

LOS ANGELES CITY WORKFORCE INVESTMENT BOARD



LAYOFF AVERSION PROGRAM FY2014:

Economic Impact Analysis

JULY 2014



Los Angeles County Economic Development Corporation
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This research was commissioned by the City of Los Angeles Workforce Investment Board and the City of Los Angeles Community Development Department.

The LAEDC Institute for Applied Economics provides objective economic and policy research for public agencies and private firms. The institute focuses on economic impact studies, regional industry analyses, economic forecasts and issue studies, particularly in workforce development, 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 partner, the Valley Economic Alliance (VEA), resulting in the retention of 5,054 jobs for at-risk businesses in the City WIB Service Delivery Area (SDA).

In this report, the LAEDC Institute for Applied Economics provides an analysis of the success and overall benefit of the City of L.A. WIB Layoff Aversion Program in three steps, as described below.

Program Evaluation

The performance of the Layoff Aversion Program is measured 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 and ninety times* that of the HUD minimum level required.

Against all other measurable metrics, the Layoff Aversion Program met or exceeded its goals.

Characteristics of the Jobs Saved

The locations of the businesses who received assistance within the L.A. City WIB SDA to successfully retain jobs are mapped, and a summary of jobs saved by City Council District is provided.

The industries associated with the jobs saved in the L.A. WIB Service Delivery Area are identified, and their occupational distribution is estimated.



Economic Impact Analysis

A total of 5,054 jobs were retained in the Los Angeles City WIB SDA. Of these, 4,915 jobs were directly retained as a result of activities funded by the Layoff Aversion Program and an additional 139 were retained in the L.A. City WIB SDA due to additional activities of the LAEDC Business Assistance Program during the contract period.

The total estimated economic impact in Los Angeles County of this outcome is shown in Exhibit E-1. ❖

Exhibit E-1
Economic and Fiscal Impact of Jobs Saved in L.A. City WIB SDA

Total Employment		11,886
Direct jobs	5,054	
Indirect and induced jobs	6,832	
Total Labor Income (\$ millions)		\$ 690.5
Direct labor income	\$ 296.7	
Indirect and induced labor income	393.8	
Total Output (\$ millions)		\$ 2,346.3
Direct output	\$ 1,340.4	
Indirect and induced output	1,005.9	
Total Fiscal Impact (\$ millions)		\$ 209.2
State and local taxes	\$ 70.3	
Federal taxes	139.0	

Source: Estimates by LAEDC

1 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 socio-economically 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 partner, the Valley Economic Alliance (VEA), have led a year-long Layoff Aversion Program for at-risk businesses in the City WIB SDA in two separate six-month contract periods. Through a wide range of services, including in-person consultations and layoff aversion workshops, the LAEDC and its partner 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 LAEDC Business Assistance Program (BAP) provided additional support to businesses in the L.A. City WIB SDA, resulting in additional jobs retained within the SDA during the contract period.

To assist in focusing these efforts, in 2013 the LAEDC produced a report entitled *Industry and Labor Market Intelligence for the City of Los Angeles*, a follow-up to its 2010 report entitled *The Next Decade: Industries and Occupations for the Los Angeles Workforce*. This report examined the demographic and economic characteristics of the City of Los Angeles in three parts: 1) a demographic overview, outlining the social and economic characteristics of the residents of the City to provide context and insight into the strengths and challenges of the community; 2) a labor market analysis, describing the current economic situation and projected trends of the local area economy, industries and occupations; and 3) an occupational analysis, which combined the industry forecast with the estimated occupational makeup of the city to produce occupational



projections, and to identify the education and skills required for entry into these occupations.

In this supplemental report, the LAEDC Institute for Applied Economics evaluates the overall effectiveness of the efforts of the Layoff Aversion Program and the BAP in the L.A. City WIB SDA. First, the results of the Layoff Aversion Program are compared to the standard employed by the U.S. Department of Housing and Urban Development (HUD) and program’s achievement levels against various program metrics. Next, the industries impacted through the Layoff Aversion Program are identified, and the total economic impact associated with the jobs saved is estimated, including their effect on economic output, employment, and labor income in Los Angeles County. Additionally, the types of occupations that were likely to have been affected are summarized, along with their average annual wages.

Details of the program and its impact for each of the two contract periods are provided. ❖

2 Measuring the Program's Success

The efficacy of the Layoff Aversion Program carried out by the Business Assistance Program (BAP) of the LAEDC can be measured in a variety of ways including U.S. Department of Housing and Urban Development (HUD) Public Benefit Evaluation Guidelines and identifying the program's achievement levels against contract performance 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.



Exhibit 2-1
Layoff Aversion Program Performance
Using HUD Standards for Evaluating Public Benefit

Direct Impact	
LAP jobs saved (directly attributable to program)	4,915
Additional jobs saved due to ancillary activities	139
Total jobs saved in L.A. City WIB SDA	5,054
Layoff Aversion Program contract amount	\$ 609,160
 Public Benefit Evaluation:	
HUD Criteria:	
Requires one job per funded amount of	\$ 35,000
Required jobs saved for the L.A. City WIB LAP to equal or exceed	17
 City of L.A. WIB Layoff Aversion Program:	
Saved one job per funded amount of	\$ 124
Jobs saved in excess of HUD requirement	4,898
Saved jobs per \$35,000 funded	282
 City of L.A. WIB SDA (LAP and Leveraged Jobs Saved):	
Saved one job per funded amount of	\$ 121
Jobs saved in excess of HUD requirement	5,037
Saved jobs per \$35,000 funded	290

Source: Estimates by LAEDC

Using the HUD standard for activities in the aggregate and applying it to the L.A. City WIB Layoff Aversion Program to evaluate the program's public benefit shows that the program far exceeds the minimum level required, as shown in Exhibit 2-1.

