

# CITY OF LOS ANGELES WIB LAYOFF AVERSION PROGRAM

## ECONOMIC IMPACT ANALYSIS

Los Angeles County Economic Development Corporation



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This analysis was commissioned by the City of Los Angeles Workforce Investment Board.

The LAEDC Economic and Policy Analysis Group offers objective economic and policy research for public agencies and private firms. The group focuses on economic impact studies, regional industry analyses, economic forecasts and issue studies, particularly in water, transportation, infrastructure and environmental policy.

Every reasonable effort has been made to ensure that the data contained herein reflect the most accurate and timely information possible and they are believed to be reliable.

The report is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

## **Executive Summary**

A Layoff Aversion Program for the Los Angeles City Workforce Investment Board (WIB) has been implemented over the past year by the Los Angeles County Economic Development Corporation (LAEDC) and its partners, resulting in the retention of 3,872 jobs for at-risk businesses in the City WIB Service Delivery Area (SDA).

In this report, the Economic and Policy Analysis Group of the LAEDC performs an analysis of the success and overall benefit of the City of LA WIB Layoff Aversion Program in four steps, as described below.

### **Program Evaluation**

We begin by comparing the performance of the Layoff Aversion Program against the standard used by the U.S. Department of Housing and Urban Development (HUD) to evaluate the public benefit of an economic development program. Against this standard, the program produced a retention rate *more than two hundred times over* that of the HUD minimum level required.

We use GIS mapping software to show the locations of the businesses who received assistance within the LA City WIB SDA to successfully retain jobs.

Next we outline the Layoff Aversion Program in measureable metrics and display how the LAEDC and its partners performed in relation to those goals – meeting or exceeding all.

#### Industry Classifications of Jobs Saved

We identify the industries associated with the jobs saved in the LA WIB Service Delivery Area, through both the layoff aversion program efforts and the leveraged jobs saved through the efforts of the Business Assistance Team of the LAEDC.

### **Economic Impact Analysis**

A total of 3,872 jobs have been retained through the Layoff Aversion Program: 1,517 jobs were directly retained as a result of activities funded by the program and an additional 2,355 were retained in the LA City WIB SDA due to additional activities of the Business Assistance Program during the contract period. The Economic and Policy Analysis Group

of the LAEDC conducted an economic impact analysis of these jobs, quantifying their effect on economic activity in Los Angeles County. The results are shown below.

Economic Impact of Jobs Saved					
	Employment (jobs)	Labor income (\$ millions)	Output (\$ millions		
Direct effects	3,872	\$ 187.1	\$ 635.0		
Indirect effects	1,272	76.6	213.4		
Induced effects	1,771	87.5	251.3		
Total Impact	6,915	\$ 351.2	\$ 1,099.7		

Source: Estimates by LAEDC

In addition to the economic impact listed in the table, these 3,872 jobs saved are estimated to have a total annual fiscal impact (federal, state and local) of \$133 million.

### **Occupational Analysis**

Additionally, we provide an analysis of the occupations represented by the jobs saved based upon their respective industries, and provide their average annual wages in the county.

Aggregated Occupational Distribution for Jobs Saved in the City of LA WIB SDA						
		Direct	Total	Average Annual		
SOC Code	Occupational Description	Employment	Employment	Wage (LAC)		
11-1300	Management, business, and financial occupations	262	585	\$ 57,086		
15-2900	Professional and related occupations	373	814	77,973		
31-3900	Service occupations	367	1,036	29,286		
41-0000	Sales and related occupations	609	968	40,620		
43-0000	Office and administrative support occupations	1,174	1,808	38,110		
45-0000	Farming, fishing, and forestry occupations	3	8	26,132		
47-0000	Construction and extraction occupations	40	88	52,784		
49-0000	Installation, maintenance, and repair occupations	94	225	48,264		
51-0000	Production occupations	761	936	32,269		
53-0000	Transportation and material moving occupations	189	445	33,839		
Total	All Occupations	3,872	6,914	\$ 52,381		

\* May not sum due to rounding Source: Estimates by LAEDC



### Introduction

The City of Los Angeles Workforce Investment Board Service Delivery Area (City WIB SDA) stretches across vast areas of Los Angeles County encompassing a variety of socioeconomically diverse communities, from the Port of Los Angeles in the south to Sylmar in the north, and from West Hills in the west to the I-710 in the east.

