

The Effects of the Living Wage in Baltimore

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TABLE OF CONTENTS

Executive Summary	1
Introduction	3
Budgetary impact of the living-wage law	5
Data sources for budgetary changes	5
Results of the budget analysis.....	6
Variations in cost changes across sectors	6
Possible impact of wage spillovers	8
Impact of the law on the bidding environment	8
Effect of noncompliance with the law	9
Summary: an insignificant budget impact.....	9
A picture of low-wage workers in Baltimore	10
Characteristics of Baltimore's low-wage service labor force	10
Characteristics of low-wage jobs	13
Housing circumstances of low-wage workers	14
Poverty status of low-wage service workers	14
Summary: who benefits from a living-wage law?	14
Estimating the number of living-wage workers	17
The impact of the living wage on workers: payroll data.....	19
Scope and quality of the payroll data.....	19
Hours of work	20
Income	20
Firm size	21
Labor turnover	21
Promotions	21
Summary: the need for more hours at living wages	21
The impact of the living wage on workers: interview data	25
Wages earned and hours worked by interview subjects	25
Length of time at the job	26
Employment levels	26
Attitudes toward work	27
Training and productivity	28
Sources of household income and poverty status	29
Housing	30
Biggest worries	30
Conclusion	32
Appendix: Selecting a sample from the Census	33
Endnotes	35
Bibliography	37

EXECUTIVE SUMMARY

The “living-wage” law passed by the city of Baltimore, Md., in 1994 is designed to ensure that workers paid through publicly supported funds earn wages above the poverty level. It required private contractors performing services for the city to pay their workers on these contracts a stipulated minimum hourly wage of \$6.10 per hour beginning in fiscal year 1996; the amount rose in stages to \$7.70 per hour in FY 1999.

The law was extremely controversial, and it was opposed both by the private sector and by important segments of the city’s bureaucracy as threatening the “competitiveness” and economic health of Baltimore. Critics charged that higher wages on city contracts would worsen Baltimore’s already precarious fiscal state, with negative consequences for tax rates and the provision of urban services, and, by tending to raise the minimum wage more generally in the city, would reduce the city’s ability to attract private investment. Proponents argued that raising the wages of the “working poor” would not only benefit these individuals but, in the long run, would reduce the burden of welfare and other social services costs in the city.

This report examines two principal issues: (1) the direct costs of the living wage to the city of Baltimore, and (2) the impact of the living wage on workers.

Impact on Baltimore finances

- For 26 living-wage contracts that could be directly compared before and after the law went into effect, the aggregate cost increase to the city amounted to 1.2%, less than the rate of inflation. The real cost to the city of these contracts, then, actually declined slightly despite the increase in wage rates. These 26 contracts represent 52% of the contracts covered by the ordinance and roughly two-thirds of the dollar amount of all covered contracts.
- Cost changes varied considerably by contract type, from an increase of 16.6% in nominal terms for janitorial services to a nominal decline of 8.2% for the Summer Food Service Program.
- Noncompliance with the living-wage ordinance continues to be a significant problem that limits the benefits of the ordinance to an unknown degree. The impact of noncompliance on overall costs is difficult to calculate.
- The impact of the living wage on the composition of the pool of bidders is hard to detect to date with the available data.

Impact on workers: payroll data

- An analysis of payroll data for nearly 300 living-wage bus aide workers from September 1996 through June 1997 (the normal school year) showed a mean income of \$3,354, which is 21% of the level required to achieve an annual living-wage income sufficient to lift a family of four out of poverty. These workers primarily work part time – generally less than half time – for just nine months of the year. In all, the average worker in this group worked roughly 25% of the hours in a normal working year.
- Working hours were considerably greater at larger firms (560 hours per year on average) than at smaller firms (390 hours per year on average), and mean income was correspondingly higher (\$3,696 versus \$2,574). Labor turnover at large firms was less than half the level of turnover at smaller firms, suggesting that the ability to offer better hours significantly improves the stability of a company’s workforce.

- Noncompliance by contractors with the requirement that they provide regular payroll data to the city makes it difficult for this study to assess the broader impacts of the law. This noncompliance will hinder all attempts to study the impact of the living wage.

Impact on workers: Census and interview data

- An accurate count of the number of workers in the city directly affected by the living-wage law is difficult to obtain, but the best estimate is about 1,500. Because some part-time workers “share” living wage jobs, the number of workers affected could be significantly higher, although the benefits of the living wage would be accordingly attenuated.
- According to the 1990 Census, African Americans made up 72% of the city’s private-sector, low-wage service workforce, although they accounted for only 59% of the city’s population. Twenty-seven percent of the households of low-wage workers lived below the poverty line.
- Within the city’s low-wage service sector, the distribution by race and gender across occupations is highly uneven, according to the 1990 Census. For example, 84% of the low-wage janitors in Baltimore are African American, while women hold roughly 83% of low-wage administrative support and personal services jobs. On the other hand, working hours and total wage income did not vary significantly across these categories.
- Of 26 living-wage workers interviewed in depth, the overwhelming majority work part time but would work full time if they could. This finding was particularly true for women.
- The prevalence of part-time and seasonal work means that nearly half the workers in this group were unable to earn incomes above the poverty line; while they praised the ordinance highly, many were still unable to meet their families’ basic needs.
- An important effect of the living wage may be the greatly enhanced sense of recognition for work that living-wage recipients feel. This feeling, in turn, may be linked to greater job commitment, reduced turnover, and increased productivity.

Conclusions

The living wage ordinance has had positive effects on a relatively small number of workers in Baltimore without significant financial cost to the city. Moreover, the evidence suggests that higher wages and hours improve the stability and reliability of the workforce. Due to the prevalence of part-time and seasonal work, however, living wages do not always amount to living incomes. Greater consideration must be given to increasing and stabilizing hours worked.

The small financial impact on the city suggests the possibility that living wages could be paid more generally in the private and nonprofit sectors with a relatively low impact on costs and competitiveness. The precise impacts would be expected to vary by sector, and they merit further investigation.

Noncompliance in terms of paying the living wage and/or providing adequate payroll documentation remains a significant problem, affecting the impact of the ordinance and the ability to analyze that impact.

The small but important gains realized so far could be at risk from the effects of welfare reform, including the release of thousands of people into the labor market at or even below the minimum wage to the degree that their wages are subsidized. Protecting and expanding the gains from the living wage may require linking the debate over the living wage to the debate over welfare reform.

INTRODUCTION

In 1994, the city of Baltimore passed the nation's first "living-wage" law. It required private contractors performing services for the city to pay their workers on these contracts a stipulated minimum hourly wage of \$6.10 per hour beginning in fiscal year 1996; the amount rose in increments to \$7.70 per hour by FY 1999.¹ The wage minimum was set at \$6.60 per hour for FY 1997 and \$7.10 per hour for FY 1998; after FY 1999, the living wage is scheduled to rise at a rate that "exceeds the poverty level."

The ordinance directs the city's Board of Estimates to determine the specific contracts to be covered, based on the recommendation of the Bureau of Purchases. In December 1995, the Bureau of Purchases stated that the living wage applied to the following categories of contracts with private suppliers: food service, janitorial, stenography, homemaker services, carpet repair, carpet cleaning, maintenance and repair of solid waste transfer stations, health care, equipment cleaning, moving and hauling, charter bus services, and school bus services.²

The aim of the legislation is to lift the lowest-paid workers in the city out of poverty. Workers performing the sorts of services that are at issue here constitute the core of the "working poor" – people who have jobs but are unable to earn enough to meet their families' basic needs, even if they work full time. At the present federal minimum wage of \$5.15 per hour, someone working 40 hours per week for 50 weeks would earn \$10,300, which amounts to about two-thirds of the federal poverty line for a family of four. These jobs typically do not provide benefits such as health insurance or pensions.

In Baltimore and many other similar cities, most workers in these low-wage occupations are African American. According to 1990 Census data, African Americans constituted 71% of the city's private sector, low-wage service workforce while accounting for only 59% of the city's total population. The living wage, then, lies at the core of a complex set of social and public policy issues concerning race and class, health care, education, welfare, housing, employment, crime, and the health of cities.

In another era, city dwellers trying to work their way out of poverty might plausibly have looked to government employment to provide the wages and job stability needed to attain an adequate standard of living, even where the work was not highly skilled. This path was especially useful for those groups who experienced considerable discrimination in the labor market. But in the United States since the 1980s, the privatization of urban services has become a well-established trend. Driven by the desire to reduce costs, cities have contracted for a wide range of municipal functions, including car towing and storage, legal services, street light operation, labor relations, solid waste disposal, and ambulance services. Baltimore, which has been more aggressive than many other cities, has privatized bus services, airports, parking lots, billing, day care, and even building inspections (Valente and Manchester 1984). As a consequence, many city jobs that once provided steady, full-time work with benefits at adequate pay have been spun off to the private sector where low wages, part-time and seasonal work, and the lack of benefits is increasingly the norm (Carre et al. 1995).

The initial impetus behind the living-wage law came from a largely church-based organization known as BUILD – Baltimoreans United in Leadership Development. Many pastors in the poorer sections of the city noticed that more and more employed people were frequenting the soup kitchens and other charitable services offered by their churches. It became increasingly clear to them that a large population of working poor in the city was unable to live on the income from these kinds of jobs. In conjunction with union and Industrial Areas Foundation organizers, and with the strong support of the American Federation of State, County, and Municipal Employees (AFSCME), BUILD launched a campaign focusing on city contracts, on the theory that tax dollars should not be used to support private firms that were paying their workers poverty wages. It was able to push through the ordinance (No. 442) in 1994.

The living-wage law was opposed both by the private sector and by important segments of the city's bureaucracy as threatening the "competitiveness" and economic health of Baltimore. Critics charged that higher wages on city contracts would worsen Baltimore's already precarious fiscal state, with negative consequences for tax rates and the provision of urban services. They argued further that, by tending to raise the minimum wage more generally in the city, the living wage would reduce the city's ability to attract private investment. Proponents argued that raising the wages of the working poor would not only benefit these individuals but in the long run would reduce the burden of welfare and other social services costs in the city.

A year after the ordinance went into effect, an evaluation by the Preamble Center for Public Policy showed that the costs of city contracts affected by the ordinance had not risen significantly and that private investment in the city had actually increased somewhat (Weisbrot and Sforza-Roderick 1996). These findings suggested that the short-run impacts of the legislation were not a problem either in terms of city finances or economic competitiveness.

The present study, a **followup** to that evaluation, benefits from an extra year's experience. However, one of the main lessons of this study is that it is extremely difficult to assess the effects of the living-wage law, for a variety of reasons. Thus, the results presented here must be understood as partial and indicative rather than complete and definitive.

This study addresses two main areas of concern: the impact of the living-wage law on the city's budget, and its impact on workers employed on affected contracts. It utilizes a number of different sources of data to assess these impacts and provide **some context** for understanding them. These sources range from the minutes of the city's Board of Estimates for contract prices, to payroll data for school bus aides, to interviews with a group of living-wage workers.

BUDGETARY IMPACT OF THE LIVING-WAGE LAW

Opponents of the living-wage legislation argued that the law would significantly increase the cost of services to the city. In Baltimore, contractors who may have been paying their employees the then-federal minimum wage of \$4.25 an hour would have been obliged to increase wage rates to \$6.10 an hour in FY 1996 and to \$6.60 an hour in FY 1997.³ Have these costs been passed through to the city, and have they had an important effect on the city's budget?

The potential impact of the legislation is significantly attenuated by a number of factors. Most importantly, the wages stipulated in any contract cannot normally be changed during the contract's term. Some contracts have terms of more than one year, and often the contractor has the option of extending the contract. According to sources in the comptroller's office, only new contracts bid in a given fiscal year must adhere to that year's living wage. In any case, rather than a neat and simultaneous progression by all contractors through the various increments of the living wage, a range of contractual obligations may be in force at any given moment.