The Layoff Aversion Program was funded at \$609,160 for both contract periods combined. According to the HUD standard, the minimum level of public benefit for this contract amount would be the creation of 17 permanent full-time equivalent jobs. The efforts of the Layoff Aversion Program directly yielded 4,915 jobs or one job for every \$124 of the funded contract, a retention rate of more than *two hundred and eighty times* that of the HUD minimum level required.

When considering the total efforts of the LAEDC in the L.A. City WIB SDA, through both the Layoff Aversion Program and the Business Assistance Program, a total of 5,054 jobs were saved, one job for every \$121 of the funded contract, a retention rate of *two hundred and ninety times* that of the HUD minimum level required. ❖

Layoff Aversion Program Metrics

The Layoff Aversion Program, funded by the L.A. City WIB, was a yearlong collaborative effort between the LAEDC and its partner, the Valley Economic Alliance (VEA), to create and retain jobs within the City WIB SDA.

Reportable goals were set for the LAEDC and its partner over two contract periods as a way of tracking the progress of the Layoff Aversion Program (LAP).

Exhibit 2-2 outlines job-related program metrics and goals set for the first contract period, which spanned from July 1, 2013 through December 31, 2013, and reports achievement levels.

Exhibit 2-2
Los Angeles City WIB SDA Layoff Aversion Program
Performance Metrics - Contract Period 7/1/13-12/31/13

	Goal	LAP	Success Rate (%)
Jobs retained	290	611	210.7
At-risk businesses identified	3,200	3,973	124.2
Number of companies to which the program was marketed:	980	2,564	261.6
LAEDC Business Assistance Program		1,732	
VEA		832	
In-person needs assessment consultations:	320	493	154.1
LAEDC Business Assistance Program		346	
VEA		147	

Sources: LAEDC; VEA

The Layoff Aversion Program consisted of outreach efforts made to businesses deemed “at-risk” within the L.A. WIB SDA. The goal for identified “at-risk” businesses and the goal for marketing the available Layoff Aversion Program services to these businesses over the first contract period were set at 3,200 and 980 respectively. Both goals were met and exceeded, recording a success rate of 124.2 percent and 261.6 percent, respectively.

Once an identified “at-risk” business expressed an interest in using the Layoff Aversion Program services, further outreach efforts were conducted, including one-on-one in-person needs assessments. The goal for in-person consultations was 320 during the first contract period. This was exceeded by 173 consultations, a success rate of 154.1 percent.

Through these efforts, the overall number of jobs retained during the first contract period was 611, more than twice the goal of 290 jobs.

Exhibit 2-3 outlines the job-related program metrics and the goals set for the second contract period, which extended from January 1, 2014 through June 30, 2014, and reports achievement levels.

Exhibit 2-3
Los Angeles City WIB SDA Layoff Aversion Program
Performance Metrics - Contract Period 1/1/14-6/30/14

	Goal	LAP	Success Rate (%)
Jobs retained	400	4,304	1,076.0
Enrollments of eligible businesses:	200	208	104.0
LAEDC Business Assistance Program		139	
VEA		69	
Customer service satisfaction surveys (208 collected)		✓	
Service plans for business clients (228 completed)		✓	
Workshop participation:	8 hours	11.5 hours	143.8
“Financing Workshop” (1/30/2014)		2 hours	
“Social Media/ Marketing Workshop” (3/18/2014)		2 hours	
“MBE/WBE Workshop Certification” (3/26/2014)		2 hours	
“Healthcare Reform Workshop” (4/17/2014)		2 hours	
“Social Media/ Marketing Workshop” (4/24/2014)		3½ hours	
Distribute / collect workshop/webinar forms		✓	100.0
Submit monthly contract reporting		✓	100.0
L.A. City WIB, CDD and Mayor’s business team meetings		✓	100.0
Submit layoff aversion related events/success stories with authorization to make information public		✓	100.0
FY14 Layoff Aversion Economic Impact Analysis		✓	100.0

Sources: LAEDC; VEA

The Layoff Aversion Program for the second contract period consisted of different programmatic goals, including business enrollments and workshop participation. The goal for completed enrollments of eligible “at-risk” businesses over the second contract period was set at 200 enrollments and the goal for workshop participation set at 8 hours. Both goals were met and exceeded, recording a success rate of 104.0 percent and 143.8.0 percent, respectively.

Through these efforts, the overall number of jobs retained during the second contract period was 4,304, more than ten times the goal of 400 jobs. ❖

3 Characteristics of the Jobs Saved

The jobs that were saved through the Layoff Aversion Program are located in businesses throughout the City of Los Angeles, across a variety of industries and in a range of occupations.

Geography

The City WIB SDA stretches across vast areas of Los Angeles County encompassing a variety of socio-economically 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 L.A. City WIB, businesses, and its economic development partner, the Valley Economic Alliance (VEA). These teams also utilized resources and services of local and regional agencies to assist in the provision of layoff aversion services for businesses in the L.A. City WIB SDA. These layoff aversion services included outreach phone calls, in-person consultations, action plans utilizing federal, state and local programs and resources, financial assessments and cost containment strategies, funding assistance, and layoff aversion workshops.

