DOCUMENT RESUME

ED 473 863 EF 006 175

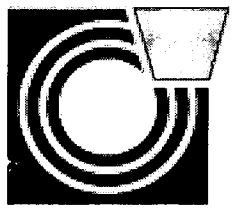
AUTHOR	Wial, Howard
TITLE	Do Lower Prevailing Wages Reduce Public Construction Costs?
INSTITUTION	Keystone Research Center, Harrisburg, PA.
REPORT NO	No-99-2
PUB DATE	1999-07-00
NOTE	14p.
AVAILABLE FROM	Keystone Research Center, 412 N. Third St., Harrisburg, PA 17101. Tel: 717-255-7181; Fax: 717-255-7193; e-mail: KeystoneRC@aol.com. For full text: http://www.keystoneresearch.org/pdf/ prevailing wage.pdf.
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	*Construction Costs; *Minimum Wage; Policy Analysis; School Construction; State Action; State Surveys
IDENTIFIERS	*Market Wage Rates; *Pennsylvania

ABSTRACT

In 1997, the Pennsylvania Department of Labor and Industry implemented a change in its method of determining prevailing wage and benefit rates, resulting in a reduction in the legally required prevailing rates in many construction trades in much of the state. This report analyzes data to determine if this change in fact lowered the cost of public construction projects. It concludes that this claim is not supported. It asserts, for example, that data on public school construction costs show no strong evidence that Pennsylvania's lower prevailing wages and benefits reduced construction costs charged by contractors performing public works. The report also finds that lower prevailing minimum wages paid to workers have no measurable impact on public construction costs partly because wage declines lead to offsetting declines in productivity. (EV)

Reproductions supplied by EDRS are the best that can be made from the original document.

ED 473 863



KEYSTONE
RESEARCH
CENTER

Do Lower Prevailing Wages Reduce Public Construction Costs?

July 1999

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Carol Ramsey

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Howard Wial

Full text available at:
http://www.keystoneresearch.org/pdf/prevailing%20wage.pdf

EF 006 175

BEST COPY AVAILABLE

KEYSTONE RESEARCH CENTER

Keystone Research Center

The Keystone Research Center (KRC), a non-partisan think tank with offices in Harrisburg and the Philadelphia area, conducts research on the Pennsylvania economy and civic institutions. This research documents current conditions and seeks to develop innovative public policy proposals to expand economic opportunity and ensure that all State residents share in the benefits of economic growth.

The Keystone Research Center is a non-profit organization as described in section 501(c)(3) of the Internal Revenue Code. All contributions are tax deductible.

About the Author

Howard Wial is a Senior Fellow of the Keystone Research Center and adjunct professor of law at Rutgers University, Camden, New Jersey. He holds a Ph.D. in economics from the Massachusetts Institute of Technology and a law degree from Yale University. Dr. Wial is co-author of the 1998 Cornell University Press book *New Rules for a New Economy: Employment and Opportunity in Postindustrial America*.

Acknowledgments

Carol Ramsey designed and did the layout of the document.

© Keystone Research Center, 1999

Do Lower Prevailing Wages Reduce Public Construction Costs?

Howard Wial

Briefing Paper 99/2

For additional copies of this report contact:

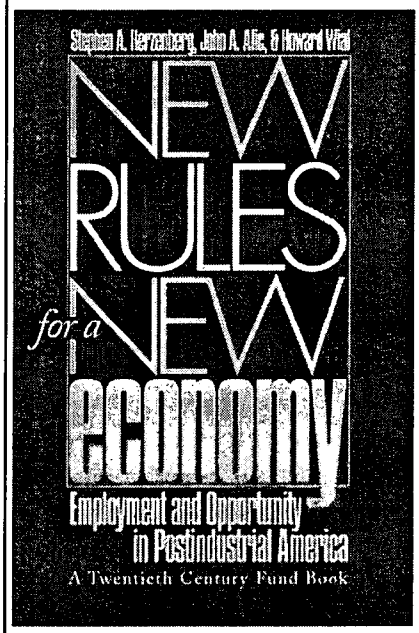
KEYSTONE
RESEARCH
CENTER

Keystone Research Center • 412 North Third Street • Harrisburg, Pennsylvania 17101
Phone: (717) 255-7181 • Fax: (717) 255-7193 • Email: KeystoneRC@aol.com

This report was published and printed in-house.