Second, the living wage applies only to those employees currently paid below that level. This group may include all of a contractor's employees on that contract or only some of them. However, a major concern of critics of the living-wage law was the possibility of serious "wage spillovers," that is, increases at wage levels above the new minimum implemented to maintain wage parity, thus raising costs across the board.

Some argued that rising labor costs would be passed directly onto the city through contract price increases. Others proposed that higher wages would be mitigated by increased productivity, lower turnover and, thus, training costs, and the competitiveness of the bidding environment.

In this section, we compare a selection of city contracts from before and after the living-wage ordinance in order to answer the following questions:

- Has the overall cost of city service contracts covered by the living-wage ordinance increased with the increase in wages? If so, how significant was the increase?
- Did the cost changes vary on the basis of contract type (e.g., bus, janitorial, etc.), and is this variation linked to differences in labor intensity?
- What are the difficulties involved in trying to assess the direct costs of the living wage on the city's finances?

Data sources for budgetary changes

The data required for this analysis – the record of public contracts – is in theory publicly available but is in fact quite difficult to obtain. Contract information is often filed with other city documents that contain confidential information, and it would have to be laboriously separated in order to be made available. There is apparently no central file of contract specifications and costs.

The primary data presented here – the prices for various contracts – were culled from the Minutes of the Baltimore Board of Estimates (vols. 1993:5-1997:3). Information on terms of service is based upon comparisons of bidding sheets stored in Baltimore's Legislative Reference. Prices for contracts awarded after June 1997 and the definitive list of living-wage contracts as of August 25, 1997 were provided by the Bureau of Purchases. Finally, data on labor intensity of certain contracts were taken from a report on the costs of the living wage produced by the city at the end of 1995 (Mazza 1995).

Results of the budget analysis

To produce a picture of how the living wage affects the cost of service contracts, we must control for other variations where possible, especially in the terms of service. "Terms of service" refers to the actual work required by the contract at specific locations. Several contracts -- most notably grass cutting and school janitorial -- were excluded from the study because the terms of service were significantly changed after July 1996, making cost comparisons difficult.

In all, we were able to find 26 current living-wage contracts that could be directly compared to pre-living-wage contracts based on terms of service (i.e., the pre- and post-living-wage contracts are for essentially the same work). These represent 52% of the total number of city contracts covered by the living wage (see Table 1).⁴

For the 26 comparable contracts, the total price increased from \$20,273,909 to \$20,510,301 or just 1.2%, since the living wage was implemented on July 1, 1995 (or the beginning of FY 1996). Correcting for inflation, the total price actually declined.

This is, on the face of it, a surprising outcome: the increase is well below what might be expected from a large rise in the minimum wage taking place within labor-intensive industries. The figure, however, is entirely in line with the results of the Preamble Center study, which found a nominal increase of less than one-quarter of a percent from FY 1995 and before to FY 1996 -- effectively, the first year of the living wage -- which amounted to a decline of 2.4% in real terms. The average contract price, weighted by its share in the total cost of the sample, declined by 1.9% (Weisbrot and Sforza-Roderick 1996).

The Preamble Center study suggested that the decline in overall costs might be attributed to the competitive pressures of the bidding market, which inhibited contractors from passing through the wage increase, and to efficiency gains at higher wages. The report also suggested that the institution of the living wage may reduce worker turnover and thus the costs of labor recruitment and training (Weisbrot and Sforza-Roderick 1996). Unfortunately, these hypotheses cannot be evaluated from this data (see below for a consideration of employee turnover).

Another possibility is an increase in the *intensity* of work, that is, the same amount of work performed in less time. In this circumstance, contractors would be bidding to perform a given amount of work at the higher, living wage, but counting on completing the work in less time than they used to take before the living wage went into effect. Their expectations in this regard might be based on a certain amount of slack that had existed in the system before, or on the supposition that workers would be more willing or more easily pressured into working harder for a higher wage.

Again, the contract data do not provide any guidance in sorting through these possible explanations, and there are no other quantitative data available that can be directly tied to the cost data. Moreover, our interviews with living-wage workers found no obvious trends in employer responses to the living wage. As we report below, most of the workers we interviewed reported no change in employment levels at their workplace, although many felt they were working harder since the living wage went into effect. It would be extremely valuable to be able to assess how contractors are altering their work practices in order to restrain cost increases.

Variations in cost changes across sectors

Cost changes before and after implementation of the living wage varied tremendously by contract types. Table 1 groups the contracts into rough subcategories. At the high end, janitorial service contracts rose by 16.6% overall, while bus service contracts (by far the largest category in terms of dollar value) rose by only 2.1%. The Summer Food Service Program for Youth declined by 11.6%.

TABLE 1
Contract prices before and after the living wage

Contract name	Old contract no.	Old price (\$)	New contract no.	New price (\$)	Applicable min. wage (\$/hr)	Price change (%)
Public pupil bus transportation	BP-06000	14,358,259	BP-06000	14,693,000	6.10	2.3
Athletic & cultural bus transportation	BP-I 3494	1,000,000	BP-I 2697	1,000,000	6.60	0.0
Camp variety bus transportation	BP-20495	30,960	BP-22096	36,400	6.10	17.6
General charter bus service	BP-24093	750,000	BP-20795	750,000	6.10	0.0
Bus total		16,139,219		16,479,400		2.1
Homemaker services	BP-I 1695	60,500	BP-I 0597	56,000	6.60	-7.4
Homemaker/personal care	BP-I 3595	316,000	BP-I 0497	323,000	6.60	2.2
Homemaker services total		376,500		379,000		0.7
Carpet cleaning, various	BP-12194	19,225	BP-1 4996	20,540	6.10	6.0
Mntnce, planting-Convention Center	BP-I 3295	23,970	BP-I 2797	24,894	6.60	3.9
Janitorial, 2330 St. Paul	s-50501	8,600	s-70403	11,400	6.60	32.6
Janitorial EPFL Br. 10&22	BP-I 5894	7,200	s-701 05	7,860	6.60	9.2
Janitorial EPFL Br. 14&25	BP-I 5794	6,500	S-701 06	8,280	6.60	27.4
Janitorial EPFL Br. 19&21	BP-22293	8,000	S-60703	8,700	6.10	8.8
Janitorial EPFL Br. 2&4	BP-22393	5,940	S-60704	8,736	6.10	47.1
Janitorial EPFL Br. 23 &26	BP-22693	8,100	S-60502	8,160	6.60	0.8
Janitorial EPFL Br. 30,36,38	BP-22493	10,068	S-60702	12,000	6.10	19.2
Janitorial EPFL Br. 5&42	BP-I 5994	5,900	s-70107	9,120	6.60	54.6
Janitorial EPFL Br. 6&18	BP-22593	6,672	S-60701	6,843	6.60	2.7
Janitorial EPFL Br. 7&13	S-40603	6,440	S-60602	7,560	6.60	17.4
Janitorial total		97,390		113,553		16.6
Summer Food Program for Youth	BP-95111	1,506,500	BP-96110	1,332,000	6.10	-11.6
Construction equipment rental svc.	BP-I 6694	250,000	BP-10198	250,000	7.10	0.0
Hydraulic trailer maintenance	BP-I 7794	50,000	BP-I 2296	50,000	6.60	0.0
General moving & hauling	BP-I 3794	142,965	BP-I 4596	118,508	6.10	-17.1
Push pit maintenance	BP-201 94	85,600	BP-I 1897	84,650	6.60	-1.1
Repair, mntnce of terex scrapers	BP-20294	49,275	BP-I 0697	57,150	6.60	16.0
Sludge disposal - DPW	BP-21 294	1507,235	BP-I 9996	1,575,500	6.60	4.5
Trailer preventive maintenance	BP-I 7594	50,000	BP-I 0396	50,000	6.10	0.0
Miscellaneous total		2,135,075		2,185,808		2.4
Total		\$20,273,909		\$20,510,301		1.2

Source: See text. Totals may not add due to rounding.

Some part of this disparity may be tied to the proportion of workers on a contract whose hourly pay had been below the living-wage level before the ordinance was implemented. The contract for general charter bus service, for example, covers bus drivers who made \$8.50 per hour before the living wage went into effect; here, the living wage is not a cost factor and, indeed, this contract was rebid at exactly the same price.

The largest single contract, accounting for 72% of the total dollar value of the 26 contracts combined, is for public pupil bus transportation. This work includes relatively well-paid bus drivers and a large contingent of bus aides whose wages used to be substantially below the living wage. In the most recent version of contract, \$6.5 million dollars, or roughly 45% of the total contract, was earmarked for the bus aide component. Of this, about \$3.8 million (or 58%) was for wages for the bus aides. Put another way, roughly 25% of that contract was susceptible to wage increases that may have been on the order of 40%. Yet, the total contract price rose only 2.3%.

Another source of variation might be related to the labor intensity of the sector. Service contracts pay not only for labor but also for equipment and other overhead, along with a profit margin. In some sectors with low equipment needs, a much higher proportion of the contract price may go for direct labor costs. Janitorial contracts, for example, pay as much as 86% of the contract price in wages. Health care contracts, by contrast, pay roughly 10% of the contract in wages.⁶ In food service contracts, which recorded the biggest drop, labor costs are less than 20% of total costs. Other variables, such as a reduction in demand for the program, have a bigger impact on the overall cost decline.⁷ Thus, the impact of the living wage should be felt in the most labor-intensive sectors. In fact, we find the largest percentage increase in janitorial services, as expected, but other sectors did not exhibit any consistent relationship of this sort.

Possible impact of wage spillovers

Some contractors that provide minimum wage labor also employ other low-wage workers above the federally mandated minimum wage. This second group may include workers with more skills, seniority, or responsibility than those at the bottom of the pay ladder. When the federal minimum wage is raised to the living wage, the new wage floor may approach or even exceed the prevailing wage within this second group, putting pressure on employers to increase wages for these workers. This phenomenon is referred to as a wage spillover. As a result, the living wage may have significant effects outside of the lowest-paid category of workers.

In the case of the public pupil bus transportation contract, for example, the prevailing wage of a special needs bus aide has begun to put pressure on the wages of special needs bus drivers. Contracts bid after July 1, 1997 must pay aides \$7.10 an hour; this amount rose to \$7.70 an hour the following year. The current midrange for bus drivers is roughly \$7.85 to \$8.50 an hour. According to BUILD staff, drivers have begun to demand increases to maintain the traditional wage differential with bus aides, while contractors have complained that the contract prices are too low to accommodate both the living wage for bus aides and higher wages for drivers. This is an emerging issue that will require further research.

Impact of the law on the bidding environment

A quantitative analysis of changes in the bidding environment—whether that environment is more or less “competitive” and whether these changes might influence price—was not possible for this study. However, there are some ambiguous signs of change that can be enumerated.⁸ As with wage spillovers, this effect is an emerging one and has remained in the background of the debate.

According to the contracts reviewed here, some reorganization has taken place in both the grass cutting

and bus sectors. In grass cutting, the withdrawal of some medium-size contractors prompted the subdivision of contracts to favor small-scale management. Bus contracting has shifted slightly toward larger, national companies and away from smaller, local companies. We are unable to say, however, if these changes are an effect of the living-wage ordinance.

Effect of noncompliance with the law

Since the ordinance was first implemented, there have been several reports of ongoing violations. Also, there has been some ambiguity concerning when contractors must pay the living wage, especially contractors with long contracts or options for extension. Whatever the cause of noncompliance, the result would be to reduce the upward pressure on costs to the city.

A significant example concerns the bus contracts that make up such a large proportion of the contracts on which we were able to develop comparable data. The majority of bus companies were not in compliance during the first half of FY 1997 due to a dispute over the nature of bus contract extensions. At this point, wages were scheduled to rise to \$6.60 an hour, but most companies continued paying at the FY 1996 rate of \$6.10 an hour. Other bus companies were found to be in noncompliance since January 1997 (i.e., the second half of FY 1997).

