

# THE ROLE OF METRO AREAS IN THE US ECONOMY

*Prepared for:*

**The United States  
Conference of Mayors**

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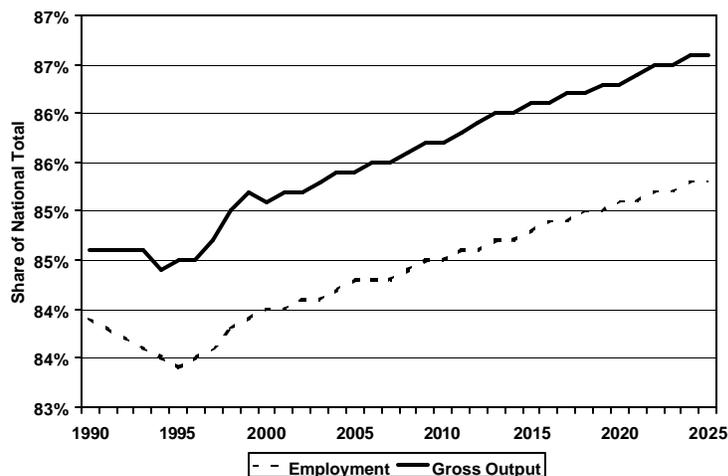
## INTRODUCTION

As the focal points of economic activity, metropolitan areas are vital to the nation's economic development. While states are defined by geographic and political boundaries, metro areas are shaped by economic activity, sometimes across state or national borders. The concentration of people and business in metro areas creates unique economic conditions that give rise to new industries, speed the diffusion of knowledge, spur technological innovation, and increase productivity. The economic dynamism and creativity found in metro areas enables American industries to thrive in global competition. Historically, most of the largest U.S. industries began in cities, where access to labor, capital, and customers fostered business development. Today, metro areas generate more than 80% of the nation's employment, income, and production of goods and services.

## THE RECENT PERFORMANCE OF METROPOLITAN AREA ECONOMIES

The U.S. economy experienced a mild recession in 2001, with a peak-to-trough decline in output of only 0.3%, making this the mildest recession on record. Manufacturing bore the brunt of the impact, with 1.5 million jobs disappearing, with factory layoffs accounting for virtually all of them. If it had not been for the September 11 terrorist attacks, the economy could possibly have avoided recession altogether, despite weakness in manufacturing. The recovery is likely to be as unremarkable as the recession. The pent-up demand that drives strong recoveries is not present in the current cycle. Consumers have continued to buy big-ticket items and business still has little reason to step up investment.

**FIGURE 1: THE CONTRIBUTION OF METRO AREAS TO THE NATIONAL ECONOMY WILL CONTINUE TO GROW**



Metro areas account for over 80% of national output, driving the economic performance of the nation as a whole. Of the 319 metro areas, 269 showed growth in inflation-adjusted output in 2001 and 135 grew faster than the national average. Non-metro area growth lagged metro area growth slightly in 2001, allowing metro areas to continue to gain share of national activity, even in a recession year. Metro areas accounted for 85.2% of production of goods and services in 2001, up slightly from the previous year. Over the past 10 years, metro economy output increased from \$5.0 trillion to \$8.9 trillion, an average annual

increase of 6.0%, slightly ahead of the national average. Metro areas account for 86% of national growth over that period. The share of the nation's output accounted for by metro economies increased from 84.6% in 1991 to 85.2% in 2001. DRI-WEFA expects the contribution of metro areas to the national economy to continue to rise over the next 25 years as metro areas remain the focal point of economic activity. DRI-WEFA predicts that metro areas will account for 86.7% of national activity in 25 years, up 1.5 percentage points from 2001.

Due to the mild nature of the recession, and the resiliency of metro areas, in aggregate, the metro areas did not experience declines in any of the major economic indicators (employment and gross metro product-GMP). Metro area employment managed to grow 0.3% in 2001, with nominal GMP advancing by 4.5% and inflation-adjusted output gaining 2.2%. While these figures are all weaker than previous years, in aggregate, the metro areas experienced more of a growth deceleration than a recession.

However, despite the overall aggregate growth experienced by metro areas, the recession impacted several industries more heavily than others, and those metro areas concentrated in those industries experienced declines in employment growth and in some cases GMP. Metro areas less heavily reliant on manufacturing, high-tech, and telecommunications probably fared better than those more concentrated in those areas. In aggregate, however, metro areas outperformed non-metro areas in all of these industries in 2001.

Metro areas outperformed non-metro areas in many other key indicators of the contribution of metro areas to the national economy in 2001. Metro area employment in the financial services and transportation, communications, and utilities sectors, which are two of the nation's highest value-added industries, grew 1.6% and 0.5% annually, respectively, in 2001. Non-metro area employment in these industries grew 1.6% and 0.1% respectively. Metro area per capita income growth was adversely affected by general corporate weakness and stock market losses. Many companies lowered or eliminated bonuses and froze wage increases in the face of the slowdown, weakening income growth. Accounting for inflation, per capita income rose 1.7% in 2001, down from the 3.0% average rate registered over the last five years.

## **THE ROLE OF US METROPOLITAN AREAS IN THE GLOBAL ECONOMY**

As mentioned earlier, states and nations are defined by geographic and political boundaries and metro areas are shaped by economic activity that crosses state and national borders. Trade liberalization and economic integration are further reducing the residual effect that political boundaries have on international economic activity. Consequently, metro area economies, both in the U.S. and abroad, are the true competitors in a global marketplace, not politically defined states or nations. Investment banks in New York City, for example, compete with their metro counterparts in London, Frankfurt, and Hong Kong.

Metro areas provide many competitive advantages that will allow them to become increasingly important players in the global marketplace:

- Metro areas are transportation hubs, serving as the primary point of exit for goods headed for international markets.
- Metro area transportation infrastructure also acts as a gateway between the nation's non-urban areas and the global economy.
- The concentration of transportation infrastructure in metro areas also lowers transportation costs, lowering the cost of production inputs, and ultimately providing goods and services to final customers at a lower price.

- Metro areas have well-developed labor markets that are attractive to both households and businesses.
- Telecommunications infrastructure, like transportation infrastructure is more heavily concentrated in metro areas, providing all of the same benefits of transportation infrastructure concentration.

Because of all of these advantages, metro areas are the core of new industry development. Developing a new industry, or economic cluster, in a metro area provides many benefits to that industry and to the local economy:

- Reduced operating costs of the suppliers of warehousing, transportation, communications, and utilities.
- Increased knowledge and technology transfers between companies, increasing the rate of innovation, growth, and expansion of economic clusters
- Increased demand for an economic cluster's output. Part of this demand is internal, created by local businesses and consumers. A large portion is external, exports to other regions and countries.