The Los Angeles County Economic Development Corporation (LAEDC) and its partners (the Valley Economic Alliance (VEA) and the Valley Economic Development Corporation (VEDC) have led a year-long Layoff Aversion Program for at-risk businesses in the City WIB SDA. Through a wide range of



services including in-person consultations and layoff aversion workshops, the LAEDC and its partners have helped to retain a meaningful number of businesses and jobs in the region, helping to stem the loss of employment opportunities for many local residents.

Simultaneously, the Business Assistance Program (BAP) of the LAEDC provided additional support to businesses in the LA City WIB Service Delivery Area, resulting in additional jobs retained within the SDA during the contract period.

To aid in these efforts, in 2011 the Economic and Policy Analysis Group of the LAEDC conducted an Industry Cluster Report for the City WIB entitled *The Next Decade: Industries and Occupations for the Los Angeles Workforce.* This report included an industry cluster analysis to quantify the economic output, employment, and wages generated within the WIB's Service Delivery Area, focusing on fifteen export-oriented industry clusters that are key drivers in the Los Angeles County economy. The report examined the industry makeup and occupational composition of the WIB SDA, and outlined those industries which were most promising to target for job retention efforts.

In this supplemental report, we identify the industries impacted through the efforts of the Layoff Aversion Program and the BAP in the LA City WIB SDA and quantify the total economic impact associated with the jobs saved, including their effect on economic output, employment, and wages in Los Angeles County. Additionally, we provide insight into the types of occupations represented and their average annual wages. By way of introduction, we compare the results of the Layoff Aversion Program to the standard employed by the U.S. Department of Housing and Urban Development (HUD) and outline how the program achieved its goals with various program metrics.

## **HUD Public Benefit Evaluation Guidelines**

The U.S. Department of Housing and Urban Development (HUD) has specific guidelines for evaluating and selecting economic development programs (24 C.F.R. §570.209), including mandatory standards for activities in the aggregate which are used in evaluating the public benefit of a particular economic development program. The minimum level of public benefit obtained from the expenditure of federal funds is defined by HUD as the creation or retention of at least one full-time equivalent permanent job for every \$35,000 of funds received.

Using the HUD standard for activities in the aggregate and applying it to the City of LA WIB Layoff Aversion Program to evaluate the program's public benefit reveals that the program far exceeds the minimum level required, as shown in the exhibit below.

Exhibit 1 Layoff Aversion Program Performance Using HUD Standards for Evaluating Public Benefit			
Direct Impact			
LAP jobs saved – directly attributable to program		1,517	
Additional jobs saved LA City WIB SDA due to ancillary activities		2,355	
Total jobs saved in LA City WIB SDA		3,872	
Layoff Aversion Program contract amount	\$	628,000	
Public Benefit Evaluation			
HUD Criteria			
Requires one job per funded amount of	\$	35,000	
Required total jobs saved for the LA WIB LAP to equal or exceed		18	
City of LA WIB Layoff Aversion Program			
Saved one job per funded amount of	\$	414	
Jobs saved in excess of HUD requirement		1,499.1	
Jobs saved per \$35,000 funded		84.5	
City of LA WIB SDA – LAP and Leveraged Jobs Saved			
Saved one job per funded amount of	\$	162	
Jobs saved in excess of HUD requirement		3,854.1	
Jobs saved per \$35,000 funded		215.8	
Source: Analysis by LAEDC			



The Layoff Aversion Program was funded at \$628,000. According to the HUD standard, the minimum level of public benefit for this contract amount would be the creation of 18 permanent full-time equivalent jobs. The efforts of the Layoff Aversion Program directly yielded 1,517 jobs, or one job for every \$414 of the funded contract, a retention rate of over 83 times that of the HUD minimum level required.

When considering the total efforts of the LAEDC in the LA City WIB SDA, through both the Layoff Aversion Program and the Business Assistance Program, a total of 3,872 jobs were saved, one job for every \$162 of the funded contract, a retention rate *more than two hundred times over* that of the HUD minimum level required.

## The Geography of the Jobs Saved

The City of Los Angeles Workforce Investment Board service delivery area (City WIB SDA) stretches across vast areas of Los Angeles County encompassing a variety of socioeconomically diverse communities, from the Port of Los Angeles in the south to Sylmar in the north, and from West Hills in the west to the I-710 in the east.