Compliance, in principle, is enforced by the city Wage Commission, which must sift through payroll data on every worker. Because of the voluminous data and the small staff, the commission has so far been able to monitor only bus contracts. But, as shown below, this monitoring has not guaranteed compliance.

Summary: an insignificant budget impact

The budgetary impact of the living wage has, to date, been insignificant. Adjusting for inflation, the cost of a set of comparable contracts from before and after the institution of the living wage actually declined slightly.

The causes for this are difficult to assess given the currently available data. The lag in implementation due to contract extensions probably plays a role, as do the contribution of efficiency gains; cost reductions related to lower employee turnover; increasing intensity of work; a restructuring in favor of larger, lower-cost service providers; and noncompliance in limiting the cost impact.

But two years into the living wage, the widely voiced fear that its implementation would place intolerable strains on the city's budget have not been realized. While it is true that the full effect of the living wage may not yet have been felt, the lack of impact so far is striking, and it indicates that the city's ability to absorb the living wage has not yet come close to its limits.

Research that could elucidate the reasons behind this non-impact would be tremendously valuable. In other words, we need to understand better how the cost of the living wage is absorbed or compensated for by (1) contractors in the form of reduced profits; (2) workers who labor more intensively; and (3) increased productivity, such as through the displacement of smaller firms by larger, more productive firms.

A PICTURE OF LOW-WAGE WORKERS IN BALTIMORE

In order to appreciate the effect of the living wage on workers, it would be helpful to establish some sense of the working and living conditions of Baltimore's low-wage service workers in general; in the sections that follow we will examine data for living-wage workers in particular. Because the 1990 Census data we use to sketch the broader population and the particular data we have drawn on living-wage workers are not comparable, we are not able to construct a statistically representative sample of living-wage workers. Thus, this sketch provides only a notional basis for comparison. Also, a considerable amount of time has elapsed since the 1990 Census, so many things may have changed.⁹ We nevertheless feel that this sketch provides an important backdrop to what follows.

The Census data provide information about the employment, family, and housing circumstances of Baltimore's low-wage service sector workforce.¹⁰ We selected a subset of people who met the following criteria:

- (1) they worked for government or private sector for-profit and nonprofit employers;
- (2) they worked in one of a range of occupations chosen for their similarity to occupations covered by the living-wage law (e.g., janitors and cleaners, parking lot attendants, bus and taxicab drivers, etc.);
- (3) they worked in one of a range of sectors similar to those covered by the living-wage law (landscaping, construction, food service, transportation, finance/insurance/real estate, business and repair services, entertainment and recreation services, and professional and related services); and
- (4) they worked for low wages. Low wages were defined as below \$6.31 per hour, which was the median estimated hourly wage for the service workers in these categories in 1989. Thus, half of all service workers in low-wage occupational categories earned less than \$6.31 an hour in 1989 and became part of our sample group."

We have also relied on the Bureau of Labor Statistics for data concerning wage rates of various occupations. A complete explanation of the categories we used and what they mean can be found in the appendix.

Characteristics of Baltimore's low-wage service labor force

From the Census data, we estimate that there were 20,136 workers in our occupational categories whose approximate wage rate was below \$6.31 per hour in 1989. Seventy-one percent of these workers were African American, although this group represents only 59% of the city's total population. We present a summary of the racial characteristics and occupational categories of Baltimore's low-wage workforce in **Table 2**.

Janitors constituted the largest occupational category of low-wage workers in the city (28% of the total). The second largest group was employed in administrative support occupation (18%), followed by food service (16%), guards (8.5%), and construction workers (8.5).

The unequal distribution of racial groups among these occupations suggests a racially segmented labor market within these occupational categories. To test for the statistical significance of this unequal distribution, we compared these observed counts against the number expected for each occupational category if people of different racial groups were evenly distributed across them. In other words, we would expect the proportion of janitors who are African American to be roughly equal to their share of the total population of low-wage service workers. By this test, African Americans are over-represented in the following occupational categories: janitors, guards, and construction workers. A chi square test indicates that these disparities are statistically significant, meaning that they cannot be attributed to chance.¹²

TABLE 2
Low-wage service workers by occupation and race, 1990

Occupation		Race			Total
		Black	Other	White	
Administrative support	Count	2,173	152	1,206	3,531
	% of occupation	62%	4%	34%	100%
Construction	Count	1,291	—	426	1,717
	% of occupation	75%		25%	100%
Food service	Count	2,001	28	1,083	3,112
	% of occupation	64%	1%	35%	100%
Guards	Count	1,236	19	457	1,712
	% of occupation	72%	1%	27%	100%
Janitors	Count	4,732	19	854	5,605
	% of occupation	84%	—	15%	100%
Transport	Count	417	—	186	603
	% of occupation	69%	—	31%	100%
Laborers	Count	1,469	—	725	2,194
	% of occupation	67%	—	33%	100%
Personal services	Count	1,079	25	558	1,662
	% of occupation	65%	2%	34%	100%
Total	Count	14,398	243	5,495	20,136
	% of occupation	72%	1%	27%	100%

Source: 1990 Census.

The gender distribution of low-wage workers is similarly uneven and beyond what would be expected if chance were the only factor in determining the distribution.¹³ Women constitute 49% of this population, but, as shown in **Table 3**, they account for 83% of administrative support workers and 84% of the personal services category: attendants, guides, child care providers, public transportation attendants, etc. Conversely, construction and other “laborer” categories, security guards, and transportation are primarily a male domain.

As our discussion below shows, the gender and racial segregation of work does appear to contribute to unequal working time and unequal wage income for women in our sample population of service workers. At the same time, the disproportionately large share of African Americans in the low-wage service sector as a whole inevitably contributes to the higher rate of poverty in that population.¹⁴

It is often supposed that the low-wage service workforce is to a large degree composed of teenagers and recent school-leavers with few, if any, family responsibilities, and that their low wages are sufficient for their needs. The mean age of low-wage service workers in Baltimore, however, was 34 years and ranged from 16 to 87 years. Not surprisingly, these individuals had a variety of household responsibilities.

Those who identified themselves as the householder (the person in whose name the house is rented or owned) were, on average, 43 years old. As **Table 4** shows, 61% of this group were women. Of these women,

TABLE 3
Low-wage service workers by occupation and gender, 1990

Occupation		Gender		Total
		Female	Male	
Administrative support	Count	2,923	608	3,531
	% of Occupation	83%	17%	100%
Construction	Count	59	1,658	1,717
	% of Occupation	3%	97%	100%
Food service	Count	1,428	1,684	3,112
	% of Occupation	46%	54%	100%
Guards	Count	447	1,265	1,712
	% of Occupation	26%	74%	100%
Janitors	Count	2,697	2,908	5,605
	% of Occupation	48%	52%	100%
Personal services	Count	1,388	274	1,662
	% of Occupation	84%	16%	100%
Transport	Count	202	401	603
	% of Occupation	33%	67%	100%
Laborers	Count	756	1,438	2,194
	% of Occupation	34%	66%	100%
Total	Count	9,900	10,236	20,136
	% of Occupation	49%	51%	100%

Source: 1990 Census.

roughly three-fourths provided 100% of the family's income (not shown in table). The combination of racial and gender segmentation in the labor market seems to be an especially severe problem for African American women in Baltimore. And the presence of children in predominantly women-headed households results in a startling statistic: nine out of 10 children of working families in poverty are African American.

Another effect of low-wage work is that many more people in a low-wage service worker's family are likely to be mobilized into the labor market when compared with all other Baltimore families. As **Table 5** shows, 29% of low-wage families had three or more family members in the labor market, compared with 15% for the city as a whole.

According to the Census, 6% of all low-wage service workers reported receiving some form of Social Security income, including Social Security pensions and survivors benefits and permanent disability insurance payments. Another 6% reported receiving some form of public assistance; the amount averaged \$3,073 per year and consisted of supplementary security income from federal or state welfare agencies for people who are age 65 and over, blind, or disabled; Aid to Families With Dependent Children; and general assistance. Under 4% of low-wage workers reported receiving some form of retirement or disability income in addition to their wages. This type of income includes retirement pensions or survivor benefits, and disability income from sources such as workers' compensation.

TABLE 4
Household status by gender in Baltimore, 1990

Gender		Household status					Total
		Householder	Nonrelative	Other relative	Child	Partner	
Female	Count	4,243	902	465	2,476	1,814	9,900
	% of household status	61%	47%	34%	35%	64%	49%
	% of total	21%	4%	2%	12%	9%	49%
Male	Count	2,722	1,008	906	4,560	1,040	10,236
	% of household status	39%	53%	66%	65%	36%	51%
	% of total	14%	5%	4%	23%	5%	51%
Total	Count	6,965	1,910	1,371	7,036	2,854	20,136
	% of household status	100%	100%	100%	100%	100%	100%
	% of total	35%	9%	7%	35%	14%	100%

Source: 1990 Census.

Characteristics of low-wage jobs

The impact of privatization of public services is dramatically revealed in a comparison of government and private sector wage rates for similar work. According to the Bureau of Labor Statistics (BLS), prevailing wages for service occupations in the private sector are significantly lower than in the government sector.¹⁵ Government workers in the identical service sector occupational categories to our Census sample normally averaged 35.4 hours per week, worked an average 42 weeks per year, and had an average wage income of \$14,263 in 1989 (indicating an hourly pay rate of about \$9.90).

For example, in May 1992, the BLS estimated that there were some 12,000 people employed as janitors in Baltimore, 72% of whom worked in the private sector while the rest were employed in state and local government. The 1992 median wage for janitors in the private sector service industry was \$5.19 per hour, and 75% of these janitors were making less than \$6.50 per hour. In the government sector, by contrast, the median wage for janitors was \$9.19 per hour.

According to federal poverty data for 1992, a worker needed a wage of \$6.89 per hour for 40 hours a week over 52 weeks to reach the \$14,335 poverty threshold for a family of four. At \$5.19 per hour, a worker would have had to work an average of at least 53 hours per week over 52 weeks to reach the poverty level. By 1995, the median wage for janitors in the service sector had climbed to \$5.50, but the poverty threshold had increased faster, so that a worker would have had to work an additional 1.3 hours a week, or at least 54.3 hours, to reach the poverty line in that year. In the past, the workers presently covered by the living-wage law might have been working directly for the city at a living wage. It is when this work is contracted to the private sector that it becomes impossible to earn an adequate living.

TABLE 5
Number of workers in family, by wage level

Number of workers in family	Low-wage families		Other Baltimore families	
	Count	% of total	Count	% of total
1 worker	4,190	28%	51,749	41%
2 workers	6,528	43%	56,825	45%
3 or more workers	<u>4,311</u>	29%	<u>19,041</u>	15%
	15,029		127,615	

Source: 1990 Census.

Housing circumstances of low-wage workers

Housing is frequently one of the largest expenses of low-income people. The usual rule of thumb for housing affordability is that total housing costs should not exceed roughly 30% of total income. Sixty-four percent of low-wage families in Baltimore rent their homes, and, of these, 45% report paying in excess of 30% of their income on housing. **Table 6** shows the proportion of low-wage households who own or rent their homes and compares it with all families in the city.

Low-income families live in more crowded circumstances than others in Baltimore. The average number of people in low-wage households is 3.64, while for the city as a whole it is 2.26 (not shown in table). One measure of the adequacy of a family's housing situation is the number of rooms per person. Government guidelines specify a ratio of one room to a person to define acceptable housing density.¹⁶ In Baltimore, the citywide average is 2.8 rooms per person, while the average for low-wage households is 1.85.

Poverty status of low-wage service workers

The Census distribution of all low-wage households with respect to the poverty level is presented in **Figure 1**. **The** median family income of all low-wage service workers is 171% of the poverty line.¹⁷ Twenty-seven percent of low-wage service workers' households were below the poverty line in 1990.¹⁸ Of these families, 74% were African American.