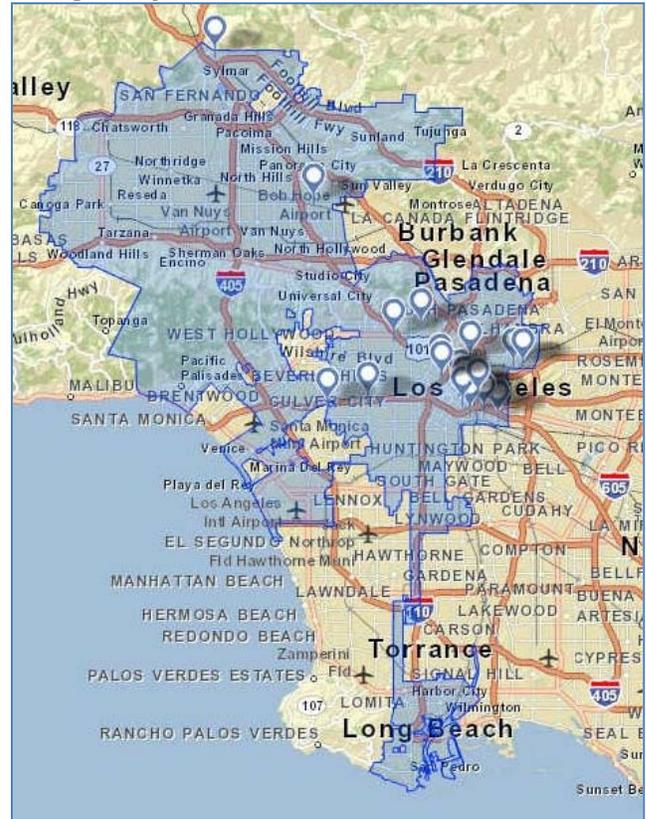
Through the provision of these services, the LAEDC and its partner have helped to retain a total of 5,054 jobs throughout the L.A. City WIB SDA during the contract period.

Exhibit 3-1 shows the geographic location of the 19 businesses within the City of LA WIB SDA which utilized these layoff aversion services to retain jobs. ❖

Council Districts

Its Mayor and its City Council, a body of representatives from fifteen City Council Districts of approximately equal residential population, govern the City of Los Angeles. The City Council Districts are shown in Exhibit 3-2.

Exhibit 3-1
Los Angeles City



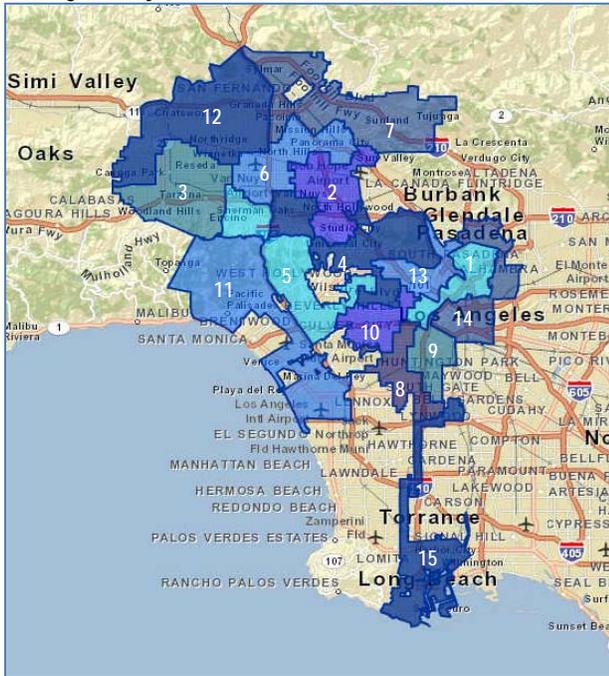
Sources: ESRI, LAEDC

While each district has approximately the same residential population, the geographic area of the districts varies widely, as do the socio-economic makeup of its residential population, business characteristics and vibrancy, and the composition of industry.

The most densely populated districts are the 9th, 10th and 13th districts, in the heart of the city. Together, these districts represent 20 percent of the population but only nine percent of the total land area in the City.

The largest district by land area is the 11th district, covering the west side and Los Angeles International Airport. The 7th and 12th districts are also quite large, reaching into the northern regions of the city.

Exhibit 3-2
Los Angeles City Council Districts



Sources: ESRI, LAEDC

Residential density does not always correlate with job density. Some areas may be more residential in nature and will provide fewer opportunities for industry growth, while others may be centers of commercial and industrial activity. These areas would be more likely to provide employment opportunities for residents living elsewhere in the region.

Exhibit 3-3 shows the total employment in each council district along with its share of the total employment in the City of Los Angeles.

The 14th district, encompassing the core of downtown, has the highest number of jobs overall, numbering 332,758 employees. Other districts with large numbers of jobs include the 5th district, with 188,286 jobs, the 11th district, with 139,500 jobs. These three districts together accounted for 44 percent of all jobs in the City of Los Angeles.

