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Living Wages at the Airport and Port of San Francisco:

The Benefits and the Costs

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Introduction and main findings

Purpose of this report

San Francisco's proposed living wage ordinance would require covered employers to pay their workers a minimum of $11 per hour plus health benefits or a cash equivalent. The covered employers are basically those who have more than five employees and who either have contracts with the city or lease property from the city.

This report constitutes the second of two installments of a comprehensive analysis of the proposed ordinance. The first part, released in June 1999 (and available on the web at http://socrates.berkeley.edu/~iir/) discussed the needs of San Francisco's workers and examined the costs and benefits of raising pay for employees of service contractors and home care workers. This second part discusses the costs and benefits of raising pay for employees of property contractors.

Most Living Wage ordinances that are in effect in the U.S. cover only employees who work for municipal service contractors. San Francisco's ordinance is more expansive in that it would also cover employees of private employers who are located on city-owned property. These employers are themselves tenants who have a rent or lease contract with the city or are subcontractors of such tenants. City agencies refer to these contracts as property contracts, as opposed to the service contracts that we analyzed in our first report.

The main purpose of this report is to estimate the costs and benefits of the proposed Living Wage Ordinance to the tenants of the City of San Francisco. Almost all the workers who are covered by the property contract sections of the living wage ordinance are employed at two sites: San Francisco International Airport and Port of San Francisco. For this reason we focus our analysis entirely on these two properties.

San Francisco is only the second city, after Los Angeles' additions in 1998, to include property contracts in a living wage ordinance. The San Francisco ordinance calls for workers to be paid a minimum of $11 per hour, plus health benefits or a cash equivalent. The present report is the first comprehensive study of living wage impacts on a municipality's property contracts.

Sources

To conduct this study, we drew upon data provided by both the Airport and the Port concerning leases, rents and levels of economic activity. The Airport also provided employment figures and some pay rates. We supplemented these with our own onsite surveys at the Port, with government survey data, with data provided by business and union officials, and with interviews with leading officials at both the Airport and the Port. We carefully checked our data for biases in reporting by respondents and to conform with known benchmark aggregates.

Main findings

San Francisco International Airport

- Approximately 145 firms and 28,000 workers at San Francisco Airport are covered by the ordinance. Of these, about 11,500 workers would receive pay increases averaging about $4,600 per year, for a total of $53.2 m. About 9,500 workers would receive wages bringing them to $11 per hour. An additional 2,100 who make near $11 would be expected to benefit indirectly from "wage–push" pressures for equity that would raise their pay to $13 per hour.

- The low-wage sectors at SFO include: baggage screeners, fuelers, cabin cleaners, ramp agents and customer service representatives; parking lot cashiers, retail and food concession workers, skycaps and rental car agents. Baggage screeners at SFO currently earn $6-7 an hour. These positions, the frontline of security against airport terrorism, have extraordinarily high turnover rates. The living wage is expected to reduce turnover, increase productivity and enhance security at the airport.

- The increased payroll costs resulting from the ordinance amount to $59 million, which is 2.7 percent of current business costs for the affected firms. About 75 percent of the increased payroll costs would be borne by airline companies-- such as United, American and Continental-- directly or through their subcontractors. The total cost to the airlines amounts to 0.6 percent of the fare revenue they receive at SFO each year; this works out to about $1 per airline passenger.

- About 20 percent of the increased payroll costs would be borne by retail and food concessions, such as Host International, and would increase business costs by 12 percent. A large fraction of the cost increases would be offset by reduced turnover and increased productivity. Prices of many of the products that are provided by these concessions at SFO are regulated, suggesting that there is room for small price increases.

- SFO is United Airlines' most profitable location in the U.S. Yet SFO has the fourth lowest landing fees of the ten largest U.S. airports. Airline passenger traffic at SFO increased by 18 percent between 1993 and 1997 and airlines earned $7.5 billion in revenue from fares at SFO in 1998. With the new international terminal about to open, passenger traffic is projected to increase another 25 percent by 2006.

- The impact of the ordinance at the airport upon overall costs is moderate and would occur in an economic context of rising airport revenues and profits. Since rents at the airport have been increasing, any impact upon revenues

would be on the rate of increase of rents, and should be minimal. Since the airport is an independent entity, fiscal impacts on the City of San Francisco will also be negligible.

The Port of San Francisco

- The Port of San Francisco leases over 17 million square feet of property for a wide variety of land-uses. Many of these uses do not result in on-site employment, and thus will not be affected by the ordinance. We estimate that about 4,400 workers at 239 establishments located on the Port of San Francisco--at restaurants and retail establishments, fish processing sites, parking lots, and offices-- would be covered by the ordinance.

- Of these workers, about 2,600 low-paid workers would obtain increases averaging about $6,500 per year as a result of the ordinance. About 2,300 of the benefiting workers would obtain pay increases directly because of the ordinance. An additional 300 could expect increases indirectly because of wage-push pressures for equity.

- Low-wage employment at the port is concentrated in restaurants and food stands, other retail establishments and fish-processing plants.

- The increased payroll costs due to the ordinance would total $18.2 million, which amounts to 4.6 percent of business costs for the affected port tenants. This increase works out to less than $1.40 for each of the 13 million tourist visits to the port each year. Of the port tenants who will be affected by the ordinance, the largest ten percent (or 29) account for 66 percent of the port's rental revenues, and the largest twenty percent (or 47) account for 79 percent of the port's rental revenues. The largest ten restaurants at the port account for 72 percent of all the restaurant business at the port.

- We found significant variation in wage rates at port restaurants, with little correlation between restaurant wage rates and menu prices. For example, the starting wage for dishwashers ran from $6.43 to $10.12 at restaurants with similar price structures. Nonetheless, the impact of the ordinance upon port restaurants would vary depending upon whether a tip credit is included in computing pay. Without a tip credit in the ordinance, the increase to port restaurants would average 13 percent of business costs. With a tip credit, the increased costs to restaurants would average 3 percent. These increases fall within the range of price variation for similar meals found within the port area and at nearby locations.

- Sales revenue for port businesses rose 16 percent between 1995 and 1998 and vacancy rates at the port are insignificant. The port is anticipating major expansion, including a cruise ship terminal, hotels and retail complexes. The

port's percentage lease arrangements help insulate tenants from swings in the business cycle, providing important benefits for many businesses. It is not likely that the ordinance would actually deter future development.

- Given the buoyant state of port business, the impacts of a living wage ordinance on employment and port rents would be negligible, as would any fiscal impact on the City of San Francisco. The restaurant industry in San Francisco has experienced larger percentage wage increases over the past decade and yet has maintained a positive job growth trend.

The ordinance as a whole

- The San Francisco Living Wage Ordinance as proposed would benefit a total of 26,900 low-wage workers. This figure consists of: 6,000 people working on city service contracts and 6,700 home care workers; and 11,600 employees at the Airport and 2,600 at the Port, as reported in this second part of the study. Of the 26,900 benefiting workers, about 23,000 workers currently earn below $11 an hour. About 3,900 others earn near $11 an hour and are projected to experience a wage increase to $13 as a result of "wage-push" pressures for equity.

- Appendix B of this report revises some of the estimates in the first release, based upon more comprehensive data. We now estimate that 6,000 employees of city contractors would receive wage increases (down from 6,500 in the first release), as would 6,700 home care workers (as in the first release). Costs are comparably lower as well. These revisions do not change the conclusions we presented earlier.

Distinctive characteristics of property contracts

Property contracts require a separate analysis from service contracts. In the case of service contracts, the demand arises from the city's need for services for its resident inhabitants, visitors and businesses. These services must be performed within the city limits and the city wants to provide the services at the same or higher levels than before the ordinance. The associated increased costs to the city depend upon the degree of cost pass-through, which is likely to vary with the type of service provided and with the improvements in the degree of competition in bids that are becoming associated with living wage ordinances. In any case, since the city is committed to paying the pass-through costs, the adverse service level and employment effects of a Living Wage Ordinance can therefore be negligible.

Of course, the potential costs to the city and to employers could be substantial, as can be the benefits to the affected workers. In a previous report, we estimated such costs to the city as $32 million. In an appendix to the current report, we provide updated and refined cost estimates for the service contractors and the home care workers discussed in our previous report. Our revisions focus on the universe of service contracts, the rate of employer-paid taxes and the value of health benefits. The revised results turn out to be very similar to the estimates in the first release.

In the case of property contracts, the demand arises from private employers who provide goods and services on the city-owned land and the city derives revenue from leases and rents. Wage increases may be passed on in higher prices to customers, such as air passengers or tourists visiting the wharf areas, or be absorbed by employers in lower profits, or result in some economic activity shifting to another site. The latter two cases could affect the value of the leases and therefore reduce rents received by the city. These outcomes could affect the level of employment at these areas as well.

As is the case for service contractors, employers who are property contractors with less than five employees are exempt from the ordinance; no minimum property contract is specified in the ordinance.

Our analysis of the effects of the ordinance upon the property contractors has had to confront a number of methodological issues. San Francisco's tenanted properties are far-flung and include land on many sites outside the city's boundaries. The property contracts themselves are bid, negotiated and administered by a variety of city departments and agencies. The structure of the leases varies from fixed rents to rents that combine a minimum payment with a variable component related to sales revenue and rents that have only a variable component. The term of the contract can vary from month/to/month at the low end to forty years or more at the high end. Long-term leases are subject to re-negotiation, particularly when repairs or improvements in the property are undertaken. The effort involved in tracking all these properties is complex. Moreover, the records on property contracts are decentralized in the relevant city bureaucracies.

To make our analysis tractable yet comprehensive, we exploit the fact that almost all the employees of property contractors who would be covered by the ordinance work in

just two areas: San Francisco International Airport and the Port of San Francisco. The airport alone accounts for nearly 30,000 such covered workers, with an additional 10,000 expected to be added with the opening of the new international terminal in May 2000.

The Port includes the wharf areas and some of the adjoining lands, such as at Ferry Plaza. These tenanted properties account for approximately 5,000 workers who would be covered by the ordinance. Given the wide variation in land uses and employment patterns, we disaggregate the analysis of the property contracts whenever possible. We collected property contract data provided from the relevant agencies and we use a variety of data sources to estimate employment and wage rates in each sector. These sources include our own surveys, surveys conducted by researchers at the Center for Labor Research and Education (CLRE), by consultants to the airport, as well as government census and survey data.

To analyze the impact of the ordinance, we also need to estimate the impact of wage increases upon employment, profits earned by contractors, rents received by the city and prices charged to consumers. In addition, the dynamic effects of the ordinance upon future development and job creation are also important. We consider each of these separately for the airport and for the port.

Living wages at San Francisco Airport

Background and economic context

San Francisco International Airport, the fifth busiest in the United States, served over 39 million passengers in 1997. As Table 1.1 shows, passenger traffic has been increasing steadily in recent years, from 32 million passengers in 1993 to 39 million in 1997. Passenger traffic is projected to grow even more rapidly with the completion of the multibillion-dollar international terminal project in May 2000. The airport is expected to handle 49 million passengers by 2006, with much of the increase consisting of Pacific Rim travelers.

Airport rents and concession revenue are large and have also been increasing. As detailed in Table 1.2, these revenue sources amounted to $361 million in FY 1998/99, and they are projected to rise to $437.9 million in FY 1999/2000. Again, the Airport expects further increases to occur in future years with the expansion of the airport's facilities.

The economic boom at the airport is reflected in the data on employment growth. The airport and its tenants account for 34,000 jobs, an amount that is ten percent higher than four years ago, and that is also expected to continue to grow significantly. A surge in employment is expected with the airport's expansion: 11,000 new jobs from the new International Terminal alone. Wage rates have also increased in recent years.

Leases at the airport

We begin with presentation of data on all the leases and tenants at the airport. We used airport, union, and public data sources to estimate the number of workers that would be covered by the proposed ordinance. Together with pay data, we then estimated the number of workers that would be affected by the ordinance and the pay increases they would obtain.

The number and distribution of airport leases, subleases, tenant agreements and concessions are shown in Table 1.3. The total number of such agreements is 145, including three service contracts for security workers and skycaps, but not including a number of much smaller contracts. Over half of the leases (76 out of 145) are with passenger and cargo airlines and an additional 23 are in aviation services. Retail and food concessionaires and rental car companies account for 39 of the leases.

The structure of leases varies considerably. Some assign more relative importance to fixed dollar rental amounts while others contain variable rent formulas. Almost all concession agreements appear to have a minimum annual guarantee that acts as a minimum rent. On top of this, most leases also include a revenue-sharing component, normally 10 to 20 percent of revenues achieved, and often on a sliding scale. We discuss

the implications of revenue-sharing leases further below when estimating the affordability of the ordinance.

The duration of leases also vary, from a month to 10 years, although most are less than 5 years in duration. This heterogeneity means that the implementation of a living wage ordinance in theory would occur over up to a decade as leases expire or are renegotiated. In order to simplify our analysis we proceed nonetheless as if the implementation of a living wage ordinance occurred simultaneously at all sectors of the airport. The benefit and costs estimates we generate consequently will be upwardly biased, since staggered implementation would imply lower numbers. The use of expiration dates to stagger the implementation also would imply the possibility of pay inequities among low-wage workers and their employers. We consider this issue as significant for implementation design but outside the scope of our report.

One key aspect of the analysis concerns the location-specific features of economic activity at the airport. Most airport-based work cannot be performed elsewhere and therefore property contractors at the airport generally are not competing with offsite employers. (The exceptions mainly comprise airline-catering services with offsite kitchens.) We consequently do not expect any adverse impacts upon airport employment because of relocation of firms outside the ordinance's jurisdictions.

The activities that are more likely to be affected by the Living Wage Ordinance include the aviation-related activities, where most employment is concentrated, and also retail concessions, food concessionaires, parking services, and security and skycap services. Although unionization rates are quite high in some of these sectors, some negotiated agreements pay below the proposed living wage level ($11 per hour). Large proportions of airport jobs provide health and other benefits.

Covered employment

Studies prepared for the Airport Commission (Economic Impact Report) find that there are approximately 33,900 permanent jobs at SFO. Not all of these workers are covered by the ordinance. To estimate the number of covered employees, we first excluded the employees who work directly for the airport, the federal government, the City and County of San Francisco, and the U.S. Postal Service. We then excluded shuttle and taxi drivers who apparently will not be covered by the ordinance, and workers at the airport hotel, which is under renovation. We also excluded construction workers, who are covered by prevailing wage agreements, consultants, who are assumed to be in high-paying positions, and truck drivers, who are also assumed to be in high-paying unionized positions.

We estimate that 28,310 jobs would be covered by the Living Wage Ordinance, based upon the coverage stated in the ordinance and contractual agreements between the tenants and SFO. (See Table 1.4.) As Table 1.4 details, about 22,000 of the 28,000 covered workers at the airport are employed directly by passenger and cargo airlines. An

additional 3,400 work under subcontracts with the airlines, in catering, as baggage screeners (security workers) and skycaps and aviation services. This concentration reflects the not surprisingly large role of the airlines as employers at SFO. About 3,000 covered workers are employed in retail and food concessions, at airport parking lots, or as employees of rental car companies.

Low-wage employment

To determine the number of covered workers who would be directly or indirectly affected by the ordinance we collected wage data by detailed occupation and tenure class. Our sources included prior research conducted by the Center for Labor Research and Education at UC Berkeley, which had estimated employment and wage data in each of the affected sectors. We updated and checked wage information with job postings from the airport employment website, with personal interviews of tenant employees at the airport, as well as with follow-up telephone calls with the human resource departments of the tenant employers and union officials. We used occupational wage data from the Bureau of Labor Statistics to complete the wage estimates in a number of cases.

To arrive at an estimate of the low-wage workforce, we focused on the major employers who account for a high proportion of employment in the sector and for whom more data are available. We then applied a multiplier to estimate total employment in the sector. We then checked these estimates with business and labor officials to insure their accuracy. We began with available information on job classifications, benefits, union status, job tenure and wage rates. We excluded known employment in job classifications that paid above $13, and an estimate of other high paying positions, such as managerial and professional staff. Where appropriate and where available data allowed, we adjusted the estimated wage distribution to take into account that workers with longer tenure tend to earn higher wages. This is most common in jobs covered by union contracts that include a tenure-based sliding wage scale.

One carrier, United Airlines, dominates private employment at SFO. The large number of United workers—over 16,000-- reflects the presence at SFO of a major United aircraft maintenance centers as well as the large number of United flights at SFO. To illustrate the methods and results made above, we discuss briefly the method we used to estimate the structure of employment and pay at this firm.

At United we started by identifying the known high-wage job titles, which included the flight attendants, mechanics, pilots, computer technicians, and other professional staff. We then distributed the remaining jobs according to other estimates of employment at the United Maintenance Center (published in the Economic Impact Report) and from prior research. This allowed us to identify the number of workers in low-wage job classifications, those where some or all workers earn less than $13 per hour.

The results for United are shown in Table 1.5. We obtained an estimate of about 750 high-wage workers earning an average of about $37 per hour, about 11,150 medium-wage workers earning an average of about $17 per hour, and about 4,100 low-wage workers earning an average of about $9.70 per hour. Note, however, that because of tenure-based sliding wage scales, some workers in the 'low-wage' job titles earn more than $13 per hour and were thus included in the medium-wage category (denoted as 'senior' workers). We include tenure effects when we estimate the costs and benefits of the Living Wage Ordinance.

Pay increases

The next step is to estimate the number of low-paid workers at SFO as a whole that are covered by the ordinance. In Table 1.6, we list the job titles of workers with pay levels below $11 per hour and their current pay scales by detailed job classification. The number of workers has been estimated to conform with our knowledge of job aggregates and if some misclassifications among detailed job titles has occurred, they will cancel each other in the aggregate.

We aggregate these workers by sector and display the results in the first column of Table 1.7. Table 1.7 indicates that approximately 9,470 low-wage employees at SFO can expect a pay increase directly as a result of the ordinance. About three-fourths of the low-wage workers at SFO are employed by airlines or by companies that service the airlines directly. The remainder are distributed among the various airport services.

The second column of Table 1.7 shows the distribution of low-wage workers and workers earning $11-13 at SFO. A substantial number of airline workers earn between $11 and $13 and would be affected through wage push effects. An additional 2,140 employees can expect increases because of indirect wage push pressures. The total getting increases would then be 11,610 workers.

To compute the magnitudes of these increases, we calculated the direct wage increases of those positions earning less than $11 and the indirect wage increases of those positions earning between $9 and $13. For the indirect wage increases, we assumed as in our first report that workers in the $9-11 range could potentially experience a wage push to $11.50 and that workers earning between $11 and $13 could be pushed to $13. We calculated total compensation based on average yearly hours worked, as obtained from the Current Population Survey for each sector. This method accounts for fewer hours among part-time workers. We applied an additional 11.15 percent to the total wage increase to account for employer-paid taxes. For the cost of health benefits, we assumed a rate of $1.25 per hour to be applied to workers currently working without benefits. Using these parameters, we estimated the total compensation increases and total payroll cost increases for each of the affected sectors.

Next, we indicate the overall magnitudes involved in raising the pay of these workers. As shown in Table 1.8, we estimate the overall compensation increases as totaling $53m. This figure indicates the economic benefits of the ordinance that result

from the inclusion of SFO. The pay increases are equivalent to an average increase of about $4,600 per employee per year. With payroll taxes added in, the pay increases will cost employers about $59.1m, or about a 2.7 percent increase in business costs.

The increased costs resulting from the ordinance are unequally distributed. In absolute dollars, the largest increase would be concentrated in the passenger airlines themselves. This sector, which constitutes over 80 percent of all covered payrolls at the airport, accounts for one-third of the total cost increase. Since the passenger airlines sector is so large and includes giant firms such as United Airlines and American Airlines, the percentage cost increases are much lower, amounting to only 1 percent of business costs.

Well over half of the cost increase due to a living wage is located in the broader airlines and airline service sector, which adds airline catering, security and skycap services and aviation services. This sector accounts for about 90 percent of all payroll covered by the ordinance at the airport. We estimate cost increases of 6 and 13 percent, respectively, for the airline catering and aviation services components of this sector.

The airport services sector, which includes retail and food concessions, security and skycaps, parking, rental car and shuttle services firms, is much smaller in overall size, but have larger percentages of low-wage workers. The increases in business costs due to the ordinance would vary from 4 percent among rental car and shuttle services to 12 percent among retail and food concessions.

Affordability

The costs of the ordinance to airport tenants appear to be quite moderate when expressed as a percentage of their business costs. The costs can also be expressed as a percentage of the fare revenues generated at SFO, using data presented in the airport's bond revenue proposals. We estimate that the cost to the airlines of conforming to the living wage ordinance amounts to only 0.6 percent of the fare revenue. This amount seems extremely small, especially considering that SFO is reputed to be the most profitable airport for United and other carriers. Moreover, this profitability may partly be due to the relatively low landing fees at SFO (see Table 1.9). The profitability is notable also because jet fuel is costlier in the Bay Area than in other regions of the U.S.

Another measure of affordability examines the cost per passenger served. Using the passenger data in Table 1.1, ordinance by the number of passengers we estimate the airlines' cost of the ordinance as equivalent to about $1 per air passenger.

How much of the increase in costs would be offset by savings because of reduced turnover and increased productivity? A reliable quantitative estimate is not possible, but anecdotal data that we heard repeatedly suggests that airport lines would be considerably shorter if more airport personnel had more experience at their jobs. Moreover, baggage screeners, who are paid $6 to $7 per hours and yet are expected to be the first line of

defense against terrorism, are reputed to have very high turnover rates, with average tenure levels below six months. Clearly, some savings would occur reduced turnover.

About 20 percent of the increased costs would fall on food and other retail concessions at SFO. Large multinational companies, such as DFS and Host International hold some of these concessions; many others are national chains. The increase of 12 percent in their costs would again be offset somewhat by reduced turnover and increased productivity. Prices of some food products are regulated, indicating that there is some room for price increases without meeting customer resistance. Clearly, most customers at airport restaurants and shops represent a captured market relative to offsite competition. In this context, the demand for airport services is much more a function of the demand for air travel than of the cost of the ordinance.

The airport is experiencing prosperity, with sales, rents and numbers of workers increasing rapidly. Not all workers are sharing in this boom, however. Yet a case can be made that SFO is subsidizing its tenants. The variable rent structure—with rent proportional to revenue—of most of the leases means that the city absorbs a share of the costs of the variability in economic activity due to the business cycle. This cushions declines in profitability and constitutes a justification for a wage standard. Moreover, long-term lease agreements, which are common at the airport, constitute protection from competition as well as reduction in employer risk

These considerations suggest that the impact of a living wage ordinance upon airport rents would be minimal. Moreover, the airport constitutes a quasi-independent entity, required to recycle any surpluses within the airport rather than return them to the city. Consequently, any reduction in rental revenue would not have a fiscal impact for the city of San Francisco.

Living Wages at Port of San Francisco

Leases at the port

The Port of San Francisco is heterogeneous and calls for an even more disaggregrated analysis than we conducted for the airport. The Port of San Francisco leases 643 properties, representing 17 million square feet of property, and receives rents of about $3m per month. The lease contracts are with 497 different tenants, indicating that some companies have multiple leases.

Table 2.1 shows the level and trends in operating revenue and net operating income at the port from 1994 to 1998. Operating revenue grew from $32.4 million in 1994 to $38.5 million in 1998, a 19 percent increase. Since most of the leases at the port determine rents as a percentage of revenue, it is clear that the economic environment at the port is positive. This picture was confirmed when we looked only at percentage rent leases. These leases exhibited very little turnover and so also provide a reliable indication of economic trends at the port. (They do not, however, yet reflect any of the new developments taking place in the southern waterfront area.) The growth in rents and therefore in operating revenue for the port generated a nearly four-fold increase in the port's net operating income.

To provide a more concrete picture of the port's tenants, we delineate in Table 2.2 the twelve largest private tenants of the port, as measured either by number of square feet rented or the value of the rents paid. These tenants account for 42 percent of the square feet rented by the port and 32 percent of the revenue received by the port. One of these tenants, Pier 39 in the Fisherman's Wharf area, subleases to a number of restaurants and other retail shops, and we have taken this business structure into account in our subsequent employment and wage estimates.

Table 2.3 lists the number of leases by use and revenue type. The structure of the rent contract between the Port of San Francisco and the lessor has some implications for the Living Wage Ordinance. In 461 leases, monthly rent is a fixed amount, in 74 leases, the rent is determined as a percentage of revenue received by the tenant, while in the case of 108 maritime-related leases, the rent is determined on both fixed and/or variable bases. The percentage rent agreements normally include a minimum or base rental that guarantees the Port a minimum income regardless of revenue receipts.

The revenue-sharing rental agreements between the port and tenants probably originated when the waterfront was first being developed, and the venture was not yet firmly established. This system has the benefit of partly insulating tenants from swings in the business cycle - more pronounced here because the waterfront is so dependent on the tourist sector. This renting method is fairly common in defined development areas – such as shopping centers – where tenant mix and stability may be a desirable goal. From the point of view of the port, such revenue agreements are also a way of ensuring they capture benefits of localized growth very quickly.

The use of percentage rent agreements raises the possibility that tenants may have different incentives from comparable firms with other tenancy arrangements. This could occur if the minimum rent is artificially low or high. If it is too low, then the tenant has a reduced incentive to use the land most efficiently; if it is too high then the tenant may be squeezed out. Note however that the former scenario, low minimum rates, may be used to promote tenant diversity, mix and stability.

Of those percentage contracts for which we have data, 40 out of 63 paid more than the minimum rent. The minimum rent paid per month of the 63 would have been about $499,000; the total rent paid was actually just over $921,000. This suggests that these lessors are particularly successful at the moment, or that the minimum is too low, and thus there is reduced incentive to raise revenue.

One additional conceptual point about rents is necessary. Any port-specific costs or benefits of doing business at the port should already be factored into market rent calculations when Port officials and a business negotiate a lease. Nonwage issues at the port, such as public access, maintenance of piers, etc. have already affected rents relative to locations not on the port. They are not relevant when considering the impact of the living wage ordinance.

Port uses most affected by the ordinance

Using Table 2.4 as our reference, we discuss each of the types of uses of the port to determine the sectors that are most likely to be affected by the ordinance.

Restaurants and food stands: 48 leases account for close to $500,000 per month. The most important zone is Fisherman's Wharf, where 21 leases account for $320,000. The impact of a Living Wage Ordinance is likely to vary from restaurant to restaurant. Most restaurants pay rent on a percentage rent basis (35 of 48). These leases would include some low-wage employment. However, since it constitutes a prime location, the wage elasticity of demand for space is likely to be low on Fisherman's Wharf. This argument may not apply elsewhere.

Retail, excluding restaurants: 20 leases account for just over $200,000 per month and 1.6m square feet of space. The most important area again is Fisherman's Wharf (15 leases), accounting for virtually all space and revenue. Most (15) leases are on percentage basis. These leases would include some low-wage employment.

Fish processing: 39 leases accounting for a very small amount of space and rent. Most leases are special maritime related contracts. Employment impacts of the ordinance in this sector differ considerably between unionized and non-unionized firms.

Office / office storage: 243 leases accounting for over $460,000 per month, and a more modest amount of space. Most of the space is in the North-East Waterfront area and Ferry Plaza and most are month to month in duration. These leases would include some low-wage employment. All contracts are on fixed basis.

Parking: 20 lots generate $280,000 per month in rent. These leases include some low-wage employment and are a mix of fixed and percentage contracts.

Industrial: 16 leases, mostly in the Southern Waterfront area. These account for over $260,000 per month, and over 1.3m square feet of space. These leases include some low-wage employment. All are fixed contracts.

The remaining uses of the port — artist studios, tours and ferries, maritime support, wharves and marinas, storage and warehousing, roadways and parks, utilities and recreation-- are not likely to be covered or affected by the ordinance. We review each of these in an appendix to this report.

Covered employment

In order to estimate the impact of the Living Wage Ordinance, we followed a similar methodology to that employed in the rest of the study. Using the discussion above, we determined that the following categories of users would be likely to include low wage workers; restaurants, retail, fish processing, office/office storage, tours and ferries, parking and industrial. Our estimates do not include the recreation uses, where low wage employment may be substantial with the opening of the new Giants Baseball Stadium.

For all use types, we calculated the number of establishments and total rent paid per month. The number of establishments is smaller than the number of leases. Where one establishment has more than one lease, we combined the leases and allocated the use type of the largest (in revenue terms) lease to be the use type for that establishment. This insured that storage, parking and other space was associated with the dominant business activity (restaurant, retail, fishing, etc). Table 2.5 shows the number of lessees by use type and the amount of rent paid.

For the selected use types, we estimated the number of employees per establishment using our own surveys (especially in the case of parking, fish processing and restaurants) and County Business Patterns data for San Francisco County for 1996. In the case of the restaurant sector, where it is believed that restaurants on Port land are larger than average, we assumed that the number of employees would be close to twice the County average. We used the same source to derive an average total annual payroll per establishment (which was adjusted using the San Francisco Consumer Price Index).

As Table 2.6 shows, we estimate that 239 of the 624 establishments at the Port would be covered by the Living Wage Ordinance. These establishments employ about 4,400 employees. The largest number of workers are employed in restaurants and food stands, offices, and other retail establishments.

Next, we examine the number of low-wage workers. As Table 2.7 indicates, about 2,300 workers, or about half of the employees in the port establishments covered by the ordinance, are paid wages less than or equal to $11 per hour, and another 300 are paid between $11 and $13 per hour. These figures do not include earnings from tips, which can be substantial for some restaurant workers. Therefore, Table 2.7 also includes our estimates if tips are included in the determination of pay. As Table 2.7 shows, of the 2,600 workers who would benefit from the ordinance, nearly three-fourths are employed in restaurants and other retail establishments, and most of the rest are employed in fish processing or in offices. Finally, in Table 2.8, we list the number of low-wage workers and their pay scales by detailed job title.

Pay increases

For each sector at the port, Table 2.9 shows the increase in pay that would accompany complying with the living wage ordinance. The total gains (wages plus health benefits) add up to $16.7 million, or $6,500 per benefiting worker per year. With payroll taxes added, these pay increases would cost the affected firms about $18.2 million per year. These dollar costs are equivalent to an increase of about 4.6 percent in business costs for the affected port tenants.

As is the case at the airport, the incidence of these costs varies considerably. While the increase in business costs for the fish-processing sector is 26 percent, office lessors can expect an increase in business costs of less than 1 percent.

Restaurant survey results

Much of the concern over the impact of the Living Wage Ordinance at the port focuses on restaurants. To place this concern in perspective we surveyed a sample of restaurants, some of which were on the port and others near the port. As shown in Table 2.10, we collected price and wage data for paired comparisons of restaurants, according to their location (on the port or adjacent to the port) and union status. We surveyed both medium and large restaurants when possible.

The price information comes from dinner menus and take-out copies of the regular menus. The price of clam chowder reflects a bowl of clam chowder without a main course. The price of a Caesar salad reflects a medium-sized Caesar salad equivalent, not always called a "Caesar salad." Fish entrees reflect the price of a mid-priced main course seafood dish on each restaurant's menu. Because menus varied, the type of fish or the way in which it was prepared also varied. This item should be interpreted as the cost of a "mid-priced seafood entrée," which may vary according to the style of the restaurant as well as price and quality expectations.

The results indicate that restaurants on the port charge somewhat higher prices than those adjacent to the port. Union status and worker pay each are unrelated to

differences in menu prices. The variance in menu prices for a specific menu item exceeds any geographic differences. These data indicate that pay increases could have a very small impact upon menu prices.

Further data on restaurant worker pay is also provided in Table 2.10. We collected data in a port-area worker survey conducted for the purposes of this study. Volunteers asked restaurant workers to provide information on their jobs, salaries, benefits, and working conditions. Part of the way through the survey process, we improved the questionnaire. We asked for details on average weekly tips, and we changed the health insurance question so that it collected information on employer-paid insurance only, rather than including those covered by family insurance. Data on tips and health insurance are sensitive to the type of survey document used. We also provided Spanish-language surveys to Spanish-speaking workers.

The results indicate that average pay is slightly higher at restaurants located on the port, but the variation in pay within detailed occupations is much greater than any geographic differences. Unionized restaurants pay significantly higher scales regardless of location. Some of the pay rates in these occupations are already close to the living wage level in the proposed ordinance.

The retail and restaurant sectors in San Francisco

To develop a fuller context for the restaurant and retail labor market, we examine trends over the past decade in wages and employment in the city in these sectors. (We are referring to retail here as a shorthand label for retail, excluding eating and drinking establishments.)

Tables 2.11 and 2.12 present revenue and employment and payroll data for these sectors for San Francisco for the years 1987 to 1996. The tables show that both revenue and employment have varied with the economic cycle, as measured by the city's unemployment, but nonetheless have grown over time. This growth has occurred simultaneously with increases in the California minimum wage, from $3.35 in 1987, to $4.25 in 1988 and to $5.75 in 1998. These figures suggest that substantial minimum wage increases have not reduced the size of the retail or restaurant sectors in San Francisco, contrary to the concerns expressed by some industry associations during this period.

We find that wages have increased substantially in restaurants and retail sectors in recent years, in percentages that are greater than those contemplated by the ordinance. These pay increases have occurred without creating visible adverse employment impacts. Employment levels in these sectors, which have been growing during the current economic boom, are much more sensitive to national and regional business cycles than they are to local wage rates. These patterns are only suggestive for the impacts of living wages at the port's restaurants, but they do indicate that the restaurant sector is not as vulnerable to mandated pay increases as it often fears.

Affordability

The Port of San Francisco is clearly undergoing an economic upswing and more of the same is predicted. The southern waterfront areas currently are undergoing major development, including the baseball stadium, a cruise ship terminal and proposed hotels and retail complexes. The vacancy rate at the Port's improved properties is negligible and developers have been expressing interest in the unimproved ones.

At present 13 million tourists visit the waterfront each year, making it one of the busiest tourist destinations in the U.S. The cost of the ordinance could thus be expressed as about $1.40 per tourist visitor.

As at the airport, the level of economic activity at the port is much more a function of economic business cycles that are international and national in origin than it is a function of local wages. An increase of 5 percent in business costs, not counting once again savings in turnover costs and increased productivity, seems to be a quite modest objective.

Also as with the airport, the Port of San Francisco constitutes a quasi-independent fiscal entity. It is not likely that rents at the port will be visibly affected. Nonetheless, any surpluses cannot be shared with the city's taxpayers and consequently, the impact on city finances is nil.

The ordinance as a whole

The San Francisco Living Wage Ordinance as proposed would benefit a total of 26,900 low-wage workers. This figure consists of: 6,000 people working on city service contracts and 6,700 home care workers; and 11,600 employees at the Airport and 2,600 at the Port, as reported in this second part of the study. Of the 26,900 benefiting workers, about 23,000 workers currently earn below $11 an hour. About 3,900 others earn near $11 an hour and are projected to experience a wage increase to $13 as a result of "wage-push" pressures for equity.

The following table provides a matrix of costs and benefits for the city:

	Costs	Benefits
Home Health Care Workers	$16.9m to external sources $16.7m to City/County	$30.5m to 6,650 workers
Service Contracts	$27.2m to City and Contractors ($6.7m to for-profit contractors and $20.5m passed through to City by contractors)	$25.2m to 6,000 workers
San Francisco Airport	$59.1m to Airport tenants and users	$53.2m to 11,600 workers
Port of San Francisco	$18.2m to Port tenants and users	$16.7m to 2,600 workers
Other		Reduced public health expenditures to City Enhanced quality of city services Productivity gains Multiplier effect of injection of income from external sources

Appendix A: Port uses not covered or affected by the ordinance

Artist studios account for a small amount of space and revenue, mostly in Southern Waterfront area. Employment effects are likely to be negligible. All contracts are on a fixed basis.

Tours and ferries: 16 leases, many of which are concessions / stands, and thus not pure property leases. This sector accounts for a small amount of space and revenue. Most employment in this sector is unionized and thus includes virtually no low-wage employment. Most contracts (10 of 16) are on a percentage basis.

Maritime support / wharves / marinas: 32 leases, half of which are in the maritime port area. This sector accounts for over 7m square feet, but only just over $310,000 per month. Low-wage employment is likely to be limited to service-type occupations in marinas. Shipping port employment likely to be unionized. Most leases (22 of 32) are special maritime contracts.

Storage / warehousing: 134 leases accounting for over 2.8m square feet of space and $450,000 per month. Living Wage Ordinance effects are likely to be limited since storage involves limited employment on site. Half of all storage space is in Southern Waterfront area. Leases are on fixed basis, some under special maritime contracts.

Mixed use: This use category seems to apply to recently developed areas, particularly in the Southern Waterfront. The category applies to a small number of leases, space and revenue. All are fixed contracts. Employment impacts are not determinable.

Public use / roadways / parks: These leases are mostly San Francisco Redevelopment Agency sites. No or limited employment on these 8 sites.

Utilities, electricity, easements: Almost all of these 16 leases appear to be easements, infrastructure services, or substations with limited on-site employment.

Recreation: This sector includes the new baseball stadium, which currently involves only construction employment, and a recreation attraction, which includes general service-sector employment and thus may include some low-wage employment. Both leases are fixed rent contracts. We have not included these in the Living Wage analysis because these are current developments with long-term leases. Employment at the new ballpark can be expected to replace employment at the former Candlestick location.

Other (billboards, helipads, etc): accounts for small proportion of space and revenue. Property lessees in this category are unlikely to be influenced by the Ordinance since they are unlikely to have five employees on site.

Appendix B: Revision to first release on service contracts

The first release of this report, presented to the City of San Francisco, the public and the media in June 1999, generated considerable discussion and scrutiny. We received a number of useful comments and suggestions for refinement of the initial analysis, especially from the members of the Board of Supervisor's Living Wage Task Force as well as the Board's Legislative Analyst and other city officials. We have made some revisions based on these comments and present them here. The two main areas concern the universe of service contractors and refinements of the costs of health benefits and employer paid taxes. As we document below, these revisions affect some of the details but do not change the main findings of the first release.

The universe of service contracts

The San Francisco Controllers Office provided the original list of service contracts used in this study. After some discussion, we determined that this list combined data drawn from a number of sources: the City's FAMIS financial management database, the Purchaser's ADPICS system and other sources. This list included 2,152 contracts valued at $1.559bn, awarded and paid to 884 firms and nonprofit organizations during the 1997/8 fiscal year. The list did not contain any contracts or grants under the value of $50,000. After we had excluded contracts that would be exempt from the ordinance (firms employing fewer than 5 people, goods purchases, those covered by prevailing wage laws, interdepartmental and intergovernmental transfers), the list contained 1,295 contracts, valued at $728.4m and paid to 214 firms and 293 nonprofit organizations.

Some participants in the public debate over the proposed ordinance raised doubts about the comprehensiveness of the list of contracts used in the first release. It should be recognized that correctly defining the universe of contracts that will be affected by the Living Wage Ordinance is difficult. First, the financial monitoring systems were not established with the intention of providing research data. We believe that we have an accurate reflection of City purchasing patterns, but there will be some gaps and misclassifications. Second, the wording and interpretation of the final Ordinance contains uncertainties. We cannot in advance know exactly all the contracts that will be affected by the ordinance. Third, the amount awarded for a contract (known by city officials as the encumbrance) is often different from the actual amount paid once the service has been provided. This distinction may affect the data in an uncertain direction. It will also affect data obtained from mail surveys of contractors and it may also affect the bidding responses of firms to the Ordinance.

We recognized these shortcomings and with the helpful collaboration of the Purchasers' office, we have attempted to resolve them. In the end we decided to continue to work with the original list. We do so because it distinguishes between for-profit and nonprofit service providers and because it provides the actual amounts paid during a complete fiscal year.

As mentioned, this dataset does not include contracts valued between $25,000 and $50,000. In order to estimate the effects of these contracts, we requested and obtained from the city a special extraction from the ADPICS database. This extraction revealed that there were at least 119 contracts valued between $25,000 and $50,000 in the 1997/8 fiscal year. However, these contracts together are only worth about $4.5m, or about 0.6 percent of the total contract value. This amount is not only relatively small. It is also likely that many of these contracts were awarded to service providers that would be exempt, especially on the grounds of size. Consequently, we have not revised our estimates using this information.

The original list and our sectoral classification of service contracts contained a large number of contracts allocated to the 'other' category. This category accounted for around $225m or around one-third of contract value. Since this category could have included non-service contracts we may have over-estimated the costs and benefits of the ordinance. Moreover, our wage impact estimates for this broad category may be subject to larger errors. Thus, for these revisions we invested further resources in correctly categorizing these contracts. In so doing, we identified and excluded some contracts that would not be covered by the Ordinance and also generated an additional "Arts and Entertainment" sector for estimation purposes. The revised service contract list includes 1,248 contracts, valued at $695m. The category 'other' was reduced to $29m in contract value, or only one-eighth of its previous size.

The net effect of these revisions is to decrease slightly the overall costs and benefits of the ordinance, to substantially reduce the costs and benefits associated with the 'other' category, and to moderately increase the costs and benefits estimates associated with specified sectors.

Cost of health benefits and employer-paid taxes

In the first release, we estimated the value of health benefits at $1.50 per hour. Based on input from a variety of sources including the San Francisco Department of Public Health, and because of some revisions in the proposed ordinance, we have revised the value of health benefits to $1.25 per hour. We have also reviewed the costs of employer-paid taxes for employers. These taxes, which are applied to increases in wages and salaries but not to increased health benefit costs, are now valued at 11.15 percent of the increased wage costs, and include social security payments, unemployment insurance, and training levies. One would expect that these two revisions would work in opposite directions in the aggregate, while falling differently upon individual employers.

Revised estimates

These revisions add up to a small reduction in the estimated costs and benefits of the ordinance, as compared to the first release. The changes may be summarized as follows.

We estimate that about 4,800 (down from 5,200) employees of the city's service contractors would benefit from the proposed ordinance. These directly affected workers will receive a total wage increase of $14.3m, and $7.6m in additional health benefits. Some 1,200 workers will receive wage increases of $3.3m due to indirect wage push effects. Together this implies gains in wage and health benefits of some $25.2m (down from $33.7m) for 6,000 employees of service contractors.

Employer costs will increase by $25.2m plus $2m in employer-paid taxes. Of this $27.2m increase in employer costs, $10m (down from $14.6m) will fall on for-profit firms and $17.2m (up from $16.4m) on nonprofits. The contrasting incidence of this revision on for-profit firms and nonprofits is attributable to two factors. First, a disproportionate amount of the contract value excluded from the 'other' category in the reclassification process was linked to for-profit firms. Second, nonprofit organizations are more likely to already be paying for health benefits, so they do not experience a downward revision in costs because of our lower valuation of health benefit costs.

Cost and benefit estimates for home care workers remain unchanged.

Costs to the city's finances will remain approximately the same as previously estimated. Contractor pass-through for pay and benefit increases will be slightly lower than previously estimated (around $20.5m, down from $21.3m) while savings from reduced public health expenditures may be marginally lower, since fewer workers will be affected. Benefits to the city economy due to the multiplier effect will be reduced to around $17m (from $21m) because of lower estimated worker benefits and leakage of employer-paid taxes.

Author biographies

Michael Reich is Professor of Economics at UC Berkeley and Director of the Center on Pay and Inequality at the Institute of Industrial Relations at UC Berkeley. A specialist in labor economics, he has published dozens of scholarly articles and nine books, including *Labor Market Segmentation; Racial Inequality; Social Structures of Accumulation*; and *Work and Pay in the United States and Japan*. He received his Ph.D. in Economics from Harvard University in 1974, has served as Editor of the scholarly journal *Industrial Relations* and as Research Director of the National Center for the Workplace. He was recently appointed to the University of California Advisory Group on the Code of Conduct for Trademark Licensees, which is addressing living wage issues in both the United States and abroad.

Peter Hall received an M.Sc. degree from the London School of Economics in 1995 and is also a graduate of the University of Cape Town in South Africa. He has worked as a research consultant and in local government economic development. He is currently a Ph.D. student in City and Regional Planning at UC Berkeley and a Graduate Student Researcher at IIR. He is especially interested in regional economic development analysis.

Fiona Hsu is a 1999 UC Berkeley graduate with a double major in Economics and Sociology. She is currently employed in Washington, D.C.