From the Census we also determined that 15,034 children under the age of 16 were living in the households of low-wage service sector workers. But a disproportionately large number – 40% – of these children lived in households below the poverty line. Of these children in poor households, 89% were African American. **Table 7** provides a breakdown of all poverty-level households by race, number of children, and household type.

Summary: who benefits from a living-wage law?

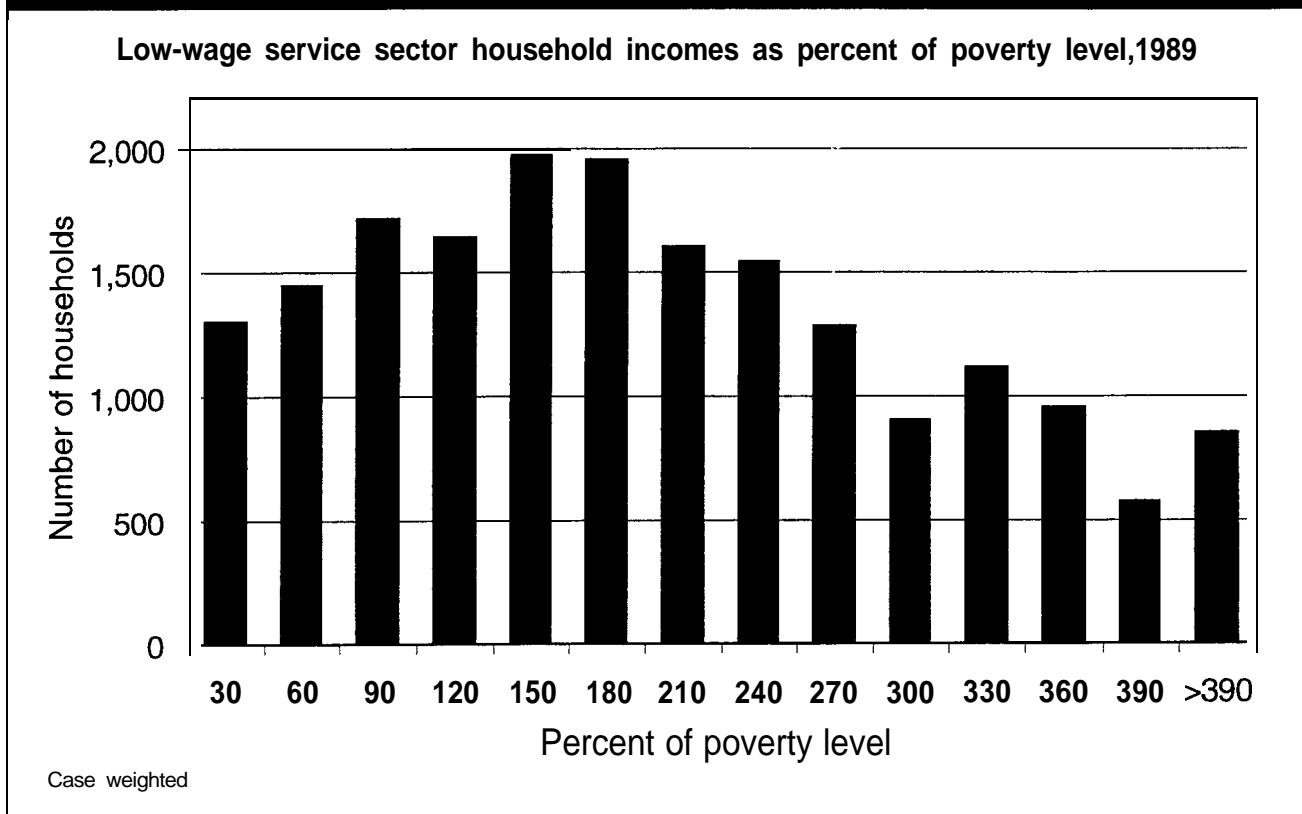
This sketch of the low-wage service sector population highlights race and gender as markers of the low-wage population in general and the poverty-level population in particular. It stresses that private sector service jobs of the sort specifically targeted by the living-wage law are generally and persistently far from providing for a family's basic needs, although many families are primarily dependent on the income from such jobs. The jobs affected by the living-wage law might once have been located in the government sector, which provides

TABLE 6
Housing tenure status of Baltimore households

	Low-wage families		All families in Baltimore (%)
	Frequency	Percent	
Owned with mortgage	4,204	22.3	27.4
Owned free and clear	2,539	13.5	21.4
Rented for cash	12,020	63.7	50.4
No cash rent	112	0.6	0.8

Source: 1990 Census.

FIGURE 1



wages well above the poverty line for full-time work, but with the increasing prevalence of contracting for public services, they are likely now to be found in the private sector.

In what follows, we try to estimate the number of workers in Baltimore who may presently be working on living-wage contracts. We then provide an analysis of the earnings history of a group of bus aides whose jobs are subject to the living-wage law, and we offer some insights into the circumstances of living-wage workers gleaned from in-depth interviews.

TABLE 7
Race, number of children, and household type for all poverty households, Baltimore, 1990

<u>Race/ethnicity</u>	Number of children					Total
	1	2	3	4	5	
Black						
<i>Household type</i>						
Married couple	92	33	31	66		222
Male householder family	155	53	20			228
Female householder family	513	687	617	134	59	2,010
Female nonfamily	20					20
Total	780	773	668	200	59	2,480
Other						
<i>Household type</i>						
Female householder family				28		28
Total				28		28
White						
<i>Household type</i>						
Married couple	25		93			118
Female householder family	69	71			48	188
Male nonfamily	23	25				48
Total	117	96	93		48	354

Source: 1990 Census.

ESTIMATING THE NUMBER OF LIVING-WAGE WORKERS

After discussions with many inside and outside city government, we could find no estimates for the number of workers affected by the living-wage law. It would, obviously, be helpful to have some sense of the magnitude of this figure in order to assess the impact of the law.

In December 1995, the city's Bureau of the Budget and Management Research (BBMR) produced a rough estimate of the cost of the ordinance (Mazza 1995). To do so, it had to estimate the average cost of low-wage labor as a percentage of city expenditure on eligible service contracts. It also had to make some assumptions about how contractors were likely to behave in the face of the mandated wage increases. This study, which was done in advance of the law's implementation, projected a 9-13% increase in city contract expenses resulting from a stipulated wage of \$7.70.

BBMR estimated existing prevailing wages and the cost of low-wage labor as a percentage of the total contract cost. Secondly, it assumed that all contractors would pass on all cost increases to the city. Third, BBMR assumed wage spillovers would tend to push up the wages of other employees and that these costs, too, would be passed onto the city. The study assumed no increase in productivity and no decrease in the costs of absenteeism, turnover, recruiting, or training that might be expected from the availability of a "premium wage."

In **Table 8**, in the columns entitled "1995 estimated low-wage labor cost" and "1995 prevailing wage," we present some of the data underlying BBMR's projection¹⁹ Starting with the estimated low-wage labor cost, we subtract 15% for payroll taxes to arrive at a figure more closely approximating what would actually be paid out in wages (adjusted compensation). Our own estimates (from interviews) about the total number of working days per year and the average number of hours per day for a given type of job allow us to calculate total working time (number of days multiplied by number of hours). We are then able to derive an estimate of the numbers of workers by dividing working time into adjusted compensation costs.

This procedure, to be precise, gives us an estimate of the number of *living-wage jobs* rather than workers. That is, one bus aide job would amount to an average of six hours per day for nine months (188 days) of the year. This does not automatically imply that one person does that job and, indeed, in the case of bus aides, it almost certainly does not mean that (see below). Depending on how living-wage jobs are allocated to workers, one job could equal anywhere from one to four persons. The impact of the job in terms of total wages earned in the city would not vary, although some of the hypothesized benefits of the living-wage would be attenuated to the degree that a single living-wage job is spread over several people.

In this way, we arrive at an estimate of 1,494 living-wage jobs. Note, however, that what might be thought of as a "complete" living-wage job is not necessarily a full-time one, if we consider full time to be 40 hours a week for 50 weeks a year. Some jobs are normally seasonal (188 days per year) and/or normally provide less than eight hours a day of work.

How big is 1,494 jobs? If we assume one job to one person, this would represent about 7.4% of the 20,136 low-wage service workers described above. If one thought that each living-wage job was, in effect, "shared" by two workers, then as many as 15% of the low-wage service labor force in Baltimore might be touched directly, and in a reasonably significant way, by the living-wage legislation. If one thought each job was "shared" by four workers, then the impact of the living wage is felt directly by 30% of this segment of the labor force, but in a much-attenuated way. Plainly, more research is necessary to better estimate the numbers involved.

TABLE 8
Estimated number of living wage jobs

Contract category	1995 estimated low-wage labor cost (\$)	1995 prevailing wage (\$)	Estimated working days	Estimated daily hours	Estimated number of jobs
Food service					
Education	873,659	6.10	188	6	108
CARE	410,664	6.10	241	6	40
OED	258,514	6.10	241	6	25
School bus					
Regular	580,000	7.50	188	6	58
Special needs driver	3,915,000	7.50	188	6	393
Special needs aide	3,915,000	6.10	188	6	484
Janitorial					
Other	231,589	6.10	241	6	22
Education	2,322,039	5.50	188	6	318
Stenographer					
Part A	163,628	6.10	241	8	12
Part B	106,878	7.00	241	8	7
Part C	133,114	7.50	241	8	8
Maintenance and repair					
Solid waste transfer	8,891	6.10	241	8	1
Carpet repair	6,150	6.10	241	8	0.4
Carpet cleaning	15,405	6.10	241	8	1
Equipment cleaning	33,725	6.10	241	8	2
Moving and hauling					
	82,956	6.10	241	8	6
Health care					
	137,000	7.00	241	8	9
Total					1,494

Source: Mazza 1995 (1995 estimated costs and wages); interviews (estimated working days and hours).

THE IMPACT **OF THE** LIVING WAGE ON WORKERS: PAYROLL DATA

Bus aide is a strategically important occupation in the general scheme of things, although the value of the work is not rated highly in market terms. Bus aides are responsible for keeping order on the bus, helping children on and off as well as across the street, acting as role models, protecting the driver from dangerous distractions, providing first aid, and helping to manage emergencies. In short, they are directly responsible for the safety of schoolchildren and must have considerable “human relations” skills to do the job well. Bus aide work has been shown to produce high levels of stress (Lede et al. 1994).

Bus aide work is normally part time and occurs in widely separated segments of the day. A typical bus worker will start work between 6:00 and 7:00 a.m. and finish the morning route by 9:30. From 9:30 to 1:00 p.m. is enforced idle time, for which no pay is received. The worker is free to go off site, but this might mean a long journey home and then back again for the afternoon shift, or finding somewhere else to wait. For example, one bus aide with whom we spoke left her house every morning at 4:30 a.m. in order to catch a bus to take her to work. Plainly, she is unable to make two roundtrips per day. Yet, given the odd hours involved, it is extremely difficult to mesh bus aide work with a second part-time job. Furthermore, bus aides are usually employed only for the nine-month school year.

We analyzed nine months worth of payroll data for 267 bus aides in order to determine the following:

- How many hours do bus aides work during the school year and what income levels are associated with this work?
- What is the turnover rate of the bus aide workforce?
- Do hours and turnover rates vary by size of firm?

Scope and quality of the payroll data

The living-wage ordinance requires bus companies working on contract to the city to routinely file payroll data on their employees showing hours worked and pay rates. The data is limited to the period from September 1996 to June 1997 – that is, the normal nine-month school year.²⁰ It is further limited, by necessity, to those companies that complied with the ordinance and submitted their payrolls to the city’s Wage Commission.

We collected data on 267 workers, representing substantially more than half of the entire population of bus aides employed on Baltimore city contracts in the school bus sector. The data exclude bus drivers who are not covered by the living-wage law, since they earn close to **\$8.00/hour**.

