

Labor Standards for School Cafeteria Workers, Turnover and Public Program Utilization

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I. INTRODUCTION

The history of requiring minimum labor standards as part of government contracting processes goes back more than one hundred years to the first state-based prevailing wage law in Kansas in 1891.¹ Prevailing wage standards were expanded to non-construction federal service contracts through the Service Contract Act of 1965 (SCA).² The economic impacts of minimum labor standards policies received renewed attention with the advent of municipal living wage ordinances in the early 1990s.³ This research offers important lessons for national procurement standards.

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1. THE ECONOMICS OF PREVAILING WAGE LAWS 11-16 (Hamid Azari-Rad, Peter Philips & Mark Prus eds., 2005).

2. Service Contract Act of 1965, 41 U.S.C. § 351 (2006).

3. More than 100 cities and local governments passed living wage laws between 1994 and 2004. See generally David Fairris & Michael Reich, *The Impact of Living Wage Policies: Introduction to the Special Issue*, 44 INDUS. REL. 1 (2005).

A variety of mechanisms may serve to absorb at least part of the costs of paying higher wages mandated by minimum labor standards policies. Available evidence strongly suggests that improving wages and benefits can increase productivity and reduce employee turnover.⁴ Lower turnover decreases employers' costs for worker replacement and training. A second source of offsets for standards on federal contracting may come from the reduced need for public assistance from low-wage workers.⁵ To the degree that a higher contracting floor improves quality and productivity, or reduces costs to the public, the savings from low-bid contracting may be less than they initially appear, while the cost of improving job quality may be significantly less than the nominal cost of wage increases.

A recent proposal by the Service Employees International Union (SEIU) to establish labor standards for school cafeteria workers through the Child Nutrition Reauthorization Act provides a good case study to analyze the scope of the offsets.⁶ In this paper we focus on two sources of offsets, reduction in turnover and worker replacement costs, and reduced demand for public programs. We estimate that about 28 percent of the increased compensation costs from higher labor standards for school cafeteria workers would be offset through these two mechanisms alone.

II. BACKGROUND

There are approximately 420,000 food service workers in our nation's Kindergarten through 12th grade schools.⁷ Of these, an estimated 50,000 are employed by private contractors, including Sodexo, Compass and Aramark.⁸ SEIU estimates that over half of the outsourcing of school cafeteria workers occurs in seven states: New York, New Jersey, Illinois, Arizona, Ohio, Michigan and Pennsylvania.⁹ School districts turn to outsourcing as a way to control costs.¹⁰ While large contractors reduce costs through bulk purchasing, the main source of savings is lower wages.

4. See generally Harry J. Holzer, *Wages, Employer Costs, and Employee Performance in the Firm*, 43 INDUS. & LAB. REL. REV. 147-S (1990); David I. Levine, *Can Wage Increases Pay For Themselves? Tests with a Productive Function*, 102 ECON. J. 1102 (1992).

5. See generally Carol Zabin, Arindrajit Dube & Ken Jacobs, *The Hidden Public Cost of Low-Wage Jobs in California*, 4 ST. CAL. LAB. 3 (2004) (examining the costs of public assistance programs utilized by working families in California).

6. See generally, SERVICE EMPLOYEES INTERNATIONAL UNION, *A CASE FOR WORKPLACE STANDARDS IN SCHOOL CAFETERIAS* (2009) [hereinafter SEIU, *WORKPLACE STANDARDS*].

7. SERVICE EMPLOYEES INTERNATIONAL UNION, *HEALTHY WORKERS, HEALTHY FOOD, HEALTHY KIDS: REAUTHORIZING THE CHILD NUTRITION ACT 1* (2010) [hereinafter SEIU, *HEALTHY WORKERS*].

8. *Id.* at 1-3.