KEYSTONE RESEARCH CENTER

FROM THE STAFF OF THE KEYSTONE RESEARCH CENTER



Three-quarters of the American workforce is now employed in services, a substantial portion in low-paying, dead-end jobs. Can the service economy do as well by the American worker as the manufacturing economy once did? Can the widely shared prosperity that accompanied steady increases in productivity and performance in manufacturing be replicated in the services? They can and they will, the authors of this timely book contend, but only if outmoded policies and practices are brought into line with the new economy. *New Rules for a New Economy* explains why this goal must be accomplished and how we can start.

The authors call for new, decentralized institutions suited to a dynamic economy in which change is constant and rapid. In particular, they see a need for job ladders and worker associations that cut across firm boundaries. These institutions would foster individual and collective learning, mark out career paths, and facilitate coordination among both individuals and organizations in a networked economy. The authors propose new rules to reshape labor market institutions and policy, improving economic performance and opportunities for workers.

REVIEWERS' PRAISE FOR *NEW RULES FOR A NEW ECONOMY*

"A stimulating book."

- *Financial Times* of London

"A challenge to liberals by fellow liberals to rethink their traditional economic policies."

- *The New Democrat*

"If you want to know why wages are stagnant and social inequality is growing, this book is the place to start. And... the authors propose the kinds of reforms – simultaneously practical and radical – necessary to bring about change."

- Nelson Lichtenstein, University of Virginia

"This book should serve as a springboard for a serious public debate of what it would take to reverse rising inequality and make America's economy deliver again for more than a small minority."

- Richard Leone, Twentieth Century Fund

"A stellar achievement that breaks new ground."

- Harley Shaiken, University of California, Berkeley

TO ORDER THIS BOOK CALL:
KEYSTONE RESEARCH CENTER AT 717-255-7181 OR
CORNELL UNIVERSITY PRESS AT 1-800-666-2211

BEST COPY AVAILABLE

KEYSTONE RESEARCH CENTER

Overview

Pennsylvania law requires construction contractors working on publicly funded construction or renovation projects to pay workers at a minimum the "prevailing wages and benefits" in their respective trades in the geographical area in which the work is performed. In 1997, the Pennsylvania Department of Labor and Industry (DLI) implemented a change in its method of determining prevailing wage and benefit rates resulting in a reduction in the legally required prevailing rates in many construction trades in much of the state. (Although the Pennsylvania Commonwealth Court ruled them illegal on January 11, 1999, the prevailing wage and benefit rates DLI implemented were in place for more than a year.)

Opponents of prevailing wage laws often argue that repealing or weakening these laws will lower the cost of public construction projects because such action will reduce the wages and benefits of construction workers employed on public projects. Data on Pennsylvania public school construction projects during the period in which lower prevailing rates were in effect do not support this claim.

- Data on public school construction costs show no strong evidence that Pennsylvania's lower prevailing wages and benefits reduced construction costs charged by contractors performing public works.
- Studies from other states show no statistically significant relationship between the existence of prevailing minimum wage and benefit laws and the cost of school construction.
- Lower prevailing minimum wages paid to workers have no measurable impact on public construction costs partly because wage declines lead to offsetting declines in productivity.
- Real savings in public construction costs are more likely to come from investments in worker training, which can make workers more productive, thereby lowering costs without cutting wages.

By threatening the construction industry's skill base, lowering prevailing minimum wages and benefits moves Pennsylvania's construction industry in the opposite of the direction in which it needs to move to reduce construction costs over the long term.