Since few contractors submitted data for the 1995-96 period, it was not possible to do a “before and after” study to test if companies were reducing working hours in response to higher hourly wage rates. Given the special nature of bus aide work, however, this seems unlikely. The bus routes have not changed and cannot be drastically sped up, nor can an aide work on more than one bus at a time.

The payroll data are certified and signed by company officers and submitted to the Wage Commission, where they are subject to public scrutiny. The data are checked by Wage Commission staff and are used to conduct spot-checks, on-site company inspections, and hearings, as well as to establish **fin**es and **backpay** settlements. At least one company, however, has admitted to submitting incorrect data, and many companies have not submitted data at all.

The working year, as noted, runs from September to June. In trying to estimate the rate of labor turnover, we have registered as an instance of turnover any individual who drops off the payroll data for more than eight consecutive weeks.²¹ We are not able to determine why the separations occur. In addition, any worker who worked less than a week total was not included in our analysis.

Hours of work

On average, bus aides in this group worked 508 hours total during the year, or only about 56 hours per month (see **Figure 2**). Out of 267 workers, 12.5% worked less than 50 hours for the year, close to 25% worked between 700 and 900 hours, and only 10% managed to work more than 1,000 hours, which would represent something like a half-time job.²² The average bus aide, instead, worked a quarter of normal hours for a full-time, full-year job.

These hours data suggest that the average worker does not have a steady assignment i.e., five days a week, four weeks a month, on the same route. A steady assignment, by our estimate, would produce 20-30 hours per week on average (720-1080 hours per year), depending on the route. Why are a majority of the bus aides so far from attaining this level of hours? One possibility is that the bus aides prefer to work a smaller number of hours and are not available for more consistent work. But this seems extremely unlikely. Every indication we received from our interviews (see below) suggests an overwhelming desire for steadier work and more full-time work. And other researchers have established that much contemporary part-time work is involuntary – that is to say, the individuals would work full time if they could (Carre et al. 1995).

The alternative explanation is that employers prefer, for some reason, to spread the work out over a larger labor force than they appear to need. This seems, on the face of it., perverse – at least from the point of view of the final purchaser of the service, which is the city. One imagines very easily that the ability of a bus aide to perform his or work well depends on knowing the individual children and being able to anticipate problems and deal with them efficiently and effectively. It seems equally likely that it is important for the children to know the bus aide and to have consistent expectations about what behaviors will be tolerated. Instead, it would seem that the employment practices of the contractors specifically make this deeper knowledge impossible.

Presumably, this hiring pattern affords some perceived advantages to the employer. It certainly provides numerical flexibility, so that workers are always available as needed and yet, as we have seen, never have to be paid when they're not needed. Even so, the 65% of bus aides who do not work long enough hours to be on a steady assignment seem rather more than would be required to ensure a buffer supply of labor available on short notice. Unavoidably, this suggests that some employers at least may see an **advantage in** having an unstable labor force comprising workers who are prevented from developing any sense of ownership in their jobs – a sense that may, in turn, generate stronger demands about appropriate terms of work.

This is merely a hypothesis in the absence of other plausible explanations, and would be well worth additional research. The city has an interest in ensuring that the role of bus aide is performed as well as possible. One of the justifications for paying the living wage is that it will attract **good workers and encourage** them to provide high-quality services. The city needs to be sure that its vendors are **allowing the full benefits** of the living wage to be realized.

Income

Even if paid at the FY 1997 level of \$6.60 per hour, the low level of hours worked means that bus aides are far **from earning** what could be thought of as a living income. And, of course, many bus aides are still being paid \$6.10 an hour as a result of the disputed interpretation of contract extensions described above. We base our calculations **here**,

though, on the \$6.60 rate, since **backpay** has been awarded when firms have come into compliance.

At \$6.60 per hour, the mean annual income was \$3,355, or \$12,645 short of the city's own figure for keeping a family of four out of poverty (see **Figure 3**). The top 10% of earners in our sample brought in \$6,600 to \$8,580 per year, the lower 50% earned less than \$3,300, and 12.5% earned less than \$330 for the year. On the other hand, it is crucial to recall that, if paid at the current federal minimum wage of \$5.15 per hour, the mean annual income of this group of workers would have been only \$2,616.

We cannot know, of course, what other sources of family income these workers may have had during this period. It is worth repeating, though, that the peculiarity of the schedules involved makes it unusually difficult for the bus aides themselves to supplement their incomes with other part-time work.

Firm size

Hours worked per year and, thus, incomes varied strongly by firm size. Larger firms (those employing more than 50 bus aides, of which there were two) employed their bus aides an average 560 hours per year (see **Figure 4**) for an income of \$3,696. Of the 267 workers in our sample, 176 worked in larger establishments. Small firms, by contrast, offered an average of 390 hours of work per year (see **Figure 5**), for an income of \$2,574. Half the bus aides at these small firms worked less than 350 hours per year, for a median income of \$2,310. Small firms employed an average of 17 bus aides each.

Labor turnover

Turnover is important because it is related to the experience of workers and the quality and efficiency of work they are able to do. It is also related to the operating costs of the firm, including the costs of recruiting new workers and the inefficiencies connected with learning the job. The definition of labor turnover used here is the number of workers who drop off the payroll divided by the total size of the workforce for the nine-month school year. We count workers who have dropped off the payroll for at least eight consecutive weeks; this fairly generous margin probably works to understate the magnitude of the changes involved.

The average turnover for the large firms, by this measure, was 19.3%, meaning that, for any 10 jobs, the firm employed approximately 12 workers during the year. This is not an especially low figure, but it is completely eclipsed by the 41.4% turnover rate for small firms. This difference illustrates that the small firm employment environment is particularly unstable.

Promotions

At one of the larger bus companies we identified at least 10 workers who started out as bus aides and, after roughly 20 weeks of work, were promoted into higher-paying driver's jobs. This is an important development for the workers involved, and may be connected to the more favorable turnover experience of this particular company. We could find no evidence of such a trend at the other companies, and we were also unable to determine if this company conducted training programs or assisted workers in getting commercial driver's licenses.

Summary: the need for more hours at living wages

The bus aide sector of Baltimore's low-wage labor market is in considerable flux. There is significant employment instability across the board, but it is most strongly in evidence at smaller companies. When we consider the safety and quality of care of children and the disabled who are transported by private bus companies on contract for the city, employment instability becomes a real public issue.

At its most regular, bus aide work involves two shifts a day, each shift consisting of two to three hours.