When compared to international economies, metro areas rank among the top global economies. If metro areas were countries, 48 of the 100 largest economies would be metro areas. Several metro areas showed improvements in the international rankings in 2001. The New York metro area advanced one spot, overtaking South Korea and becoming the 13<sup>th</sup> largest economy in the world. This is particularly significant due to the challenges that New York faced in 2001 in combination with the fact that South Korea experienced fairly strong growth for the year. Los Angeles-Long Beach, CA moved from the 16<sup>th</sup> to the 15<sup>th</sup> largest global economy, overtaking both the Netherlands and Australia. Boston advanced one (to 22<sup>nd</sup>) overtaking Switzerland, and Houston is now the 27<sup>th</sup> largest economy, having overtaken both Belgium and Sweden.

## THE CONTRIBUTION OF METROPOLITAN AREAS TO THE NATIONAL ECONOMY

### THE SCOPE OF METRO AREA ECONOMIES

The size of metro area economies illustrates their importance to the nation. If they were counted as a single country, the gross product of the five largest U.S. metropolitan areas (\$1.68 trillion) would rank fourth among the world's economies, trailing only the U.S. (\$10.21 trillion), Japan (\$4.15 trillion) and Germany (\$1.85 trillion). The importance of metro area economies can also be illustrated by their size relative to the output of U.S. states. The gross product of the 10 largest U.S. metro areas exceeds the combined output of the 31 smallest states. Last year, the five largest metro areas produced more goods and services than California; \$1.7 trillion compared with \$1.4 trillion.

Within a particular state, a single metropolitan area often dominates the state's economy (See Table 7 in the Appendix). Sixteen metro areas account for over 50% of the output in the state in which they are located. An additional 28 metro areas individually account for over 25% of output in their respective states. For example, the Phoenix-Mesa metro area provides 70.0% of Arizona's employment and 72.0% of gross state product. In Illinois, the Chicago metro area produces 71% of the state's output and employs 70% of the work force. In highly urbanized states, almost all economic activity occurs in metro areas. In California, 97% of employment and output is generated within metro areas. In 31 states, the combined metro economies contribute 75% or more of the total economic output of the state.

## EMPLOYMENT AND OUTPUT

As previously noted, most of the economic activity in the United States occurs within metro area cities and counties. A total of 111.0 million workers were employed in metro areas in 2001, or 84.0% of national employment. The total value of goods and services produced in metro areas last year was \$8.9 trillion, 85.2% of U.S. gross domestic product. Metro areas, though geographically smaller, contribute much more to the national economy than non-metro areas. The metro area percentages of national employment and gross domestic product both exceed metro area shares of population and land area, highlighting the geographic concentration of economic activity within urban and suburban areas.

This geographic concentration of companies and people is one of the main reasons metro areas are able to make a disproportionately large contribution to the national economy. Close proximity between producers and consumers reduces the costs of business operations, allowing more goods and services to be produced per person and per acre of land.

**FIGURE 2: MOST ECONOMIC ACTIVITY OCCURS IN METRO AREAS**  
(2001)

		<b>Metro Areas</b>	<b>Rest of United States</b>	<b>United States</b>
<b>Size</b>	Population (Millions)	230	55	285
	Share of US	80%	20%	
	Land Area (Square Miles, 000s)	716	2,780	3,496
	Share of US	21%	79%	
<b>Jobs &amp; Output</b>	Employment (Millions)	111	21	132
	Share of US	84%	16%	
	Gross Domestic Product (Billions)	\$8,900	\$1,547	\$10,447
	Share of US	85%	15%	
<b>High Value-Added Employment Sectors</b>	Financial Services (Thousands)	6,998	728	7,727
	Share of US	91%	9%	
	Transportation & Utilities (Thousands)	6,141	925	7,066
	Share of US	87%	13%	

The clustering of two of the nation's highest value added sectors in urban locations also magnifies the metro area contribution to the national economy. In 2001, 91% of financial services employment and 87% of transportation, communications, and utilities sector employment were located within metropolitan areas. The financial services sector had the highest level of output per employee last year, \$261,855. Financial services companies choose to locate in metro areas for proximity to major securities and commodity markets and access to highly skilled workers. Companies maximize the efficiency of their transportation and communications networks by locating hubs and distribution centers in metro areas, taking advantage of extensive road, rail, shipping, and communications infrastructure.

Most of the economic gains made in the United States are generated in metro areas (See Figure 3). Over the past five years, 89% of the 9.4 million jobs generated in the US were in metro areas. As a result of the recession, net job creation in 2001 was well below its historical trend. In 2001, only 330,000 net new jobs were created compared to over 2.5 million in 2000. However, of the limited number of jobs that were created in 2001, 98% of them were in metro areas.

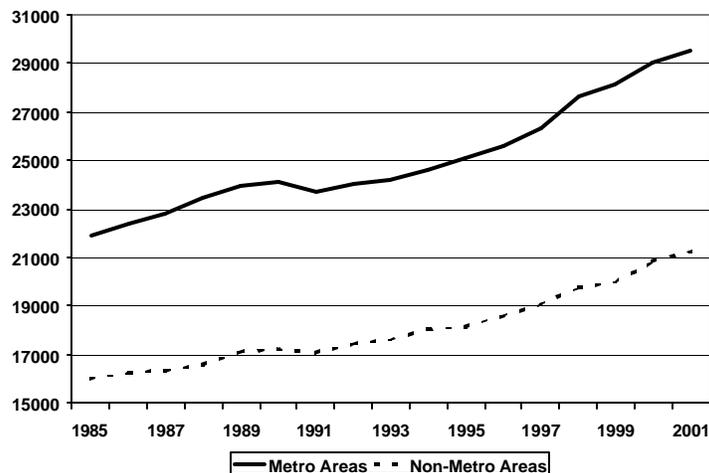
**FIGURE 3: MOST ECONOMIC GAINS WERE MADE IN METRO AREAS**  
*(ADDITIONS TO US ECONOMY, 2001)*

Size	Rest of		United States	
	Metro Areas	United States		
Population (Thousands)	2,340	379	2,720	
	86%	14%		
Jobs & Output	Employment (Thousands)	337.6	5.3	342.9
	Share of US	98%	2%	
	Gross Domestic Product (Billions)	384	60	445
	Share of US	86%	14%	
High Value Added Employment Sectors	Financial Services (Thousands)	111	12	122
	Share of US	90%	10%	
	Transportation & Utilities (Thousands)	30.5	0.7	31.2
	Share of US	98%	2%	

**INCOME CREATION**

Most of the nation’s labor income is also generated by metro area economies. In 2001, metro area workers earned \$4.51 trillion in wages and salaries, while non-metro area workers earned \$595 billion. Metro area economies also create more income per person than non-metro areas as higher wage jobs are typically located in urban areas. Last year, the average metro area worker collected \$40,600 in wages and benefits, while the average non-metro area worker earned \$28,200, a difference of \$12,400 per worker. The gap between metro and non-metro area workers has grown consistently since 1985, when the difference between metro area and non-metro area earnings was only \$4,800.