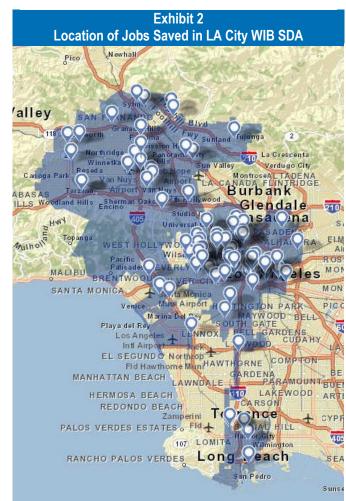
The Layoff Aversion Program included coordination with the LA City WIB, businesses, and several economic development partners: the Valley Economic Alliance (VEA) and the Valley Economic Development Corporation (VEDC). These teams also utilized resources and services of local and regional agencies to assist in potential layoff aversions for businesses in the City of LA WIB Service

Delivery Area.

these layoff aversion Through services, which include outreach phone calls. in-person consultations, action plan of federal, state and local programs and resources, financial assessments and cost containment, funding assistance, and layoff aversion workshops, the LAEDC and its partners have helped to retain a total of 3,872 jobs throughout the LA WIB Service Delivery Area during the contract period.

Exhibit 2 shows the geographic location of the 91 businesses within the City of LA WIB Service Delivery Area which have utilized these layoff aversion services to successfully retain jobs.

A description and enumeration of the services delivered is presented below.





## Layoff Aversion Program Metrics

The Layoff Aversion Program was a yearlong collaborative effort between the LAEDC and its partners, the Valley Economic Alliance (VEA) and Valley Economic Development Corporation (VEDC), which was funded by the LA City WIB to create and retain jobs within the City WIB SDA.

Reportable goals were set for the LAEDC and its partners as a way of tracking the progress of the Layoff Aversion Program. Exhibit 3 outlines the program metrics and the goals set for each and compares that to what



was achieved over the life of the contract. The LAEDC and its partners have marketed the Program to 12,138 identified at-risk businesses and helped 91 businesses to create or retain a total of 3,872 jobs throughout the LA WIB Service Delivery Area through their efforts during the contract period.

Exhibit 3 City of Los Angeles WIB SDA Layoff Aversion Program Performance Metrics					
	Goal	Layoff Aversion Program	Success Rate (%)		
At risk businesses identified	6,600	21,222	321.5		
Number of companies where we marketed the Layoff Aversion Program	6,600	12,138	183.9		
Outreach calls to at-risk businesses		7,494			
Informational mailings sent by regional managers to at-risk businesses		2,200			
Monthly emails sent by regional managers to at-risk businesses		2,444			
In-person consultations	660	863	130.8		
Referrals to Mayor's business team	192	214	111.5		
Retention goals	96	108	112.5		
Expansion goals	96	106	110.4		
Workshops participation	5	44	880.0		
Average Success Rate for All Measures			248.5		

Sources: LAEDC; VEA; VEDC

City of Los Angeles WIB SDA Layoff Aversion Program Performance Metrics (cont'd)				
	Goal	Layoff Aversion Program	Success Rate (%)	
Additional Layoff Aversion Program Measures:				
Jobs Saved (HUD public benefit standard)	18	3,872		
At-risk businesses with layoffs averted		91		
Notifications to City of LA's Rapid Response Unit of pending workforce reductions		4		
Financial assessments to businesses (VEDC and LAEDC)		492		
Monthly follow-up emails to businesses without approved action plan		completed		
Customer service satisfaction surveys		completed		
FY 11-12 Layoff Aversion Economic Impact Analysis		completed		
Layoff Aversion Marketing Program - Phase II:		completed		
a. E-newsletters - mailed to 5,311 at-risk businesses	6	6	100.0	
E-newsletter #1 - Business Source Centers		3/9/2012		
E-newsletter #2 - One-on-One Consulting		3/23/2012		
E-newsletter #3 - Small Business Financing		4/9/2012		
E-newsletter #4 - Making Your Talent Hunt a Little Easier		4/20/2012		
E-newsletter #5 - Tips for Writing a Business Plan		5/4/2012		
E-newsletter #6 - Learn from the Experts-Courses, Conferences & Tradeshows!		5/21/2012		
b. Secure at-risk business testimonials	3	3	100.0	
Handsome Coffee Roasters				
Tropicana Markets				
Ultraglas				
c. LA Works 4 Biz Website - Updates	6	6	100.0	
Sources: LAEDC; VEA; VEDC				

The Layoff Aversion Program consisted of outreach efforts made to businesses deemed "at risk" within the LA WIB SDA. The goal for identified "at-risk" businesses and the goal for marketing the available Layoff Aversion Program services to these businesses were both set at 6,600. Both goals were met and exceeded, by an additional 321.5 percent and 183.9 percent respectively.