FIGURE

Frequency distribution of annual hours, bus aides

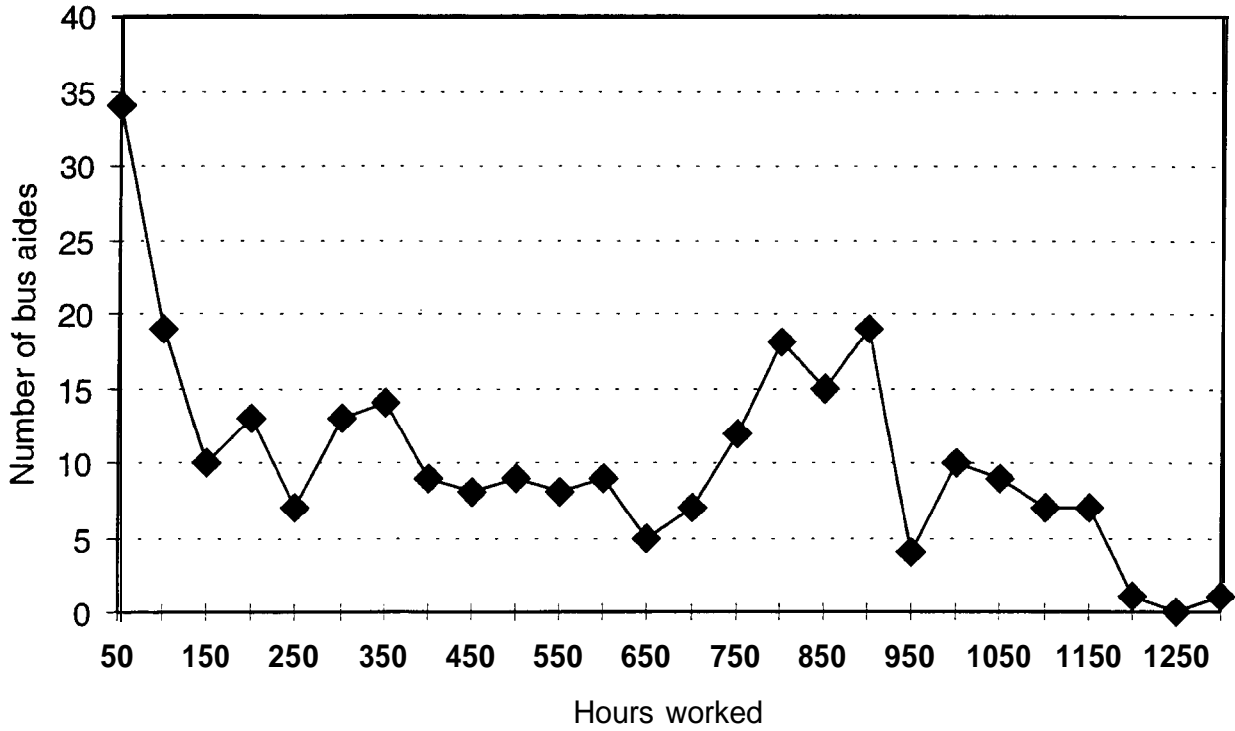


FIGURE 3

Frequency distribution of annual income, bus aides

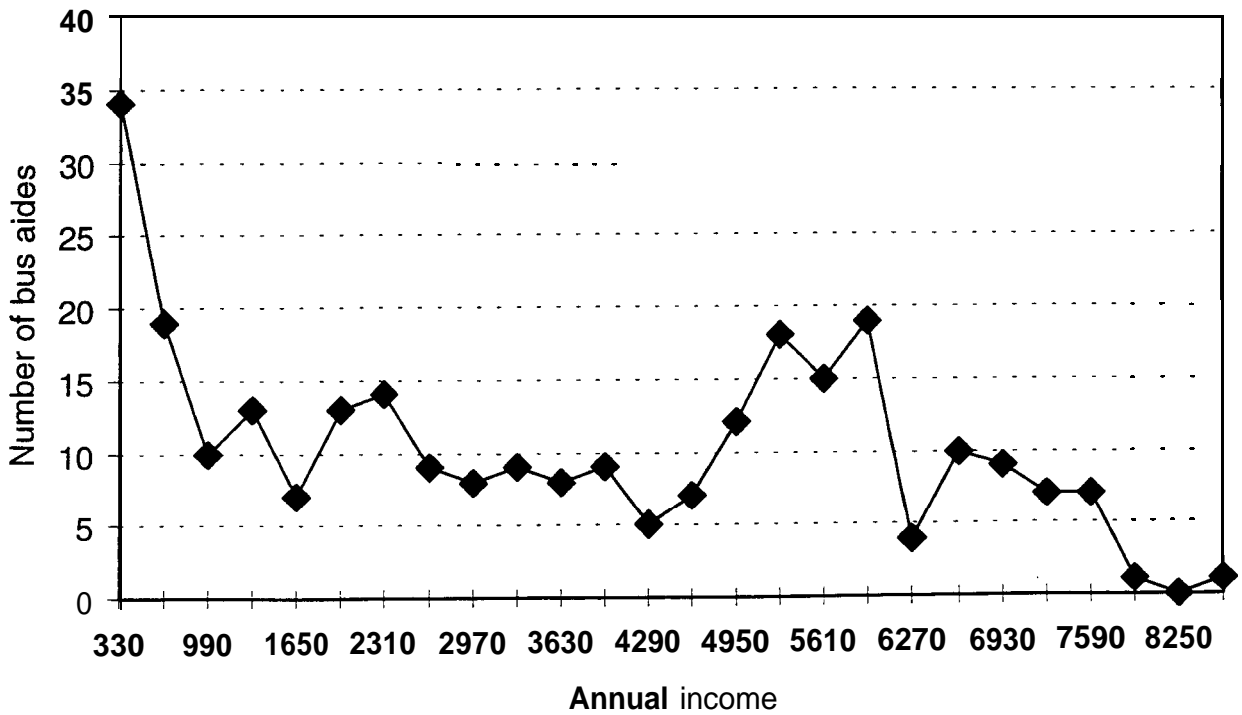


FIGURE 4

Distribution of hours worked, large companies

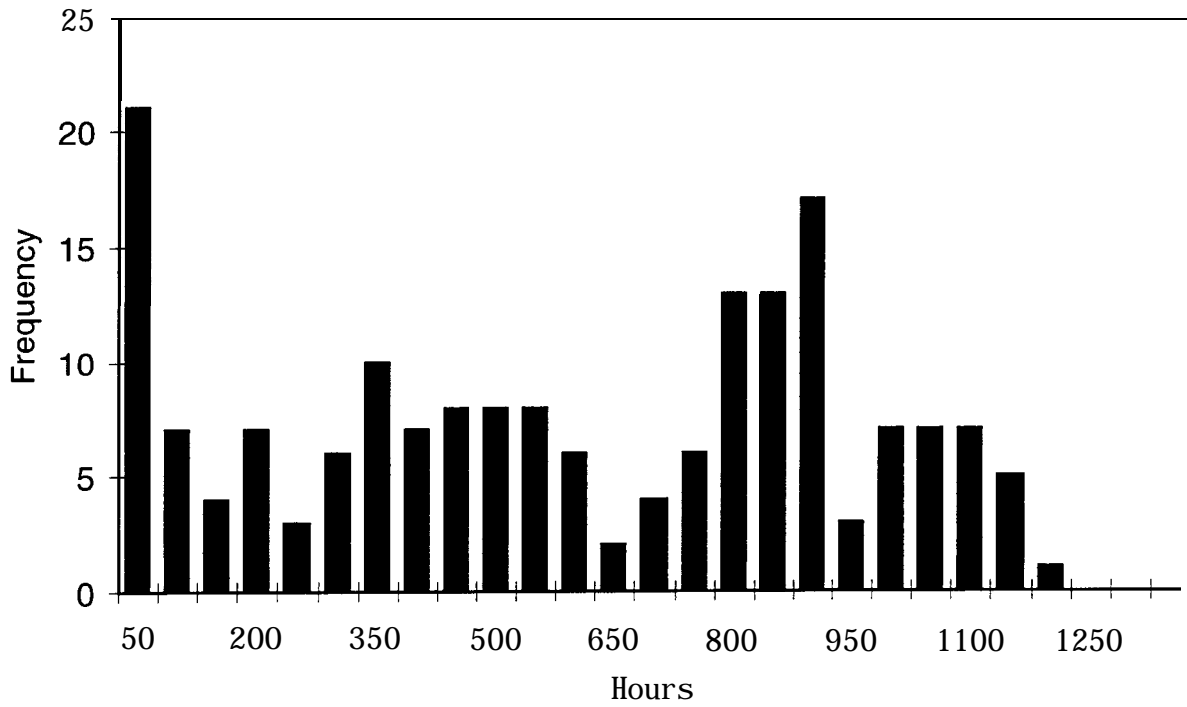
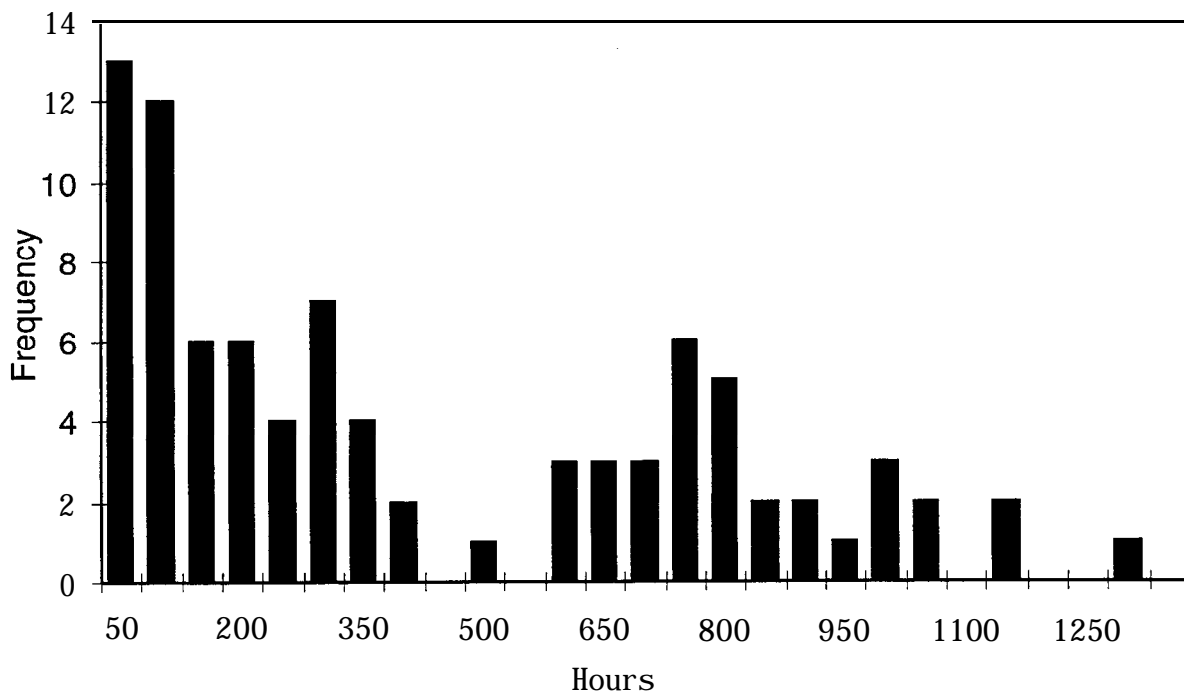


FIGURE 5

Distribution of hours worked, small companies



At best, these hours would amount to something between half-time and three-quarter-time work, but most bus aides do not enjoy even this consistency or quantity of work. On an annualized basis, the majority of bus aides average no more than 25% of a full year's work (i.e., 2,000 hours).

As a result, the incomes yielded from bus aide work are dramatically lower than the poverty line, despite the living wage. The living wage, in this context, is an important improvement for these workers, but is not by itself a solution to the problems of the working poor. Greater attention must be paid to the issue of hours worked and whether it would be possible to draw work hours into the living-wage equation.

If we agree that job instability erodes the quality of service in this important area, then a first step to stabilizing the sector would be to ensure that workers are offered the maximum possible hours at living-wage rates. Small companies, as we have shown, maintain wider available labor supplies, and they seem to prefer employing more workers at fewer hours instead of fewer workers at more hours in better jobs. This practice arguably has substantial negative consequences. It may be productive to make employment practices part of the process of assessing the contract-worthiness of bidders for these jobs. This step might provide much-needed incentives to retain staff, stabilize work schedules, and develop workers' capabilities.

THE IMPACT **OF THE** LIVING WAGE ON WORKERS: INTERVIEW DATA

To learn more about the circumstances of workers in the city's low-wage labor market and to measure the impact of the living wage on workers, we interviewed 26 people currently working in living-wage jobs. The 45-minute interviews focused on three of the largest categories of affected service workers: food service workers, janitors, and school bus aides. Twenty-one in this group were women. The detailed questionnaire of 55 questions roughly followed the Census questionnaire. The questions covered employment, family characteristics, income, and expenses of these workers.

We did not contact these workers at their place of employment, out of concern that this might have placed them in some jeopardy with their employers. Nor did we use the payroll data as a guide to potential respondents on the thesis that such a method would, in effect, compromise their confidentiality. Rather, we found most of them through the Solidarity Sponsoring Committee (SSC), an advocacy and training organization that has promoted the living wage in Baltimore. This selection procedure may have introduced some bias into the sample, but it seemed to be the most responsible way of identifying living-wage workers. We did recruit several respondents who are not associated with the SSC, but the SSC was our principle method of contact.

As our review of the Census data showed, the city's low-wage service sector workforce is diverse, and the impact of the living wage will depend upon the particular circumstances of each individual. Because the living-wage workers with whom we spoke were somewhat self-selected through their association with SSC, they may represent that portion of workers most greatly affected by the living wage. For example, our group of 26 workers was somewhat worse off financially than the average low-wage worker in the city.

In any case, 26 workers is not a statistically valid sample, and we do not propose to make statistical arguments. Our purpose, rather, is to provide richer, more detailed insights into how the living wage affects real people's lives. The interviews allow the workers, in effect, to define their own context and important reference points, and to draw their own judgments about the law. In addition, the interviews also lay the groundwork for subsequent research, especially where this might include survey research that could be statistically linked to the Census data.

Wages earned and hours worked by the interview subjects

Before the living wage went into effect, workers in this group earned an average \$4.94 per hour, somewhat more than the prevailing federal minimum wage. At the time of the interviews, this average had risen to \$6.66 per hour, an increase of 35%.²³

Wages varied considerably across occupational categories. In food service, they ranged from \$6.10 to \$6.25 per hour, even though the city's Board of Estimates had **reaffirmed** its commitment to a minimum of \$6.60 per hour in December 1996. The bus aides in this group were averaging \$6.56 per hour, but they only began receiving the \$6.60 hourly wage in January 1997, six months after that wage was supposed to come into effect. The city's Wage Commission had begun imposing fines on school transportation contractors who were not paying the contracted minimum. From September 1996 to January 1997, all of the bus aides reported earning \$6.10 an hour. All of the janitors with whom we spoke reported that their wages had increased to \$7.10 per hour on July 1, 1997. The city's new school board recently affirmed that this wage level would apply when all school-based contract employees returned to work in the fall.

Only four of the interview subjects had full-time jobs, and only these four had been offered full-time

work by their employers. Two-thirds of the remaining workers said they would accept full-time work if it were available. Those workers satisfied with part-time work were either elderly, had health problems, or had family responsibilities that prevented them from working full time.

At most workplaces, interviewees said the division between full- and part-time work was involuntary. Only one woman out of the 21 women in our group had full-time work, and some women felt that as a matter of policy employers were more likely to offer full-time work to men. As one put it, “The management has a policy that the guys work [full-time] and the women work [part-time].” On the other hand, a worker at another job site said, “Only managers get full-time work. No one else gets full-time work.”

Fifteen out of the 26 workers we interviewed worked only during the school year. Based on the city’s analysis, we estimate that 74% of all workers covered by the living wage work in the school system (Mazza 1995). While not all school jobs are seasonal, many are limited to nine-month terms. Some bus companies offered their aides summer work, but schedules are irregular and unpredictable. As we have seen, these irregular hours attenuate the impact of the living wage.

Length of time at the job

Among the people we interviewed, school bus aides (who were all women) had the longest tenure at their jobs, averaging more than five years. Janitorial workers averaged 34 months at that job, and food service workers 13 months.

School bus aides also had the most positive comments about their work. One woman, who had been at her job for more than seven years, made the following observation, which is representative of what many bus aides said about the job:

Initially, it was a job; but then after working there, I started liking the kids, because when you see you can make a difference in one of their lives, then I think you’ve done a wonderful job. That’s why I stay with the job: it’s the children. When I sit down and think about it, why don’t they want to pay us? We work with the most precious thing in the world. We take their kids to school. We have them for an hour or two a day, but that hour can make a difference in their life. They look for me to be there. And I love being with them.

