Ohio Commission on Local Government Reform and Collaboration

Costs Related to Prevailing Wage Laws in Ohio

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Introduction

The brief "*Costs Related to Prevailing Wage Laws in Ohio*" was created in response to inquiries from the Ohio Commission on Local Government Reform and Collaboration, which requested empirical findings that discussed the fiscal costs associated with paying prevailing wages for local government construction. It is only intended to address the specific concern of effects on costs. Other arguments in favor or critical of prevailing wages are reviewed in the brief "Prevailing Wages in Ohio and Across the Nation", which provides a more rounded analysis of the effects of prevailing wages laws. This brief is meant to complement this earlier prevailing wage brief.

The ideal findings in this brief would document the total cost to Ohio's state and/or local government, possibly by determining whether there is a gap between prevailing and average market wages, and measuring the aggregate difference between contracts that were subjected to prevailing wage requirements and those that were not. To date no studies on this scale have been carried out. However, other studies on prevailing wage laws in Ohio have been undertaken, most of which do not attempt to quantify the cost to local or state government due to the complexity of variables affecting prevailing wage costs.

Of the studies that do quantify the fiscal costs to government, one of the most extensive state analyses of prevailing wage law effects in Ohio is the 2002 study by the Legislative Service Commission Staff, "*The Effects of the Exemption of School Construction Projects from Ohio's Prevailing Wage Law*". The study fulfilled a statutory requirement imposed by S.B. 102 of the 122nd General Assembly, and required a significant amount of staff time and effort. Due to the difficulty in quantifying all relevant variables when carrying out an analysis on prevailing wage, the study's results regarding quality and outside influences were sometimes inconclusive. However, "LSC found indications of $487.9 million in aggregate savings, and overall savings of 10.7%" (49).

This brief discusses the findings of the LSC and compares parts of their findings to data gathered in West Virginia to make further meaningful comparisons between building projects subject to prevailing wage regulations and construction projects where prevailing wage laws are not in effect. Also provided in the brief are several examples of projects carried out in Sycamore Township in Hamilton County. Contractors who were awarded bids on several projects were requested to provide estimated costs in accordance with prevailing wage laws as well as a second estimate submitted as if prevailing wage laws were not applied.

Cost Reductions as Reported by the LSC

The LSC utilized data from F.W. Dodge, a firm that collects data for private and public construction projects. The estimated aggregate savings of $487.9 million was a total that included additions, alterations, and new construction of school buildings in Ohio. Information was also gathered from both urban and rural counties, categories that are considered separately in the report. Estimated savings for new construction experienced the smallest reduction in costs, at 1.2%. New additions experienced the greatest savings, decreasing 19.9% according to data collected by the LSC. The data indicated that savings for building alterations were 10.7%. The LSC staff noted that the greater savings for additions and alterations were consistent with survey responses, which indicated a belief that savings would be greater for these two categories than for new building construction.

The average estimated savings associated with exempting school construction from prevailing wage requirements for rural counties was reported as $177.4 million with 432 projects. For urban counties the estimated savings are $310.4 million across 692 projects. Not all construction projects were similar in scope, and different individual projects may have experienced disproportionate cost reductions or no cost reduction at all. The average rate of savings for rural and urban counties was estimated as 9.2% and 11.9% respectively.

The following pages are extracted from the LSC report, detailing how the savings are distributed across these different categories.

Table 4: Summary of Estimated Saving
(dollar amounts in thousands of 2001 dollars)

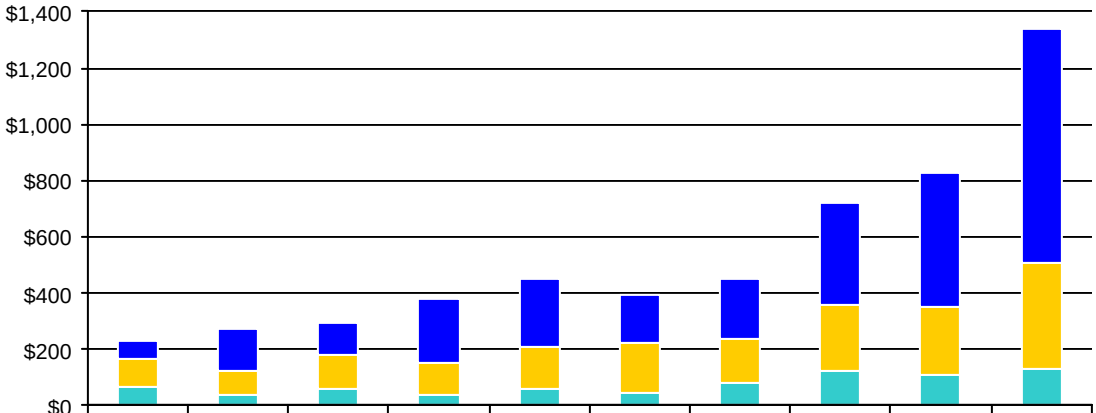
Year	Projects	Combined Savings	Percent
1997	35	$14,843.0	12.6%
1998	315	$82,094.7	13.3%
1999	280	$115,282.7	11.7%
2000	230	$97,333.5	9.4%
2001	264	$178,318.4	9.9%
Total	1,124	$487,872.4	10.7%