List of tables

Table 1.1

Revenue from rents and concessions, SFO

($ millions)

	Approved FY 1998/9	**Proposed FY 1999/00**
Rentals	121.5	161.2
Terminal concessions	46.0	49.0
Parking	64.0	70.0
Rental cars	34.0	34.5
All other sources	95.4	123.3
Total	**360.9**	**437.9**

Table 1.3

Leases, subleases, tenant agreements and concessions, SFO 1997

Sector	Number
Passenger airlines	55
Airline catering	3
Security / Skycaps	3
Aviation services	23
Cargo airlines	20
Retail concessions	19
Food concessions	10
Airport parking	1
Rental cars	10
TOTAL	**144**

Table 1.4

Number of covered workers and 1993 employment, SFO

Sector	Covered workers (1997/98)	1993 Employment
AIRLINES AND AIRLINE SERVICES		
Passenger airlines	21,800	21,400
Airline catering	1,340	370
Security/Skycaps	1,000	500
Aviation services	1,070	800
Cargo airlines	240	300
AIRPORT SERVICES		
Retail concessions	800	1,000
Food concessions	870	
Airport parking	150	140
Rental cars	1,040	1,200
TOTAL	**28,310**	**25,710**

Table 1.5

United Airlines workforce at SFO

Job Classification	**Average wage**	**Employment**
HIGH-WAGE EMPLOYMENT (>$20)		
Pilots	40.00	500
Computer Technicians	30.10	250
Average pay and total high-wage employment	**36.70**	**750**
MEDIUM-WAGE EMPLOYMENT ($13-$20)		
Flight Attendants	19.10	4,000
Mechanics	15.10	6,100
Experienced Reservation Sales/Service Representative	16.00	100
Experienced Utility Maintenance	15.00	100
Experienced Ramp Service	17.00	450
Experienced Fueler and Ground Service	17.00	400
Average pay and total medium-wage employment	**16.55**	**11,150**
LOW-WAGE EMPLOYMENT (<$13)		
Administrative Support	6.60	200
Crew Scheduler	7.60	200
Reservation Sales/Service Representatives	10.00	300
Customer Service Representatives	9.20	200
Utility Maintenance	9.00	300
Ramp	10.50	1,350
Fueler and Ground Service	10.50	1,150
Cabin Service	7.50	400
Average pay and total low-wage employment	9.70	**4,100**

Table I.6

Low-wage employment at SFO

Sector	Job Titles	Number of Workers	Wage Range	Average Wage
Passenger Airlines	Administrative support		6.60	6.60
	Crew Scheduler	230	7.60	7.60
	Customer Service Representative	370	7.60-15.00	9.00
	Reservation Sales / Service Representative	450	8.40-16.00	11.50
	Fueler, Ground and other Aircraft Service	1,800	8.90-17.00	12.10
	Ramp Service	2,200	8.90-17.00	12.10
	Utility maintenance	530	7.60-16.00	10.60
	Cabin Service	470	7.50	7.53
Airline Catering	Clerk	200	9.60	9.60
	Utility worker	200	7.80	7.80
	Food preparation	400	9.00-9.80	9.40
Security / Skycaps	Baggage Handler	200	5.75-5.90	5.80
	Pre-board screener	200	6.00-7.00	6.50
	Wheelchair agents	200	5.75-6.00	5.90
	Skycap	180	6.00	6.00
	Security / guard	200	7.00-9.50	8.30
Aviation Services	Fuel agent	130	7.00	7.00
	Cabin Cleaner	290	6.00-8.00	6.40
	Ramp Agent	200	6.50-8.00	7.20
	Customer Service agent	120	5.75-8.50	6.40
Parking	Cashier	20	6.00	6.00
	Valet	20	9.00	9.00
	Audit clerk	20	6.80	6.80
Retail Concessions	Sales Associate / Representative	320	6.00-8.00	6.70
	Stock Person	320	6.00-7.90	6.50
	Supervisor	140	8.00-13.80	12.20
Food Concessions	Bartender / cocktail server	190	5.80-9.80	8.20
	Snack bar attendant / cashier	180	6.20-10.00	7.90
	Dishwasher / utility	110	6.30-8.00	7.10
	Busser	110	7.20-7.70	7.40
	Driver	110	7.40	7.40
	Food preparation	110	9.30-9.50	9.40
Rental Cars	Rental agent	190	8.70-10.00	9.40
	Service agent	170	8.24-8.60	8.40
	Shuttler / hiker	250	11.00	11.00

Table I.7

Number of workers affected by a living wage ordinance, SFO

Sector	Directly affected workers (< $11)	Indirectly affected workers ($11-13)
AIRLINES AND AIRLINE SERVICES		
Passenger airlines	4,170	1,300
Airline catering	990	340
Security/Skycaps	980	0
Aviation services	1,000	50
Cargo airlines	20	170
AIRPORT SERVICES		
Retail concessions	780	10
Food concessions	820	0
Airport parking	70	0
Rental cars	640	270
TOTAL	**9,470**	**2,140**

Table 1.8

Impact of Living Wage Ordinance on SFO tenants and employees

($ millions)

Sector	Compensation	Payroll Increase	Wages and benefits increase	Increase in business costs (%)
AIRLINES AND AIRLINE SERVICES				
Passenger Airlines	673.0	20.5	18.4	1
Airline Catering	21.7	4.7	4.2	6
Security/Skycap	15.5	11.5	10.3	47
Aviation Services	14.4	6.9	6.2	13
Cargo Airlines	5.3	0.4	0.4	2
AIRPORT SERVICES				
Retail Concessions	8.9	6.1	5.5	12
Food Concessions	12.2	5.5	5.0	12
Airport Parking	3.7	0.5	0.4	8
Rental Cars	14.6	2.9	2.7	4
TOTAL	769.3	**59.1**	**53.2**	**2.7**

Table 1.9

Landing fees, top ten passenger airports and Bay Area airports

(November 1998)

Airport (City)	**Airline Landing Fee Rate (per 1000 pounds)**
Newark (New Jersey)	$4.282
Kennedy (New York)	3.880
Denver (Denver)	2.808
O'Hare (Chicago)	2.606
Los Angeles (Los Angeles)	1.830
Dallas-Fort Worth (Dallas)	1.610
San Francisco (San Francisco)	*1.465*
Miami (Miami)	1.410
Metropolitan Oakland (Oakland)	0.940
San Jose (San Jose)	0.930
Sky Harbor (Phoenix)	0.750
Hartsfield (Atlanta)	0.500

Table 2.1

Operating revenue and net operating income, Port of San Francisco, 1994-98

($ millions)

Year	Operating Revenue	Net Operating Income
1994	32,431	2,297
1995	32,212	3,990
1996	32,057	5,312
1997	37,290	7,413
1998	38,490	8,472

Table 2.2

Largest private tenants, Port of San Francisco

(500,000 square feet or more or $50,000 per month or more)

	Monthly rent ($)	**Space (sq ft)**
Alioto's Restaurant	75,000	43,000
Allright Cal, Inc.	67,000	101,000
Blue & Gold Fleet	104,000	59,000
California Sealift Terminal	64,000	298,000
China Basin Ballpark Co.	171,000	1,164,000
Crowley Marine Services Inc.	23,000	595,000
Limbach & Limbach Attorneys	65,000	35,000
Marine Terminals Company	33,000	1,765,000
Pier 39 Ltd. Partnership	151,000	1,274,000
San Francisco Drydock, Inc	67,000	1,451,000
Scoma's Restaurant Inc.	76,000	20,000
West Coast Recycling, Inc	74,000	309,000

Table 2.3

Type of leases by sector, Port of San Francisco

	Fixed	Percentage	Other	Total
Restaurants and food stands	13	35		48
Retail excluding restaurants	4	15	1	20
Fish processing	3		36	39
Office / office storage	242		1	243
Artist studio	25			25
Tours and ferries	1	10	5	16
Maritime support /wharves /marinas	7	3	22	32
Storage / warehousing	97		37	134
Parking	11	8	1	20
Mixed use	9			9
Industrial	14		2	16
Public use / roadways / parks	8			8
Utilities, electrical, easements	13	2	1	16
Recreation	2			2
Other (helipads, vending machines, etc)	12	1	2	15
Total	461	74	108	643

Table 2.4

Number of leases by sector, Port of San Francisco

Sector	Leases	Total space (sq ft)	Monthly rent ($)
Restaurants and food stands	48	424,000	492,000
Retail excluding restaurants	20	1,598,000	215,000
Fish processing	39	273,000	95,000
Office / office storage	243	437,000	462,000
Artist studio	25	43,000	17,000
Tours and ferries	16	165,000	189,000
Maritime support/wharves/marinas	32	7,062,000	311,000
Storage/ warehousing	134	2,816,000	451,000
Parking	20	1,170,000	285,000
Mixed use	9	492,000	77,000
Industrial	16	1,305,000	260,000
Public use / roadways/ parks	8	527,000	13,000
Utilities / electricity/ easements	16	12,000	22,000
Recreation	2	606,000	136,000
Other (helipads, vending machines, etc)	15	108,000	36,000
TOTAL	643	17,038,000	3,063,000

Table 2.5

Summary of lessees and expected living wage impact, Port of San Francisco

	Lessees	Total Rent Paid ($ per year)	Expected Living Wage Impact
Restaurants and food stands	60	6,427,000	Yes
Retail excluding restaurants	123	2,777,000	Yes
Fish processing	28	1,008,000	Yes
Office / office storage	190	5,208,000	Yes
Artist studios	23	198,000	Limited employment
Tours and ferries	14	2,280,000	Employment is unionized
Maritime support /wharves /marinas	28	3,600,000	Mostly use fees
Storage / warehousing	98	5,070,000	Limited employment on site
Parking	8	2,184,000	Yes
Mixed use	2	575,000	Unknown employment
Industrial	16	3,486,000	Yes
Public use / roadways / parks	4	637,000	Public sector and limited employment
Utilities, electricity, easements	14	381,000	Public sector and limited employment on site
Recreation and Ballpark	2	2,492,000	Currently construction employment
Other (helipads, vending machines, etc)	14	433,000	Limited employment on site
Total	624	36,755,000	

Table 2.6

Establishments and workers covered by a living wage ordinance, Port of San Francisco

	Covered establishments[1]	Covered Employees
Restaurants and food stands	55	1,730
Retail, excluding restaurants	61	750
Fish processing	28	380
Office / office storage	82	1,250
Parking	2	30
Industrial	11	270
Total	239	4,410

Table 2.7

Number of workers affected by a living wage ordinance, Port of San Francisco

		Directly affected workers (< $11)	Indirectly affected workers ($11-13)
Restaurants and food stands	Without tip credit	1290	90
	With tip credit	690	30
Retail, excluding restaurants		380	70
Fish processing		280	20
Office / office storage		250	100
Parking		10	0
Industrial		80	10
Total (without / with tip credit)		2,290 / 1,690	290 / 230

Table 2.8

Low-wage employment at the Port of San Francisco

Sector	Job Titles	Number of low-wage workers	Wage range	Average wage
Restaurants and Food Stands	Busser	150	5.75-10.30	Without tip credit: 7.30 With tip credit: 10.50
	Dishwasher	150	5.75-12.00	
	Cook, food preparation	300	7.75-13.50	
	Waiter, cocktail server, bartender	600	5.75-7.10	
Retail excluding restaurants	Cashier, stock clerk, etc.	450	N/a	9.40
Fish Processing	Packers	240	5.75-14.00	6.10
	Cutters	100	12.00-14.00	13.00
	Sales	80	5.75-14.00	6.10
Office	Receptionist, janitor, etc.	350	N/a	10.60
Parking	Parking attendant	10	8.00-10.80	8.50
Industrial	Utility, packer, etc.	90	N/a	12.10

Table 2.9

Impact of a living wage ordinance on port tenants and employees
($ millions)

		Wage bill of covered employers	Increased payroll costs[1]	Wage and health benefits[1]	Increased business costs[2] (%)
Restaurants and food stands	Without tip credit	23.8	10.3	9.5	13
	With tip credit		3.1	2.9	3
Retail		16.8	3.1	2.8	4
Fish processing		4.8	3.1	2.8	26
Office/ office storage		74.5	1.0	0.9	1
Parking		0.7	0.06	0.05	6
Industrial		10.8	0.7	0.6	3
Total (without / with tip credit)		131.4	18.2 / 11.0	16.7 / 10.1	4.6 / 2.8

LIVING WAGES AND ECONOMIC PERFORMANCE

THE SAN FRANCISCO AIRPORT MODEL

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March 2003

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SUMMARY AND MAIN FINDINGS

In response to low pay for workers and low service quality for taxpayers, about 100 local governmental entities in the United States have instituted living wage ordinances. Generally, these ordinances apply wage and benefits mandates for employees of contractors conducting services for a municipal government. Some of the ordinances also apply to employers who conduct business on government-owned property.

An innovative and far-reaching living wage ordinance has been implemented at San Francisco International Airport (SFO). Nearly two years before September 11, 2001, SFO adopted a Quality Standards Program (QSP), which was designed to improve safety and security at SFO as well as improve the conditions of the SFO labor market. The program went well beyond the FAA regulations in place at the time, establishing compensation, recruitment and training standards for a wide range of airport employees whose performance affects airport safety and security. Two additional policies in San Francisco in 2000 also restructured the labor market at SFO: a Labor Peace /Card Check Rule and a Minimum Compensation Ordinance (MCO), which places living wage mandates into airport leases and service contracts not covered by the QSP.

In this study we examine the determinants of low-wage labor markets at the airport, the scope of the new policies at SFO, and the impacts of those policies on workers, employers, consumers and taxpayers, with special attention to the effects on airport safety and security. This study constitutes the first examination of the impacts of the policies. In this summary of our findings, we focus on the main findings of our study. The document that follows provides our full report.

To conduct the study, we carried out detailed surveys of airport employers and workers in the summer and fall of 2001, and we interviewed labor, management and airport officials. We also drew upon government documents and census datasets, the airport's own security badge data, and FAA data on security at major U.S. airports.

1. Low pay in the SFO labor market

- *SFO, the fifth largest airport in the U.S., comprises a major multi-employer labor market with substantial pay inequality and a large proportion of low-wage workers.*

  Over 140 different private employers do business at SFO—approximately 60 airlines, 40 airline service firms and 40 passenger service concessions—with a workforce of nearly 30,000 people. Average pay growth in the air transportation industry has lagged other sectors, including even retail, since deregulation began in 1978. Nonetheless, as of 2002, many airport workers-- including the public sector employees, the pilots, computer technicians, the flight attendants, and the large number of mechanics who work at the SFO United Air Lines service facility-- are paid at rates near or well above the national average of about $15 per hour.

  The remaining workforce at SFO consists of the ground-based, non-managerial workers, including: customer service and ramp workers, baggage handlers, screeners, cabin cleaners, and

restaurant and retail workers. Most of the 11,000 workers in this group were paid less than $10 per hour.

- *Airline service contractors employed a substantial portion of the low-wage labor at SFO.*

  In the 1980s, the airlines increasingly contracted out services that used to be performed by direct airline employees. Employees of the airline service firms receive lower wages and benefits, receive less training and have fewer opportunities for advancement than direct airline employees. For example, average pay for airline service employees ranged from fifty-nine to seventy-three percent of pay for direct airline employees in the same job classifications.

- *Low pay at SFO became associated, as at other airports, with inadequate training and high turnover as well as lower service quality and low security standards.*

  Airport screeners illustrate this pattern. Prior to the QSP, pre-board screeners at SFO were paid very close to the minimum wage, received only a few hours of training, and had turnover rates of about 80 percent. Turnover among screeners at 19 major airports averaged 110 percent.

2. The proposed policy solutions

- *The new policies cover a wide spectrum of employees at SFO.*

  The QSP covered all employees who work in secure areas of the airport. The MCO will eventually cover most of the remaining employees. In contrast, living wage ordinances in other localities cover a very small segment of the local labor market.

- *The new policies set standards for pay and benefits as well as enhanced training.*

  The QSP established a minimum pay standard of $10 per hour plus full benefits, or $11.25 without. It also established a 40 hours of training standard.

3. The impacts on workers

- *The Quality Standards Program and other living wage policies had a large impact on pay at SFO.*

  Over 9,700 low-wage workers at SFO received substantial pay increases after the QSP was implemented. The direct beneficiaries of the QSP and MCO included 5,400 workers who had previously earned less than the mandated $10 an hour. Entry-level pay for these directly-covered workers rose by an average of 33 percent after the policies went into effect.

- *The QSP had a broad impact on the low-wage airport labor market, reaching beyond those firms directly mandated to increase pay.*

Firms raised pay for low-wage occupations not covered by the QSP to compete for workers at SFO. We estimate that this spillover from the program resulted in additional pay increases of at least ten percent for 2,550 workers who were not directly covered by the QSP or MCO (but are among the 11,000 ground-based non-managerial work force).

- *The pay increases were most marked among the lowest paid airline service workers, including security screeners, baggage handlers, fuel agents, customer service agents, ramp workers and cabin cleaners.*

While 55 percent of the ground-based non-managerial workforce was paid less than $10 an hour before the QSP, only 4.9 percent were paid less than $10 after the QSP. Security screeners, who averaged $13,400 a year with no benefits prior to the QSP, earned $20,800 plus full benefits by January 2001, which amounts to a 55 percent increase in pay, and a 75 percent increase in total compensation. These increases substantially reduced the pay differentials between direct airline workers and service contract workers in the same jobs.

- *All workers in QSP-covered jobs now receive a package of health benefits and paid days off or an extra $1.25 per hour. Yet many non-covered workers still receive no effective health benefits.*

Approximately 2,000 workers in firms that did not previously offer employer-paid health benefits are now receiving the wage premium or the full QSP-mandated benefits package. Additional workers gained access to health benefits as firms eased eligibility requirements and reduced the employee share of out of pocket expenses. Seventy percent of QSP-covered firms—accounting for 75 percent of the workers covered by the QSP—chose to provide health benefits and paid days off over increasing wages by an additional $1.25 an hour.

4. Costs of the Quality Standards Program

- *The cost of the QSP and living wage ordinance to airlines and airport travelers amounted to about $1.42 per passenger.*

The direct cost of the QSP to employers consists of increased wages, payroll taxes, health benefits, paid time off and training costs. These costs approximate $42.7 million a year. Including the spillover effects to other workers and employers at SFO adds $14.9 million to employers' costs. The total cost amounts to 0.7 percent of the fare revenue received at SFO in one year. If the airlines passed these costs directly to the customers, the cost increase would average $1.42 per airline passenger. This cost estimate does not take into account any savings from increased productivity and other employer savings.

5. Adjustments that reduced business costs and improved service quality

Following implementation of the QSP, workers and firms adjusted their behavior in ways that reduced its costs.

- *Employee turnover rates fell dramatically.*

  Turnover fell by an average of 34 percent among all surveyed firms and 60 percent among firms that experienced average wage increases of 10 percent or more. The greatest reduction in turnover occurred among airport security screeners, from 94.7 percent a year in April 2000 to 18.7 percent fifteen months later, an 80 percent decrease. Cabin cleaning firms reported a 44 percent reduction in turnover, and ramp workers a 25 percent reduction.

- *Reduced turnover saved employers $ 6.6 million per year.*

  Every time an average worker has to be replaced employers pay about $4,275 in turnover costs. The turnover reductions therefore saved employers $ 6.6 million each year.

- *Employees improved overall work effort and performance.*

  Significant percentages of employees covered by the QSP reported that they are working harder at their jobs (44 percent), that more skills are required of them (50 percent), and that the pace of work increased after the implementation of the new rules (37 percent).

  Average job performance by QSP-covered workers improved substantially. One-third of all SFO employers, accounting for over half of all employees, reported improved overall job performance among workers covered by the QSP. The proportion of employers who reported improvements in employee morale was 47 percent, decreases in employee grievances (45 percent), decreases in employee disciplinary issues (44 percent), and decreases in absenteeism (29 percent). In each category most of the remaining employers reported no change; few employers reported any deterioration in performance.

- *The QSP mandates increased worker training, which helped improve worker performance. By increasing pay, the QSP also made training more desirable to employers.*

  Twenty-five percent of QSP-covered employers increased the training programs they were providing their workforce. Among non-QSP firms, the comparable figure was eleven percent. None of the firms reported a decrease in training.

- *Service levels improved, as did indicators of security.*

  The benefits of the QSP for airport customers include higher security and improved quality of service. Almost half (45 percent) of all employers reported that customer service improved; only 3 percent thought it had worsened. Our analysis of FAA data for 19 large airports found that lower turnover is associated with higher rates of detection of security breaches.

- *The labor-management environment improved at SFO following implementation of the policies.*

  The new policies reduced employee grievances and employer-initiated disciplinary cases and improved employee morale. The policies also minimized disruptions during labor organizing

campaigns. Following implementation of the policies, 2,400 workers gained union representation in 21 airport firms with no significant disruptions of business.

6. Level and composition of employment

- *Employment levels did not decline as a result of the QSP.*

  Employment in QSP-covered jobs in the airline and airline service firms grew by up to 15 percent between 1998 and 2001. The observed expansion in employment occurred despite the fact that the effects of the recession on airport activity were apparent by the beginning of 2001. Employment at SFO began to decline only after the sharp drop in airport activity subsequent to September 11.

- *The composition of the workforce did not change significantly with the QSP.*

  We find some evidence of small displacement effects as a result of the program. The QSP allowed employers to hire screeners with slightly more education, although increased training mandates and worker protections ensured that few incumbent workers were displaced. While the overall proportion of women to men in the SFO workforce did not change, the QSP did result in more hiring of men than women in certain low-wage occupations. There is no evidence of changes in hiring patterns by age and race.

7. SFO as a model

The Quality Standards Program constitutes a model for improving airport safety and security. Security at airports should involve all the workers with access to the tarmac, aircraft and baggage areas. By raising pay and standards even before September 11, and for most airport workers, not just the screeners, SFO set the national pace in improving security and safety.

SFO remains an innovative laboratory-- the FAA has selected the airport for a pilot program that retains contract screener status rather than federalizing the screener workforce.

CHAPTER 1 INTRODUCTION

Since 1994 living wage ordinances have been passed and implemented in about 100 local governmental entities in the United States; about one-fifth are in California. Living wage ordinances establish wage and benefit standards for employees of municipal service contractors and/or recipients of tax subsidies at a level substantially above the minimum wage.[1]

Although the number of living wage ordinances is still growing, most ordinances cover a very small number of workers. While individual workers have benefited substantially, the ordinances generally have very little impact on the local labor market, including the low-wage sectors. Moreover, the implementation of the ordinances by local officials often involves the granting of numerous waivers and exemptions, which further reduces their impact.

The living wage policies instituted in San Francisco cover a much larger portion of the low-wage labor market than most living wage policies. The policies extend to workers in non-profit organizations and for-profit firms with city contracts, to home care workers, and to employees at San Francisco International Airport (SFO). SFO constitutes a geographically distinct microcosm of urban labor markets, with over 30,000 workers and 140 employers. The broad coverage of living wage policies at SFO and the great density of workers affected by the policies means that the entire airport's labor market structure may well be substantially different from before. If so, the SFO experience will be instructive for other broad labor market interventions.[2]

The living wage experience at SFO is also pertinent to nationally prominent questions of airport security. The Quality Standards Program was explicitly designed to improve safety and security at SFO. After September 11, the low pay and high turnover among screeners nationally was recognized as a major weakness of airport security systems and became the focus of the Aviation and Transportation Security Act, signed into law in November of 2001. The changes in pay, training and supervision now being instituted at airports across the country were already in place at SFO on September 11. The SFO experience prior to September 11 therefore provides lessons for all major airports. Moreover, SFO remains innovative: as part of a national experiment it will continue contract status for its screeners while all other very large airports federalize their screeners in 2002.

This study examines the impact of the living wage policies at SFO with these issues in mind.

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[1] Living wage ordinances in San Francisco and in California are tabulated in Appendices A and B below. Previous surveys of living wage policies include Pollin and Luce (1998) and Luce (2002). Neumark and Scott (2000), although claiming to study the impacts of living wage policies, do not have any direct data on workers or employers covered by living wages.

[2] For "blueprints" of such proposed interventions, see Osterman et al (2001).

1.1 The problem: low pay, high turnover and security standards at U.S. airports

Until the federalization in 2002, private security companies, carried out baggage screening at U.S. airports, operating under subcontracts with airlines. Airlines routinely awarded contracts to the lowest bidder. In order to compete for contracts, security companies kept wages at a minimum and offered few, if any, employment benefits. As a result, low wages and high worker turnover had become the norm at airports throughout the country.

At SFO, and at many other airports in the late 1990s, pre-board screeners and other security workers earned an average of $6.25 an hour, less than the starting wage in many local fast food restaurants. In 1999, according to the General Accounting Office, annual turnover among the nation's 8,000 screeners exceeded 125 percent. At this rate, the average screener had been on the job for only four and one-half months. Officials at SFO expressed concerned about the impact of such high turnover on security. Airport officials reported screeners taking on multiple jobs at the airport to make ends meet, and raised concerns about their ability to stay alert on the watch.

1.2 The solution at SFO: living wage mandates and related policies

A Quality Standards Program (QSP) and other living wage policies were crafted as a result of a campaign in San Francisco to bring living wage standards to the city's contractors and leaseholders. Spurred by the rapidly rising costs and increasingly precarious situation for low-wage workers[3], labor, religious and community organizations joined together in 1998 to press for a living wage ordinance in San Francisco.[4] San Francisco International Airport, which was undergoing significant expansion, was of specific concern to organized labor. The QSP was approved by the San Francisco Airport Commission in January 2000.

The QSP constituted only one of a related set of policies that substantially restructured the institutions regulating pay, benefits and labor relations policies at SFO between 1999 and 2001.Tthe San Francisco Airport Commission and the San Francisco Board of Supervisors also passed far-reaching health care and labor peace/card-check programs.[5] At the same time, a multi-union organizing drive conducted under the labor peace agreement at SFO led to union recognition in 21 firms, covering about 2,400 workers.[6]

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[3] By 1999, according to an estimate by the National Low-Income Housing Coalition, a full-time worker in San Francisco needed to earn a minimum of $17.50 an hour in order to be able to pay rent on a studio apartment and still make ends meet.

[4] The coalition leading the effort included the Bay Area Organizing Committee, the San Francisco Labor Council, Service Employees International Union Locals 790 and 250, Hotel and Restaurant Employees Local 2, Office and Professional Employees Local 3, the International Brotherhood of Teamsters Local 665 and several immigrant and welfare rights organizations.

[5] Labor peace agreements refer to compacts that modify National Labor Relations Board standards for employer and union conduct in an organizing campaign. Card check agreements essentially permit "instant" elections rather than a long and often complex procedure involving the NLRB electoral machinery.

[6] The San Mateo and San Francisco Labor Councils, along with ten member unions, formed the SFO Organizing Project, reaching common agreements on resources and organizing jurisdictions.

This unusual mix of policies, which we discuss in more detail below, could arise because of the role that the airport plays in the regional economy as well as an institution that reflects regional political structures. The airport's governance arrangements give it the authority to make employment policy, in concert with other decision-makers. SFO is a quasi-public entity, located in San Mateo County but owned by the City and County of San Francisco, and operated as a separate enterprise department. A five-member Airport Commission is appointed by the Mayor to four-year terms.[7] In this way, the Airport is held to some degree of public accountability, and it is subject to regulation through City and County Ordinances, including ordinances regulating employment in the City of San Francisco.

The financial arrangements that govern the airport provide it with some degree of independence. The Airport is financed by rents and fees charged to users through leases, concession and use agreements and other contractual arrangements. Airport revenues are held in an Airport Revenue Fund, separately from the City and County General Fund.

Transfer of airport revenues to the city is limited. In a 1981 agreement with the major airlines, transfers of airport revenue to the City for fire, policing and other services are capped at 16 percent of concession revenue or $5 million per year, whichever is greater. As a result, in 2001 the Airport contributed $38 million in general fund revenues to an overall city budget of $4.5 billion. The airport's contribution to city finances is thus modest, while long-term tenants, especially the airlines, have a significant interest in the day-to-day administration of the airport.

This landscape of actors, interests and governance arrangements makes the airport an especially fertile site for policy innovation. In other contexts, private interests diverge and often preclude significant local policy-making. But the political pressures on the airport and the powers of the commission make it an unusual regulatory body. It can mediate among competing interests and provide a vehicle for the development of regional public goods. Institutions like SFO can thereby play an influential role in structuring local private labor markets through public policy.

1.3 The mix of living wage policies at SFO

The *Quality Standards Program* was passed by the Airport Commission in January 2000 and set the pattern for the broader city living wage ordinance. It was followed shortly thereafter by the *Card-Check/Labor Peace Rule*. The living wage law, renamed as the *Minimum Compensation Ordinance*, was passed in August of the same year.[8] The *Health Care Accountability Ordinance* became law in July 2001.

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[7] The City Charter empowers the Commission as the policy-making body responsible for construction, management, supervision, maintenance, extension, operation use and control of all the property and assets of the Airport. Day-to-day operation of the Airport is the responsibility of an Airport Director, employed by the Commission. The Commission has the exclusive right to issue revenue bonds for capital expenditure subject to approval, amendment or rejection by the Board of Supervisors.

[8] An agreement on the living wage ordinance developed after the Living Wage Coalition collected signatures to put the law on the November ballot. Previous negotiations among the Mayor's Office, the business community and living wage supporters had broken down over disagreements about coverage. With the threat of a ballot fight looming, a compromise was reached by removing the Port of San Francisco from coverage under the living wage law, but including it under the proposed health care ordinance.

Table 1.1 Selected pay, benefit and labor standards policies at SFO

Policy	Jurisdiction / Phase-in Dates	Coverage at SFO	Conditions
Quality Standards Program (QSP)	SFO only April 2000: Airline service firms June 2000: Skycaps and wheelchair agents October 2000: Airlines	Covers all workers in security areas or performing security functions.	$9 an hour minimum compensation with benefits or $10.25 an hour without; increased to $10/$11.25 in January 2001; indexed annually to the Bay Area CPI.
Labor Peace/Card Check Rules	SFO only Food and Beverage 1999; Other February 2000	Covers all employers where airport has a proprietary interest.	Requires employers to follow card check agreements for union recognition.
Minimum Compensation Ordinance (MCO)	City/County and SFO Phased in at SFO from October 2000 as contracts renew	Covers all employees working on service and property contracts.	Requires employers to pay a minimum of $9 an hour increasing to $10, January 2002; 12 paid days off annually.
Health Care Accountability Ordinance (HCAO)	City/County and SFO Phased in from July 2001 at SFO as contracts renew	Covers all employees working on service and property contracts.	Requires employers to provide health benefits or pay $1.50 per worker hour into a city fund for the uninsured.

Note: See Appendix A for further details and documentation.

The Quality Standards Program

The QSP was passed by the Airport Commission in January 2000 and its implementation began the following April. The program establishes hiring, training and compensation standards for all employers with workers in security areas or performing security functions. The standards, which exceeded those set at the time by the FAA, cover some 8,300 workers in over 80 firms, including baggage screeners, skycaps, baggage handlers, airplane cleaners, fuelers and boarding agents—anyone whose performance affects airport security and safety.

With the QSP, airline service contractors that had previously evaded regulatory oversight have to be certified by the Airport Commission; the quality standards are a condition of certification. The implementation of the program was phased in over the course of 2000, first going into effect for airline services contracts on April 1, and airline employees on October 1. It was later amended to include skycaps and wheelchair agents, starting June 1, 2000.

The program established minimum compensation levels of $9 an hour with benefits, $10.25 an hour without benefits, which increased to $10 an hour with benefits, $11.25 without benefits on January 1, 2001. This amount is adjusted annually in accordance with the Bay Area CPI. Benefits are defined as company-paid membership in a group medical plan, twelve paid days off and ten unpaid days off a year. Firms must also satisfy a range of hiring, training and performance standards, many of which were designed to exceed FAA regulations. These standards included high school diplomas and substantially greater training, approximately 40 hours for airport screeners under the QSP, compared to about 8 hours under then-existing FAA regulations.

The QSP policy departed from previously issued but not implemented FAA proposals in five important respects. First, it extended coverage well beyond pre-board screeners to include all airport workers employed in safety and security-related positions. Second, it addressed wages and benefits, establishing minimum compensation levels for covered workers. Third, for security-related employees, the QSP established higher standards for hiring, specifically in the areas of English language competence and ability to deal with contingencies on the job. Fourth, it extended standards for entry and recurrent training in security and safety topics. Fifth, the QSP established a regulatory relationship between the airport and the airline service contractors that previously had evaded oversight.

Labor Peace/Card Check Rule

The Airport Commission passed two Labor Peace/Card Check rules governing different classifications of workers in 1999 and 2000.[9] The rules, which are designed to protect airport revenues from labor disruption, require employers operating at the Airport to enter into card check agreements with any registered labor organization that requests such an agreement.[10] Card check procedures call for immediate recognition of the union as the bargaining agent if fifty per cent plus one of the workers have signed union cards. In return, the union agrees not to strike prior to recognition. A card check agreement bypasses the lengthy and often-contentious process of representation elections conducted by the National Labor Relations Board.

To date, twenty-one airport employers, with a total of 2,400 employees, have recognized unions through the card check procedure. By early 2002, nearly 2,000 workers in twelve firms had achieved collective bargaining agreements.

The Minimum Compensation Ordinance

San Francisco's living wage law, the Minimum Compensation Ordinance (MCO), was passed by the San Francisco Board of Supervisors in August 2000 and went into effect in October 2000. The MCO requires private contractors performing services for the city, or operating at the San Francisco International Airport, to meet specified minimum wage and benefit requirements. The law also

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[9] In April 2001, Aeroground, an airport cargo services firm operating off-site, requested an injunction against the rule, arguing that federal labor law preempts it. The U.S. District Court issued an injunction in July of 2001 prohibiting the airport from applying the rule to Aeroground. The court argued that the airport does not have specific proprietary interest in airline service firms such as Aeroground.

[10] Employers governed by the Railway Labor Act are exempt.

covers home care workers employed through the In Home Support Services Public Authority (IHSS). The MCO exempts contracts of less than $25,000 with for-profit businesses and $50,000 with non-profit agencies. Contracts with small businesses that have fewer than 20 total employees in all affiliated entities are also exempt from the ordinance.[11]

The pay provisions of the MCO are slightly different from those of the QSP. The required minimum pay rate in the MCO was set initially at $9 an hour, increasing to $10 on January 1, 2002, and with a 2.5 percent cost of living increases in each of the following three years. Compensation must also include 12 paid days off a year for vacation and sick leave and 10 uncompensated days off for family emergencies.[12]

The Minimum Compensation Ordinance goes into effect for any given firm at the time a lease or service contract is renewed or amended. Over time it will cover all employees at SFO and the SFO rental car facility. An October 2000 lease amendment made United Airlines the largest firm to be affected. United's 100 or so customer service agents who, unlike the customer service representatives, were not covered by the QSP had previously earned an average of $8.20 an hour.

Unlike most other living wage ordinances, there is no health care differential pay in the San Francisco MCO. Instead, a separate ordinance—the Health Care Accountability Ordinance—addresses health benefits.

The Health Care Accountability Ordinance

The Health Care Accountability Ordinance (HCAO) was passed by the San Francisco Board of Supervisors and became law in July 2001. Known more popularly as the Living Health Ordinance, it is the first local law of its type in the United States. Standard living wage ordinances allow employers to pay a somewhat lower mandated wage if they offer health benefits; such a differential is contained in the QSP. San Francisco's approach to non-QSP employers is different.

The HCAO requires covered employers to provide their employee's health benefits that meet standards set by the San Francisco Health Department, or pay $1.50 an hour into a city fund for the uninsured. The ordinance also directs the Health Department to establish a program to provide a low cost health insurance alternative to covered businesses. These features make the HCAO unusual.

The HCAO applies to service contracts and leases with the City and County of San Francisco, including businesses operating at SFO. In the first year it covers employees working 20 hours a week or more; beginning on July 1, 2002, the HCAO covered employees working 15 hours a week. Like the Minimum Compensation Ordinance, it is a contract condition that applies to specific contracts

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[11] The San Francisco Redevelopment Agency also approved comprehensive living wage and health care policies in October 2001. These policies are the first to be instituted at a redevelopment agency in California.

[12] The Airport Commission also approved a Worker Retention Policy in June 2001. The policy applies to contracts with third party service providers subject to the QSP, as well as contracts for parking garage, curbside management operations, and information booths. When these contracts are terminated, any successor contractors are required to retain workers who have been on the job for a minimum of six months for a 90-day trial period. It was amended in 2002 to cover food and beverage leases.

as they are renewed, let or amended. For this reason, the first airport firms began to be covered by the law only in July 2001.[13]

1.4 Purpose, methods, and outline of this study

Our primary focus is on the living wage policies at SFO and their impacts upon workers, airport businesses, airport security and safety, consumers and taxpayers. We first examine the scope of the policies, then look at the structural causes of low pay at SFO, and then consider the impacts and consequences of the QSP and the card check agreement. Our purpose is to examine whether the ordinances are having their desired impact on pay and benefits and on safety, security and service quality. We examine how they more generally affected the airport labor market. We also include a discussion of the post-September 11 changes and their implications at the end of the report.

Following a standard evaluation methodology, we compare business and working conditions and performance at SFO before and after the implementation of the policies. One methodological challenge was to isolate the impacts of the program from other changes also taking place. In an ideal experimental situation, a researcher has confidence that very little changed besides the intervention, or that the effects of other changes can be controlled for by comparison with a non-effected group.

At the time of our survey the MCO had gone into effect for a relatively small number of workers at SFO, and implementation of the HCAO had not started. For this reason we will primarily discuss the QSP as the main policy setting wage and benefit standards at the Airport. The QSP also set the general wage rate in collective bargaining agreements reached for workers covered by the program during this time period. The Labor Peace/Card Check policy had a major impact on unionization at the airport in this period, which likely influenced the non-monetary results found in this study.

We anticipated that we would need to control for the downturn in the economy that began in early March 2000 and for the airport terminal expansions that occurred simultaneously with the QSP. Our data collection was largely completed before September 11, 2001, while the effects of the sharp decline in air travel are discussed in the study, they do not affect our main findings.

Our primary pre- and post-QSP employment data comparison dates are June 1998 and June 2001. Both dates occur during summer peak-period employment, ruling out seasonality effects. When possible, we have also sought to compare developments at SFO to those at other Bay Area airports. To address the question of controls more fully we also collected data from a variety of sources to increase our confidence in the findings.

We present a summary description of our data sources below.

Pre-QSP employment data

The pre-QSP employment data for this study refers to mid-1998; the wage data refer to mid-1999. These data are occupation and employer-specific. We collected the employment and wage data in a previous study conducted by the authors (Reich and Hall 1999).

[13] In San Francisco, where it will have its main impact, the HCAO is anticipated to result in benefits for 16,000 low-wage and previously uninsured workers.

Post-QSP employment data

The QSP was phased in during the period April 1, 2000 to October 1, 2000. The majority of covered employees began to receive increases from June 1, 2000. In the early summer of 2001 (June to August) we conducted a survey of employers to generate a post-QSP employment and wages database comparable with the pre-QSP data. In this survey we also asked evaluation questions that allowed employers to reflect on the implementation effects of the QSP.

Our second major data source on post-QSP employment conditions was the SFO Badge Office's database of employees as of June 1, 2001. This database provided detailed firm and occupational employment counts, as well as data on demographics and employment tenure, for about 17,500 workers.

Supplementary data

We supplemented our pre- and post-QSP employment data with information from the following sources:

- The Airport employment office – we collected information on working conditions, wages and benefits and job descriptions for various occupations from an archive of employment advertisements maintained by the SFO Employment Office.

- Airline passenger numbers – SFO officials provided us with data for the period 1998-2000 on the numbers of flights, passengers and cargo by airline for SFO.

- Structured interviews with eleven union organizers from six union locals and the AFL-CIO.

- A short self-administered questionnaire that was completed by a sample of 100 workers.

For a fuller description of our methods and data sources, see Appendix C.

Outline of this report

In the next chapter we discuss the sources of low pay among the segments of the airport workforce. Chapter 3 reports our findings of the impacts of the living wage policies on workers' pay, benefits, quality of working life and employee voice. Chapter 4 discusses the impacts on businesses, consumers and government. In Chapter 5 we examine the adjustments made by workers and employers that followed the implementation of the policies, with attention to changes in employee turnover, worker performance and employer practices. Chapter 6 considers the impacts on employment levels at SFO as well as on the composition of employment. Chapter 7 discusses the impacts on airport security, and we present brief concluding comments in Chapter 8.

CHAPTER 2 AIRPORT LABOR MARKETS: STRUCTURE AND EVOLUTION

San Francisco Airport officials adopted the Quality Standards Program in response to failures in private labor markets and federal policy. Although airport security constitutes a relatively small proportion of total business costs, airlines have acted aggressively to reduce this expense. Why were the employees responsible for safety and security at U.S. airports paid and trained so poorly? Why didn't legitimate safety and security concerns lead the Federal Aviation Administration (FAA) to correct these patterns?

In this chapter we address these questions by examining the structure and evolution of airport labor markets. We begin with a baseline description of employment and pay inequality in the airport labor market. We then discuss the impacts of airline deregulation and the current dimensions of labor market segmentation at the airport. In particular, we examine the role of outsourcing, which became widespread in many parts of the airport economy.

Finally, we consider how low pay results from a particular evolution of institutional arrangements that put further pressure on already low-paying jobs at airports. Although low pay led to substantial declines in security and safety levels, before September 11, 2001 the FAA was unable to reverse these patterns.

2.1 Employment and pay at SFO

In our previous study of SFO (Reich and Hall 1999), we estimated that there were approximately 34,000 permanent jobs at the airport in 1998. This large number makes the airport one of the most important employment sites in the regional economy (SFO 1998; for more, see Appendix F1). The airport provides job opportunities for a diverse group of Bay Area residents. In many respects, the airport labor market constitutes a geographically distinct yet representative microcosm of many urban labor markets.

The total airport workforce includes many public sector employees who work directly for the Airport Commission or for other agencies with a permanent presence at the airport, including the federal government, the City and County of San Francisco (police and firefighting services), and the U.S. Postal Service. Others work at the airport on a temporary basis, such as construction workers or transportation consultants. Counting just the permanent private sector employees, we estimated a workforce of about 28,000 in 1998.

These 28,000 workers are employed by over 140 private firms that do business at SFO. The firms include 60 different passenger and cargo airlines, 40 companies that provide services to airlines—such as security, fueling and maintenance, and in-flight catering; and 40 companies that provide services to airport passengers—food and other retail concessions, parking, and rental cars. Table 2.1 shows the number of employers and employees by sector in 1998. The airline sector is dominated by United Airlines, which accounts for about half of all the flights and passengers at SFO, and just over half of all private employees working there. United Airlines' central maintenance base is housed at

SFO, employing six thousand mechanics. The remaining employers are mainly of medium and small size.

Table 2.1 Private sector employers and workers at SFO, Pre-QSP

Sector	Workers	Employers
AIRLINES[1]		
Passenger airlines	21,800	45
Cargo airlines	240	15
AIRLINE SERVICES		
Airline catering	1,340	3
Security/Skycaps[2]	1,000	4
Aviation services	1,070	33
PASSENGER SERVICES		
Retail concessions[3]	800	19
Food concessions[3]	870	10
Airport parking	150	1
Rental cars	1,040	10
TOTAL	28,310	140

Sources: Author's own analysis and adjustments of *The Economic Impact of San Francisco International Airport*, March 1998; CLRE Airport Study, 1999. Employment data are for 1998. All figures have been rounded.

Notes: 1. This includes airlines with active permits to land at SFO but not currently operating. There were 39 active passenger airlines and 10 active cargo airlines at the time of the SFO Employer Survey.
2. Most skycaps are subcontracted by the airlines.
3. Retail and food concessions figures together conform to those in the Economic Impact report; classification of firms into these categories may differ in other sources.

The jobs at the airport vary considerably with respect to pay, skill levels, training, worker voice and other conditions of employment. In our 1999 study of the likely impacts of the then proposed Living Wage Ordinance, we estimated that approximately 9,500 private sector airport workers earned less than $11 per hour. The occupations of these workers and their approximate numbers are presented in Table 2.2 below. Using this $11 benchmark, about one-third of the SFO workers were low-paid.

Table 2.2 Selected low-wage employment at SFO before the QSP

Job titles	Number of workers	Entry wage	Average wage
Customer service agents	3,700	5.75-10.00	10.15
Administration/ clerical	200	7.40-12.90	10.90
Baggage/ ramp agents	2,500	6.95-9.40	10.50
Cabin cleaners	700	6.00-8.00	9.95
Screeners	1,000	5.75-7.00	6.50
Skycaps	200	5.75-6.50	6.35

Sources: Reich and Hall (1999); UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: All amounts have been rounded to nearest 100 employees / $0.05. Low-wage job titles not listed here include wheelchair agents, fuelers, car rental service agents, restaurant workers, bartenders, dishwashers, drivers and retail cashiers.

The dispersion in pay is apparent even within United Airlines, the single largest employer, as Table 2.3 demonstrates. Although United is a relatively high-wage employer, offering careers and benefits, there is a distinct wage hierarchy within the firm. Many of the low-paying jobs at United are unionized, with the exceptions of administrative support and crew schedulers.

Table 2.3 Pay dispersion among United Airlines workers at SFO, 1999

Job classification	Employment	Average pay
HIGH-WAGE EMPLOYMENT(>$20)		
Pilots	500	40.00
Computer technicians	250	30.10
MEDIUM-WAGE EMPLOYMENT ($13-$20)		
Flight attendants	4,000	19.10
Mechanics	6,100	15.10
LOW-WAGE EMPLOYMENT(<$13)		
Customer service representatives	950	11.85
Maintenance	400	10.50
Ramp	1,800	12.90
Cabin service	400	10.80
Total United Airlines Employment at SFO (All occupations)	16,000	-

Source: Amended from Reich and Hall (1999b), Table 1.5. Wage data are for 1999.

The demographic characteristics of the SFO workforce as of June 2001 are outlined in Table 2.4. Female workers are more likely than the overall workforce to be low-wage. However, the majority of low-paid workers are male.

The diversity of the airport's workforce is most apparent along the dimensions of race and ethnicity. White workers constitute one-fourth of the ground-based workforce and only one-fifth of the low-paid workers. Filipinos constitute the single largest ethnic group of low-paid workers. Many of them work as security screeners.

As is to be expected, there are slightly more young workers in the low-wage occupations than in the SFO than in the workforce as a whole. However, the differences are insubstantial: the median age of all airport workers is 43 years, while it is 41 years for those in low-wage occupations. Over two-thirds (68 percent) of workers in low-wage occupations are aged 35 years or older.

Table 2.4 Demographics of the airport workforce, June 2001

	All airport workers[1]	Ground-based non-supervisory workers [2]	Low wage occupations [3]
Number of badges[4]	22,064	11,516	7,422
Gender			
Female	26.4	31.7	32.2
Male	73.6	68.3	67.8
	100.0	100.0	100.0
Race/ethnicity [5]			
White	34.9	23.1	20.0
Hispanic	14.7	16.1	16.6
Filipino	20.4	28.8	32.0
Black	7.8	7.9	9.2
Asian	21.8	23.8	21.7
Native American	0.4	0.2	0.5
	100.0	100.0	100.0
Age			
Up to 24	6.9	9.3	10.6
25-34	19.0	21.1	21.5
35-44	28.6	27.5	27.1
45-54	26.4	24.5	23.3
55-64	15.1	14.2	13.9
65 and up	4.0	3.3	3.6
	100.0	100.0	100.0

Source: Authors' analysis of SFO Badge Office Data.

Notes: 1. Does not include pilots, flight attendants and rental car agents.
2. Corresponds to survey population; excludes United Airlines mechanics.
3. Customer Service Representatives and Assistants, Ramp, Cabin Cleaners, Screeners, Skycaps and Wheelchair attendants.
4. The number of badges may over-estimate actual employment (see Appendix C).
5. These figures should be interpreted cautiously since a significant proportion of SFO Badge Office records did not indicate race/ethnicity.

In general, low-paid workers are less educated than higher-paid workers, but this pattern does not always apply. At SFO, large numbers of security screeners were relatively well-educated, in part because they were immigrants who were unable to utilize educational credentials obtained in their home countries to obtain better paying jobs in the United States.

Although we were not able to obtain education data on the entire SFO workforce, the union representing the screeners—SEIU Local 790—conducted a survey of their members in July 2002. We have analyzed their results and present the findings in Table 2.5. In 2002, 79 percent of the security screeners at SFO had education above a high school diploma and 38 percent had a bachelor or higher degree. Most of these workers had been employed as SFO screeners before September 11.

Table 2.5 Security screeners' education levels, 2002

	Citizens	Legal permanent residents	All
High School/GED	25	17	21
Some College	29	25	27
AA or Technical Degree	16	8	12
BS or BA	27	44	36
Advanced Degree	2	3	2
No response	1	2	2
Total	100	100	100

Source: Authors' analysis of SEIU Local 790 member survey, 2002. All figures are percentages.

In contrast to patterns among other low-wage workers elsewhere, the legal permanent residents had higher education levels than citizens. Nationally and at SFO, a large percentage of airport screeners were not citizens. The new law requires that they become citizens as one condition of retaining their jobs. We return to this issue in the last chapter of this report, as part of a discussion of changes at airports since September 11.