Once an identified "at-risk" businesses expressed an interest in using the Layoff Aversion Program services, further outreach efforts including one-on-one needs assessments were conducted with C-level executives, assisting businesses with the creation of an implementable action plan of federal state and local programs and resources. The goal for the measure of in-person consultations was met and exceeded; a total of 863 in person consultations were conducted, 203 more than the goal.



Monthly referral goals for the Mayor's business team were required as part of the Layoff Aversion Program, 96 retention referrals and 96 expansion referrals were set as the goal for the Program. Through the LAEDC and its partners' outreach efforts; 108 retention leads and 106 expansion leads were identified and referred to the Mayor's business team during the life of the contract.

The LAEDC's partners in the Layoff Aversion Program met or exceeded their Program goals as well. The VEDC performed 400 financial assessments for at-risk businesses, and the LAEDC and VEA conducted an additional 92 assessments, for a total of 492 financial assessments conducted for at-risk businesses.

The provision of Layoff Aversion Workshops was required as part of the program. A goal of 5 workshops, one in each of the five regions of the City of LA, was to be hosted by the LAEDC and its partners. Over 40 workshops were carried out, eight times more than the set goal.

Additional completed components of the Layoff Aversion Program are included in Exhibit 3.

## The Industries of the Jobs Saved

With an economic base as diverse as the one in the City of LA WIB SDA, the jobs saved through these retention efforts occurred across a wide variety of industries. The classification of the direct jobs saved according to industry is presented in Exhibit 4.

Exhibit 4 Jobs Saved by Industry			
NAICS	Industry title	Direct jobs saved	
238	Specialty Trade Contractors	1	
311	Food Manufacturing	105	
312	Beverage and tobacco product manufacturing	12	
313	Textile Mills	4	
315	Apparel Manufacturing	10	
323	Printing and Related Support Activities	68	
325	Chemical Manufacturing	3	
332	Fabricated Metal Product Manufacturing	71	
333	Machinery Manufacturing	721	
334	Computer and Electronic Product Manufacturing	17	
335	Electrical Equipment, Appliance, and Component	143	
336	Transportation Equipment Manufacturing	20	
337	Furniture and Related Product Manufacturing	30	
339	Miscellaneous Manufacturing	44	
423	Merchant Wholesalers, Durable Goods	80	
424	Merchant Wholesalers, Nondurable Goods	72	
441	Motor Vehicle & Parts Dealers	20	
442	Furniture & Home Furnishings Stores	2	
444	Building Material & Garden Equipment & Supplies	14	
445	Food and Beverage Stores	27	
448	Clothing and Clothing Accessories Stores	9	
453	Miscellaneous Store Retailers	47	
454	Nonstore Retailers	2	
484	Truck Transportation	2	
512	Motion Picture and Sound Recording Industries	3	
517	Telecommunications	25	
518	Data Processing, Hosting, and Related Services	20	
519	Other Information Services	4	



Exhibit 4 (cont'd)				
NAICS	Industry title	Direct jobs saved		
531	Real Estate	9		
541	Professional, Scientific, and Technical Services	166		
561	Administrative and Support Services	1,560		
562	Waste Management and Remediation Services	5		
611	Educational Services	58		
623	Nursing & Residential Care Facilities	45		
624	Social Assistance	100		
722	Food Services and Drinking Places	230		
811	Repair and Maintenance	10		
812	Personal & Laundry Services	59		
813	Religious, Grantmaking, Civic, Professional, & Similar	54		
Total of A	3,872			

Source: Estimates by LAEDC

## The Economic Impact of the Jobs Saved

The impacts of the jobs saved circulate throughout the regional economy. Had these jobs been lost, wages would not have been paid, businesses would not have purchased supplies and equipment from other regional firms, and households that had depended on incomes from these jobs would not have been able to make their own purchases or pay their rent. All of this spending would have been lost, resulting in job losses in addition to those jobs not retained.