Pennsylvania's Prevailing Wage Law

Since 1961, Pennsylvania has required construction contractors who work on publicly funded projects (such as public schools, government buildings, and highways) to pay construction workers at least the prevailing wages and benefits for their respective trades in the area in which the work is performed. This prevailing minimum wage requirement exists, in one form or another, in many states and at the federal level as well. The purpose of the requirement was to prevent building contractors from using out-of-state or out-of-town workers to undercut the local economy and wage base.

Since 1979, nine states have repealed their prevailing wage laws.[1] Opponents of prevailing wage laws believed that the laws kept construction workers' wages and benefits artificially high because the prevailing minimum wages set under the laws were often the hourly wages paid to unionized workers, which are generally higher than nonunion workers' hourly wages. If wage and benefit rates were no longer propped up by law, prevailing minimum wage opponents argued, wages would fall to their "natural" market levels yielding lower construction costs and saving taxpayers money.

Pennsylvania's prevailing wage law has not been repealed. However, the Pennsylvania Department of Labor and Industry (DLI) recently weakened the law's effect by changing its method of determining prevailing rates. (The prevailing wage statute gives DLI the responsibility for determining the prevailing wage and benefit rates in each trade or craft.) Before February 27, 1997, DLI set the prevailing wage and benefit rates by accepting submissions of wage and benefit information from any interested party, including building contractors and trade unions. It then declared the prevailing rates to be the hourly wage and benefit rates that were most frequently paid to workers. While the wage and benefit rates of nonunion workers often vary from job to job, person to person, and employer to employer, rates in the unionized sector are generally unform in an area for each specific trade. For this reason, the prevailing wage and benefit rate was usually the collectively bargained wage and benefit rate.

In June 1996, DLI decided to set prevailing wage and benefit rates in a different way. Instead of relying on submissions from interested parties as contemplated by the statute, DLI contracted with the Pennsylvania State Data Center to conduct a statewide survey of construction workers' wages. The survey covered the period from January 1995 through May 1996. It was sent to building contractors, although certain contractors and certain types of construction projects were excluded. Using the survey results, DLI would declare the prevailing wage and benefit rate in a particular trade and county to be the wage and benefit rate paid to a majority of workers in that trade and county based upon DLI's criteria for the determination of majority status. If no single wage and/or benefit rate was paid to a majority of workers, DLI would declare the prevailing wage to be the average wage and benefit rate of all survey responses. The new method of setting the prevailing wage and benefit rates went into effect February 27, 1997, but was the subject of a legal challenge which stayed its implementation or use from April 8, 1997, until August 13, 1997, when the stay was lifted.

In many trades and counties where a large share of construction workers were covered by a collective bargaining agreement, the prevailing wage and benefit rates were the same under the new method as under the old one. But in trades and counties with a lower union presence or a low survey response rate for unionized projects, the new method usually resulted in a decline in the prevailing minimum wage and benefit rate because that wage and benefit rate was no longer the collectively bargained rate.

KEYSTONE RESEARCH CENTER

The Effect of Lower Prevailing Wages and Benefits on Construction Costs

Opponents of prevailing wage laws would expect Pennsylvania's public construction costs to have declined after the impact of collective bargaining agreements on prevailing wages and benefits was weakened. To find out whether such expectations are warranted, we can look at evidence on school construction costs in Pennsylvania during the two-year period from October 1996 through October 1998. If lower prevailing wage and benefit rates reduced construction costs to public bodies, then the average cost per square foot for public school construction projects would be expected to have been lower after August 1997 than it was in the earlier part of the two-year period.[2]

Table 1 shows the average cost per square foot for school construction projects for which contracts were awarded in the months before and after the wage-determination method was changed.[3] The table shows the average cost for eight groups of Pennsylvania counties. Each group of counties is characterized by the number of building trades or crafts (out of ten) in which the new prevailing wage and benefit rates were the collectively bargained wage. (There are no before-and-after data for groups of counties in which the new prevailing wage and benefit rates were the collectively bargained rate in one or six trades, so those county groups are excluded from the table.)