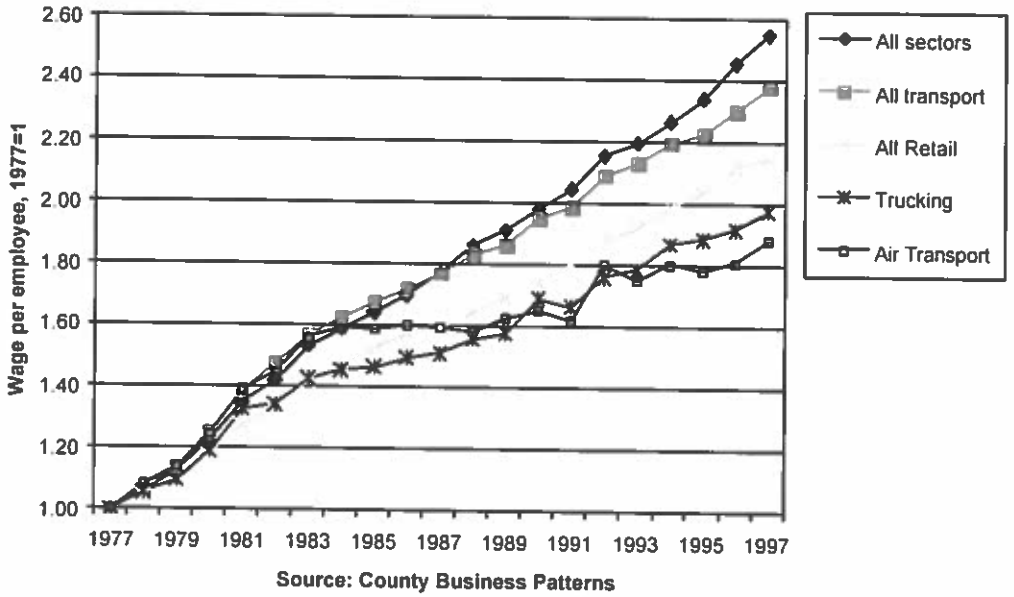
2.2 The segmented structure of airport labor markets

The SFO airport labor market exhibits a considerable concentration of employers and unevenness in pay and working conditions. While pay continued to grow in recent decades for the higher-paid tiers of the airline industry, real wages fell for many ground-based airline service workers. This trend mirrors similar patterns of greater pay inequality in the entire U.S. economy since the 1970s, and so to some extent reflects national developments. Yet, two specific circumstances of the industry are also important: airline deregulation and the subsequent impact on labor negotiations, and the specific institutions of airports that led to widespread outsourcing.

Airline deregulation

Airline deregulation began in 1978 and by the early 1980s the resultant intense competition, consolidation, and cost cutting generated sector-wide downward pressure on wages. A key moment occurred in 1981 when striking air traffic controllers were permanently replaced. As Figure 2.1 shows, pay in air transportation began to lag behind pay trends in other economic sectors at that point. This lag appears when air transportation is compared to transportation overall, as well as when it is compared to trucking, a sub-sector that was deregulated in 1980s and then experienced a decline in pay growth (Peoples 1998). In the 1990s, pay growth in air transportation even fell below pay growth in retail, a traditionally low-paying industry.

Figure 2.1 Pay in Air Transportation has lagged behind other sectors since 1983



Source: County Business Patterns

As we show below, the distribution of pay rates at SFO is described by a segmented labor market model. In such a model, employers and workers interact within distinct labor market segments. The

determinants of pay and working conditions vary among the segments, with low pay, dead-end jobs and little training in one segment and higher pay, career progressions, internal labor markets and more training in the other. The process of segmentation generates pay inequality over time (Gordon, Edwards and Reich 1982; Reich 1984).

Today, airport employment is increasingly segmented along two major dimensions: one involves differences between firms – the direct employees of the airlines versus employees of contracted-out airline service companies; the other dimension involves differences within firms—between workers with some bargaining power and those who are without bargaining leverage.

The history of contracting out among airlines and at SFO

Although labor market segmentation has long been present in the U.S., the current pattern of segmentation in airport labor markets is of more recent origin, dating mainly from the widespread adoption of two-tier wage systems in the industry in the 1980s. Two-tier wage systems arose in the industry after competition from unregulated low-wage airlines expanded in the years following the Airline Deregulation Act of 1978. American Airlines, in 1983, became the first airline to implement a two-tier wage system, one that reduced pay of new employees 30 to 50 percent below existing employees in the same job titles.[14] Existing employees were given long-term job security guarantees to eliminate their fear of being replaced by new second-tier employees. After a month-long strike, United Airlines implemented a similar system in 1985; most other major airlines also adopted similar systems.

By the late 1980s, the two-tier systems were falling out of favor because of employee resistance to pay inequities. In 1987, American Airlines agreed to merge pay scales for senior pilots after 10 years, and moved to eliminate two-tier wages for other employees, including in-flight attendants and ground staff. Other factors that contributed to the decline in two-tier wage systems included the general tightening of labor market conditions in the late 1980s and the mergers that were eliminating many of the low-cost airlines.

The legacy of the two-tier system has not disappeared entirely, however. As one analyst predicted in 1988:

> Two-tier systems will remain on the American scene. What you will start seeing are more hidden two-tier systems, low-cost subcontracting, temporaries, part-timers, leased employees and so forth (Richard Belous, cited in Swoboda 1988).

In retrospect, Belous' observations seem on the mark. The use of lower-cost subcontractors did grow in the 1980s and 1990s at SFO. The declining real value of the minimum wage in the 1980s increased the pressure to outsource work and to replace unionized employees by minimum wage, nonunion employees.

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[14] Levine (1989) traces the growth and decline in two-tier wage systems in the airline industry. See also Gesell (1986). For more on the decline in the two-tier wage system see O'Connor (2001); on mergers see Goetz (2002).

The history of contracting-out policies at SFO is instructive.[15] By the early 1980s, airline deregulation and its consequences had generated intense conflict between the airlines and the SFO Airport Labor Coalition. In 1983, three airlines attempted to contract out ground-based services, precipitating a labor relations crisis at the airport. The specific events included contracting out of skycaps working for United Airlines and mechanical services by Quantas Airlines, and a change in the contract for janitorial services from a union to non-union firm by one of the large airlines.

In response, the San Mateo Central Labor Council and the Airport Labor Coalition pressed for a prevailing wage policy to maintain pay and benefits for contracted out workers. The policy was approved by the San Francisco Board of Supervisors in 1984. As the Board's findings at the time put it, the practice of contracting out:

> ...is increasingly being used to undermine the pay and benefit levels previously paid for the performance of these personal services, which leads to a constant turnover in the workforce, lower skill levels, poor employee morale, and ongoing labor strife... and has already resulted in job losses for hundreds of long-term experienced workers including janitors, security guards and various other occupations, and has led to drastic reductions in pay and benefit levels for others... (City Ordinance 140-84, p. 2)

The prevailing wage policy was intended to cover all employees of concession- and leaseholders, and their contractors. The airlines, most of whom had signed the 30-year leases in 1981, challenged the prevailing wage policy in court.[16] In the end, the airlines won the case, arguing that the prevailing wage constituted a change in lease conditions. With changes in city administration and turnover in labor leadership, the policy was not enforced, even on new leases and concessions, and it was eventually removed from the City Administrative Code.

Outsourcing: direct versus indirect airline employees

This dimension of segmentation divides the direct employees of the airlines from those who work for them indirectly as employees of airline service firms. The airline service firms provide ground-based services—such as ticketing and other passenger services, ramp services, cabin cleaning, fueling, and catering of in-flight meals. In many cases, these services formerly were provided in-house by the airlines, but they have now been contracted out.

Outsourcing, which we refer to synonymously with contracting out, is distinct from privatization, which refers to a shift away from a publicly provided service. In the airport case, the services were already provided by a private entity, so privatization was not at issue.[17]

Outsourcing can develop for efficiency reasons. For example, there may be scale economies in having one specialized firm provide services to a number of companies simultaneously. The threat

[15] The following account is based on our examination of three decades of Airport Commission archives as well as interviews with the participants.

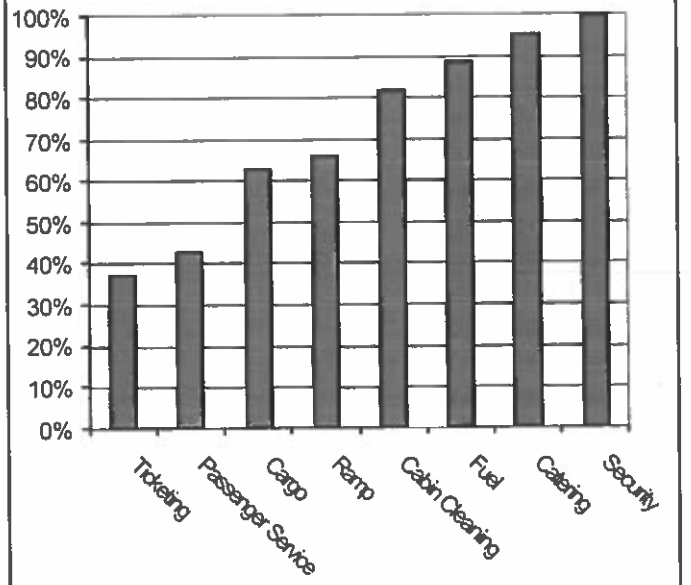
[16] We argue in Section 2.2 below that these long-term leases are partly responsible for the intense pressure on airlines to reduce fixed airport operations costs.

[17] Some systematic datasets (Warner and Hefetz 2000) show a modest increase in privatization of local services in the 1980s and 1990s.

to outsource can provide an incentive to entrenched internal groups to not fall below maximum productivity. A previous literature has examined such outsourcing primarily in the contexts of manufacturing, where the boundary of the firm is often determined by a "make or buy" decision, and high-paid business services, such as consulting.[18]

Outsourcing can also develop for cost-saving reasons that are profitable but are not efficiency-based, such as when contractors can pay lower wages to workers but do not improve productivity. This type of outsourcing is especially relevant in services that are performed by relatively less-skilled workers.[19] As we previously mentioned, many living wage advocates have argued that outsourcing of such work is motivated primarily by opportunities to reduce worker pay.

Figure 2.2 Airline Outsourcing by Service



Source: UCB-SFO Employer Survey, 2001

At SFO, contracting out occurs unevenly. Aircraft maintenance, which is relatively well paid, generally is carried out directly by the airlines. The concentration of contracting out is greatest among non-mechanic ground-based services, which are the lower-paid sectors (see Figure 2.2). Although airlines account for almost four-fifths of all airport workers, they employ directly only two-fifths of the non-mechanic ground-based employees. Although not shown in Figure 2.2, contracting-out of these services is also more prevalent among smaller airlines, as one would expect. On balance, it appears that most of the outsourcing occurred for cost-saving rather than efficiency-promoting reasons.

Many of the direct employees—managers, pilots, mechanics and flight attendants especially-- have access to career ladders and other benefits of working in the internal labor markets of large employers. Even among workers performing the same jobs, airline service employees were likely to be paid less than in-house employees and to face flatter pay profiles (see Table 2.6). Employees of airline service firms are also more likely to be employed on a contingent basis, with little training or long-term career prospects. These patterns are similar to outsourcing effects in other contexts.[20]

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[18] For reviews of this earlier literature, see Grossman and Helpman (2002) and Sclar (2000), who also provides a good introduction to the privatization debate.

[19] We do not know how much private firms outsourced low-wage services in the U.S. during the past two decades. The only study using systematic time series (Dube 2002) is limited to janitors and security guards. For these two groups, Dube finds a considerable increase in outsourcing from 1983 to the present. Autor (2000) is also pertinent.

[20] Dube (2002) finds that outsourced janitors and guards get lower pay, even when firm size, unionization and skill and demographic composition of the workforce are held constant. Using longitudinal data, Dube shows that workers who switched between direct and contracted out status also experienced switches in their wages, suggesting that the workers' unobserved skill or attitudinal differences do not explain the outsourcing wage penalty.

Table 2.6 Pre-QSP pay, in-house and contracted out jobs

	Airline employees (in-house)		Airline services employees (contracted out)	
	Entry wage	Average wage	Entry wage	Average wage
Customer service	8.65	11.25	7.25	8.25
Ramp	8.70	12.10	7.10	7.10
Cabin cleaner	7.85	10.80	7.20	7.20

Source: Reich and Hall (1999b).
Note: Data are for pre-QSP period. Includes only cash wages and not benefits and only jobs with complete wage data; all figures rounded to nearest $0.05.

United Airlines provides a good example of the advantages of working in a large company that maintains career ladders, pays health benefits and provides training to its workers. By creating rewards for longer-term employment, each of these components of United's employment policies generates mutual gains for the employer and the workers. Table 2.7 shows that United Airlines employees received more training and were paid more than other workers in the same jobs. United Airlines employees also receive better benefits than most other airport workers.

Table 2.7 Pay and training, United Airlines versus other employers

	United Airlines		All other employers	
	Hours of initial training	Average wage	Hours of initial training	Average wage
Customer service	280	$11.85	41	$9.50
Baggage/ Ramp	80	12.90	37	8.80
Cabin cleaner	80	10.80	3	7.20

Sources: Reich and Hall (1999b); UCB-SFO Employer Survey, 2001 conducted by the authors.
Note: All figures rounded to nearest $0.05. Pay rates are *prior* to the QSP.

Further pay differences are related to differences among employees in the same firm or sector that derive from their occupation-specific bargaining power. Unionized employees generally receive higher wages and better benefits than nonunionized workers, but the effects depend strongly upon the bargaining power of each union. Cremieux (1996) shows that while deregulation in the airline sector reduced pay for pilots and flight attendants, it did not have the same effects on the earnings of mechanics. According to Cremieux, the mechanics had greater bargaining power, a consequence of their job opportunities outside the airlines. The hub-and-spoke system that emerged in the 1980s may have been particularly beneficial to the large unionized carriers (Peoples 1998), also contributing to segmentation between unionized and non-unionized workers.

The persistence of some pay differentials at United (see Table 2.3) may result from the reduced bargaining leverage of the occupational groups that have lower union density elsewhere in the industry and that experience significant use of outsourcing by competing firms.

Part-time workers

Part-time work has become common at SFO. Table 2.8 reports the percentage of workers in part-time (less than 35 hours per week) and full-time (35 or more hours per week) jobs at SFO, by sector. About one-third of direct airline employees are part-timers, a much higher rate than in the U.S. workforce. Part-timers are just as common among the subcontract-intensive airline service employees as among the carriers themselves.

As is well established, most forms of transportation involve peak-load congestion at specific times in the day. Airlines are no exception and part-time employment may be more common at SFO for such a reason. Our survey data did not permit estimating whether the part-time workers were more likely to be lower-paid or uninsured, as has been found in other studies.

Table 2.8 Employee hours worked per week

Hours	Airlines	Airline services	Con-cessions	Average
5 to 14	0.2	0.0	0.5	0.2
15 to 24	27.0	3.2	2.1	13.1
25 to 34	6.2	34.7	13.8	17.4
35 to 44	64.3	58.8	81.7	66.7
45+	2.4	3.3	1.9	2.6
Total	100.0	100.0	100.0	100.0

Source: UCB-SFO Employer Survey, 2001, conducted by authors.
Note: All figures are percentages.

To summarize, the deepening of segmentations in the airport labor market reflects the confluence of both economy- and sector-wide forces. The real value of the minimum wage fell every year over the period 1978 to 1989. Despite some increases in the state and federal minimum wages in the 1990s, considerable incentives were created for outsourcing and downward wage pressure. Deregulation resulted in further downward wage pressure, although these pressures were not evenly distributed (Card 1989; Cremiux 1996; Peoples 1998).

2.3 Airport economics and further sources of wage pressure

While outsourcing has put pressure on worker pay in many areas of the economy, to understand the further downward pressures on the pay of ground-based airport workers, we examine airport economics more closely. In this section we argue that U.S. airlines have faced particular pressures to reduce the overall fixed costs of airport operations at the major or hub airports, but that they have faced institutional constraints in being able to do so. As a result, the airlines are especially interested in reducing wages of ground-based airport workers, and in particular the wages of those employed in federally mandated airport security positions.

Airline travel demand is characterized by peak load patterns that provide strong incentives to reduce fixed costs. The phenomenon of peaking refers to the fact that people prefer to fly at particular times of the day, week and year. A key business challenge for airlines is to maintain sufficient capacity to meet the demand at peak periods, without losing too much money during the low demand periods. At the same time, airports themselves involve large infrastructure investments that are essentially fixed.

Together, these structural conditions create a tension between the need for capacity to meet peak demand and to reduce fixed costs, but they need not necessarily result in low wage labor markets. In the next paragraphs we discuss how low wage pressures were generated by the specifics of how airports have come to be managed in the United States.

The airport-related costs of U.S. airlines have become even more fixed at some airports.[21] This shift occurred because most gates at most major U.S. airports are leased through long-term contracts that specify exclusive or preferential usage rights. At SFO, as at many other airports, 82 percent of the gates are secured by long-term exclusive agreements (NRC 1999). Long-term tenancy is desirable both from the point of view of the airports (it provides guaranteed revenue streams against which airports can borrow) and the airlines (it guarantees runway access during peak hours at hub airports). But if an airline wants to secure exclusive or preferential gate access at SFO, or similar airports, the airline has to enter into a long-term agreement with the Airport.[22] This long-term agreement effectively becomes a fixed cost that the airline has relatively little power to reduce.[23]

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[21] As O'Connor (2001) notes, in comparison to flight operations, terminal operations are particularly labor-intensive despite technological advances.

[22] For more details on these developments, see Appendices F.3 and F.4.

[23] The opening of the New International Terminal has heralded some changes in leasing arrangements at SFO. New gate allocations will be on a preferential but not exclusive basis. However, until the currently 30-year agreement expires in 2011, airport costs will remain fixed for most airlines operating out of SFO.

What are the implications of these institutional arrangements for airport service workers? The case of security workers is particularly instructive. Since the 1970s, the FAA has required airlines to provide security at airports. But airport security is a largely fixed expense, proportional to the number of access points to the gates used by an airline. As noted above, airlines face strong pressures to reduce the fixed costs of airport operations, but their ability to do so is limited. Hence, the incentives to reduce airport security costs became particularly strong.

Airlines achieved this cost reduction through a variety of means. They actively resisted the attempts of the FAA to impose higher training and certification standards for screeners. As we have seen, they increasingly contracted out screening and other airport service functions (see Figure 2.2). Airlines routinely awarded contracts to the lowest bidder. In order to compete for contracts, private security companies kept wages at a minimum and offered few, if any employment benefits. According to an Associated Press business report that appeared on September 12, 2001:

> In 1990 Wackenhut Corp. provided pre-departure screenings at more than 50 U.S. airports. Now, the $2.5 billion security company is in just three airports—in Maryland, Tennessee and Hawaii. "We were underbid in contract after contract," said Patrick Cannan, director of corporate relations. "The rates they wanted us to come in at were untenable." (Foss 2001)

As a result, U.S. airlines spent a lower proportion of their fare revenue on security than did European airlines, and low wages and high worker turnover became the norm at airports throughout the country (GAO 2000).

The airlines would have liked to transform airport labor costs, including security costs, into a variable expense. The scope to achieve this transformation was relatively limited, since the airport security firms themselves require annual or longer contracts to provide pre-board screening services. Casualization of the pre-board screeners' employment contract was also hard to achieve, at least in theory, because of the time required to conduct security background checks and to train staff. In practice, these requirements were not followed at many airports, as the many highly publicized instances since September 11 demonstrated. Given the structural considerations outlined here, this pattern of ignoring the rules is not surprising.

There is one dimension of the security function that airlines did succeed into turning into a variable cost. Airline travel is highly seasonal, with traffic in the summer well above winter levels. Even with a fixed number of gates and flights, more passengers fly in the summer, creating a demand for more screeners than in the rest of the year. By paying low wages and experiencing high turnover, security companies were able to hire screeners early in the summer, knowing many would quit by the fall. But the cost of having an inexperienced security workforce is also clear.

One might expect that the FAA would have stepped in to ensure safety and security standards. It failed to do so, which is what makes the Quality Standards Program so significant and interesting from a public policy perspective. We turn in the remainder of this study to examining its impact.

2.4 Summary

We have argued that the structure of airport economics, the nature of demand for airline travel, and the institutional rules governing the allocation of airport facilities, combined to put particular downward pressures on wages at the nation's airports. This occurred in the context of deregulation in the transportation sector and the declining value of the minimum wage. Faced with peaking demand, airlines try to reduce their fixed costs, but have institutional restrictions on reducing non-labor costs. As a result, the airlines had particularly strong incentives to reduce fixed labor costs, including federally mandated airport screening functions.

Airlines turned to outsourcing of airline service positions to reduce labor costs, increasing labor market segmentation. Employees of airline service firms receive lower wages and benefits, receive less training and have fewer long-term career prospects than direct airline employees. At the same time, wage differentials increased among direct airline employees, as competition from airline service firms eroded workers bargaining power in a range of job classifications. The result created a national race to the bottom in the wages and working conditions of pre-board screeners and others fulfilling important airport security functions. It was this situation that the QSP was designed to correct.

CHAPTER 3 IMPACTS OF THE POLICIES ON WORKERS

In this chapter we examine the impacts of the QSP and related policies on the workers who were covered under the programs. We begin with a discussion of the impacts on pay levels and pay inequality. In the following section we examine the impact on health benefits. We then discuss the impacts on working conditions and quality of life, and finally turn to the impacts on worker voice and unionism.

3.1 Impacts on worker pay

Who the policies covered

The first step in our analysis is to identify the relevant employment groups that were covered by the policies. At the time of our study, the QSP and MCO policies covered most, but did not yet apply to all, of the low-wage privately employed workers at the airport. The QSP covers workers who are employed in positions related to safety and security, generally those who work for the airlines or airline service firms. The MCO covers passenger service workers and the employees of concession-holders, but the coverage applies in a phased manner as the leases and concessions are renegotiated.[24]

To be more specific, we used the detailed specification in the QSP and MCO. They are:

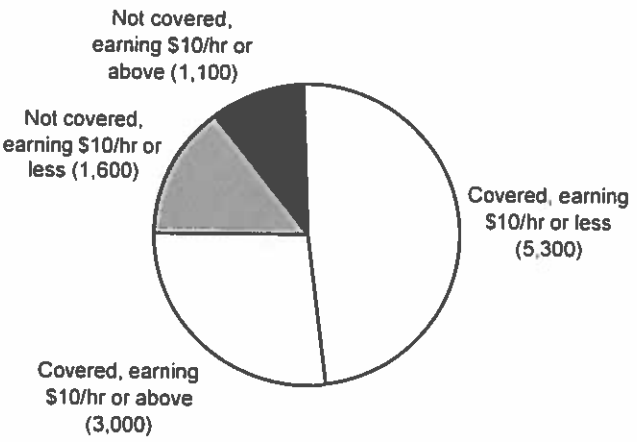
- United Airlines employees in the customer service, ramp and cabin cleaning divisions;
- all ground-based non-managerial employees of other airlines;
- all non-managerial employees of airline services firms; and
- all concessionaires, including retail, restaurants and car rental.

Adding these groups together, we find that there are approximately 11,000 workers in these jobs (for examples, see Table 3.2, and for full details on data sources and methods, see Appendix C). Of these workers, 8,300 are covered under the QSP, while 2,700 others are covered under the MCO.

Of the 8,300 QSP-covered workers, approximately 3,000 had earned at least $10 an hour prior to the program; so 5,300 workers were eligible to receive pay increases as a direct result of the QSP (see Figure 3.1). We discuss the pay increases first in terms of what we observed in our survey, and second with the purpose of distinguishing the direct effects of the programs, the indirect effects through wage pushes, and the wage increases that would have occurred anyway because of general labor market conditions.

[24] Those working off-site in airline catering and some cargo operations will not be covered by either the QSP or the MCO.

Figure 3.1 Pre-QSP wages and QSP status of ground-based non-managerial workers at SFO



Source: UCB-SFO Employer Survey, 2001, conducted by authors.
Note: All figures have been rounded.

Observed pay increases

From the inception of the QSP in April 2000 to our data collection date of June 2001, almost 90 percent of the 11,000 ground-based non-management workers at SFO -- or approximately 9,700 workers – obtained a wage increase. As a result, average pay of all workers increased by approximately 22 percent. This amount translates into a total increase of $56.6 million in annual earnings for ground-based non-management employees. The largest increases were recorded among entry-level workers in QSP-covered positions.

Table 3.1 shows that average wages for both QSP and non-QSP covered workers increased after QSP implementation, but entry-level wages for those in QSP jobs went up most dramatically, leaping from $7.78 to $10.37. The increase in the average entry wage was 33 percent for QSP covered positions compared to 10 percent for non-QSP covered positions. The increase in the average hourly wage was 22 percent for both QSP and non-QSP covered positions.

Table 3.2 shows entry-level and average pay before and after the implementation of the QSP for selected job titles. Job titles receiving the largest average wage increases include screeners and skycaps. Security screeners, who averaged $13,400 a year with no benefits prior to the QSP, earned $20,800 plus full benefits by January 2001, a 55 percent increase in wages, and a 75 percent increase in total compensation.[25]

[25] Post 9/11 benefits are estimated at $1.25 an hour in accordance with the QSP.

Table 3.1 Pay before and after QSP implementation

		Entry wage		Average wage	
		Pre-QSP	Post-QSP	Pre-QSP	Post-QSP
QSP Covered Positions (8,300)	Mean	$7.78	$10.37	$9.58	$11.72
	Standard deviation	*1.22*	*0.57*	*2.58*	*1.19*
Non-QSP Covered Positions (2,700)	Mean	8.58	9.32	9.43	11.47
	Standard deviation	*0.98*	*1.66*	*1.70*	*1.81*

Sources: Reich and Hall (1999); UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: Excludes positions with incomplete wage data.

Table 3.2 Pay before and after QSP, selected job titles

Job titles	Number of workers	Entry wage		Average wage	
		Before QSP	After	Before QSP	After
Customer service agents	3,700	5.75-10.00	10.00-15.50	10.15	11.85
Administration/ clerical	200	7.40-12.90	9.00-24.00	10.90	13.45
Baggage/ ramp agents	2,500	6.95-9.40	10.00-14.00	10.50	12.35
Cabin cleaners	700	6.00-8.00	10.00-11.25	9.95	11.45
Screeners	1,000	5.75-7.00	10.00	6.50	10.05
Skycaps	200	5.75-6.50	10.00	6.35	10.00
All ground-based non-managerial employees	11,000	5.75-15.00	6.25-24.00	9.60	11.70

Sources: UCB-SFO Employer Survey, 2001, conducted by authors.
Note: All amounts have been rounded to nearest 100 employees / $0.05. Low-wage job titles not listed here include wheelchair agents, fuelers, car rental service agents, restaurant workers and retail cashiers.

Prior to the new City and Airport policies, 55 percent of the ground-based non-managerial jobs paid an average of less than $10 an hour (see Table 3.3). By June 2001, only 5 percent of these jobs were paying an average of less than $10 per hour. The proportion of entry-level positions receiving $10 per hour or more increased from less than 3 percent to over 80 percent. Even more will receive raises as more firms operating at the airport come into coverage under the Minimum Compensation Ordinance (MCO).[26]

Table 3.3 Wage distribution before and after QSP

Average hourly wage	Before QSP	After QSP
Less than $8 per hour	23.1	0.2
Less than $10 per hour	55.0	4.9
Less than $12 per hour	82.0	66.3
Less than $14 per hour	98.0	96.7
All ground-based non-managerial employees	100.0	100.0

Source: UCB-SFO Employer Survey, 2001, conducted by authors.

Of the 8,300 workers covered under the QSP, some 5,300 were paid less than $10 per hour when the QSP went into effect. These workers all received wage increases as a *direct* result of the policy. As Table 3.4 indicates, about 1,550 of these low-wage workers were directly employed by the airlines, while about 3,750 worked for airline service companies. Virtually all of the remaining 3,000 QSP-covered workers who were paid more than $10 per hour worked directly for the airlines.

Table 3.4 Distribution of QSP coverage and beneficiaries

Workers earnings pre-QSP (April 2000)	Airlines	Airline services	Total
Below $10/hr	1,550	3,750	5,300
$10/hr or more	2,950	50	3,000
Total	4,500	3,800	8,300

Source: UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: All figures have been rounded.

The pay increases mandated by the QSP significantly reduced the pay differences between in-house (airlines) and contracted out (airline services) ground-based jobs. The differences in entry-level pay rates have been eliminated entirely (see Tables 3.5a). Indeed, in-house employees in entry-level

[26] Recall that the MCO will be phased in since it only applies to new contracts and to existing contracts when they are renewed or amended.

positions now earn slightly less than contracted-out employees in the same positions, since the airlines tend to offer full benefits while some airline service firms offer the $1.25 premium in lieu of benefits. The elimination of entry-level pay differentials has important positive implications for the recruitment of suitable candidates for airline service firms. In-house employees on average still receive slightly higher pay than contracted-out employees, which reflects a combination of longer tenure and steeper pay gradients in the in-house jobs (see Table 3.5b).

Table 3.5a Entry wage for airline and airline services employees before and after QSP

	Entry wage					
	Before QSP			*After QSP*		
	Airline employees (in-house)	Airline services employees (contracted out)	Airline services wage as percent of airline wage	Airline employees (in-house)	Airline services employees (contracted out)	Airline services wage as percent of airline wage
Customer service	8.65	7.25	84	10.25	10.75	110
Ramp	8.70	7.10	82	10.10	11.20	111
Cabin cleaning	7.85	7.20	92	10.00	10.90	109

Sources: Reich and Hall (1999b); UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: Includes only cash wages and not benefits (higher post-QSP wages for ramp workers reflects a single major employer that opted to pay $1.25 per hour premium rather than provide benefits). Includes only jobs with complete wage data; all figures rounded to nearest $0.05.

Table 3.5b Average wages for airline and airline services employees before and after QSP

	Average wage					
	Before QSP			*After QSP*		
	Airline employees (in-house)	Airline services employees (contracted out)	Airline services wage as percent of airline wage	Airline employees (in-house)	Airline services employees (contracted out)	Airline services wage as percent of airline wage
Customer Service	11.25	8.25	73	12.50	10.90	87
Ramp	12.10	7.10	59	12.90	11.20	87
Cabin cleaning	10.80	7.20	66	11.65	10.95	94

Sources: Reich and Hall (1999b); UCB-SFO Employer Survey, 2001, conducted by the authors.

Attributing the wage increases: direct, indirect and general labor market effects

To what extent can we relate these wage increases to the policy change? In order to attribute the wage increases resulting from the policies correctly, we distinguish three types of wage increases:

1. *Direct wage increases* are those received by the workers who are covered by the QSP policy and who were earning less than the mandated wage level.[27] Although we define the direct increases as net of any wage increases these workers would have received without the QSP, we argue that they would not have received significant increases without the QSP. Pay in many of these jobs tracked the state minimum wage, which did not increase during the study period. United Airlines, the largest employer at SFO, did not award any increases during the study period because of ongoing contract negotiations.

2. *Indirect wage increases* are those received by workers not covered by the policy but still affected by it. Indirectly related increases may be thought of as being the results of either vertical or horizontal wage pushes. Vertical wage increases occur in firms covered by the QSP when workers earning at or above the mandated wage receive increases in order to maintain some or all of the wage differentials within the firm. Horizontal wage increases occur when employees working in firms and/or jobs not directly covered by the QSP receive increases because of competitive effects.

3. *General labor market-based wage increases* result from labor market tightening or general wage inflation and would have occurred without the QSP policy. These labor market based wage pressures generally do not affect jobs that are closely tied to the minimum wage.

As we mentioned above, we found a total observed increase of $56.6 million in annual wages for ground-based non-management employees. Of this total, $34.6 million can be related *directly* to the QSP and the MCO. This amount represents the sum of all wage increases paid to airport workers who were covered by the mandated wage increases and who previously earned below the mandated wage level. By June 2001, this group consisted of approximately 5,300 employees in jobs covered by the QSP and fewer than 100 employees in positions covered by the MCO.

This leaves $22 million in wage increases generated through indirect effects of the QSP or resulting from other general labor market effects. Our calculations suggest that just over half of this was indirectly related to the new airport policies. Without the policy change, we would expect wages at the airport to rise at approximately the same rate as wages in comparable occupations in the San Francisco metropolitan area during the same period. To estimate how much pay would have increased over the same time period in the absence of the QSP and living wage policies, we examined data from the California Employment Development Department.

Table 3.6 indicates that average wages for a selected group of service sector occupations in the area rose approximately 17 percent over the period 1998 to 2001. We estimate that pay increased about

[27] To identify these workers, our employer survey instrument asked: "How many employees in your establishment received wage increases mandated by the QSP?"

seven percent in these jobs in 1998 and by 10 percent from 1999 to 2001.[28] Median average pay for similar jobs in the Bay Area thus rose approximately 10 percent over the same period, compared to a 22 percent total increase in pay for the airport jobs in this study. We therefore attribute 45 percent (or 10/22) of the observed non-direct QSP increase in business costs to general labor market increases and 55 percent to indirect effects of the QSP itself.

Table 3.6 Average pay, selected service occupations

San Francisco MSA	Average pay
2001	$10.41
1998	8.90
Percent increase	16.9

Source: This data is based on the 1996-98 and 2000 Occupational Employment Statistics (OES) surveys, with wages updated to the 1998 annual average and the third quarter of 2001. Data accessed by web from www.calmis.ca.gov.

Note: Selected occupations included here are Guards and Watch Guards, Bartenders, Combined Food Preparation and Service Workers, Baggage Porters and Bellhops, Janitors and Cleaners, Except Maids and Housekeeping Cleaners. We included only these occupations because of changes in occupational definitions.

Our evidence suggests that vertical indirect wage increases were relatively small, and that most of the indirect wage increases were across, rather than within firms. In the airport services sector, most firms have not raised wages above mandated minimum, and among airline employees, vertical wage increases were limited by the fact that wages at United Airlines were effectively fixed during the study period. Conversely, the percentage wage increases in the non-QSP Concessions sector were only slightly smaller than those received by those directly covered by the QSP, and were substantially above the rate of wage increase in the general economy. This pattern suggests that horizontal indirect wage increases were significant. In other words, employers not covered by the QSP raised pay at a faster rate than they otherwise would have, in order to keep employees from leaving for higher-paying jobs covered by the QSP, and to match the new wage norms.

In terms of the number of workers affected, we estimate that 9,700 of the 11,000 ground-based non-management workers at SFO received wage increases during the study period (see table 3.7); 5,400 of them received wage increases as a direct result of the QSP or MCO. A further 2,550 received increases above the 10 percent general labor market wage increase. These workers received wage increases as an indirect result of the policies. Another 1,750 workers received increases as a result of the general labor market increase only. Some 1,300 workers received no increase at all; most of these were United Airlines who were awaiting a new contract during the study period.

[28] More of the increase occurred at the start of the period because in 1998 the state's minimum wage was increased by 12 percent, and because the economy had begun to cool by 2001.

Table 3.7 Workers receiving wage increases: summary

	Number of workers
Received wage increase as direct result of QSP (5,300) and MCO (100)	5,400
Received wage increase as indirect result of QSP and general labor market increase	2,550
Received wage increase as a result of general labor market increase	1,750
Did not receive a wage increase	1,300
All ground-based non-managerial workers	11,000

Source: UCB-SFO Employer Survey, 2001, conducted by authors.

3.2 Impacts on employee benefits

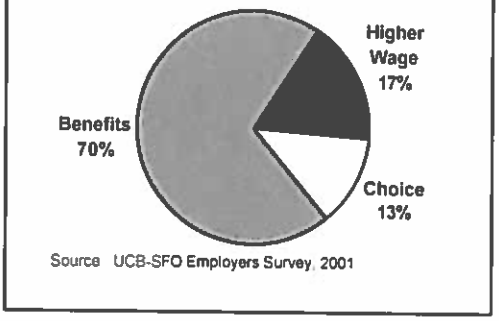
The QSP requires employers to provide health benefits and twelve paid days off a year or pay workers an extra $1.25 per hour. In response to our survey, all covered firms reported being in compliance. Of the 8,300 employees covered by the QSP, 24 percent previously were not offered any employer-based health benefits. Consequently, approximately 2,000 workers who previously were not offered employer-paid health benefits are now receiving the full QSP-mandated benefit package or the wage premium.

Other QSP-covered workers received an improved benefit package as a result of the policy. Most firms had offered some sort of health insurance to employees before the QSP was adopted. But in many cases this coverage became active only after a substantial initial waiting period and involved significant out of pocket costs to the individual worker. For these reasons, coverage rates were quite low, especially in the airline services sector where turnover rates were highest, and where many workers never qualified for coverage.

Our survey data did not probe for the quality of coverage, eligibility requirements, employee premium costs or take-up rates. Nonetheless, our anecdotal evidence suggests that firms eased initial eligibility period requirements and improved their share of out of pocket expenses, leading to higher take up rates by their employees.

QSP-covered firms could choose whether to offer benefits or a wage premium. As Figure 3.2 shows, we found that 70 percent of QSP-covered firms chose to provide benefits rather than the wage premium; these firms account for 75 percent of covered workers. This proportion was replicated in the worker survey; 69 percent of the QSP-covered workers responding to the survey reported receiving health benefits from their employer.

Figure 3.2 Firms Electing to Provide Benefits or Pay Higher Wage



Firms' decisions on whether to provide benefits or pay the wage premium were influenced by whether they had previously offered health benefits. Surveyed firms reported that the average cost for individual health coverage was approximately $170 per month, considerably lower than the $1.25 an hour in lieu of benefits required by the QSP. Of the firms with QSP-covered employees that previously offered some sort of health benefits, 95 percent opted to provide benefits or provided employees with a choice between benefits or the wage premium. In contrast, 58 percent of the firms that had not previously offered health benefits chose to pay the wage premium. This pattern suggests that firms may have wanted to avoid the administrative and other fixed costs of establishing benefit plans.

Unlike in the case of wages, we found little evidence of a spillover effect of health benefits to non-covered firms. All the surveyed employers not covered by the QSP reported offering health benefits before and after the policy. Yet only 54 percent of workers in non-QSP covered firms reported that they were enrolled in employer-based health insurance. In other words, the effective level of coverage reported by workers is below the level reported by employers. Most of those workers reporting that they were without coverage were retail workers. Of the workers in the survey who did not have insurance from their employer, only 10 percent reported receiving coverage through a spouse or another job.

As a result of the QSP, all covered workers now receive 12 days of paid time off per year. These can be used for national holidays, vacation leave and sick leave. Evidence collected from our worker interviews, from union contracts and job advertisements suggests that many airport workers did receive paid leave prior to the QSP. To calculate the monetary value of this leave benefit, we estimated that all employees at United Airlines and half of the remaining airport workers had received 12 days of paid leave. (These assumptions are based upon the anecdotal indications.) The leave benefit is then worth an additional $3.4 million for covered workers. To be conservative, we also assumed that the leave benefit spilled over to all other ground-based workers at the airport, which would add $1.4 million per year to total employment costs.

3.3 Impacts on quality of life

Living wage policies can have effects upon workers' lives beyond the paychecks themselves. To probe for these effects we included in the worker survey a series of questions concerning the workers' quality of life. These questions asked about any changes in time spent with their family, vacation time, personal finances, hours worked in all jobs, their housing situation and their health status.

To our surprise, relatively few workers reported improvements in the various quality of life categories that we surveyed (see Table 3.8). Nonetheless, workers not covered by the QSP were much more likely to report declines in quality of life than those covered by the QSP. The differences were greatest for time spent with family, personal financial savings and housing situation, and they were smallest for vacation time and health status.

Table 3.8 Workers' reported changes in quality of life variables

Change in...	QSP			Non-QSP		
	More	*Same*	*Less*	*More*	*Same*	*Less*
Time spent with family	13	65	21	0	48	52
Vacation time	31	54	15	21	50	29
Personal financial savings	18	61	21	17	29	54
Hours worked in all jobs	19	67	14	32	60	8
	Better	*Same*	*Worse*	*Better*	*Same*	*Worse*
Housing situation	20	66	14	17	50	33
Health	13	74	13	12	68	20

Source: UCB-SFO Worker Survey, 2001, conducted by the authors. Figures are percentages.

Question wording: "Thinking back on the last two years (i.e., from 1999 till now), have any of the following aspects of your life changed? Please check the appropriate box:"

Anecdotes that we heard from labor activists suggested that some workers held more than one job prior to the QSP. We could not examine this directly, as our survey question asked about work hours in all jobs. Our data do indicate that hours worked in all jobs increased somewhat among non-QSP covered workers, while remaining mainly unchanged among QSP-covered workers.

Taken together, these worker-reported changes in quality of life following the pay increases suggest a continuing vulnerable position of low-wage service workers. Despite the substantial wage increases following the QSP, the pay of many ground-based airport service workers remains well below estimated self-sufficiency wages for the Bay Area.[29]

3.4 Worker voice and labor relations

In the two years following the adoption of the Labor Peace/Card Check Rule and the QSP in early 2000, 2,400 workers gained union representation in 21 airport firms. Together with the United Airlines customer service agents who gained union representation in 1999, these newly organized workers account for approximately one quarter of the workers in the surveyed firms.

[29] A 1999 study by the California Budget Project reported that a basic family wage of $12.92 was needed in San Francisco and San Mateo Counties with two full time working parents, and $17.56 with one working parent. (California Budget Project, *Making Ends Meet*, October 1999.)

The new organizing of workers is concentrated in the airline service sector (see Table 3.9a), and in precisely those firms highly affected by the QSP (see Table 3.9b). Over 90 percent of the firms that were most affected by the QSP were not organized before the study period. Close to half of these were subsequently organized. Along with the mandated wage increases, newly organized workers gained improvements in benefits, formalized grievance procedures, seniority, and greater voice on the job, all of which contributed to changing the work environment at SFO.

Table 3.9a Unionization status of firms, by sector

	Not organized	Previously organized[1]	Newly organized[2]	Total
Airlines	14.3	62.7	23.0	100
Airline services	48.9	0.0	51.1	100
Total	23.8	48.7	27.6	100

Table 3.9b Unionization status of workers, by QSP impact on firm

	Not organized	Previously organized[1]	Newly organized[2]	Total
Low impact[3]	5.9	77.7	16.4	100
High impact[4]	50.2	5.8	44.0	100
Total	23.8	48.7	27.6	100

Source: UCB-SFO Employer Survey, 2001, conducted by the authors, and analysis of organizing data provided by the SFO Organizing Project. Figures may not add due to rounding. All figures are percentages. Concessions not reported because of insufficient data.

Notes:
1. Firms with employees organized before the study period are "Previously organized".
2. Firms with employees organized during the study period are "Newly organized."
3. Less that 50 percent of employees directly affected by QSP are "low impact."
4. More than 50 percent of employees directly affected by QSP are "high impact."

As expected, the Labor Peace/Card Check policy had a significant impact on union organizing efforts at the airport. Union organizing drives were initiated in 24 firms over the two years. In the 21 firms in which the rule was applied, in every case the union gained recognition, and all had reached collective bargaining agreements, or had reported progress towards reaching agreements. In the three cases in which the rule was not applied, the organizing drives were ultimately abandoned by the unions.

The Labor Peace/Card Check policy appears to have achieved the objective of minimizing business disruptions during the organizing process. The timing of our employer survey coincided with a period when many were still negotiating first contracts, which could have generated greater tension in labor relations. Yet, only one newly unionized firm in the survey did not report improvements on the majority of the labor relations questions in the survey—employee morale, absenteeism, employee grievances and disciplinary issues.[30]

Scholars generally argue that mandated wage increases, such as those in the QSP, can have two opposing effects on unions. Mandated pay increases can reduce the benefits and power of unions, since workers get pay increases without joining a union. Alternatively, by raising the floor on wages, pay increases can protect unionized employers from competition with non-union employers. Our evidence suggests that on balance, the living wage policies—and the campaigns to achieve them (see Appendix E) --appear to have improved the climate for organizing private contractors at SFO.

The benefits of living wage policies for unions are especially clear in the public sector, where contracting entities are generally required by law to grant the contract to the lowest qualified bidder. Service contractors have little flexibility in their cost structure outside of employee compensation. In order to put in the lowest bid, they are forced to keep wages and benefits to a minimum.

Similar conditions apply in the private sector when service jobs are contracted out. Under conditions of outsourcing, if any single contracting firm is unionized, they will have difficulty meeting demands for increased wages and benefits and retaining the contract, unless competing firms are subject to the same constraints on reducing compensation. In the absence of sufficiently high union density in an industry to set the wage pattern, living wage ordinances provide those constraints by taking wages out of competition, and creating a common floor for all contractors.

To the degree that living wage laws reduce worker turnover, they may provide an additional contribution to organizing. Organizing is more difficult in firms where the workforce is unstable and the workers with the greatest leadership skills are more likely to quit for another job than fight. Higher wages increase the value of job security, seniority and other benefits of unionization

At SFO, the living wage policies appear to have provided the greatest benefits to union organizing when workers were directly involved in the campaign and worker contact was made in advance of implementation of the policies. When a long period of time elapsed between the mandated raises and the initial worker contact, and workers credited the employers for the raise, the policies may have had a slight negative effect on organizing (See Appendix E).

The benefits for organizing increase when living wage ordinances are combined with other policies. Worker retention laws have been passed in San Francisco (2001), Los Angeles (1995), San Jose (1998) and Santa Cruz (2000). Such policies require successor firms to retain long-term workers for a minimum period of time when a contract changes hands. By enabling the union to remain in place under the new contractor, they remove the incentive to substitute lower wage contractors (Zabin 1999).

The benefits to workers that come about through the organizing process for the living wage campaigns may be as important as the direct benefits of the policies themselves. Living wage

[30] See Section 5.3 below for further details.

campaigns have proven a successful vehicle for building long-term relationships between unions, congregations and community organizations (Zabin 1999). The campaigns bring public attention to the plight of the working poor and the general need for a "living wage" which can serve to create a community standard that goes beyond the workers covered directly by the law.

3.5 Summary

The Quality Standards Program resulted in substantial increases in pay and benefit coverage at SFO. The QSP had a broad positive impact on the low-wage labor market at SFO that extended well beyond the firms directly covered by the program. Wages increased across low-wage occupations at the airport as employers competed for workers. These benefits reduced previous trends towards lower real wages in the airline service sector and significantly reduced the pay differential between in-house and contracted-out positions.

The Labor Peace/Card Check Rule and QSP removed major obstacles to unionization of airline service firms. Prior to the policies, none of the airline service firms surveyed were organized; within two years, half were organized. Some of these same jobs had been union positions prior to outsourcing by the airlines in the early 1980's. The increase in union organization and workers under collective bargaining agreements constitutes an important part of the change in the labor relations and employment environment at SFO.

CHAPTER 4 IMPACTS ON BUSINESSES, CONSUMERS AND TAXPAYERS

The pay and benefit enhancements described in the previous chapter result in increased labor costs, which initially fall upon employers. But additional adjustments will also occur. For example, workers might be less likely to quit, which would reduces employers' turnover costs; or firms might increase the training they offer, which could improve their workers' productivity; or firms might increase their prices.

Firms' actual responses to increased labor costs involve multiple factors, including the ability to pass costs on to consumers, workers and taxpayers; workers' adjustments to higher compensation levels; the ease of labor substitution; the relative size of the increase in business costs; the availability of strategies to increase productivity; and the time frame involved. We know from other contexts that the behavioral adjustments that workers and firms make will be especially important. In this chapter we examine the costs to airport businesses and consumers before taking behavioral adjustments into account. We then consider how businesses and workers have adjusted to these increases in the subsequent chapter.

For firms, some of the higher costs of employment have been offset by a series of behavioral adjustments, including efficiency wage effects. A question for consumers and government is whether these changes are worth the extra cost. In the latter sections of this chapter we compute the costs of the QSP as if it were entirely passed on to airline passengers. Finally, we examine how the structure of airport financing affects city finances as a direct result of the QSP.