The exhibit below shows the total economic impact of the jobs saved through the Layoff Aversion Program.



Exhibit 5 Economic Impact of Jobs Saved						
Employment (jobs)Labor income (\$ millions)Output (\$ millions)						
Direct effects	3,872	\$ 187.1	\$ 635.0			
Indirect effects	1,272	76.6	213.4			
Induced effects	1,771	87.5	251.3			
Total Impact	6,915	\$ 351.2	\$ 1,099.7			

Source: Estimates by LAEDC

These jobs saved will generate \$1.1 billion in economic activity in Los Angeles County and support 6,915 jobs with labor income of \$351 million.

This activity will generate tax revenues for all levels of fiscal authorities. The total estimated fiscal impact of the jobs saved is shown in Exhibit 6 on the next page. Total federal, state and local tax revenues are estimated to reach \$133 million.



Exhibit 6 Fiscal Impact of Jobs Saved (\$ millions)			
Sales taxes	\$15.32		
Property taxes	16.88		
Income taxes (including profits taxes)	12.40		
Fees and fines	4.71		
Social insurance	1.48		
Other taxes	2.95		
Total Local and State Taxes* \$53.74			
Total Federal Taxes \$79.23			
Total Fiscal Impact \$132.97			

\* May not sum due to rounding

#### Source: Estimates by LAEDC

### **Industry Sector Impacts**

The economic impact spills across industries in Los Angeles County through indirect and induced effects. Not all industries would have been directly impacted. A list of the top ten industries most directly impacted (ranked by employment that would have been lost) is shown in Exhibit 7.

Exhibit 7 Top Ten Industries Affected by the Jobs Saved					
NAICS	Industry title	Employment (jobs)	Labor income (\$ millions)	Output (\$ millions)	
386	Business support services	1,528	\$ 57.6	\$ 92.6	
216	Air conditioning, refrigeration and warm air heating equipment manufacturing	708	39.7	242.4	
413	Food services and drinking places	488	12.0	31.7	
319	Wholesale trade businesses	279	20.9	46.0	
382	Employment services	167	4.5	6.2	
360	Real estate establishments	161	3.6	31.6	
380	All other misc. professional, scientific, and tech svcs.	115	6.9	27.5	
394	Offices of physicians, dentists and other health practitioners	103	8.3	13.3	
356	Securities, commodity contracts, investments and related activities	102	4.2	13.1	
260	Lighting fixture manufacturing	96	6.6	25.1	

Source: Estimates by LAEDC

Nevertheless, the employment impacts would be felt in other sectors. The distribution of the total impact by industry sector is shown in Exhibit 10. The values in the exhibit should be interpreted as illustrative of industry effects rather than precise given model and data limitations.

Exhibit 8 Economic Impact of Jobs Saved by Industry Sector					
	Employment (jobs)	Labor Income (\$ millions)	Output (\$ millions)		
Agriculture	2	\$ 0.1	\$ 0.2		
Mining	3	0.5	1.1		
Utilities	6	0.9	5.4		
Construction	39	2.4	5.8		
Manufacturing	1,407	88.0	463.9		
Wholesale trade	279	20.9	46.0		
Retail trade	433	16.1	33.1		
Transportation and warehousing	160	9.7	21.2		
Information	136	13.1	57.5		
Finance and insurance	270	17.8	56.4		
Real estate and rental	188	5.2	70.0		
Professional, scientific and technical services	431	35.9	77.9		
Management of companies	48	4.9	9.3		
Administrative services and waste remediation	1,915	70.8	120.2		
Educational services	136	5.9	10.0		
Health care and social assistance	490	25.6	44.0		
Arts, entertainment and recreation	81	2.5	6.3		
Accommodation and food services	492	12.1	32.1		
Other services	348	13.5	29.5		
All others	53	5.2	9.9		
Total *	6,915	\$ 351.2	\$ 1,099.7		

Source: Estimates by LAEDC

Most of the impacts will occur in the administrative services and waste remediation sector since it had the largest direct effects. However, other sectors have been impacted, including manufacturing, health care and social assistance, accommodation and food services, retail trade and professional, scientific and technical services. A description of these industries found in Exhibit 10 is provided in the Appendix.