9. SEIU, *WORKPLACE STANDARDS*, *supra* note 6 at 7.

10. SEIU, *HEALTHY WORKERS*, *supra* note 7 at 2.

A survey by the Rutgers Center for Women and Work found that outsourced food service workers in New Jersey earned as much as \$4.00 to \$6.00 an hour less than those hired directly by the school district.¹¹ Many of the outsourced cafeteria workers do not have access to paid sick leave or health insurance.¹²

In 2009, SEIU proposed to expand the Child Nutrition Reauthorization Act by establishing demonstration projects that include labor standards for school cafeteria workers.¹³ Participating school districts would be required to apply the SCA wage and benefit standards to school cafeterias and establish minimum training standards. In return the participating school districts would receive additional funding to cover their increased costs. In addition, all school districts would be required to report data, including turnover rates and use of full time vs. part time outsourced cafeteria workers, and to provide paid sick leave to school cafeteria workers, whether employed directly or by contract.¹⁴ Such a pilot program could be used to assess expanding standards to all school districts receiving funding through the federal free lunch program.¹⁵

In order to measure the prospective impact of the proposed wage standards on the school lunch program, we looked at nine states: The seven high contracting states plus California and Wisconsin, where we have done previous research on these topics.

III.

WORKFORCE DEMOGRAPHICS

School cafeteria workers are largely female (93 percent), disproportionately older, and more likely to be married (70 percent) with children at home (63 percent), compared to the workforce in general.¹⁶ Less than one-quarter have education beyond a high school graduation, compared to 62 percent for the workforce as a whole.¹⁷ The race and ethnicity of the school cafeteria workforce in the nine states, however, closely mirrors the population as a whole in those states (Table 1).¹⁸

11. MARY MCCAIN, RUTGERS CTR. FOR WOMEN & WORK, *SERVING STUDENTS: A SURVEY OF CONTRACTED FOOD SERVICE WORK IN NEW JERSEY'S K-12 PUBLIC SCHOOLS 4* (2009).

12. *Id.* at 3-4.

13. SEIU, *WORKPLACE STANDARDS*, *supra* note 6, at 6-7.

14. *Id.*

15. *See id.*

16. Data compiled from the U.S. CENSUS BUREAU, *AMERICAN COMMUNITY SURVEY* (2008). Calculations on file with author.

17. *Id.*

18. *Id.*

Table 1: Workforce Demographics of School Cafeteria Workers¹⁹

	School Cafeteria Workers	All Workers
<i>General</i>		
Age, median	47	40
Female, percent	93	47
Married, percent	71	55
Children under 18 at home	63	44
<i>Educational Attainment</i>		
No high school degree	21	12
High school degree	54	27
Some college	21	31
BA or more	3	30
Total	100	100
<i>Race and Ethnicity</i>		
White non-Latino	67.5	66.9
Latino, Hispanic, Spanish, all races	17.2	16.2
Black non-Latino	11.1	8.9
Asian/PI non-Latino	1.8	4.6
Other, multi-racial	2.5	3.5
Total	100	100

School cafeteria workers earn low wages and most work part-time and only during the school year. The median hourly wage in 2008 was \$10.45, with 20 percent earning minimum wage.²⁰ The median school cafeteria worker works 25 hours a week for 40 weeks a year at their job, earning \$9,300 a year.²¹ Many women with school-age children may initially take these jobs in part due to the convenience of working school hours. While the jobs pay low wages, workers' family incomes may vary, depending on whether or not there is another wage earner in the household and the income of that wage earner. Nevertheless, school cafeteria workers are more likely to be in low-income families than the general population: In the nine states examined 30 percent of the workers were in families with incomes below twice the federal poverty level, compared to 12.4 percent for all workers (Table 2).²²

19. *Id.*20. *Id.*21. *Id.*22. *Id.*

Table 2: Wages, Hours and Earnings of School Cafeteria Workers²³

	School Cafeteria Workers	All Workers
Hourly wage, median	\$10.45	\$17.58
Weekly work hours, median	25	40
Annual work weeks, median	40	52
Annual earnings, median	\$9,300	\$30,000
Annual earnings, average	\$11,038	\$40,792
Family Income below 200% FPL	30.8%	12.4%

IV.