4.1 Payroll costs

Drawing upon the responses to our employer survey, we have computed the costs of increased wages, payroll taxes, health benefits and paid time off for airport businesses. The sum of these individual components represents the direct costs of the QSP to employers, before the behavioral adjustments mentioned above.

As we show in Table 4.1, most of the total increase-- $34.6 million-- is accounted for by direct wage increases. We arrived at this amount by summing the increased costs of employing those who were covered by the QSP and who previously earned less than the mandated wage level. We also estimated the other changes in payroll costs: the increased costs of employer-paid taxes as $4.2 million, the increased health benefits as $0.5 million, and the paid time off for these workers as $3.4 million.[31] Adding these together, we arrive at an estimate of the direct costs of the QSP as amounting to $42.7 million per year.

As we discussed in Chapter 3, workers who are not directly covered by the QSP nonetheless received increases because of it; others received increases because of the general labor market

[31] Estimated using the baseline data and data collected in the firm survey; for details, see Appendix C.

conditions that were unrelated to the QSP. If we include all of the reported wage increases in our survey for employees who were not directly covered by the QSP, the total cost of the higher wages, employer-paid taxes, benefits, and paid time off that was paid by employers amounts to $68.7 million per year (again, see Table 4.1). In dollar terms, $11.1 million of the total observed labor cost increases would have occurred over the same time period in the absence of the QSP, while $14.9 million represent the indirect impact of the QSP.

Table 4.1 Increases in total payroll costs after QSP

	Wages	Payroll taxes [1]	Health benefits [2]	Paid time off [3]	Total
Directly related to QSP	34.6	4.2	0.5	3.4	42.7
Indirectly related to QSP	12.0	1.5	-	1.4	14.9
General labor market increase	10.0	1.1	-	-	11.1
Total increase	**56.6**	**6.9**	**0.5**	**4.7**	**68.7**

Sources: Reich and Hall (1999); UCB-SFO Employer Survey, 2001, conducted by the authors.

Notes:
1. Employer-paid taxes applied to wages and salaries (including paid leave but not health benefit costs), are valued at 11.15 percent of the wage costs, and include social security payments, unemployment insurance and training levies.
2. We have not estimated changes to non-QSP related health benefits, as there probably were no changes. The United Airlines jobs covered by the MCO already had full health benefits.
3. Costs of 12 days paid time off for holidays, vacations and sick leave. Estimated assuming that prior to the QSP, unionized workers had full leave benefit and 50 percent of other workers had leave benefit. After QSP, all workers have full leave benefit.
4. All figures are in $ millions and rounded.

When the increased labor costs are taken as a percentage of business operating costs, they are quite modest. If we take the total figure of observed wage increases and assume that all costs are ultimately passed on to the airlines, we find that the total wage increase amounts to 0.83 percent of Fiscal Year 2000 fare revenue.[32] If only the direct costs are passed on, the comparable figure is 0.51 percent. If we add only the indirect costs, as we argue in Chapter 3, we come to our estimate of the pass-through (without productivity increases or other cost-savings adjustments): 0.69 percent of fare revenue.

Over time, we would expect that increased labor costs for airline service firms, and to a lesser extent the concessionaires, will be passed on to the airlines. Two-thirds of the airline service firms surveyed

[32] Using data for the first nine months of the fiscal year, the Department of Transportation estimated that airlines would receive $8.31 billion in fare revenue from flights originating and terminating at SFO (Exhibit 11.0, Official Statement of the Airport Commission of the City and County of San Francisco, $238,185,000 Second Series Revenue Bonds, December 7, 2000).

reported that all or part of the costs of the wage increases had been passed on to the airlines. These responses, coming one year after the wage increases, could be expected to vary depending on the structure of the contract between the airline and the services firm.

Where the airline pays the contractor by the person hour, the pass-through was immediate and automatic. Where service contractors are paid for services delivered, the airline service firms could be expected to absorb more of the increased costs in the short run. Over time, as contracts are re-bid and/or re-negotiated, increased costs that are not offset by increases in productivity will be passed on to the airlines. Similarly, while costs of per-hour worker contracts will be fully passed through in the short run, they might go down over time as contracts are re-bid and savings from increased productivity are passed on to the airlines.

Increased costs to concessionaires that are not absorbed through lower profit, price increases or productivity increases may result in re-negotiation of terminal rentals over time. As we have seen in Chapter 2, these rent reductions will effectively be passed on to the airlines in the form of increased landing fees.

4.2 Impact on consumers

In addition to improved security, airport customers are receiving better service as a result of the mandated wage increases. According to our employer survey, almost half (45 percent) of all employers reported that customer service improved among workers covered by the QSP, while only 3 percent reported that they got "worse" or "a lot worse." High impact firms (those in which the QSP directly raised the total wage bill by 10 percent or more) and low impact firms both reported improvements in customer service, suggesting that improvements in worker performance were widespread across the airport.

These improvements do not come free, of course. The question is how much of the additional employment costs will be passed on to consumers. We argue that most of the increased costs of employment have been absorbed by the airlines. This occurs because the options for reducing and displacing ground-based employees are limited (see Chapter 6), and because airline service firms are able to transfer most of their increased costs to the airlines (see Section 4.1).

To what extent will the airlines be able to transfer the costs to consumers? The ability of an airline to pass costs on to a consumer depends on an array of factors, including the elasticity of demand, and the costs, availability and convenience of alternative transportation modes. We expect that airlines will be able to pass on most of the costs of the QSP because the increases are modest.

If we make the unlikely assumption that there are no offsetting productivity increases and that 100 percent of the direct and indirect costs are passed through to consumers, the cost works out to be a modest $1.42 per airline passenger.[33] This amount compares favorably to a $4.50 departure tax proposed by the airport in 2001 to study options for building new runways, and the $5.00 per segment security tax approved after September 11.

[33] 41 million passengers enplaned and deplaned at SFO in 2000. Source: SFO Airport Commission (accessed by web at www.flysfo.com).

Airport consumers will also pay some of the costs resulting from the wage increases received by those working in the concessions sector. The Airport Commission places controls on food and beverage prices that will prevent concession-holders from passing cost increases on to consumers in the short run. In the long run we might expect the airport to adjust the prices upward.

Note that the direct costs of the QSP incurred by the airlines cannot be recouped from airport concession sales. If airport prices were raised too high, the revenues received by the Airport Commission from concessions might fall. The Airport Commission itself operates on an annual budget of 'allowable' expenses that airlines must match through adjustments to landing fees and terminal rents. Since airlines have to meet the annual costs of the airport operation and expansion, reductions in concession revenue effectively result in higher landing and terminal rents for airlines (see Appendix F4 for more on this point).

4.3 Costs and benefits to taxpayers

Given the structure of Airport financing (as discussed in Chapter 2 and Appendix F), only a small portion of the costs of the QSP to airlines and airline service firms can be passed on to the Airport Commission and City, and therefore to the taxpayers. As we mentioned in Chapter One, transfers of airport revenue to the City for fire, policing and other services are capped at 16 percent of concession revenue or $5 million per year, whichever is greater.

Following September 11, retail and concessionaires requested and received a reduction in minimum base rents from the Airport. Concessionaire revenues were suffering from both the decline in passenger volume and the new regulations that do not allow non-passengers to pass through security gates. None of the concessionaires noted increased labor costs in their request for a reduction in the base rents. As noted above, the reductions in rent payments by concession-holders resulting from the change will largely be borne by the airlines, and the city will experience a small decrease in its annual transfer as a result.[34]

A second potential cost to the taxpayers would come from any increase in unemployment or reduction in hours that might cause an increased burden on county services. We did not find evidence of such a reduction (this is discussed in Chapter 6).

Third, the City has incurred some additional costs associated with the enforcement of the QSP and MCO. The Living Wage/Living Health Division of the City Office of Contract Administration has five full-time staff and a budget of just under $500,000 a year to enforce the MCO and Health Care Accountability Ordinances. These ordinances potentially apply to close to 900 firms that do business with the City and County of San Francisco (Hall and Reich 1999a, 1999b), of which 140 operate at SFO. The division is responsible for drafting and implementing the rules and regulations governing each ordinance, investigating complaints, conducting audits, and providing technical assistance to city contractors, departments and covered employees. The airport is directly responsible for QSP

[34] The entire transfer from the $470 million Airport budget to other city departments was $38 million in FY 2001, a small fraction of the $4.5 billion city budget. The projection for 2002 is $21 million (Glionna 2002). For City of San Francisco budget information, including the Airport Commission, see http://www.ci.sf.ca.us/mayor/budget02/index.htm.

enforcement, but has had no full-time staff dedicated to the program following the initial implementation.

The national experience with living wage laws suggests that effectiveness is highly dependent on both a dedicated enforcement mechanism in the City, and enforcement from below from the covered workers. At SFO, a primary reason for the lower cost to the taxpayers for enforcement of the living wage policies arises from the central role played by unions in educating workers about their rights, identifying problems, and providing information to the relevant enforcement agencies. This role is made possible by the relatively high union density at the airport. In effect, the Labor Peace/Card Check Rule allowed the airport to shift a large part of the enforcement costs for the QSP to business and labor.

On the positive side of the ledger, the direct increase in payroll taxes to the federal government is estimated at $6.9 million. We can also project an increase in local sales tax revenues as a result of the increased wages. To the degree that the wage increases are paid for by business travelers and tourists from outside the region, using money they would not have otherwise spent while visiting the area, it is a net gain for the local economy and local sales tax. Similarly, since low-wage workers spend more of their wages in the local economy than higher paid workers, increased costs paid for by more affluent travelers from within the region will also have a multiplier effect for the local economy and a subsequent increase in county sales taxes.

To summarize, we have considered the effects of the QSP on airport and city finances, on safety net expenses for the unemployed, on enforcement costs for the city, on payroll tax revenues and on multiplier effects. Taking these all into account, the overall tax effects are likely to be small.

4.4 Summary

In the context of the overall business revenues and expenses at SFO, the cost increases from the QSP were modest. As we shall see in the next chapters, these increases were not large enough to significantly affect employment practices and levels. Over time, we can expect the costs to airline service firms not absorbed through productivity increases to be passed on to the airlines. Increases in training costs from higher wages were partly offset by decreases in turnover. The benefits of the QSP for airport customers include higher security and improved quality of service. Even if the entire cost of the QSP had been borne by consumers, the increase in the cost of an airline ticket would have been modest. Moreover, the financing arrangements of the airport imply that taxpayers and the City are largely insulated against any cost pass-through from airlines.

CHAPTER 5 ADJUSTMENTS BY WORKERS AND FIRMS

The QSP components regarding pay, benefits, paid time off and hiring and training standards have generated a new work environment for both workers and firms. This chapter addresses the responses in the behavior of both sets of actors. We look at changes in turnover, in worker effort, in worker performance, in work schedules, and employment practices, including training. In the following chapter we examine whether there are changes in the level and composition of employment.

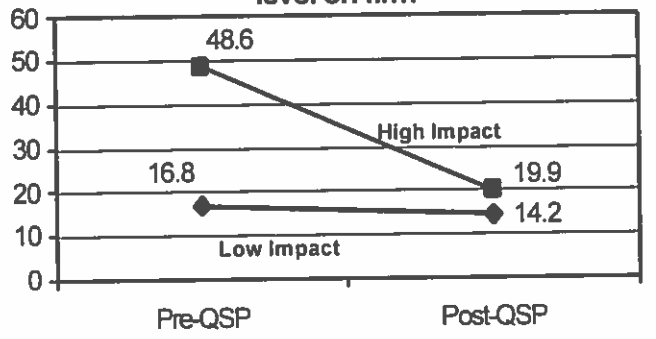
Some of these adjustments may represent further benefits that are generated by the QSP. For example, falling turnover implies a series of benefits to workers and employers. Longer job attachment implies greater opportunities to acquire on the job training, savings in recruitment and training costs, and a more stable group of employees. In addition to the obvious benefits for employers and workers, lower turnover also has important airport security benefits (as we document in Chapter 7).

5.1 Turnover

One of the most noticeable and positive impacts of the QSP has been a reduction in turnover rates. In this section we examine the relationship between higher wages and improved benefits and reduced turnover. We use the results of a series of questions in the employer survey to measure this effect, and we draw upon the evidence in the SFO Badge Office data to examine whether our findings are supported from another source.

Figure 5.1 shows that turnover fell dramatically for firms that experienced the greatest increases in wage costs. For those firms experiencing an increase in wage costs of 10 percent or more as a result of the QSP, turnover rates fell by approximately three-fifths (from almost 50 percent per year to 20 percent).

Figure 5.1 Annual Turnover by QSP impact level on firm



Source: UCB-SFO Empoloyers Survey, 2001.
High impact firms experienced a 10% or greater increase in wage costs directly due to the QSP while low impact firms experienced a less than 10% increase.

As Table 5.1 indicates, turnover fell the most among the Airline service firms, with smaller reductions in the Airline and Concession sectors. This pattern is expected, since most Airline employees received wages above the QSP mandated levels and generous benefits packages, while the QSP only indirectly influenced the Concessions sector.[35]

Almost one-third (31 percent) of all employers reported that turnover rates improved among workers covered by the QSP, while only 9 percent reported that they got "worse" or "a lot worse." High impact firms (those in which the QSP directly raised the total wage bill by 10 percent or more) reported greater improvements in turnover than other firms.

One contractor mentioned that although they have more than ten times the number of employees in San Francisco as in a nearby airport where wages remained low, their recruiters spent 75 percent of their time finding workers for the other airport. The number of open positions at the two airports was the same, but they had 10-15 applications for SFO for every 1 or 2 for the other airport.

Table 5.1 Annual turnover by sector

	Airlines	Airline services	Concessions	All firms
April 2000	12.8	42.6	13.8	23.1
June 2001	11.4	30.1	9.2	16.8

Source: UCB-SFO Employer Survey, 2001, conducted by the authors.

We also examine the linkages between higher wages and reduced turnover on a job-specific basis, for selected job titles. In general, we collected turnover rates for the entire firm rather than per job title. However, for the security screening firms and for United Airlines we collected job-specific turnover rates, and in some firms there was only one job title. We thus have been able to generate credible, but not precise, estimates of the turnover reduction for selected individual job titles.

In Table 5.2 we present data on entry-level and average hourly wages and turnover rates before and after the implementation of QSP, for selected jobs covered by the program.

[35] The small discrepancies in turnover rates for All firms in Tables 5.1 and 5.2 are the result of missing wage data.

Table 5.2 Wage and turnover rates for selected jobs covered by QSP

	Before QSP			After QSP		
	Entry wage	Average wage	Turnover (percent)	Entry wage	Average wage	Turnover (percent)
Customer service	8.30	10.30	36.2	10.50	12.00	34.6
Baggage/ Ramp	8.20	10.50	36.9	10.45	12.40	27.8
Cabin cleaner	7.70	9.95	16.3	10.20	11.45	9.2
Screener	5.90	6.45	94.7	10.00	10.00	18.7

Source: UCB-SFO Employer Survey, 2001, conducted by the authors.
Wages rounded to nearest $0.05.

In Table 5.3 these data are converted to percentage changes. Larger increases in wages are clearly associated with greater reductions in turnover. For example, the 27 percent increase in entry-level wages for ramp workers is associated with a 25 percent decline in turnover, while the 69 percent increase for screeners is associated with an 80 percent decline in turnover.[36]

Table 5.3 Change in wages and turnover rates for selected jobs

	Percent increase		Percent decrease
	Entry wage	Average wage	Turnover
Customer service	26	17	5
Baggage/ Ramp	27	18	25
Cabin cleaner	32	15	44
Screener	69	55	80

Source: UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: All figures in percentages. Data covers April 2000 to June 2001.

We have tested the dramatic turnover findings from our employer survey by analyzing implicit tenure patterns in the dataset provided by the SFO Badge Office data. This analysis is presented

[36]This analysis only includes cash wages and does not include health benefits added by the QSP. This omission may have biased the reported post-QSP wages for Customer service representatives, Ramp agents and Cabin cleaners upward, since one large employer elected to pay the higher wage and not provide health benefits.

fully in Appendix D. The central challenge of this analysis was to estimate tenure changes over time from a snapshot of the tenure profile and the implicit replacement rates of current employees.

Using this dataset, we found that the QSP had positive effects on the rate at which SFO workers needed to be replaced. More specifically, QSP-covered jobs had lower replacement rates, indicating reduced turnover and/or lower growth in these jobs. Since we know that airport employment increased overall in the period leading up to June 2001, our results imply that turnover rates did indeed fall after the introduction of the program. These turnover reductions were most concentrated on the wheelchair and screener occupations, and to a lesser extent for customer service occupations, and were strongest in the Airline services sector.

Estimate of savings from turnover reduction

The decline in the average annual turnover rate translates into 1,550 fewer turnovers per year at SFO, with screeners accounting for approximately half of the aggregate decline. The lower level of turnover implies considerable savings for airport firms. These savings take the form of reduced costs of: employee separation, recruiting, selection, background security checks, training, and in the costs of reduced productivity during the new employees' learning phase.

Although turnover costs are much discussed in theoretical research, there are surprisingly few recognized empirical academic studies of the *costs* of turnover. Pollin and Brenner (2000) surveyed hotel, retail and restaurant employers in Santa Monica, California; their respondents reported an average cost of $2,090 to replace a non-managerial worker. The definition of turnover costs in this study included costs of separation, recruitment and training, but not the productivity losses. Since the appropriate economic concept should include productivity losses, we regard the Santa Monica estimates as too incomplete and suggestive only of a lower bound. We expect that replacement costs at SFO to be higher for two additional reasons: airport workers require extensive background security checks, which imply a higher fixed hiring cost, and their wages are higher. On average Santa Monica low-wage workers were paid $7.58 per hour, almost one-half lower than the entry post-QSP wage and benefits of $11.25 per hour of San Francisco airport workers.

A detailed study by researchers at the Cornell University School of Hotel Administration examined the costs of turnover among hotel employees in Miami and New York, based upon a framework they had tested among hotels in Boston and Chicago (Hinkin and Tracey 2000). These researchers were careful to include productivity costs, which they measured chiefly using the learning curve for new employees, as well as the associated disruption to peers and supervisors. Their estimated turnover costs in Miami ranged from $1,332 for room-service wait staff, to $2,077 for cooks, to $3,383 for store clerks, and $7,658 for administrative assistants. Front-office associates, whose work is similar to that of customer service agents, cost between $5,688 and $5,965 per turnover. The hourly salary and benefits of a new employee was approximately $10 per hour in Miami, one-eighth lower than the entry post-QSP wage and benefits of $11.25 per hour. Hinkin and Tracey noted that the hotel's own estimates of turnover costs were somewhat lower because, as in Santa Monica, the employers did not include the costs of reduced productivity.

The same researchers' estimates of turnover costs for comparable positions in New York hotels, arguably a labor market that more closely resembles the Bay Area, were approximately twice those found in Miami (up to $12,882 for a front-desk associate). Almost all the difference between the two

estimates arose from the different salary levels in the two labor markets, indicating that turnover costs in Miami are equivalent to those in New York once we have adjusted for wage differentials. The study also found that initial training costs accounted for no more than one-third of total turnover costs.

The ranges in the Cornell academic study correspond to the range in the estimates made by human resources practitioners and trade associations. For example, estimates of the cost per turnover for employees earning $8 per hour include: $3,500 (Society for Human Resources Management), $3,637 (Coca-Cola Retailing Research Council), $4,000 (American Management Association), $4,100 (American Hotel and Motels Association), and $8,000 (Hay Group and Superb Staff Services).[37]

Our employer survey did not include detailed questions on the full range of turnover costs. Instead, we focused primarily upon practices involving entry training. Following the usual practice, we asked only about formal training, as informal training is very difficult to measure.[38] Drawing upon employer responses to our survey, we estimated average hours of entry training for various occupations at SFO. (See Table 5.4) We combined this data with additional information on the costs of training to derive the average cost of training one person.

Table 5.4 Entry training hours and costs, by occupation

Occupation	Training hours	Cost of training ($ per person) After QSP
Customer Service	41	625
Administration / Clerical	5	70
Baggage / Ramp	38	460
Cabin cleaner	4	40
Screener	16	160
Wheelchair attendant	16	160
All occupations	26	360

Source: UCB-SFO Employer Survey, 2001, conducted by the authors.
All figures have been rounded.

[37] These estimates are summarized on the web site of a human resources company, Sasha Corporation (http://www.sashacorp.com/turncost.html accessed 10-1-02).

[38] In the U.S., formal training almost always refers to classroom-based off-the-job training, while informal training refers to on-the-job training done by co-workers and supervisors. Several national surveys indicate that the intensity of informal training is correlated with formal training, but involves five to ten times more employee time. The same economic considerations that apply to formal training will also hold for informal training. For a discussion, see Brown et al 1997, ch. 3.

Note that the average initial training cost of $360 obtained from the survey is lower than the amount implied by Hinkin and Tracey's (2000) estimate that initial training accounted for up to one third of turnover costs. This may reflect the fact that when we conducted our survey, employers were still implementing changes to their training programs. Training time may, in other words, not be constant. The QSP set standards for minimum entry training and for recurrent training, involving both security and safety. As we mentioned previously, these standards exceeded then-current FAA standards and matched levels that were long proposed by the FAA but that were never approved. In fact, since the QSP went into effect, one-quarter of QSP covered firms and one-fifth of all firms reported enhancements in their formal training programs. (This result appears in Table 5.10 below).

In addition to the direct mandates of the policy we would also expect employers to increase the training of workers over time. If workers are staying longer on the job, employers may decide to increase their training investment in their experienced workforce because they can recoup their investment over a longer time period. The ongoing training of experienced workers—which we call recurrent training-- is commonplace in Japan, where employment stays are much longer, and is thought to be central to seniority-based increments in pay. Most of the formal training in the U.S. is entry training, concentrated on new hires, and is thought to be related to the flatter pay profiles over worker careers in the U.S. (For more, see Brown et al 1997).

Taking all these factors into account, we have estimated the savings from turnover reductions at SFO using the two academic sources to provide lower (Santa Monica) and upper (Miami and New York) bounds (see Table 5.5). We have adjusted the published estimates to account for the wage differential between San Francisco airport workers and those reported in the studies. We have also prepared two estimates, the first using the adjusted academic source only. In the second estimate, we exclude one-third of the total cost to account for initial training costs, and include the (lower) training cost estimate from our survey. This provides four estimates of the savings from turnover reductions, ranging from $3.8m to $10.4m per year.

The average of these estimates, which is our best estimate of the savings from turnover reductions, is $6.6m per year.

Table 5.5 Savings from turnover reductions

		Using academic sources only	Combining survey training costs [1]
Lower bound (Santa Monica)	Reported cost of turnover	2,090	
	Adjustment factor [2]	1.484	
	Adjusted cost of turnover	3,100	2,430
	Turnover reductions	1,550	1,550
	Estimated savings	**$4.8m**	**$3.8m**
Upper bound (Miami and New York)	Reported cost of turnover [3]	5,975	
	Adjustment factor [2]	1.125	
	Adjusted cost of turnover	6,720	4,840
	Turnover reductions	1,550	1,550
	Estimated savings	**$10.4m**	**$7.5m**
Average of estimated savings		**$6.6m**	

Source: UCB-SFO Employer Survey, 2001, conducted by the authors; Pollin and Brenner (2000) and Hinkin and Tracey (2000).
All figures have been rounded.

Notes: 1. Adjusted turnover cost has been reduced by one-third (as indicated in Hinkin and Tracey 2000), and then increased by $360 (as indicated in the UCB-SFO Employer Survey).
2. Adjustment factor reflects differences in post-QSP entry wages and benefits of $11.25 at SFO and those reported in the academic studies (for Santa Monica, $7.58, and for Miami / New York, $10 per hour.
3. Turnover costs for Miami and New York are the mean of the costs reported for Miami hotels and half those reported for New York hotels.

5.2 Worker effort

A variety of efficiency wage theories argue that work effort will increase when pay increases. These changes can come about because workers value the jobs more and want to be sure to hold on to them, or because they are more motivated to acquire skills through informal training methods, or because employers place greater stress on using their employees more effectively—either by reducing down-time or increasing the pace of work.

The findings from the worker interviews indicate that work in the QSP-covered jobs did involve increased skill and more effort. As Table 5.6 shows, QSP-covered workers reported that more skills are required of them (50 percent), that they were working harder at their jobs (44 percent), that that they have greater stress on the job (43 percent), and that the pace of work has increased (37 percent). In each case, the percentage reporting "more" was similar to the percentage reporting "no change," and greatly exceeded the percentage reporting "less."

Table 5.6 Worker reports of changes in job characteristics

	More	No change	Less
Skill required	50.0	43.0	6.9
Effort on the job	44.2	42.8	12.8
Stress on the job	42.8	44.2	12.8
Pace of work	37.1	44.2	18.5

Source: UCB-SFO Worker Survey, 2001, conducted by the authors using only information on QSP covered positions. Figures are percentages.

The worker survey began in the weeks before September 11 and was resumed about two weeks afterwards. It is clear that skill requirements, effort and particularly stress did increase significantly after this date. Nevertheless, the results from the sub-sample of interviews conducted before September 11 indicate that skill, effort, stress and pace all increased before that date. For example, of those surveyed before September 11, 42 percent reported working harder and 37 percent reported more stress.

Workers who experienced larger wage increases were more likely to report more skill, effort, stress and pace. In particular, Table 5.7 shows that workers who received an increase of $2 or more were more likely to report they were putting in more effort on the job, compared to those with a wage increase of less than $2.

Table 5.7 Worker reports of changes in job characteristics by size of wage increase

	Small wage changes (less than $2)			Large wage changes (greater than or equal to $2)		
	More	No change	Less	More	No change	Less
Skill required	40.9	54.5	4.5	53.0	38.7	8.1
Effort on the job	28.5	47.6	23.8	50.0	41.6	8.3
Stress on the job	42.8	52.3	4.7	43.7	41.6	14.5
Pace of work	45.4	36.3	18.1	34.0	46.8	19.1

Source: SFO Worker Survey, 2001, conducted by the authors using only information on QSP covered positions.
Note: All figures in percentages.

5.3 Worker performance

Our employer survey also demonstrated that higher wages and better benefits at SFO translated into improved worker performance. Table 5.8 shows that employers reported improvements in overall work performance (35 percent), employee morale (47 percent), absenteeism (29 percent), disciplinary issues (44 percent), equipment maintenance (29 percent), equipment damage (24 percent) and customer service (45 percent). In each case, a much smaller proportion reported any worsening of the condition.

Table 5.8 Employer reports of changes in employee performance

	"Better" or "a lot better"	"No change"	"Worse" or "a lot worse"
Overall work performance	35	62	4
Employee morale	47	37	16
Absenteeism	29	66	5
Employee grievances	45	52	2
Disciplinary issues	44	47	9
Equipment maintenance	29	67	4

Equipment damage	24	69	7
Customer service	45	52	3

Source: UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: All figures in percentages and may not add to 100 due to rounding.

Question wording: "How has **employee performance** changed in the past year for those working in job titles covered by the QSP? Please check the appropriate box for each aspect of employee performance, and use the space provided below to add additional comments about any of the changes you have observed."

Table 5.9 shows that high-impact firms reported greater improvements in overall work performance, turnover, and employee morale than low-impact firms, suggesting a direct relationship to the improvements in wages and benefits. Low-impact firms reported greater improvements in grievances and disciplinary issues. This pattern may be a result of the union organizing campaigns underway during the period in many of the high impact firms. Normally, an increase in formal grievances and disciplinary procedures would be expected during a union organizing drive. Since the organizing at the airport took place in an unusual context-- under the Labor Peace Rule--it is notable that no such increase was reported. Improvements in customer service were reported across the board.

Table 5.9 Mean score for changes in performance reported by firms

	Low impact firms	High impact firms	All firms
Overall work performance	3.3	3.8	3.4
Employee morale	3.2	3.8	3.3
Absenteeism	3.3	3.4	3.3
Employee grievances	3.9	3.3	3.8
Disciplinary issues	3.7	3.2	3.6
Equipment maintenance	3.6	3.3	3.5
Equipment damage	3.4	3.3	3.4
Customer service	3.7	3.5	3.6

Source: UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: Mean score is rated on a range: 1="a lot worse" to 5="a lot better." *A score of 3 implies no change.* A high impact firm is defined to be one where QSP resulted in a 10 percent plus increase in wages and health benefits.

These survey findings match the qualitative reports from employers, employees and other airport stakeholders. One employer reported, "[The QSP] changed the way we do business. We are more proactive in getting good folks and keeping them trained... If we have someone who isn't performing, we have no hesitation about letting them go. We've weeded out non-performers, so the quality goes up considerably."

Along the same lines, a long-time worker reported: "Before we could take more liberties. The job had less value; there was a lower threat of replacement. Now you have to be responsible, show up on time, look right, and do your job correctly."

Similar comments came from the union organizers: "People are more careful about committing infractions. They don't want to lose their jobs. The mentality is different now. Before people didn't care, [they] can always find another $6 job."

5.4 Changes in employment practices

As previously mentioned, employers could also adjust to the costs of the mandated wage increases by changing schedules or employment practices. Only a few firms reported changes in shift schedules, job descriptions, skill requirements or hiring practices following implementation of the QSP (see Table 5.10). All of the changes in shift schedules were reported by airlines, as opposed to the airline service firms that had the greatest relative increases in pay. Reports from the non-QSP firms indicated that none of them had made changes in any of these areas during the study period.

Table 5.10 Employers reporting changes in employment practices

Changes in	QSP firms	Non-QSP firms	All firms
Shift schedules	8.2	0.0	5.2
Job descriptions	3.3	0.0	2.1
Skill requirements	6.7	0.0	4.2
Hiring practices	13.1	0.0	8.3
Training	24.6	11.4	19.8

Source UCB-SFO Employer Survey, 2001, conducted by the authors.
Note: All figures represent percentage changes.

Question wording: Have there been any substantial changes in your firm's employment policies and practices in the last year? Please check if applicable and elaborate below:

The one significant change in Table 5.10 occurred in the proportion of firms reporting increases in training. In every case where employers reported a change in training, this entailed an increase in the amount of initial or on-the-job training provided. This result is consistent both with the increased training mandates of the QSP, and with economic theory. Higher wages provide an incentive for the employer to increase training of workers in order to raise productivity to match the new, higher wage level.

Anecdotal evidence in the employer survey points in the same direction. For example, one large employer reported a significant improvement in the trainability of new hires. In the year up to July 2001, only 2 percent failed in-company training, whereas earlier, in the calendar year 2000, 13 percent had failed in-company training. Such training failures represent a loss to the business. In the same vein, one contractor reported that it was "more proactive in getting good folks and keeping them trained."

Our survey of union organizers found a similar concentration of changes in shift schedules and job descriptions in QSP covered firms, though the sample of non-QSP firms was small. Union organizers tended to report more changes in shifts and work schedules in airline service firms than were reported by management in those same firms. This inconsistency could reflect ongoing tactical responses to organizing efforts or differences in perceptions.

Union organizers reported that only one airline service firm moved to a split shift, reducing the time workers were paid while waiting between flights, and two others reduced the hours on shifts with large amounts of dead time. Reduction in work hours appears to have affected a relatively small number of workers, and in most cases, would not have lowered their gross pay below what they were receiving prior to the wage increase.

In summary, the evidence available suggests that training increased and there were only minor changes in the other employment practices.

5.5 Summary

Workers and employers have adjusted to the QSP, reducing its costs. We found dramatic reductions in turnover as a result of the QSP, falling as much as 80 percent among the screeners. Worker effort and performance also improved, but there was very little change in job schedules. Firms are providing more training, which is not surprising given the QSP's training mandates.

CHAPTER 6 IMPACTS ON THE LEVEL AND COMPOSITION OF EMPLOYMENT

In this chapter we examine the effects of the QSP on the level and composition of employment at SFO. In theory, incumbent workers and potential new hires may be hurt by higher mandated wage increases through reduced employment opportunities. A reduced need for workers could occur through two different channels. If higher costs lead to higher ticket prices and thereby to lower demand for air travel, fewer workers will be needed and some will be displaced. As we saw in Chapter 4, cost increases were small as a fraction of revenue and this channel is unlikely to be significant.

A second channel of reduced employment demand involves labor substitution. Reduced employment levels could occur if employers now find it cost-effective to replace less skilled workers with capital equipment and/or (a smaller number of) more-skilled workers. Such substitution depends upon employers having some flexibility in their staffing requirements. This is generally more difficult to implement in the short run. Employer flexibility in adjusting workforce levels may also be restricted by institutional factors such as federally mandated staffing levels, worker retention clauses, or other employment rules and norms. For example, among airport screeners, we might not see proportional employment reductions because of mandated minimum employment ratios in some jobs (e.g., screeners per gate).

Independently of whether employment levels fall, some economists argue that mandated wage increases of the magnitudes involved in living wage ordinances could result in another unintended and undesirable outcome. In particular, an increase in pay could lead employers to substitute better-skilled workers for their existing workforce, thereby displacing current workers. Such an effect would not necessarily be an adverse public policy outcome, since it could lead to higher levels of services and the displaced workers might be able to find equivalent employment elsewhere. If, however, the displaced workers do not find alternative jobs, or if wages are bid down in other sectors, a policy such as the QSP may make some of its intended beneficiaries worse off.

Living wage policy-makers implicitly recognize these possibilities when they insert worker retention language into their ordinances. Such language is included, for example, in the Los Angeles and San Jose ordinances, and SFO has a separate worker retention policy (see Appendix A.) This policy, however, applies only for ninety days and only in the event of a successor contract award. Clauses in collective bargaining contracts that contain layoff protections and seniority systems also could restrict substitution possibilities.

Our concern is with the actual, as opposed to the potential, magnitudes of these displacement effects. We examine whether part of the incumbent workforce was displaced and/or partially replaced by more-skilled workers by considering trends in the level and in the composition of employment at SFO. We first consider the evidence on trends in airport employment. Our strategy is to examine whether the recent downturn in business at SFO results from the QSP or external factors that are not related to the QSP. We then consider evidence of displacement effects drawn from a variety of data sources.

6.1 Changes in Airport Employment levels

In Table 6.1 we compare 1998 employment by occupation for selected occupations and employers with mid-2001 employment. The 1998 estimate is based on the Airport Commission's own economic impact study, and provides a reliable baseline. The data for mid-2001 come from our own employer survey. A comparison with data from the SFO Badge Office from the same time period can be found in Appendix C. [39]

Table 6.1 Changes in employment at SFO, selected occupations[1]

	1998	2001
Airlines[2]	4,055	4,681
Airline services	3,284	3,803
Total	7,339	8,484

Sources: SFO, 1998; authors' analysis of UCB-SFO Employer Survey, 2001.
Notes: 1. Excludes concessionaires. Survey data sample too small for valid comparison.
2. Includes United Airlines ramp, customer services and cabin cleaners only; all ground-based employees of other airlines are included.

The employer survey findings in Table 6.1 indicate that employment among airlines and airline services firms rose 15.6% during the period in which the QSP was implemented. This increase is surprising given that over the same time period, airport activity declined by 9% and overall employment in the San Francisco MSA increased by only 1%.

All of the increase in airline employment is accounted for by passenger airlines other than United Airlines. The number of passengers handled by these airlines increased 13.1% from 1998 to 2000, while the number of passengers handled by United Airlines actually declined over the same period. These other passenger airlines are more likely than United Airlines to contract out customer service, baggage handling and other functions. Hence their increased activity levels account for the increase in the number of workers in the Airline Services sector.

Another factor contributing to the overall growth in airport employment between 1998 and 2001 was the opening of the new International Terminal in 2000. This had been projected to substantially increase airport activity and employment, although the basis of this optimistic projection is questionable.[40] We must nevertheless consider whether the QSP affected the overall level of airport activity and hence the rate of job growth. We address this question in the following sub-section.

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[39] The Badge Office data findings report a considerably larger employment level, which to some extent reflects a weakness in this dataset. The Badge Office data are likely to overestimate employment because of delays in the returning of badges once employment ends. This problem was more common among the passenger airlines. We compare these two data sets in more detail in Appendix C.

[40] The Airport projected 11,000 new jobs by 2005 as a result of airport expansion. No documentation was available on where the employment increases were anticipated. Through the end of 2001, airlines relocated from the old to the new International Terminals, and the old International Terminal was closed for renovations. Hence the airport expansion

Did living wage policies curtail growth?

San Francisco International Airport, the fifth busiest in the United States, served over 40 million passengers per year in the late 1990s. In 2001, however, SFO declined from fifth to tenth place in the nation's rankings, and suffered a 15.7 percent decrease in passenger volume (Wilson 2002). At the same time, other Bay Area airports fared much better. Mineta San Jose International Airport kept the same number of passengers in 2001 as in 2000, while Oakland International Airport was one of the few airports worldwide that actually increased its passenger throughput, due to the relocation of Southwest Airlines. We consider here whether these declines at SFO are attributable to the QSP, and argue instead that they are a direct result of the downturn in the Bay Area economy that began late in the fall of 2000. This downturn pre-dated the even more dramatic decline in airport activity following the events of September 11th, 2001.

Table 6.2 shows that passenger traffic at SFO was increasing steadily in recent years, from 32 million passengers in 1993 to 41 million in 2000. Cargo traffic was also increasing steadily during this period. Passenger traffic had been projected to grow even more rapidly after the opening of the multibillion-dollar international terminal project in fall 2000. The airport was expecting to handle 49 million passengers by 2006, with much of the increase consisting of Pacific Rim travelers.

Table 6.2 Passenger and cargo volume, SFO 1993-2006

Year	Enplaned and deplaned passengers (millions)		Enplaned cargo[2] (thousands of tons)
	Total	International	
1993	31.9	4.4	-
1994	33.1	4.9	-
1995	34.7	5.5	388
1996	37.2	6.3	391
1997	39.1	6.8	413
1998	40.1	6.7	414
1999	40.3	7.2	418
2000	41.0	8.0	454
2006[1]	49.1	10.7	-

Sources: Meeting the Challenges of the Next Millennium: The New International *Terminal Building Concession Program.* Brochure prepared for San Francisco International Airport by Leigh Fisher and Associates (based on SFO Airline Traffic Report and Airport Official Statement); Official Statement of the Airport Commission of the City and County of San Francisco, $238,185,000 Second Series Revenue Bonds, December 7, 2000.

Notes: 1. 2006 figure is projected
2. Includes freight and mail.

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could not have significantly increased aggregate airport employment in airlines and airline services during the study period (i.e. by the end of 2001) since it had not resulted in any net increase in airport activity levels. It is possible that the opening of the new International Terminal resulted in increased employment in the concessions sector, but our data do not allow us to draw a definite conclusion on this issue (see Table 6.1 above and related text).

However, after peaking in 2000, actual activity levels fell considerably below these projections. The decline, especially in domestic passenger volume, began well before September 11, 2001. Table 6.3 compares the percentage change from the previous year in the year-to-date activity levels, with endpoints of August 1999, August 2000 and August 2001. From August 2000 to August 2001, travel declined markedly in all categories except international passenger departures.

Table 6.3 Changes in passenger and cargo volume, SFO 1998-2001

		Percentage change per year, January to August only		
		1998 to 1999	1999 to 2000	2000 to 2001
Passengers Departing	International	7.0	10.8	2.6
	Domestic	-1.3	0.6	-10.7
	Total	0.1	2.5	-8.1
Freight outbound	International	5.8	16.4	-14.2
	Domestic	2.7	-0.3	-14.6
	Total	4.4	8.9	-14.4

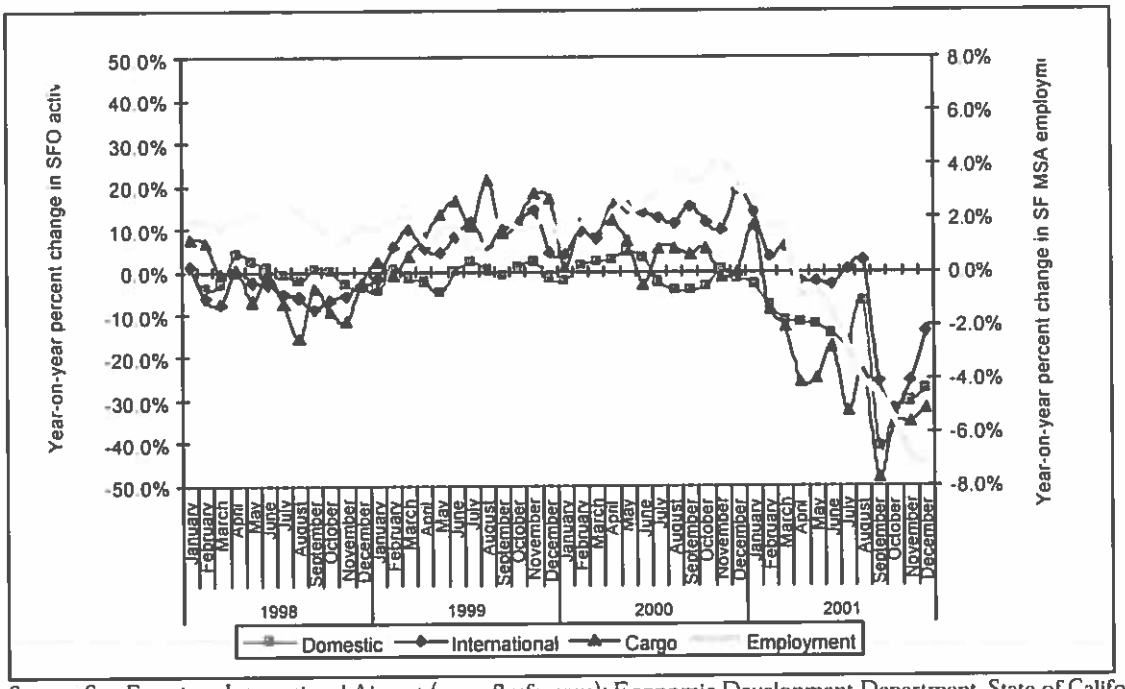
Source: SFO Airport Commission.
Note: 1. Cargo excludes U.S. Mail and is measured in metric tons.
All figures are percentage changes for January to August.

We find no evidence that these reductions in passenger volume are causally the effect of the QSP. The declines in international travel and cargo correspond to the broader decline in the Bay Area economy following the shakeout among technology firms as well as the onset of the national recession. This pattern is illustrated in Figure 6.1, which tracks the relationship between growth in activity at SFO and the economic growth in the Bay Area.

In Figure 6.1, economic growth is indicated by the annual change in employment in the San Francisco MSA. After consistent employment growth through the late 1990s, the employment growth rate began declining in the fall of 2000 and turned negative during the spring of 2001. The timing of the downturn in activity at SFO closely tracks this pattern. International passenger growth that had been strong during the late 1990s began declining at the same time as did Bay Area employment growth, while domestic passenger and cargo growth were both negative from the start of 2001.

After September 11, 2001, the steepest decline occurred among international travelers. After growing modestly at a 2.6 percent rate in the first eight months of 2001, international air travel declined rapidly, ending the year down 6.4 percent from the previous year (Wilson 2001). The volume of domestic air passengers at the end of the year fell by 18 percent.

Figure 6.1 Activity at SFO declined with the Bay Area economy, before 9-11



Source: San Francisco International Airport (www.flysfo.com); Economic Development Department, State of California (http://www.calmis.cahwnet.gov/file/indcur/sanf$pr.txt).

One Airline, Southwest, did cease operations at SFO in March, 2001, after the QSP went into effect, relocating to Oakland, San Jose and Sacramento. The change was not related to the QSP. According to a Southwest official (quoted in Armstrong 2001), the airline was "not able to secure terminal facilities, and there is limited runway capacity at SFO." Southwest's departure does not account for most of the decrease in passenger volumes at SFO, as it accounted for between 2.4 and 2.7 percent of domestic passenger departures at SFO in the years 1998-2000.

However, Southwest's move does account for the entirety of the increase in passenger volumes at Oakland International Airport. In 2000, Southwest Airlines enplaned some 440,000 passengers at SFO, representing 2.7 percent of total SFO passenger departures. This volume is more than the total increase in departures at Oakland International Airport in 2001 as compared with 2000.[41]

The evidence thus does not support the view that the QSP derailed growth in passenger volumes at SFO. As noted above, even if all the costs of the QSP had been passed on to consumers, they would not have had a significant effect on ticket prices. Both international and domestic passenger growth declined primarily as a result of the downturn in the economy, while international passenger volumes in particular turned sharply downward after September 11, 2001. Most of the relative growth at another Bay Area airport, Oakland, reflects the relocation of one airline away from SFO for reasons not related to the QSP.

[41]Departures from Oakland increased by 410,000, or 7.8 percent, in 2001 over the previous year (OIA 2002).

We have show that the decline in airport activity closely tracks the decline in economic activity in the Bay Area economy from the start of 2001. Hence, the aggregate growth in employment we found in the employer survey (conducted during the summer of 2001) probably reflects the lag between changes in airport activity and employment. Our overall conclusion – that the QSP did not result in significant disemployment at SFO – remains.

6.2 Labor-labor substitution: the composition of employment

Standard human capital theory predicts that mandated wage increases – above those set at competitive equilibrium or market-clearing levels – will lead to some employment displacement (see Becker 1964 and Mincer 1974). In a perfectly competitive situation, the firm can no longer afford to employ low skill (and hence low productivity) workers and remain profitable. Moreover, with a binding minimum wage, workers cannot accept lower pay in exchange for employer-provided training. The firm may therefore replace less productive workers with more productive ones. Economists call such a scenario labor-labor substitution.

However, the standard human capital theory makes very restrictive assumptions about the competitive character of labor markets. A newer labor economics paradigm emphasizes alternative scenarios of how labor markets function: that productivity can increase as a result of wage increases, often referred to as an efficiency wage model (Katz 1986); and that many firms hold some market power over their employees, with pay a function of market power. Under these conditions, as Acemolgu and Pischke (1999) show, a higher minimum wage may in fact lead firms to train employees rather than displace them. They draw on data from national and state minimum wage increases in the period from 1987 to 1992 and find that training increased when and where mandated pay levels rose.

These new insights are illuminating in showing how different outcomes might arise in the SFO environment. Airport labor markets certainly do depart from the competitive textbook model. We have already seen that considerable segmentation is present in the airport labor market. Moreover, screener firms at SFO historically hired older workers, many of whom are recent immigrants from the Philippines. These workers tend to be highly skilled and many have professional degrees that are not recognized in the United States.

From a public policy perspective, the main question does not concern the theoretical possibility of labor-labor substitution, but rather the extent to which it occurs in the present context. Firms that were more heavily influenced by the QSP did report higher entry skill requirements and stricter hiring policies, indicating that the mandated higher wages allowed the firm to be more selective in making new hires. In the words of one security-screening manager: "(We) raised the bar on entrance exams, with more applicants we can afford to demand higher standards. We're much pickier." Such changes, which were reported by 8.3 percent of all firms (see Table 5.8), suggest that a small amount of substitution occurred.

Employees also adjusted by working harder following the wage increases. A substantial number-- approximately half of all workers— reported working harder following the QSP (see section 5.2). This evidence suggests the efficiency wage effect: the same individuals, with the same level of education and training, may become more productive when they are paid more. The additional work

effort could also be a by-product of the workers' additional training. By having more skills, workers may be able to carry out more tasks than before.

