5 report issued in 1992  
= 6 report issued in 1993  
= 7 report issued in 1994

INIT = 1 first time negotiations  
= 0 otherwise

SIZE = 1 bargaining unit less than 10 members  
= 2 bargaining unit 10 to 19 members  
= 3 bargaining unit 20 to 29 members  
= 4 bargaining unit 30 to 39 members  
= 5 bargaining unit 40 to 59 members  
= 6 bargaining unit 60 to 99 members  
= 7 bargaining unit 100 to 199 members  
= 8 bargaining unit 200 or more members

MED = 1 fact-finder attempted mediation  
= 0 otherwise

STK = 1 bargaining unit strike permitted  
= 0 otherwise
Appendix B

Regression Equation: Fact-Finding - Strike Permitted:

\[ Y(\text{ISSUES}) = \alpha_1 + \beta_1(\text{TIMES}) + \alpha_2(\text{UNEXP}) + \alpha_3(\text{EREEXP}) + \alpha_4(\text{BOTHEXP}) + \alpha_5(\text{UNATT}) + \alpha_6(\text{ERATT}) + \alpha_7(\text{BOTHATT}) + \alpha_8(\text{ERCON}) + \alpha_9(\text{ATTCON}) + \beta_2(\text{YEAR}) + \alpha_{10}(\text{INIT}) + \beta_3(\text{SIZE}) + \alpha_{11}(\text{MED}) + \mu \]

Where:

ISSUES = issues at impasse
TIMES = times employer and union have used procedure
UNEXP = 1 union negotiator (procedure experience); employer negotiator (none)
        = 0 otherwise
EREXP = 1 employer negotiator (procedure experience); union negotiator (none)
        = 0 otherwise
BOTHEXP = 1 union negotiator (procedure experience); employer negotiator (procedure experience)
        = 0 otherwise
UNATT = 1 union negotiator (outside attorney); employer negotiator (internal)
        = 0 otherwise
ERATT = 1 employer negotiator (outside attorney); union negotiator (internal)
        = 0 otherwise
BOTHATT = 1 union negotiator (outside attorney); employer negotiator (outside attorney)
        = 0 otherwise
ERCON = 1 employer negotiator (outside consultant); union negotiator (internal)
        = 0 otherwise

ATTCON = 1 union negotiator (outside attorney); employer negotiator (outside consultant)
        = 0 otherwise

YEAR  = 1 report issued in 1988
        = 2 report issued in 1989
        = 3 report issued in 1990
        = 4 report issued in 1991
        = 5 report issued in 1992
        = 6 report issued in 1993
        = 7 report issued in 1994

INIT  = 1 first time negotiations
        = 0 otherwise

SIZE  = 1 bargaining unit less than 10 members
        = 2 bargaining unit 10 to 19 members
        = 3 bargaining unit 20 to 29 members
        = 4 bargaining unit 30 to 39 members
        = 5 bargaining unit 40 to 59 members
        = 6 bargaining unit 60 to 99 members
        = 7 bargaining unit 100 to 199 members
        = 8 bargaining unit 200 or more members

MED   = 1 fact-finder attempted mediation
        = 0 otherwise
APPENDIX C

Regression Equation: Fact-Finding - Strike Prohibited

\[ Y(\text{ISSUES}) = \alpha_1 + \beta_1(\text{TIMES}) + \alpha_2(\text{UNEXP}) + \alpha_3(\text{EREEXP}) + \alpha_4(\text{BOTHEXP}) + \alpha_5(\text{UNATT}) + \alpha_6(\text{ERATT}) + \alpha_7(\text{BOTHATT}) + \alpha_8(\text{ERCON}) + \alpha_9(\text{ATTCON}) + \beta_2(\text{YEAR}) + \alpha_{10}(\text{INIT}) + \beta_3(\text{SIZE}) + \alpha_{11}(\text{MED}) + \mu \]

Where:

\text{ISSUES} = \text{issues at impasse}

\text{TIMES} = \text{times employer and union have used procedure}

\text{UNEXP} = 1 \text{ union negotiator (procedure experience); employer negotiator (none)}
= 0 \text{ otherwise}

\text{EREEXP} = 1 \text{ employer negotiator (procedure experience); union negotiator (none)}
= 0 \text{ otherwise}