Another bus aide reflected on the importance she saw in the work and the reality of low pay and lack of social recognition:

I wasn’t too proud of the job in the beginning, because I wasn’t making enough to support myself. Now, my husband is gone and I really need the money. [But] I feel proud about the job now, thinking about the children that I have helped. And you know, it is an important job, bringing children back and forth to school. And you know, some of these children have behavioral problems. It’s just like we’re working at the school. A lot of children have to take medicine. And I think we should be getting paid more than what we are. You can have 23 to 30 children on a bus.

Employment levels

One of the common arguments against the living wage has been that if employers are forced to pay their workers more, they will hire fewer workers. Commenting on a proposed living-wage ordinance for Los Angeles, for example, the senior vice president of the California Taxpayers’ Association said, “The proposed ‘living-wage’ mandate in Los Angeles would be costly to taxpayers and to those who would find fewer entry-level jobs” (Taylor 1996). Other research, however, has shown that a local increase in the minimum wage

(although less than the living wage) has no negative effects on employment levels compared with nearby jurisdictions with a lower minimum wage (Card and Krueger 1995).

We asked workers if there had been any change in the number of workers at their workplaces or if their working hours had changed since their wages had increased. Based on these interviews, we found no evidence that employment levels or working time had changed because of the living wage.

Out of 26, only one living-wage worker at a small cleaning firm said that her working hours had decreased since the living wage went into effect, but it was impossible to isolate the cause of this reduction in hours. Sixty-five percent of the workers we interviewed said that there had been no change in employment levels at their workplace. A bus aid said, "There are more people working there now, if any change at all." Another worker described how the employment levels in her building changed when the contractor changed, but this change cannot be directly attributed to the living wage:

When [the present company] got the contract from [the former company], they reorganized the building. Those that had seniority stayed. It was something like 38 people there. [The new company] only needed 27. The rest of the people were laid off [and put on a waiting list]. And as different ones left, they would call the next one on the list.

We asked workers if they thought they were working harder after getting the living wage. Half of them suggested they were:

They're demanding more. yes. With the living wage going up, your job is on the line. They'll get rid of you if you don't do your job, for any mistakes that you know you're not supposed to do.

I notice a difference for the good, as far as the people working, from the first year that I started working. Last year I noticed less absenteeism. Now there's less turnover. More people stayed. When I first started working, there was a lot of absenteeism. It's been better as far as I'm concerned. More people stayed and they come to work more.

Yes, my work is harder. It's paying more, this is true. You don't mind coming to work because.. .you come to work because you know you're making better money. Once you get your paycheck, it feels good to see it like that. . .that amount.

Attitudes toward work

We asked workers if their attitude towards their job had changed since the institution of the living wage. More than half responded positively:

It's made somewhat of a difference to me. I think I'll be staying there for a little while because I'm getting a little more money. Basically, I don't miss much time anyway, but I'll miss even less, and I'll want to do what I'm supposed to do, like keep my bus clean....So my attitude, I guess, has changed for the better.

I feel like I'm working for something now. I feel self-worth more, even though my work is only 20 hours per week. I feel good about [my job]. I can pay my bills. I can get things extra, more than I could get before. It's also enabled me to stop my second job.

I think it's real neat. I take pride in what I do.

The money thing, it's definitely real good because I can better myself as far as what I need to do for myself. I know that \$7.10 ain't all, but it's better than \$6.00 or \$6.60. I'm there because I know that in July, I'll get another raise. It's going to get better.. .

It is a subtle change as to how I feel about the money. I've always been proud to say I was a bus aide, but the wage increase seems to give me, make me feel more proud to say I'm a bus aide, you know. Like, yes, I am worthy of my **hire**, you know. Because **there** are times when you say, I'm a bus aide and someone asks, "you put up with all that for that little bit of money that they pay you?" you know. And they'll say "janitor pays more than that. You could be a janitor." And it's just that now I feel like I have more confidence in the job I'm doing.

It gives me more a feeling of wanting to be there; it gives a sense of responsibility.

When you're sluggish at times and you don't want to go to work, if you think about that \$7.10 an hour, it'll make you get up and go to work.

The pay, it does affect the performance of the job. Because I never did like volunteer work, you know, doing something for nothing. It makes me feel better about myself. It makes me want to work, because I see what I'm getting for **the** work. You know, the quality of my work, I see it in my pay. If I don't see it in my pay, **then** you're not caring about me, **the** work **that** I give you. Don't give me all this work and **then** not enough to take care of my family. I'm doing **the** job that you ask me to do. I want to see **that** when it comes pay time.

It makes me feel more important. It gives me a smile on my face. When I go back, I'm happy because I'm getting more money.. . .

On the other hand, the workers we spoke to both recognized that the increased wage did not solve **all** of their problems and saw value in their work apart from the monetary compensation:

Every little bit helps, but it won't make a big difference. I do my best anyway. I do whatever I can by 2 o'clock. They don't pay overtime.

To me, it's not a big difference. The only thing is that maybe you will be getting a few more dollars that you can do a little something more with.

The living wage does not really change the way I feel about my job, because the way I feel about the children, I'm gonna still feel that way. Me and the parents are in contact, we can talk. I still feel the same because I'm doing the same thing. It's a little more, but it's nothing to write home to your mother about.

The lesson we drew from these interviews is that, like most people, these workers have their own, independent sense of the value of the work that they do. But they also feel acutely the lack of social recognition **of** their work that is signaled by extremely low wages. One would expect that higher pay would elicit a stronger commitment to the job because the job is now worth more, and we find evidence of this effect. But the greater sense of recognition for their work that is strongly symbolized by the higher wage seems in many ways just as important. We haven't been able to directly measure the benefits of the living wage in terms of reducing the costs of absenteeism and high levels of turnover or increasing **the** quality of the work performed, but this impressionistic evidence does suggest that the city is getting value for its money, at least as it concerns the people performing the actual work.

Training and productivity

One might hypothesize that the increased wage rates and reduced employee turnover associated with the living wage would provide a strong incentive to employers to offer training in order to improve **the** quality of

the work product and increase productivity. Our interviews, however, revealed that few employers were currently using training as a means of improving quality and efficiency.

School bus aides, in particular, uniformly expressed a strong desire for increased training in order to address the variety of needs of children with disabilities. They currently receive less than one day of training per year, which they consider inadequate.

If the bus operators feel no incentive or obligation to provide training, one must presume it is not a significant feature in the contracting relationship with the city. It may be necessary for the customer (in this case, the city) to impose higher standards on the contractors in order to ensure that any higher costs are paid for with better service.

Sources of household income and poverty status

Just over a quarter of the workers whom we interviewed held second jobs (besides their living-wage job), from which they averaged \$800 per month in gross income. The “second jobs” of three workers were actually full-time jobs, so that their total working week exceeded 60 hours. For the others, the second job involved irregular work in catering and private-duty nursing.

Twenty-four out of the 26 workers we interviewed were the primary earners in their households. Only a fourth of the households had more than one wage-earner.

Nine women in the group had some form of income other than wages. Several had pensions and insurance from deceased husbands, and several received some form of public assistance, usually rental housing subsidies.

Some have wondered whether the living wage might reduce the need for families to seek public assistance, but, as our data on workers’ actual wage incomes has shown, many workers are still not earning above the poverty level and continue to need some assistance in meeting basic family needs. Three living-wage workers did report that their wages had now increased so that they were no longer eligible for assistance. One of these was a woman with two sons, no health insurance, and a projected annual income of under \$7,000 whose food stamps had been cut back to \$14 a month because of her wage increase.

Fourteen of the interviewees reported that they had received some form of public assistance in the past, but most said that it had been at least 10 years since they had relied on welfare. All of them said that this assistance was temporary, during the period in which they were raising young children.

Using information from our interviews, we estimated that median household income for our interview sample was \$13,632. This estimate is based on total working time and hourly wage at the living-wage job, income from other jobs, income contributed by other workers in the household, and income from pensions and public assistance. On average in this group, the living-wage worker’s income accounted for 68% of total household income, a finding that underscores the importance of the living wage in sustaining family incomes.

Based on our estimates of household income and family size, we estimated that nine of the interviewees were below the 1996 adjusted federal poverty threshold (the latest year for which the poverty data are available). In our sample of living-wage workers, family incomes ranged from 43% to 359% of the adjusted federal poverty level.

Plainly there is a way to go before living wages are translated into living incomes. But the higher wage does make an appreciable contribution to stabilizing family and community circumstances, as suggested by these comments:

I'm not as stressed out, worrying how I'm going to pay this and that. I always felt like I wasn't pulling my weight in the marriage when I had to go to work and make \$4.25 an hour. It's not all on him any more...**Now** I don't have to worry about going out and finding another job. I'm comfortable paying my bills. I get to spend my money in the neighborhood...**There's** a lot of different things that I can do in the community. Like when they have barbecues in the summer for the kids, I can give. Like when they have bake sales, I can give, you know. Before I was giving two or three dollars, now I can give five. It makes me feel like a better person.

I can pay my bills, and still have some money to do the things that I need to do. Put an extra couple of dollars in the bank now. The rope is loosening up.

It makes a big difference for me because it allows me to do things that I wouldn't have been able to do otherwise. It allows me to be a foster mom. And I do volunteer work... And some other children who come into the class, from families that don't have the funds, it enables me to put some money toward helping these children so that we can do things as a group...**Sometimes** you just want to treat the children because they've behaved so well...**Earning** the living wage helped me to afford that.

I think being able to give my boys that opportunity... It makes you feel as if it's worth it all. You know it's worth it.

Housing

Housing is frequently one of the largest expenses of low-income people. On average, the households of the group that we interviewed spent 36% of their total family income on housing, even taking government housing subsidies into account. This exceeds the normal standard for housing affordability of 30% of gross income. Even this number, however, does not quite portray the full story, since some in this group were doubling up with relatives.

Biggest worries

It should be clear that, although the living wage is an important help to the affected workers, it does not solve all of their problems. When asked what their biggest worries were now, most cited the lack of health insurance as a major concern. The second most important problem, often related to the lack of health insurance, was debt. Living-wage workers reported a variety of reasons for their debt, from past medical expenses to education-related loans, child support payments, and consumer debt.

The potential impact of welfare reform was beginning to emerge as an area of concern. Many workers reported that they were training welfare-to-work participants and feared eventually losing their jobs to these "second-tier" workers whose "pay" is effectively their public assistance stipend.

These comments were representative:

I worry about health care for my children and grandchildren. I take care of my children on my own. When my grandchildren need medical care, I have to pay for it on my own. I got to get my grandchild glasses before she starts school. They cost \$85. I don't want to go to welfare. I'm not going there. I have always worked two jobs in my life. Now, dealing with the kids is another job. If it weren't for them, I would work two jobs.

I worry about my kids! Providing food and basics for my kids, a roof over their heads... Just keeping food in the house and trying to keep the bills paid. Stretching the money out.

My own worry is what's going to happen now with welfare reform. Are we going to return to work?

Our concern is about what if the contracts get taken away from these bus companies, will we get hired somewhere else?

I'm behind on child support. I can't afford to pay it now. I've got to get back on it. Child support is my biggest worry. Also, getting more income. I don't have health insurance, and that worries me a lot.

I have high blood pressure. I can't afford the medicine, so I can't take it. A hundred and forty dollars. These hospitals are worrying the hell out of me. I can't take it.

I'm trying to get a place of my own. It hurts you to have to lay on my child. This is her life, and she doesn't want me here. I feel like I'm stopping something. She's used to being on her own, too. I'm trying to get me something, so I'm not stuck on her like I am. I'm working for \$6.10, so I only get about \$290 every two weeks, and it's hard to get a place on just that.

My daughter should be going to the eighth grade this year. And that's prom time. You know, cap and gowns.... I got a reasonable daughter and she compromises with me, she knows what we have and don't have, she works with me. It's always hard when you can't do these things for them. You have to sit down and hope they understand. It hurts when you have to tell them that the things you planned on doing, you really can't do. When my son comes to me and tells me that he needs so much for a class trip and you have to sit down and tell him, well, I don't have it this time. Next time, the child ~~will~~ get a little tired of that, not being able to participate in these activities. That hurts me to tell him that he can't participate because we have financial difficulties.

