

## Section V

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### **An Analysis of Firm Size in Los Angeles City with Special Attention to Minority-Owned and Women-Owned Firms**





## **An Analysis of Firm Size in Los Angeles City with Special Attention to Minority-Owned and Women-Owned Firms**

The following section provides some statistical analysis of the size of firms in Los Angeles city. The purpose of this section is twofold: to examine differences in firm size by industry and planning district and, most importantly, to determine whether any differences are statistically significant; and to focus on the minority- and women-owned business sectors and test whether differences in minority-owned and women-owned firm size by industry and district are statistically significant.

### **An Analysis of Firm Size in Los Angeles City: All Firms**

#### **Overview**

It is worthwhile to note some of the salient features of firm distribution by employment and by sales at the outset. The mean employment statistic is 9.95 persons while the mean sales statistic is \$1.6 million. At the same time, the median employment for firms in Los Angeles is 2.00 persons and the median sales statistic is \$140,000. Clearly, both distributions are not symmetrical.

Moreover, both distributions have high skewness statistics: 80.7 and 118.8, respectively. These statistics indicate that the firm distribution by employment and by sales is characterized by a high concentration of firms with relatively few workers or relatively low sales, and a “long tail” of fewer firms with relatively many workers or high sales.



## Distribution of Firm Size by Planning Area

Table 1 presents an overview of two available measures for firm size for all of Los Angeles and for each of the seven planning areas. Firm size is not distributed uniformly across the districts, but rather exhibits differences that are found to be statistically significant. The average employment by firms in East Los Angeles, Harbor, the South Valley and West Los Angeles are different from the rest of the city, and crucially, these differences are statistically significant (at the 1 percent or, in the case of West Los Angeles, 5 percent level). Unlike employment, fewer district-based variations are seen in the distribution of firms' average sales. However, firm sales in the Harbor district are highly statistically different from the rest of the city, and firm sales in the West Los Angeles and North Valley districts are different from the rest of the city, although these latter two differences are less significant than the first. The difference between the Harbor district and the rest of Los Angeles is significant at the 1 percent level. The differences between West Los Angeles and the rest of the city – and the North Valley and the rest of the city – are significant at the 10 percent level.

**Table 1-V**  
**Employment and Sales by District**  
**All Firms**

	Employment		Sales (\$Ths.)	
	Mean	Median	Mean	Median
All Los Angeles	9.95	2.00	\$1,641	\$140
Central L.A.	10.04	3.00	\$1,775	\$150
East L.A.	12.64***	2.00	\$1,169	\$120
Harbor	12.41***	3.00	\$3,172***	\$150
North Valley	9.77	2.00	\$931*	\$130
South L.A.	10.32	2.00	\$1,247	\$120
South Valley	7.71***	2.00	\$1,450	\$130
West L.A.	10.71**	3.00	\$2,016*	\$140

Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances.

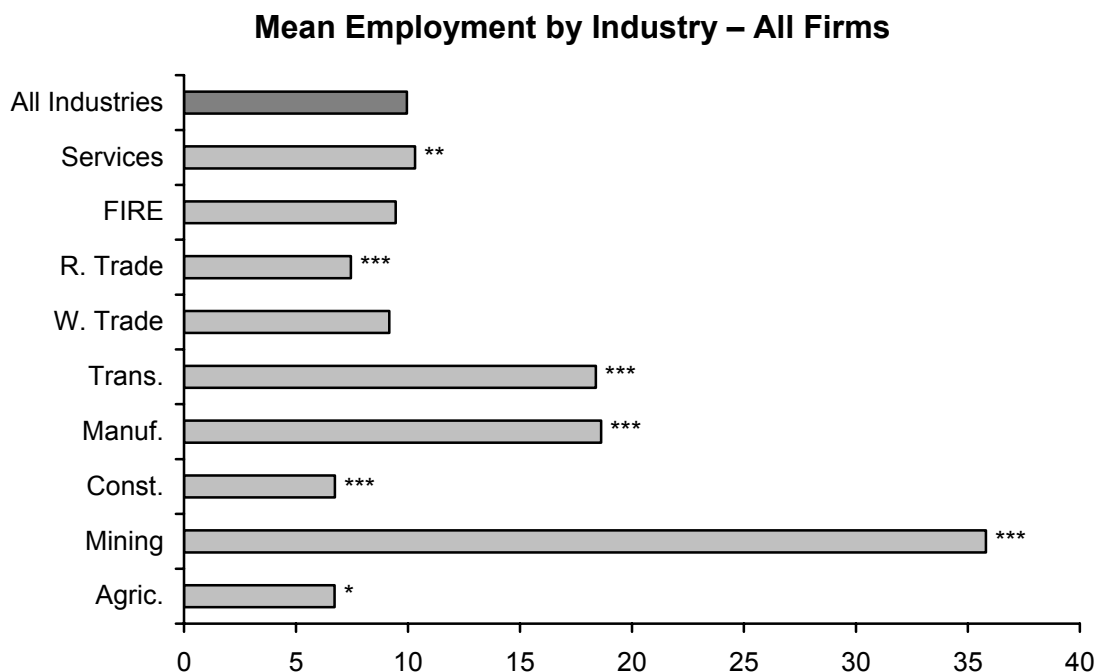


## Distribution of Firm Size by Industry

Just as the two measures of firm size are not distributed uniformly geographically, they are not distributed uniformly across industry groups. As can be seen in Figure 1 below, the mean employment in firms in the mining,<sup>1</sup> manufacturing and transportation, communications, electric, gas, and sanitary services sectors is statistically significantly greater (at the 1 percent level) than the remainder of Los Angeles firms. In addition, mean employment at firms in the services sector is statistically significantly greater (at the 5 percent level) than at nonservice sector firms.

While these sectors employ more workers than the rest of the city's economy, several sectors' firms employ fewer individuals on average. The mean employment in firms in the retail trade and the construction sectors is statistically significantly less (at the 1 percent level) than the remainder of Los Angeles firms. In addition, mean employment at firms in the agriculture, forestry and fishing sector is statistically significantly less (at the 10 percent level) than at agriculture sector firms.

Figure 1-V

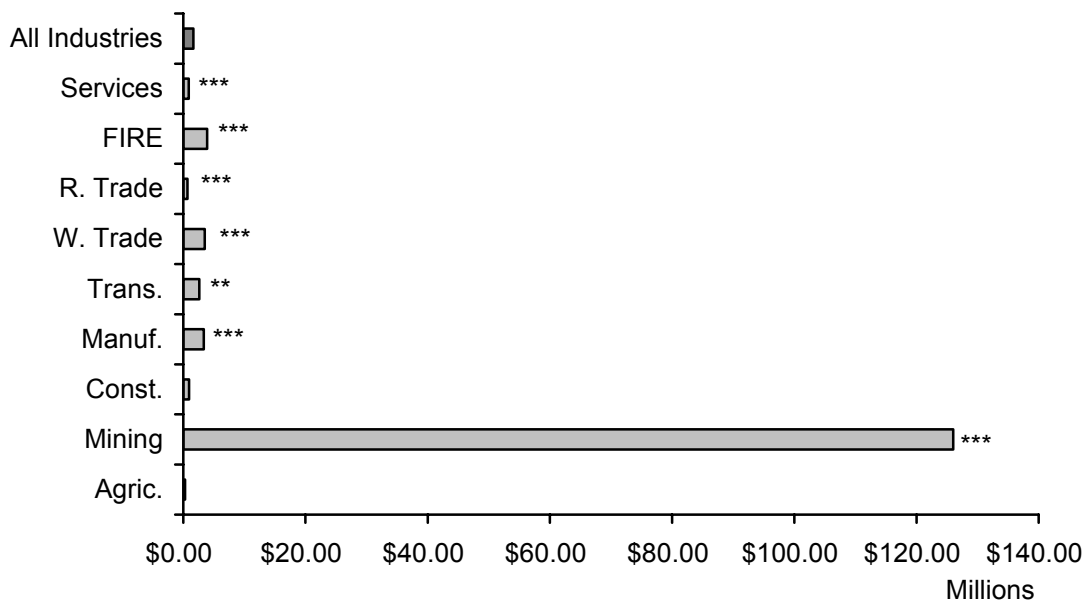


Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Agriculture, Forestry and Fishing (Agric.) consists of industries included in SIC 0111-0971, Mining (Mining) in SIC 1011-1499, Construction (Const.) in SIC 1521-1799, Manufacturing (Manuf.) in SIC 2011-3999, Transportation, Communications, Electric, Gas, and Sanitary Services (Trans.) in SIC 4011-4971, Wholesale Trade (W. Trade) in SIC 5012-5199, Retail Trade (R. Trade) in SIC 5211-5999, Finance, Insurance and Real Estate (FIRE) in SIC 6011-6799 and Services (Services) in SIC 7011-8999.