Table 5: Summary of Estimated Saving
(dollar amounts in thousands of 2001 dollars)

	New Construction			Additions			Alterations		
Year	Projects	"Savings"	Percent	Projects	"Savings"	Percent	Projects	"Savings"	Percent
1997	9	$1,388.2	2.2%	14	$12,664.5	25.6%	12	$790.3	12.7%
1998	29	$4,095.5	1.8%	68	$65,501.0	21.7%	218	$12,498.2	13.0%
1999	39	$2,856.2	0.7%	91	$95,928.9	20.8%	150	$16,497.7	11.5%
2000	48	$4,380.9	0.9%	67	$79,949.7	19.4%	115	$13,002.9	10.5%
2001	74	$11,918.6	1.4%	82	$153,987.1	18.6%	108	$12,412.8	8.6%
Total	199	$24,639.4	1.2%	322	$408,031.1	19.9%	603	$55,201.9	10.7%

Estimated percentage savings were greater for additions than for alterations and new construction. This supports comments made in response to surveys sent to school districts that indicated a belief that savings would be greater on additions and alterations than on new construction. Although the trend was not consistent across project types, percentage savings appear to have decreased over time. For most of the time since the exemption went into effect, the construction industry experienced healthy growth and increased demand for workers. Year-over-year growth in construction employment was positive until September 2001. High and increasing demand for workers may have decreased the difference between union and non-union wages and worked to reduce the possible savings from the exemption. One reason for the high and increasing demand for construction workers was the increase in school construction activity that started in 1997. Factors contributing to this increase include the creation of the School Facilities Commission and increased state appropriations for school construction. The increase in school construction activity is pictured in Chart 1.

Chart 1: Ohio Public School Construction Expenditures
(bid amounts in millions of dollars; based on F.W. Dodge data)



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total	$228.1	$275.2	$293.8	$380.6	$451.5	$396.2	$446.9	$719.8	$824.5	$1,341.9
New	$64.6	$153.4	$110.6	$225.6	$242.7	$172.7	$208.5	$363.8	$474.2	$832.4
Addition	$95.1	$80.4	$120.9	$113.4	$146.0	$181.8	$160.1	$234.5	$241.3	$377.7
Alteration	$68.4	$41.5	$62.3	$41.5	$62.8	$41.7	$78.2	$121.5	$109.0	$131.8

The estimated savings by location are presented in Table 6. Rural counties had 36 percent of the aggregate estimated savings compared to 64 percent for urban counties. Estimated percentage savings were greater in urban counties than in rural counties. This is possibly due to differences in the mix of project types between the two location categories. Rural counties had a larger percentage of new construction projects and a smaller percentage of alterations compared to urban counties.

Table 6: Estimated Savings by Location
(dollar amounts in thousands)

	Rural			Urban		
Year	Projects	"Savings"	Percent	Projects	"Savings"	Percent
1997	11	$5,650.3	14.5%	24	$9,192.7	11.6%
1998	145	$23,785.8	12.2%	170	$58,309.0	13.8%
1999	112	$34,506.4	8.4%	168	$80,776.4	13.9%
2000	73	$24,807.2	5.8%	157	$72,526.3	12.0%
2001	91	$88,659.8	10.3%	173	$89,658.6	9.6%
Total	432	$177,409.5	9.2%	692	$310,462.9	11.9%

A Word of Caution: Construction costs are a function of many factors. The presence or absence of prevailing wage laws is just one of many factors that will influence the cost of a project. Many of the factors influencing cost are project

specific. Projects differ in size and location. Projects of the same size may differ in specifications. Similar projects built at different times may face shortages or surpluses of labor or materials due to the state of the economy. Analysis of construction costs should take into account as many of the factors that influence construction costs as possible. The above analysis included the factors available, but was not able to include all the factors that may influence construction costs. For example, LSC was unable to obtain information regarding the division of cost between labor and materials. Omitting relevant variables from regression analysis may statistically bias the estimates of the coefficients of the included variables. The bias may be positive or negative depending on the relationships between the included variables and the omitted variables. Any effects on the estimated coefficients will affect any calculations that make use of the coefficients.[46]

The results reported are for the specific exemption of school construction in the Ohio economy between 1997 and 2001. The effect of an expanded exemption in a different economic environment may not necessarily be the same.