\text{BOTHEXP} = 1 \text{ union negotiator (procedure experience); employer negotiator (procedure experience)}
= 0 \text{ otherwise}

\text{UNATT} = 1 \text{ union negotiator (outside attorney); employer negotiator (internal)}
= 0 \text{ otherwise}

\text{ERATT} = 1 \text{ employer negotiator (outside attorney); union negotiator (internal)}
= 0 \text{ otherwise}

\text{BOTHATT} = 1 \text{ union negotiator (outside attorney); employer negotiator (outside attorney)}
= 0 \text{ otherwise}
ERCON = 1 employer negotiator (outside consultant); union negotiator (internal)
       = 0 otherwise

ATTCON = 1 union negotiator (outside attorney); employer negotiator (outside consultant)
       = 0 otherwise

YEAR = 1 report issued in 1988
       = 2 report issued in 1989
       = 3 report issued in 1990
       = 4 report issued in 1991
       = 5 report issued in 1992
       = 6 report issued in 1993
       = 7 report issued in 1994

INIT = 1 first time negotiations
       = 0 otherwise

SIZE = 1 bargaining unit less than 10 members
       = 2 bargaining unit 10 to 19 members
       = 3 bargaining unit 20 to 29 members
       = 4 bargaining unit 30 to 39 members
       = 5 bargaining unit 40 to 59 members
       = 6 bargaining unit 60 to 99 members
       = 7 bargaining unit 100 to 199 members
       ≈ 8 bargaining unit 200 or more members

MED = 1 fact-finder attempted mediation
       = 0 otherwise
APPENDIX D

Regression Equation - Conciliation:

\[ Y(\text{ISSUES}) = \alpha_1 + \beta_1(\text{PREV}) + \alpha_2(\text{UNEXP}) + \alpha_3(\text{EREXP}) + \alpha_4(\text{BOTHEXP}) + \alpha_5(\text{UNATT}) + \alpha_6(\text{ERATT}) + \alpha_7(\text{BOTHATT}) + \alpha_8(\text{ERCON}) + \alpha_9(\text{ATTCON}) + \beta_2(\text{EARLY}) + \alpha_{10}(\text{INIT}) + \beta_3(\text{SIZE}) + \alpha_{11}(\text{MED}) + \alpha_{12}(\text{MAD}) + \mu \]

Where:

\text{ISSUES} = \text{issues at impasse}
\text{PREV} = 1 \text{ employer and union previously used conciliation}
\quad = 0 \text{ otherwise}
\text{UNEXP} = 1 \text{ union negotiator (procedure experience); employer}
\quad \text{ negotiator (none)}
\quad = 0 \text{ otherwise}
\text{EREXP} = 1 \text{ employer negotiator (procedure experience); union negotiator}
\quad \text{ (none)}
\quad = 0 \text{ otherwise}
\text{BOTHEXP} = 1 \text{ union negotiator (procedure experience); employer}
\quad \text{ negotiator (procedure experience)}
\quad = 0 \text{ otherwise}
\text{UNATT} = 1 \text{ union negotiator (outside attorney); employer negotiator}
\quad \text{ (internal)}
\quad = 0 \text{ otherwise}
\text{ERATT} = 1 \text{ employer negotiator (outside attorney); union negotiator}
\quad \text{ (internal)}
\quad = 0 \text{ otherwise}
BOTHATT = 1 union negotiator (outside attorney); employer negotiator (outside attorney)
= 0 otherwise

ERCN = 1 employer negotiator (outside consultant); union negotiator (internal)
= 0 otherwise

ATTCON = 1 union negotiator (outside attorney); employer negotiator (outside consultant)
= 0 otherwise

EARLY = 1 award issued between 1984 and 1988.
= 0 otherwise.

INIT = 1 first time negotiations
= 0 otherwise

SIZE = 1 bargaining unit less than 10 members
= 2 bargaining unit 10 to 19 members
= 3 bargaining unit 20 to 29 members
= 4 bargaining unit 30 to 39 members
= 5 bargaining unit 40 to 59 members
= 6 bargaining unit 60 to 99 members
= 7 bargaining unit 100 to 199 members
= 8 bargaining unit 200 or more members

MED = 1 conciliator attempted mediation
= 0 otherwise

MAD = 1 conciliation conducted pursuant to a mutually agreed upon dispute settlement procedure bypassing fact-finding
= 0 otherwise
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