Figure 2 shows that mean sales of firms in the mining, manufacturing, wholesale trade and FIRE sectors are statistically significantly greater (at the 1 percent level) than the remainder of Los Angeles firms. In addition, mean sales of firms in the transportation, communications, electric, gas, and sanitary services sector are statistically significantly greater (at the 5 percent level) than at nontransport sector firms. Mean sales of firms in the retail trade and the services sectors are statistically significantly less (at the 1 percent level) than the remainder of Los Angeles firms.

**Figure 2-V**  
**Mean Sales by Industry – All Firms**



Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Agriculture, Forestry and Fishing (Agric.) consists of industries included in SIC 0111-0971, Mining (Mining) in SIC 1011-1499, Construction (Const.) in SIC 1521-1799, Manufacturing (Manuf.) in SIC 2011-3999, Transportation, Communications, Electric, Gas, and Sanitary Services (Trans.) in SIC 4011-4971, Wholesale Trade (W. Trade) in SIC 5012-5199, Retail Trade (R. Trade) in SIC 5211-5999, Finance, Insurance and Real Estate (FIRE) in SIC 6011-6799 and Services (Services) in SIC 7011-8999.

### Distribution of Firm Size: Industry Specific Focus

Los Angeles has for some time been an important center for the manufacture of furniture and food, and both toy manufacturing and textile manufacturing have given names to parts of the city (“Toy Town” and the “Garment District”). In addition to these industries, it might be supposed that metal manufacturing is an important industry due to the presence of a large aerospace and a large construction sector. Table 2 and Figures 3 and 4 test the supposition that these industries are important sectors of the Los Angeles city economy in terms of jobs and sales created. The conclusions are mixed; food and textiles are the most important industries, followed by metals and furniture. Toy manufacture is seen to be unimportant.

An overview of the total employment and sales of these selected industries is presented in Table 2. The largest, both in terms of individuals employed and sales, is the textiles industry with sales of \$4.9 billion and nearly 35,500 workers. This is followed by the food and the metal sectors. These two sectors each account for around half of the textiles sector’s employment (18,351 and 18,050, respectively). Sales of the metal sector (\$2.4 billion) also approximate 50 percent of the textiles sector, however,



the firm sales in the food sector (\$4.4 billion) are nearly 90 percent of the textiles sector's total sales. Sales per employee are thus nearly twice as high in the food as in the metals or textiles industries, suggesting that labor productivity and thus wages may be correspondingly higher in the food sector<sup>2</sup>. The furniture manufacturing sector is smaller still, employing around 50 percent as many individuals as either the metals or the food manufacturing sectors with sales around 50 percent of metals and 25 percent of textiles. The toy making industry is extremely small and is unimportant either in terms of sales or employment. Although Mattel, the largest toy firm in the world, is headquartered in the Los Angeles area, manufacturing of toys is not an important component of the Los Angeles city economy<sup>3</sup>.

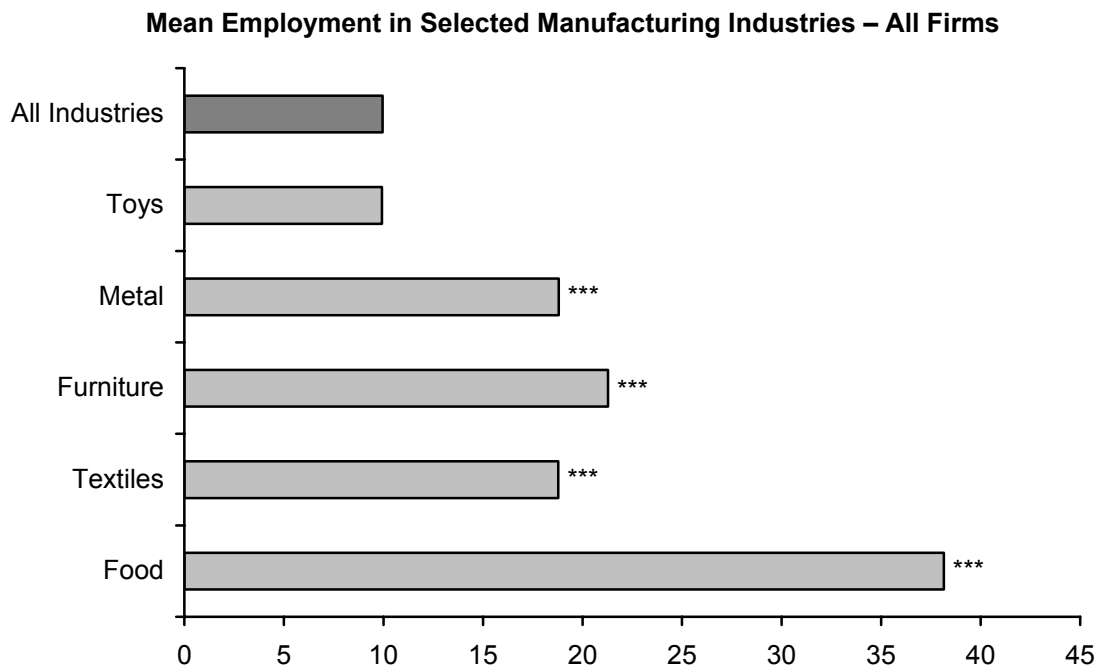
**Table 2-V**  
**Employment and Sales in Selected Manufacturing Industries**  
**All Firms**

<b>Industry</b>	<b>Employment</b>	<b>Sales ( \$Mil.)</b>	<b>Number</b>
Food	18,351	\$4,350	481
Textiles	35,446	\$4,900	1,887
Furniture	9,109	\$1,020	428
Metals	18,050	\$2,410	960
Toys	724	\$86	73



Figure 3 shows mean employment in these selected industries – one measure of firm size. Mean employment at firms in the food, textiles, furniture and metal sector are all statistically significantly greater (at the 1 percent level) than the rest of the Los Angeles city economy. The mean employment at firms in the large food sector is 38 persons, nearly four times as high as the rest of the economy. The industry with the next-largest firms in terms of employment is the furniture-making sector, with mean employment of 22 individuals. Metal manufacturing and textiles firms each have mean employment of 19 individuals, smaller than either food or furniture, but much larger than the rest of the Los Angeles city economy. The toy manufacturing sector has mean employment that is not statistically significantly different from the rest of the city economy.

Figure 3-V



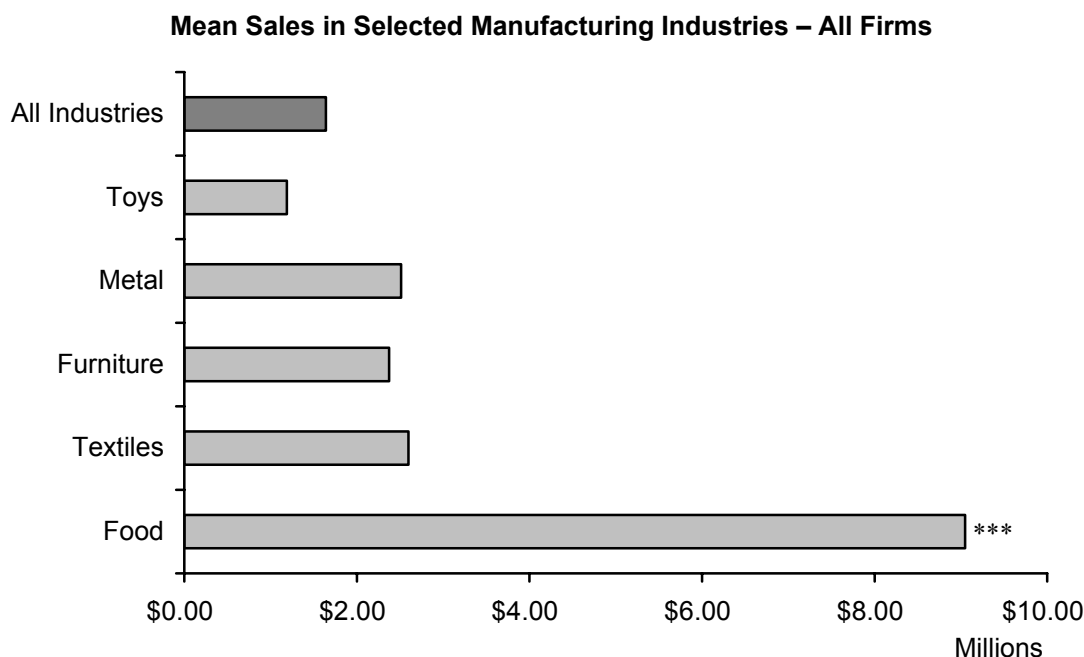
Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Food consists of industries included in SIC 2011-2099, Textiles in SIC 2211-2399, Furniture in 2511-2599, Metal in SIC 3312-3499 and Toys in SIC 3942-3944.





Figure 4 shows mean sales in these same industries and here the picture is rather different. Mean sales at firms in the food sector at \$9 million are statistically significantly greater (at the 1 percent level) than the rest of the Los Angeles city economy which has mean sales of \$1.6 million. However, although mean sales are higher at metal, furniture and textiles firms than the rest of the economy, the difference is not statistically significant. Sales of toy makers are, in fact, lower than the rest of the Los Angeles city economy; however, as with textiles, metals and furniture, the difference is not statistically significant.