### Occupational Analysis of the Jobs Saved

For each of the industries in which jobs were saved, we examine the occupational composition by their occupational code. Ninety-three descriptive categories such as production occupations, management occupations and business and financial operations are identified. The distribution of the direct employment and the total employment (which includes direct, indirect and induced employment) are detailed in Exhibit 11 along with their average annual salary in Los Angeles County.



Exhibit 9 Aggregated Occupational Distribution for Jobs Saved in the City of LA WIB Service Delivery Area					
SOC Code	Occupational Description	Direct Employment	Total Employment	Average Annual Wage (LAC)	
11-1000	Top executives	71	121	\$ 143,011	
11-2000	Advertising, marketing, promotions, public relations, and sales managers	22	38	127,438	
11-3000	Operations specialties managers	45	82	122,426	
11-9000	Other management occupations	23	66	102,327	
13-1000	Business operations specialists	71	148	72,501	
13-2000	Financial specialists	31	130	78,669	
15-1000	Computer specialists	83	152	84,422	
15-2000	Mathematical science occupations	3	5	85,476	
17-1000	Architects, surveyors, and cartographers	2	5	94,977	
17-2000	Engineers	38	57	101,844	
17-3000	Drafters, engineering, and mapping technicians	30	41	60,760	
19-1000	Life scientists	1	3	75,490	
19-2000	Physical scientists	1	5	83,629	
19-3000	Social scientists and related occupations	11	21	79,626	
19-4000	Life, physical, and social science technicians	2	5	46,681	
21-1000	Counselors, social workers, and other community and social service specialists	37	69	50,009	
21-2000	Religious workers	16	19	67,780	
23-1000	Lawyers, judges, and related workers	9	27	168,180	
23-2000	Legal support workers	20	31	58,806	
25-1000	Postsecondary teachers	8	28	\$96,057	

	Exhibit 9 (cont'd)			
SOC Code	Occupational Description	Direct Employment	Total Employment	Average Annual Wage (LAC)
25-200	Primary, secondary and special education teachers	6	25	\$62,121
25-3000	Other teachers and instructors	17	29	50,056
25-4000	Librarians, curators, and archivists	0	2	56,290
25-9000	Other education, training, and library occupations	8	19	33,205
27-1000	Art and design occupations	19	36	71,553
27-2000	Entertainers and performers, sports and related occupations	9	25	116,932
27-3000	Media and communication occupations	10	28	75,045
27-4000	Media and communication equipment occupations	10	18	74,687
29-1000	Health diagnosing and treating practitioners	15	94	102,316
29-2000	Health technologists and technicians	18	68	49,773
29-9000	Other healthcare practitioners and technical occupations	0	2	69,803
31-1000	Nursing, psychiatric, and home health aides	22	64	25,933
31-2000	Occupational and physical therapist assistants and aides	0	3	41,001
31-9000	Other healthcare support occupations	29	60	33,100
33-1000	First-line supervisors/managers, protective service workers	0	2	48,250
33-2000	Fire fighting and prevention workers	1	1	97,412
33-3000	Law enforcement workers	0	3	47,209
33-9000	Other protective service workers	7	48	29,544
35-1000	Supervisors, food preparation and serving workers	18	40	31,934
35-2000	Cooks and food preparation workers	58	127	21,585
35-3000	Food and beverage serving workers	123	279	21,170
35-9000 37-1000	Other food preparation and serving related workers Supervisors, building and grounds cleaning and	27	60	20,142
37-1000	maintenance workers	1	9	45,285
37-2000	Building cleaning and pest control workers	25	134	25,491
37-3000	Grounds maintenance workers	2	36	28,950
39-1000	Supervisors, personal care and service workers	2	6	45,678
39-2000	Animal care and service workers	5	10	25,178
39-3000	Entertainment attendants and related workers	1	14	22,131
39-4000	Funeral service workers	0	1	80,137
39-5000	Personal appearance workers	24	37	28,205
39-6000	Transportation, tourism, and lodging attendants	1	8	25,874
39-9000	Other personal care and service workers	22	94	27,172
41-1000	Supervisors, sales workers	41	74	51,213
41-2000	Retail sales workers	106	295	25,454
41-3000	Sales representatives, services	48	101	73,799
41-4000 41-9000	Sales representatives, wholesale and manufacturing Other sales and related workers	79 336	119 379	67,824 47,183