In addition to the efficiency wage effects, the QSP also entailed the intentional raising of education levels among airport security workers and additional training. The policy mandated high school completion as a condition of hiring, although this requirement was not used to displace any existing workers. At the same time, one of the innovative aspects of the QSP was a mandate for higher training standards. In fact, almost 20 percent of all firms reported increasing the amount of training they undertook, supporting the argument that upgrading the skills of the incumbent workforce was as likely as substitution.

Our survey data, then, indicate that firms and workers engaged in skill upgrading, and only very modest displacement effects or substitutions effects at the wage rates mandated by the QSP. Our analysis of the SFO Badge Office data also did not indicate any increased replacement of workers following the implementation of the QSP (see Appendix D). More firms responded to the QSP by training and upgrading their existing workers than by replacing them.

One additional consideration suggests that labor-labor substitution was likely to be relatively modest at the wage levels offered under the QSP. Unless employers can expect a substantial improvement in new workers' skills, they will not be willing to incur the turnover costs of replacing incumbent workers. Theory suggests that the turnover costs will be greater the more specific are the skills used at the workplace, as those skills are acquired on the job rather than through formal schooling. We might expect that job-specific skills are less important in routinized low-wage jobs. However, many airport jobs involve considerable job-specific skills and so the prediction of theory is more ambiguous.

In a previous study, Reich and Hall (2001) estimated the likely increase in a new hire's educational level after a change to higher mandated wages. To do so, we computed the average years of schooling at different wage levels for California respondents in the Current Population Survey. We used this result to estimate the likely substitution effects of the 1996-98 minimum wage increases in California; we found that the potential effects were relatively small (see Reich and Hall, 2001).

We use the same approach and CPS dataset to estimate the likely displacement effects of the QSP wage increase. As Table 6.4 indicates, the average schooling level of workers who earn approximately the pre-QSP entry-level wage ($7.50-8.49 per hour) is 11.6 years. At wage levels closer to the post-QSP entry-level wage ($10-10.99 per hour), the average schooling level is 12.2 years. While this difference does cross the high school completion threshold, it does not represent a substantial increase in schooling levels. At these pay levels, the higher wages generate a real but small degree of pressure to increase the average skill level of workers.

Table 6.4 Years of schooling by wage rate, California

	$7.50 - 8.49	$10 – 10.99
1994	11.9	12.7
1995	11.6	12.4
1996	11.9	12.5
1997	11.9	12.5
1998	11.7	12.6
1999	11.6	12.2

Source: Authors' analysis of CPS monthly Outgoing Rotation Groups for California 1994-99, modified from Reich and Hall (2001). We use one-dollar wage bands in order to obtain significant sample sizes in each cell.

Changes in the education level of SFO Screeners

A survey of baggage screeners conducted for the responsible union, SEIU Local 790, provided additional information that allowed us to examine whether the QSP resulted in the displacement of less educated by more educated workers. We have compared the education profile of those hired in the year before the implementation of the QSP (June 1999 to May 2000) and in the 18 months following the implementation of the QSP until implementation of the Airline Transportation Security Act (June 2000 to November 2001). The results are presented in Table 6.5.

Table 6.5 Education of screeners by hiring date

Time of hiring	Post-QSP, Pre-TSA (June 2000-Nov. 2001)	Pre QSP (June 1999- May 2000)
High school only	23.1	31.6
High school plus some college	23.1	16.5
AA / AS or similar certificate	11.0	11.4
BA / BS or higher degree	42.7	40.5
	100.0	100.0
Chi-square		p=0.382

Source: Authors analysis of SEIU Local 790 member survey, 2002.

As discussed in Chapter 2, the education level of screeners at SFO was higher than we expect to find among workers at this wage rate. This occurs because over half (51 percent) of all screeners at SFO were immigrants, mainly from the Philippines, and this group tends to be more educated than most immigrant workers in unskilled jobs. [42] Forty-percent of the screeners on the job in July 2002 who were hired prior to the QSP held a bachelor degree or higher; more than half had some degree or certificate above high school. Screeners hired after the QSP were more likely to have attended some college, but were only marginally more likely to have earned a degree than those hired prior to the QSP.[43]

The proportion of workers hired with only a high school diploma fell from 31.6 percent prior to the QSP to 23.1 percent immediately afterwards. While not statistically significant, this change does indicate a modest displacement effect for less educated workers.[44] The small increase in the education level of the workers corresponds to the expected small increase in years of schooling at the higher wage rate discussed above.

Note that this analysis refers only to screeners, the occupational grouping that received the largest wage increases as a result of the QSP (see Tables 3.2 and 5.3). We would expect displacement effects to be smaller for other occupations.

Changes in the demography of SFO workers

Economic theory also suggests that employers may respond to the increased wage mandate by hiring workers with different demographic characteristics. This may be regarded as an undesirable unintended consequence of the policy if it leads to the displacement of workers unable to find work elsewhere. There is some evidence that the QSP did lead to slightly more hiring of men than women, but that it did not change the hiring patterns by age and race.

The data for this analysis is the SFO Badge Office data, which presents a snapshot of the SFO workforce on June 1, 2001. We have compared the demographic profile of those hired in the year since the QSP (the period June 2000 to May 2001), with those hired in the year before it was implemented (the period June 1999 to May 2000). This comparison is shown in Table 6.6.

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[42] In August 2002, prior to implementation of the citizenship requirement, almost half (46.3 percent) of non-citizen screeners had a bachelor's degree or higher, while only one-third (30.7 percent) of citizen screeners were similarly qualified.

[43] We also examined whether the mean number of years of schooling of screeners changed when the QSP was implemented. The average number of years of schooling increased from 14.0 to 14.2 years. This increase is statistically insignificant. Note that the screener survey data did not indicate the number of years of schooling and hence this analysis is approximate. Following accepted conventions, we have assumed that a high school diploma is the equivalent of 12 years of schooling, some college is the equivalent of 13 years of schooling, an AA/AS certificate is the equivalent of 14 years of schooling, and a BA/BS degree is the equivalent of 16 years of schooling.

[44] The hiring of both less educated citizens and less educated non-citizens declined following the implementation of the QSP. In both cases the decline was not statistically significant, but was somewhat more pronounced for non-citizens than for citizens.

Table 6.6 Demographic profile of workers hired before and after QSP

	Ground-based non-supervisory workers		Low wage occupations only	
Time of hiring	Pre QSP (June 1999-May 2000)	Post QSP (June 2000-May 2001)	Pre QSP (June 1999-May 2000)	Post QSP (June 2000-May 2001)
Age at start date				
Up to 24	18.3	21.0	20.9	23.1
25-34	25.4	27.4	23.3	25.9
35-44	25.4	26.0	22.7	25.6
45-54	19.7	16.7	18.8	16.3
55-64	8.6	6.6	10.9	6.6
65 and up	2.7	2.2	3.5	2.4
Race/ethnicity				
White	17.1	18.1	11.8	14.0
Hispanic	19.1	16.9	18.9	17.7
Filipino	31.9	30.7	37.3	36.2
Black	8.2	7.8	9.6	8.4
Asian	23.7	26.6	22.4	23.7
Gender				
Female	32.3	31.8	33.4	30.3
Male	67.7	68.2	66.6	69.7

Source: Authors analysis of SFO Badge Office data.

The interpretation of this data is subject to some limitations. In particular, we do not have data on those who have already stopped working at SFO. Those who have stayed in the job longer may have a different demographic profile from those more recently hired for reasons that are unrelated to the policy change. This could especially be the case in the lowest wage jobs, where we might expect the quit rates to be higher for demographic groups with the greatest opportunities to find higher paying work elsewhere. With these caveats, we observe some patterns, by age, race/ethnicity and gender.

Age

The proportion of young workers (those aged less than 24 years old) is higher among those hired after QSP implementation. However, more than half of all low wage hires in the year following the implementation of the QSP were 35 years or older. It is unlikely that this change is related to the implementation of the QSP. There were no differences between the Airline and Airline Service sectors with respect to age at hiring, suggesting that the change was not a result of the mandated wage increase. Rather, it is likely that our data are capturing the fact that quit rates soon after being hired are higher among young workers.

Race/ethnicity

There were no differences in the ethnic/racial profile of workers hired before and after the implementation of the QSP. This finding should be interpreted cautiously because race/ethnicity data are incomplete in the SFO Badge Office data. This finding also contrasts with the reported changes in employment of screeners at other airports following the implementation of the Federal Transportation Security Administration Act (see Alonso-Zaldivar and Oldham 2002).

Gender

The QSP led firms to hire more men in a small number of 'masculine' low-wage occupations. Among all ground-based non-supervisory workers (the survey population), the overall proportion of women hired did not change (32.3 vs. 31.8 percent). However, among low-wage occupations (customer service, ramp, cabin cleaners, screeners, wheelchair attendants and skycaps only), the proportion of women hires fell from 33.4 to 30.3 percent.

To examine this gender effect further, we also compared the hiring demographics of the Airline and Airline Service sectors, as a proxy for differentiating high wage/low QSP impact and low wage/high QSP impact sectors respectively. This comparison is shown in Table 6.7.

We find that whereas the proportion of women hired into these positions by the high wage/low impact airline sector remained unchanged (34.4 to 35.5 percent), the proportion of women hired into the low wage/high impact airline service sector fell (32.5 to 25.5 percent; this change is statistically significant). If we compare across low-wage positions, we find that in low-wage customer service positions, where women account for half (51.7 percent) of employees, there was little change in the hiring of women after the mandated wage increase. Instead, the greatest changes took place in those positions already dominated by men. The proportion of women hired as security screeners, ramp workers, cabin cleaners and skycaps fell from 21.7 to 16 percent. This suggests that the mandated wage increases resulted in more hiring of men than women in selected low-wage occupations only.

Table 6.7 Hiring of women among low-wage airline service occupations

	Low wage occupations only			
	Airlines		Airline Services	
Time of hiring	Pre QSP (June 1999-May 2000)	Post QSP (June 2000-May 2001)	Pre QSP (June 1999-May 2000)	Post QSP (June 2000-May 2001)
Female	34.4	35.5	32.5	25.5
Male	65.6	64.5	67.5	74.5
	100.0	100.0	100.0	100.0
Chi-square	P=0.699		P=0.003	

Source: Authors analysis of SFO Badge Office data.

6.3 Summary

To conclude, our evidence suggests that the QSP did not lead to any significant reduction in employment. Employment in covered positions actually increased over the period in which the QSP was implemented. This result is surprising given the reductions in airport activity during 2001. We show that the QSP did not cause these sharp reductions in airport passenger volumes. Instead, these declines are explained by the downturn in the Bay Area economy that started in late 2000, and the events of September 11, 2001.

We do find some evidence of small displacement effects as a result of the program. The QSP allowed employers to hire screeners with slightly more education, although increased training mandates and worker protection clauses ensured that few incumbent workers were displaced. While the overall proportion of women to men in the SFO workforce did not change, the QSP did result in more hiring of men than women in certain low-wage occupations. There is no evidence of changes in hiring patterns by age and race.

CHAPTER 7 IMPACT ON AIRPORT SECURITY

In the last three chapters we found that the mandated pay increases and other changes to the SFO labor market improved working conditions for most ground-based non-management airport workers. In this chapter, we examine evidence that lower turnover among airport screeners contributes to increased security detection at airports.

7.1 A brief history of airport security and screening

Until the end of 2001, the FAA, the air carriers and the airport operators had joint responsibility for airport and airline security in the United States. The FAA was responsible for assessing threats to the aviation system and establishing regulations and procedures to ensure that these threats are effectively deterred. Air carriers were responsible for screening passengers and baggage, hiring and training employees or contracting out these services, and purchasing equipment. Airport operators were responsible for providing secure airport facilities.[45]

Airline and airport security were virtually nonexistent before 1973, when getting on a plane involved no more checks than getting on a city bus does today. After a series of international hijackings in the early 1970s, the FAA had metal detectors installed at airport gates and gave the airlines the responsibility of screening their passengers. The airlines began to subcontract this work soon thereafter, with no effective oversight from airports or the FAA.

By the mid1980s, established security firms such Wackenhut were losing their airport contracts to lower-cost firms, such as Ogden and Argenbright. A further decline in security followed. For example, in 1987, a hijacker with a loaded gun walked past guards and took control of a Los Angeles to San Francisco flight, resulting in a crash and loss of life for all 43 passengers and crew. By this point, journalists were already pointing fingers at low pay and high turnover among screeners, and the importance of security measure beyond just screening passengers, but very little was done to improve the situation.[46]

Airline and airport security received renewed attention following the 1988 bombing of Pan Am Flight 103 and the 1996 crash of TWA Flight 800. This attention included two Presidential commissions and a series of rule-making actions by the Federal Aviation Administration. In particular, a 1996 Commission report recommended a series of actions to improve the performance of security screeners (GAO 1999). However, despite considerable pressure from Congress, progress on implementing proposed changes to the regulations occurred very slowly. For example, a proposed rule for certifying security firms was originally mandated in a 1996 law, while a 2000 law gave the FAA until May 31, 2001 to issue the regulations (AP 2001). The regulations still had not been issued by September 11, 2001.

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[45] See Code of Federal Regulations, 14, Chapter 1 F / FAR Part 108.

[46] A Los Angeles Times headline for December 17, 1987 on this incident illustrates how long this system has been in place. "Airport Security: Low Pay and High Turnover may be the Weak Link." (Baker 1987).

In 1999, according to the General Accounting Office, annual turnover among the nation's 8,000 airport screeners exceeded 125 percent. At this rate, the average screener was on the job for four and one-half months. At Boston's Logan Airport, the turnover rate was 200 percent; at Atlanta's Hartsfield Airport, it exceeded 400 percent. It was in this context of regulatory failure that the SFO Airport Commission implemented the QSP.

7.2 Airport security and screener turnover

The Quality Standards Program was designed to improve safety and security at SFO by improving wages and benefits for a wide range of employees across the airport. In December 2001, the Massachusetts Governor's Special Advisory Task Force on Massport cited the QSP as a model because of its broad approach to airport security. This much more comprehensive scope makes the SFO program different from the federal response to September 11, which has concentrated almost entirely on pre-board screeners. By establishing a regulatory relationship between the airport and the airline service contractors, the QSP also created accountability that did not exist at other airports.

In previous chapters, we presented evidence indicating that the QSP led to a general increase in job performance and to a decrease in turnover in particular. We saw that turnover fell a dramatic 80 percent among the screeners. We also described how high turnover has been identified as a cause of weak security.

To examine this relationship further, we analyzed FAA and GAO data for 15 major U.S. airports on screeners' detection of passenger security breaches and screener turnover rates. Holding constant the number of passengers at an airport, we found that higher turnover rates are associated with lower rates of detecting security breaches (see Table 7.1).

The relationship was confirmed by a linear regression:

Number of security breaches detected

$$= 134.81 - \underset{\text{[se=0.313, 90 percent sig]}}{0.615 * \text{turnover rate}} + \underset{\text{[se=0.002, 95 percent sig]}}{0.005 * \text{thousand passengers}}$$

$$df = 15,\ R^2 = 0.390$$

The results show that 39 percent of the variation in the number of detections per airport in 1998 and 1999 is explained by the number of passengers in those years and the screener turnover rate in the year to April 1999. For every percentage point increase in the turnover rate at an airport, the number of detected security breaches fell by 0.62 percent. (This finding rests on the reasonable, but unproven assumption that the actual security violation rate was uniform across all airports.) In general, the longer the airports are able to retain pre-board screeners, the more likely they are to detect security breaches.[47]

[47] These results need to be taken as suggestive, however. Passenger numbers are enplanements, rather than the number of people being screened. This would bias our results towards indicating better security performance at hub airports with many connecting flights, such as Atlanta or O'Hare, as opposed to origin airports, such as Los Angeles. Also, the FAA

Table 7.1 Detection of security breaches and turnover rates by airport

AIRPORT	Turnover rate for screeners, April 1998-April 1999	Detected breaches per million passengers (1998 and 1999)
Honolulu	37.00	5.75
New York-JFK	53.00	14.01
Miami	64.00	5.82
Detroit	79.00	5.51
Los Angeles	88.00	11.13
Washington-Dulles	90.00	6.47
Orlando	100.00	4.48
San Francisco	110.00	7.02
Seattle	140.00	9.55
Dallas/Fort Worth	156.00	7.38
Denver	193.00	4.45
Chicago	200.00	2.90
Boston	207.00	9.10
Houston	237.00	3.82
Atlanta	375.00	2.94
St Louis	416.00	4.62

Source: Analysis of FAA Security Violations Database; FAA enplanement data; GAO 2000.

7.3 Post 9/11 changes at airports: San Francisco as a model

Airports and the entire airline industry are undergoing a fundamental transformation in the wake of September 11. To begin with, Congress provided the airlines a considerable financial bailout for losses incurred, and the national debate after September 11 focused significant public attention on the relationship between security screener pay and service quality. The Aviation Transportation Security Act (ATSA), passed late in 2001, made pre-board screening into a federal government function. The new federal screening employees will be paid from a $5 per passenger surcharge and a congressional appropriation instead of from contracts made by the airlines with private firms.

The federalization of airport screening and other security functions represents a radical departure from the previous system of shared responsibility. It also provides advances in standards that the FAA had attempted but failed to achieve. As we discussed in Chapter 2, the airlines had resisted the previous FAA. The new federal passenger surcharge is borne mainly by air travelers and is subsidized by taxpayers.

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data on security breaches mix together two types of incidents, those that occur at screener checkpoints, and those that occur elsewhere at the airport.

Last year SFO was selected as one of only five airports in the U.S. to be given a two-year exemption from the federalization of the screener positions. In the Congressional act, the exemption was added in order to permit observation of how private employers would compare to the Federal government in carrying out the security function. The exempted airports must still meet all the job standards for screeners that are specified by the new Transportation Security Administration of the FAA. SFO, as we emphasized in Chapter 2, has for some time already met most of these standards. Indeed, SFO was chosen for the exemption in part because of its prior QSP experience.

Whether or not they are federal employees, the pre-board screeners will now be better trained, and they have already begun to receive higher wage rates than those mandated by SFO airport management through the QSP. (See Table 7.2.) The new positions will provide significant improvements in working conditions and compensation for those who secure them. Staffing and supervision ratios will be improved, and the new jobs will also require more education and will offer some job ladders.

Table 7.2 New job ladders and training requirements for screeners

Job title	Duties and responsibilities	Training	Pay (annual)
Level 1 screener	Conduct screening of passengers, baggage, and/or cargo under close supervision of a screening supervisor.	40 hours of classroom training and 60 hours of on-the-job security screener training. Must be certified to use machines employed in job. Recurrent training and certification exams on a periodic basis.	$23,600 - 35,400
Level 2 screener	Conduct screening of passengers, baggage, and cargo.	All training and certification requirements for Level 1 screeners and at least one year of work equivalent to Level 1.	$23,600 - 35,400
Level 3 screener	May perform Level 2 screener duties. Use specialized explosives detection equipment (EDS) to screen checked baggage and cargo.	Equivalent of at least one year of experience as Level 2 screener. Additional training and certification for explosives detection equipment (EDS).	$23,600 - 35,400
Manager Level 1 screening supervisor of screeners	Direct supervision of Level 1, 2 and 3 screeners. Fill in for screeners when they must leave their posts. Handle more difficult problems. Full range of supervisory duties, including managing performance, scheduling work and approving leaves.	Experience, training and certification as screener as well as ability to supervise others. Must be certified on all screening equipment. 40 hours of classroom training and 60 hours of on-the-job training.	$36,400 - 56,400
Manager Level 2 screening supervisor	Supervise and manage Level 1 screening supervisors and subordinates.	Experience as journey level screener and as first level screening supervisor. Must be certified on all screening equipment.	$36,400 - 56,400

Source: U.S. Department of Transportation website. www.tsa.dot.gov.
Note: All positions listed are eligible for locality pay.

The new federal system does not, however, address the underlying causes of the downward pressures on wages of all the other ground-based airport service workers who are not pre-board screeners. In the absence of programs such as the QSP, we expect continued downward pressure on the wages of customer service workers, baggage attendants, cabin cleaners and others whose jobs directly influence airport and airline safety and security.[48]

The Aviation and Transportation Security Act can be criticized for being focused too narrowly on security screeners. The only changes for other airport employees—even those with direct access to the aircraft-- involve having airports conduct stricter background checks. In contrast, the SFO Quality Standards Program broadly covers all the jobs where performance affects airport safety and security and creates a direct regulatory relationship between the airport and service contractors operating in secure areas of the airport. For this reason, the QSP can serve as a better model for airports throughout the country.

[48] At the time of writing of this report, the federalized system contained fewer opportunities for worker voice. The new TSA had not clarified whether screeners will be able to join unions, or submit grievances when they are asked to operate equipment longer than is standard.

CHAPTER 8 CONCLUSIONS AND POLICY IMPLICATIONS

In recent years, changes in the organization of the airports and the airline industry, and the outsourcing of labor-intensive service jobs by government and private firms, created downward pressures on wages as firms competed to put in the lowest bids. Higher levels of government and regulatory agencies, such as the FAA, failed to reverse these forces, with a consequent decline in the level of services. In this context, city-level living wage policies create a common floor that enables employers to bid on service quality, not wages. Such policies should have positive effects on job performance and service quality.

The benefits of comprehensive coverage

This is precisely what we found at SFO, where job performance directly affects airport safety and security. The QSP did more than pay people higher wages. It also required higher training and recruitment standards, and it re-established regulatory relationships that had been broken by the out-sourcing process. Along with improved wages, the workers who now conduct security-related functions at the airport also have more job experience, skills and training.

San Francisco's combined living wage and health benefits policies are the most far reaching to date for any city or county in the country. The Quality Standards Program and other living wage ordinances in San Francisco led to improvements in wages and working conditions, both directly in jobs that were covered by the programs, and indirectly as firms that were not covered by the law competed for workers. The effects were strongest in the relatively closed labor market of SFO.

The San Francisco experience demonstrates the broader impact that wage policies can have within specific industries. Effects were also felt in the home care industry in the Bay Area, where the higher rate by the In Home Support Service Public Authority created upward pressure on wages in the private sector, and the unions leveraged better contracts in neighboring counties. Similarly, a security guard union negotiated the living wage rate into contracts in San Francisco, where only a small number of workers were actually covered by the ordinance. To the degree that living wage campaigns enable unions to increase density in any given industry, the corresponding effects on the labor market will be that much greater.

The changes in worker performance and improved security at SFO came about in the context of policies that improved wages, increased access to health benefits, and provided easier access to unionization. Labor market norms for minimum pay have changed and the extent of inequality is considerably lower than before. These policies worked in tandem to improve the overall climate of labor-management relations and worker morale at the airport.

The worker and employer adjustments to the new policies occurred smoothly and were in place before September 11. As a result, much of the costs increases that most other airports have faced since September 11 had already been absorbed at SFO. The new policies improved SFO as a place to work and as a place for travel.

The story of the QSP and other employment policies at SFO contains a wider lesson for attempts to reverse the growing inequality that has characterized the U.S. labor market since the 1970s. The

airport labor market is a microcosm of other urban labor markets, characterized in recent years by a 'low road' model of economic development that results in increasing labor market segmentation.

The SFO case, the largest living wage experiment in the U.S., shows how the regulation of local labor markets by public authorities can succeed. At SFO, the design and enforcement of these regulations resulted from concerted organizing by labor, innovative policy-making by public officials and enlightened acceptance by key employers. As we have seen, this policy was able, at a modest cost, to raise pay and benefits, increase training, improve service and security, and provide incentives to shift to a 'high road' model of economic development.

Living Wages at the Port of Oakland

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Living Wages at the Port of Oakland

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Summary and Main Findings

In June of 1999, a coalition of citizen groups proposed that the City of Oakland's Living Wage Ordinance should be extended to cover workers employed by leaseholders and contractors of the Port of Oakland. The Port is currently excluded from the City law. The Port of Oakland is the city's biggest public asset and is frequently touted as the city's principal engine of economic growth. Businesses at the Port's three divisions-- the maritime port, Oakland International Airport, and the waterfront real estate division, which includes Jack London Square-- employ over 11,000 workers and generate indirectly another 11,000 jobs. The Port is planning expansions that will increase these numbers dramatically.

This study estimates the costs and benefits of implementing a specific living wage policy proposal which would cover the leaseholders and on-site service contractors of the Port of Oakland. We based our analysis on the assumption that the living wage policy would follow the provisions of the Oakland law, except that the Port policy would include the category of leaseholders. Leaseholders are only covered in the Oakland law if they receive direct city financial assistance. Following the Oakland law, the proposal we analyzed would require covered businesses to pay their workers $8.30 per hour if they provide health benefits or $9.55 per hour without benefits, with wages indexed to cost-of –living adjustments every year. The proposal would also provide a floor of 12 days of paid leave (and 10 days unpaid leave) for illness, holidays and vacation.

The information used in this analysis is based largely on contract and economic data that we obtained from the Port and from a detailed survey that we conducted of the Port's leaseholders and on-site contractors. Our survey examined the 140 businesses at the Port who would be covered by the proposed ordinance because they are leaseholders or on-site subcontractors, and who employ over five workers. The survey compiled extensive information on firms, jobs and workers, supplemented when necessary by estimates derived from government data sources, by a briefer survey we conducted of firms located near Jack London Square and by selected on-site interviews. We also obtained useful comments from Port officials and other stakeholders.

What kinds of jobs does the Port create and who holds them?

Thirty years ago much of the employment at the Port consisted of highly-paid longshoring jobs in the maritime division. Since then, the number of longshoring jobs in the Bay Area has fallen by half, while employment at the Port's airport and real estate divisions both have increased and are expected to continue to grow in the coming decade. As a result, the maritime division currently contains the lowest number of jobs at the Port (about 2,050), although at the highest average wages (about $32 per hour). The airport is by far the biggest job generator at the Port, with almost 7,300 employees and average wages of $14.50. The real estate division, with 2,100 jobs, produces the lowest wage employment, with an average wage just under $11. Unionized jobs are concentrated

in the maritime division and pay much higher wages than non-union jobs, which are most concentrated in the real estate division. The individual economic sectors with the lowest average wage rates at the port are the hotel, restaurant, parking, security and skycaps, and other services sectors.

Approximately 54 percent of Port workers live in Oakland and about 35 percent are women. About 36 percent of Port workers are African American, about the same as their representation in Oakland as a whole. Asian Americans and Latinos comprise 14 percent and 24 percent of Port workers, respectively.

Average wage disparities among ethnic groups in the Port as a whole are fairly small, with the notable exception of Asian Americans, who earn substantially less than other groups. Within the Port's divisions, however, racial wage disparities have been overcome only in the maritime division, where African Americans constitute about half of the highly-paid longshore workers. In both the airport and the real estate divisions, average wages of whites are about 50 percent higher than those of African Americans.

What would be the benefits of a living wage policy at the Port?

About 2,600 low-paid workers at the Port of Oakland would benefit directly from the proposed living wage ordinance. They would receive an average pay and benefits increase of $2.25 per hour, and up to 12 days of paid leave per year. In total, these low-wage workers would receive an additional $4.7 million in wages and $3.3 million in health benefits each year.

In addition, approximately 500 more workers would benefit indirectly because of a "wage push" effect. They would receive an average pay increase of $1.16 per hour. The total indirect wage push for workers just above and below the living wage level amounts to a $2.1 million increase each year.

The 3,100 living wage beneficiaries would comprise about 27 percent of all non-supervisory employees of Port leaseholders.

About 41 percent of the direct beneficiaries would be African American, 25 percent would be Latino, 19 percent would be Asian American and 15 percent would be white. People of color, especially African Americans, are represented in greater proportions among the benefiting workers than among Port workers as a whole, because currently they are over-represented in low wage jobs. Oaklanders would also benefit disproportionately, comprising 65 percent of the beneficiaries.

What are other benefits of the ordinance?

Firms would receive some benefits due to lower turnover costs and higher productivity among workers earning the living wage standard.

The ordinance would contribute to the county, state and federal public coffers through savings in county health expenditures for the uninsured and increased revenues from income and payroll taxes. This is a small but positive but effect on public finance.

What would be the costs of a living wage policy at the Port?

Living wage costs would increase Port leaseholders' wage bill by 4.4 percent and comprise about 1 percent of leaseholders' annual business revenues.

The total cost to employers of the living wage policy would be about $13 million per year. The cost of increasing wages to $8.30 an hour is about $4.7 million; the costs of providing more health care coverage is $3.3 million; the costs of paying an indirect wage push is $2.1 million; and the costs of paying 12 days of paid leave is $2 million. Employers would also pay an additional $1 million in payroll tax, bringing the total cost increase to about $13 million.

Since not all leases are up for renewal every year, the costs would be phased in over time.

Who would bear the costs and would business growth in Oakland be hurt?

The maritime division would experience almost no increase in cost. Cost increases in the airport and real estate divisions would constitute about 1.5 percent and 4.3 percent of leaseholders' business revenues, respectively.

For the airport, this cost amounts to $0.59 per passenger departure, not enough to change passenger preference for flying out of Oakland. Low wages are concentrated in a few firms who are subcontractors to the major airlines. The airlines could easily absorb these small cost increases and would pass some of them on to consumers.

For the real estate division, the increase in wages and benefits amounts to $0.66 per visitor to Jack London Square annually. The increase in costs to the affected restaurants and hotels is smaller than the premium they get for locating near the waterfront and in Jack London Square, compared to similar businesses in less desirable locations. With business growing in the area, the relatively small increase in costs should not affect the overall business climate.

Employment at the Port would continue to grow and at a rate that is unlikely to be affected by the proposed ordinance. Revenues collected by the Port are also likely to continue to increase.

Conclusions

Enacting a living wage ordinance at the Port of Oakland would help increase the incomes of 3,100 low-wage workers. The costs of the proposed ordinance are about $13 million and comprise only about 1 percent of Port leaseholders' business revenues.

We conclude that these costs will be absorbed easily by Port leaseholders, visitors to the waterfront, and passengers at the Oakland airport. Business will not be driven away and Port revenues will not go down. Bond ratings for the Port should remain unaffected.

The Port will continue to generate large numbers of jobs for Oakland and the region but, without public policy intervention to affect the quality of jobs, many of these will be low-wage jobs. Moreover, racial wage disparities will be perpetuated by this pattern of growth. The structure of job growth at the Port is not unique; it parallels the private economy as a whole. The question facing policy-makers is whether or not a public agency like the Port should act to reverse this pattern of increasing wage polarization as well as the growth of the working poor.

1. Introduction and overview of Living Wage Ordinances

Purpose of this report

This report estimates the costs and benefits of a Living Wage Ordinance that would cover the Port of Oakland. The Oakland City Council unanimously passed a Living Wage Ordinance in March of 1998. Oakland is one of forty cities and counties across the United States that have adopted living wage laws; over fifty others currently are in the process of considering such an ordinance. The Oakland Ordinance did not include the Port of Oakland, which is a semi-autonomous department of the city, governed by an appointed Port Commission.

In June of 1999, a number of citizen's groups, under the banner of the Coalition for an Accountable Port, proposed that the Oakland Ordinance should be extended to cover contracts, rental agreements or leases with the Port of Oakland. The basis for the extension is that the Port of Oakland is the city's biggest public asset and it is frequently touted as the city's principal engine of economic growth. The Port's three divisions-- the maritime port, Oakland International Airport, and the waterfront real estate division, which includes Jack London Square-- generate over 22,000 jobs and the Port is planning expansions that will increase this number dramatically.

The proposed living wage ordinance is designed to increase the pay and benefits of low-wage workers by requiring covered employers to pay a "living wage. Absent a specific written policy proposal from the citizen's groups, we evaluated a living wage proposal that assumed the same wage and benefit provisions as those stipulated in the City of Oakland's ordinance. This would set a wage floor of $8.30 per hour if the employer also pays for health benefits, or $9.55 without health benefits, to be is indexed to inflation in future years. The proposed ordinance would also mandate a floor of 12 days of compensated time off for illness, holidays and vacation. However, it should be noted that the City of Oakland ordinance currently covers leaseholders only if they receive direct public assistance, while the proposal we analyze includes all leaseholders at the Port of Oakland.

Living wage campaigns have arisen in response to the growing problem of inequality and of poverty even among full-time workers. The idea of a living wage is simple. Workers should be able to support themselves and their dependents at a basic self-sufficiency standard on the earnings they receive from full-time employment.

At one time, the minimum wage was set to provide self-sufficiency but it no longer does so. The real buying power of the California minimum wage in 1999 is three-quarters of what it was in 1968, despite the fact that the U.S. economy is 54 percent more productive in 1999 than it was in 1968. If the 1968 minimum wage had kept pace with inflation and productivity growth, it would now be about $11.80 per hour. Since the statewide minimum wage has not been raised to a level sufficient to support a family, the Living Wage campaign represents an attempt to use local government to reinstate a meaningful minimum wage.

A weakness of living wage laws is that in some cases they cover a small number of workers. Estimates of the impact of the City's ordinance have ranged from 400 to 2,200 employees (City of Oakland, 1998). However, only 56 workers on service contracts and 31 workers employed by City financial assistance recipients had received wage increases as of October 1999.[1] This figure is expected to rise as contracts are executed, but even when fully implemented, City personnel have concluded that the number of affected workers will be much closer to the estimate of 400 than to the larger estimate of 3,000.

In some cities, the numbers of workers benefiting from living wage policies is much greater. In Los Angeles, about 9,000 workers may benefit, largely because leaseholders at the Los Angeles International Airport are covered (Uchitelle, 1999). Living wage proponents in Oakland targeted the Port as a way to extend the benefits of the living wage idea to more workers.

This study estimates both costs and the benefits of the proposed ordinance, in the hopes of promoting informed debate among Oakland residents, elected officials, and Port commissioners. While proponents see the living wage as a way to bring low-wage workers out of poverty, there are costs. Opponents are concerned that the proposed policy could drive business away from the Port of Oakland, or could lower revenues for the Port, which is self-supporting. We analyze who is likely to bear the costs of the proposed living wage policy, and whether or not the costs are affordable.

The study was carried out by a team of economists and students from the University of California, Berkeley. It was funded by the UC California Policy Research Seminar, at the request of Senator Don Perata.

We organize the report as follows. We first provide background information on Living Wage ordinances around the country. We then discuss Oakland's economy, with emphasis upon how recent economic growth continues to generate inequality. Next we profile the employment created by businesses who hold leases at the Port of Oakland, using data from a survey of employers that we conducted over the spring and summer of 1999. Using this survey data, we then estimate the benefits and costs of the proposed ordinance and examine the affordability of the ordinance in the context of the Port's overall economic activity.

The Oakland Living Wage Ordinance in national perspective

The Oakland Living Wage Ordinance covers all private businesses and non-profit organizations that have city contracts worth at least $25,000 or receive at least $100,000 in city subsidies per year (and their tenants and leaseholders). The Ordinance initially required a wage of $8.00 per hour with health benefits, and $9.25 without, and is adjusted each year in accordance with the Bay Region Consumer Price Index. The 1999 adjusted

[1] Personal communication, Vivian Inman, Office of Contract Compliance, City of Oakland.

wage level is $9.55 an hour, or $8.30 if the firm provides health benefits.[2] The Ordinance also entitles covered workers to 12 paid days off per year (and 10 days unpaid leave) and it contains an "opt out" provision by which a collective bargaining contract can supersede the requirements of the ordinance.

Oakland's wage standard and coverage

The wage standard in Oakland's Ordinance is lower than estimates of a self-sufficiency wage for the city and lower than the levels mandated in some of the living wage ordinances elsewhere. The California Budget Project has estimated a self-sufficiency wage for Alameda County at $12.92 per hour, substantially above the current Oakland living wage (California Budget Project, 1999). This self-sufficiency wage is based on a family with two parents who are both working and with two children who squeeze into a one-bedroom apartment and use family day care (generally the most inexpensive kind of childcare).

The Oakland standard is also modest compared to other cities that have adopted living wage ordinances, once Oakland's high cost of living is taken into account. As Table 1-1 shows, Baltimore's living wage of $7.90 is equivalent in purchasing power to a wage of $13.27 in Oakland, and Boston's living wage of $8.23 would be $9.29 in Oakland. The $7.51 Los Angeles living wage is equivalent in purchasing power to a wage of $9.52 in Oakland. This ordinance includes workers at LAX airport. The recently announced living wage agreement at the SFO airport provides for $9 per hour, increasing to $10 per hour after one year (Epstein, 1999). This level is equivalent to purchasing power of $8.62 in Oakland.

The City of Oakland's Living Wage Ordinance covers the city's contractors and subsidy recipients. The proposed living wage policy for the Port would include leaseholders, a category of employers not currently covered by the City's Ordinance unless they are also city financial assistance recipients (CFARs) or their tenants. Leaseholders have been included in a number of other living wage policies around the country, including the Los Angeles and Miami airports, and have been proposed for San Francisco's airport and maritime port.

Living wage ordinances around the country vary with respect to the set of employers they cover. However, the underlying principle is similar in all cases: the ordinances recognize the impact of local governments' business decisions on job creation. The living wage mandates that public entities directly or indirectly create good jobs in a particular locality, whether through direct expenditures on contractors or the opportunities created by publicly owned assets such as waterfront property or port facilities.

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[2] An official at the Port of Oakland has questioned the accuracy of the cost of living adjustment of the current City of Oakland Living Wage. The small adjustment suggested - to $8.22 rather than $8.30 - does not materially affect the estimates presented here, and thus we have used the official living wage.

Some living wage ordinances contain additional provisions, such as local hiring requirements, and public disclosure and/or enforcement stipulations. Most living wage laws provide exemptions for small firms: Oakland's Living Wage Ordinance, and the proposal evaluated here, only applies to firms with more than five employees.

2. Recent growth and income distribution trends in Oakland

The Oakland economy is currently undergoing an upswing, with high rates of job and income growth. However, this economic prosperity is distributed unevenly and the area faces a legacy of inequality that will be exacerbated by the current growth trajectory. In this context, policies such as a living wage ordinance can help to distribute the benefits of growth more equitably.

Economic growth in Oakland

Like the rest of California, Oakland experienced an economic recession in the early 1990s. From 1990 to 1993, employment among Oakland residents fell from 167,600 to 162,700, while the city's unemployment rate increased from 6.4 percent to 10.3 percent. With the state's economic recovery in recent years, job and income growth in Oakland has also resumed and the ingredients for a substantial economic boom are in place. In 1998, employment had risen to 174,000; the unemployment rate had fallen to 6.5 percent, and by the third quarter of 1999 it was down to 5.3 percent (Employment Development Department, 1999). Between 1998 and 1999, the Oakland MSA created a net 28,100 new jobs, for a growth rate of 2.9 percent[3] (CB Richard Ellis, 1999). Oakland's central location, good public transportation infrastructure, strong maritime port and air cargo airport, potentially highly valuable housing stock and a number of other elements have combined to create strong growth.

This growth is reflected in rising commercial and residential property values. Class A rents in the East Bay office market have increased 9 percent in the past year, and are projected to increase further (CB Richard Ellis, 1999). Nonresidential construction grew 68 percent between 1996 and 1997, more than double the statewide average of 28 percent, although lagging the Bay Area rate of 83 percent (SF Airport Commission, 1999). The residential housing market is also healthy. Median home prices in Alameda County rose to $247,000 in 1999, nearly double the U. S. urban average, and grew 7.4 percent over the previous year. These real estate statistics provide evidence that Oakland is becoming a more attractive investment and development location.

Those left behind

California has experienced substantial increases in income inequality over the last two decades, even more than the nation as a whole (California Budget Project, 1998; Daly and Royer, 1999). Although we have no detailed studies of recent patterns of inequality in the Bay Area, there are strong indications that the Bay Area is still experiencing growing inequality. We can document continuing inequality both between Oakland and other Bay Area cities and within Oakland itself.

Although Oakland's economy as a whole has begun to catch up to other Bay Area cities, income in Oakland is still lower than elsewhere in the Bay Area. Average wage

[3] The Oakland MSA includes Alameda County and Contra Costa County. Wherever possible, we use data for the City of Oakland.

data also indicate an ongoing between Oakland and its richer neighbors, San Francisco and San Jose, as is shown in Table 2-1.

A large fraction of Oakland residents earn low wages. The latest government survey data show that 45 percent of Oakland workers earn below the self-sufficiency wage of $12.74 per hour while 28 percent earn below the Oakland's living wage of $8.30.[4] By contrast, 40 percent of workers in the Bay Area earn below $12.74 and less than 20 percent earn below the $8.30 wage.

Paralleling the rest of California, wage rates of local jobs are increasingly polarized. Many middle-income jobs have declined in number and the new jobs that are being created are concentrated at the high and low ends of the income scale. As Table 2-2 shows, the two occupations with the greatest projected job growth between 1995 and 2002 in Alameda County are cashiers and retail salespersons, both of which paid on average less than $8 per hour in 1997. Among the top ten occupations in Oakland, about half the total projected number of jobs in 2002 and half of the projected increase from 1995 to 2002 are in jobs earning less than $20,000 per year (in 1997 dollars).

Low wages and poverty are still concentrated in communities of color. African Americans represent 44 percent of the city's total population, but comprise 56 percent of those living below the federal poverty level (Bay Area Economics, 1999). Substantial inequality also exists within Oakland, with significant numbers of the working poor and pockets of poverty concentrated among certain neighborhoods and ethnic groups, especially among African Americans and Latinos. The West Oakland neighborhood that abuts the Port suffers from many of the negative side effects of a successful port, such as traffic congestion, noise, dust, and air pollution. In 1998, median household income in West Oakland was $14,788 and an estimated 22 percent of West Oakland residents received welfare (Bay Area Economics, 1999).

[4] The percentages are calculated in constant 1999 dollars using the CPS March Supplement sample of Oakland and Bay Area residents between 1996 and 1999.

3. Employment and pay at the Port of Oakland

In 1995, as Table 3-1 indicates, about 22,500 jobs were directly or indirectly attributed to the Port of Oakland, according to surveys carried out by consultants to the Port (Martin Associates, various years). This estimate includes Port tenants, leaseholders and contractors, and other firms whose businesses are directly dependent on the Port of Oakland.[5] At one time, the Port provided mainly middle-income jobs in its main activity, maritime shipping, where largely unionized longshore and trucking jobs provided important opportunities for upward mobility, particularly for African American workers in Oakland. As we discuss below, the transformation of the Port's uses and its projected expansions have resulted in the growth of low-wage jobs and will continue to do so in the future.

The Port's transformation

The Port has undergone substantial change over the past thirty years. During this period, revenues and shipping volume have grown rapidly in the maritime port, as San Francisco traffic has shifted to Oakland and trade volumes have risen. However, the number of jobs created for each dollar of goods shipped has declined, and the number of longshore jobs in the Bay Area has fallen to half the level of thirty years ago (Pacific Maritime Association, various years). In contrast, the Port's air and real estate divisions, while producing smaller revenue growth, have created growing numbers of jobs and will continue to do so in the future. The real estate division, and to a lesser degree the airport division, create substantial numbers of low wage jobs.

In the maritime port, automation in containerized shipping has sharply reduced the number of jobs generated per ton of cargo moved. The San Francisco Bay longshore workforce fell from 5,366 in 1951 to 1,049 in 1998, while throughput increased from 7 million to 23 million tons during the same period (Pacific Maritime Association, various years).[6] The leading West Coast ports in Southern California and Seattle have maintained longshore employment only because of tremendous growth in the volume of cargo. Cargo throughput in Oakland has grown at a healthy 2.5 percent per year since 1992, but this growth is much less than the annual growth at Long Beach (14 percent), Los Angeles (6.7 percent) and Seattle (5.0 percent) (Port of Oakland, 1998). The Port of Oakland expects to increase cargo throughput as a consequence of its expansion plans, which may lead to a one-time jump in maritime jobs, but long-term employment growth remains limited by on-going automation and constraints on increasing Oakland's market share.

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[5] The latter category comprises port-related businesses such as freight forwarders, customs brokerage houses, and trucking and warehousing firms. These businesses would not be located in the Bay Area without the Port of Oakland, but may not be located on Port land or have a direct financial relationship to the Port. Consequently, they would not be affected by a Living Wage ordinance.

[6] A significant portion of the loss of longshore jobs occurred in San Francisco, although we cannot give an exact breakdown because of lack of data. Oakland essentially has taken over shipping from San Francisco.

Besides stevedoring, short haul trucking is the main on-site occupation in the maritime port (Thurston, 1999). As a consequence of deregulation and de-unionization, about 85 percent of these workers are now owner-operators. While their employment status disqualifies them from coverage under a typical living wage policy, it should be noted that their annual net earnings are quite low.[7]

At the same time, air transport has grown tremendously. Centrally located, Oakland is well situated to serve Alameda and Contra Costa County, which in 1997-8 had the highest population growth in the Bay Area (Willis, 1999). In the last ten years, the number of passengers at Oakland grew by 130 percent, and Oakland's market share for passenger travel for the three major Bay Area airports increased from 10 percent to 15 percent. More dramatically, Oakland has become the main air cargo terminal in the Bay Area. In 1998 Oakland International Airport managed around 50 percent of all Bay Area domestic air cargo, up from around 20 percent in 1987 (Port of Oakland, 1999).

Alternative uses of the Port of Oakland's waterfront real estate have also grown, and created many more jobs in entertainment, leisure and recreation activities. As in other urban areas, there are mounting pressures to make waterfront land accessible for the public use. Over the next few years, uses that are compatible with public access, such as Jack London Square and similar developments, are likely to be supported and prosper. Indeed, after many years of disappointing activity, Jack London Square is becoming a lively commercial and entertainment locale, producing $60 million in business revenues in 1996, with further growth projected (Howe, 1997). Embarcadero Cove, on the southern tip of the estuary, is also slated for mixed use development in the coming years.

The Port's expansion

The Port of Oakland has just begun an unprecedented expansion that involves up to two billion dollars of capital improvements over the next five years. The maritime expansion plan includes the Vision 2000 program of building new berths and a new joint intermodal terminal, and dredging the channel to 50 feet. The expansion plan for Oakland International Airport includes new terminal buildings, a parking garage, and a cross-airport roadway. Revenue bonds will finance maritime and airport expansion. The Port has also recently proposed a $200 million plan for developing the waterfront in the Jack London Square area and has requested bids from private developers (DelVecchio, 1999). The Port does not expect to borrow funds to support this development.[8]

Port expansion is projected to lead to over 5,000 new jobs in the airport and close to 5,000 jobs in the maritime port.[9] Job projections are not yet available for the real estate division.

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[7] A recent survey of short-haul independent operators in Seattle found that average hourly wages were about $8.50 (Farb and Tomescu, 1999).

[8] Personal communication, Omar Benjamin, Director of the Port of Oakland's Real Estate Division.

[9] Personal communication, Ann Whittington, Strategic Planner, Port of Oakland.

Current Port employment patterns

The process of transformation and growth described above has created many more low-wage jobs, while many well-paid, largely unionized jobs have been lost. Here we analyze the current employment and workforce profiles of Port leaseholders in more detail. We find a pattern of high wages in the maritime division, low wages in the real estate division, and a range of wages in the airport division.