**Figure 4-V**



Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Food consists of industries included in SIC 2011-2099, Textiles in SIC 2211-2399, Furniture in 2511-2599, Metal in SIC 3312-3499 and Toys in SIC 3942-3944.

### Concluding Points: All Firms

As is the case with the country as a whole, the size distributions of all firms by sales and by employment are skewed to the left and have long tails. Thus, most Los Angeles firms are small, employing few individuals and having low sales, with a very small number of firms with large numbers of employees and high sales.

The distributions of firm size as measured by sales and by employment are not uniform either across districts or industries. However, not all these differences are statistically significant, so caution must be used when comparing industries and districts.

Finally, the food, textiles, furniture and metal manufacturing industries can be seen as of importance to Los Angeles, while toy manufacturing is not.



## An Analysis of Firm Size in Los Angeles City: Minority- and Women-Owned Firms

### Overview of the Minority-Owned Business Sector

Minority-owned is defined as firms owned by individuals of any race or ethnicity aside from non-Hispanic White. Minority-owned firm distribution by employment and by sales differ somewhat from that of all firms. As with all firms, the distributions of minority-owned firms are asymmetrical with mean sales of \$795,363, median sales of \$150,000, mean employment of 7.25 and median employment of three. Thus, distributions of minority-owned firms have both smaller means and medians than those of all firms. However, the distributions are neither as skewed nor as sharply peaked (leptokurtic) as those of all firms with skewness and kurtosis statistics lower than those of all firms.<sup>4</sup>

### Distribution of Minority-Owned Firm Business Activity by Planning Area

Table 3 provides an overview of the share of Los Angeles city business activity accounted for by minority-owned firms. The share of employment that is accounted for by minority-owned firms is 7 percent of total employment in Los Angeles, but varies from 11 percent in South Los Angeles to just 3 percent in the South Valley. The share of total sales that minority-owned businesses account for is smaller than minority-owned firms' shares of employment at 4 percent for the city as a whole. Again, minority-owned businesses' share of sales is not equal across districts, but rather varies from a high of 10 percent in South Los Angeles to a low of 2 percent in the South Valley and West Los Angeles districts.

**Table 3-V**  
**Minority-Owned Firms' Share of Business Activity**

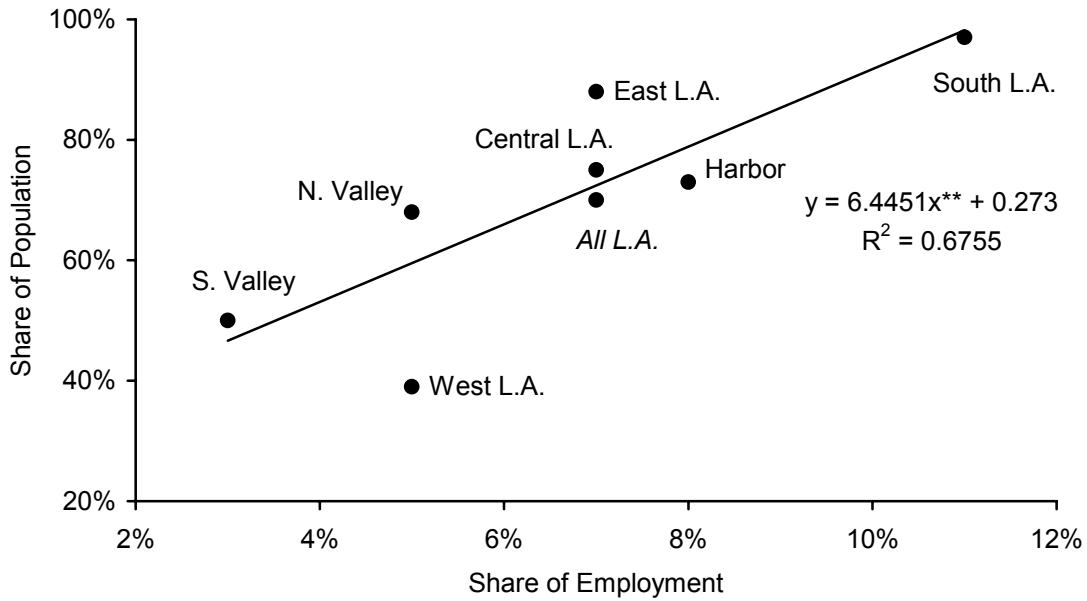
	Employment	% Share	Sales ( \$Mil.)	% Share
North Valley	10,743	5%	\$1,090	6%
South Valley	7,756	3%	\$1,090	2%
West L.A.	14,199	5%	\$1,070	2%
Central L.A.	31,363	8%	\$3,410	5%
East L.A.	7,177	7%	\$835	9%
South L.A.	16,190	11%	\$1,730	10%
Harbor	8,894	7%	\$1,330	4%
All Los Angeles	96,322	7%	\$10,555	4%

### Some Determinants of the Distribution of Minority-Owned Firm Business Activity by Planning Area

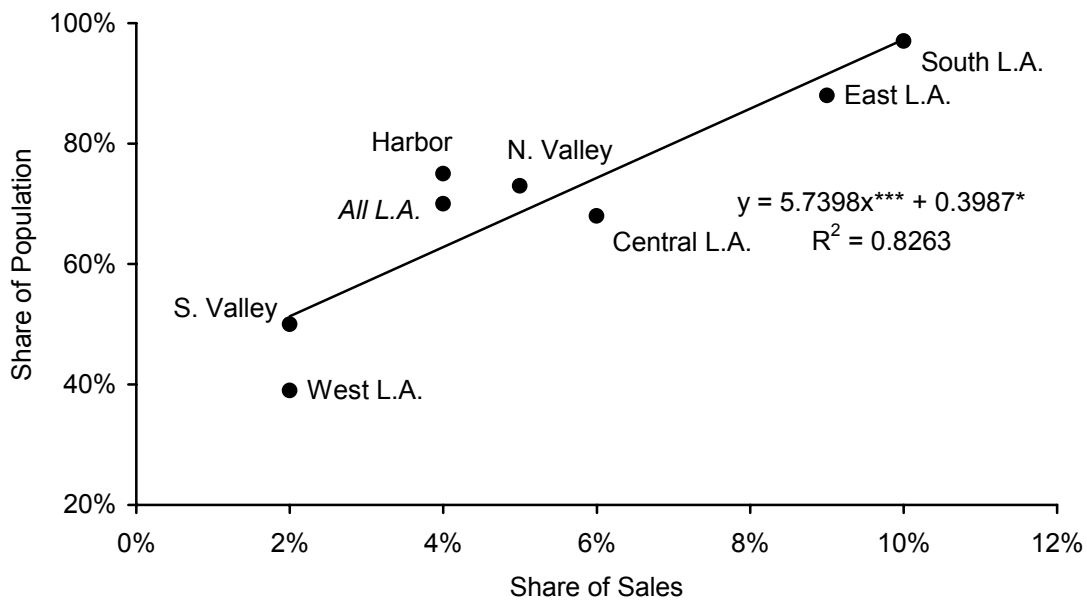
There are statistically significantly positive relationships between the areas' shares of population that are accounted for by ethnic minorities and minority business activity as a share of total business activity, as seen below in Figures 5 and 6.



**Figure 5-V**  
**Minority-owned Firms' Share of Employment of All Firms Statistically Significantly Positively Related to Minority Share of Population**



**Figure 6-V**  
**Minority-owned Firms' Share of Sales of All Firms Statistically Significantly Positively Related to Minority Share of Population**





## Distribution of Minority-Owned Firm Size by Planning Area

Table 4 compares the average size of minority-owned firms as compared to nonminority-owned firms. The difference is significant both in terms of employment and in terms of sales. The mean employment at minority-owned firms is seven persons, which is statistically significantly different (at the 1 percent level) from nonminority-owned firms' mean employment of 10 persons.<sup>5</sup> The mean sales of minority-owned firms, at \$795,000, are statistically significantly different (at the 1 percent level) from nonminority-owned firms' mean sales of \$1.7 million.

**Table 4-V**

**Mean Employment and Sales**  
**Minority-Owned Compared to Nonminority-Owned**

	Not Minority-Owned	
Employment	Not Minority-Owned	10.22
	Minority-Owned	7.26***
Sales	Not Minority-Owned	\$1,725,042
	Minority-Owned	\$795,363***

Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with unequal variances.

Table 5 shows that firm size for minority-owned firms is distributed more uniformly across the city's seven planning areas than is the case for nonminority-owned firms. The average employment of firms in West Los Angeles is statistically significantly different (at the 5 percent level) from the rest of the city with the differences between the other regions and the rest of the city being not significant. In the case of sales, it is the Harbor area that stands out, not West Los Angeles. The average sales of firms in the Harbor area are statistically significantly different from the rest of the city at the 1 percent level. It is worth noting that in no planning area is the median employment of minority-owned-firms lower than nonminority-owned, and in fact the median employment of minority-owned firms is higher in Central Los Angeles and South Los Angeles. Moreover, the median sales of minority-owned firms are higher than nonminority owned in the Central Los Angeles, Harbor, South Los Angeles and West Los Angeles areas, and are lower in only one area: the South Valley.