[46] *In one estimation attempt, LSC included a dummy variable to indicate funding by the Ohio School Facilities Commission. This attempt is described in Appendix 3.*

Case Study Reviewed by the Legislative Service Commission

The report also included a case study of the Westlake City School District, which passed a levy for a facilities improvement program in November 1996. Due to uncertainty of whether school construction would be exempted from prevailing wage requirements the following year, the school district requested contractors submit two bids, one of which needed to be subject to prevailing wage requirements as stipulated prior to the 1997 school construction exemption. Savings associated with non-prevailing wage bids in this case study were 5.8% for overall project costs, but varied depending on the construction task in question. For example, savings for HVAC contracts were 2.2% whereas savings observed for plumbing contracts without prevailing wage were 10.5%. Pages extracted from the report's appendix are provided for the Commission's review.

Appendix 1

Case Study: Westlake City School District

In November 1996, the Westlake City School District, located in Cuyahoga County, passed a bond issue for a $27 million facilities improvement program. The project consisted of additions and renovations to seven buildings and all work was scheduled to be completed by December 1998.

In October 1997, bids were received for the fourth and largest ($8.5 million) phase of the project. This phase included additions and renovations to Lee Burneson Middle School, Parkside Middle School, and Westlake High School. The project required that contractors submit two bids: one subject to prevailing wage requirements and one exempt from prevailing wage requirements. The construction manager for the project provided bid information to the Ohio School Facilities Commission. The School Facilities Commission forwarded a copy of this information to the LSC.[59]

Analysis of the Overall Project

The tables below provide summaries of the bids for the overall project in total and by trade area. The requirement that bids be submitted as prevailing wage and non-prevailing wage allowed LSC to estimate the effect of the prevailing wage exemption on project bid cost. Estimated savings are presented as both dollar amounts and percentages.

Table 15: Overall Project

School	*Prevailing Wage Low Bid*	*Non-Prevailing Wage Low Bid*	*Savings*	*Percent Savings*
Parkside Middle	$ 2,046,900	$ 1,872,946	$ 173,954	8.5%
Burneson Middle	$ 2,126,100	$ 2,074,978	$ 51,122	2.4%
Westlake High	$ 4,546,600	$ 4,267,500	$ 279,100	6.1%
TOTAL	**$ 8,719,600**	**$ 8,215,424**	**$ 504,176**	**5.8%**

[59] *Although the construction manager for the project provided information to the Ohio School Facilities Commission, the project was not a School Facilities Commission project.*

Table 16: General Trades

School	*Prevailing Wage Low Bid*	*Non-Prevailing Wage Low Bid*	*Savings*	*Percent Savings*
Parkside Middle	$ 1,257,000	$ 1,105,000	$ 152,000	12.1%
Burneson Middle	$ 1,324,000	$ 1,315,000	$ 9,000	0.7%
Westlake High	$ 3,040,000	$ 2,865,000	$ 175,000	5.8%
TOTAL	**$ 5,621,000**	**$ 5,285,000**	**$ 336,000**	**6.0%**

Table 17: HVAC

School	*Prevailing Wage Low Bid*	*Non-Prevailing Wage Low Bid*	*Savings*	*Percent Savings*
Parkside Middle	$ 339,000	$ 339,000	$ 0	0.0%
Burneson Middle	$ 488,200	$ 474,200	$14,000	2.9%
Westlake High	$ 688,600	$ 668,600	$ 20,000	2.9%
TOTAL	**$ 1,515,800**	**$ 1,481,800**	**$ 34,000**	**2.2%**

Table 18: Plumbing

School	*Prevailing Wage Low Bid*	*Non-Prevailing Wage Low Bid*	*Savings*	*Percent Savings*
Parkside Middle	$ 105,900	$ 105,900	$ 0	0.0%
Burneson Middle	$ 118,900	$ 110,500	$ 8,400	7.1%
Westlake High	$ 275,000	$ 230,900	$ 44,100	16.0%
TOTAL	**$ 499,800**	**$ 447,300**	**$ 52,500**	**10.5%**

Table 19: Electrical

School	*Prevailing Wage Low Bid*	*Non-Prevailing Wage Low Bid*	*Savings*	*Percent Savings*
Parkside Middle	$ 345,000	$ 323,046	$ 21,954	6.4%
Burneson Middle	$ 195,000	$ 175,278	$ 19,722	10.1%
Westlake High	$ 543,000	$ 503,000	$ 40,000	7.4%
TOTAL	**$ 1,083,000**	**$ 1,001,324**	**$ 81,676**	**7.5%**

Estimated overall savings for the project were 5.8 percent. Savings vary by school and by trade. The largest dollar savings are associated with the largest project, Westlake High School. However, the largest percentage savings were associated with the smallest project, Parkside Middle School.