Table 1.
Average Cost Per Square Foot* for School Construction Projects in Pennsylvania, October 1996-October 1998, Before and After Prevailing Wage Determination Method Was Changed

Number of Trades, in County Group, in Which New Prevailing Wage Was the Collectively Bargained Wage**	Average Cost Per Square Foot Before Prevailing Wage Determined Method Was Changed (October 1996 - August 1997)	Average Cost Per Square Foot After Prevailing Wage Determination Method Was Changed (September 1997 - October 1998)	Percentage Change in Average Cost Per Square Foot
0	$ 61.50	$ 97.33	+58%
2	37.06	77.31	+109
3	125.43	59.28	- 53
4	110.00	238.00	+116
5	80.25	113.90	+ 42
7	116.71	160.95	+ 38
8	113.35	159.40	+ 41
9	151.19	73.61	- 51
10	101.12	108.13	+ 7

*Average cost per square foot is the ratio of total costs of all construction projects in a county group to total square feet covered by those projects.
**Each county was classified according to the number of trades in which the new prevailing wage was the collectively bargained wage. The counties were then grouped together according to this number. For example, "2" indicates that the data pertain to all counties in which the new prevailing wage was the collectively bargained wage in two trades.

ERIC

The table shows that average construction costs per square foot declined only in counties where either three or nine trades had their new prevailing wage rates set equal to the collectively bargained wage. In all other county groups, average costs rose after the new wage-determination method went into effect.

Table 1 also provides data on which county groupings saw the largest declines or smallest increases in average cost per square foot. Proponents of weakening prevailing wage laws would expect construction costs to fall most (or increase least) in the counties in which very few trades had their prevailing wage and benefit rates set by collective bargaining after the change in the prevailing wage determination method. These proponents would therefore expect the top rows of the last column of Table 1 to be more negative (or less positive) than the bottom few rows. In fact, the data shows the opposite of what would be expected if lowering prevailing wage and benefit rates reduced construction costs: while the trend is erratic, the top rows of the last column of Table 1 tend to be higher than the bottom rows.

Of course, the projects included in Table 1 differ in terms of many other things that may affect their costs, not just whether their contracts were awarded before or after the change in the method of determining the prevailing wage rate. For example, they differ by the number of square feet in the project, the cost of living in the relevant county, the type of school, and the particular month in which the contract was awarded. A statistical technique known as multiple regression makes it possible to separate the influence of the prevailing wage rate change on construction costs from other influences on those costs. Multiple regression analysis of Pennsylvania school construction data shows no across-the-board decline in costs after the prevailing wage law's determination methods were changed.[4]

Studies of prevailing wage laws in other states have also produced no strong evidence that these laws have any impact on construction costs.

- A study of 15 Great Plains states showed that the average cost per square foot of building new schools did not differ significantly between states that had prevailing wage laws and states that did not.[5]

- A comparison of school construction costs between prevailing wage and non-prevailing wage states in the Mountain West and Southwest found that average costs per square foot were actually lower in states with prevailing wage laws.[6]

- A multiple regression study of school construction costs in Maryland and other mid-Atlantic states found that prevailing wage laws have no measurable impact on costs.[7]

The most cited statistical study that produced a contrary result, a multiple regression analysis of the impact of the federal prevailing wage law (the Davis-Bacon Act) on construction costs in non-metropolitan areas of the U.S., was flawed by its deliberate exclusion of publicly funded projects that were not subject to the requirements of the federal law.[8] The study thus compared public

projects subject to the federal prevailing wage law with private projects. Because many publicly funded projects (such as highways, public transportation systems, and prisons) have no private counterparts, however, it is impossible to hold constant the characteristics of the project when comparing public and private projects. Therefore, it is impossible to attribute public-private cost differences to the public sector's prevailing wage and benefit rate requirement.