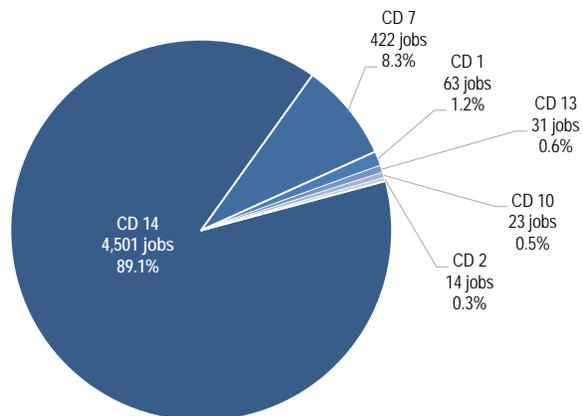
Exhibit 3-3
Total Employment by L.A. City Council District 2011

	Total Employment	Share of LA City
Council District 1	82,147	5.4%
Council District 2	57,072	3.8%
Council District 3	91,839	6.1%
Council District 4	102,989	6.8%
Council District 5	188,286	12.4%
Council District 6	67,073	4.4%
Council District 7	46,350	3.1%
Council District 8	18,890	1.2%
Council District 9	63,451	4.2%
Council District 10	61,052	4.0%
Council District 11	139,500	9.2%
Council District 12	91,107	6.0%
Council District 13	93,141	6.2%
Council District 14	332,758	22.0%
Council District 15	78,382	5.2%
Total All Districts	1,514,037	100.0%

Sources: US Census Bureau, LED; Estimates by LAEDC

The distribution of jobs saved was relatively widespread across the city, but the areas with the highest concentration of employment were natural targets for jobs retention. Exhibit 3-4 shows the distribution of direct jobs saved by City Council District. ❖

Exhibit 3-4
Jobs Saved by L.A. City Council District



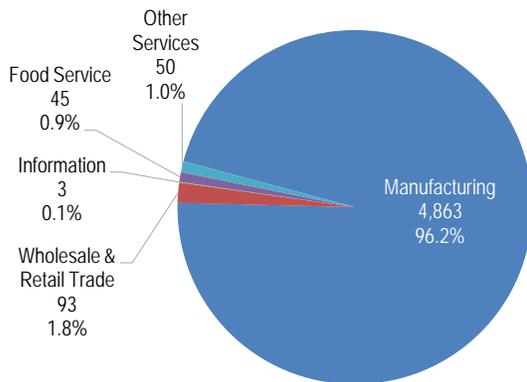
Source: Estimates by LAEDC

Industries

With an economic base as diverse as the one in the L.A. City WIB SDA, the jobs saved through these retention efforts occurred across a variety of industries.

Exhibit 3-5 presents the distribution of direct jobs saved by industry in the WIB SDA during the contract period.

Exhibit 3-5
Total Jobs Saved in SDA by Industry Sector



Source: Estimates by LAEDC

Over 96 percent of the jobs saved, or 4,863, were in the manufacturing industry sector. Wholesale trade and retail trade industries accounted for 93 jobs, or almost 2 percent of all jobs saved. The remainder was distributed among several other industry sectors.

Industry sectors are aggregates of subsectors. Subsectors provide more detailed differentiation among industry types. The industry subsector classification of the direct jobs saved is presented in Exhibit 3-6. This exhibit differentiates between the jobs saved through the efforts of the Layoff Aversion Program (LAP) and those saved in the City WIB SDA through additional efforts of the LAEDC Business Assistance Program, which are referenced as leveraged jobs.

The industry subsector with the most jobs saved directly attributed to the Layoff Aversion Program, is apparel manufacturing with 4,322 jobs saved. This subsector includes a variety of industries, including apparel knitting mills, cut and sew apparel manufacturing and apparel accessories and other apparel manufacturing. The most significant job retention occurred in the cut and sew apparel manufacturing industry of this subsector.

Other subsectors with significant job retention successes included computer and electronic product manufacturing, chemical products manufacturing and personal and laundry services.

The jobs saved through the additional efforts of the LAEDC Business Assistance Program—which are called leveraged jobs in this report—are somewhat more diverse. Food services and drinking places accounted for 45 leveraged jobs, followed by 42 in textile product mills, 23 in leather and allied product manufacturing and 14 in transportation equipment manufacturing. Other subsectors affected were motion picture and sound recording industries and furniture and home furnishings stores. ❖

Exhibit 3-6
Direct Jobs Saved by Industry

NAICS	Industry Subsector	LAP	Leveraged	Total SDA
311	Food manufacturing	6	0	6
313	Textile mills	34	0	34
314	Textile product mills	0	42	42
315	Apparel manufacturing	4,322	0	4,322
316	Leather and allied product mfg	0	23	23
334	Computer and electronic product mfg	422	0	422
336	Transportation equipment mfg	0	14	14
424	Merchant wholesalers, nondurable	91	0	91
442	Furniture and home furnishings stores	0	2	2
512	Motion picture and sound recording	0	3	3
722	Food services and drinking places	0	45	45
812	Personal and laundry services	40	10	50
Total of All Industries		4,915	139	5,054

Source: Estimates by LAEDC

Occupations

Occupations are commonly classified using the Standard Occupational Classification (SOC) system, developed by the Bureau of Labor Statistics. This system classifies all workers into one of 840 detailed occupations with similar job duties, skills, education and training. These detailed occupations are not generally industry-specific but are common to many industries. For example, retail salespersons are employed in a full spectrum of industries.