This analysis is based on a survey carried out by the UC Berkeley research team. The survey was necessary because the Port does not maintain detailed information about the employment generated by their tenants. (See Appendix A for a detailed description of our survey methodology.) Our survey comprises all businesses that hold leases with the Port and draws upon a list of tenants provided to us by Port officials. Contractors are included only if they have a substantial on-site presence or are direct subcontractors of leaseholders. We excluded building contractors and professional services firms because they are unlikely to employ workers at less than Oakland's living wage level. We did not include any port-related employers that were off-site, since they would not be covered by the proposed ordinance. We excluded employers with five employees or less, since Oakland's Living Wage Ordinance exempts such employers.

After these exclusions, we obtain a total of 140 Port leaseholders who employ about 11,400 workers (see Table 3-2a). These are the employers who would be covered by the proposed ordinance. In Section 4 we will analyze which of these employers would actually be *affected* by the ordinance because they currently pay low wages.

As Table 3-2a shows, the maritime division generates the highest average wages (about $32 per hour), but the lowest number of jobs, about 2,050. The real estate division produces slightly more jobs, but at much lower average wages, under $11. The airport is by far the biggest job generator, with 7,270 jobs, at average wages of $14.50. The wage differences among the Port's divisions correlate with widely different unionization rates. The maritime division is highly unionized, and the real estate division mostly non-union.

We provide a more detailed breakdown of employment, by economic sector rather than port division, in Table 3-2b. The lowest average wage rates at the port are concentrated in the hotel, restaurant, parking, security and skycaps, and entertainment and personal services sectors.[10]

The Port's workforce is unevenly distributed across ethnicity, gender, and residence. These patterns are presented in Table 3-3. About 54 percent of Port workers live in Oakland and about 35 percent are women. About 36 percent of Port workers are African American, similar to their representation in Oakland as a whole (US Bureau of the Census, 1990).

[10] Since retail, restaurant, car rental and parking establishments are located in both the airport and real estate divisions, the sectoral breakdowns do not correspond to different port divisions.

Average wages within Port divisions also vary by demographic group. Table 3-4 presents these patterns, weighted by the number of workers in each category. The wage gap between white and African American workers has been overcome only in the highly unionized maritime division. While overall average wages for African Americans are only slightly lower than for whites ($18.75 compared to $19.73), the wage gap is greater for the airport division ($10.96 compared to $15.80) and the real estate division ($8.88 compared to $12.53). The small number of women in the maritime division partly accounts for their low overall wage relative to workers as a whole.

A relatively small number of jobs and sectors account for most of the low-wage employment. Table 3-5 illustrates the kinds of low wage jobs that exist at the Port. Prominent low-wage occupations include restaurant waiters, rental car agents, airport ramp agents, and entertainment and personal services.

In sum, the survey data tell a powerful story about the types of jobs that are generated by the Port of Oakland. Clearly, the highly unionized maritime division provides the best-paid jobs for Oakland's diverse (male) population. However, these jobs stand in sharp contrast to the many low-wage jobs created in the real estate and airport divisions. Without public policy intervention to affect the quality of jobs, the Port will continue to contribute to the polarized growth trajectory of Oakland and the region. Moreover, racial inequities will be perpetuated by this pattern of growth.

4. The benefits of a living wage ordinance

Enacting a living wage ordinance at the Port could change the mix of jobs and increase wages for the lowest-paid workers. However, such a policy will generate costs as well as benefits. In this section we present our best estimates of the benefits to workers, to employers and to governmental entities of a living wage ordinance at the Port. The benefits for workers are the pay and health coverage increases among workers employed by Port leaseholders, including the indirect pay increases that result from wage push. We discuss how different demographic groups would benefit from the living wage ordinance. Benefits to employers consist of reduced turnover costs and increases in worker productivity. Benefits to governmental entities include reduced demands upon public health facilities and increased income and payroll taxes. We present our estimates of the costs in the succeeding section. Our estimates of both benefits and costs are the most careful that can be developed from the available data.

Benefits to workers

We present the number of low-wage workers who will be affected by the living wage ordinance in Table 4-1. The first and second columns estimate the direct beneficiaries of the ordinance. The first column shows that about 1,750 workers currently earn less than the living wage ($8.30 per hour) and would thus become eligible for a wage and benefit increase. This increase would bring them up to $8.30 per hour with health benefits or $9.55 without health benefits. The second column shows an additional 815 workers currently earn $8.30, but do not receive full health benefits. They are eligible for an improvement in their health benefits or for an increase in their wage to $9.55 per hour. We assume, following the proposed ordinance, that health benefits cost employers $1.25 per hour worked.

Table 4-2 indicates the demographic composition of the workers who would benefit directly from the living wage ordinance. African Americans, Latinos and Asian Americans, comprise a disproportionate number of living wage beneficiaries because they are currently over-represented in low wage jobs. For example, as is shown in Table 4.2b, African Americans comprise 36 percent of all workers at the Port, but 41 percent of workers making less than $9.54 per hour. Whites are over-represented among higher wage workers who would not be affected by the proposed ordinance. Women are over-represented among low-wage workers. Oakland residents are also over-represented among the low-wage category, and thus will also benefit disproportionately from the living wage ordinance.

Following previous research, we estimate that those workers who earn between $7.65 and $11.44 receive a wage increase due to the effect of a "wage push." This effect occurs because employers tend to raise the wages of the next tier of workers when the lowest paid workers in a firm receive a wage hike. Employers do this in order to maintain some of the relative pay differences for those with longer service, more skills or responsibility, or other job-related factors. Studies of wage-push effects find that wage

push pressure is generally confined to wage rates just above the floor wage (see Appendix B). To estimate this effect, we have drawn on research by Card and Krueger (1995), and followed the methodology used in the San Francisco living wage study by Reich et al (1999a and 1999b).

Table 4-3 summarizes the benefits for workers. About 2,600 workers will be directly affected by an increase in wages and/or benefits; and an additional 550 workers will be affected due to the wage push effect, bringing the total number of beneficiaries to over 3,100 workers. Directly affected workers will experience, on average, an increase of $2.25 in their hourly wage, totaling an additional $4.7 million in wages and $3.3 million in health benefits each year (see Table 4.4). Indirectly affected workers will gain $1.16 per hour. The total indirect wage push for workers just above and below the living wage level amounts to a $2.1 million increase each year. These total benefits to workers add up to $10.1 million. The 3,100 living wage beneficiaries would comprise about 27 percent of all non-supervisory employees of Port leaseholders. In addition, employees in covered firms would receive 12 days paid leave per year.

Benefits to employers

The living wage ordinance will increase worker pay, which frequently leads to some savings for employers. We examine here two sources of such savings: the reduced employee turnover costs and the increased productivity that economists expect to occur when wages are increased. These benefits to employers from paying higher wages will offset some of the increased costs, especially among the lowest-paying employers, and it is useful to consider the amounts involved.

Our best data on potential savings concern turnover, which we obtained through our employer survey. According to our summary calculations from the survey data, employee turnover at the Port averages about 25 percent per year, but it is nearly 20 percentage points higher among low-wage firms than among high-wage firms. A recent National Restaurant Association annual survey also found that turnover is about 20 percentage points lower in higher-wage establishments (Restaurants USA, 1999).[11]

Using the 20 percent expected decline in turnover, we calculated the savings in turnover costs as follows. According to the findings in the previous section, we estimate that the proposed ordinance would create an average wage increase of about $2.05 for over 3,000 workers. Increasing pay from $7.50 to $9.55 is equivalent to an increase of about 27 percent. According to the current research literature, as summarized by Card

[11] The same survey reports annual turnover rates among low-wage restaurants that are often in excess of 100 percent (see also Card and Krueger, 1995). The reported turnover rates in our sample may understate considerably the true turnover, especially at low-wage firms at the Port. Some of the respondents may have misinterpreted the survey question on this topic and reported monthly rather than annual turnover statistics. For this reason, we do not present a table with the turnover data, and we use only the summary figures to generate an estimate of the savings that are likely if turnover were reduced. Our calculations do not depend upon the turnover level, only the reduction, and this figure is likely to be robust .

and Krueger, this increase should reduce quits by an equal 27 percent. To be conservative, we use an estimate of 20 percent instead.

This reduction of 20 percentage points in turnover means that in a workplace of 100 people, there will be 20 fewer quits and consequently 20 fewer replacement hires will take place to keep the firm at the same size. Each quit that does occur generates a cost to the firm to replace the worker. This replacement cost consists of lost output while the vacancy has not been filled as well as the recruiting, interviewing, screening and training costs of filling the vacancy and then bringing the new worker up to speed. The training costs usually involve both formal and informal on-the-job training and take the time both of coworkers and the new workers. Replacement costs generally are a higher proportion of pay for occupations higher on the skill ladder, but an estimate of 20 percent of annual salary for each replacement is in the middle of a range for low-paid and unskilled jobs (Brown et al 1997). We use this figure of 20 percent as the replacement cost per replaced worker.

The firm's overall turnover costs consist of the replacement cost per replaced worker multiplied by the number of replaced workers. If 20 fewer workers out of a workforce of 100 have to be replaced, the firm saves the replacement cost per replaced worker (20 percent) multiplied by the 20 percent reduction in the replacement rate, for a 4 percent saving of its labor costs. Since the wage bill usually amounts to 25 to 50 percent of business costs for these firms, a 4 percent saving on labor costs translates into a 1 to 2 percent offset to increased business costs. In other words, the 1.1 percent increase in business costs could be offset entirely by reduced turnover costs.

Productivity is also known to respond to wage increases, as recent economic theory and research findings have emphasized (Freeman and Medoff, 1984; Katz, 1986). This research literature on efficiency wages identifies a number of possible channels through which wage increases generate productivity improvements. For example, higher wages can increase productivity through improved management incentives and efforts to utilize labor more efficiently and to economize on nonlabor inputs. Some of the increase can arise because new hires may come from a more experienced or skilled labor pool. Other productivity improvement sources that are associated with higher wage rates include lower employee supervision costs, increased morale and lower absenteeism and greater amounts of informal and formal training.

Improvements in productivity are particularly important in creating room for firms to increase wages without having to reduce employment or profits or to increase prices. Whenever productivity growth occurs, by definition output per worker hour goes up. Also by definition, wage costs per unit of output are equal to wages per hour divided by output per hour. Consequently, wages per hour can increase at the same rate as output per hour without increasing wage costs per unit of output. Wage costs per unit of output are also known as unit labor costs. If unit labor costs do not increase, firms can maintain profit margins without increasing prices.

Without much more data than are available, we cannot quantify the magnitudes of these effects for firms at the Port. We do know that labor productivity improvements have averaged 2 percent per year in the nonfarm private economy over the past 4 years. An older literature (reviewed by Freeman and Medoff, 1984) showed that firms experienced even greater productivity increases when unionization created a one-time shock to pay of 20 percent or more. More recently, when minimum wages in California went up by 27 percent in 1988 and by 35 percent in 1996-98, low-wage sectors such as restaurants and retail did not experience declines in employment and their prices did not increase faster than overall inflation. In the current era of rapid technological change associated with the computer and the Internet, many establishments have been able to achieve cost reductions in purchasing of supplies, management of records and a host of other improvements. These cost reductions have occurred in low-wage sectors such as restaurants and would be further accelerated by pay increases.

Benefits to governmental entities

The proposed living wage ordinance will also have some impact on public finances. In general we find that these effects will be positive but small. The public sector will collect more revenue as a result of the proposed ordinance, and will contribute less to various subsidy programs.

Increasing pay will mean that the Federal and state governments will collect higher payroll and income tax revenues. We estimate that employers will pay an additional $1 million in payroll taxes (see Table 4-4). This amount includes social security payments, and training, disability and unemployment insurance levies. Individual employees will also pay higher taxes, and/or qualify for a smaller Earned Income Tax Credit. We have not calculated the changes in individual tax payments since we do not have data on the household and tax status of employees.

Public agencies will see savings as some low-wage workers reduce their usage of various public assistance programs. The main decreases probably involve reduced usage of county public health services and reduced food stamp usage. We have not attempted to estimate the reduced food stamp usage since we do not have data on the household characteristics of employees or on program uptake rates. We can, however, indicate the order of magnitude of the impact on the public health system.

Using data provided by the Alameda County Health Department and the state's Medically Indigent Care Reporting System, we estimate that indigent health care currently costs Alameda County approximately $160 annually for each person who does not have private insurance or HMO/prepaid plan. Since we have estimated that the Living Wage Ordinance would extend health benefits to at least 1,550 currently uninsured people, the County's public health savings could amount to some $250,000 per year. This relatively small financial impact is likely to be felt as a positive reduction in waiting times and in the burden on over-worked public-sector health care providers.

5. The costs and affordability of the proposed ordinance

In this section we examine the increased costs to Port leaseholders and the portion of these costs that are likely to be passed on to the Port of Oakland or to consumers. We begin by presenting our estimates of the aggregate costs of complying with the proposed ordinance, in both absolute dollars and relative to the magnitude of Port businesses. We then examine the distribution of those costs among Port divisions and economic sectors. We also consider the impact of higher pay upon employment trends at the Port.

To analyze the affordability of the proposed ordinance we focus on how many firms in each sector would experience cost increases of different magnitudes. We can then consider how the costs might be shifted and borne by the various parties. Finally, we address whether Port firms would lose business or leave the Port and whether other firms would be deterred from locating on the Port because of the proposed ordinance.

Costs to employers

A first approximation of the total cost of the proposed ordinance is equal to the direct and indirect wage and benefit increases documented in the previous section. These costs are shown in Table 5-1. The cost of bringing wages up to $8.30 an hour is about $4.7 million, the costs of providing more health care coverage is $3.3 million, the costs of paying an indirect wage push is $2.1 million, and the costs of paying 12 days of paid leave is $2 million. These costs add up to a total of $12.1 million. In addition, employers must also pay an additional $1 million in payroll taxes, bringing the total cost of the proposed ordinance to about $13 million.

To put this figure in perspective, we have computed the cost as a percentage of the total wage bill that Port leaseholders paid to their workers and as a percentage of the business revenue received by the leaseholders. As Table 5-1 indicates, our calculations show that enacting the living wage ordinance would increase leaseholders' aggregate wage bill by 4.4 percent and that the increase would constitute 1.1 percent of their current revenue. These aggregate figures indicate that the overall cost increases could be absorbed relatively easily. However, the costs of complying with the living wage ordinance will be felt unevenly, and some sectors will experience smaller impacts than others.

We present the distribution of the costs by Port division and economic sector in Table 5-2. As Table 5-2a shows, the maritime division would bear less than $2 million of the cost and the airport and real estate divisions would each bear close to $6 million. To place these absolute dollar amounts in context we also present the increases as percentages of the relevant leaseholders' wage bill and business revenue. Using this yardstick, the real estate division, with an increase equivalent to 14.4 percent of the wage bill and 4.3 percent of revenue, would be most affected by the proposed ordinance. The effect on the airport would not be as great: 4.9 percent of the wage bill and 1.5 percent of

revenue. The effect upon the maritime division is nearly insignificant: 1.2 percent of the wage bill and 0.25 percent of business revenue.

Table 5-2b presents a breakdown in the costs of complying with the living wage ordinance by economic sector. Several activities and industry sectors account for the lion's share of low-wage workers, and therefore of the costs of the proposed ordinance. The sectors that would experience a cost increase greater than 10 percent of their business revenues are airport security, airport curbside assistance, and entertainment and personal services. Restaurants, hotels, warehousing, retail stores, car rental agencies and parking lots all would experience smaller, but significant, increases in costs.

Costs to workers

Economics students are taught that the quantity of labor demanded by firms goes down when the price of labor goes up. Much of the evidence for this prediction comes from past studies of minimum wage increases, which reported declines of about one to three percent in employment for each 10 percent increase in the minimum wage. However, more recent studies have found no measurable decline in employment resulting from minimum wage increases, even when they were comparable in percentage terms to the increases that the living wage ordinance would generate (for a survey, see Card and Krueger, 1995). When studies did find employment reductions, they tended to be concentrated among teenagers.

The relevance of the minimum wage literature for the proposed ordinance is only suggestive, since the pay rates considered here are at higher levels and are greater in absolute terms. Nonetheless, the recent studies indicate that employment reductions are likely to be much smaller than is often considered. The earlier literature neglected to examine the savings in turnover and the increases in productivity that permit wage increases to occur without employment declines. The Port has smaller than average rates of teenage employment, even in the commercial real estate division, which also mitigates employment effects. Finally, since employment at the Port is projected to grow in coming years, we do not expect employment declines to result from a living wage ordinance, although there could be a small decline in the rate of growth of employment.

Affordability

We have estimated that enactment of the proposed living wage ordinance would cost about $13 million in the aggregate. To put this figure in perspective, it amounts to about 8.5 percent of the overall revenue generated by the Port in 1998 (Table 5-3), and 1.1 percent of Port leaseholders' annual revenue. It is also equivalent to the Port's biennial growth rate in revenue over the past five years.

Another perspective on the affordability of a living wage ordinance relates the cost for each of the port's divisions to the business done per customer in each division. These comparisons indicate that living wage costs are equal to 59 cents per passenger departure at the airport, 6 cents per ton of containerized cargo at the Maritime Port, and

66 cents per visitor to Jack London Square. These figures, while small, are not definitive, as we have not yet considered who would actually bear these costs. Nonetheless, their modest size suggests that enacting a living wage for the Port of Oakland could have a minimal financial impact on the Port while benefiting over 3,000 low-wage workers and their families.

For a fuller affordability analysis, we supplement these aggregate costs and the costs per customer figures with a more analytical discussion and examine the affordability issues separately for each of the Port's divisions.

The logical place to begin the analysis is with the firms. To simplify the analysis, we first consider the proportion of firms that would experience little or no direct cost impact from the proposed ordinance and we then turn to the firms that would experience a greater impact. Based upon our survey data and as reported in Table 5-4, 43 percent of all the firms at the port would experience a direct impact that amounted to less than 1 percent of their business revenue. About 14 percent of firms would experience an impact greater than 1 percent but less than 3 percent of business revenue. For this combined 57 percent of the firms, we expect that reductions in turnover costs and normal productivity improvements alone would mean that the firms could offset the entire cost without reducing sales, employment or profits.

A second group in Table 5-4 consists of firms that would experience moderate cost increases. We estimate that 21 percent of the firms would have increases of more than 3 percent but less than 6 percent and that 9 percent would see increases between 6 and 10 percent. A combined 30 percent of firms thus falls into this second group.

Finally, some firms in Table 5-4 would see higher cost increases. About 12 percent of the firms would experience an increase of between 10 and 15 percent of their costs. Only one firm would face a cost increase over 15 percent; as we discuss below, this firm is a subcontractor to the airline companies.

We turn next to considering the likely behavioral response of the firms, separately by port division and economic sector, limiting the discussion to the firms with moderate or greater costs.

Affordability at the Airport

As mentioned, the aggregate cost of the proposed ordinance at the airport amounts to $0.59 per departing passenger. This cost to pay for the living wage will not affect airport demand. Even if passengers were to absorb the entire increase, they would not choose to fly out of another airport to avoid paying this minor expense. The costs to the Airport Division of the Port consequently will be small.

At the airport, the major sectors are the airlines themselves, airline servicing, airport security and curbside assistance, parking, car rental and retail. Of these, the airline companies generally face very small direct cost increases, under 2 percent in Table 5-1b. This sector consists of very large companies that can absorb these costs easily. Southwest

Airlines, the Oakland Airport's largest airline and second highest revenue source, accounts for nearly 13 percent of all the airport's revenue. Southwest has had significant growth in recent years as net income in 1998 increased to $433 million, up from $207 million in 1996[12]. Oakland's second largest airline, United, had net earnings in 1998 of $6.83 billion, up from $5.06 billion in 1996.

The airline service sector (fuelers, cabin cleaners, caterers, baggage handling) generally faces slightly higher costs increases of 1.2 percent of business revenue (see Table 5-1b). These costs are distributed unevenly, but are never greater than 6 percent per firm. The cost increases for these firms presumably would be passed on to the airlines themselves. Some of the firms in this sector are also large. For example, LSG Sky Chef has annual sales of $1.6 billion and is owned by Lufthansa, the German airline company.

The same pattern of small increases applies for airport security. Most of the employment in this sector is for baggage screeners. Again any increased costs are likely to be passed on to the airlines. If the Port pays a security company for overall guard service, it should be possible for the Port to easily pass increased costs to the airlines as well. For example, the landing fees the Airport charges to airlines currently are much lower than for other leading airports: one-half lower than at LAX and one-third lower than at SFO (Reich and Hall, 1999b).

The biggest cost increase-- 40 percent of business costs-- in our sample is for a firm that provides curbside and wheelchair assistance. This firm operates as a subcontractor for the airline companies. Although the cost increase to the firm is substantial, insofar as the organization of work does not permit improving productivity, the firm is likely to pass its increased costs to the airlines, who have a much greater ability to pay. The cost for the airlines would constitute a minimal increase of 1 percent or less. Whether the full cost increase would in turn be passed onto airline passengers and to cargo customers is difficult to determine. Although a partial pass-through is more likely, even a full pass-through would not be noticeable to the airlines' customers.

The other low-wage workers in the Aviation Division are located primarily in car rental, parking and restaurant sectors. Six car rental companies operate at the airport: Alamo, Avis, Budget, Dollar, Hertz, and National. Half of the rental companies in our sample would experience a cost increase of just over 1 percent, an easily-absorbed amount. One company would experience a 4 percent increase, which is also easily affordable. Each of the car rental companies is a well-known national corporation. For example, the parent company of National Car Rental, one of the largest car rental employers, had revenues of nearly $10 billion in the first six months of 1999 alone. National Car Rental sales at the Oakland location are over $10 million per year.

Many of the other low-wage employers at the airport are likely to have a significant ability to pay. Such firms include Huntleigh and ABC Security. Huntleigh Corporation has sales of over $5 million per year.[13] ABC Security has annual sales in

[12] Company revenue details provided in this section are drawn from the American Business Directory.
[13] This is the figure for the Los Angeles office.

Oakland of over $5 million. California One Services has subsidiaries or branches at 17 other airports. At most of these they have a very similar presence to Oakland: $1-2.5m sales and 50-99 employees.

The implementation of the proposed ordinance at the airport would not occur in a single year. Since the air passenger license and temporary use agreements typically are renewed annually, the Airport has significant flexibility in setting rates and it is not locked into long-term contracts. Consequently, without long lease durations in the way, the implementation of a living wage ordinance could take place rather quickly for this group of airport workers. But the rental car, air cargo, air maintenance, and restaurant and bar facilities typically have long-term lease agreements. For these sectors, the implementation of an ordinance is likely to take place over time. Such a phase-in implies that the costs per year would also be phased in over time.

In summary, only a few firms at the airport will actually have significant cost increases. Demand for departures from Oakland is not likely to be affected by a 59 cent increase. Airline services will be able to pass on increases to the airlines, and the airlines will be able to pass on increases to their customers. Many of the firms at the airport have a high ability to pay a living wage. The revenue implications for the Airport consequently are minimal and should not affect any bond-financed expansion costs.

Affordability at the Maritime Division

The impact of a living wage on the Maritime division will be significantly less than in the other divisions. According to Table 5-1a, the cost will be $1.68 million, equivalent to 0.25 percent of business revenue. As is shown in Table 5-1b, the impact within the maritime division upon maritime shipping activities themselves is 0.02 percent, which is essentially zero.

The impact on trucking and warehousing within the maritime division will be larger, about 4.2 percent of business revenue. Some of the trucking companies that will experience a cost increase are large firms that may be able to pay higher wages. For example, according to publicly available business sources, Pacific America, a trucking company and a major employer in the Maritime Division, has over $5 million in sales.

From our survey (but not reported in the table), we know that the bulk of the costs of enacting the living wage will be carried by non-maritime businesses that are located on maritime port land, such as a car rental agency and a restaurant.

In summary, taking all the sectors within the maritime division into account, the overall costs are so small and the pass-through and impact upon the firms' revenue is likely to be even smaller. Consequently, there should not be much impact upon the Port's revenues or bond ratings.

Affordability at the Real Estate Division

The affordability issues at the Real Estate Division are somewhat different from those at the Airport and Maritime Divisions of the Port. First, the overall percentage cost increase is larger: 4.3 percent of business revenue. Second, many of the activities at the port are more subject to competition from nearby businesses. Location at the airport and the port is essential to most of the activities there, so the issue of competition with offsite businesses that pay lower wages is small. At the waterfront, offsite competition is a greater issue. Nonetheless, location of restaurants and other retail businesses at the waterfront provides them with competitive advantages: scenic views, city and port-supported infrastructure created by previous public investment, and a critical concentration of retail businesses. Whether this premium is sufficient to offset the cost increases is the principal issue.

The Port's revenue from the real estate division is also much lower than in the other two divisions. Not counting the revenue growth related to Oakland Portside Associates, operating revenue in the commercial real estate division has hovered at about $10 million in recent years, or one-seventh of the operating revenue in each of the other two divisions. More disturbing, the real estate division has been losing money. Its net operating income has been negative, even before taking depreciation and interest expenses into account (Table 5-3). Any possible reduction in rents in this division consequently generates a great affordability concern for the Port.

Our findings suggest that most of the firms that would be significantly affected by the proposed ordinance are concentrated in the real estate division. Except for about a dozen of these firms, the impact is less than 10 percent of their business costs. To examine whether the Port location provides a corresponding premium, we examined prices charged by businesses at Jack London Square to others at nearby locations.

Businesses on Port-owned land do charge more for their services than in nearby locations, presumably because of the locational advantages. For example, the Motel 6 on Port property is 18 percent more expensive than the Motel 6 adjacent to Port property. Additionally, the Airport Hilton, the Waterfront Plaza Hotel, and the Embarcadero Executive Inn charged on average 32 percent more than hotels immediately adjacent to Port property. Compared to similar hotels in surrounding cities, the three hotels on Port property charged 6 percent more.[14]

For another comparison, we sampled the prices of restaurants in and near Jack London Square. Comparing similar menu items, we found that restaurants on Port land charge on average 16 percent to 30 percent more than restaurants in the surrounding area.[15] These differences are greater than the cost of the proposed ordinance to

[14] Comparable hotels are Radisson, Clarion Suites, Four Points Hotels-Sheraton, and Holiday Inn in the Berkeley Marina, Lake Merritt, and Emeryville respectively.

[15] We compared prices at five restaurants in Jack London Square with prices at five restaurants in the surrounding area. The methodology involved comparing menu prices among the restaurants for both the least expensive seafood and the cost of dinner with the seafood entrée and a caesar salad.

restaurants. They suggest that an increase in costs of 66 cents per customer is affordable without hurting revenue.

Some of the employers in this division are large and profitable companies with a regional or national presence. Potentially affected companies leasing property from the commercial real estate division include Best Western, Motel 6 and the Old Spaghetti Factory. Best Western is an independently owned member of Best Western International, whose hotels had sales in 1998 of $70 million. The Motel 6 on Port property has sales of over $1 million per year while the Motel 6 not on Port property has sales of less than $1 million. The Old Spaghetti Factory has annual revenues of between $2.5 and $5 million and is part of a private company with over 40 total restaurants and $54.6 million in sales.

Vacancy rates at Jack London Square are currently low, which supports recent publicity suggesting that retail establishments at or near Jack London Square are facing increasing market rents. The rent increases reflect the success of local economic development and again indicate that a living wage ordinance can be absorbed by this sector. Indeed, cost increases as a result of rising rents may well dominate any labor cost increases in coming years. It does not seem likely that businesses would be deterred from locating at Jack London Square in such an environment.

In summary, the cost increases for leaseholders in the commercial real estate division are greater than in the other divisions, but are below 10 percent of current business revenue for all but a dozen firms. Even without taking into account the likely business savings due to lower turnover costs and higher productivity, most firms should be able to adjust to the higher labor costs without reducing their workforce or relocating from the Port. Of the dozen firms with greater impact, most will be able to pass on increases to consumers without hurting sales.

In a context of rising rents near Jack London Square, the firms that are most affected are much more likely to increase prices than to obtain reductions in the rent they pay to the Port. Firms that are less affected are also not likely to obtain rent reductions. We conclude that Port revenues in the commercial real estate division should not decline significantly as a result of the proposed ordinance.

6. Conclusion

The Port of Oakland is Oakland's largest public asset and is one of the most important generators of jobs in the City and its environs. In the past, work in the maritime industry provided substantial numbers of well-paid jobs, which provided a path to the middle class for many Oaklanders, especially for African Americans, who currently comprise 50 percent of the Port's longshore workers.

In the future, however, the greatest job growth will occur in the airport and real estate divisions, not the maritime division. The lowest average wage rates at the port are concentrated in the hotel, restaurant, parking, security and skycaps, and other services sectors. These sectors are all part of the growing airport and real estate divisions, where we see both lower average wages and higher wage disparities between whites and people of color.

Without public policy intervention to affect the quality of jobs, the Port will continue to generate large numbers of jobs for Oakland and the region, but many of these will be low-wage jobs. Moreover, racial wage disparities will be perpetuated by this pattern of growth.

Enacting a living wage ordinance at the Port of Oakland would help increase the incomes of 3,100 low-wage workers. The average affected worker will see an increase in income including health benefits of $2.06 per hour. Employees will also get paid leave.

The costs of the proposed ordinance are about $13 million and comprise only about 1 percent of Port leaseholders' business revenues. The maritime division would experience only a very small increase in cost, with shipping activities essentially unaffected. Cost increases in the real estate and airport divisions would constitute about 4.3 percent and 1.5 percent of leaseholders business revenues, respectively.

For the airport, this amounts to $0.59 per departure, certainly not enough to change passenger preference for flying out of Oakland. Low wages are concentrated in a few firms, many of whom are subcontractors to the major airlines. Since they provide essential onsite services, they will be able to pass most cost increases to the airlines, who can easily absorb them and/or pass them on to passengers.

For the real estate division, the increase in wages and benefits amounts to $0.66 per visitor to Jack London Square annually. The increase in costs to the affected restaurants and hotels is smaller than the premium they get for locating near the waterfront and in Jack London Square, compared to similar businesses in less desirable locations. With business growing in the area, the small increase in costs should not affect the overall business climate.

We conclude that the increased wage bill costs can be absorbed by the Port's leaseholders, visitors to the waterfront and passengers at the Oakland airport. Businesses

should not be driven away, Port revenues should not go down and bond ratings for the Port should remain unaffected. The overall effects of a living wage ordinance--considering the benefits and as well as the costs-- should be to redirect economic growth at the Port toward the more equitable path that it had sustained in previous decades.

Appendix A: Survey method and data sources

The primary data source for the Port of Oakland study was a telephone and in-person survey of Port leaseholders and their on-site subcontractors that we conducted in the spring and summer of 1999. Where necessary, we collected supplementary data from a variety of official sources. This appendix discusses the sample universe, sample realization, weighting, estimation procedures, survey methodology, the survey instrument and the supplementary data.

Sample universe and realization

The universe – the list of all firms that are tenants of the Port of Oakland - for the sample survey was generated from the following sources. First, we obtained a list of tenants compiled by the Government Affairs Division of the Port of Oakland. When it became clear that some gaps existed in this data source, requests were directed at the Real Estate and Airport Divisions for further information. Their responses to our requests provided the second source of information. Third, we conducted field visits to complete the universe, in particular to complete the lists of sub-tenants at 80 Swan Way, Embarcadero Cove and Jack London Village and subcontractors such as security and skycap firms at the airport.

From these sources, we generated a list of leaseholders of the Port of Oakland. After duplications, name changes and other sources of error had been identified and corrected or removed, we were left with a list of 278 firms.

We attempted to survey all 278 firms on the list and continually monitored progress in order to ensure a balanced sample realization across port divisions, sectors and geographic areas. Our interviews revealed that 30 firms were no longer tenants of the Port, leaving a total of 248 firms in our universe. About one-third of the firms were not surveyed because they refused to answer our questions or were not traceable. Table A-1 shows the sample realization results.

Weighting procedure

The 168 surveyed tenants / service contractors of the Port of Oakland employ some 9,518 people (both managerial and non-managerial). When data from the American Business Directory for unsurveyed firms is added to this, the total estimated employment at the Port of Oakland is 13,787. The gap between these figures is explained by the fact that we successfully surveyed 68 percent of the possible firms. To adjust for this discrepancy, we weighted each surveyed firm.

The goal of weighting is to determine how many actual firms or employees is represented by each surveyed firm or employee. We generate a factor by which to 'expand' each surveyed firm and employee to generate the actual number of firms and employees. Following standard sample survey methodology, we tried to increase the

accuracy of our weighting (or expansion) factors by comparing apples with apples. For example, a restaurant in the airport should not be taken to represent a trucking firm in the port.

Thus, in the weighting procedure, we used 11 industrial classes (construction, manufacturing, truck, maritime, air, retail, restaurant, finance and related, hotel, services and other) and 7 port regions (Hegenberger, Airport, Embarcadero, Jack London Village, Jack London Square, Port). This means, for example, that each surveyed retail worker in Jack London Square is taken to represent 1.25 actual retail workers in Jack London Square. The weights thus vary by sector and region, thus minimizing the errors in the weighting process.

Once the weights had been applied, we estimated that there were 13,010 people working in the Port of Oakland. This is only slightly lower than the estimate that includes ABD data. Once managerial employees, and those working for firms employing fewer than 5 people are excluded, we are left with 11,430 people. These are the workers who would be covered by a Living Wage Ordinance.

Our overall employment estimate compares well with a combination of employment estimates derived from the Martin Associates (*various dates*) reports for the Real Estate, Airport and Maritime Port Divisions. This data source is out of date – the reports are dated from 1992 to 1997 – and includes all employment related to port activity, regardless of whether it is on Port property or not. However, a realistic estimate of on-site employment from this source ranges between 11,000 and 18,000.

The reported number of firms is also affected by weighting. The 123 surveyed firms that employ one or more non-managerial worker represent 174 firms when weights are applied. Of these, 140 have five or more employees (see Table 3.1). The 45 surveyed firms that have no employees represent 74 actual firms. Thus the weighted number of firms equals the universe of 248 firms.

Questionnaire

The questionnaire for the survey was designed and pilot-tested with restaurant and retail sector employment as the primary target. With minor modifications we made it applicable to other employment sectors. Survey interviews took between 10 and 20 minutes, depending on the number of job titles in the firm. Questions were directed only towards the employment at the establishment on port property (or on employment linked to port-related service contracts) and not the entire firm.

The first section of the questionnaire dealt with the employment profile of the workforce in terms of job permanence, demographic characteristics, unionization levels and benefits. In order to reduce the length of the questionnaire, these questions were applicable only to the non-managerial workforce, and thus demographic profiles per job title / occupation are estimates.

In the second section of the questionnaire, information was collected on each non-managerial job title. This included the number of people with the job title, minimum educational and other qualifications, and starting and average pay. In one-third of all job titles, the average wage was not provided, requiring supplementary information (see below).

The third section of the questionnaire dealt with the recruitment and training practices of the establishment. The questionnaire concluded with two very sensitive questions - the revenue and labor share of business costs - questions which most respondents would not or could not answer.

Supplementary data

Given these and other gaps it became necessary to supplement the survey data in four ways. First, we used the American Business Directory to identify the location, sector, employment and revenues of 190 of the firms. This information helped us to complete the sample universe, to identify potential respondents, to fill information gaps in the interviews, for purposes of weighting the sample, and to check the survey-based total employment estimate.

Second, as noted above, in about one-third of (119 out of 360) job titles surveyed we were not provided with average wage data. To fill this gap, we searched for comparable job titles in comparable firms within the sample, and where appropriate used this source. This filled 34 of the missing average wage rates. In a further 42 cases, we had been provided with the starting wage but no average wage. We multiplied the starting wage by a factor of 1.559 in the case of unionized job titles, and 1.341 in the case of non-unionized job titles to estimate average wages. These factors were generated from the available survey data, and reflect the fact that tenure-based pay increases are larger for unionized than for non-unionized workers. Finally, in 33 cases we were able to fill the average wage gap using average wage data for the 1997 Occupational Employment Series for the Oakland Primary Metropolitan Statistical Area. This left 10 job titles for which we were unable to generate an average wage.

Third, most of the firms employing members of the ILWU (i.e., stevedores and terminal operators) were unable to provide information on the number of longshoremen and clerks they employ, and their pay and benefit scales. This employment is distinguished from other (generally administrative) employment within such firms, and for which we generally were provided full information. In order to complete this component of employment by port tenants, we collected wage and demographic information from the Pacific Maritime Association and from Lawrence Tiebout, the President of ILWU Local 10, and his staff. Although this data is subject to inaccuracy because the San Francisco ILWU hiring hall covers the entire Bay Area, wage rates for these workers are all above $20 per hour. Thus this supplementary data will not bias estimates of the cost and benefit of a Living Wage Ordinance.

Fourth, we extracted microdata from the March Supplement of the Current Population Survey for 1996-9 for the Bay Area Statistical Area. This data provided hourly wage data for the entire Bay Area, for Alameda County and for the City of Oakland.

We also used this data source to supplement our health benefit coverage information. In the questionnaire, we did not distinguish whether employers or employees paid for health coverage, and thus we could not use our survey data to estimate this aspect of the impact of a Living Wage Ordinance. For each job title, we estimated the value of health benefits paid by the employer for each job title based on the average health coverage rates for similar job titles and sectors in the Bay Area.

Appendix B: Supplementary wage calculations

This appendix is devoted to two technical issues in the study. The first issue concerns the impact on wage scales within a firm when the lowest paid workers receive a wage increase. We discuss our methodology and assumptions for estimating these so-called wage push effects of the proposed living wage ordinance. The second issue concerns tip income. Our discussion highlights the complexities of this issue, although our estimates indicate that including a tip credit in the proposed ordinance would make little difference in the aggregate.

Wage push calculations

Although the proposed ordinance mandates pay increases only for workers who are paid less than $8.30 per hour, it is reasonable to ask whether employers would feel pressure to raise the pay of other workers as well. Such wage push pressure would be expected to arise primarily from workers whose wages fall just above the living wage level, since most pay comparisons involve workers in closely related job classifications. Pay increases might be required in order to maintain relative pay differences for those with longer service, more skills or responsibility, or other job-related factors. These indirect effects, which we have called "wage push," have also received such labels as "wage creep," "ripple effects" and "wage contour effects".

An accurate accounting of such increases depends upon our knowledge of the rigidities and flexibilities of the occupational wage structure. The current state of such knowledge is imperfect. Although relative wage structures have compressed in the past, notably in the 1960s and 1970s, in more recent decades they have widened. In the past three years they have stabilized and in some instances have narrowed. A large literature by economists has debated the relative importance of market-based and institutional-based causes of these patterns. Nonetheless, we can draw upon recent experience with minimum wage increases and with living wage ordinances in other cities to develop some reasonable estimates.

The best wage-push analysis of minimum wages is by Card and Krueger (1995), who examined the impact of minimum wage increases upon the pay of above-minimum workers. They found that the indirect effects did indeed concentrate at just above the new minimum. The percentage pay increase for those just above the new minimum averaged less than half of what the workers at the old minimum received. In other words, recent minimum wage increases have led to some compression of the wage structure.[16] This compression is not surprising in historical perspective, since wage inequality in the 1990s has been higher than at any other period since the Bureau of the Census began collecting reliable data in 1947.

[16] Sachdev and Wilkinson (1998) obtain similar findings for the United Kingdom. Both studies find negligible adverse employment effects. See also Reich (1999).

Card and Krueger's results do not apply directly to a living wage ordinance, but they are very suggestive. Since the increases contemplated by the ordinance are greater, in percentage terms, than the minimum wage increases studied by Card and Krueger, the indirect effects may also be greater. On the other hand, minimum wage increases apply to all low-wage workers in the labor market, while living wage ordinances apply only to a small percentage. Consequently, the indirect effects may be restrained by larger labor market forces and could be somewhat smaller. These two considerations work in opposite directions and probably cancel each other.

It therefore seems reasonable to translate Card and Krueger's findings as suggesting that if the largest wage increase at the Port of Oakland were about $4 per hour, an increase of up to $2 per hour might occur for workers currently paid $9.55 per hour. The total wage bill would not go up proportionately, however, because there are fewer workers at the more skilled and supervisory levels that receive higher pay.

Using the underlying survey data on the proportion of workers at each pay level, we have assumed that each worker currently earning between $7.65 to $9.55 would actually receive $10.03 per hour after the Living Wage is implemented. We have also calculated the cost of bringing all workers who are currently paid between $9.55 and $11.44 up to $11.45. We estimate that these indirect wage gains could amount to $2.2 million for employees of Port tenants.

Tip income calculations

The impact of the Living Wage Ordinance depends in part on how tip income is treated. This is a complicated issue that can become a source of controversy. In this appendix we present and discuss our findings in the interests of a more informed debate on this topic, without making a specific recommendation for dealing with tip income. We show that the overall impact of a tip credit would be relatively modest, although it may be important for specific sectors or employers.

Tips constitute an important source of income for employees in various service-sector occupations. In the Oakland Port context, over 1,000 restaurant workers, skycaps and parking valets may earn up to half their income in tips (see Table B-1). For this reason, employers may resist increasing the wages of workers who earn above the living wage level when tips are taken into account. A solution to this problem may be to estimate the value of tip income earned by each employee and allocate this as a tip credit.

However tips are by their nature highly irregular, prone to under-reporting and often inequitably distributed. These features make regulation very difficult and could in restaurants create great inequities since not all employees collect tips directly. Bussers, cleaners and cooks only receive tip income where a pooling system operates. Tips also vary considerably across different restaurants, and workers in fast-food and cafeteria-

style restaurants generally do not receive tips.[17] Enacting and enforcing an equitable tip credit system would be very complicated, and the impact on costs would be modest.

We estimated the value of tips for certain categories of workers. In the case of waiters, bartenders and cocktailers, we assumed that tips added a further 70 percent to an individual's wage. We based this estimate on interviews with restaurant workers and a review of the limited literature on this subject. For other restaurant workers, including bussers, food preparers and other employees, we assumed that tip income would increase an individual's earnings by 10 percent. This amount takes account of the tip sharing that occurs in some establishments. For skycaps and parking valets at the airport, we assumed tips to value of $2 per hour. This assumption was based on interviews with airport workers. In the report, wage data and estimates of the costs and benefits of a Living Wage Ordinance are generally presented without including tips as income

Table B-2 shows that the number of workers benefiting from the Living Wage Ordinance would only fall marginally with a tip credit – from 3,100 to 3,050. This small effect occurs because the estimated value of tip income brings most employees closer to the living wage level without taking them above it. However, the average hourly wage increase per worker falls from $2.06 to $1.67.

A tip credit would result in a decrease in the annual cost of the proposed ordinance of almost $2 million (see Table B-3). Most of this decrease – some $1.5 million - occurs within the restaurant sector. The decrease in costs for the Security and Curbside Assistance sector is small in absolute terms, but it is relatively important since it represents 10 percent of the wage bill in this sector.

[17] The 1988 bill to raise the California minimum wage originally contained a tip credit, but this provision was eliminated by a court decision.

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List of Tables

Table 1-1 Cost of Living and Living Wage Comparisons

	Living wage[1] (unadjusted)	Wage adjusted with Oakland Cost of Living[2]
Oakland	$8.30	$8.30
National Comparisons		
Baltimore	$7.90	$13.27
Boston	$8.23	$9.29
Miami	$8.56	$12.96
Regional Comparisons		
Los Angeles	$7.51	$9.52
San Francisco[3]	$11.00	$9.48
San Jose	$9.50	$8.35

Sources: ACCRA Cost of Living Index and Wider Opportunities for Women, Self-Sufficiency Worksheets.

Notes:
1. Living wage with health benefits.
2. Adjusting factor = Oakland CofL/City's CofL (using ACCRA Composite Index for Baltimore, Boston, Los Angeles and Miami, and W.O.W. index for San Francisco and San Jose).
3. Proposed Living Wage.
4. Cost data are for the city, except for Boston (PMSA) and Miami (Dade County).

Table 2-1 Comparison of wage rates for selected Bay Area Central Cities

	Average hourly wage, 1996-9
Oakland	$14.52
San Francisco	$15.97
San Jose	$18.99
All Bay Area Central Cities	$17.68

Source:
Hourly wage from authors analysis of March Supplement of the BLS Current Population Survey, Bay Area Counties, 1996-9 extraction. Adjusted for inflation using the San Francisco-Oakland-San Jose CMSA all urban consumers consumer price index.

Table 2-2 Top Ten Occupations with greatest absolute job growth in Alameda County 1995-2002

Job Title	1995	2000	Total Change	Median Hourly Wage[1]	Mean Annual
Low-wage occupations					
Cashiers	13,450	15,410	1,960	$7.65	$19,190
Retail Salespersons	19,500	21,450	1,950	$7.78	$19,910
Assemblers and Fabricators	7,720	9,210	1,490	$9.21	$20,550
Waiters/Waitresses	6,240	7,480	1,240	$5.67	$13,110
Low-wage total	**46,910**	**53,550**	**6,640**	-	**$18,904**
Medium-wage occupations					
Sales Representatives[2]	8,350	9,370	1,020	$19.17	$44,910
Secretaries[3]	11,810	12,700	890	$14.16	$29,870
Teachers (Secondary)	5,170	5,950	780	$24.29[4]	$50,530
Medium-wage total	**25,330**	**28,020**	**2,690**	-	**$39,045**
High-wage occupations					
General Managers	17,450	19,380	1,930	$36.93	$74,660
Computer Engineers	1,660	2,800	1,140	$33.81	$65,710
Systems Analysts	1,820	2,870	1,050	$31.41	$61,860
High-wage total	**20,930**	**25,050**	**4,120**	-	**$72,837**

Source: California Employment Development Department.

Note:
1. 1997 wage rates for the Oakland PMSA.
2. Sales representatives not including retail or scientific.
3. Secretaries not including legal or medical.
4. No median wage available for teachers. Median hourly wage given is mean yearly wage divided by 2080 hours.

Table 3-1 Port-related employment[1]

	1995	Projected 2010
Airport	10,200	16,500
Maritime	8,800	12,700
Commercial real estate	2,900	Not available
Port staff	580	Not available
Total port employment	22,480	32,680
Total Alameda County employment	525,444	784,840

Sources: County Business Patterns, ABAG web site, Martin and Associates

Note:
1. Includes off-site employment.

Table 3-2a Tenants of the Port of Oakland: firms and employment by revenue division

Revenue Division	Firms[1]	Employees[2]	Percentage of total workforce[3]	Average wage[4], $/hour	Percent of employees unionized
Airport	36	7270	63.6	14.50	44.1
Maritime port	20	2050	17.9	31.66	80.5
Real estate	84	2110	18.4	10.54	4.9
Total	**140**	**11430**	**100.0**	**16.80**	**43.4**

Table 3-2b Tenants of the Port of Oakland: firms and employment by sector

Industry Sector	Firms[1]	Employees[2]	Percent of total workforce[3]	Average wage, $/hour[4]	Percent of employees unionized
Air Cargo	4	4164	36.4	15.84	34.8
Passenger airlines	6	1109	9.7	16.00	82.3
Airline support services	8	745	6.5	12.91	27.5
Security and curbside assistance	3	223	2.0	7.02	0.0
Car rental	6	445	3.9	10.15	57.5
Parking services	3	300	2.6	9.90	69.3
Retail	22	371	3.2	10.65	5.4
Restaurant	16	918	8.0	8.07	23.5
Hotel	16	324	2.8	9.30	0.0
Maritime	9	1601	14.0	37.99	98.0
Trucking and warehousing	10	365	3.2	12.76	7.1
Construction and Manufacturing	4	113	1.0	12.54	72.2
FIRE[5]	7	146	1.3	18.4	0.0
Professional services	21	257	2.2	19.14	5.4
Entertainment and personal services	5	350	3.1	7.32	0.0
Total	**140**	**11430**	**100.0**	**16.80**	**43.2**

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Excluding firms with fewer than 5 employees.
2. Non-managerial employees only.
3. Non-managerial employees in sector / total non-managerial employees.
4. Including health benefits. Based on the occupation-weighted sample.
5. Finance, Insurance, and Real Estate.