**FIGURE 4: METRO AREA WORKERS EARN MORE THAN NON-METRO AREA WORKERS**



In most labor markets, earnings are directly related to labor productivity--workers that are more productive receive higher wages and benefits. Figure 4, therefore, provides an indirect measure of the higher labor productivity in cities and counties within metro areas. Metro area workers are able to produce more goods and services than non-metro area

workers because of the clustering of specialized industries within urban areas, access to superior training and educational facilities, and a greater degree of knowledge-transfer and interaction between companies.

### GENERATING NEW INDUSTRIES

With few exceptions<sup>1</sup>, most major industries in the United States started in cities, including automobile manufacturing (Detroit), television broadcasting (New York), and personal computer manufacturing (San Jose). Metro areas provide new industries with crucial amenities--a diverse and ample supply of labor, financial and physical capital, access to national and international markets, a local base of technical knowledge--that are essential for their initial development and eventual success. As an industry matures, technological advances often allow companies within that industry to move to non-urban locations. As a consequence, newer, faster-growing industries tend to cluster within metro areas, while older, slower-growing industries are less tied to urban locations.

Figure 5 shows that two of the fastest-growing segments of the U.S. economy, high-tech and business services, are almost entirely concentrated within metro areas. These two sectors of the economy contain some of the nation's newest and most innovative industries, including computer hardware, computer software, telecommunications equipment, optical instruments, Internet publishing, and management consulting. Despite the recent dot-com bust and telecommunications slowdown, it is still desirable to have these fast-growing industries in a metro area. However, maintaining a high level of diversity will help to insulate a metro area from sector-specific slowdowns that do occur.

**FIGURE 5: MOST HIGH-TECH AND BUSINESS SERVICES  
EMPLOYMENT IS LOCATED IN METRO AREAS  
(2001)**

High Growth Employment Sectors		Rest of		
		Metro Areas	United States	United States
High Growth Employment Sectors	High-Tech (Thousands)	7,242	494	7,735
	Share of US	94%	6%	
	Business Services (Thousands)	9,365	597	9,962
	Share of US	94%	6%	

<sup>1</sup> The major exceptions are resource-extraction industries (e.g., forestry, coal mining, oil drilling) which are tied to the geographic location of a particular natural resource.

# REVIEW OF THE 2001 TOP 20 METROPOLITAN ECONOMIES

## INTRODUCTION

The U.S. experienced a mild recession in 2001. However, declines were concentrated in certain industries including manufacturing, high-tech, and financial services. Metro areas weathered this slowdown to varying degrees depending on their relative concentration in these key industries. The following analysis looks at the top 20 metro area economies (ranked by 2001 gross metro product), their economic structure, the composition of employment, and the performance of both leading into and following the 2001 recession.

The top 20 metro economies generated \$3.7 trillion in gross output in 2001. This accounted for 42% of total metro area output, and 36% of national output. Output in the top 20 metro areas grew by 4.6% in 2001, ahead of the national rate of 4.4%.

**FIGURE 6: TOP 20 METROPOLITAN ECONOMIES**  
(NOMINAL GROSS OUTPUT\*)

Rank		2001	
		US\$, BN	Growth
1	New York, NY	\$461.01	4.3%
2	Los Angeles -Long Beach, CA	\$389.72	4.2%
3	Chicago, IL	\$348.61	4.0%
4	Boston, MA	\$256.06	5.0%
5	Washington, DC-MD-VA-WV	\$228.34	5.7%
6	Houston, TX	\$190.04	7.7%
7	Philadelphia, PA-NJ	\$188.59	3.5%
8	Atlanta, GA	\$175.28	4.7%
9	Dallas, TX	\$169.58	5.0%
10	Detroit, MI	\$159.84	0.3%
11	Orange County, CA	\$142.59	6.5%
12	Minneapolis -St. Paul, MN-WI	\$128.06	4.1%
13	Seattle-Bellevue-Everett, WA	\$124.41	4.6%
14	Phoenix-Mesa, AZ	\$119.32	5.1%
15	San Diego, CA	\$113.14	5.9%
16	San Francisco, CA	\$112.58	2.8%
17	Nassau-Suffolk, NY	\$111.89	4.7%
18	Baltimore, MD	\$100.32	5.2%
19	Oakland, CA	\$99.46	5.0%
20	Newark, NJ	\$98.40	3.9%
Total Top 20		\$3,717.24	4.6%
Share of US			35.6%

\*For inflation-adjusted gross output growth see Appendix Table 9

The top 20 metro areas are geographically diverse and have varying economic structures. This variety in the composition of the top 20 metro areas will illustrate how the structure of the economy determined in large part how well each metro area weathered the recession. Total employment growth (2001) varied in the top 20 metro economies from a decline of

2.5% in Detroit, to a 2.3% gain in San Diego. Average job growth in 2001 of the top 20 metro economies was 0.3%.

**FIGURE 7: 2001 GROWTH IN KEY EMPLOYMENT SECTORS**  
**TOP 20 METROPOLITAN ECONOMIES**  
(SORTED BY 2001 TOTAL EMPLOYMENT GROWTH)