Using the national estimates of the distribution of occupations within each industry and aggregating across industries, the direct jobs saved through the LAP and BAP efforts might reasonably be expected to consist of occupations shown in Exhibit 3-7.

The exhibit displays minor occupational groups, each of which contains several detailed occupations. A wide variety of occupations were impacted by the program.

The occupational group with the highest number of direct jobs saved is in the category of textile, apparel, and furnishings occupations, which includes laundry and dry cleaning workers, sewing machine operators and shoe and leather workers. The second largest occupational group is other production occupations, which is a large group that includes helpers, inspectors, machine operators and other production workers. The third largest occupational group is material moving occupations, which consists mainly of conveyor, crane and tower, dredge and hoist and wench operators, industrial truck and tractor operators, refuse and recyclable material collectors and tank car, truck and ship loaders. ❖

Exhibit 3-7
Aggregated Occupational Distribution of Jobs Saved

SOC	Occupational Description	Jobs Saved
11-1000	Top executives	81
11-2000	Advertising, marketing, sales managers	21
11-3000	Operations specialties managers	65
11-9000	Other management occupations	17
13-1000	Business operations specialists	51
13-2000	Financial specialists	29
15-1000	Computer specialists	51
17-2000	Engineers	82
17-3000	Drafters, engineering, mapping techs	28
19-1000	Life scientists	1
19-2000	Physical scientists	2
19-3000	Social scientists and related	8
19-4000	Life, physical, social science techs	1
27-1000	Art and design occupations	98
27-2000	Entertainers / performers, sports / related occupations	1
27-3000	Media and communication occupations	3
33-9000	Other protective service workers	5
35-1000	Supervisors, food prep and serving	3
35-2000	Cooks and food preparation workers	10
35-3000	Food and beverage serving workers	24
35-9000	Other food preparation and serving	5
37-2000	Building cleaning, pest control workers	32
39-2000	Animal care and service workers	7
39-9000	Other personal care and service workers	2
41-1000	Supervisors, sales workers	14
41-2000	Retail sales workers	51
41-3000	Sales representatives, services	1
41-4000	Sales representatives, wholesale / manufacturing	122
41-9000	Other sales and related workers	5
43-1000	Supervisors, office and admin support	32
43-2000	Communications equipment operators	4
43-3000	Financial clerks	93
43-4000	Information and record clerks	109
43-5000	Material recording, scheduling / distributing	240
43-6000	Secretaries and administrative assistants	55
43-9000	Other office and administrative support	96
47-2000	Construction trades and related	2
49-1000	Supervisors of installation, maint / repair workers	5
49-2000	Electrical / electronic eqmt mechanics, installers, repair	6
49-3000	Vehicle / mobile eqmt mechanics, installers, repairers	2
49-9000	Other installation, maintenance, repair occupations	50
51-1000	Supervisors, production workers	154
51-2000	Assemblers and fabricators	111
51-3000	Food processing occupations	2
51-4000	Metal workers and plastic workers	24
51-5000	Printing occupations	33
51-6000	Textile, apparel, and furnishings occupations	2,564
51-9000	Other production occupations	344
53-1000	Supervisors, transportation / material moving workers	14
53-3000	Motor vehicle operators	23
53-6000	Other transportation workers	13
53-7000	Material moving occupations	251
Total of All Occupations*		5,054

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

4 Economic Impact Analysis

The overall impact of the jobs saved by the Layoff Aversion Program extends beyond the direct jobs themselves. The jobs saved represent a continuation of the ongoing activities of the businesses assisted, such as their continued purchases of goods and services from regional suppliers, and the continuation of wage and salary payments to the retained employees. Had these jobs been lost, these payments would have ceased, 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.



Economic and Fiscal Impact

Exhibit 4-1 below shows the total economic impact of the jobs saved through the Layoff Aversion Program.

Exhibit 4-1
Economic Impact of Jobs Saved in L.A. City WIB SDA

Total Employment		11,886
Direct jobs	5,054	
Indirect and induced jobs	6,832	
Total Labor Income (\$ millions)		\$ 690.5
Direct labor income	\$ 296.7	
Indirect and induced labor income	393.8	
Total Output (\$ millions)		\$ 2,346.3
Direct output	\$ 1,340.4	
Indirect and induced output	1,005.9	

Source: Estimates by LAEDC

The retained jobs will generate over \$2.3 billion in economic activity in Los Angeles County and support 11,886 jobs with labor income of \$690.5 million.

This activity will generate tax revenues for all levels of fiscal authorities, as shown in Exhibit 4-2. Total federal, state and local tax revenues are estimated to reach \$209 million.

Exhibit 4-2
Fiscal Impact of Jobs Saved in L.A. City WIB SDA

State and Local Taxes (\$ millions)		\$ 70.3
Income taxes	\$ 21.4	
Property taxes	18.6	
Sales taxes	20.8	
Social insurance taxes	2.2	
Other state and local taxes, fees and fines	7.3	
Federal Taxes (\$ millions)		\$ 139.0
Income taxes	\$ 66.8	
Social insurance taxes	66.4	
Other federal taxes	5.7	
Total Fiscal Impact (\$ millions)		\$ 209.2

Source: Estimates by LAEDC

Exhibit 4-3 displays the distribution of these impacts between LAP and leveraged jobs saved.