Table 3-3a Port employment and demographic profiles by revenue division

Revenue Division		Percent of employees who are:					
		Women	Oakland residents	African-American	Asian-American	Latino	White
Airport	7,270	40.8	69.0	41.9	22.0	16.4	19.6
Maritime Port	2,050	11.3	27.7	37.0	2.4	34.1	26.4
Real Estate	2,110	55.1	64.3	29.1	17.9	23.4	29.6
Total	**11,430**	**35.8**	**53.9**	**35.8**	**14.0**	**23.8**	**26.5**

Table 3-3b Port employment and demographic profiles by industry sector

Industry Sector		Percent of employees who are:					
		Women	Oakland residents	African-American	Asian-American	Latino	White
Air Cargo	4,164	25.5	60.0	12.1	0.9	2.8	84.1
Passenger airlines	1109	63.6	75.5	28.3	24.1	23.5	24.1
Airline support services	745	45.1	66.7	57.4	9.8	8.8	23.9
Security and curbside assistance	223	27.1	74.3	65.6	26.6	6.0	1.8
Car rental	445	43.9	81.4	63.7	13.8	16.0	6.5
Parking services	300	72.4	40.3	40.2	46.3	1.5	11.1
Retail	371	45.2	72.4	35.3	7.6	18.1	39.4
Restaurant	918	52.3	56.1	23.0	13.3	38.2	25.5
Hotel	324	67.8	85.0	30.0	16.6	40.9	12.4
Maritime	1,601	7.4	31.7	39.8	1.6	21.8	36.9
Trucking and warehousing	365	33.6	10.4	15.1	6.0	63.4	15.2
Construction and Manufacturing	113	4.2	15.7	3.6	4.2	71.4	20.3
FIRE[1]	146	60.5	27.0	14.6	4.9	3.5	77.0
Professional services	257	62.1	28.2	10.6	35.3	9.9	44.2
Entertainment and personal services	350	41.7	92.5	57.2	28.9	3.5	10.4
Total	**11,430**	**35.8**	**53.9**	**35.8**	**14.0**	**23.8**	**26.5**

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Finance, Insurance, and Real Estate.
2. The number of employees by sector and the percent of employment by demographic group were calculated based upon the firm-weighted sample universe. See Appendix A.

Table 3-4 Average wage by revenue division and demographic group

Revenue Division	All Employees	Average wage, $/hr[1]						
		Women	Oakland residents	African-American	Asian-American	Latino	White	Unionized
Airport	14.50	13.42	12.18	10.96	11.80	13.07	15.80	14.91
Maritime Port	32.12	23.60	37.29	37.48	21.03	26.27	34.41	37.87
Real Estate	10.27	10.88	8.58	8.88	10.70	9.15	12.53	13.70
All Divisions	**16.81**	**13.41**	**15.27**	**18.75**	**11.88**	**17.89**	**19.73**	**22.19**

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Including health benefits, not including tips.
2. Average hourly wages are weighted by the number of employees in each category.

Table 3.5 Low-wage employment at the Port of Oakland[1]

Industry Sector	Job Title	Employees	Average wage, $/hour[2]	Wage range, $/hour[3]
Airline Support services	Fueler / Ramp agent	250	8.40	6.50-9.15
	Food preparation	90	9.10	6.40-10.20
Security and skycap	Skycap and screeners	160	5.95	5.75-6.25
	Security	60	9.00	6.50-9.00
Rental Cars	Rental and service agents, shuttlers	350	8.90	5.75-12.85
Parking Services	Cashier, Valet	225	8.55	5.75-9.05
Retail	Cashier and sales	200	8.25	5.75-12.00
Restaurant	Busser	45	5.90	5.75-7.70
	Dishwasher	90	7.60	5.75-9.40
	Cook, food preparation	190	8.20	5.75-10.70
	Waiter, cocktail server, bartender, host	490	7.45	5.75-15.00
Hotel	Housekeeper / room cleaner	150	7.15	5.75-9.50
	General Maintenance	30	7.90	5.75-8.50
	Desk clerk	60	8.55	5.75-9.25
Trucking And warehousing	Packagers and general labor	200	6.75	5.75-8.50
Entertainment and personal services	Customer services, cleaning	240	6.25	5.75-6.25

Source: UC Berkeley (CLRE) Employer Survey

Notes:

1. Low-wage job titles are defined as those where the starting wage is below $8.30 per hour. Due to tenure-based pay scales, average wage rates for some of these job titles may exceed $8.30 per hour. Since we do not have detailed data on wage scales, the number of workers reported includes all employees within the firm in the relevant job title.
2. Average hourly wages are weighted and do not include tips.
3. Minimum of wage range is lowest starting wage and maximum of wage range is highest average wage.
4. All numbers have been rounded.

Table 4-1a Number of employees by wage category and revenue division

Industry	All Employees	Earning below the proposed living wage[1]	Earning below the proposed living wage plus health benefit level[2]	Indirectly affected by the proposed living wage ordinance[3]	Unaffected by the proposed living wage ordinance[4]
Airport	7265	551	513	321	5880
Maritime Port	1979	175	66	50	1688
Real Estate	2050	1032	236	167	615
Total	**11294**	**1758**	**815**	**538**	**8183**

Table 4-1b Number of employees by wage category and sector

Industry	All Employees	Earning below the proposed living wage[1]	Earning below the proposed living wage plus health benefit level[2]	Indirectly affected by the proposed living wage ordinance[3]	Unaffected by the proposed living wage ordinance[4]
Air Cargo	4164				4164
Passenger airlines	1109	54	22	178	855
Airline support services	745	48	66	127	504
Security and curbside assistance	223	157	66		
Car rental	445	86	193		166
Parking services	300	50	176		74
Retail	371	119	60	56	136
Restaurant	918	691	65	38	124
Hotel	324	171	26	66	61
Maritime	1509			45	1464
Trucking and warehousing	362	140	65		157
Construction and Manufacturing	101			5	96
FIRE[5]	146				146
Professional services	252			20	232
Entertainment and personal services	325	242	76	3	4
Total	**11294**	**1758**	**815**	**538**	**8183**

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Earning below $8.30 per hour.
2. Earning between $8.30 and $9.54 per hour.
3. Earning between $9.55 and $11.44 per hour.
4. Earning more than $11.45 per hour.
5. Finance, Insurance, and Real Estate.

Table 4-2a Wage groups by gender

	Directly benefited employees (percent)[1]	All employees (percent)
Men	54.3	64.0
Women	45.7	36.0
Total	**100.0**	**100.0**

Table 4-2b Wage groups by ethnicity

Ethnic Group	Directly benefited employees (percent)[1]	All employees (percent)
White (nonHispanic)	14.7	26.5
African-American	41.1	35.8
Asian and Pacific Islander	18.9	14.0
Latino	25.2	23.8
Total	**100.0**	**100.0**

Table 4-2c Wage group by place of residence

	Directly benefited employees (percent)[1]	All employees (percent)
Oakland residents	64.6	53.9
Non-Oakland residents	35.4	46.1
Total	**100.0**	**100.0**

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Those earning less than $9.55 per hour, including health benefits, not including tips. Those workers whose wage plus health benefits are greater than $9.55 are excluded.

Table 4-3 Affected workers and wage and benefit increases

Wage Category	Average hourly wage increase[1]	Average annual wage increase[2]	Number of employees
Directly affected workers (earning under $9.55/hr.)	$2.25	*Full-time*: $4,500 *Part-time*: $2,300	2,573
Indirectly affected workers[3] (earning between $9.55 and $11.44/hr.)	$1.16	*Full-time*: $2,400 *Part-time*: $1,200	538
Total affected workers	**$2.06**	***Full-time*: $3,800** ***Part-time*: $2,00**	**3,111**

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Average wage increase attributable to the proposed living wage ordinance, including health coverage but excluding paid days off.
2. Full-time employees are assumed to work 2000 hours per year; part-time employees work on average 1070 hours per according to survey data.
3. Indirectly affected workers are those workers who would benefit from upward wage push pressure with the new higher wage floor.

Table 4-4 Total annual costs

	Total Costs $ millions	Percent of original wage bill
Original annual wage bill, including health insurance	**296.5**	**100.0**
Cost of increasing Wages to $8.30	4.7	1.6
Cost of providing health insurance ($1.25/hour)[1]	3.3	1.1
Cost of the indirect wage push[2]	2.1	0.7
Cost of paid days leave[3]	2.0	0.7
Subtotal (benefits to workers)	**12.1**	**4.1**
Cost of employer-paid taxes on increase[4]	1.0	0.3
Total cost	**13.0**	**4.4**

Source: UC Berkeley (CLRE) Employer Survey

Notes:

1. Health insurance costs are the cost of raising each employee's total compensation to $8.30 per hour with health benefits or $9.55 per hour, less the direct costs of raising workers' wages to $8.30 per hour.
2. Indirect wage push refers to upward wage pressure with the higher floor wage of a living wage. We assumed that wages between $7.65 and $11.44 would be subject to wage push effects.
3. Paid leave costs provide all employees with a leave benefit at the post-ordinance wage rate, taking into account currently received paid leave. Full-time workers are to get 12 days paid leave per year and part-time workers get 6 days.
4. Employer paid taxes are 11.15% of wage bill, including health insurance. Oakland payroll taxes are fixed per employee and are thus unaffected by the living wage ordinance.

Table 5-1a Cost summary, by revenue division

Revenue Division	Total cost $ millions	As percent of old wage bill	As percent of business revenue
Airport	5.84	4.92	1.52
Maritime Port	1.68	1.21	0.25
Real Estate	5.53	14.37	4.31
Total	**13.0**	**4.41**	**1.11**

Table 5-1b Cost summary, by sector

Industry sector	Total cost $ millions	As percent of old wage bill	As percent of business revenue
Air cargo	0.11	0.32	0.10
Passenger airline	1.34	3.63	1.45
Airline services	0.88	4.03	1.21
Security and curbside assistance	1.38	40.0	28.0
Car rental	0.82	9.69	1.94
Parking services	0.55	8.58	6.00
Retail	0.76	10.8	2.15
Restaurant	3.44	28.1	6.56
Hotel	1.11	17.2	5.17
Maritime	0.10	0.08	0.02
Trucking and warehousing	1.41	14.0	4.20
Construction and Manufacturing	0.05	1.91	0.76
FIRE	0.04	0.92	0.37
Professional services	0.06	0.57	0.17
Entertainment and personal services	0.98	29.9	12.0
Total	**13.0**	**4.41**	**1.11**

Notes:
Estimated using labor shares of business revenue derived from the 1998 American Restaurant Association Survey, and the Economic Censuses of Construction, Service Industries, Retail Trade, Manufacturing and Transportation, Communication and Utilities as reported in the US Bureau of the Census web site and the Statistical Abstract of the United States, 1997 and adjusted according to authors' survey.

Table 5-2 Port of Oakland Revenue Divisions: Annual Revenues 1993-1998 (millions $)

Revenue Division	Years ended June 30	Property Lease Rentals[1]	Parking	Dockage and wharfage, and landing fees[2]	Other Operating Revenue[3]	Total Operating Revenue	Net Operating Income (loss)[4]
Aviation	1993	25.9	14.3	7.9	8.8	56.9	4.9
	1994	25.9	15.5	8.4	8.4	58.0	(0.2)
	1995	26.9	17.6	10.2	8.2	62.7	4.6
	1996	28.2	19.1	10.2	8.7	66.1	3.1
	1997	29.3	21.6	9.6	8.4	69.1	6.2
	1998	30.7	21.9	9.9	8.9	71.3	5.4
Maritime	1993	1.7	-	42.6	7.2	51.5	15.6
	1994	1.5	-	43.7	7.1	52.3	11.1
	1995	2.5	-	49.3	8.3	60.1	11.5
	1996	4.6	-	51.9	9.4	65.9	13.8
	1997	6.0	-	53.5	8.2	67.6	11.9
	1998	6.8	-	56.7	9.2	72.6	14.7
Commercial Real Estate[5]	1993	6.7	0.9	-	1.0	8.6	(6.2)
	1994	6.9	0.9	-	1.0	8.9	(5.8)
	1995	7.0	1.0	-	1.0	9.0	(12.1)
	1996	7.5	1.3	-	1.0	9.7	(8.4)
	1997	7.8	1.9	-	1.0	10.7	(8.8)
	1998	6.9	2.6	-	1.1	10.6	(9.0)
Total	1993	34.3	15.2	50.5	17.0	117.0	14.3
	1994	34.3	16.1	52.0	16.5	118.9	5.1
	1995	36.4	18.6	59.4	17.4	131.8	4.0
	1996	40.2	20.3	62.1	19.0	141.7	8.5
	1997	43.1	23.5	63.1	17.6	147.4	9.3
	1998	44.4	24.5	66.6	19.1	154.6	11.1

Source: Port of Oakland Supplementary Schedule of Revenues and Expenses

Notes:
1. Includes airport terminal rental, concessions and other aviation rentals, maritime space assignments and rentals, and lease rentals.
2. Includes dockage, wharfage and related accounts and landing fees.
3. Includes airport field revenue and ground access revenue, cranes, storage and demurrage, marinas and utilities.
4. Net operating income is Total Operating Revenue less Operating Expenses, Depreciation, Amortization and Interest Expense.
5. Excludes Oakland Portside Associates, a subsidiary property management company of the Port of Oakland. According to port officials, Oakland Portland Associates has made a loss during recent years.

Table 5-3 Distribution of firms by increase in business costs

Costs of living wage as percent of business revenue	Percent of firms	Percent of increased costs	Percent of non-managerial employment
0-1%	43.1	5.8	62.9
1-3%	13.8	15.4	12.8
3-6%	20.6	23.7	9.1
6-10%	9.0	19.5	6.6
10-15%	12.6	26.1	7.1
15%+	0.9	9.5	1.4
Total	100.0	100.0	100.0

Source: UC Berkeley (CLRE) Employer Survey

Notes:
For details of business revenue estimates, see Table 5-1.

APPENDIX TABLES

Table A-1 Sample Realization

Survey Result		Firms	
		Number	Percent
Done	Interview completed	123	44
	No employees on site	45	16
Not Done	Refusal	58	21
	Not traceable	22	8
Closed / no longer tenants		30	11
Total		**278**	**100**

Table B-1 Tipped Employees

Occupation	Number of workers	Average wage[1], $/hour	Average wage, with tips[2], $/hour
Waiters, bartenders, cocktail server	420	7.87	13.63
Other restaurant employees	500	8.24	9.04
Valet parking	40	7.19	9.19
Skycaps, curbside assistants	100	5.94	7.94

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Including health benefits. Based on the occupation-weighted sample.
2. See Appendix A for details.

Table B-2 Wage and benefit increases (with and without tip credit)

Wage Category	Without tip credit		With tip credit[1]	
	Average hourly wage increase[2]	Number of workers	Average hourly wage increase[2]	Number of workers
Directly affected workers (earning under $9.55/hr.)	$2.25	2,573	$1.89	2,192
Indirectly affected workers[3] (earning between $9.55 and $11.44/hr.)	$1.16	538	$1.09	855
Total affected workers	**$2.06**	**3,111**	**$1.67**	**3,047**

Source: UC Berkeley (CLRE) Employer Survey

Notes:
1. Tip credit added to employer-provided wage including health benefits. Hourly tips were estimated for waiters, valets, and skycaps. See Appendix A.
2. Average wage increase attributable to the proposed living wage ordinance.
3. Indirectly affected workers are those workers who would benefit from upward wage push pressure with the new higher wage floor.

Table B-3. Cost summary for sectors with tipped employees

Industry sector		Total cost $ millions	As percent of old wage bill	As percent of business revenue
Security and curbside assistance	Without tip credit	1.38	40.0	28.0
	With tip credit	1.04	30.2	21.2
Parking services	Without tip credit	0.55	8.58	6.00
	With tip credit	0.43	6.74	4.72
Restaurant	Without tip credit	3.44	28.1	6.56
	With tip credit	1.98	16.1	3.77
All Sectors	**Without tip credit**	**13.0**	**4.41**	**1.11**
	With tip credit	**11.1**	**3.76**	**0.95**

Notes: See Table 5-1b.

Living Wage Implementation at the Port of Oakland:

One Year Status Report

July 2003

East Bay Alliance for a Sustainable Economy

1714 Franklin Street, Suite 325
Oakland, CA 94612
(510) 893-7106

Executive Summary

On March 5, 2002, Oakland voters approved Measure I, the Port of Oakland Living Wage and Labor Standards Charter Amendment, by a margin of 78%, bringing the promise of a living wage to workers employed by businesses located at the Port of Oakland. The people of Oakland sent a clear message that the Port, as a vital public facility and economic growth engine for the region, should lead the way in using public resources to create good jobs. This report focuses on the Oakland International Airport, assessing to what degree the promise of Measure I has been achieved, and what measures could be taken to more effectively implement the law.

Benefits of the Port of Oakland Living Wage

- An estimated 413 airport workers have received wage increases as a result of the Charter Amendment, improving their ability to provide for themselves and their families.
- Business performance has remained strong since implementation of the Charter Amendment. Concession and other airport revenues have continued to grow in double-digits, and airport passenger traffic is up 16% for the twelve months ending May 31, 2003.

Port Implementation Progress

- The Social Responsibility Division (SRD) has created a good basic framework of rules and regulations for the Charter Amendment, addressing the main areas of implementation: determination of coverage, monitoring, and enforcement.
- The Board of Port Commissioners resolved a dispute over the application of the Charter Amendment to month-to-month leaseholders by mandating compliance of all month-to-month leaseholders.
- SRD has determined that nineteen airport businesses—employing nearly one-fifth of the airport workforce—are covered by the Charter Amendment.

Remaining Challenges

- Out of an estimated 1,620 low-wage workers at the airport who could benefit from the Charter Amendment, over 1,200 (74%) have not yet benefited from a wage increase.
- The Port has exempted several large airport businesses from compliance through a loophole intended to protect small businesses with fewer than 21 workers.

- Only 10 out of 47 month-to-month tenants are currently deemed covered by the Charter Amendment in the Port's monitoring database. Several of the Port's major airlines are not included.

- The majority of firms covered by the Charter Amendment are not providing quarterly payroll data as required by the law; and to date, no enforcement action has been taken against them.

- Most low-wage work at the airport is done through subcontracting of airline services, but the Port has not actively sought to determine coverage, monitor or enforce compliance with the Charter Amendment for subcontracted employers.

Recommendations

- The Port should continue to work with stakeholders to develop a permanent set of Rules and Regulations and other policies needed to implement the Charter Amendment and ensure its application to all those it is intended to benefit.

- Determination of coverage. The Port should take action to close the loophole allowing large employers to take advantage of small business exemptions; effectively monitor and enforce its policy on month-to-month leaseholders; and more proactively determine coverage of subcontracted employers.

- Monitoring. SRD should develop a program of site visits and employee interviews to verify compliance with the Charter Amendment, particularly provision of health benefits, provision of paid time off, and notification of rights under the law, all of which are difficult to verify through review of payroll data. SRD should require employers to report their contributions to health benefits and should develop a method for determining the value of these contributions.

- Enforcement. SRD should notify firms that are failing to comply with the quarterly reporting requirements of the Charter Amendment that they are in violation, give them an opportunity to correct their violation, and then take enforcement action against firms that do not.

Table of Contents

Background: Living Wages and the Port of Oakland

Why This Report?

By approving Measure I in March of 2002, the people of Oakland took a major step in making sure that Port businesses—beneficiaries of one our region's key public resources—support working families. Voters decided that a vital public resource like the Port should have *higher* standards than the private economy, helping working families in the daily struggle for food, shelter, and education, rather than contributing to the region's crisis of economic opportunity.

A little over one year after passage of Measure I, many workers have benefited from the new law, but much is left to be done. We hope that this report can focus attention on how the living wage is improving the lives of working families and also help the Port make progress toward full implementation. This report assesses the benefits gained by workers thus far, the progress made by the Port in implementation, and the obstacles remaining for all workers to benefit from the law's provisions.

This report focuses exclusively on Measure I, which, after passage, became Section 728 of the Oakland City Charter. We refer to the law interchangeably as Section 728 of the City Charter, the Charter Amendment, and the Port Living Wage. This report does not assess the outcomes of the Port's own, contractor-only living wage ordinance, passed in November 2001 and reconciled with the Charter Amendment in October 2002.

Port Living Wage Timeline

December 4th, 2001: City Council puts the Port Living Wage and Labor Standards Charter Amendment, named Measure I, on the March 2002 ballot
March 5th, 2002: Voters adopt Measure I by 78% and it becomes Section 728 of the City Charter
April 25th: Section 728 goes into effect
August 6th: Port requires all month-to-month leases, including rental car firms, to comply with Section 728
October 1st: Port reconciles Section 728 with its own prior, limited living wage ordinance
November 1st: Effective date for all month-to-month agreements to become covered under Section 728

Who is EBASE?

The Port of Oakland Living Wage and Labor Standards is the result of a three-year effort by a coalition of citizen groups to extend the City of Oakland's Living Wage Ordinance (LWO) to the Port that included community, labor and faith-based organizations. EBASE played a key role in facilitating the coalition and providing legal, research and technical assistance. EBASE has also helped pass living wage laws in Berkeley and Richmond and supports economic equity efforts throughout the East Bay. *Behind the Boomtown: Growth and Urban Re-development in the City of Emeryville,* EBASE's most recent major report, documents the risks of economic

development without community and labor standards. Our research publications can be found at www.workingeastbay.org.

Why Living Wage Laws?

Living wage policies, such as Measure I and Oakland's LWO, are important tools in the effort to create greater economic opportunity in the East Bay. A growing divide between low-wage, low-skill service industries and high-wage, high-skill industries is threatening to create an "hourglass economy," with most of the jobs in the top wage tiers or at the bottom.[1] More families than ever struggle to make ends meet with low-wage jobs, while costs of living increase at a faster pace. Even during the peak of the recent economic boom in 2000, with unprecedented levels of employment, poverty in the East Bay remained the same as it was in 1990.[2]

Living wage policies are intended to make sure that public agencies like the Port of Oakland use public resources to create good jobs, instead of subsidizing poverty-level employers. *"The idea of a living wage is simple. Workers should be able to support themselves and their dependents at a basic self-sufficiency standard on the earnings they receive from full-time employment."*[3]

Why the Port of Oakland?

The Port of Oakland, a public agency established by the Charter of the City of Oakland, is often referred to as the economic engine of the East Bay region. Because of its broad and deep economic impact on the region, successful implementation of living wages at the Port can make a significant contribution to improving economic conditions for working individuals and families in East Bay communities. Businesses operating at the Port employ an estimated 17,000 people directly,[4] while Port business activity induces an additional 25,700 jobs in the region.[5] The Port's total economic impact, which includes wages paid to Port-dependent workers and state and local tax revenue, is nearly $7 billion annually.[6]

The Port consists of three divisions: Aviation, Maritime, and Commercial Real Estate. The Aviation Division administers operations at the Oakland International Airport, Maritime administers operations at the Oakland container port, and Commercial Real Estate manages

[1] Greenwich, Howard and Christopher Niedt, *Decade of Divide: Wages and Inequality in the East Bay*, East Bay Alliance for a Sustainable Economy, September 2001.
[2] US Census Bureau, 1990 STF3 and 2000 SF3.
[3] Zabin, Carol, Michael Reich and Peter Hall, *Living Wages at the Port of Oakland*, UC Berkeley Center for Labor Research and Education, December 1999.
[4] Port of Oakland, <http://www.portofoakland.com/portnyou/regional.asp>, accessed July 2003.
[5] Jobs are induced in off-site Port-related business, and their regional suppliers and service providers; additional jobs are generated by Port-dependent workers spending their wages on goods and services.
[6] Port of Oakland, <http://www.portofoakland.com/portnyou/regional.asp>.

commercial developments on Port property, such as Jack London Square. The Commercial Real Estate Division was excluded from Measure I when it was placed on the ballot by the Oakland City Council. As such, the Charter Amendment covers only the Aviation and Maritime divisions.

The Oakland International Airport is the largest Port division, both in terms of employment (over 10,000 jobs[7]) and revenues ($106 million, out of the total Port revenue of $206 million in FY 2002[8]). The airport's regional economic impact of $4.5 billion represents the bulk of the Port's total $7 billion impact.[9] It also has the greatest number of low-wage jobs—an estimated 1,620[10]—at the Port.[11] The airport has experienced tremendous growth in both passengers and cargo over the past decade, and with 25% of the Bay Area market share, ranks as the second largest airport in the region.[12]

Due in part to the growing regional demand for budget/economy travel, a $1.4 billion expansion project is now underway at the airport.[13] The expansion is projected to create 2,300 permanent jobs,[14] many of which will be in the low-wage sectors of airline services, security, passenger assistance, airport restaurants, rental cars, and parking. Because of its concentration of low-wage jobs and its regional economic impact, the airport is the focus of this one-year status report.

The Port of Oakland's maritime operations represent the second biggest revenue source for the Port. The container port employs over 2,000 people, and is the fourth largest in the United States.[15] Jobs at the container port have the highest levels of unionization and pay the highest average wages of the three Port divisions. However, an estimated 241 maritime port workers could be eligible for wage increases as a result of the Charter Amendment.[16] A major expansion project underway at the container port will add a significant number of permanent jobs.

At this time, neither EBASE nor the Port of Oakland has assessed the impact of the Charter Amendment on seaport workers. While it is important to ensure implementation of the living wage for low-wage jobs at the seaport, the airport remains the Port division where the greatest numbers of workers stand to gain from improved implementation measures for the living wage.

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[7] Oakland International Airport, < http://oaklandairport.com/airport_stats.shtml >, accessed April 2003.
[8] Port of Oakland, *Consolidated Financial Statements 2001 & 2002*.
[9] Port of Oakland, <http://www.portofoakland.com/portnyou/regional.asp>.
[10] Zabin et al., 1999. The 1999 figure is adjusted upward by growth in airport employment 1999-2002 (see Methodology, Appendix A).
[11] The Commercial Real Estate Division has the lowest average wage of the Port divisions.
[12] Mara, Janis, "Oakland Airport humming," *Oakland Tribune*, February 7, 2003.
[13] Kiang, Frank, "Monumental airport project will boost economy," *East Bay Business Times*, February 7, 2003.
[14] Port of Oakland, untitled informational brochure, 2002.
[15] Zabin et al., 1999.
[16] Ibid.

Part I: Accomplishments of Measure I

Provisions of Section 728 of the City Charter

Wages and Health Benefits Credit

Under the Charter Amendment, qualifying Port businesses (see "Covered Firms," below, for an explanation of criteria) must pay a wage equal to or greater than the wage set by the Oakland Living Wage Ordinance. As of July 1, 2003, the Port living wage is $11.02 for workers who do not receive health benefits, and $9.58 for workers who receive health benefits from their Port employer. To qualify for the lower wage rate, an employer must demonstrate that it provides health benefits worth at least the difference between this and the higher wage rate (currently $1.44 per hour). The wage rate is adjusted annually by the Bay Area's Consumer Price Index (CPI), which measures inflation in the price of basic goods.

In the section "Benefits to Port Workers," below, we estimate the number of employees whose wages have been raised due to the living wage.

Job Security

Many workers at Oakland International Airport are in a unique situation—they can lose their jobs at any time if their employers lose a contract with an airline. The lack of job security in airport service sector employment adds to the difficulties that result from inadequate wages. The Charter Amendment attempts to prevent displacement of workers by requiring that any qualifying business replacing a prior qualifying business must offer employment to the prior business's workers. This provision ensures that, in addition to receiving living wages, employees of Port businesses will have greater job security.

Notification

Under Section 728, employers are required to post written notice of the living wage in prominent areas of the workplace. Additionally, employers are required to provide all current and newly hired employees written notification of their rights under the living wage policy.

Section 728 requires employers to inform employees earning less than $12.00 per hour of their possible right to the Federal Earned Income Credit (EIC). The Port business must make available to the employee the forms required to secure advance EIC payments from the business. This provision of the Charter Amendment is intended to make the economic benefits of the EIC program accessible to workers.

Monitoring and Enforcement

The policy also establishes procedures for monitoring and enforcing compliance with Section 728.[17] Employers must:

- submit quarterly payroll reports to the Port, including the name of each employee, pay rate, and employer contribution to health benefits, if any; failure to comply results in a penalty of $500 per day
- grant the Port access to work sites and payroll records for monitoring purposes
- grant representatives of the relevant labor organizations access to employees during non-working time and in non-work areas, for the purpose of ensuring compliance with the Charter Amendment

Under Section 728, employees also retain private rights of action, allowing them to bring suit against employers for violations of their living wage rights. Employees claiming such violations are entitled to remedies including back pay and reinstatement. If they win their suit, they can also be awarded reasonable attorney's fees and other legal costs.[18]

How the Living Wage Works

A Landlord Port

The Port of Oakland is primarily a "landlord port," which means that it charges rent and concession fees to operators and other service providers, rather than directly providing port services.[19] The Charter Amendment is implemented by including it as a requirement of leases and other agreements between the Port and Port businesses.[20] Section 728 requirements are applied to businesses that meet criteria established by the law (see below).

Covered Firms

To be covered by Section 728, a firm must qualify as a *"Port Assisted Business"* (PAB).

A PAB is defined as:

- any firm or individual receiving over $50,000 in financial assistance from the Port, **or**
- any firm with over 20 employees that:
  - receives over $50,000 in contract payment from the Port, or
  - pays the Port over $50,000 in rent or license and concession fees over the term of an agreement, or

[17] Charter of the City of Oakland, Section 728.8.D.
[18] Charter of the City of Oakland, Section 728.9.
[19] With the exception of the Port-operated parking facilities and BART shuttle.
[20] Professional services agreements—architectural services, for example—are exempt from living wage requirements.

- pays the Port more than $50,000 over 5 years, if the agreement term is less than one year but may be renewed or extended, or
- holds a subcontract, sublease, or sublicense derived from a Port agreement

These criteria are intended to apply to firms involved in airport or seaport business. Businesses operating on the Port's commercial real estate property are not covered by Section 728.

Implementation Actions by the Port

The Port has taken a number of clear steps to implement the Charter Amendment. After a period of discussion and debate, the Board of Port Commissioners issued an ordinance on August 6, 2002 declaring all businesses with month-to-month Port agreements to be covered by Section 728. As a result, ten month-to-month businesses now provide the living wage to an estimated 347 low-wage workers.

On October 1, 2002, the Board improved the environment for the implementation of the living wage by reconciling the community-supported Charter Amendment with a contractor-only wages policy that the Port had implemented in November of 2001. The Board's ordinance extended the 12 days paid and 10 days unpaid time off of the Port's narrower policy to workers covered by the Charter Amendment, and maintained the Charter Amendment's higher standards and broader applicability.

Worker Profile: Maria Benitez
A Better Future With Living Wages

In 2002, Maria Benitez was earning a little over minimum wage as a driver at two of the rental car firms at Oakland International Airport. Among the challenges of surviving on low wages, including lack of quality time with her family and insufficient income to buy nutritious food, what distressed her most was the fact that neither she nor her husband, Danny, (also a rental car company driver) were able to provide medical insurance for their three children.

Since implementation of the Charter Amendment, life has changed. With increased income came less need to work overtime. Maria gave up her second job and can now spend time with her children, even volunteering in their school. "I can now do what a mother is supposed to do – spend time giving warmth and love to my children." Since living wages were implemented last year at the companies where they work, Maria told us that they bought a computer for their children so that they "can do their schoolwork without waiting hours in line at the library every day – I never thought it would be possible to save enough money to buy my kids a computer." Another important outcome is that the law encouraged Danny's company to offer health insurance to more employees, and now the children have medical coverage.

The Port Social Responsibility Division (SRD) addressed the lack of staff resources committed to Section 728 implementation and monitoring by creating the full-time "Sustainable Wage Specialist" position in May 2003. The Sustainable Wage Specialist will work to monitor and enforce both Section 728 and prevailing wage (PW) regulations.

SRD has developed interim rules and regulations to implement the Charter Amendment. The interim document provides a good basic framework for accomplishing some of the main goals of the Port Living Wage. In addition to the interim rules, the SRD has created many of the basic tools for implementing Section 728. These include: self-evaluation checklists for Port businesses, living wage compliance checklists, self-certification statement forms, and notice posters featuring both the living wage rate and information about the EIC program. SRD has also taken appropriate steps to implement the annual wage increase, indexed to inflation, provided for in Section 728. SRD sent notices and new posters with the adjusted wage rate to Port businesses.[21]

These steps taken by the Port indicate that the Port is proactively seeking to ensure that the Charter Amendment is implemented effectively, and suggest the potential for further measures to make the law more successful and effective.

How Port Workers Have Benefited

In order to understand the impact of Section 728, it is important to understand how various airport firms have been or may be affected.[22] First, there are a total of 83 tenants at the Airport employing 10,700 workers that are potentially affected (See Table 1). Of this total, only 20 firms employing 2,228 workers have been officially identified and notified as "covered" by the Port's Division of Social Responsibility. The remaining 63 firms fall into two categories: 1) firms that the Port has deemed not covered by the Charter Amendment and are entirely exempt from compliance and 2) firms and their subcontractors that have not had their agreements with the Port renewed or amended after April 25th, 2002. In other words, many employers may yet be designated as covered as agreements turn over in the near future.

[21] Interview with Paul Chavez, SRD Sustainable Wage Specialist (telephone), July 9, 2003.

[22] It is difficult to determine the exact number of workers who are benefiting from the living wage for a variety of reasons. First, payroll data collected by the Port from employers is substantially incomplete. Second, it is hard to determine how many workers now making the living wage standard actually received a raise due to the Charter Amendment. We make a best estimate through two methods. First, we estimated the total number of workers making sub-living wages by combining the results of a UC Berkeley Center for Labor Research and Education survey of firms in 1999 (Zabin et al.) with data from the Port's Social Responsibility Division (see Methodology). Second, we spoke with several dozen Port workers and union officials representing workers at low-wage paying businesses to verify if living wages were actually being paid (see Appendix A).

Table 1. Employers Covered By Section 728 and Number of Workers Receiving A Raise

	Firms	# Employees	# Employees Receiving Raise
All Airport Tenants	83	10,700	
Covered Firms	20	2,228	
Covered Firms Employing Low-wage Workers	12	1,401	
Determined As Paying LW	**9**	**710**	**413**
Undetermined If Paying LW	3	691	

Sources: Port of Oakland Social Responsibility Division; Zabin et al., 1999.

Of the 20 firms that have been officially designated as covered, only 12 employ significant numbers of low-wage workers (see Appendix B for a list of all covered firms).[23] These 12 firms employ 1,401 workers, although not all are low-wage. Of these 12 firms, we conclude with a degree of certainty that nine have actually provided raises to a total of 413 employees. Of the 413 employees, 84% work in seven rental car firms and 16% work in two flight services firms. See the text inset above for how one worker's life has been improved by receiving a living wage under Section 728.

Neither the Port nor EBASE has been able to determine whether the remaining three employers who are officially covered by the Charter Amendment and employ low-wage workers are in compliance with the living wage law. The three remaining firms employ another 691 total workers in skycap service and aircraft engine maintenance.

While an improvement in 413 workers' earnings can be pointed to as a success of the Charter Amendment, the number of workers that have received raises so far is only 25% of the total number, 1,620, that we project should receive raises. We discuss this further in the "Obstacles To Implementation" section later in this report.

[23] Employer survey results, Zabin et al., 1999.

"We All Win" With Living Wages at Ogden Ground Services

Ogden Ground Services, Inc. provides baggage and ground handling services for airlines such as Mexicana, Alaskan and American Airlines at Oakland International Airport. One hundred and twenty workers at Ogden perform duties of "cabin cleaners," responsible for water and lavatory service, "rampers," responsible for loading and unloading baggage into the belly of the plane, and "wing-walkers," responsible for guiding the aircraft into and away from the terminals. For this crucial work, many employees were earning as little as $7.00 per hour last year.

Last summer, Ogden workers organized and joined the International Longshore and Warehouse Workers' Union (ILWU) Local 6 in order to improve wages and working conditions. The Port Living Wage was instrumental in helping the workers and the union to negotiate a fair contract. After winning union recognition, Ogden workers and ILWU looked carefully at the law, determined that Ogden was required to comply with the provisions and informed the company.

"*In truth, the company was concerned that it would not be able to withstand the financial burden of the ordinance,*" says ILWU Local 6 Representative Darrin Woodard, "*but through good-faith bargaining and exercising the collective bargaining opt-out clause of the ordinance, we came to an agreement that provides living wages and improved benefits for all Ogden employees as well as protecting their jobs for the long-term... Without the Port living wage ordinance this level of flexibility and benefits would be impossible.*"

Over the life of the contract, ninety full-time workers will receive raises of up to $2.50 per hour, and all workers are getting improved medical coverage for themselves and their families, with a dental plan and retirement benefits not available before. "*With living wages and a contract in place, employee morale and performance is up,*" says Woodard. "*It is benefiting the company, the union – it's been successful all around – we all win with the living wage.*"

Port Business Prospers Under the Living Wage

Our analysis of recent Port business performance indicates that the Charter Amendment has had no discernible negative economic impact on the Port. Long-term growth trends and multi-billion dollar expansion plans at both the airport and the container port suggest that the Port will maintain a strong economic position for the foreseeable future. Even in the current poor economic climate, both the airport and the maritime port show impressive resilience. The Charter Amendment helps to ensure that Port workers will benefit along with business as the Port continues to grow.

The Airport Prospers

The airline industry, and many airports by extension, suffered from plummeting passenger travel after the dual shocks of 9/11 and the economic downturn. Compared to other Bay Area and national airports, however, the Oakland International Airport (OAK) has shown exceptional economic stability (see Table 2). In fact, the Airport had a record year in 2002. Over 12 million passengers chose OAK in 2002, marking the first time in the airport's 75-year history that it averaged over one million passengers per month.[24] OAK's success has continued into 2003: the airport had served 13.3 million passengers in the twelve months ending May 31, 2003, 16% ahead of the twelve-month total in May 2002.

Table 2: Business Performance of Bay Area Airports, 2002

	Passengers (millions)	Change from 2001
Oakland International	12.7	11.5%
Mineta San Jose International	11.1	-15.0%
San Francisco International	31.5	-9.2%

Sources: Oakland International Airport; Oakland Tribune 2/7/2003

In addition to its successful performance relative to regional competitors, Oakland International also outperformed national averages. National passenger travel declined 4.7 percent in 2002,[25] compared to Oakland's 11.5% increase.[26] Cargo traffic increased nationwide by 3.7%, against a 7% increase in cargo traffic for Oakland International.[27]

Part of the airport's long-term success—passenger traffic nearly doubled over the decade between 1990 and 2000[28]—comes from its specialization in low-cost air travel. Low-cost carriers Southwest Airlines and JetBlue Airways represent a majority of Oakland International's traffic. Not only has the presence of these carriers boosted Oakland International's business,[29] but the carriers themselves are stable anchor tenants. Southwest, Oakland's largest passenger carrier, recently reported nationwide profits of $24 million and continues to expand service, while other airlines are posting losses and cutting flights.[30]

The $1.4 billion expansion project currently underway at the airport, expected to create 2,300 additional permanent jobs, completes the picture of an airport that is well positioned for long-term economic success.

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[24] Oakland International Airport, "Record Year for Passenger Traffic at Oakland International Airport in 2002," press release, February 4, 2003.
[25] Departing flights.
[26] Mara, Janis, "Oakland Airport humming," *Oakland Tribune*, February 7, 2003.
[27] Ibid.
[28] Oakland International Airport, < http://oaklandairport.com/airport_stats.shtml >, accessed April 2003.
[29] Mara, Janis, "Oakland Airport humming," *Oakland Tribune*, February 7, 2003.
[30] Adams, Paul, "High-flying Southwest turns $24 million profit," *Oakland Tribune*, April 22, 2003.

Business Within the Airport

The businesses most affected by Section 728 are found in security, passenger assistance, airport concessions, rental cars, parking, and other airline services such as cabin cleaning.[31] Even for these low-wage paying firms, implementation of the living wage has had no discernible negative economic impact. Rather, fluctuation in these services follows trends in passenger travel. After the implementation of the living wage, just as before, sales in these services grow when passenger travel increases, and decline when passenger travel decreases.

Like passenger traffic, revenues in these low-wage service businesses have shown significant growth over the past several years.[32] For example, revenues in concessions (shops and restaurants) and car rentals grew over 31% and 13% respectively in 2002 (see Table 3).

Table 3: Oakland Airport Revenue (in millions of dollars)

	2001	2002	% Change
Concessions (Restaurant, Bar, Shops)	23.4	30.8	31.5%
Car rentals	87.7	99.5	13.4%

Source: Aviation Marketing Department, Oakland International Airport

Both concession and car rental businesses, as they approach the end of the first full fiscal year during which the Charter Amendment was in force, are on pace to beat last year's revenue totals by a wide margin. Cumulative revenue (fiscal year-to-date) for airport concessions, as of May 2003, was nearly 21% higher than in May 2002. For car rentals, cumulative revenue as of May 2003 was 12% above the May 2002 level. This growth in part reflects a recovery from the precipitous drop in travel after 9-11; but current airport statistics also indicate growth *above* pre-9/11 levels: cumulative passenger travel totals for May 2003 are 19% higher than in May 2001, car rental revenues are 9% higher for the same periods, and concession revenues are 51% higher. The past six months have seen a dip and recovery in passenger travel that is in part a seasonal pattern, but may also reflect the sluggish economy and curtailment of travel in reaction to the war in Iraq.[33] As would be expected, concession and car rental revenues have followed the trajectory of passenger traffic over this period.

That these overall growth rates have been achieved in the period after the implementation of the Charter Amendment indicates that the living wage has had no discernible negative impact

[31] Zabin et al. (1999) concluded that these sectors could readily absorb increases in business costs due to the living wage. The study projected increased business costs due to the living wage of only 1% in most of these sectors. In light of the sizeable sales of many of these firms, they could readily absorb the increased costs of the living wage. The study authors indicated that several firms in skycap and airline services would see significantly higher cost increases due to the living wage; the gross amount of these costs, however, would be small enough to allow the service companies to pass it on to airlines, who could easily absorb the increased costs.

[32] Oakland International Airport, Aviation Marketing and Communications, *Monthly Activity Reports*, April 2002—May 2003.

[33] Travel Daily News, <http://www.traveldailynews.com/makeof2.asp?subpage_id=344>, accessed May 2003.

on low-wage airport employers. With a fully implemented living wage, airport workers can benefit along with businesses from Oakland International Airport's strong performance and steady growth.

Maritime Port: Business Growth and Long-term Expansion

An assessment of Port maritime business helps to complete the picture of the economic environment in which the living wage has been implemented.

Like the airport, maritime operations have shown resilience to the economic slowdown. The container port, which is the fourth largest in the nation, saw a 3.9% increase in handling activity in 2002.[34] More recently, the port posted an 18% increase in cargo handled in the first quarter of 2003 compared to the first quarter of 2002.[35]

A major multi-stage expansion project underway at the port is expected to employ thousands of workers, and will help the port maintain or expand Oakland's 11% share of the west coast shipping market.[36]

[34] Port of Oakland, "Port of Oakland Posts 18% Increase for First Quarter," press release, April 29, 2003.
[35] Ibid.
[36] Port of Oakland, *Consolidated Financial Statements 2001 & 2002*.

Part II: Obstacles to Implementation

In the previous section, we showed the number of airport workers benefiting from passage of the Charter Amendment and discussed the effective steps that the Port—in particular the Social Responsibility Division—has taken to implement the law. In this section, we reveal the obstacles that remain to ensure all workers deserving Section 728 benefits are receiving them.

We start here with the fact that only 25% of the airport workers making less than a living wage have received a raise. We estimate that a total of 1,620 workers should benefit from a wage increase when all Port businesses are covered, yet to date only 413 have received a raise.[37] Some of the remaining 1,207 are likely to work for firms whose agreements with the Port or a Port tenant have not been renewed or amended and, thus, not yet entitled to a raise. However, a substantial number of employees work for firms that should be covered and in compliance now.

Below, we explore Port policy and actions in three areas of implementation that have led to fewer workers benefiting from the Charter Amendment. *Determination of coverage* refers to the procedures by which the Port decides whether an agreement with a business, and the characteristics of that business, require the business to comply with the provisions of the living wage. *Monitoring* refers to the steps taken by the Port to track a firm's implementation and compliance with the requirements of Section 728 after the firm is deemed covered by the policy. *Enforcement* refers to actions taken by the Port when businesses deemed covered by Section 728 do not comply with living wage requirements.

Determination of Coverage

Port Actions

The Port initially sent 187 notices of the enactment of the Charter Amendment to potential Port Assisted Businesses (PABs).[38] The Port Social Responsibility Division sent a letter in mid-July of 2002 to the 83 tenants at the airport, notifying them of the enactment and requirements of the Charter Amendment. The letter included checklists and forms for certification of compliance.

The SRD sent letters to the first three businesses it determined to be covered by the living wage on July 15, 2002.[39] Employers were instructed to submit an implementation timeline that would achieve compliance with living wage requirements by July 31, 2002.[40]

[37] We arrived at this estimate by projecting the increase in low-wage workers since the Center for Labor Research and Education's original estimate of living wage-affected workers. We use the Center's estimate of 1,100 and multiplied it by a factor equal to total job growth at the airport since 1999.
[38] Correspondence to EBASE from Lennon Harris, Port of Oakland Social Responsibility Division, May 13, 2003.
[39] Correspondence from Port of Oakland Social Responsibility Division to airport tenants, July 15, 2002.
[40] Ibid.

After substantial public debate, the Board of Port Commissioners voted unanimously on August 6, 2003 to apply the provisions of Section 728 to businesses with month-to-month (holdover) agreements with the Port. Subsequently, the Port sent correspondence to 47 month-to-month businesses , notifying these businesses that they were subject to Section 728, effective October 1, 2002.[41]

Beginning with the August 6th, 2002 meeting of the Board of Port Commissioners, leases, license and concession agreements, right-of-entry and indemnity agreements, service contracts, and several other agreement types have been reviewed for living wage applicability. The findings and determination of coverage are prepared by the Port Social Responsibility Division, and presented in a "Living Wage" paragraph on the agenda report form, which is made available to the public.