Exhibit 9 (cont'd)					
SOC Code	Occupational Description	Direct Employment	Total Employment	Average Annual Wage (LAC)	
43-1000	Supervisors, office and admin support workers	72	108	59,173	
43-2000	Communications equipment operators	47	53	30,196	
43-3000	Financial clerks	276	376	37,877	
43-4000	Information and record clerks	388	554	35,213	
43-5000	Material recording, scheduling, dispatching, and distributing occupations	98	191	33,847	
43-6000	Secretaries and administrative assistants	77	186	43,696	
43-9000	Other office and administrative support workers	217	340	32,670	
45-1000	Supervisors, farming, fishing, and forestry workers	0	0	50,110	
45-2000	Agricultural workers	3	7	21,463	
45-3000	Fishing and hunting workers	0	0	n/d	
45-4000	Forest, conservation, and logging workers	0	0	21,230	
47-1000	Supervisors, construction and extraction workers	1	6	73,567	
47-2000	Construction trades and related workers	38	75	51,441	
47-3000	Helpers, construction trades	0	2	34,591	
47-4000	Other construction and related workers	1	5	60,975	
47-5000	Extraction workers	0	0	52,353	
49-1000	Supervisors of installation, maint. and repair workers	8	19	71,312	
49-2000	Electrical and electronic equipment mechanics, installers, and repairers	10	24	51,411	
49-3000	Vehicle and mobile equipment mechanics, installers, and repairers	13	50	45,178	
49-9000	Other installation, maintenance, and repair occupations	63	133	45,025	
51-1000	Supervisors, production workers	50	60	57,193	
51-2000	Assemblers and fabricators	273	307	28,499	
51-3000	Food processing occupations	18	27	26,484	
51-4000	Metal workers and plastic workers	206	250	34,877	
51-5000	Printing occupations	33	40	37,057	
51-6000	Textile, apparel, and furnishings occupations	27	42	23,349	
51-7000	Woodworkers	11	14	27,958	
51-8000	Plant and system operators	0	3	72,815	
51-9000	Other production occupations	144	194	30,312	
53-1000	Supervisors, transportation and material moving workers	8	19	54,452	
53-2000	Air transportation occupations	0	3	68,991	
53-3000	Motor vehicle operators	52	156	35,776	
53-4000	Rail transportation occupations	0	2	48,277	
53-5000	Water transportation occupations	0	5	87,114	
53-6000	Other transportation workers	1	11	23,729	
53-7000	Material moving occupations	127	249	27,231	
Total	All Occupations	3,872	6,914	\$ 52,381	

Source: Estimates by LAEDC, VEDC

These estimates are based on the national employment distribution by detailed occupational classification within each industry. This direct allocation of the jobs saved in the LA City WIB SDA through the Layoff Aversion Program has been used to estimate the indirect and induced employment effects for each detailed occupational classification.

Detailed occupations are differentiated according to the job skills, abilities and work activities required. They are not generally industry-specific but are common to several industries. For example, retail salespersons are employed in a full spectrum of industries.

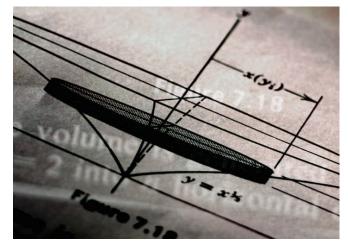
Each detailed occupation may be common to many industries. As such we aggregated all of the occupations according to their detailed occupational classification, regardless of the industry they are in. Total employment effects capture the direct jobs saved through the Layoff Aversion Program (the 3,872 jobs) and the indirect and induced employment effects within each occupational classification (the additional 3,043 jobs).

Further education and training requirements along with median annual earnings in Los Angeles County for more detailed occupational classifications are provided in the initial industry and occupational analysis conducted by the Economic and Policy Analysis Group of the LAEDC for the City WIB entitled *The Next Decade: Industries and Occupations for the Los Angeles Workforce*.



## Methodology

The total estimated economic impact includes direct, indirect and induced effects. *Direct activity* includes the employees employed by "at risk" firms. *Indirect effects* are those which stem from the employment and business revenues motivated by the purchases made by the "at risk" firms and their contractors. For example, indirect jobs are sustained by the suppliers of the office supplies and insurance purchased. *Induced effects* are those generated by the spending of employees whose wages are sustained by both direct and indirect spending.