**Table 5-V**

**Employment and Sales by District**  
**Minority-Owned Firms**

	Employment		Sales (\$Ths.)	
	Mean	Median	Mean	Median
North Valley	6.59	2.00	\$670*	\$130
South Valley	5.20*	2.00	\$733	\$120
West L.A.	10.61**	3.00	\$801	\$150
Central L.A.	7.11	3.00	\$773	\$170
East L.A.	5.84	2.00	\$680	\$120
South L.A.	7.83	3.00	\$835	\$150
Harbor	8.03	3.00	\$1,203***	\$140
All Los Angeles	7.26	3.00	\$795	\$150

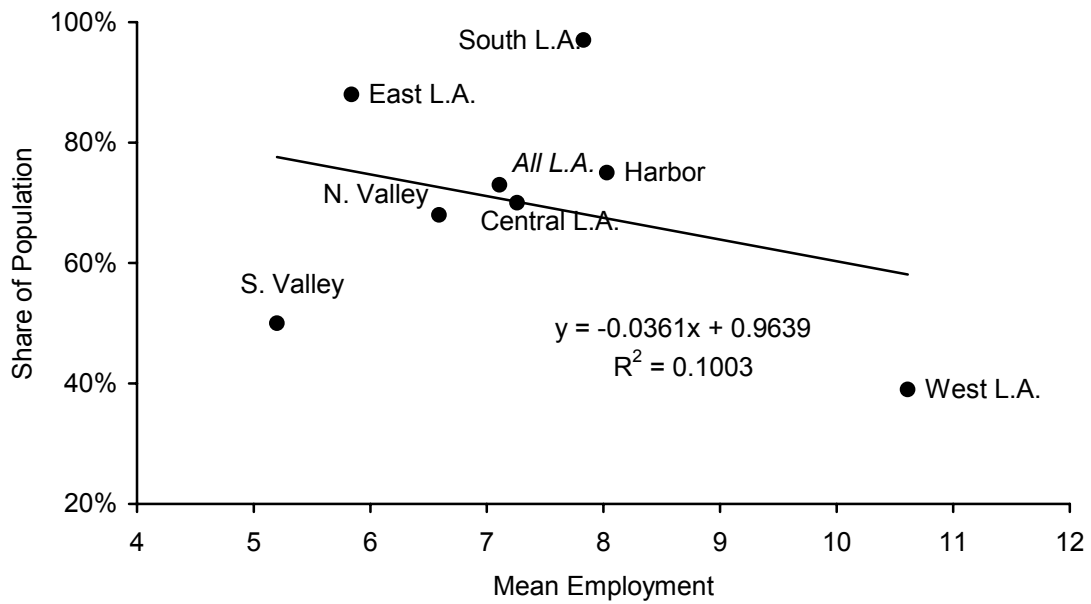
Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances.



### Some Determinants of the Distribution of Minority-Owned Firm Size by District

The positive relationship between the ethnic minority share of a planning area's population and minority-owned firms' share of business activity was noted above. There is, however, no corresponding relationship between mean size of minority-owned firms in a planning area and the ethnic minority share of the planning area's population. The lack of strong relationships is shown in Figures 7 and 8.

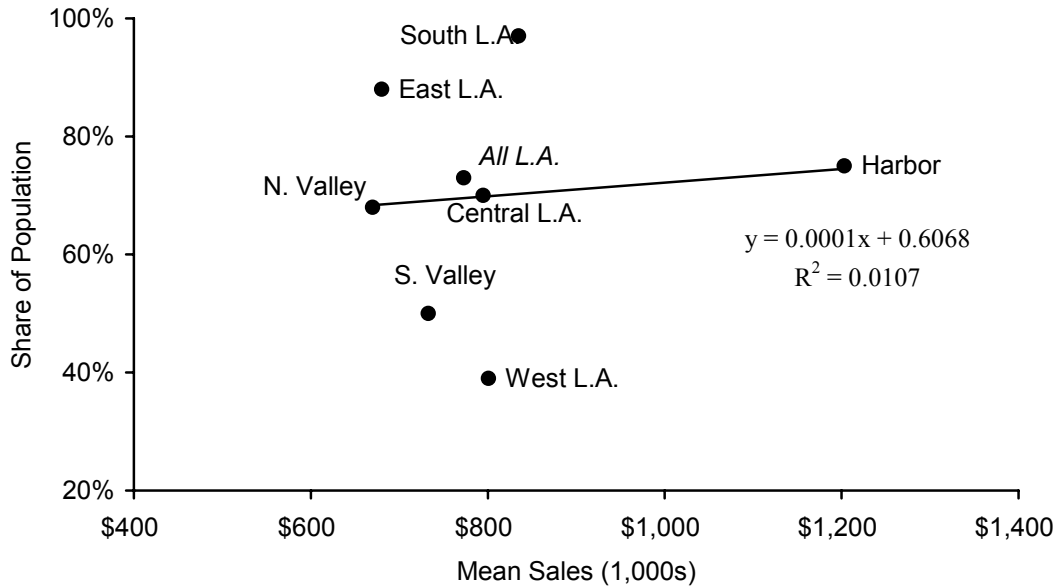
**Figure 7-V**  
**Minority-owned Firms' Mean Employment Not Statistically Significantly Related to Minority Share of Population**



Notes: \*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%



**Figure 8-V**  
**Minority-owned Firms' Mean Sales Not Statistically Significantly Related to Minority Share of Population**

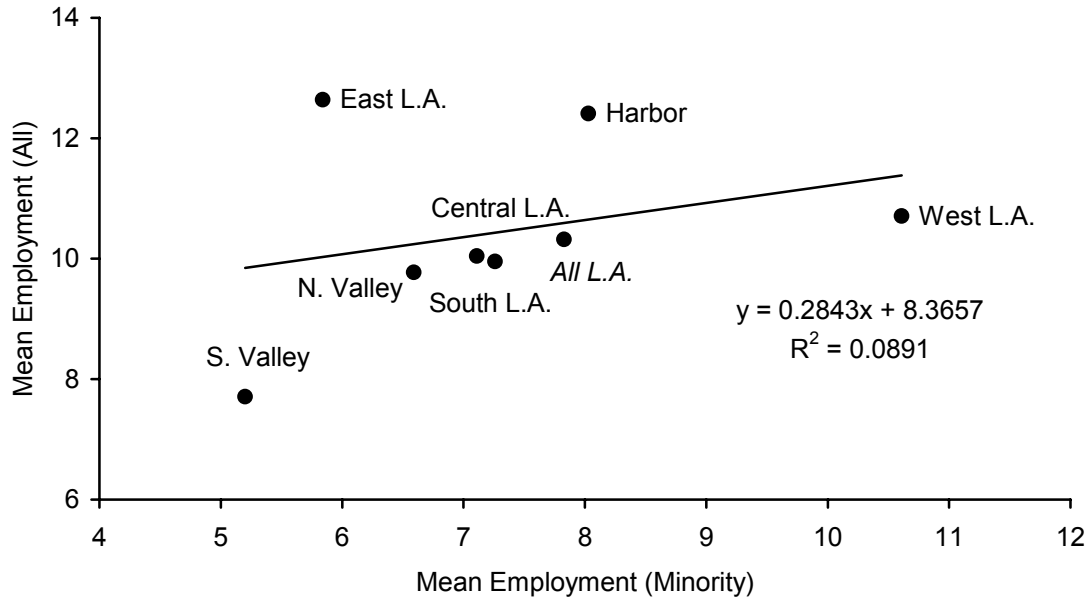


Notes: \*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%

Minority-owned firm size in a planning area has very little to do with the ethnic composition of the area and is clearly determined by other factors, with plausible candidates being the area's predominant industrial mix and the overall level of business activity in the region. It is rather curious to note, however, that while the mean sales of minority-owned firms are positively and significantly related at the 1 percent level to the mean sales of all firms, the mean employment of minority-owned firms are not similarly related to the mean employment of all firms as seen in Figures 9 and 10. It is not intuitively clear why this should be the case.