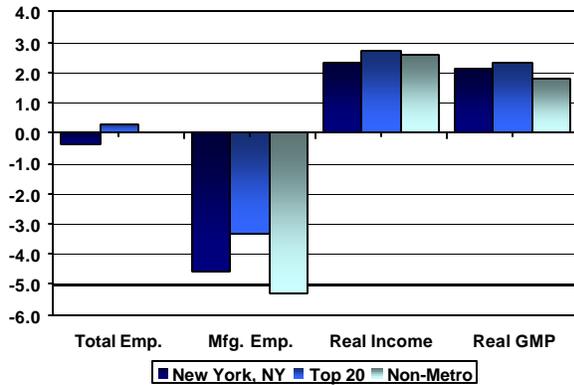
	Total Emp.	Mfg.	Services	Trade	TCPU	Finance	Gov't	Const'n/ Mining
San Diego, CA	2.3%	1.1%	2.6%	1.1%	2.4%	1.8%	3.6%	4.6%
Orange County, CA	2.1%	-2.3%	2.6%	2.7%	2.7%	5.7%	2.9%	3.5%
Houston, TX	1.8%	2.0%	1.9%	1.0%	1.5%	1.6%	1.1%	4.6%
Oakland, CA	1.4%	-1.5%	1.7%	1.1%	0.2%	2.3%	1.2%	6.4%
Washington, DC-MD-VA-WV	1.3%	1.0%	1.1%	0.1%	3.6%	2.0%	0.9%	6.0%
Phoenix-Mesa, AZ	1.1%	-4.1%	0.3%	1.7%	2.0%	4.5%	3.2%	2.2%
Dallas, TX	0.7%	-4.3%	1.2%	1.6%	2.4%	0.6%	2.1%	0.9%
Nassau-Suffolk, NY	0.6%	-3.4%	2.4%	0.1%	1.6%	-3.4%	1.2%	0.9%
Baltimore, MD	0.6%	-0.8%	1.0%	-0.3%	2.7%	2.4%	0.6%	-0.5%
Los Angeles -Long Beach, CA	0.5%	-3.4%	1.1%	0.1%	1.5%	1.3%	3.0%	1.9%
Philadelphia, PA-NJ	0.4%	-3.0%	1.1%	0.0%	-0.8%	0.8%	1.1%	5.2%
Atlanta, GA	0.4%	-4.2%	0.6%	0.4%	0.1%	1.4%	2.8%	2.0%
Boston, MA	0.3%	-3.2%	1.0%	-0.7%	0.3%	1.9%	1.0%	5.9%
Newark, NJ	0.1%	-3.6%	0.8%	-0.6%	-1.4%	4.1%	0.7%	2.5%
Minneapolis -St. Paul, MN-WI	0.0%	-3.7%	0.5%	0.9%	-1.7%	1.8%	0.6%	3.4%
New York, NY	-0.4%	-4.6%	0.7%	-1.0%	0.3%	-0.9%	-0.8%	2.4%
Chicago, IL	-0.4%	-3.6%	-0.2%	-0.2%	0.4%	0.7%	0.5%	2.7%
San Francisco, CA	-1.0%	-7.2%	0.0%	-1.6%	-3.6%	0.9%	-0.8%	1.4%
Seattle-Bellevue-Everett, WA	-1.1%	-3.0%	-1.6%	-1.7%	-1.4%	3.9%	2.9%	-4.6%
Detroit, MI	-2.5%	-6.1%	-1.7%	-1.5%	-1.3%	0.6%	-0.2%	-6.9%
<i>TOP 20 Average</i>	<i>0.3%</i>	<i>-3.3%</i>	<i>0.8%</i>	<i>0.1%</i>	<i>0.6%</i>	<i>1.2%</i>	<i>1.2%</i>	<i>2.5%</i>

While the 2001 recession was concentrated in the manufacturing and high-tech industries, employment declines were much more broad-based than just those few sectors. Only three of the top 20 metro economies escaped declines in employment across the board: San Diego, Houston, and DC. These three economies will experience declines in some sectors over the course of 2002, however, so they did not fully escape the impacts of the recession. Other economies with higher-than-average declines in manufacturing, Atlanta for example, exited 2001 with overall job gains due to the more diversified nature of their employment base. Still other metro economies benefited from the positive impacts of the recession and increased spending on security. Increased defense spending benefited and will continue to make a positive contribution in such areas as Baltimore, San Diego, Oakland, and Washington.

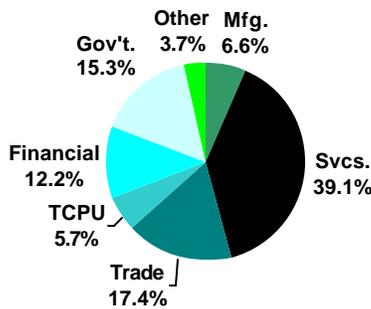
**FIGURE 8: 2001 EMPLOYMENT SHARES  
TOP 20 METROPOLITAN ECONOMIES**

	<b>Mfg.</b>	<b>Services</b>	<b>Trade</b>	<b>TCPU</b>	<b>Finance</b>	<b>Gov't</b>	<b>Const'n/ Mining</b>
Atlanta, GA	9.7%	31.2%	25.9%	8.7%	6.5%	12.5%	5.6%
Baltimore, MD	7.7%	35.6%	22.4%	5.1%	6.1%	17.4%	5.7%
Boston, MA	12.8%	37.5%	21.6%	4.4%	7.3%	12.3%	4.1%
Chicago, IL	14.4%	33.2%	22.3%	6.3%	7.4%	12.0%	4.6%
Dallas, TX	12.0%	31.3%	24.8%	7.1%	7.9%	11.1%	5.9%
Detroit, MI	20.1%	32.0%	23.2%	4.5%	5.2%	11.0%	4.0%
Houston, TX	10.1%	31.1%	22.5%	7.3%	5.5%	12.7%	10.7%
Los Angeles-Long Beach, CA	14.8%	33.3%	22.1%	6.1%	5.7%	14.6%	3.4%
Minneapolis-St. Paul, MN-WI	15.3%	30.1%	23.6%	5.4%	7.5%	13.5%	4.6%
Nassau-Suffolk, NY	8.9%	33.5%	25.4%	4.8%	6.6%	15.7%	5.1%
New York, NY	6.6%	39.2%	17.4%	5.7%	12.2%	15.3%	3.7%
Newark, NJ	12.7%	33.1%	20.2%	8.3%	7.7%	14.3%	3.7%
Oakland, CA	11.5%	30.8%	22.5%	6.1%	5.6%	16.9%	6.8%
Orange County, CA	15.9%	31.6%	24.6%	3.7%	7.9%	10.6%	5.7%
Philadelphia, PA-NJ	12.0%	37.2%	22.0%	4.7%	7.1%	12.7%	4.3%
Phoenix-Mesa, AZ	10.0%	32.3%	23.9%	5.5%	7.9%	12.7%	7.7%
San Diego, CA	10.7%	33.5%	22.2%	4.3%	5.8%	17.5%	6.0%
San Francisco, CA	6.1%	39.7%	20.4%	7.4%	10.0%	12.1%	4.3%
Seattle-Bellevue-Everett, WA	13.9%	30.7%	23.2%	6.2%	6.2%	14.0%	5.8%
Washington, DC-MD-VA-WV	3.7%	40.8%	17.7%	5.0%	5.4%	21.6%	5.8%
<b>TOP 20</b>	<b>11.5%</b>	<b>34.4%</b>	<b>22.0%</b>	<b>5.8%</b>	<b>7.3%</b>	<b>14.0%</b>	<b>5.1%</b>