SIMULATING SERVICE CONTRACT WAGE LEVELS

The SCA requires contractors and subcontractors to pay no less than the prevailing wage rate in their local area for a particular class of employees as determined by the Department of Labor.²⁴ In setting the rates the Secretary must give due consideration to wage levels paid for comparable federal government jobs.²⁵ In the case that the prior contractor was covered by a collective bargaining agreement, the collectively bargained rates are applied.²⁶ The SCA applies to contracts or subcontracts over \$2,500.²⁷

To predict the increase in compensation for school cafeteria workers in the nine states to the SCA rate, we calculated a blended 2008 wage rate for each state weighted by county population. We pooled the wages for school cafeteria workers from the American Community Survey for 2000-2008 and adjusted wages for each year to 2008 levels. We also adjusted for state minimum wage laws. We predict that if compensation for school cafeteria workers in the nine states was increased to the minimum rate for the SCA in their respective states, it would result in an average increase of \$3.62 an hour and \$4,500 a year in annual earnings for the workers.

V.

SAVINGS FROM REDUCED TURNOVER

There is no direct data on turnover among school cafeteria workers. Food service contractors are included in the food industry category by the Bureau of Labor and Statistics which is the only data source for employee

23. *Id.* Income and wages adjusted to 2008 dollars.

24. Service Contract Act of 1965, 41 U.S.C. § 351(a)(1) (2006).

25. 41 U.S.C. § 351(a)(5)

26. 41 U.S.C. § 351(a)(1)

27. 41 U.S.C. § 351(a)

turnover data by industry. Turnover is high in the food industry, estimated at 80 percent annually nationwide.²⁸

The correlation between lower wages and higher turnover rates is well established.²⁹ A similar relationship holds for the provision of health benefits and paid sick leave.³⁰ A range of studies have examined the sensitivity of turnover to increases in pay and benefits. One measure of this relationship is the wage elasticity of separation: The percent change in turnover for each percent increase in wage.³¹

For the purposes of this paper, the most relevant studies looked at the impact of turnover on wage increases resulting from living wage laws. We exclude minimum wage studies because an across-the-board minimum wage increase under which all competing employers offer the same higher wages can be expected to have a smaller impact on turnover than a wage increase implemented across a single industry or by a limited number of employers as with the school cafeteria workers proposal.³²

In a study of the Los Angeles Living Wage Ordinance, holding all else constant, Fairris found a 35 percent reduction in turnover in firms that increased wages in response to the law, with an average increase of 23 percent, which results in an elasticity of 1.5.³³ Reich, Hall and Jacobs analyzed the impact of minimum compensation standards for contractors at the San Francisco International Airport.³⁴ Turnover in firms where wages increased by 10 percent or more fell by nearly 60 percent.³⁵ Using data from the paper on specific classifications we calculate wage elasticities ranging from 0.3 for customer service agents to 2.9 for cabin cleaners.³⁶ Howes studied the impact of wage increases for San Francisco homecare workers and found that a \$1 increase in the average hourly wage, on a wage

28. BUREAU OF LABOR STATISTICS, JOB OPENINGS AND LABOR TURNOVER SURVEY, TOTAL SEPARATIONS, ACCOMMODATION AND FOOD SERVICES, 2000-2010, <http://www.bls.gov/jlt/data.htm>.

29. See John L. Cotton & Jeffrey M. Tuttle, *Employee Turnover: A Meta-Analysis and Review with Implications for Research*, 11 ACAD. OF MGMT. REV. 55 (1986); Arindrajit Dube, Eric Freeman & Michael Reich, *Employee Replacement Costs* (UC Berkeley: Inst. for Res. on Lab. & Emp., Working Paper No. 201-10, 2010), available at <http://www.irl.berkeley.edu/workingpapers/201-10.pdf>.