The Social Responsibility Division (SRD) has received and reviewed 207 self-evaluation forms from Port businesses.[42] Of these, 110 businesses were determined to meet all of the criteria for living wage coverage *excluding* the 21-employee threshold. SRD has determined that 20 of these businesses meet the 21-employee threshold, and are thus covered by Section 728.[43] SRD is attempting to monitor the remaining 90 businesses to ensure compliance with the living wage should they increase their employment to the 21-employee threshold.[44]

Finally, three businesses requested waiver of living wage requirements. The SRD reviewed and denied these waiver requests.[45]

Obstacles

- *21-employee Threshold Provides Loophole to Big Firms*
  Measure I, as adopted by Oakland voters, featured a 21-employee threshold for living wage coverage. This provision was intended to protect small businesses and local businesses operating at the airport from cost increases that could jeopardize their survival.

  However, during the course of implementation, a dispute has arisen between SRD and proponents of the Charter Amendment over the clause that exempts persons employing less than 21 employees per pay period. SRD's current position is that the term "employees" refers only to persons employed by a firm in "Port-related" employment. Therefore, the Port alleges that only if a firm has more than 20 employees **and that all of those employees**

[41] Correspondence from Steve Grossman, Director of Aviation, Port of Oakland, to month-to-month tenants, August 28, 2002.
[42] Interview with Paul Chavez.
[43] Two recent contracts triggered Section 728, but no data was available at the time of this writing.
[44] Interview with Paul Chavez.
[45] Correspondence to EBASE from Lennon Harris, Port of Oakland Social Responsibility Division, May 13, 2003; Interview with Lennon Harris May 30, 2003.

are in Port-related employment would it qualify as a PAB.

At no time in the consideration of the Charter Amendment did either EBASE, the City of Oakland legal staff who analyzed the proposed ballot initiative, or the City Council members who drafted the final version of the law assert or intend that only firms that employ more than 20 persons in Port-related employment are subject to the law.[46] Nor do we believe that this interpretation is consistent with the intent and the understanding of the voters who approved the law. In fact, the Charter Amendment includes a clause specifically designed to deal with employers, such as janitorial firms, that employ large numbers of workers nationwide, but who may have a limited number of workers engaged in Port-related employment. The Port's interpretation would exempt these employers from coverage.

Based on this interpretation of the law, the Port has granted – incorrectly, in our view – small business protection to at least two large national firms that employ fewer than 21 people in Port-related employment (see below).[47]

Example 1: Mesa Airlines was exempted from Section 728 coverage based on the policy's small business protections on November 5, 2002. Mesa operates code-share flights in 147 cities in 37 states, flying under the banners of United Airlines, America West, and US Airways, among others.[48] Mesa, which is headquartered in Phoenix, Arizona, employs approximately 3,100 people, and had nearly $500 million in sales in 2002.

Example 2: SCIS Air Security Corporation, which provides security for airline catering operations, received a negative living wage determination under the small business protection provisions on October 1, 2002.[49] SCIS, based in Arlington, Texas, alone employs over 500 people and has sales in the $10 to $15 million range.[50] SCIS, however, is a subsidiary of SC International Services, a company wholly owned by Lufthansa's LSG Sky Chefs.[51] LSG Sky Chefs, a dominant global airline catering company, has nearly $3.5 billion in combined annual revenues and employs over 36,000 people.[52]

A further danger of this interpretation of the Charter Amendment is that it creates an incentive for businesses to attempt to evade coverage of the law by misrepresenting the number of employees engaged in Port-related employment. It is obviously far more

[46] EBASE communication with Barbara Parker, Office of the Oakland City Attorney; and Oakland City Councilmember Danny Wan.

[47] For example, if a company conducts $300,000 worth of business with the Port, and employs 500 people nationwide, it would be covered by the living wage. The company employs only 19 people who work 25% or more of their time on tasks related to the Port of Oakland. This business would be required to observe the living wage *only* for these 19 Port-related workers.

[48] Mesa Air Group, Inc., 2002 10-K report.

[49] Port of Oakland, Board of Port Commissioners, Agenda Report, October 1, 2002.

[50] Hoover's Online, "Scis Air Security Corporation," <http://premium.hoovers.com>, accessed July 2003.

[51] Lufthansa Service Holding AG *2001 Group Annual Report*.

[52] Sequentra Solutions, <http://www.sequentra.com/news/skychefs_page.asp>, accessed July 2003.

difficult for SRD to verify and monitor the number of employees engaged in Port-related employment than the total firm size.

- *Lack of Subcontractor Determinations Leaves Holes* Large airport businesses often subcontract lower skilled services, a situation clearly covered in Section 728. However, the SRD acknowledges the lack, to date, of an effective program to detect and determine subcontractor coverage, making it likely that many subcontractors are "flying below the radar."[53] Currently, SRD relies on contractors to ensure subcontractor compliance with living wage requirements and informs them of this responsibility through their notification of determination. However, some subcontractors have been resistant to implement living wages for fear of losing airline service contracts to competitors not observing Section 728 requirements.

- *Month-to-month Tenants Absent from Coverage List* On October 15th, the Port notified 47 businesses holding month-to-month agreements of their obligations under Section 728. Only 10 of these businesses have been determined covered and are monitored by the Port SRD. These 10 businesses, mainly car rental companies, employ an estimated 347 low-wage employees who have received wage increases as a result of the Charter Amendment, representing a large share of the employees who have directly benefited from the policy.

  Among the remaining 37 businesses operating through month-to-month agreements with the Port are many major airlines, such as Southwest Airlines, United Airlines, and Delta

Workers at Sky Chefs Waiting for Living Wage

Although clearly covered by the living wage Charter Amendment, airline industry giant LSG Skychefs has yet to comply with the living wage provisions. Skychefs is the sole catering company for all airlines at Oakland International and employs 64 workers, half of whom make less than the living wage. Skychefs should have been deemed covered after their license agreement with the Port lapsed into a month-to-month status in December 2002. Four month earlier, the Port Commissioners passed a resolution to ensure that all month-to-month agreements were subject to the Charter Amendment henceforth. Yet, the Port has not officially included Skychefs in its list of covered employers and the company has stalled for months in responding to workers' demands to receive the living wage. LSG, the parent company of Sky Chefs, reported $3.1 billion in revenues last year, yet this delinquent employer has not faced any enforcement action from the Port.

Worker Profile: Janet Tran
Janet has worked at Sky Chefs in Oakland for 5 years and in March of this year was chosen as Employee of the Month. She and her husband are supporting three young children. She makes $8 an hour working in cold foods assembly. Out of her wages, she makes an employee contribution of over $80 per month to provide medical insurance for her family.

"I need a living wage because all costs are too much and even going up. Housing, clothes for my kids, and gas are all increasing. A living wage is really about simply paying the bills at the end of the month. I hope that my family doesn't have to wait much longer for the living wage."

[53] Interview with Lennon Harris (telephone), May 19, 2003.

Airlines.[54] While these airlines do not directly employ large numbers of low-wage workers, they subcontract a significant amount of low-wage work, including in-flight catering, plane cleaning, fueling, baggage handling, and skycap service.

Monitoring

Port Actions

Effective monitoring procedures are key to the full implementation of the Charter Amendment. The Port has taken some steps toward monitoring covered firms. SRD has developed and maintained a database of firms deemed to be covered by Section 728 and updates its records for those covered firms that comply with the quarterly payroll reporting requirement. The Sustainable Wage Specialist has also begun to work with covered businesses to audit the health benefits credit.[55]

Obstacles

At this time, there are serious gaps in the Port's monitoring of Section 728-covered firms. The database of covered businesses is substantially incomplete, due in part to the non-cooperation of some covered businesses.[56]

- *Lack of Auditing*

  The Port does not audit covered businesses to check for compliance with the provisions of the Charter Amendment. Monitoring of payroll data alone cannot determine compliance with the important non-wage provisions of Section 728. Periodic site visits and employee interviews are needed to ensure that paid time off, notification (see below), and other requirements of the Port Living Wage policy, in addition to wage levels, are observed.

  The lack of proactive monitoring efforts has allowed some airport businesses to ignore notification requirements; consequently, workers from at least one airport business report that employees are not aware of their right to paid and unpaid time off, or of their other rights under the Charter Amendment.[57]

  The Charter Amendment clearly requires covered businesses to post Section 728 notices in the workplace, and to notify employees individually of their rights under the Amendment. Port workers must be made aware of their rights under Section 728 if they are to benefit fully from it. According to SRD, however, there has been no comprehensive monitoring of compliance with either of the required notification provisions.[58]

[54] Document prepared by Airport Properties Department, *Holdover Agreements*, August 16, 2002.
[55] Interview with Paul Chavez.
[56] Port of Oakland Social Responsibility Division, *SRD Living Wage Log of Covered Businesses*, May 13, 2003.
[57] EBASE communication with Port workers.
[58] Interview with Lennon Harris.

- *No Reporting on Health Benefits Credit*
  Monitoring is also required to ensure that employers paying the lower tier of the living wage are providing health benefits equivalent to or greater than $1.44 per hour (the difference between the higher and lower living wage rates). While the Social Responsibility Division has recently begun to request health benefits information from employers receiving the health benefits credit, such monitoring has to date been inadequate and incomplete.[59] Of the 1,401 employees in low-wage paying firms covered by the Section 728, 1,042 (74%) work in companies for which the SRD has not monitored the use of the health benefits credit.[60]

Enforcement

Port Actions

The Board of Port Commissioners' ordinance declaring month-to-month agreements to be covered by the Charter Amendment was enforced through letters sent to 47 month-to-month employers on August 28, 2002.[61] This was following a period of contention, where many month-to-month tenants were claiming exemption under ambiguous language in the law. The letters were, however, unambiguous, offering month-to-month businesses an amended lease that would clarify their obligation to comply with the law; the letter also served as notice that, if the business refused the amended contract, the Port would unilaterally amend the agreement, with the same effect.[62]

Obstacles

A lack of appropriate enforcement measures for non-complying employers has slowed the implementation of the Charter Amendment at the Port. The majority of the businesses, 11 out of 20, that have been determined to be covered by the law do not comply fully with the quarterly reporting requirements of the policy.[63] Eight of these firms are low-wage paying businesses, employing approximately 1,042 workers. As a result of noncompliance with reporting requirements, it is not possible to determine implementation of wages or other Section 728 benefits for nearly half (49%) of the 1,401 low-wage workers now covered by the law.[64]

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[59] Ibid.
[60] Port of Oakland Social Responsibility Division, *SRD Living Wage Log of Covered Businesses*; Zabin et al., 1999.
[61] Correspondence from Steve Grossman, Director of Aviation, Port of Oakland, to month-to-month tenants, August 28, 2002.
[62] Ibid.
[63] Port of Oakland Social Responsibility Division, *SRD Living Wage Log of Covered Businesses.*
[64] Port of Oakland Social Responsibility Division, *SRD Living Wage Log of Covered Businesses*; Zabin et al., 1999.

Problems With Port Interim Rules and Regulations

The Port Social Responsibility Division has developed Interim Rules and Regulations (IR&R) for the Charter Amendment. These Rules and Regulations represent a positive first step towards clarifying issues left ambiguous by the Charter Amendment and developing procedures for implementation of the law. EBASE commends the work of the SRD and/or Port Attorney staff who developed this interim set of policies in sorting through the complex issues, incorporating feedback from advocates and attempting to address major issues of implementation.

However, there are several aspects of the IR&R that are either inadequate or counterproductive. Some of these problems reflect issues discussed above, while other provisions have not yet presented barriers to implementation but could in the future. Below we identify provisions that should be improved. Since SRD has expressed a willingness to discuss changes to the IR&R based on public feedback, we are hopeful that many of these issues can be resolved expediently.

A Failure of Self-Certification: OneSource Building Services

OneSource Building Services provides aircraft cabin and terminal janitorial service at Oakland International Airport as a subcontractor of Southwest Airlines. According to Port documents, OneSource received a new Right of Entry agreement with the Port valued in excess of $50,000 a year on August 6, 2002. Using the procedures provided by the Port, OneSource self-reported that it employed fewer than 21 employees and subsequently was exempt from the living wage requirement. Port staff did not investigate until the union representing workers at OneSource, Service Employee International Union Local 1877, questioned the company's claim. Port staff investigated and determined that the company had misrepresented the number of workers and was in fact in violation of the law. Even so, the company did not begin paying living wages to the workers until March of 2003, resulting in the loss of tens of thousands of dollars to 36 employees. These back wages have not been recovered to date. The primary contractor, Southwest Airlines, was not held responsible for OneSource's violation of the law, as the Port's Interim Rules and Regulations dictate.

- *Coverage determination*. The IR&R codify and expand application of the exemption for businesses with 20 or fewer employees *in Port-related employment*. As discussed above, we believe this is a misinterpretation of provisions intended to exempt small businesses.

  In addition, the IR&R create another potential loophole. The term "Port Aviation or Maritime Business" was introduced to the Charter Amendment in order to exclude firms doing business in the Port's Commercial Real Estate Division from coverage by the Charter Amendment. However, the "clarification" of the definition in the IR&R goes far beyond this intent and is sufficiently ambiguous to suggest that only firms doing the majority of their *firm-wide* business in aviation or maritime services will be considered Port Aviation or Maritime businesses. Obviously, this is not the intent of the law.

- *Self-evaluation / self-certification.* The IR&R presume that determination of coverage will be made primarily by employer self-certification; i.e., that SRD will rely upon employers' declaration that the Charter Amendment does or does not apply to them. It is unclear from the IR&R whether SRD will verify this assertion even to the extent of checking payroll records to verify that firms do, in fact, have fewer than 21 employees. Self-certification can be a starting point for determination of coverage. However, even presuming that employers have no incentive to misrepresent the applicability of the Charter Amendment to their business, determinations of applicability can be complex and should be verified by staff familiar with the provisions of the law. As discussed above, payroll review should be supplemented by selective site visits and employee interviews.

- *Public oversight.* The voters of Oakland passed the Charter Amendment, and the public therefore has an interest in seeing that the law is effectively implemented. The IR&R does not specify under what circumstances SRD must provide public notice of determinations and enforcement actions, public access to hearings, etc. Furthermore, the IR&R explicitly bars SRD from investigating complaints of noncompliance by anyone other than an affected worker—for example, by a labor union. By contrast, the Charter Amendment allows "any person" to pursue a private right of action. This raises the risk that in such cases parties will simply file suit because they have been denied access to administrative means of resolving complaints. While limiting the complaint process thus may be legal, it seems to create an unnecessary risk and does not seem to serve a valid policy purpose. Finally, as discussed in the Recommendations section to follow, we believe that creation of a public advisory committee would proactively address problems with the Charter Amendment and strengthen the policy.

- *Timelines for compliance.* In several instances, the timelines for addressing questions of coverage and problems of compliance are either not specified or are set out as discretionary. We believe that swift resolution of disputes is in the interest of all parties, and that the best method of achieving this goal is clear and firm timelines.

- *"Amended to benefit" clause.* The IR&R interprets the provision of the Charter Amendment stating that contracts are covered when they are "amended to benefit" a Port-Assisted Business in a manner that may exclude firms whose contract value exceeds the thresholds in the law.

- *Subcontracting.* The IR&R places with primary contractors the responsibility for determination, monitoring, and enforcement of the Charter Amendment for subcontractors. This presents many of the same problems as those associated with "self-certification," discussed above. While it makes sense to hold primary contractors accountable for

providing SRD with information about their subcontractors, this information should be evaluated, verified and used as the basis for a determination of coverage by SRD.

- *Cumulative value/aggregation of contracts.* In cases where employers have multiple agreements with the Port, the IR&R considers the aggregate *number of employees* of these contracts but does not consider the aggregate *value* of these contracts in determining whether the employer is covered by the Charter Amendment. This could permit some firms with multiple agreements with the Port to evade coverage. This is of particular concern in cases of subcontractors, who may provide services to multiple Port-Assisted Businesses.

Part III: Recommendations

As described in Part I, the Charter Amendment has covered 2,228 workers, bringing wage increases to at least 413 of them. This is due in part to the efforts of SRD to determine coverage for, enforce, and implement the law. However, as described in Part II, it appears that a substantial portion of the workers entitled to receive wage increases and other benefits under the Charter Amendment have not received them. This is due in part to shortcomings in determination of coverage, enforcement, and implementation of the law. The following Recommendations summarize the actions that EBASE recommends SRD and the Port take in order to ensure that the benefits of the Charter Amendment go to those workers who are entitled to them, in accordance with the intent of Oakland voters.

Determination of Coverage

21-Employee Threshold

As discussed in "Determination of Coverage: Obstacles," the Port's current interpretation of the size threshold and exemption language allows large national employers to take advantage of provisions intended to protect small and local businesses. It also creates a risk that firms will misrepresent the number of employees engaged in Port-related employment. This loophole is codified, and indeed expanded, throughout the Port's Interim Rules and Regulations. The Port should close this loophole, either through revision of the Rules and Regulations or through a resolution by the Board of Port Commissioners.

Month-to-Month Agreements

The Port policy on month-to-month agreements adopted in August of 2002, as well as the Interim Rules and Regulations developed by the Social Responsibility Division, address the issue of coverage of month-to-month agreements by the Charter Amendment. However, these policies must now be effectively monitored and enforced.

Subcontractor Coverage

Because a substantial amount of service work at the Port is carried out by subcontractors of the major airlines, it is critical that the Port ensures that all covered subcontractors are complying with the Charter Amendment. The Port should take more active steps in ensuring that primary contractors are appropriately determining coverage for their subcontractors and enforcing compliance with the law.

Monitoring

Auditing

As discussed above, ensuring full compliance with major provisions of the Charter Amendment requires proactive measures beyond review of payroll data. Compliance with posting and individual notification, provision of paid time off, and verification of health benefits provisions can only be monitored effectively through site visits and interviews with employees. SRD should develop criteria for targeting in-person verification in order to conduct verification effectively using existing staff resources.

Health Benefits Credit

The provisions of the Charter Amendment allowing an employer to claim a health benefits credit are intended to recognize the actual value of employer contributions to health insurance. If employers claim this credit, there should be verification that employers are actually providing a level of health coverage equivalent to the wage credit. SRD should require employers to report their contributions to health benefits and develop a method for determining the value of these contributions.

Public Oversight. The permanent Rules and Regulations should specify when and how the Port will provide public notice of determinations and enforcement actions, public access to hearings, etc. The permanent regulations should not prohibit SRD from investigating complaints of noncompliance initiated by third parties other than affected workers. Finally, we recommend the creation of a public advisory committee on the living wage that brings together a range of stakeholders—including Port staff, businesses, workers and their representatives and representatives of the public at large. Government agencies, such as the County of Santa Cruz and the City of Boston, who have created such bodies have found that they can serve to strengthen their living wage policies and proactively resolve problems as they arise.

Enforcement

Quarterly Reports

At present, review of quarterly reports is the primary mechanism for SRD to verify that firms are meeting their obligations under the Charter Amendment. Therefore, timely and accurate quarterly reporting is essential to ensuring that the Charter Amendment is implemented. As discussed above, the majority of covered firms are not fully complying with reporting requirements at this time. SRD should notify firms that are failing to comply with the reporting requirements of the Charter Amendment that they are in violation, give them an opportunity to correct their violation, and then take enforcement action against firms that do not.

Appendix A: Methodology

This report utilizes data from two main sources:

- Port of Oakland documents.
  The Port website, agenda reports and staff provided information on:
  * business performance data (airport passenger traffic, concession revenues, and car rental revenues);
  * employment figures for the Port's Aviation and Commercial Real Estate divisions;
  * and the Port's economic impact on the region.

- *Living Wages at the Port of Oakland,* University of California at Berkeley Center for Labor Research and Education, 1999.
  We relied on this study for employment estimates for covered businesses, when not available from the Port. We especially rely on data and analysis from a survey of Port employers conducted by the Center for this study.

Analysis By Findings

1) *1,620 airport workers are eligible for a wage increase.*
This estimate is derived from the 1999 UC Berkeley study's estimate of workers that would benefit from a living wage policy in 1999. The study surveyed employers and used available industry data to determine how many airport workers made less than the Oakland living wage rate at that time. The study estimated that 1,100 workers fell into this category. Because the airport has grown since 1999, we adjusted this estimate upwards by a growth factor. The factor is simply the change in overall employment from 1999 (7,265) to 2003 (10,700), or 47%. We assume that the low-wage employment, which includes many basic services at the airport, increased at the same rate as overall employment.[65] Keep in mind that this total number of eligible employees includes the workers that have already received a living wage increase (see below).

2) *413 workers have already received wage increases.*
To arrive at this figure, we first obtained a spreadsheet of all firms that the Port SRD had determined as covered. (These businesses were notified at some point over the last year that they must comply with the Charter Amendment provisions and have to submit quarterly payroll data to the Port.) The spreadsheet contained 20 firms. Using the UC Berkeley study data, we then determined that 12 of the 20 firms employed significant numbers of low-wage workers. Through direct communications with workers in most of these businesses, we

[65] Not all airport companies expanded equally over this period. Approximately 100 to 150 very low-wage security screeners lost their jobs after the Federal Transportation Security Administration assumed screening duties from private firms. Also note, however, that our estimates of sub-living workers may be considerably larger if we did not assume that wages rose at the same pace as overall inflation.

determined with certainty that nine out of those 12 firms had raised wages as required. Neither EBASE or the Port were able to determine if the remaining three had complied with the wage provisions. See appendix B for a list of all these employers.

At this point, two more steps were required to arrive at a number of workers receiving a wage: 1) we needed to determine total employment in each of the nine living wage-paying firms and 2) we needed to determine the proportion of total workers that were making less than the living wage before compliance.

For total employment in each of the nine firms, the Port's spreadsheet provided numbers for four employers. We used the UC Berkeley data to estimate three and communications with union representatives for the remaining two. For the percentage of sub-living wage workers in those nine firms we used an estimate of sub-living wage jobs by industry in the UC Berkeley study. For example, the study found that in the car rental industry, 63% of all employees were making less than the living wage. We applied these percentages to the total number of employees to arrive at our best estimate of workers that have received a raise since the effective date of the Charter Amendment.

Appendix B: Businesses Deemed Covered under the Charter Amendment

Table B.1: Businesses Deemed by the Port to be Covered under the Charter Amendment

Businesses without low-wage workers	# Employees	Low-wage workers?			Month-to-month
Airborne Express Freight Corporation	100	no			no
America West	47	no			no
Arinc, Inc.	n/a	no			no
Evergreen Aviation Ground Logistics Enterprises, Inc.	262	no			no
JetBlue Airways Corporation	123	no			no
Kaiserair, Inc.	156	no			yes
Pacific Maritime Association	63	no			yes
Ryan International Airlines, Inc.	73	no			no
Businesswith low-wage workers (wage raise confirmed)	**# Employees**	**Low-wage workers?**	**% Low-wage**	**# Employees receiving raise**	**Month-to-month**
Avis Rent A Car System, Inc.	158	yes	63%	99	yes
Budget Rent A Car Systems, Inc.	41	yes	63%	26	yes
Dollar Rent A Car Systems, Inc.	129	yes	63%	81	yes
Enterprise Rent A Car Company of San Francisco	34	yes	63%	19	yes
Hertz Corporation	90	yes	63%	56	yes
National Car Rental System, Inc.	80	yes	63%	50	yes
Ogden Ground Services, Inc.	120	yes	25%	30	no
One Source Building Services, Inc.	36	yes	100%	36	no
Thrifty Car Rental	25	yes	63%	16	yes
Businesses with low-wage workers (no wage raise confirmed)					
Huntleigh USA Corporation	170	yes	100%	?	no
Rolls-Royce	500	yes	?	?	no
Superior Aircraft Services, Inc.	21	yes	100%	?	no
Total	**2,228**			**413**	

Sources: Port of Oakland; Zabin et al.; worker interviews

EXAMINING THE EVIDENCE

THE IMPACT OF THE LOS ANGELES LIVING WAGE ORDINANCE ON WORKERS AND BUSINESSES

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An Assessment of Methods and Findings of the New York City Economic Development Corporation's Living Wage Study

May 12, 2011

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1. Overview

In this research brief, we provide an initial assessment of the executive summary of the New York City Economic Development Corporation (EDC)'s living wage study, *The Economic Impact on New York City of Proposed Living Wage Mandate: Key Findings*, released May 9, 2011 (hereafter "the EDC "study summary"). The study is being conducted for EDC by Charles River Associates and a staff of consultant economists.

We emphasize that the executive summary provided by EDC omits many details about the methodology and data used and the basis for its conclusions, making a definitive assessment impossible at this time. However, even the limited explanation presented in the executive summary reveals a series of fundamental errors in methodology and analysis.

In our assessment, these errors render the study fundamentally flawed. The assessment of real estate market impacts is based on a mischaracterization of the proposed law, and focuses on a subsidy program, the Industrial and Commercial Abatement Program (ICAP), that the proposed law does not in fact cover. The assessment of labor market impacts is based on a methodology developed by Dr. David Neumark that has been demonstrated to be unreliable for evaluating the impact of living wages laws. Since these two sections constitute the bulk of the EDC study, our current assessment, based on the executive summary, is that the study is an inaccurate and unreliable guide for policymakers.

We elaborate on each of these points below.

2. Errors in the Real Estate Market Impact Analysis

The "Real Estate Market" section of the executive summary attempts to project the effect of a New York City living wage policy on decisions by developers or other businesses to go forward with new projects.

However, several serious flaws in the methods used and in the analysis are evident.

First and most important, the analysis erroneously focuses on New York's ICAP as-of-right tax abatement program under which many small projects in the outer boroughs receive subsidies. However, this subsidy program would not be covered by the proposed law. While the current draft of the bill would cover the very limited number of as-of-right subsidies that the state legislature has authorized New York City to regulate, the legislature has not authorized the City to regulate ICAP. Neither the City Council Counsel nor the New York City Corporation Counsel has ever taken the position that the legislature has authorized the City to do so.

As a result of this significant mischaracterization, the modeling in the EDC study focuses on development projects that will not be covered by the proposed law – and that differ significantly from projects that will be covered. Instead, the EDC study should have focused on the large mixed-use development projects like Yankee Stadium, the Bronx Gateway Mall, Willets Point, Hudson Yards and Coney Island that receive the lion's share of the City's discretionary subsidies and that constitute the core coverage of the proposed living wage policy.[1] This critical misconception renders the study's job loss simulations inaccurate. This is because while the City's other subsidy programs do not affect enough jobs and worksites to amount to an appreciable share of the city's labor market, the broad ICAP program almost certainly does. To illustrate, while the EDC reported approximately 516 IDA/EDC projects for fiscal year 2010, there are approximately 6,918 ICAP/ICIP exempt properties across New York City.[2]

Second, the real estate impact models are based on the assumption, from the outset, that subsidized development projects will not go forward without those subsidies – an assumption that in effect pre-determines the finding that a wage mandate would substantially alter developers' cost/benefit analysis. However, David Neumark's own research (of California's enterprise zone program) has found that economic development subsidies "have no statistically significant effect on either employment levels or employment growth rates."[3] That finding is consistent with conventional industry wisdom that developers and businesses typically make expansion decisions based on other factors and then, once they have decided to move forward, investigate what subsidies they may be eligible for. As Mayor Bloomberg himself has opined, "any company that makes a decision as to where they are going to be based on the tax rate is a company that won't be around very long."[4]

Third, because of the assumptions of the study's real estate impact model and its failure to focus on discretionary subsidy programs, the study fails to test for the possibility that a living wage policy would function as a tool to help the City target development resources to different types of development projects, namely those that include "high road" tenants paying a living wage. Experience from Los Angeles suggests that this is frequently how business assistance living wage policies function: to steer subsidy dollars towards projects that include businesses like Costco, Trader Joe's or unionized hotel chains that already pay a living wage.

Fourth and most surprisingly, the study failed to examine the most important evidence of how wage standards affect development projects: the actual experiences of cities like Los Angeles, San Francisco and

New York in extending wage standards to major projects. (While New York does not currently have a living wage policy for economic development, it has, on a project-by-project basis, extended wages standards to various categories of workers on a range of development projects since 2005.) EDC and its researchers should have conducted an in-depth series of interviews with the developers, employers and city agencies affected by those cities' policies, as they were urged to do at the start of the study. These case studies were repeatedly recommended to EDC's researchers as especially appropriate for close examination. The EDC study team's failure to examine these and other projects that have actually been the subject of wage standards is a glaring omission.

Finally, we should flag that even in the executive summary, there is evidence of careless use of data that alone should make policymakers question the study. For example, the real estate impact analysis makes unsupported and implausible statements about the costs of monitoring and compliance, asserting that those costs are substantial, and that they exceed the value of any financial assistance that would be offered. Similarly, the impact analysis depends on a tremendous over-statement of retail employment in the outer boroughs at 560,000; but according to the NYS Labor Department, total retail employment in New York City is a little over 300,000, with only about 160,000 in the four boroughs outside of Manhattan.

3. Errors in the Labor Market Impact Analysis

The "Labor Market Impacts" section of the executive summary attempts to project the effect of a New York City living wage policy on employment at covered economic development projects.

However, for this portion of the study, the researchers used a methodology drawn from Dr. Neumark's past research that has been shown to be unreliable.

Specifically, the study attempts to glean from regional employment data[5] the impact that business assistance living wage laws in other major U.S. cities have had on employment levels in those cities, using a methodology for assessing employment effects developed by David Neumark and Scott Adams in a 2003 study.[6] Claiming that such analysis shows reduced employment levels in other cities, the report then simulates a corresponding reduction in employment under the New York City proposal.

However, Dr. Neumark's methodology is fundamentally flawed. Built into it is the unsupported and inaccurate assumption that nearly all low-wage workers – typically 80 percent or more – in the U.S. cities with business assistance living wages that he studies are potentially covered under the wage laws. Why does he assume this? As he explains in his 2003 study, "For workers in cities where businesses receiving financial assistance from the city are covered, virtually any nongovernment worker potentially may work for a company that is subject to the legislation. Therefore, we characterize all private-sector workers as being potentially covered."[7]

However, in cities that have adopted and implemented business assistance living wage laws, typically only a very small number of projects and businesses have been covered. Consider, for example, the case of Los Angeles. Dr. Neumark's 2003 study assumed that in Los Angeles, 90 percent of low-wage workers would be covered by that city's living wage law. However, a careful study of how many businesses were actually covered by the living wage law after it passed, combined with telephone interviews with city officials in charge of implementing the ordinance, established that less than one percent of the Los Angeles' low-wage workforce had actually been covered by the law.[8]

What this means is that Dr. Neumark's methodology essentially looks for living wage effects among workers *who were almost entirely not covered by the provisions of the law*. As a result, his model detects other trends that are occurring in municipal and regional labor markets and wrongly attributes them to living wage policies. In reality, when an accurate definition of living wage policy coverage is used and applied across all cities with living wage laws, including Los Angeles, researchers find that there is *no* statistically meaningful effect on overall employment in these cities.[9]

Other economists who have studied living wage law impacts in Boston, Los Angeles and San Francisco have used a better methodology. Specifically, they directly surveyed affected employers and workers and compared this affected group with a control group of those who were not affected by the measures. The studies using this alternative methodology have not found any negative overall employment effects from living wage policies.[10]

Finally, the most recent study of the impact of business assistance living wage laws, published in 2010, used a more detailed dataset and similarly found no evidence of any negative employment impacts.[11] This most analysis provides a further strong refutation of the job losses that have been estimated in the EDC study summary.

In short, because the EDC study uses the same inappropriate methodology as Dr. Neumark's previous research, it is not capable of detecting what impact, if any, business assistance living wage laws have had in other cities – and by extension, are likely to have in New York City.

* * *

To summarize, the assessment of real estate market impacts in the EDC study summary focuses entirely on a subsidy program, ICAP, that the proposed law does not in fact cover and that operates very differently from business subsidy programs that are covered. The assessment of labor market impacts is based entirely on a methodology that has been shown to be fundamentally flawed. As a result, the purported findings regarding potential job losses are unsupported by defensible empirical foundations. Taken together, it is our current assessment that these basic errors render the study invalid, and therefore unreliable as a guide for policymakers in assessing the merits of the proposed living wage law.

[1] For background on the problem of large development projects creating low-wage jobs in New York, see Fiscal Policy Institute, Good Jobs New York and National Employment Law Project. "An Overview of Job Quality and Discretionary Economic Development Subsidies in New York City (Feb. 2011), http://www.nelp.org/page/-/SubsidizedEmployersCreateLowWageJobsReport2011.pdf?nocdn=1

[2] Sources: N.Y.C. Local Law 48 Report for FY2010; N.Y.C. Dep't of Finance website of exempt properties.

[3] Jed Kolko and David Neumark, "Do California's Enterprise Zones Create Jobs?" Public Policy Institute of Calif. (2009), http://www.ppic.org/content/pubs/report/R_609JKR.pdf.

[4] "The Big City; An Outsider Comes Inside To Run Things." N.Y. Times (Nov. 8, 2001).

[5] The U.S. Census Bureau's Current Population Survey (CPS).

[6] EDC study, Table 3, citing David Neumark and Scott Adams (2003). This is, presumably, referring to their paper, "Do Living Wage Ordinances Reduce Urban Poverty." *Journal of Human Resources*, Vol. 38 (3), pp. 490-521 (2003).

[7] Neumark and Adams (2003), p.508.

[8] David Fairris, David Runsten, Carolina Briones, and Jessica Goodheart. "Examining the Evidence: The Impact of the Los Angeles Living Wage Ordinance on Workers and Businesses." Los Angeles Alliance for a New Economy (2005); and, Mark Brenner, Jeannette Wicks-Lim and Robert Pollin. "Detecting the Effects of Living Wage Laws: A Comment on Neumark and Adams," in A Measure of Fairness: The Economics of Living Wages and Minimum Wages in the United States. Cornell University Press (2008).

[9] Mark Brenner, Jeannette Wicks-Lim and Robert Pollin. "Detecting the Effects of Living Wage Laws: A Comment on Neumark and Adams," in A Measure of Fairness: The Economics of Living Wages and Minimum Wages in the United States. Cornell University Press (2008).

[10] See the studies by Brenner, Fairris and Reich et al. in *Industrial Relations*, January 2005, "Special Issue: the Impacts of Living Wage Policies." This issue also contains a paper by Adams and Neumark that finds quite different results from the 2003 model used in the report.

[11] William Lester & Ken Jacobs. "Creating Good Jobs in Our Communities: How Higher Wage Standards Affect Economic Development and Employment." Center for American Progress (2010), http://www.americanprogress.org/issues/2010/11/living_wage_cap.html.

Higher wages lead to more efficient service provision

The impact of living wage ordinances on the public contracting process

by Jared Bernstein

The purpose of this document is to explore questions of competitiveness engendered by recent living wage ordinances. The central focus is whether and to what extent the introduction of a living wage ordinance in a locality would be expected to either reduce the competitiveness of the contracting process or introduce economic distortions into the local economy. Both the theory and the evidence point to the following conclusions:

- Any regulation that affects all firms puts no one firm at a competitive disadvantage.
- No current living wage ordinance covers more than 1% of its locality's workforce. Similarly, for most firms, the increase in labor costs is expected to be less than 2% of total production costs. Therefore, no credible analysis could argue that the policy will have a significant negative impact on a locality's economy.
- It is reasonable, however, to ask if living wage ordinances might have a negative sectoral effect; the evidence from existing living wage evaluations and the economics literature on the impact of exogenous (i.e., policy-induced) wage increases fails to find evidence of these effects.
- The most likely explanations for these results are 1) like living wage ordinances, existing wage policies tend to affect a small share of the workforce, and 2) firms tend to absorb the higher costs through efficiency gains.
- Such efficiency gains are realized through lower turnover, vacancy, and accident rates, and improvement in the quality of the low-wage workforce, all of which lead to higher quality provision of goods and services.

The rest of this document discusses these findings in greater detail. The first section asks what economic theory would predict when a living wage ordinance is introduced. The next section presents a brief overview of related economics literature on the impact of policies which raise sectoral wage rates. This section includes results from the only two studies (with which I am familiar) that have systematically evaluated the impact of a living wage ordinance (the Baltimore ordinance). The third section explains the finding that firms tend to absorb these increases through efficiency gains, and the final section concludes. In this last section, I mention a set of indirect effects of living wage ordinances that are likely to have a positive effect on local economies.

What would economic theory predict when a living wage ordinance is introduced?
First, it is important to establish the extent to which living wage ordinances a) put any given firm at a competitive disadvantage, and b) actually increase labor costs.

Regarding the first point, it is essential to recognize that any policy or regulation that affects all firms puts no single firm at a competitive disadvantage. This means that were a locality to pass a living wage ordinance, all firms who bid for a locality's contracts would face the same wage floor; no firm could underbid the wage floor set by the living wage. This no more creates a competitive disadvantage within the locality than any other regulation, such as a requirement that firms may not practice discriminatory hiring practices.

Second, the impact of a living wage on the cost of contracting depends on the extent to which the increase actually "bites" into the wage scale at the affected firms. If the mandated wage level is below that of wages already paid to workers covered under local contracts, then of course there would be no impact at all. Interestingly, research on existing living wage ordinances in various cities shows that the number of workers affected tends to be quite small, either in absolute numbers or as a share of the workforce. In no case of which I am aware does the ordinance extend to more than 1% of the locality's total workforce. Similarly, according to Pollin and Luce (1998), who offer the most detailed analysis of living wages to date, most ordinances will increase affected firms' labor cost by less than 2% of production costs (i.e., labor plus capital costs).

Thus, no reasonable economic model would predict that the introduction of a living wage ordinance could possibly have a major distortionary effect on a local economy. A more relevant question is whether the ordinance would be likely to generate a negative sectoral impact. That is, while it is logically insupportable to argue that the law would disrupt the locality's overall economy, it is not unreasonable to wonder about the impact on those sectors of the locality's economy affected by the increase.

Here, economic theory is instructive. An increase in labor costs would be expected to be absorbed through one (or a combination) of the following four channels: prices, employment, profits, or productivity/efficiency gains. On the price side, employers attempting to absorb the increase in labor costs may try to pass the price forward to buyers in the form of higher prices. Or, as has commonly been raised in the minimum wage debate, the wage increase might lead employers to cut employment, either through cutting hours or the number of employees on the payroll. Profit margins may also shrink to absorb the increase. Finally, and this has turned out to be key to understanding employer's responses, firms can absorb the wage

increase through efficiency gains.

What does the evidence show?
Which, or what combination, of the "absorption channels" do we observe when wages are increased by fiat?

Various strains of empirical labor economics literature are revealing. The following presents a brief overview of three policies, including living wages, that lead to higher labor costs (through higher wages) than would exist in the absence of the policy.

Increases in the Federal Minimum Wage: This, along with unionization, is by far the most studied wage policy. Summarizing a large literature, economists find that moderate national minimum wage increases, like those we have experienced over the sixty-five years that the policy has been in place, have few, if any, identifiable distortionary effects. The most common prediction regarding the impact of an increase is that the employment of workers affected by the increase will decline. But significant negative effects have never been consistently found; some studies have even found positive employment effects. A good estimate of the negative employment effects from this extensive literature would be between very small and zero. The state of economists' understanding of the issue was summed up by Nobel laureate Robert Solow, who said, "the main thing about this research is that the evidence of job loss is weak. And the fact that the evidence is weak suggests that the impact on jobs is small."

Similarly, there is little evidence of a price or profit effect. Thus, we are left with efficiency gains as the main channel through which minimum wage increases are absorbed.

Prevailing Wage Laws: These laws state that under federal (or in some cases, state) contracts, construction workers (Davis-Bacon Act) or service workers (Service Contract Act) must be paid the "prevailing wage" for such workers in that area. The motivation for this legislation was both to insure that workers on government projects could earn a living wage, and to insure against low-quality work by low-bidding contractors. Thus, these laws are clearly similar to living wage ordinances, with the exception that the ordinances rarely differentiate who is covered by occupation.

The impact of Davis-Bacon laws have been investigated quite carefully by labor analysts. Regarding competitiveness, this research found that by providing for a level playing field, responsible, higher-quality contractors, were able to compete successfully with "lowball bidders." In addition, the research shows that increased labor costs were generally absorbed through more efficient production. Under so-called "little Davis-Bacons" (state versions of the federal law), training of employees increased substantially and as a result, occupational injuries fell. Contracts were completed more efficiently and with fewer delays. One study of the effect of repealing the little Davis Bacon in Utah revealed that total cost overruns on state highway construction tripled after the act was repealed.

A new study of building services is particularly relevant to living wage ordinances, since, unlike construction, these occupations are closer to those typically covered by the ordinance. This study examines the competition between low-ball bidders and higher paying contractors (some of whom are covered by living wage ordinances) in building services. The study finds that higher-wage contractors provide higher quality services leading to improved occupancy rates, a higher probability of lease extension by major tenants, and greater physical integrity of the property. The contractors paying higher wages had less turnover and offered more training, leading to higher customer satisfaction among tenants.

Living Wage Ordinances: Living wage ordinances are a relatively recent phenomenon, and there is thus little evidence of their impact on jobs or economic activity.

The most thorough evaluations (of which I am aware) are two separate studies of the Baltimore living wage ordinance, which was approved by the city council in December of 1994. The main findings of these studies are:

- As far as these studies could discern, the cost increase to the city after the living wage ordinance went into effect (1.2% for the contracts examined) was less than the rate of inflation over this period;
- Workers interviewed for one of the studies reported no change in employment levels at their workplaces in response to the wage increases;
- There was a small decrease-concentrated among smaller firms-in the number of bids per contract after the ordinance went into effect, this small decline, however, did not appear to lower competitiveness or raise contract costs,
- Interviews and case studies with affected employers suggests some absorption of labor cost increases through efficiency gains, particularly lower turnover;
- While there is evidence that the ordinance raised wages for those at the bottom of the wage scale, the affected group appears to be small (less than 2,000).

The Los Angeles living wage ordinance, which passed in 1997, was recently examined by Richard Sander of UCLA and Sean

Lokey for the Fair Housing Institute). Their research took place when the ordinance had been in effect for 18 months. Much of the report focuses on administrative problems with enforcement of the law. Apparently, 59% of companies had been granted exemptions when the study was undertaken, and only 675 workers received a wage increase. Thus, these findings are less informative than those from Baltimore, where the ordinance has been in effect long enough to reliably measure its impact.

With those caveats, the LA study found that in 17 of the 30 covered firms, the costs of the contracts did not change, and employment levels dropped modestly, if at all. In 8 of the 30 firms, the cost was passed on to the city (in these cases there was no competitive bidding). In 5 of the 30 firms, the scope of the contract was reduced, resulting in less employment on the contracts; the researchers estimate that total employment on city contracts was reduced by about 3%. Implementation costs were approximately $500,000 for an ordinance that brought wage benefits to workers of about $2.5 million.

In sum, the empirical research finds that none of these policies have been found to lower competitiveness or raise costs in any significant way, and, in some cases, such policies seem to be associated with higher levels of efficiency. I turn now to this issue.

Wage increases and efficiency gains

It has been stated throughout that firms appear to have consistently absorbed these wage increases through productivity, or efficiency gains. This result is related to both the small magnitude of the increase in labor costs engendered by the ordinance, and to a number of facts that characterize the production practices of firms which contract with municipalities.

The fact that living wage ordinances tend to represent a small share (usually less than 2% of affected firms' production costs) means that rather than leave the market, firms will try to absorb the increase. In some cases, for example, with concessionaires, this may take the form of trying to pass higher prices through to consumers. However, these firms operate in a competitive market, and, especially given the current deflationary environment, such pricing practices will be difficult. Thus firms will try to absorb the increase through efficiency gains. Essentially, the price increase forces firms to "cut the fat" out of their production processes, and low-wage firms-who are, by definition, more likely to be affected by the ordinance-tend to have more to cut than other firms. That is because these firms typically have higher than average levels of turnover, leading to increased training costs. A related problem disproportionately faced by lower-wage firms is higher vacancy rates, which increase production costs due to advertising and interviewing costs. Finally, by increasing wages, thus lowering turnovers and vacancies, employment stability increases at affected firms, and this tends to raise employee morale, productivity, and workmanship.

Labor market analysts have examined the effect of wages on efficiency in the context of the "efficiency wage hypothesis," which maintains that "labor productivity depends on the real wage paid by the firm." The seminal research, by Akerlof and Yellen (1987), identifies "four benefits of higher wage payments: reduced shirking of work by employees due to a higher cost of job loss, lower turnover, improvement in the average quality of job applicants, and improved morale," (pg. 2). In the context of the living wage debate, one implication of this research is that if wages are "too low," i.e., below the efficiency level, service provision to the city will be less efficient than if wages were raised.

The above research identifies turnover as a significant cost to firms. This is particularly the case in the low-wage sector, where turnover is much higher than in better paying segments of the labor market. Evidence of this relationship is cited in the second citation just noted and, in the context of unions, in Freeman and Medoff (1984, Chapter 11). This latter citation provides evidence that productivity/efficiency is higher in unionized workplaces, and that "reduced exit behavior" (lower turnover) is one reason why this is the case.

Finally, a new report by the business network *Responsible Wealth* is particularly instructive regarding this question of wages and efficiency. In "Choosing the High Road: Businesses that Pay a Living Wage and Prosper," the authors give numerous case study examples, including employers' testimonies, of firms that pay living wages in order to reap the efficiency gains discovered by the literature reviewed above.

Of course, it is also likely that these efficiency gains are combined with other absorption channels. Pollin and Luce (1998, p. 123) stress the fact that in the face of a "negligible cost increase" most firms are unlikely to relinquish historically profitable relationships with municipalities. Thus, they may sacrifice some of their profit margins, which according to these authors range from 10 to 20 percent of production, compared to less than the 2% effect of the living wage ordinance. They also may reduce ancillary costs which tend to pad budgets, such as lobbying and legal fees.

Conclusion

In considering the impact of the living wage ordinance on the competitiveness of a locality's contracting process, a number of factors should be considered. First, as with any other procurement regulation, since the higher wage floor applies to all firms that bid with the locality, no one firm is at a competitive disadvantage. Second, since the living wage is likely to affect a small share of the workforce (typically less than 1%), and to represent a small share of affected firms production costs (typically less than 2%), it is not credible to argue that the policy will distort a municipality's economy.

It is reasonable, however, to be concerned about the impact on the locality's contracting process. The analysis presented in this report, which includes the results from two studies of the impact of the Baltimore living wage ordinance, argues that firms tend to absorb the wage increase mainly through efficiency gains, specifically through lower rates of turnover and vacancies, leading to

increased employment stability, and thus raising both employee morale and productivity.

Thus, a living wage ordinance can be expected to result in the provision of higher quality and more efficient services to the locality.

This report does not explore other important salutary effects of living wage ordinances, as they are second order effects and not directly related to competition. These effects, however, should not be discounted when considering the impact of the ordinance. First, while I have argued that the policy affects few workers as a share of the workforce, most of those who are affected are low-wage workers from low-income families. These workers are by far the most likely in the workforce to generate social costs by using public programs such as food stamps, publicly-provided cash assistance, and unemployment insurance. To the extent that wage ordinance raises their earnings, these social costs are reduced. Also, since low-income workers are very likely to consume, as opposed to save, their extra earnings, there are multiplier effects which will generate extra economic activity and raise the income of the communities where these workers reside. Finally, these effects will tend to improve the economic conditions of those workers who have done least well over the past few decades, thus helping to counteract the long-term rise in the inequality of economic outcomes.

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