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

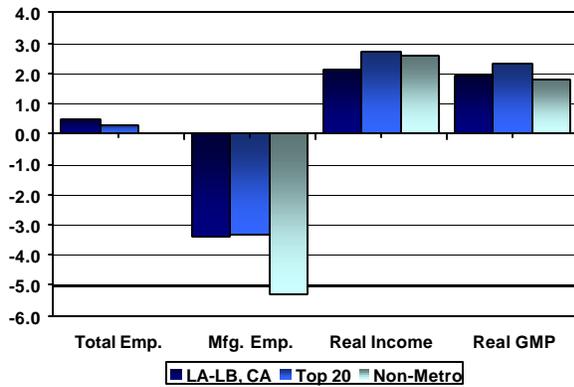


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

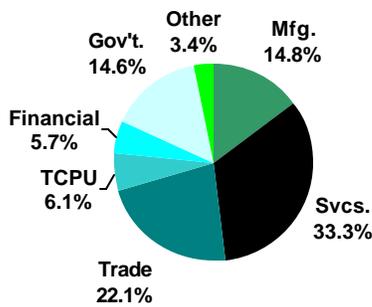
	1990 to 2000	2001	2002 to 2012
Total Employment	0.4%	-0.4%	1.4%
Manufacturing	-3.3%	-4.6%	0.6%
Services	2.4%	0.7%	2.0%
Trade	0.3%	-1.0%	1.2%
Transp'n & Utilities	-0.6%	0.3%	1.3%
Financial	-0.6%	-0.9%	1.4%
Government	-0.5%	-0.8%	0.5%
Mining & Const'n	0.7%	2.4%	0.9%
Real Income	2.6%	2.3%	3.8%
Real GMP	2.8%	2.1%	3.6%

- As the financial capital of the world, New York is home to the nation's largest stock and commodity exchanges, as well as most of the leading investment and commercial banks. Finance, insurance, and real estate provided 12.2% of the metro area's jobs in 2001, compared with just 5.8% nationally. Furthermore, its abundance of Fortune 500 companies and corporate headquarters gives it a large business-to-business services market. The metro area is a popular tourist destination, particularly for foreign travelers.
- Manufacturing activity has become a small component of the metro-area economy, shielding the area from more extensive job losses in the 2001 slowdown. Manufacturing's share of total employment has fallen from approximately 17% in 1977 to just under 7% today. Remaining industrial activity is concentrated in the apparel, printing and publishing, and jewelry-manufacturing industries.
- The New York City metro area continues to feel the effects of the September 11 tragedy and the national recession of 2001. Total employment contracted by 0.4% in 2001, compared to average annual increases of 0.4% per year over the prior 10 years. Manufacturing and financial services were the hardest hit industries in terms of employment losses. Despite the direct impacts of September 11 on the city, New York's relatively small reliance on manufacturing allowed the metro area to weather the recession better than other more manufacturing-intensive metros.
- The New York City metro area is forecast to have a difficult 2002, followed by a robust recovery in the following years, bolstered by growth in services employment which accounted for the largest share of employment in 2001.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



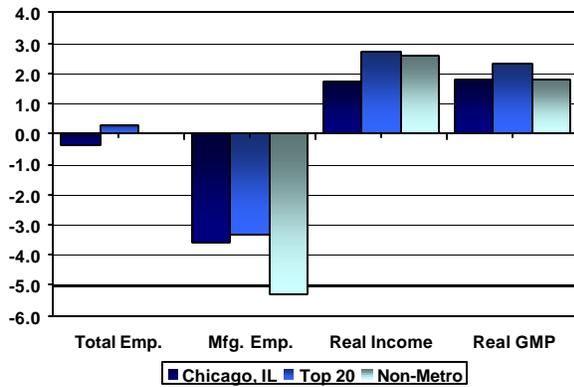
**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

	1990 to 2000	2001	2002 to 2012
Total Employment	-0.1%	0.5%	0.9%
Manufacturing	-2.8%	-3.4%	0.4%
Services	1.4%	1.1%	1.7%
Trade	-0.5%	0.1%	0.4%
Transp'n & Utilities	1.4%	1.5%	1.4%
Financial	-1.9%	1.3%	-0.1%
Government	0.7%	3.0%	0.3%
Mining & Const'n	-0.4%	1.9%	0.2%
Real Income	1.5%	2.1%	2.7%
Real GMP	1.4%	1.9%	2.7%

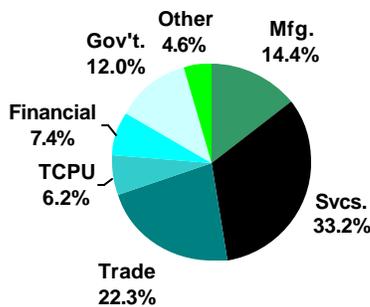
- Los Angeles County has a broad-based economy. Its economic diversity belies the impact of high concentrations of activity in entertainment, aerospace, business services, and several key nondurable goods manufacturing sectors, notably, apparel.
- Southern California's trade ties with Asia and Latin America influence the area's transportation-services industry. Port activity in the Los Angeles area is greatly dependent upon growth in the Asian and Latin American economies. Therefore, the health of the transportation-services industry will rest with world economic conditions, the outlook for which is a slow recovery. An expected decline in the US dollar should spur export demand, however.
- Los Angeles' economic experience in the boom years of the late 1990s was of moderate expansion. The metro did not attract the heavy concentration of Internet and dot-com companies as its neighbors to the north, or biotechnology firms as San Diego to the south, but has maintained its economic diversity. This has meant the accumulation of less relative wealth or job gains in recent years, but also meant a less precipitous fall in 2001.
- The continued migration of apparel industries overseas, combined with weakness in the metro area's key aerospace sector, particularly since the September 11-related airline industry slowdown, led to a 3.4% contraction in the manufacturing sector last year. All told, Los Angeles eked out a 0.5% employment gain last year.
- The stock market meltdown is continuing to effect local communications and high-tech industries. Meanwhile, the steady southward march of the textiles industry proceeds apace. The metro area's job growth is projected to be barely positive this year, but will return to a 0.9%

average annual rate over the next 10 years.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

	1990 to 2000	2001	2002 to 2012
Total Employment	1.7%	-0.4%	0.9%
Manufacturing	1.2%	-3.6%	0.1%
Services	3.4%	-0.2%	1.2%
Trade	0.5%	-0.2%	1.1%
Transp'n & Utilities	1.5%	0.4%	1.2%
Financial	0.5%	0.7%	0.9%
Government	1.1%	0.5%	0.7%
Mining & Const'n	1.5%	2.6%	1.5%
Real Income	3.1%	1.7%	2.6%
Real GMP	3.7%	1.8%	2.4%

➤ Surpassed in size among U.S. urban centers only by New York and Los Angeles, Chicago is a nationally and globally important business center. It is the headquarters for over 30 Fortune 500 corporations, and hosts the world's largest futures and options market. Its large and diverse financial sector—encompassing investment banks, mutual fund companies, venture capital firms, and insurance companies, among others—is regionally dominant, and an important player nationally and internationally.