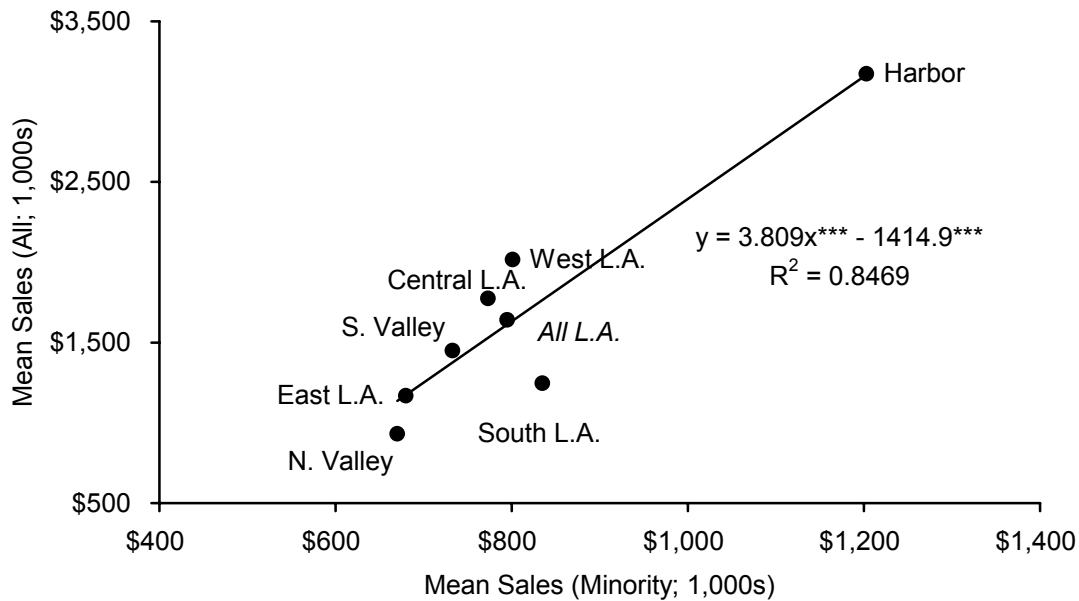


**Figure 9-V**  
**Minority-owned Firms' Mean Employment Not Statistically Significantly Related to All Firms' Mean Employment**



Notes: \*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%

**Figure 10-V**  
**Minority-owned Firms' Mean Sales Statistically Significantly Positively Related to All Firms' Mean Sales**



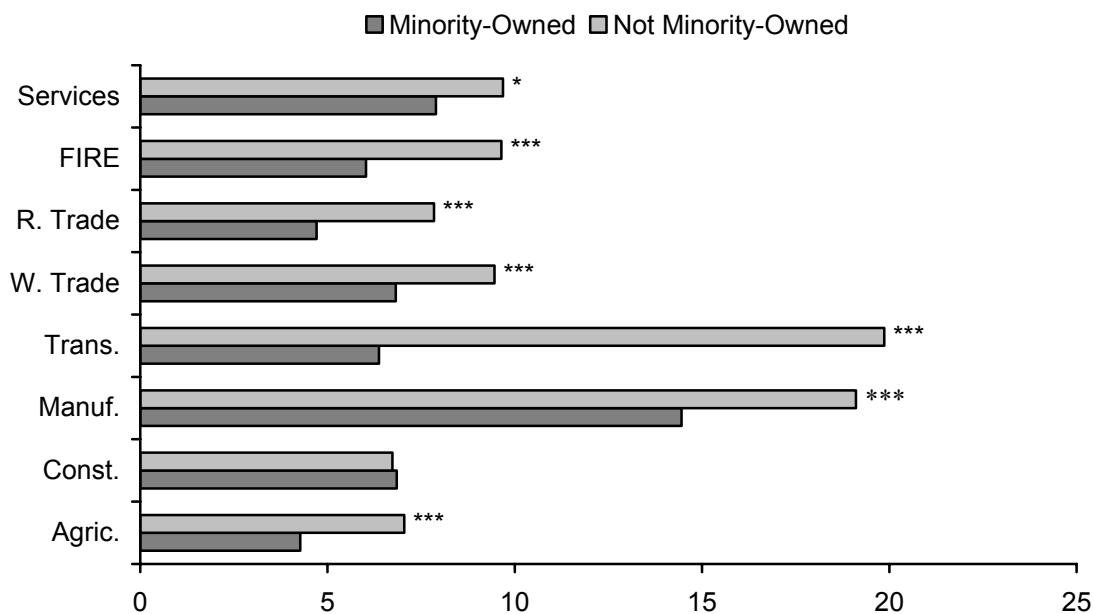
Notes: \*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%



### Distribution of Minority-Owned Firm Size by Industry

Figure 11 compares the size of minority-owned firms relative to nonminority-owned firms by industry group. The size of minority-owned firms (as measured by mean employment) is smaller for all industries with the sole exception of construction, and in this case, the difference is not statistically significant. In all remaining industries, minority-owned firms' mean employment is statistically significantly lower than that of nonminority-owned firms (at the 1 percent level, except for retail sales, which is only significant at the 10 percent level).

**Figure 11-V**  
**Mean Employment by Industry – Minority-Owned Firms Compared to Nonminority-Owned**



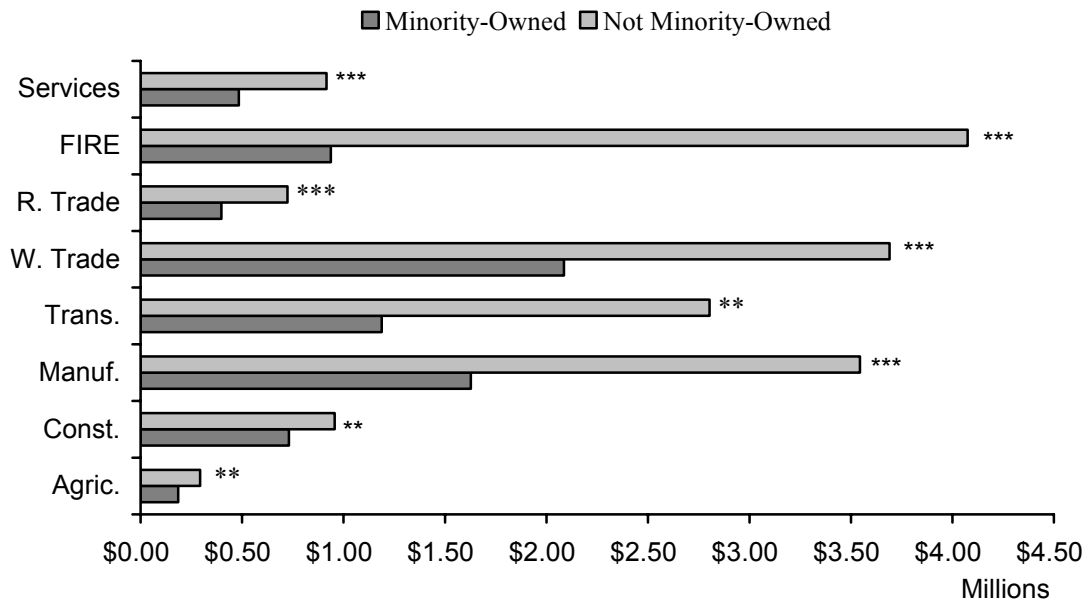
Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with unequal variances. Mining not included due to small sample size. Agriculture, Forestry and Fishing (Agric.) consists of industries included in SIC 0111-0971, Construction (Const.) in SIC 1521-1799, Manufacturing (Manuf.) in SIC 2011-3999, Transportation, Communications, Electric, Gas, and Sanitary Services (Trans.) in SIC 4011-4971, Wholesale Trade (W. Trade) in SIC 5012-5199, Retail Trade (R. Trade) in SIC 5211-5999, Finance, Insurance and Real Estate (FIRE) in SIC 6011-6799 and Services (Services) in SIC 7011-8999.





Figure 12 repeats the above analysis using mean sales as a measure of firm size. The results are quite similar. For no industry group are the mean sales of minority-owned firms larger than those of nonminority-owned firms. Indeed the size of minority-owned firms, as measured by mean sales, is statistically significantly different than those of nonminority-owned firms in the same industry group at the 1 percent level for manufacturing, wholesale trade, retail trade, FIRE and services, and statistically significantly different at the 5 percent level for the agriculture, forestry and fishing industry, the construction industry, and transportation, communications, electric, gas, and sanitary services.

**Figure 12-V**  
**Mean Sales by Industry – Minority-Owned Firms Compared to Nonminority-Owned**



Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with unequal variances. Mining not included due to small sample size. Agriculture, Forestry and Fishing (Agric.) consists of industries included in SIC 0111-0971, Construction (Const.) in SIC 1521-1799, Manufacturing (Manuf.) in SIC 2011-3999, Transportation, Communications, Electric, Gas, and Sanitary Services (Trans.) in SIC 4011-4971, Wholesale Trade (W. Trade) in SIC 5012-5199, Retail Trade (R. Trade) in SIC 5211-5999, Finance, Insurance and Real Estate (FIRE) in SIC 6011-6799 and Services (Services) in SIC 7011-8999.



### Distribution of Minority-Owned Firm Size: Industry-Specific Focus

Table 6 and Figures 13 and 14 gauge the importance of the food, textile, furniture, metal and toy manufacturing industries to the sector of the Los Angeles city economy that is comprised of minority-owned firms. An overview of the total employment and sales of minority-owned firms in these selected industries is provided by Table 6. The largest industry, by far, is the textiles industry both in terms of individuals employed and sales. There are some 273 textile manufacturing firms in Los Angeles city that are minority-owned firms and they employ nearly 5,000 individuals – around 14 percent of total textile employment – and have sales of nearly \$550 million. This industry is followed in importance by the food sector with 57 firms, 1,100 workers and total sales of \$203 million, and by the metal manufacturing sector with 103 firms, 1,100 workers and \$96 million in sales. The furniture sector is next largest with 51 firms employing 670 individuals and having sales of \$60 million. As was the case with the Los Angeles economy as a whole, the toy manufacturing sector is unimportant.