Exhibit 4-3
Economic Impact of Jobs Saved by LAEDC Efforts
Total Contract Period (7/1/2013-6/30/14)

	Direct Jobs Saved	Employment (jobs)	Labor Income (\$ mil)	Output (\$ mil)
L.A. City WIB LAP	4,915	11,686	\$ 681.1	\$ 2,317.7
Leveraged	139	200	9.4	28.7
Total All Efforts	5,054	11,886	\$ 690.5	\$ 2,346.3

Sources: Estimates by LAEDC

Of the 5,054 direct jobs saved in the SDA, 97 percent were directly attributable to the LAP, with the remaining 3 percent saved by the ancillary efforts of the LAEDC BAP team in the L.A. City WIB SDA. ❖

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, but the employment impacts would be felt in many other sectors. The distribution of the total impact by industry sector is shown in Exhibit 4-4.

Exhibit 4-4
Economic Impact of Jobs Saved by Industry Sector

	Employment (jobs)	Labor Income (\$ mil)	Output (\$ mil)
Mining, and oil and gas extraction	9	\$ 0.8	\$ 4.9
Utilities	15	2.5	15.9
Construction	49	3.3	7.5
Manufacturing	5,517	312.6	1,457.8
Wholesale trade	405	31.9	88.1
Retail trade	452	19.0	39.0
Transportation and warehousing	228	13.3	30.4
Information	128	18.7	55.5
Finance and insurance	274	23.5	71.4
Real estate and rental and leasing	247	8.3	108.0
Professional and technical services	994	88.2	165.7
Management of companies	162	18.5	35.2
Administrative and waste services	1,666	65.7	112.5
Educational services	116	5.5	9.4
Health care and social assistance	581	36.7	63.0
Arts, entertainment, and recreation	122	4.9	9.6
Accommodation and food services	506	14.2	33.9
Other services	361	17.7	29.9
Government	54	5.3	8.4
Total All Industries	11,886	\$ 690.5	\$ 2,346.3

Sources: CA EDD; LAEDC

Most of the impacts occurred in the manufacturing sector since it had the largest direct effects. However, other sectors have been impacted, including administrative and waste services, professional and technical services, health care and social assistance and accommodation and food services.

The values in the exhibit should be interpreted as illustrative of industry effects rather than precise given model and data limitations. A description of these industry sectors is provided in the Appendix. ❖

Occupational Impacts

The distribution of direct employment and total employment (which includes direct, indirect and induced employment) by occupational composition is detailed in Exhibit 4-5 along with their average annual salary in Los Angeles County.

These estimates are based on the national distribution of detailed occupations within each industry. As above, the exhibit displays minor occupational groups, each of which contains several detailed occupations. Detailed occupations are differentiated according to the job skills, abilities and work activities required. They are generally not industry-specific but are common to several industries. For example, retail salespersons are employed in a wide variety of industries. As such, we aggregated the occupations across industries.

Exhibit 4-5
Aggregated Occupational Distribution of Jobs Saved

SOC	Occupational Description	Direct Jobs	Total Jobs	Average Annual Wage
11-1000	Top executives	81	204	\$ 135,796
11-2000	Advertising, marketing, sales managers	21	58	129,492
11-3000	Operations specialties managers	65	142	127,179
11-9000	Other management occupations	17	93	102,527
13-1000	Business operations specialists	51	222	73,867
13-2000	Financial specialists	29	186	80,443
15-1000	Computer specialists	51	217	87,601
15-2000	Mathematical science occupations	0	5	89,749
17-1000	Architects, surveyors, cartographers	0	21	87,878
17-2000	Engineers	82	150	103,132
17-3000	Drafters, engineering, mapping techs	28	77	60,558
19-1000	Life scientists	1	8	90,948
19-2000	Physical scientists	2	13	83,040
19-3000	Social scientists and related	8	30	77,407
19-4000	Life, physical, social science techs	1	14	48,660
21-1000	Counselors, social workers, other	0	54	50,570
21-2000	Religious workers	0	5	60,712
23-1000	Lawyers, judges, and related workers	0	55	159,689
23-2000	Legal support workers	0	36	62,598
25-1000	Postsecondary teachers	0	27	82,497
25-2000	Primary, secondary, spec ed teachers	0	35	65,353
25-3000	Other teachers and instructors	0	19	49,525
25-9000	Other education, training, library	0	19	34,410
27-1000	Art and design occupations	98	247	70,784
27-2000	Entertainers, performers, sports	1	27	112,801
27-3000	Media and communication occupations	2	43	72,664
27-4000	Media / communication eqmt	1	16	71,111
29-1000	Health diagnosing practitioners	0	146	106,634
29-2000	Health technologists and technicians	0	92	52,905
29-9000	Other healthcare practitioners	0	3	67,002
31-1000	Nursing, psychiatric, home aides	0	83	28,614
31-2000	Occupational / physical therapist aides	0	5	43,777
31-9000	Other healthcare support occupations	0	56	34,288
33-1000	Supervisors, protective service workers	0	10	74,933
33-2000	Fire fighting and prevention workers	0	4	85,126

Exhibit 4-5 (Continued)