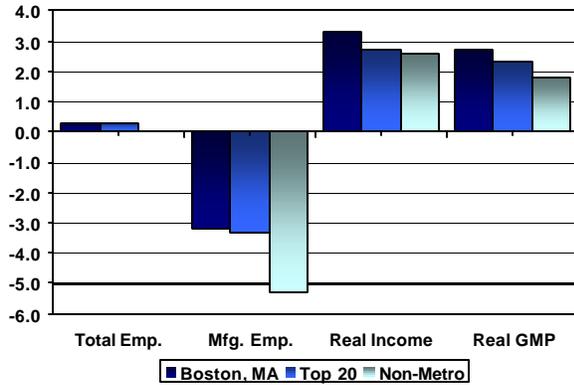
➤ Important manufacturing industries include electrical equipment manufacturing (anchored by Motorola, one of the metro area's largest employers), metal stamping and machine tooling, and printing and publishing. Chicago is a mammoth consumer market, a transport hub, and a noteworthy cultural center and tourist magnet.

➤ Chicago lost almost 50,000 jobs during the first three months of 2002 alone, bringing the total loss for the last 12 months to more than 83,000 jobs. In terms of a percentage decrease in the workforce, transportation and manufacturing are the job cuts leaders, with 4.6% and 4.0%, respectively.

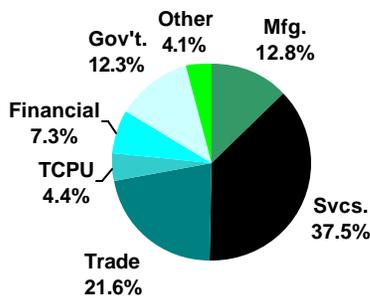
➤ The metro area's outlook is for a rather strong economic rebound later this year, and for a robust expansion over the next five years. In the short term, a major boost will come from the manufacturing sector.

➤ Nonmanufacturing employment is recovering from the short-term weakness of last year. Over the next five years, nonmanufacturing employment is expected to grow by an annual rate of 1%. While services will almost surely be the top performer in this category, the finance, insurance, and real estate sector bears watching as a potential wild card.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

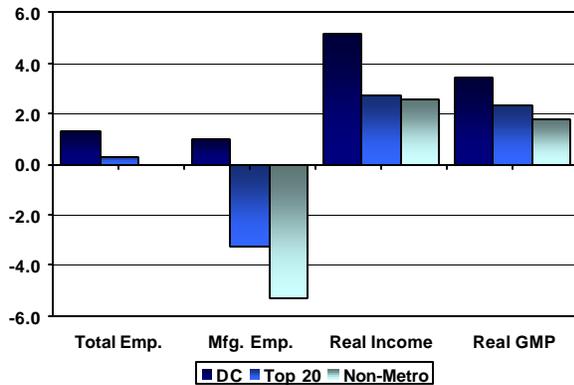


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

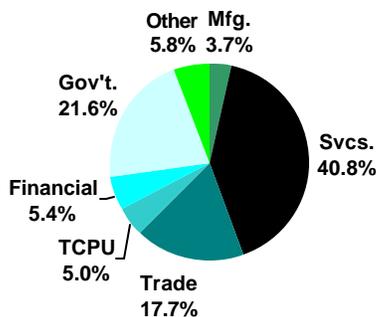
	1990 to 2000	2001	2002 to 2012
Total Employment	1.1%	0.3%	0.5%
Manufacturing	-1.7%	-3.2%	0.0%
Services	3.0%	1.0%	2.2%
Trade	0.6%	-0.7%	-2.1%
Transp'n & Utilities	1.2%	0.3%	0.8%
Financial	0.9%	1.9%	1.4%
Government	0.4%	1.0%	-1.6%
Mining & Const'n	2.7%	5.9%	0.3%
Real Income	3.2%	3.3%	2.7%
Real GMP	3.6%	2.7%	4.3%

- High-technology industries, as well as financial, educational, health-care, construction, and transportation services drive the Boston-area economy. The availability of venture capital, the high concentration of research facilities, and a talented workforce that is prime for recruiting, make the region a key location for emerging industries, notably, biotechnology, software, and communications equipment. While the high-tech concentration provides a source of growth when the economy is expanding, it also provides a source of risk when the economy experiences sectoral declines.
- The Greater Boston metro economy slowed considerably in 2001, reeling from the combined effects of the dot-com crash, the nation's recession, and the aftershocks of September 11. Total employment growth slowed sharply to 0.3% in 2001. Given the area's reliance on high-tech industries, the sluggish job growth performance last year reflected in large part the numerous layoffs at high-tech and Internet firms as the dot-com bubble burst. While the services industry did not post a decline in 2001, it did slow sharply, from 4.6% in 2000 to 1.0% in 2001. The same is true of the financial services sector.
- Boston's reliance on the high-tech and financial services will limit employment growth in the short term, as these sectors are expected to remain lackluster due to the slow pickup in capital investment and the uncertain direction of the stock market amid earnings fears.
- Services employment is expected to remain weak in 2002, but it is forecasted to grow by 3.6% in 2003 and to average 2.2% annual gains over the next ten years providing the engine for the area's continued expansion.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



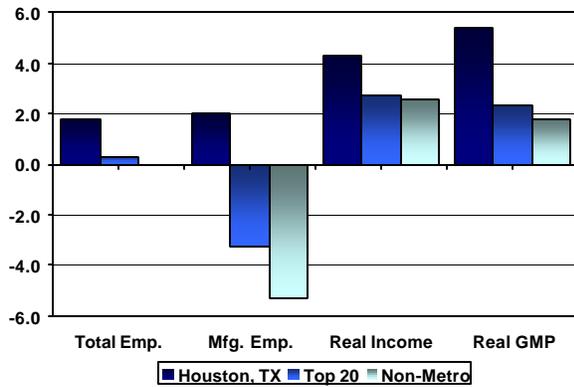
**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