30. Phillip F. Cooper & Alan C. Monheit, *Does Employment-Related Health Insurance Inhibit Job Mobility?*, 30 INQUIRY 400, 409 (1993).

31. Alan Manning, *Imperfect Competition in the Labor Market*, 31-38 (London Sch. of Econ.: Ctr. For Econ. Performance, Discussion Paper No. 981, 2010), available at <http://eprints.lse.ac.uk/28729/1/dp0981.pdf>.

32. *Id.* at 37. Manning notes that when laws cover large numbers of workers, research findings may be measuring the wage elasticity of separation at the level of the market as a whole; this would especially be true of broad minimum wage laws.

33. David Fairris, *The Impact of Living Wages on Employers: A Control Group Analysis of the Los Angeles Ordinance*, 44 INDUS. REL. 84, 96-101 (2005).

34. Michael Reich, Peter Hall & Ken Jacobs, *Living Wage Policies at the San Francisco Airport: Impacts on Workers and Businesses*, 44 INDUS. REL. 106, 125 (2005).

35. *Id.*

36. *Id.* at 125, authors calculation.

of \$8 an hour, increased the probability of the worker remaining in their job by 17 percent points, an elasticity of 1.4 (Table 3).³⁷

Table 3: Wage Elasticity of Separation

Study	Policy	Sample	Percent Wage Increase	Percent Turnover Decrease	Wage Elasticity
Reich, Hall and Jacobs (2005)	San Francisco International Airport Quality Standards Program	Customer Service	17	5	0.3
		Baggage/Ramp	18	25	1.4
		Cabin Cleaner	15	44	2.9
		Security Screener	55	80	1.5
Fairris (2005)	Los Angeles Living Wage	City Service Contract Workers	25	35	1.5
Howes (2005)	San Francisco Living Wage and Collective Bargaining	Homecare Workers	13	17	1.4

Employers incur significant costs from replacing employees. These costs include both direct costs for recruitment, selection and training of workers and the indirect costs associated with lost sales, poor customer relations, and lost productivity as new workers learn the job.³⁸ The cost of worker replacement varies greatly based on compensation, firm size and the skill level of the job. Using the 2003 California Establishment Survey, Dube, Freeman and Reich estimated that the average replacement cost for a blue collar worker in California was \$2,000.³⁹ Hinken and Tracey carried out a detailed study of non-managerial staff at four hotels, two in Boston and two in Chicago.⁴⁰ Taking into account both direct and indirect costs, they estimated replacement costs ranging from \$1,322 for room service wait staff and \$2,077 for a line cook to \$7,658 for an administrative assistant in

37. Candice Howes, *Living Wages and Retention of Homecare Workers in San Francisco*, 44 INDUS. REL. 139, 140 (2005).

38. Joseph La Lopa, Raphael Kavanaugh & Richard Ghiselli, *The Impact Of Offering Benefits To Part-Time Employees On Turnover Rates At Indiana's Quick Service Hamburger Restaurant Chains*, 12 FOODSERVICE RES. INT'L 263, 264-265 (2000).

39. Dube et al., *supra* note 29, at 2.

40. Timothy R. Hinken & J. Bruce Tracey, *The Cost of Turnover: Putting A Price on the Learning Curve*, 41 CORNELL HOTEL & REST. ADMIN. Q. 14, 18-19 (2000).

sales and catering.⁴¹ A study of the cost of supermarket turnover for the Coca Cola Research Council estimated the replacement cost for an \$8 an hour non-union worker at \$4,199 a year.⁴²

Applying the SCA to school cafeteria workers, we estimate an average wage increase of 35 percent. A wage elasticity of separation of 1.45 would result in a projected 50 percent decline in turnover. Assuming a starting turnover rate of 80 percent for food service contractors, which is in line with the food service industry in general, a 50 percent decline in turnover due to the pay increase, would lower the turnover rate by 40 percentage points. Assuming an average replacement cost of \$2,000 (from Dube, Freeman and Reich), this would result in an average savings of \$804 per worker, 18 percent of the cost of the average pay increase.