Plumbing had the largest average percentage savings (10.5%), followed by electrical (7.5%), general trades (6.0%), and HVAC (2.2%). These are average percentage savings for these trade areas. Work in the same trade area at different schools had different savings rates. The savings rates for plumbing ranged from 16 percent at Westlake High School to 0 percent at Parkside Middle School. The low bid on plumbing for Parkside Middle School came from a union contractor.

Savings may vary by project and by trade. For some combinations of project and trade, savings may be high, while for others they may be low or zero. Even without the requirement of the payment of prevailing wages, union contractors may submit the low bid. The exemption of school construction from the state's prevailing wage requirements does not guarantee that union contractors will no longer win contracts. Union contractors can compete and win without the prevailing wage requirement.

Analysis of Bidding Competition

From the information obtained concerning the bids submitted in 12 bidding competitions (3 schools multiplied by 4 trade areas), it was possible to simulate bidding with and without the requirement of the payment of prevailing wages. Twenty-one contractors submitted a total of fifty-eight bids. Twelve of the contractors were non-union, seven were union contractors, and two classified themselves as union or non-union. If the bidding were subject to prevailing wage requirements, analysis indicated that union contractors would have won two of the bidding competitions (17%) and a self-described union/non-union contractor would have won three of the bidding competitions (25%). The seven remaining competitions (58%) would have been won by non-union contractors. In bidding not subject to prevailing wage requirements, union contractors won two of the bidding competitions (17%) and a union/non-union contractor won one of the bidding competitions (8%). The remaining nine competitions (75%) were won by non-union contractors. The removal of the prevailing wage requirement caused the winning contractor to change in five of the bidding competitions.

Conclusions

In a letter accompanying the information provided to the School Facilities Commission, the construction manager for the project concluded that

> *The results show saving due to the use of non-prevailing wage rates for this project. If this type of savings can be realized in a heavily unionized area such as greater Cleveland, more significant savings may be realized in some of the more rural and non-union settings.*

The letter also included the following comment.

> *Surprisingly, there was a lack of union contractor bids, particularly given the strength of the unions in the area. This invokes thoughts that union contractors may begin to shy away from school projects without the prevailing wage in place. While this could limit competitiveness, it could also increase competitiveness. The market for schools may consist of an entirely new group of contractors, potentially resulting in more, lower cost, bidders. With a market shift, however, quality and availability of skilled tradesmen become a concern.*

This case study indicates that, in this instance, the presence or absence of the prevailing wage requirement did affect the outcome of bidding competitions and that the removal of the requirement may lead to savings. However, the absence of the prevailing wage requirement did not guarantee a non-union winner to bidding competitions. Union contractors were able to compete and win even in the absence of prevailing wage requirements, and non-union contractors were able to compete and win even when prevailing wages were required.

Impact on Construction Workers' Wages

The study also reviewed construction workers' surveys through the Federal Electronic Research and Review Extraction Tool (FERRET). The LSC reported that though information extracted using FERRET is scientifically selected, it is not a representative sample of Ohio construction workers, but "nevertheless, the data does provide information about Ohio Construction wages by trades before and after the prevailing wage exemption [for school construction]" (68). The data is for the years 1994 through 2001. The prevailing wage exemption for school construction was made in 1997.

The LSC findings were that construction wages did decrease in the post exemption period by an average of 5.7%, with non-union wages decreasing by 1.2% and union wages experiencing a steeper decrease of 7.8%. This reduced the union wage premium (the percent by which the wages of union members in a given occupation exceed wages of non-union members) from 57.8% to 47.3 % (68). The LSC findings suggest that exempting Ohio schools from prevailing wage requirements contributed to a decrease in construction workers' hourly wages, particularly union workers who are often thought to benefit from prevailing wage requirements. The LSC added that these findings are consistent with other prevailing wage studies, but cautioned that "no claims of causality can be made" due to the difficulty of ascertaining all changes in productivity and outside variables that may influence wages earned.

Data gathered by the LSC on changes in hourly construction wages during the 1994 to 2001 period is provided in the following three pages, extracted from the appendix of the report for the Commission's review.