The recent experience of two Pennsylvania school districts shows that even increases in legally mandated prevailing wage and benefit rates do not necessarily increase public construction costs. In March 1999, after two months of legal uncertainty about required prevailing wage levels, DLI began issuing prevailing wage rates that were higher than the 1998 rates. The Blue Mountain School District, in Schuylkill County, was planning to renovate its high school. In April 1999, the school district's construction manager estimated that construction costs would increase by about $670,000 as a result of the higher prevailing wage and benefit rates.[9] But when bids for the project were opened on May 6, the low bids, which were expected to be about $15.1 million, came in at only about $13.8 million, almost 9 percent below the anticipated level.[10] And in April, bids for a middle school construction project in Tamaqua, which used the same prevailing wage and benefit rates as the Blue Mountain bids, also came in under budget estimates.[11]

Why Do Lower Prevailing Wages and Benefits Have No Measurable Effects on Construction Costs?

Many people, without examining the evidence, might expect the lowering of Pennsylvania's prevailing minimum wages and benefits to reduce construction workers' compensation and, with it, construction costs. But this would be true only if construction workers' productivity did not change when workers' wages fell. When workers become less productive, construction costs rise. If the decline in wages causes productivity to drop, the effect of the productivity decline (to raise costs) works against the effect of the wage decline (to lower costs). If the two effects cancel each other out, the prevailing wage change will have no effect on construction costs. If the productivity decline outweighs the wage decline, costs will actually rise.

There are several reasons to expect construction industry productivity to decline substantially when the prevailing wage rate is lowered. Large wage cuts demoralize workers and encourage skilled and experienced workers to travel to higher wages areas or leave the industry altogether. Over a longer period of time, lower wages threaten the continued existence of construction apprenticeship programs (most of which are established through collective bargaining and administered jointly by union and employer representatives).[12] Apprenticeships, which usually last

four or five years, give workers a broad set of skills within their respective trades. If construction workers' wages are too low and workers are unlikely to spend entire careers in the construction industry, costly apprenticeships no longer make economic sense for workers or employers. As apprenticeships decline, the construction industry loses its base of skilled workers. As a result, productivity declines. Individual employers are unwilling to pick up the slack and train workers themselves because they know that any worker they train can easily go to work for a competitor. Moreover, nonunion employers have rarely been able to create or sustain apprenticeship programs that are comparable in scope to the collectively bargained programs.

In other states, eliminating prevailing wage laws has driven down wages and reduced investment in apprenticeship training. Between 1973 and 1990, the number of construction apprentices declined by an average of 53 percent in Great Plains states that repealed their prevailing wage laws or never had such laws. In Great Plains states that kept their prevailing wage laws, the number of apprentices fell by only 27 percent during the same period.[13]

Conclusion

For the period in which they existed, Pennsylvania's lower prevailing wage and benefit requirements had no measurable impact on construction costs in the state. If the lower prevailing wage and benefit* rates were intended to save taxpayers money, they failed to achieve that goal. Real savings in public construction costs are more likely to come from investments in worker training, which can make workers more productive, thereby lowering costs without cutting wages. By threatening the construction industry's skill base, lower prevailing rates move Pennsylvania's construction industry in the opposite of the direction in which it needs to go to reduce construction costs over the long term.

KEYSTONE RESEARCH CENTER

FOOTNOTES

[1] Peter Philips, *Kansas and Prevailing Wage Legislation*, study prepared for Kansas Senate Labor and Industries Committee, February 20, 1988, p. 14. The prevailing wage law in one additional state, Oklahoma, was judicially overturned.

[2] The data analyzed are from the F.W. Dodge Company and include information on the bid price at the start of the project, the structure type, project location, project scale, and technical characteristics such as number of stories and type of frame. The Dodge data also distinguish between public, private, and federal projects.

[3] The data include six private school construction projects and 70 public school projects. The inclusion of this small number of private schools, which are not covered by the prevailing wage law, makes little difference to the analysis. In addition, the prevailing wage law may have an indirect effect on wages paid to workers on private construction projects if public construction projects account for a large share of all construction industry employment in a trade and locality.