It is again worth noting that the food sector has strikingly higher sales-per-employee as was seen for the case of all firms in Los Angeles city, above. This suggests that labor productivity, and thus wages, may be higher in the minority-owned food sector than in the Los Angeles city economy as a whole.

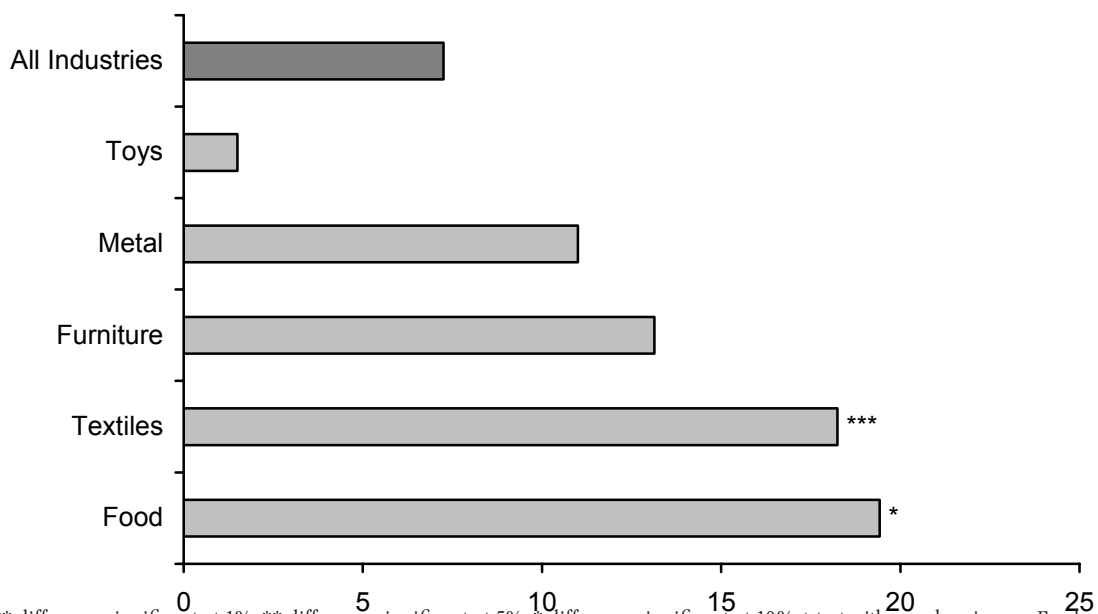
**Table 6-V**  
**Employment and Sales in Selected Manufacturing Industries**  
**Minority-Owned Firms**

Industry	Employment	Sales ( \$Mil.)	Number
Food	1,107	\$203	57
Textiles	4,980	\$549	273
Furniture	670	\$60	51
Metals	1,133	\$96	103
Toys	3	\$0	2



Figure 13 shows mean employment at minority-owned firms in these selected industries. Mean employment at minority-owned firms in the textiles sector is statistically significantly greater (at the 1 percent level) than mean employment at minority-owned firms in nontextile sectors. Mean employment at minority-owned firms in the food sector is statistically significantly greater than mean employment at minority-owned firms in nonfood sectors; however, the difference is significant only at the 10 percent level. The furniture, metals and toy manufacturing sectors have mean employment statistics that are not statistically significantly different from the rest of the minority-owned Los Angeles city economy.

**Figure 13-V**  
**Mean Employment in Selected Manufacturing Industries –**  
**Minority-Owned Firms**

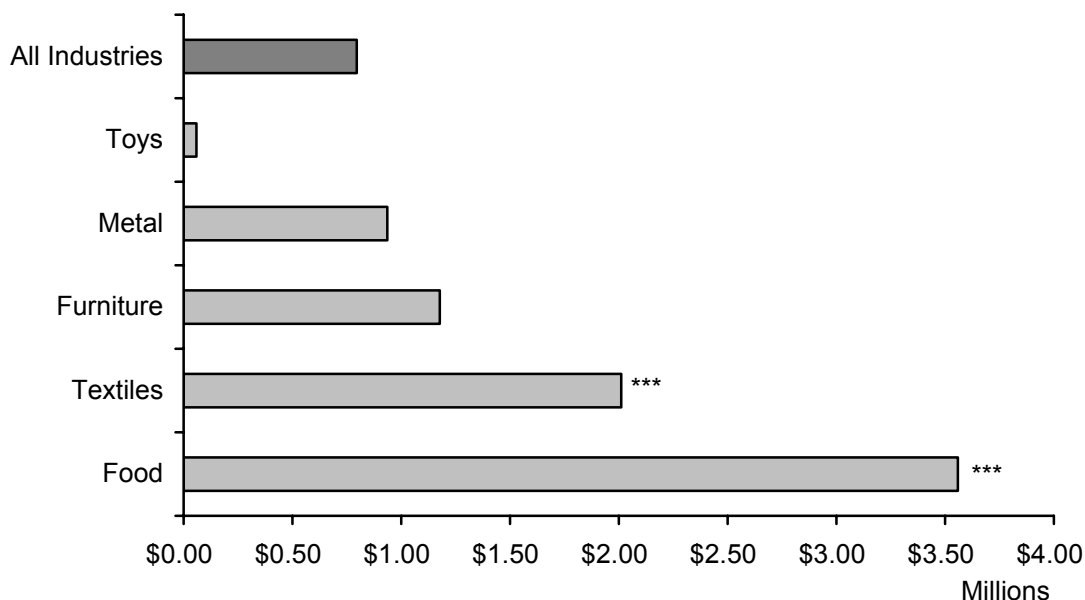


Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Food consists of industries included in SIC 2011-2099, Textiles in SIC 2211-2399, Furniture in 2511-2599, Metal in SIC 3312-3499 and Toys in SIC 3942-3944.



Figure 14 shows mean sales of minority-owned firms in these same industries. Mean sales of minority-owned firms in the textiles and food sectors are statistically significantly greater (at the 1 percent level) than mean sales of minority-owned firms that are not in these sectors. The furniture, metals and toy manufacturing sectors have mean sales statistics that are not statistically significantly different from the rest of the minority-owned Los Angeles city economy.

**Figure 14-V**  
**Mean Sales in Selected Manufacturing Industries – Minority-Owned Firms**



Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Food consists of industries included in SIC 2011-2099, Textiles in SIC 2211-2399, Furniture in 2511-2599, Metal in SIC 3312-3499 and Toys in SIC 3942-3944.

### Concluding Points: Minority-Owned Firms

As is the case with all firms, the size distributions of minority-owned firms by sales and by employment are skewed to the left and have long tails. However, this is less marked in the case of minority-owned firms than all firms.

A planning area’s racial and ethnic composition can be seen to be a good predictor of minority-owned firms’ share of business activity, however, it is not a good predictor of firm size.

As with all firms, the distributions of minority-owned firm size are not uniform either across planning areas or industries. They are, however, more evenly distributed than those of all firms.

Even more caution should be used when comparing minority firm size across industries and across planning areas, as differences that might be thought to be significant at first glance do not always turn out to be statistically significant.

As with all firms, the food, textiles, furniture and metal manufacturing industries can be seen as of importance to the minority-owned sector of the Los Angeles economy, while toy manufacturing is not.



## Overview of the Women-Owned Business Sector

The distributions of women-owned firms by employment and by sales differ somewhat from those of all firms and of minority-owned firms. As with all firms and minority-owned firms, the distributions of women-owned firms are asymmetrical. Women-owned firms have mean sales of \$477,406, median sales of \$110,000, mean employment of 4.47 and median employment of two. Thus, both distributions of women-owned firms have smaller means and medians than both minority-owned and all firms. The distributions are neither as skewed nor as sharply peaked (leptokurtic) as those of all firms with skewness and kurtosis statistics lower than those of all firms.<sup>6</sup> However, while the distribution of women-owned firms by sales is less skewed and less leptokurtic than that of minority-owned firms, the distribution of women-owned firms by employment is actually more skewed and more leptokurtic than that of minority-owned firms by employment.

## Distribution of Women-Owned Firm Business Activity by Planning Area

Table 7 provides an overview of the share of Los Angeles city business activity that is accounted for by firms owned by women. The share of firm numbers that is accounted for by women-owned firms is 14 percent for all of Los Angeles city, with this share exhibiting some variation, albeit less than that of minority-owned firms. Employment at women-owned firms is 6 percent of total employment and varies more than firm number: from 8 percent in South Los Angeles to 5 percent in West Los Angeles. The share of total sales is 4 percent for the city as a whole and varies from a high of 7 percent in the North Valley and South Los Angeles areas to a low of 3 percent in the South Valley and West Los Angeles.