CONCLUSION

The data in this evaluation strongly suggest that Baltimore's living-wage ordinance has so far had a small but meaningful impact on the incomes and lives of affected workers. The effect is to be measured not only in dollars and cents, but in the sense of worthiness and comparative independence reported by living-wage workers.

It is equally clear, however, that there are strong constraints limiting the benefits of the living wage to date. These include, notably, the prevalence of part-time employment and the relatively small number of jobs covered by the living-wage ordinance. It is evident that, in order for the hypothesized and demonstrated benefits of the living wage to make a significant impact in Baltimore, the pool of living-wage workers must be greatly expanded and their hours increased and stabilized.

What this study also shows is that the costs of the living wage to the city have, to date, been trivial. As far as the city is concerned, the fears related to fiscal drag and a hypothesized erosion of competitiveness are evidently groundless. Moreover, these results provide reason to expect that the living wage could be expanded into the private and nonprofit sectors without severely deleterious effects, although the precise impact would depend on specific sectoral conditions.

As we have argued, part of the reason that the living wage became such an important idea is that many of the jobs affected by the legislation would once have been located in the public sector and would have without question provided a living income. Outsourcing this work to the private sector to save money for the city contributed to a situation in which even people working full time were not able to provide for their families basic needs. The living wage, in this sense, was a way of adjusting the allocation of costs and benefits from this strategy, and was not a "gift" to the working poor.

Nevertheless, the small but important gains realized so far could be at risk from the effects of welfare reform, including the release of thousands of people into the labor market at or even below the minimum wage to the degree that their wages are subsidized. Protecting and expanding the gains from the living wage may require linking the debate over the living wage to the debate over welfare reform.

Finally, we have highlighted in this report a number of questions that require further research. But more work isn't the only thing that is needed. Access to data collected by the government but not easily or readily made available to researchers needs to be improved. Further, serious investigations of the effects of social policy innovations of this sort may require substantial rethinking of the kind of data we collect and the categories in which these data are reported.

APPENDIX

Selecting a sample from the Census

Accurate information about the effects of Baltimore's wage law is extremely difficult to obtain. We used two primary sources of information to construct our picture of the circumstances of low-wage service workers and the impact of the law in Baltimore. The first was a series of detailed interviews with workers who are currently employed at living-wage workplaces. The second was the information that low-wage service workers provided in the detailed questionnaire from the 1990 Census. We selected the Census because it was the most accessible source of detailed occupational, income, family, and housing characteristics for low-wage service workers in the City of Baltimore. Neither of these sources is completely satisfactory: because the city's Wage Commission has been slow in collecting information about the effects of the law on service workers, no accurate count of affected workers exists – most contractors who are required under the law to submit payroll information have failed to do so. The Census covers all low-wage service workers, and it is impossible to isolate only those covered by the ordinance. So, on the one hand, we have interviews with what is possibly only a partial cross-section of workers affected by the ordinance. On the other hand, the Census population of low-wage service workers is larger than the population of service workers affected by the ordinance. In the following section, we discuss how we selected the Census sample.

1990 Census of Population and Housing

For a general description of the prevailing employment, family, and housing circumstances of Baltimore's low wage service sector workforce, we analyzed the 1990 Public Use Microdata Sample (PUMS) from the 1990 Census. The PUMS **dataset** is based on a detailed questionnaire given to a 5% sample of the entire city population. The detailed structure of the PUMS data allowed an analysis of the particular circumstances of the city's low-wage service workforce.

We analyzed personal and household information for people in the following general work categories found in the Census: administrative support occupations; security guards and crossing guards; food counter, fountain, and related occupations; kitchen workers and food preparation workers; **waiters'/waitresses'** assistants and miscellaneous food preparation occupations; janitors and cleaners; selected personal service occupations (e.g., public transportation attendants); bus and taxicab drivers and parking lot attendants; construction helpers and laborers; garage and service station-related occupations, vehicle washers, and equipment cleaners; hand packers and packagers; and other laborers. We further limited the sample to people employed in the following industries: landscaping; construction; food service; transportation; finance, insurance and real estate; business and repair services; entertainment and recreation services; or professional and related services.

From this subset we selected people who said they were employed by government or a private for-profit or nonprofit company in 1989. Because the Census long form does not contain data about hourly wages, we calculated a "wage factor" for the identification of low-wage workers. We calculated this wage factor by dividing the total wage income by the product of the number of hours worked per week and the number of weeks worked during the year. The resulting wage factor is different from an actual wage rate because the number of hours worked in a week may have varied over the year, while the Census asked only the question, "During the weeks worked in 1989, how many hours did this person usually work each week?" (Reflecting the high variability in amount of time worked that is characteristic of jobs in the low-wage service sector, more than half the respondents reported a different answer to another question in the Census: "How many hours did you work last week?")

Our goal was a general description of the prevailing family and housing characteristics of low-wage service workers in Baltimore, so we limited our population according to our wage factor. The 1989 median wage factor for the 63,633 people in these occupational categories who worked in private firms was \$6.3 1, so we excluded from the sample those workers whose wage factor exceeded this amount. Lastly, because we were seeking information about the employment, family, and housing situation of the average low-wage service sector worker, we excluded from the population the 10% of workers in the remaining population whose household income was exceptionally high (beyond three standard deviations **from** the mean of all workers' total household income expressed as a percent of the adjusted family poverty rate). Our resulting subset of the Census database contained 20,136 low-wage workers from 18,875 **households**.²⁴

Limitations of the Census data

There are two principal considerations for the use of 1990 Census information in this study. First of all, the Census was conducted in the spring of 1990, over seven years prior to this research. While we decided that it would be useful in providing a general description of Baltimore's low-wage service workforce, one should keep in mind several limitations. First of all,

changes in Baltimore's labor market have continued during the last seven years. Secondly, Baltimore and the state of Maryland have in that same time weathered a downturn and a mild recovery in the business cycle. The impact of these events on the city's low-wage labor market is uncertain, and so our conclusions based in part on the Census information should be tentative. Any bias stemming from the date of the Census sample could be in either direction: according to the Bureau of Labor Statistics wage surveys for Baltimore, the average wage of private sector janitors failed to keep pace with the rate of inflation between 1992 and 1995.

Secondly, the PUMS data used in the following analysis is based on a sample of the entire population. Therefore, some error is inevitable. As the Census states:

Since the estimates that users produce are based on a sample, they may differ somewhat from 100-percent figures that would have been obtained if all housing units, person within those housing units, and persons living in group quarters had been enumerated using the same questionnaires, instructions, enumerators, and so forth.... The deviation of a sample estimate from the average of all possible samples is called the sampling **error**.²⁵

The standard error is plus or minus 4% for our estimate of the size of low-wage service sector workers, based on the size of the original PUMS database and the design factors used by the Census to create the PUMS sample. The reader should therefore keep in mind that each estimate produced in this study will have some associated sampling error.

Given these limitations, we believe that our analysis provides sufficient background and enough detailed information about Baltimore's low-wage service sector to provide a measure of the impact of the city's living-wage ordinance.

ENDNOTES

1. The law (City Ordinance 442) requires only those employees working on contracts for the city to be paid the living wage; other employees at the same firm or even the same employees working on **noncity** contracts do not fall under the scope of the legislation.
2. Some employees on these contracts were already earning above the living wage, so the pool of workers directly benefiting from the legislation is smaller than this list might suggest. School bus drivers, for example, had been earning \$8.50 per hour; bus aides, on the other hand, typically worked for the federal minimum wage. The living wage legislation, in effect, puts a floor under wages in these categories.
3. FY1996 is July 1, **1995-June 30**, 1996; the wage rate was \$6.10.
FY1997 is July 1, **1996-June 30**, 1997; the wage rate was \$6.60.
FY1998 is July 1, **1997-June 30**, 1998; the wage rate was \$7.10.
4. For old contracts, we used the price of the latest winning bid or year-long extension before July 1, 1995. For the new contracts, we used the most recent contract or year-long extension. For contracts that have been adjusted during their term due to unexpected costs, we used the adjusted cost basis for comparison.
5. This plan would, of course, depend on the sector and the work involved. "Speed-up" is less likely, for example, in the case of bus aides whose work hours are set by the length of the bus route.
6. Data on labor intensiveness were taken from Mazza 1995. Of the \$39 million of contracts currently covered by the living wage, \$26.8 million were studied in this report.
7. The authors thank Michelle Sforza for this point.
8. The Preamble Center study noted that the total number of bids had fallen, suggesting a less competitive environment, but not by a statistically significant amount.
9. Note that earnings data from the 1990 Census actually refer to earnings in 1989.
10. More precisely, we used the 1990 Public Use Microdata Sample (PUMS) from the 1990 Census. These data are based on a detailed questionnaire given to a 5% sample of the entire city population; this is the data set from which we drew our smaller, low-wage service worker sample. The standard error for the PUMS data at a 95% confidence interval is plus or minus 7%; the standard error for smaller subsets will be larger. Note that we are using these data to provide a background sketch rather than to draw statistical inferences.
11. As it turns out, this \$6.31 figure would have been roughly equivalent to the 1997 mandated living wage of \$7.70 after correcting for inflation based on the consumer price index. More precisely, \$6.31 in 1990 was equivalent to \$7.75 in 1997.
12. The chi square statistic is 1078 with 14 degrees of freedom; the confidence interval $p < .001$.
13. The chi square statistic is 4,446 with 7 degrees of freedom; the confidence interval $p < .001$.
14. For a detailed discussion of the racial and gender segregation of work in Baltimore and elsewhere, see Fernandez-Kelly 1994; Hanson and Pratt 1995; Wilson 1996.
15. See the BLS Occupational Compensation Survey. The BLS data cover only private sector establishments with 50 or more employees and exclude part-time, seasonal, and temporary workers. Many workers affected by the living wage work part time or seasonally for very small firms, and so the estimated prevailing wage from the BLS may actually be higher than that received by many workers of interest to this study.
16. Rooms, in the Census definition, are whole rooms used for living purposes; bathrooms, kitchenettes, utility rooms, and so forth are not included in that definition.
17. Note, however, that in the absence of the living wage ordinance, affected workers in Baltimore are likely to be earning below the federal poverty line for a family of four.
18. The percent of poverty is a federal income standard adjusted for family size.
19. The estimates are derived from (1) line items in contracts in which wage rates were specified; (2) invoices at Accounts Payable; (3) the "professional judgment" of the Bureau of Purchases and user agencies; and (4) in about 20% of the cases, "local and national industry standards."

20. This time period lies within **FY** 1997, during which time the living wage rate should have been \$6.60 per hour.
21. The eight-week time period was selected to provide generous accommodation for the possibility that individuals might work several short stints over the course of the nine months and thus make the turnover rate appear higher. As it turns out, there were no such cases. Changing the turnover definition to a four-week interval makes no significant difference to the overall results.
22. Calculating a full-time job at 40 hours per week for 50 weeks, or 2,000 working hours.
23. At the time of the interviews, the summer of July-August 1997, the stipulated living wage for FY98 – \$7.10 per hour – should have been in effect. Many of the employees in this group work seasonally – on furlough over the summer – and so their wages had not yet increased, thus drawing the average down. But some of the shortfall, as the text shows, is due to noncompliance.
24. The **dataset** we used includes teenagers who are working at low wages. Workers who were excluded from the general sketch of low-wage service workers tended to be in households with two or three incomes and no children. Excluding the highest-income low-wage workers (more than three standard deviations from the mean) has a very small impact on the overall picture, as this group comprises about 120 observations out of 20,136. For this reason, we believe our **dataset** does not substantially overstate the beneficial impacts of a living wage even though the highest-income low-wage families are not included.
25. Bureau of the Census 1990.

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