	1990 to 2000	2001	2002 to 2012
Total Employment	1.6%	1.3%	1.7%
Manufacturing	0.0%	1.0%	0.3%
Services	3.7%	1.1%	2.4%
Trade	0.7%	0.1%	1.4%
Transp'n & Utilities	1.9%	3.6%	1.5%
Financial	0.9%	1.9%	1.3%
Government	-0.2%	0.9%	0.9%
Mining & Const'n	0.0%	5.9%	1.7%
Real Income	3.3%	5.2%	3.5%
Real GMP	3.2%	3.4%	3.1%

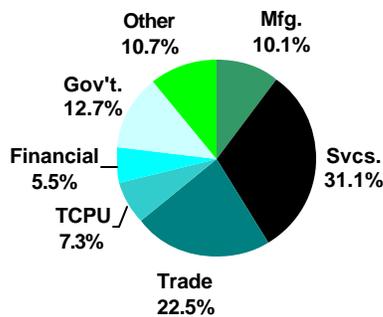
- The Washington DC metro area's economy is unique in that it is largely devoid of a manufacturing sector. Instead, as one would expect from its role as the nation's capital, it is a government region with most jobs directly or indirectly connected to the federal sector. Over the long term, the DC metro area's economic structure, especially the concentration of employment in the government, defense, high-technology, and biomedical sectors will work to its advantage, enabling it to maintain above average growth rates in employment and personal income.
- The DC metro area has a number of competitive advantages. One is a highly educated, technical labor force; another, the stabilizing influence of the large federal government sector, including businesses that provide services to the federal government, such as defense contractors. The metro area also has a critical mass of high-technology employers and computer hardware infrastructure that suggest that it will be less affected by the slowdown in U.S. economic growth than other parts of the country.
- The DC metro area had the 5<sup>th</sup> highest employment growth of the Top 20 metro areas in 2001. DC outperformed the top 20 metro areas on all fronts--employment, output, and income--in 2001. The area's small reliance on manufacturing shielded the region from the major source of decline during this slowdown. Further, increased federal spending as a result of the September 11 attacks fuelled job growth in key sectors.
- The outlook for DC is bright. Over the next ten years, job gains will continue to outpace that of the top 20. However, increasing wage and housing costs are making it increasingly difficult for the

area's employers to attract skilled workers.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

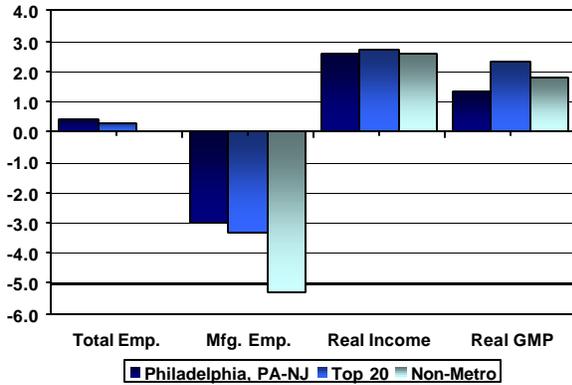


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

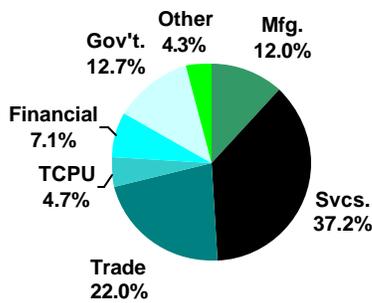
	1990 to 2000	2001	2002 to 2012
Total Employment	2.6%	1.8%	1.4%
Manufacturing	1.8%	2.0%	-0.3%
Services	3.7%	1.9%	2.6%
Trade	2.2%	0.9%	0.8%
Transp'n & Utilities	3.2%	1.5%	1.0%
Financial	1.1%	1.6%	0.8%
Government	2.5%	1.1%	0.6%
Mining & Const'n	1.9%	4.6%	1.6%
Real Income	5.0%	4.3%	2.7%
Real GMP	4.5%	5.4%	2.5%

- Its port, which directly accesses the Gulf of Mexico through the Houston Ship Channel, and its proximity to Mexico have helped the metro area develop into a distribution hub. Warehousing and distribution activities around the Port of Houston give the combined transportation, communications, and utilities sector a relatively large share of total employment. Houston's health-care services and biotechnology research have risen to national prominence. The metro area is also a major corporate center, with the headquarters of over 15 Fortune 500 companies. Houston's economy has diversified since the 1980s oil bust. Nevertheless, the energy sector remains an important force in the local economy, with much of manufacturing dependent on the oil industry.
- Prior to the layoffs at Enron, Houston's economy remained strong relative to the nation and region. Despite fourth-quarter weakness as a result, this hit to the metro area occurred too late in the year to make any substantial impact on the annual figures. As a result of its relatively diversified economic base, Houston experienced job gains across the board in 2001, one of only three metro areas in the top 20 to do so.
- The Greater Houston Partnership estimates that the Enron job losses will translate to cuts of up to 6,000 jobs. Mining and service jobs are expected to take the hardest hit. Service industries such as restaurants, hotels, and outside contractors will immediately feel the reduced need for their services. High-tech jobs may be hardest to come by in Houston, as losses at both Compaq and Enron have now glutted the market.
- Houston's economic expansion will be challenged due to the effects of the Enron layoffs and the national recession. Houston energy companies stand to gain from the growing energy demand throughout the United States.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

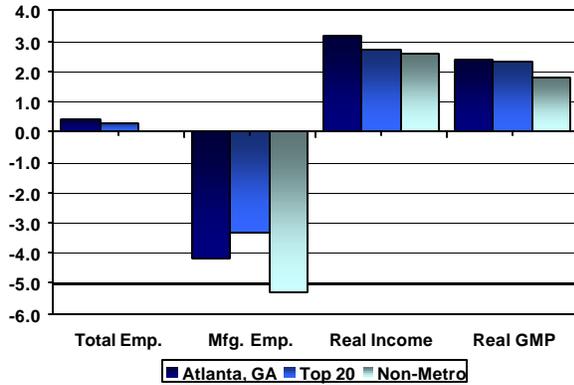


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

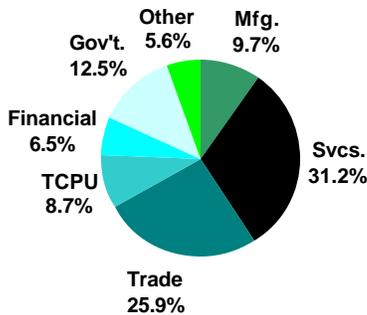
	1990 to 2000	2001	2002 to 2012
Total Employment	0.7%	0.4%	0.9%
Manufacturing	-1.7%	-3.0%	-0.1%
Services	2.5%	1.1%	1.5%
Trade	0.4%	0.0%	0.7%
Transp'n & Utilities	0.9%	-0.8%	0.7%
Financial	0.4%	0.7%	0.8%
Government	-0.2%	1.1%	0.2%
Mining & Const'n	0.0%	5.2%	0.6%
Real Income	2.0%	2.6%	2.8%
Real GMP	2.6%	1.3%	3.3%