Table 40: Hourly Pay Rate for All Construction Workers

	Pre Exemption	Post Exemption	Percent Difference
Supervisors, carpenters and rel. workers	$14.98	$19.68	31.4%
Supervisors, electricians and power transmission installers	$19.90	$21.62	8.7%
Supervisors, painters, paperhangers, and plasterers	$11.62	$10.99	-5.5%
Supervisors, plumbers, pipefitters, and steamfitters	$23.36	$26.04	11.4%
Supervisors, construction, n.e.c.	$17.96	$16.84	-6.2%
Brickmasons and stonemasons	$16.60	$16.10	-3.0%
Brickmason and stonemason apprentices	$15.57	$22.74	46.0%
Tile setters, hard and soft	$14.01	$6.83	-51.3%
Carpet installers	$10.34	$12.79	23.7%
Carpenters	$14.06	$15.00	6.6%
Carpenter apprentices		$9.66	
Drywall installers	$12.51	$11.07	-11.5%
Electricians	$18.35	$17.64	-3.9%
Electrician apprentices	$8.44	$12.45	47.5%
Electrical power installers and repairers	$5.78	$13.20	128.4%
Painters, construction and maintenance	$10.63	$16.08	51.3%
Paperhangers	$10.58	$24.01	126.9%
Plasterers	$14.49	$16.86	16.4%
Plumbers, pipefitters, and steamfitters	$19.72	$18.88	-4.2%
Plumber, pipefitter, and steamfitter apprentices	$9.24	$10.83	17.1%
Concrete and terrazzo finishers	$18.51	$15.35	-17.1%
Glaziers	$9.00	$23.10	156.5%
Insulation workers	$17.16	$17.41	1.4%
Paving, surfacing, and tamping equipment operators		$14.26	
Roofers	$12.70	$13.35	5.1%
Sheetmetal duct installers	$14.12	$20.37	44.3%
Structural metal workers	$19.91	$20.79	4.4%
Drillers, earth		$14.80	
Construction trades, n.e.c.	$13.92	$15.10	8.5%
Construction laborers		$12.25	
Overall Average	$15.59	$14.71	-5.7%

Table 41: Hourly Pay Rate for Union Workers

	Pre Exemption	Post Exemption	Percent Difference
Supervisors, carpenters and rel. workers	$16.01		
Supervisors, electricians and power transmission installers	$19.90	$27.89	40.2%
Supervisors, painters, paperhangers, and plasterers			
Supervisors, plumbers, pipefitters, and steamfitters	$29.11	$27.63	-5.1%
Supervisors, construction, n.e.c.	$19.45	$22.39	15.2%
Brickmasons and stonemasons	$20.27	$20.75	2.4%
Brickmason and stonemason apprentices			
Tile setters, hard and soft	$15.37	$8.93	-41.9%
Carpet installers			
Carpenters	$18.12	$20.05	10.7%
Carpenter apprentices		$10.03	
Drywall installers	$17.14	$13.95	-18.6%
Electricians	$21.12	$22.55	6.8%
Electrician apprentices	$9.18	$11.10	20.9%
Electrical power installers and repairers			
Painters, construction and maintenance	$10.27	$14.59	42.1%
Paperhangers			
Plasterers	$22.28	$21.88	-1.8%
Plumbers, pipefitters, and steamfitters	$25.46	$20.53	-19.4%
Plumber, pipefitter, and steamfitter apprentices	$10.65	$10.83	1.6%
Concrete and terrazzo finishers	$23.33	$19.24	-17.5%
Glaziers		$23.10	
Insulation workers	$21.94	$20.98	-4.3%
Paving, surfacing, and tamping equipment operators		$22.74	
Roofers	$18.31	$17.68	-3.4%
Sheetmetal duct installers	$16.46	$26.95	63.8%
Structural metal workers	$20.61	$23.09	12.0%
Drillers, earth		$17.29	
Construction trades, n.e.c.	$17.59	$16.47	-6.4%
Construction laborers		$16.20	
Overall Average	$20.24	$18.67	-7.8%

Table 42: Hourly Pay Rate for Non-Union Workers

	Pre Exemption	Post Exemption	Percent Difference
Supervisors, carpenters and rel. workers	$14.46	$19.68	36.1%
Supervisors, electricians and power transmission installers		$18.49	
Supervisors, painters, paperhangers, and plasterers	$11.62	$10.99	-5.5%
Supervisors, plumbers, pipefitters, and steamfitters	$17.61	$21.26	20.7%
Supervisors, construction, n.e.c.	$17.06	$15.61	-8.5%
Brickmasons and stonemasons	$14.23	$14.32	0.6%
Brickmason and stonemason apprentices	$15.57	$22.74	46.0%
Tile setters, hard and soft	$13.11	$5.78	-55.9%
Carpet installers	$10.34	$12.79	23.7%
Carpenters	$12.77	$12.81	0.3%
Carpenter apprentices		$9.28	
Drywall installers	$11.66	$10.62	-9.0%
Electricians	$12.80	$14.10	10.2%
Electrician apprentices	$7.95	$14.48	82.1%
Electrical power installers and repairers	$5.78	$13.20	128.4%
Painters, construction and maintenance	$10.66	$16.41	53.9%
Paperhangers	$10.58	$24.01	126.9%
Plasterers	$11.89	$14.35	20.7%
Plumbers, pipefitters, and steamfitters	$13.24	$16.01	21.0%
Plumber, pipefitter, and steamfitter apprentices	$7.83		
Concrete and terrazzo finishers	$12.90	$13.89	7.7%
Glaziers	$9.00		
Insulation workers	$12.39	$10.26	-17.1%
Paving, surfacing, and tamping equipment operators		$12.56	
Roofers	$10.29	$12.67	23.1%
Sheetmetal duct installers	$12.95	$18.18	40.4%
Structural metal workers	$15.70	$16.19	3.1%
Drillers, earth		$13.55	
Construction trades, n.e.c.	$12.08	$13.18	9.1%
Construction laborers		$10.38	
Overall Average	$12.82	$12.67	-1.2%