SOC	Occupational Description	Direct Jobs	Total Jobs	Average Annual Wage
33-3000	Law enforcement workers	0	6	83,945
33-9000	Other protective service workers	5	325	28,727
35-1000	Supervisors, food prep and serving	3	41	32,997
35-2000	Cooks and food preparation workers	10	131	21,562
35-3000	Food and beverage serving workers	24	300	21,786
35-9000	Other food preparation and serving	5	64	20,304
37-1000	Supervisors, building / maint. workers	0	12	44,090
37-2000	Building cleaning, pest control workers	32	195	26,098
37-3000	Grounds maintenance workers	0	50	28,281
39-1000	Supervisors, personal care and service	0	7	43,414
39-2000	Animal care and service workers	7	16	26,590
39-3000	Entertainment attendants and related	1	23	24,346
39-5000	Personal appearance workers	0	25	28,764
39-6000	Transport, tourism, lodging attendants	0	8	24,412
39-9000	Other personal care and service	2	109	26,391
41-1000	Supervisors, sales workers	14	72	48,414
41-2000	Retail sales workers	51	347	24,852
41-3000	Sales representatives, services	1	91	70,314
41-4000	Sales reps, wholesale / manufacturing	122	236	65,453
41-9000	Other sales and related workers	5	130	58,243
43-1000	Supervisors, office and admin support	32	112	55,702
43-2000	Communications equipment operators	4	22	33,036
43-3000	Financial clerks	93	338	38,119
43-4000	Information and record clerks	109	462	35,985
43-5000	Material recording / distributing	240	446	33,544
43-6000	Secretaries / administrative assistants	55	305	44,067
43-9000	Other office and administrative support	96	394	32,333
45-2000	Agricultural workers	1	8	26,180
47-1000	Supervisors, construction / extraction	0	8	76,470
47-2000	Construction trades and related	2	78	53,650
47-3000	Helpers, construction trades	0	4	34,858
47-4000	Other construction and related workers	0	10	58,432
49-1000	Supervisors, maint. / repair workers	5	25	72,610
49-2000	Electrical / electronic eqmt mechanics	6	41	52,063
49-3000	Vehicle / mobile eqmt mechanics	2	56	45,443
49-9000	Other installation, maint., repair	50	186	46,139
51-1000	Supervisors, production workers	154	193	57,600
51-2000	Assemblers and fabricators	111	193	28,092
51-3000	Food processing occupations	2	13	24,813
51-4000	Metal workers and plastic workers	24	59	35,194
51-5000	Printing occupations	33	79	35,924
51-6000	Textile, apparel, / furnishings	2,564	2,822	23,659
51-7000	Woodworkers	0	3	34,381
51-8000	Plant and system operators	0	5	73,002
51-9000	Other production occupations	344	530	30,839
53-1000	Supervisors, transp. / moving workers	14	37	54,437
53-2000	Air transportation occupations	0	3	73,525
53-3000	Motor vehicle operators	23	208	36,361
53-5000	Water transportation occupations	0	4	90,120
53-6000	Other transportation workers	13	28	25,571
53-7000	Material moving occupations	251	596	28,065

Source: Estimates by LAEDC

Education and training requirements along with median annual earnings in Los Angeles County for more detailed occupational classifications are provided in the *Industry and Labor Market Intelligence Report for the City of Los Angeles*. ❖

Impacts by Contract Period

Of the 5,054 jobs retained at 19 businesses during the fiscal year through the provision of layoff services by the LAEDC and its partner throughout the SDA during the contract period, 680 jobs in 12 businesses were retained in the first contract period and 4,374 jobs in 7 businesses were retained in the second.

The industry subsector classification of the direct jobs saved in each contract period is presented in Exhibit 4-6, as above differentiating between the jobs saved through the efforts of the Layoff Aversion Program (LAP) and those saved in the L.A. City WIB SDA through additional efforts of the LAEDC Business Assistance Program (which are referenced as leveraged jobs).

Exhibit 4-6
Direct Jobs Saved by Industry by Contract Period

NAICS	Industry Subsector	LAP	Leveraged	Total SDA
311	Food manufacturing	6	0	6
313	Textile mills	30	0	30
315	Apparel manufacturing	22	0	22
334	Computer and electronic product mfg	422	0	422
336	Transportation equipment mfg	0	14	14
424	Merchant wholesalers, nondurable	91	0	91
722	Food services and drinking places	0	45	45
812	Personal and laundry services	40	10	50
Contract Period 7/1/13-12/31/13		611	69	680
313	Textile mills	4	0	4
314	Textile product mills	0	42	42
315	Apparel manufacturing	4,300	0	4,300
316	Leather and allied product mfg	0	23	23
442	Furniture and home furnishings stores	0	2	2
512	Motion picture and sound recording	0	3	3
Contract Period 1/1/14-6/30/14		4,304	70	4,374
Total Contract		4,915	139	5,054

Source: Estimates by LAEDC

The majority of the jobs retained occurred during the second contract period.

The jobs saved in each of the two contract periods contributed to this overall impact. Exhibit 4-7 presents the economic impacts by contract period.