[4] The multiple regression analysis included all Pennsylvania school construction projects for which contracts were awarded between October 1996 and October 1998, except for those in counties where either one or six trades' new prevailing wages were equal to the collectively bargained wage. (The latter projects were excluded from the regression analysis, as they were excluded from Table 1, because there were no before-and-after data.)The regression related the logarithm of the total cost of each project to a measure of the cost of living in the project's county, the time when the project was built (measured in months after October 1996), the type of project (addition, addition/alternation, alteration, alteration/renovation, new construction, unknown/new, or unknown), the number of square feet, the type of school (public or private, and elementary, middle, or high school), and whether the project was built after August 1997 in each county group. The regression results showed that, after controlling for other influences on construction costs, costs went up in some county groups and down in others after the prevailing-wage change took effect. (In which groups costs increased and in which they decreased depended on the precise statistical specification used.) However, none of these cost increases or decreases was statistically significant at the 5 percent level except, in one specification, for a decline in costs in the nine-collective-agreement county group.

[5] Philips, *Kansas and Prevailing Wage Legislation*, pp. 18-21.

[6] Peter Philips, *Summary of New Mexico Study of School Construction Costs*, University of Utah, Department of Economics, no date.

[7] Mark Prus, *Prevailing Wage Laws and School Construction Costs: An Analysis of Public School Construction in Maryland and the Mid-Atlantic States*, study prepared for Prince Georges County (Maryland) Council, January 1999.

[8] Martha Norby Fraundorf, John P. Farrell, and Robert Mason, *Effect of the Davis-Bacon Act on Construction Costs in Non-Metropolitan Areas of the United States*, Oregon State University, Department of Economics, January 1982.

[9] Mary Ellen Maher-Harkins, "Prevailing Wage Debate Hits County; Blue Mountain Sees Project Cost Rise," *Schuylkill Online*, April 27, 1999, www.pottsville.com/pub/1999/Apr/27/D977592.htm

[10] Mary Ellen Maher-Harkins, "Blue Mountain Bids Come In Low; School District May Save More Than $1 Million in Construction Costs," *Schuylkill Online*, May 7, 1999, www.pottsville.com/pub/1999/May/7/E2374.htm

[11] Maher-Harkins, "Prevailing Wage Debate Hits County."

[12] In Pennsylvania during the 1990-95 period, labor-management apprenticeship programs operated jointly by unions and construction contractor associations accounted for 72 percent of new entrants into apprenticeship programs (and a higher share of those graduating from apprenticeships). U.S. Department of Labor, Bureau of Apprenticeship and Training, data provided by Cihan Bilginsoy of the University of Utah. During this period, unions represented about 22 percent of construction workers (Barry T. Hirsch and David A. Macpherson, *Union Memberships and Earnings Data Book* (Washington, D.C.: Bureau of National Affairs), various years.) Therefore, Pennsylvania unionized construction firms did about 9 times as much apprenticeship training relative to their employment as did non-union firms.

[13] Philips, *Kansas and Prevailing Wage Legislation*, pp. 35-36.

Harrisburg Office:

412 North Third Street • Harrisburg, Pennsylvania 17101
Phone: (717) 255-7181 • Fax: (717) 255-7193 • Email: KeystoneRC@aol.com

Philadelphia Office:

314 Springton Road • Upper Darby, Pennsylvania 19082
Phone: (610) 352-2798 • Fax: (610) 352-2798 • Email: krcphila@igc.org

This report was designed and printed in-house.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Do Lower Prevailing Wages Reduce Public Construction Costs?

Author(s): Wial, Howard

Corporate Source: Keystone Research Center

Publication Date: July 1999

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature: Carol Ramsey	Printed Name/Position/Title: Carol Ramsey, Office Mgr.
Organization/Address: Keystone Research Center, 412 N. Third St., Harrisburg PA 17101	Telephone: 717-255-7181 FAX: 717-255-7193
	E-Mail Address: Date: 1-29-03

(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

National Clearinghouse for Educational Facilities
National Institute of Building Sciences
1090 Vermont Ave., N.W., Suite 700
Washington, DC 20005-4905

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfacility.org