Table 43: Union Wage Premium

	Pre Exemption	Post Exemption	Difference	Percent Difference
Supervisors, carpenters and rel. workers	10.7%			
Supervisors, electricians and power transmission installers		50.8%		
Supervisors, painters, paperhangers, and plasterers				
Supervisors, plumbers, pipefitters, and steamfitters	65.3%	29.9%	-35.3%	-54.1%
Supervisors, construction, n.e.c.	14.0%	43.5%	29.5%	210.7%
Brickmasons and stonemasons	42.4%	44.9%	2.5%	5.9%
Brickmason and stonemason apprentices				
Tile setters, hard and soft	17.3%	54.7%	37.4%	216.0%
Carpet installers				
Carpenters	41.9%	56.6%	14.7%	35.1%
Carpenter apprentices		8.1%		
Drywall installers	47.0%	31.4%	-15.6%	-33.2%
Electricians	65.0%	59.9%	-5.1%	-7.8%
Electrician apprentices	15.4%	-23.4%	-38.8%	-252.0%
Electrical power installers and repairers				
Painters, construction and maintenance	-3.7%	-11.1%	-7.4%	199.2%
Paperhangers				
Plasterers	87.4%	52.5%	-34.9%	-40.0%
Plumbers, pipefitters, and steamfitters	92.3%	28.2%	-64.1%	-69.5%
Plumber, pipefitter, and steamfitter apprentices	36.0%			
Concrete and terrazzo finishers	80.9%	38.5%	-42.3%	-52.4%
Glaziers				
Insulation workers	77.1%	104.4%	27.4%	35.5%
Paving, surfacing, and tamping equipment operators		81.0%		
Roofers	78.0%	39.5%	-38.4%	-49.3%
Sheetmetal duct installers	27.1%	48.3%	21.1%	77.8%
Structural metal workers	31.3%	42.7%	11.4%	36.5%
Drillers, earth		27.6%		
Construction trades, n.e.c.	45.6%	24.9%	-20.6%	-45.3%
Construction laborers		56.0%		
Overall Average	57.8%	47.3%	-10.5%	-18.1%

Comparison to Findings in West Virginia Report

The LSC did not quantify the average rate of prevailing wages for each occupation, as the prevailing wage varies by county in the state of Ohio. However, due to Ohio's method of determining the prevailing wage by relying on the wages set by collective bargaining agreements, it is possible to use the union wage premium provided on the previous page as an general indicator of a gap between wages earned where the prevailing wage is applied and contracts in which it is not applied.

The union wage premium before the exemption (57.8%) and after (47.3%) both approximate the prevailing wage premium documented in the report "*An Economic Examination of West Virginia's Prevailing Wage Laws*" by doctoral fellow Andrea M. Dean of West Virginia University. Dean concluded that the prevailing wage premium in West Virginia was 48.96% over construction industry wages where prevailing wage regulations did not apply. A list of this report's finding on differences between prevailing and average market wages is found below in Table 1.

Table 1: Comparison of Current Prevailing Wages with Market Wages by Occupation

Occupation	Average True Market Wage	Average Mandated Prevailing Wage	Percentage Difference Between Prevailing Wage and Market Wage
Brickmasons and Blockmasons	$17.74	$25.84	45.67%
Carpenters	$15.55	$23.61	51.89%
Carpet Installers	$16.99	$23.70	39.54%
Cement Masons and Concrete Finishers	$17.26	$24.16	40.04%
Drywall and Ceiling Tile Installers	$13.73	$23.28	69.56%
Electricians	$21.08	$26.99	28.04%
Glaziers	$15.04	$26.27	74.67%
Millwrights	$19.16	$27.12	41.50%
Painters, Construction and Maintenance	$14.30	$22.05	54.12%
Roofers	$11.91	$24.68	107.13%
Sheet Metal Workers	$18.35	$24.51	33.54%
Structural Iron and Steel Workers	$17.47	$24.52	40.39%
All Occupations			**48.96%**