Exhibit 4-7
Economic Impact of Jobs Saved by Contract Period

	Direct Jobs Saved	----- Total Economic Impact -----		
		Employment (jobs)	Labor Income (\$ mil)	Output (\$ mil)
L.A. City WIB LAP	611	1,558	137.9	374.7
Leveraged	69	93	3.9	11.3
Period 7/1/13-12/31/13:	680	1,651	142	386
L.A. City WIB LAP	4,304	10,129	543.1	1,943.0
Leveraged	70	107	5.5	17.3
Period 1/1/14-6/30/14:	4,374	10,236	549	1,960
Total Contract	5,054	11,886	\$ 690.5	\$ 2,346.3

Sources: Estimates by LAEDC

Since most of the direct jobs retained occurred during the second contract period, the majority of the economic impacts are the result of efforts under the second contract. ❖

Appendix

Methodology

The total estimated economic impact includes direct, indirect and induced effects. *Direct activity* includes the employees whose jobs were retained. *Indirect effects* are those which stem from the employment and business revenues supported 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.

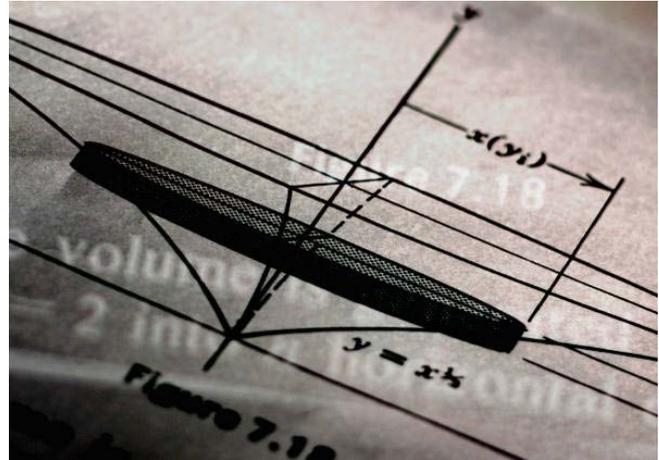
Direct jobs were those that were saved through the efforts of the Layoff Aversion Program. Indirect and induced effects were estimated using models developed with data and software from the IMPLAN Group, LLC. IMPLAN is a robust, widely-used set of modeling tools that provide economic resolution from the national level down to the ZIP code level. The economic region of interest is Los Angeles County.

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

Estimates for labor income and output are reported in 2014 dollars to correspond with the majority of the outcomes over 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 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 (2012).

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 non-consumer 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, grant-making, 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. ❖

Study Authors

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Dr. Cooper leads the LAEDC Institute for Applied Economics whose work involves research in regional issues such as economic impact studies, regional industry analysis and forecasts, workforce development analysis and policy studies. Her fields of expertise include development economics, environmental economics, regional analysis and urban sustainability.

Prior to joining the LAEDC, Dr. Cooper was co-founder of a start-up company in Hong Kong concentrating on equity transactions software and computer accessories manufacturing, which expanded production into the

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Dr. Cooper is a citizen of the United States and Canada. She earned a Bachelor of Arts in Economics from Carleton University in Ottawa, Canada, and a Ph.D. in Economics from the University of Southern California. With funding from the National Science Foundation, she earned a Graduate Certificate in Environmental Sciences, Policy and Engineering. Her current research includes industry cluster performance in the regional economy, commuting and job allocation patterns and workforce development issues.

Shannon M. Sedgwick

Economist

In her current capacity as an Economist at the LAEDC, Ms. Sedgwick develops subject-specific information and data interpretation for economic impact, demographic, transportation, industry and issue studies. She performs research, data collection and organization, analysis and report preparation. Her work focuses on demographics, industry clusters and occupational analysis. Ms. Sedgwick is also proficient at conducting geospatial analysis and has experience working with IMPLAN.

Ms. Sedgwick joined the LAEDC team in June of 2008 as an Economic Research Assistant with the Kyser Center for Economic Research. In that role she assisted both Economic Research and the Consulting Practice of the LAEDC with data collection and research, managing multiple data sets covering the State of California, Southern California and its counties. She was responsible for the *Business Scan* a collection of Los Angeles County economic indicators; the annual *L.A. Stats*, the most frequently requested statistics for Los Angeles region; and was a regular contributor to the weekly economic newsletter, *e-Edge*.

Before joining the LAEDC, Ms. Sedgwick managed an industrial and steel supply company located in the Inland Empire. There she identified and targeted a diverse customer base, and analyzed product and customer patterns in the local industrial market to successfully increase revenues.

A Southern California native, Ms. Sedgwick received her Bachelor of Arts in Economics from the University of Southern California (USC) with a minor in Architecture. She has been a member of the national and the Los Angeles Chapter of the National Association for Business Economics (NABE) since 2008.

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Somjita Mitra joined the LAEDC Institute for Applied Economics as an Economist in June 2013. She is involved in planning, designing and conducting research and analysis for consulting clients and local businesses and governments, as well as for LAEDC's internal departments. Her focus is in regional analysis, economic impact studies and the industrial and occupational structure of local economies.

Before joining the LAEDC, Dr. Mitra was an Economist for a local economic research and litigation consulting company evaluating economic damages, estimating lost profits, identifying key economic issues and developing necessary analytical and empirical frameworks. Prior to this, Dr. Mitra was Project Director for a consumer research firm in Los Angeles where she managed projects that identified and analyzed key market issues for local firms as well as multinational corporations.

Dr. Mitra received her Bachelor of Arts in Economics and Political Science from the University of California, Los Angeles and her Master of Arts in Politics, Economics and Business as well as her Ph.D. in Economics from Claremont Graduate University. Dr. Mitra enjoys volunteering in the local community and is actively involved in both women's welfare and animal rescue organizations. ❖

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