We estimated the direct, indirect and

induced effects using models developed with data and software from MIG, Inc. MIG's IMPLAN system is a robust, widely-used set of modeling tools that provide economic resolution from the national level down to the ZIP code level. Our estimates here were applied to the county as a whole.

In our analysis, we have assumed that the operations of the companies assisted are representative of the industries in which they have been classified, and that their continued operations will occur for the current year. Our analysis does not measure profitability and assumes that the inter-industry linkages and economic impacts will continue regardless of individual company performance or outlook.

Our estimates for labor income and output are reported in 2012 dollars to correspond with the majority of the contract period. Job estimates are measured on a job-count basis for both wage-and-salary workers and proprietors regardless of the number of hours worked, and are measured on an annual basis, i.e., the number of full and part time jobs supported in one year.

## **Description of Industry Sectors**

The industry sectors used in this report are established by the North American Industry Classification System (NAICS). NAICS divides the economy into twenty sectors, and groups industries within these sectors according to production criteria. Listed below is a short description of each sector as taken from the sourcebook, *North American Industry Classification System*, published by the U.S. Office of Management and Budget (2007).

Agriculture, Forestry, Fishing and Hunting: Activities of this sector are growing crops, raising animals, harvesting timber, and harvesting fish and other animals from farms, ranches, or the animals' natural habitats.

*Mining:* Activities of this sector are extracting naturally-occurring mineral solids, such as coal and ore; liquid minerals, such as crude petroleum; and gases, such as natural gas; and beneficiating (e.g., crushing, screening, washing and flotation) and other preparation at the mine site, or as part of mining activity.

*Utilities:* Activities of this sector are generating, transmitting, and/or distributing electricity, gas, steam, and water and removing sewage through a permanent infrastructure of lines, mains, and pipes.

*Construction:* Activities of this sector are erecting buildings and other structures (including additions); heavy construction other than buildings; and alterations, reconstruction, installation, and maintenance and repairs.

*Manufacturing:* Activities of this sector are the mechanical, physical, or chemical transformation of material, substances, or components into new products.

Wholesale Trade: Activities of this sector are selling or arranging for the purchase or sale of goods for resale; capital or durable nonconsumer goods; and raw and intermediate materials and supplies used in production, and providing services incidental to the sale of the merchandise. Retail Trade: Activities of this sector are retailing merchandise generally in small quantities to the general public and providing services incidental to the sale of the merchandise.

*Transportation and Warehousing:* Activities of this sector are providing transportation of passengers and cargo, warehousing and storing goods, scenic and sightseeing transportation, and supporting these activities.

*Information:* Activities of this sector are distributing information and cultural products, providing the means to transmit or distribute these products as data or communications, and processing data.

*Finance and Insurance:* Activities of this sector involve the creation, liquidation, or change of ownership of financial assets (financial transactions) and/or facilitating financial transactions.

Real Estate and Rental and Leasing: Activities of this sector are renting, leasing, or otherwise allowing the use of tangible or intangible assets (except copyrighted works), and providing related services.

*Professional, Scientific, and Technical Services:* Activities of this sector are performing professional, scientific, and technical services for the operations of other organizations.

Management of Companies and Enterprises: Activities of this sector are the holding of securities of companies and enterprises, for the purpose of owning controlling interest or influencing their



management decision, or administering, overseeing, and managing other establishments of the same company or enterprise and normally undertaking the strategic or organizational planning and decision-making of the company or enterprise.

Administrative and Support and Waste Management and Remediation Services: Activities of this sector are performing routine support activities for the day-to-day operations of other organizations, such as: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

*Educational Services:* Activities of this sector are providing instruction and training in a wide variety of subjects. Educational services are usually delivered by teachers or instructors that explain, tell, demonstrate, supervise, and direct learning. Instruction is imparted in diverse settings, such as educational institutions, the workplace, or the home through correspondence, television, or other means.

Health Care and Social Assistance: Activities of this sector are operating or providing health care and social assistance for individuals.

Arts, Entertainment and Recreation: Activities of this sector are operating facilities or providing services to meet varied cultural, entertainment, and recreational interests of their patrons, such as: (1) producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) preserving and exhibiting objects and sites of historical, cultural, or educational interest; and (3) operating facilities or providing services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.

Accommodation and Food Services: Activities of this sector are providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.

Other Services (except Public Administration): Activities of this sector are providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

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