Conclusions on the Legislative Service Commission's Staff's Research:

The Legislative Service Commission's report "*The Effects of the Exemption of School Construction Projects from Ohio's Prevailing Wage Law*", one of the most extensive of its kind carried out in the state of Ohio, indicated that the savings associated with exempting school construction totaled $487.9 million, and reduced costs by an average of 10.9%. Due to the difficulty in quantifying all relevant variables when carrying out an analysis on prevailing wage, the study's results regarding quality and outside influences were sometimes inconclusive. LSC staff also offered a word of caution to the report's readers. The report suggested prevailing wage costs are influenced by many factors, and noted that

> "Construction costs are a function of many factors. The presence or absence of prevailing wage laws is just one of many factors that will influence the cost of a project. Many of the factors influencing cost are project specific. Projects differ in size and location. Projects of the same size may differ in specifications. Similar projects built at different times may face shortages or surpluses of labor or materials due to the state of the economy. Analysis of construction costs should take into account as many of the factors that influence construction costs as possible. The above analysis included the factors available, but was not able to include all the factors that may influence construction costs. For example, LSC was unable to obtain information regarding the division of cost between labor and materials. Omitting relevant variables from regression analysis may statistically bias the estimates of the coefficients of the included variables. The bias may be positive or negative depending on the relationships between the included variables and the omitted variables. Any effects on the estimated coefficients will affect any calculations that make use of the coefficients .46 The results reported are for the specific exemption of school construction in the Ohio economy between 1997 and 2001. The effect of an expanded exemption in a different economic environment may not necessarily be the same" (24-25).

Case Studies of Prevailing Wage Costs from Sycamore Township

The last section of this brief consists of several projects undertaken in Sycamore Township in Hamilton County. Commission researchers wish to thank Sycamore Township Administrator Rob Molloy for making the documents available, and to Commission member Tom Weidman for recommending their inclusion in this brief.

The different projects are found on the following pages. Each documents a contract bid in accordance with Ohio prevailing wage law, followed by a second bid estimated as if there were no prevailing wage laws applied. Table 2 below is a summary of these figures.

Table 2: Cost Increases for Sycamore Township Projects

	With Prevailing Wage	Without Prevailing Wage	Increase
Firehouse	$4,320,943	$3,629,592	$691,351 (19%)
Solar panels	$33,000	$19,800	$13,200 (66%)
Roof Replacement	$75,011	$51,960	$23,051 (44)
Road Reconstruction	$2,051,338	$1,794,921	$256,417 (14%)
Park Pavilion	$315,021	$275,644	$39,377 (14%)

Project:	Firehouse
Prevailing Wage Cost:	$4,320,943
Standard Wage Cost:	$3,629,592
Increase:	$691,351 (19%)

Info Provided by: Tom Lemmel / CUC - tlemmel@cintiunited.com – 513-677-0060

Project:	Solar Panels (Labor Only)
Prevailing Wage Cost:	$33,000
Standard Wage Cost:	$19,800
Increase:	$13,200 (66%)

Info Provided by: Adam Harris – The Green Panel / 866-633-8553

Project:	Roof Replacement
Prevailing Wage Cost:	$75,011
Standard Wage Cost:	$51,960
Increase:	$23,051 (44%)

Info Provided by: Rodney Calhoun, Deer Park Roofing / 513-891-9151

Project:	Road reconstruction
Prevailing Wage Cost:	$2,051,338
Standard Wage Cost:	$1,794,921
Increase:	$256,417 (14%)

Info Provided by: Tim Adleta, Adleta Construction / 513-543-8819

Project: Park Pavilion

Prevailing Wage Cost: $315,021

Standard Wage Cost: $275,644

Increase: $39,377 (14%)

Info Provided by: Dennis Meyer, CFS Construction / 513-761-5131

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W/ PREVAILING WAGE

DEER PARK ROOFING

Tracy Kellums
Sycamore Township
8540 Kenwood Rd.
Cincinnati, OH 45236

11/19/08

Revised Roof Proposal
Deer Park Roofing proposes to furnish the materials and perform the necessary labor to complete the following:

- Tear off existing layers of roofing materials from administrative building only
- Prepare and clean wood decking in order to achieve a smooth surface
- Replace all damaged wood at a cost of $40.00 per man hour plus materials
- Install 30 lb roofing felt to entire roof using cap nails
- Install **Owens Corning** *Weatherlock* ice and water guard to entire gutter line and under all valleys
- Install **Owens Corning** *Duration* Algae Resistant Shingles (color of your choice) to administrative building roof using 1 ¼ inch roofing nails, 4 nails per shingle
- Remove old and install new prepainted valley metal (28 gauge)
- Remove old and install new vent pipe boots to plumbing stacks
- Install 100 ft of **Owens Corning** *VentSure* ridge vent using 3" roofing nails to ensure proper rooftop ventilation
- Replace four existing "B" vents
- Paint all exposed metal with Rustoleum oil based paint
- Haul away all debris and clean out gutters upon completion

*The Price of **$39,092.00** includes materials, labor, tax, and insurance.