VI.

SAVINGS FROM REDUCED PARTICIPATION IN PUBLIC SUPPORT PROGRAMS

A second source of offsets to the public comes from reduced participation in social safety net programs. We examined the levels of participation among school cafeteria workers in the nine states in five public support programs: the Food Stamp Program, Temporary Assistance to Needy Families (TANF), the federal Earned Income Tax Credit (EITC), Medicaid, and the State Children's Health Insurance Program (SCHIP). Using government administrative data on the number of enrollees and cost for each program by state, we adjusted the March Supplement of the Current Population Survey (CPS) to correct for the undercount of public program participation.⁴³ Next we used a regression model to predict participation levels at various wage levels, adjusting for differences in family characteristics, demographics and income. The data adjustment and regression mirrored the approach of Zabin, Dube and Jacobs.⁴⁴ Due to the relatively small sample size of school cafeteria workers in the CPS, we used the American Community Survey and applied the state level prediction equations to arrive at public program participation levels for school cafeteria workers and the general workforce. The same prediction equation was used to estimate program participation if wage levels were raised to meet those of the SCA.

We found that school cafeteria workers are nearly twice as likely as the workforce as a whole to participate in one or more public programs: 36.3

41. *Id.* at 14, 18.

42. BLAKE FRANK, COCA-COLA RESEARCH COUNCIL, NEW IDEAS FOR RETAINING STORE-LEVEL EMPLOYEES 32 (2000), available at <http://gsmweb.udallas.edu/faculty/bfrank/CCRRC/CCRRCStudy1.14.pdf>.

43. Source data and calculations on file with authors.

44. Zabin et al., *supra* note 5, at 28.

percent compared to 19.7 percent. The highest participation is in the Earned Income Tax Credit (31.4 percent), followed by Children's Medicaid or SCHIP (15.3 percent), Medicaid (14 percent), Food Stamps (8.5 percent) and TANF (1.7 percent) (Table 4).

Table 4: Participation in Public Programs by School Cafeteria Workers (percent)⁴⁵

Program	School Cafeteria Workers	All Workers
EITC	31.4	15.0
Children's Medicaid/SCHIP	15.3	9.1
Medicaid (adults)	14.0	7.1
Food Stamps	8.5	4.0
TANF	1.7	0.7
Any program	36.3	19.7

Participation rates vary greatly by state. The highest rate was in Arizona (51.4 percent) and the lowest in Wisconsin (23.2 percent) (Table 5).

Table 5: Participation in Public Programs by School Cafeteria Workers by State (percent)⁴⁶

State	TANF	EITC	Food Stamps	Medicaid (adults)	Children's Medicaid/SCHIP	Any Program
Arizona	3.1	42.9	19.4	19.9	23.3	51.4
California	2.8	37.4	6.2	17.2	20.0	44.2
Illinois	1.1	29.4	12.7	12.8	15.4	32.8
Michigan	1.8	30.8	13.1	14.2	11.5	34.1
New Jersey	1.3	28.1	5.3	9.5	9.8	29.2
New York	1.3	33.4	8.4	15.2	17.2	38.2
Ohio	1.0	26.7	7.1	11.0	9.0	28.9
Pennsylvania	1.1	27.9	7.7	13.1	13.0	32.5
Wisconsin	0.5	16.1	4.1	6.2	11.1	23.2
Total	1.7	31.4	8.5	14.0	15.3	36.3

45. U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, *supra* note 16.

46. *Id.*

Next, we estimated the current average benefit value per participating worker for each program. We then multiplied these numbers by the participation rate to get an average cost per worker for each program. The average cost to the public per worker for participation in all programs comes to \$1,743 annually. Next, we simulated the impact that raising wages to the SCA rates would have on public program take-up among school cafeteria workers using a regression model as described above. Our calculations indicated that an increase to SCA rates would reduce the average cost per worker to \$1,301, a savings to taxpayers of \$442 per worker, 10 percent of the cost of the total wage increase (Table 6).