**Table 7-V**  
**Women-Owned Firms' Share of Business Activity**

	Number	% Share	Employment	% Share	Sales (\$Mil.)	% Share
North Valley	2,553	13%	14,109	7%	\$1,270	7%
South Valley	4,105	13%	16,033	7%	\$1,370	3%
West L.A.	3,614	14%	15,048	5%	\$1,310	3%
Central L.A.	5,385	14%	24,706	6%	\$2,780	4%
East L.A.	1,143	14%	5,631	6%	\$492	5%
South L.A.	1,952	14%	11,107	8%	\$1,180	7%
Harbor	1,206	13%	8,020	7%	\$1,130	4%
All Los Angeles	19,958	14%	94,654	6%	\$9,532	4%



## Distribution of Women-Owned Firm Size by Planning Area

Table 8 compares the average size of women-owned firms as compared to nonwomen-owned firms. The difference is large and significant both in terms of employment and in terms of sales. The mean employment at minority-owned firms is nearly 5 persons, which is statistically significantly different (at the 1 percent level) from nonwomen-owned firms' mean employment of nearly 11 persons.<sup>7</sup> Mean sales of women-owned firms, at \$477,000, is statistically significantly different (at the 1 percent level) from nonwomen-owned firms' mean sales of more than \$1.8 million.

**Table 8-V**

**Mean Employment and Sales**  
**Women-Owned Compared to Nonwomen-Owned**

Employment	Not Women-Owned	10.77
	Women-Owned	4.74***
Sales	Not Women-Owned	\$1,823,959
	Women-Owned	\$477,405***

Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with unequal variances.

Table 9 shows that firm size for women-owned firms show a fair amount of variation across the city's seven planning areas and are less uniformly distributed than minority-owned firms. The mean employment of women-owned firms in the Harbor, North Valley and South Los Angeles areas is statistically significantly greater (at the 1 percent level) than the rest of the city, while mean employment is statistically significantly less (at the 1 percent level) for women-owned firms in the South Valley and West Los Angeles districts. There are no statistically significant differences between women-owned firms' mean employment in the Central and East Los Angeles areas and the rest of the city. The mean sales of women-owned firms in the Harbor and South Los Angeles areas is statistically significantly greater (at the 1 percent level) than the rest of the city, while mean employment is statistically significantly greater (at the 5 percent level) in the Central Los Angeles district. As with mean employment, mean sales are statistically significantly less (at the 1 percent level) for women-owned firms in the South Valley and West Los Angeles districts. There are no statistically significant differences between women-owned firms' mean sales in the North Valley and East Los Angeles districts and the rest of the city.

**Table 9-V**

**Employment and Sales by District**  
**Women-Owned Firms**

	Employment		Sales (\$Ths.)	
	Mean	Median	Mean	Median
North Valley	5.53***	2.00	\$497	\$110
South Valley	3.91***	2.00	\$333***	\$100
West L.A.	4.16***	2.00	\$364***	\$100
Central L.A.	4.59	2.00	\$516*	\$130
East L.A.	4.93	2.00	\$430	\$95
South L.A.	5.69***	2.00	\$604***	\$95
Harbor	6.65***	2.00	\$937***	\$115
All Los Angeles	4.74	2.00	\$477	\$110

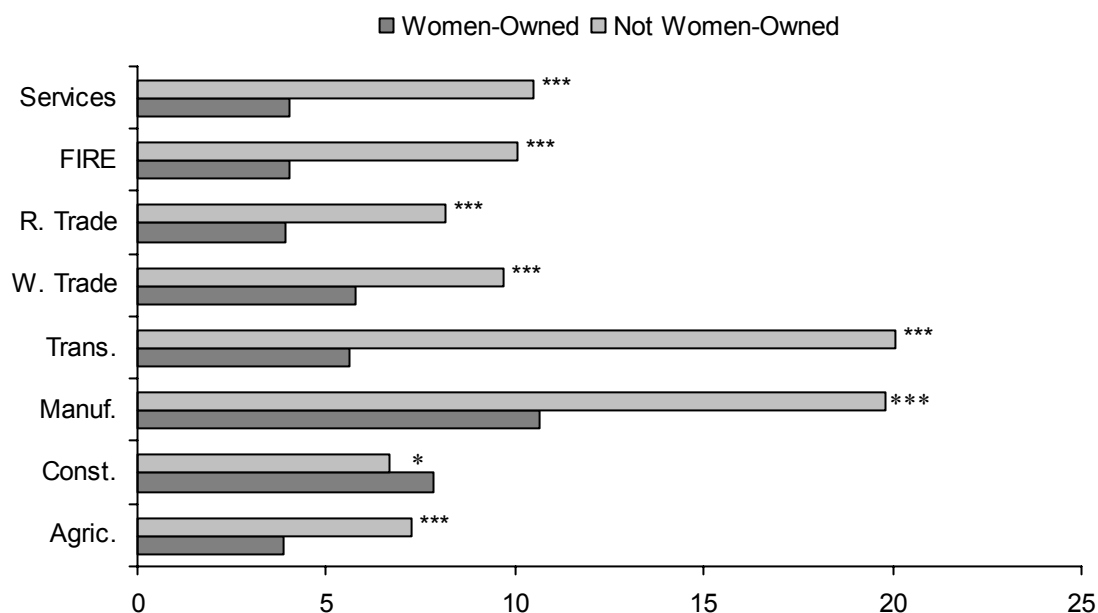
Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances.



## Distribution of Women-Owned Firm Size by Industry

Figure 15 compares the size, as measured by mean employment, of women-owned firms relative to nonwomen-owned firms by industry group. The mean employment of women-owned firms is lower for all industries with the sole exception of construction (this difference is statistically significant, albeit at the 10 percent level). In all remaining industries, women-owned firms' mean employment is statistically significantly lower than that of nonminority-owned firms at the 1 percent level.

**Figure 15-V**  
**Mean Employment by Industry – Women-Owned Firms Compared to Nonwomen-Owned**

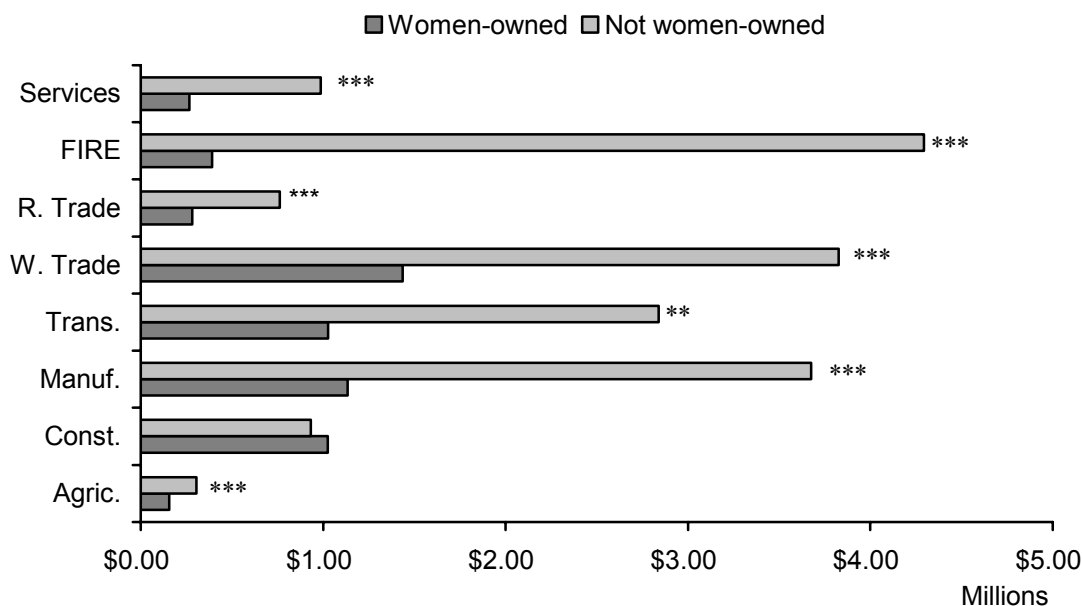


Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with unequal variances. Mining not included due to small sample size. Mining not included due to small sample size. Agriculture, Forestry and Fishing (Agric.) consists of industries included in SIC 0111-0971, Construction (Const.) in SIC 1521-1799, Manufacturing (Manuf.) in SIC 2011-3999, Transportation, Communications, Electric, Gas, and Sanitary Services (Trans.) in SIC 4011-4971, Wholesale Trade (W. Trade) in SIC 5012-5199, Retail Trade (R. Trade) in SIC 5211-5999, Finance, Insurance and Real Estate (FIRE) in SIC 6011-6799 and Services (Services) in SIC 7011-8999.



Figure 16 shows that for only one industry group – construction – are the mean sales of women-owned firms larger than those of nonwomen-owned firms and that this difference is not statistically significant. The mean sales of women-owned firms as measured by mean sales is statistically significantly smaller than those of nonwomen-owned firms in the same industry group at the 1 percent level for the agriculture, forestry and fishing industry, manufacturing, wholesale trade, retail trade, FIRE and the services sector, and statistically significantly smaller at the 5 percent level for transportation, communications, electric, gas and sanitary services.