All labor is guaranteed by our 5 Year Workmanship Warranty

Payment to be made as follows: Balance Due Upon Completion

Submitted By:
Rodney Calhoun
Rodney Calhoun
891-9151

Acceptance of Proposal:

Tracy Kellums – Sycamore Township
200-2844

For more information about Deer Park Roofing, Inc., please visit our website at www.deerparkroofing.com

*Due to high volatility in material prices, this proposal is good for a period of 30 days

10/28/2008 10:56 5138919152 DEER PARK ROOFING PAGE 0

W/O PREVAILING WAGE

DEER PARK ROOFING INC.

Tracy Kellums
Sycamore Township
8540 Kenwood Rd.
Cincinnati, OH 45236

10/28/08

Revised Roof Proposal
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- Haul away all debris and clean out gutters upon completion

*The Price of **$27,070.00** includes materials, labor, tax, and insurance.

All labor is guaranteed by our 5 Year Workmanship Warranty

Payment to be made as follows: Balance Due Upon Completion

Submitted By:
Rodney Calhoun
891-9151

Acceptance of Proposal:

_____
Tracy Kellums – Sycamore Township
200-2844

For more information about Deer Park Roofing, Inc., please visit our website at www.deerparkroofing.com

*Due to high volatility in material prices, this proposal is good for a period of 30 days

Dec. 18. 2008 9:31AM No. 0393 P. 3

Tracy Kellums
Sycamore Township
8540 Kenwood Rd.
Cincinnati, OH 45236

11/19/08

Revised Roof Proposal
Deer Park Roofing proposes to furnish the materials and perform the necessary labor to complete the following:

- Tear off existing layers of roofing materials from maintenance building only
- Prepare and clean wood decking in order to achieve a smooth surface
- Replace all damaged wood at a cost of $40.00 per man hour plus materials
- Install 30 lb roofing felt to entire roof using cap nails
- Install **Owens Corning** *Weatherlock* ice and water guard to entire gutter line and under all valleys
- Install **Owens Corning** *Duration* Algae Resistant Shingles (color of your choice) to maintenance building roof using 1 ¼ inch roofing nails, 4 nails per shingle
- Remove old and install new prepainted valley metal (28 gauge)
- Remove old and install new vent pipe boots to plumbing stacks
- Install 160 ft of **Owens Corning** *VentSure* ridge vent using 3" roofing nails to ensure proper rooftop ventilation
- Install new step flashing along all walls using 5" x 7" terne metal
- Paint all exposed metal with Rustoleum oil based paint
- Haul away all debris and clean out gutters upon completion

*The Price of **$35,919.00** includes materials, labor, tax, and insurance.

All labor is guaranteed by our 5 Year Workmanship Warranty

Payment to be made as follows: Balance Due Upon Completion

Submitted By:
Rodney Calhoun
Rodney Calhoun
891-9151

Acceptance of Proposal:

Tracy Kellums – Sycamore Township
200-2844

For more information about Deer Park Roofing, Inc., please visit our website at www.deerparkroofing.com

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Tracy Kellums
Sycamore Township
8540 Kenwood Rd.
Cincinnati, OH 45236

10/28/08

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- Remove old and install new vent pipe boots to plumbing stacks
- Install 160 ft of **Owens Corning** *VentSure* ridge vent using 3" roofing nails to ensure proper rooftop ventilation
- Install new step flashing along all walls using 5" x 7" terne metal
- Paint all exposed metal with Rustoleum oil based paint
- Haul away all debris and clean out gutters upon completion

*The Price of **$24,890.00** includes materials, labor, tax, and insurance.

All labor is guaranteed by our 5 Year Workmanship Warranty

Payment to be made as follows: Balance Due Upon Completion

Submitted By:
Rodney Calhoun
891-9151

Acceptance of Proposal:

Tracy Kellums – Sycamore Township
200-2844

For more information about Deer Park Roofing, Inc., please visit our website at www.deerparkroofing.com

*Due to high volatility in material prices, this proposal is good for a period of 30 days

Bibliography

Lundell, Allan. “The Effects of the Exemption of School Construction Projects from Ohio’s Prevailing Wage Law.” Ohio Legislative Service Commission, 20 May 2002. Web. 18 Mar. 2010. <www.abc.org/res.ashx?p=files/Government_Affairs/PrevailingWageLawStudies/Ohio.pdf>.

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