Table 6: Participation in Public Programs by School Cafeteria Workers, Current and Predicted Rates at Service Contract Act Wages⁴⁷

	Current			Predicted at Service Contract Act Wages		
	Participation Rate (percent)	Average value of benefit	Cost per Worker	Participation rate (percent)	Average Value of Benefits	Cost per Worker
EITC	31.4	\$1,863	\$585	22.0	\$1,797	\$396
Children's Medicaid/SCHIP	15.3	2,114	322	11.9	2,114	252
Medicaid (adults)	14.0	3,548	498	11.2	3,548	399
Food Stamps	8.5	2,632	224	6.4	2,632	168
TANF	1.7	6,851	114	1.3	6,851	87
All programs	36.3		\$1,743	28.2		\$1,301

Our estimates of savings are conservative as they do not include savings due to other programs such as child care assistance, state-level EITC and other state-specific support programs such as housing and energy cost assistance. Nor do they include the federal subsidies for which many workers may be eligible under the new federal health reform bill.

47. *Id.*

VII.

OTHER SOURCES OF COST SAVINGS

In addition to the savings from turnover, efficiency wage theory predicts that improved wages and benefits should result in increased productivity through greater work effort. Reich, Hall and Jacobs found that a significant share of employers at the San Francisco International Airport reported improvement in work performance (35 percent) and morale (47 percent), reduction in absenteeism (29 percent) and disciplinary issues (44 percent), and improvements in public service (45 percent).⁴⁸ Brenner found significant, but smaller increases in reported employee morale and effort across a wide range of city contractors as a result of the Boston living wage law.⁴⁹

Brenner also found a reduction in contractor profits following the implementation of the Boston living wage law: nearly 40 percent of contractors reported lowering profits in order to meet the higher labor costs.⁵⁰ This suggests that there may be excess returns, what economists call “economic rents”, in public contracts due to uncompetitive markets, which may be reduced through wage standards.⁵¹

One other aspect of the proposed standards for school cafeteria workers is mandated paid sick days. This requirement was included in several of the living wage policies discussed in this paper. In addition to any direct impacts on turnover and worker productivity, the paid sick leave requirement can also be expected to impact the both worker and consumer health, in this case both school employees and students. Workers with paid sick days are more likely to take needed medical leave. There is evidence that paid sick days reduce contagion of seasonal influenzas and food-borne illnesses in food related services, a particular concern for school cafeterias.⁵²

VIII.

SUMMARY

The costs of new standards that would improve wages and provide paid sick days for school cafeteria workers would be partially absorbed through a variety of mechanisms. We estimate that 28 percent of the cost of wage

48. Reich et al., *supra* note 34 at 127.

49. Mark D. Brenner, *The Economic Impact of the Boston Living Wage Ordinance*. 44 INDUS. REL. 57, 77-78 (2005).

50. *Id.* at 77.

51. *Id.* at 78.

52. RAJIV BHATIA ET AL., HUMAN IMPACT PARTNERS, A HEALTH IMPACT ASSESSMENT OF THE CALIFORNIA HEALTHY FAMILIES, HEALTHY WORKPLACES ACT OF 2008 (2008), available at http://www.sfphes.org/publications/PaidSickDaysHIA_report.pdf.

increases would be absorbed through reduced costs for worker replacement and reduced demand for public assistance programs. Additional costs would be absorbed through increased worker effort and improved productivity. Mandated paid sick days may contribute to reducing the spread of food borne illnesses and the seasonal flu. In combination, these offsets can be expected to substantially reduce the cost to the federal government of mandated wage increases for service contractors.