**Figure 16-V**  
**Sales by Industry – Women-Owned Firms Compared to Nonwomen-Owned**



Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with unequal variances. Mining not included due to small sample size. Agriculture, Forestry and Fishing (Agric.) consists of industries included in SIC 0111-0971, Construction (Const.) in SIC 1521-1799, Manufacturing (Manuf.) in SIC 2011-3999, Transportation, Communications, Electric, Gas, and Sanitary Services (Trans.) in SIC 4011-4971, Wholesale Trade (W. Trade) in SIC 5012-5199, Retail Trade (R. Trade) in SIC 5211-5999, Finance, Insurance and Real Estate (FIRE) in SIC 6011-6799 and Services (Services) in SIC 7011-8999.





### Distribution of Women-Owned Firm Size: Industry-Specific Focus

Table 10 and Figures 17 and 18 assess the importance of the food, textile, furniture, metal and toy manufacturing industries to the sector of the Los Angeles city economy that is comprised of women-owned firms. An overview of the total employment and sales of women-owned firms in these selected industries is provided by Table 10. As was seen to be the case with minority-owned firms, the largest industry is the textiles industry. There are some 387 textile manufacturing firms in Los Angeles city that are women-owned firms with sales of \$448 million that employ nearly 4,200 individuals (around 12 percent of total textile employment). This is followed by the food and metal sectors. The food sector is comprised of 62 firms, 894 workers and total sales of \$146 million, and the metal manufacturing sector of 102 firms, 1,494 workers and \$135 million in sales. The furniture sector is next largest with 23 firms employing 155 individuals and having sales of \$11 million. As was the case with the Los Angeles economy as a whole, the toy manufacturing sector is unimportant.

It is worth noting that the women-owned metal manufacturing industry is larger than the minority-owned metal sector both, in terms of sales and in terms of employment, and that the food sector has higher sales-per-employee than the other selected industries for all firms and for minority-owned firms in Los Angeles city.

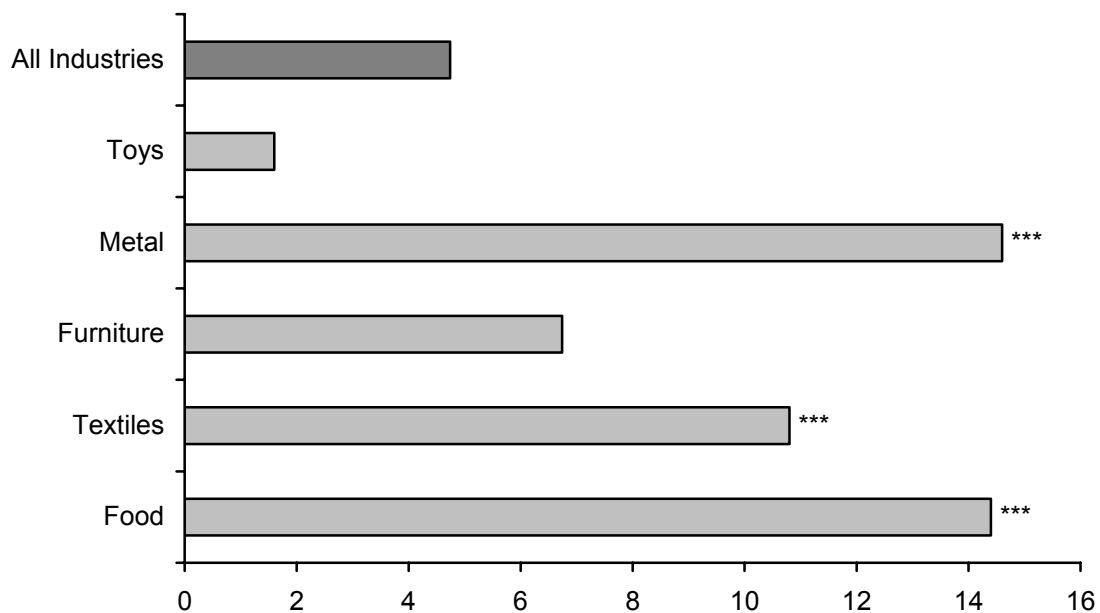
**Table 10-V**  
**Employment and Sales in Selected Manufacturing Industries**  
**Women-Owned Firms**

<b>Industry</b>	<b>Employment</b>	<b>Sales ( \$Mil.)</b>	<b>Number</b>
Food	894	\$146	62
Textiles	4,198	\$448	387
Furniture	155	\$11	23
Metals	1,494	\$135	102
Toys	23	\$1	14



Figure 17 shows mean employment at women-owned firms in these selected industries. Mean employment at women-owned firms in the food, textiles, and metals sectors is statistically significantly greater (at the 1 percent level) than mean employment at women-owned firms in the rest of the Los Angeles city economy. The furniture, metals and toy manufacturing sectors have mean employment statistics that are not statistically significantly different from the rest of the women-owned Los Angeles city economy.

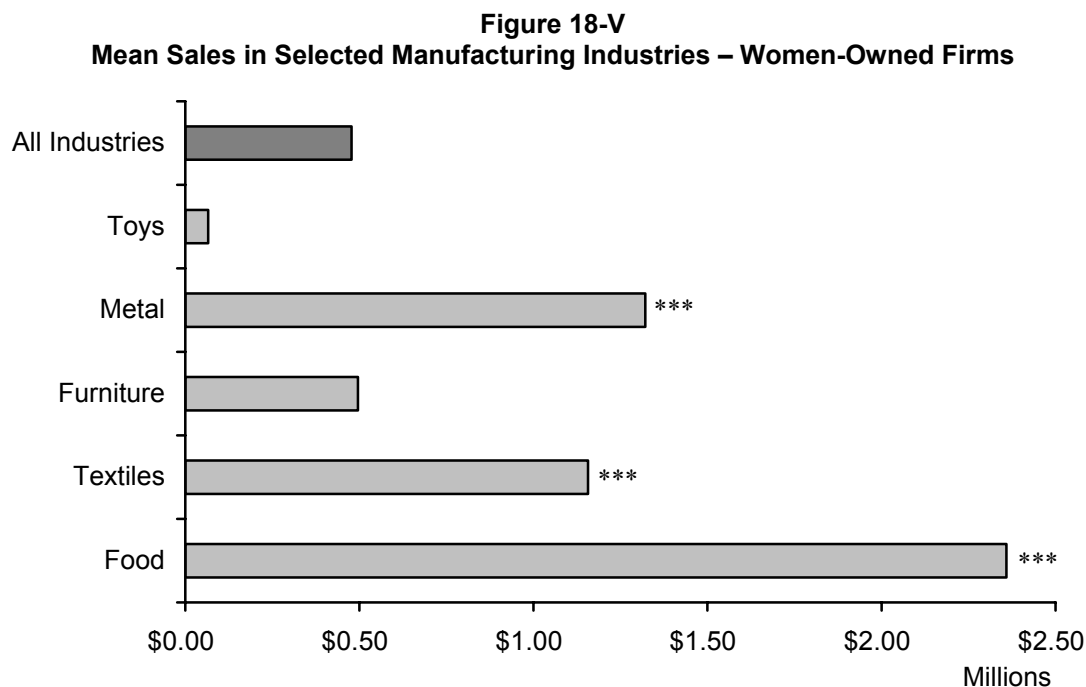
**Figure 17-V**  
**Mean Employment in Selected Manufacturing Industries –**  
**Women-Owned Firms**



Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Food consists of industries included in SIC 2011-2099, Textiles in SIC 2211-2399, Furniture in 2511-2599, Metal in SIC 3312-3499 and Toys in SIC 3942-3944.



Figure 18 shows that mean sales of women-owned firms in the food, textiles and metals sectors is statistically significantly greater (at the 1 percent level) than mean sales at women-owned firms in the rest of the Los Angeles city economy. As with mean employment, the furniture, metals and toy manufacturing sectors have mean sales statistics that are not statistically significantly different from the rest of the women-owned Los Angeles city economy.



Notes: \*\*\* difference significant at 1%, \*\* difference significant at 5%, \* difference significant at 10%; t-test with equal variances. Food is defined as industries included in SIC 2011-2099, Textiles as SIC 2211-2399, Furniture as 2511-2599, Metal as SIC 3312-3499 and Toys as SIC 3942-3944.

## Concluding Points: Women-Owned Firms

As is the case with all firms and with minority-owned firms, the size distributions of women-owned firms by sales and by employment are skewed to the left and have long tails. This is less marked than in the case of all firms; however, it is more marked for the distribution of women-owned firms by sales than is the case of minority-owned firms.

As with all firms and minority-owned firms, the distributions of women-owned firm size are not uniform either across planning areas or industries. They are, interestingly, more unevenly distributed than minority-owned firms across planning areas.

Even more caution should be used when comparing women-owned firm size across industries and across planning areas, as differences that might not be thought to be significant at first glance turn out to be statistically significant in some instances.

The food, textiles, and metal manufacturing industries can be seen as of special importance to women-owned businesses in Los Angeles, while furniture and toy manufacturing are not.