- A well-developed transportation system and proximity to some of the nation's largest urban markets make Philadelphia an attractive site for consumer- and business-oriented services companies. A large number of universities and research centers provide local companies with a steady supply of highly skilled workers. With two of the nation's busiest seaports—Philadelphia and Camden—the metro area is well placed to take advantage of increasing import and export activity.
- Philadelphia's economy is among the most diversified in the nation, with large components in health-care services, pharmaceutical manufacturing, aerospace manufacturing, education services, and transportation services. Such diversity has often proved to be a weakness, since the metro has failed to heavily cultivate one or two specific sectors, but rather scattered its resources among the many. The diversified base does however shield the economy from sectoral downturns.
- Last year, the rising tide of layoffs and weak personal income gains dampened spending, pushing down the services and trade sectors. At the same time, the metros' manufacturing sector dived further into recession, and the robust transportation, communications, and utilities sector turned negative. One bright spot was the construction sector, which posted 5.2% growth in 2001, boosted by declining interest rates.
- This year, Philadelphia will barely manage an employment gain above zero, as employment in manufacturing, trade, and the transportation, communications, and utilities sector contracts. Employment will return to its pre-recession growth path over the next 10 years, averaging 0.9% annual gains through 2012.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

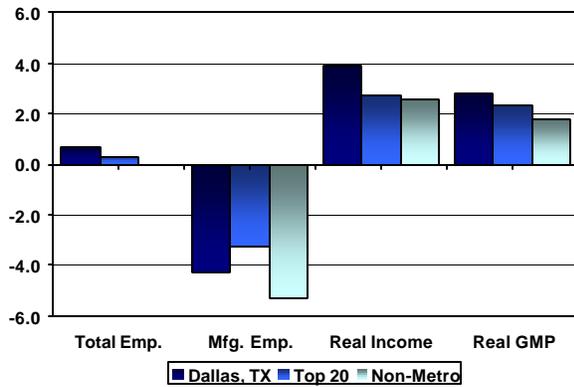


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

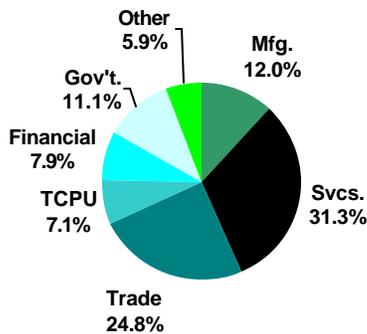
	1990 to 2000	2001	2002 to 2012
Total Employment	3.6%	0.4%	2.0%
Manufacturing	1.4%	-4.2%	0.3%
Services	5.9%	0.6%	2.8%
Trade	3.2%	0.4%	1.7%
Transp'n & Utilities	3.8%	0.1%	2.5%
Financial	2.7%	1.4%	1.8%
Government	1.5%	2.8%	1.0%
Mining & Const'n	5.2%	2.0%	2.7%
Real Income	5.6%	3.2%	4.3%
Real GMP	6.2%	2.4%	4.0%

- As a thriving regional transportation node, Atlanta has among the highest concentrations of workers in wholesale trade and transportation services in the country. Overall, the economy is highly diversified, with local operations for over 400 of the Fortune 500. In fact, the metro area is home to the headquarters of more than 20 of these companies.
- Located at the intersection of several major interstates and railroad lines, Atlanta is a major regional transportation and distribution center. Hartsfield International Airport is the world's busiest airport serving just under 76 million passengers in 2001 (O'Hare served 67.4 million passengers).
- Atlanta's slowdown began in 2000, and the trend continued into 2001. The services and construction sectors reversed their rapid gains of the past few years, as consumer spending fell off dramatically. The slowdown in spending has also hurt trade, which had been strong in the first half of the year. Yet even with a weakening economy and rising unemployment rate, Atlanta is still attracting new residents; in-migration to the metro continues to be remarkably high.
- With all sectors weakening, job growth in Atlanta slowed to 0.4% in 2001. From the low point in 2002, however, the metro will ramp up to solid growth, but it will not match the stellar job gains of previous years; employment growth will average 2.0% annually in 2002-12 compared with 3.6% average annual gains in 1990-2000. Local company Lockheed will likely benefit from increased defense spending, but transportation companies (airlines) will be hurt by the effects of September 11.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

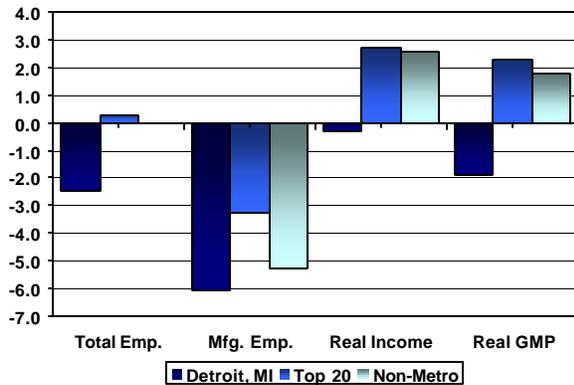


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

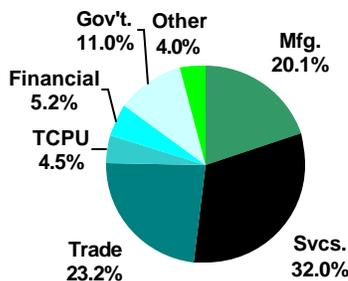
	1990 to 2000	2001	2002 to 2012
Total Employment	3.4%	0.7%	1.7%
Manufacturing	0.7%	4.3%	-0.3%
Services	5.0%	1.2%	3.1%
Trade	3.0%	1.6%	1.3%
Transp'n & Utilities	4.9%	2.4%	1.4%
Financial	1.9%	0.6%	1.2%
Government	2.6%	2.1%	0.9%
Mining & Const'n	6.0%	0.9%	2.3%
Real Income	5.5%	3.9%	3.2%
Real GMP	5.2%	2.8%	2.5%

- This historically oil-dependent economy has successfully diversified. The Dallas metro area is now a center for corporate headquarters and financial services. Also, following an expansion of its trade and services industries, Dallas has become the Southwest's largest wholesale trade center, and one of the region's major retail hubs. As a result, the transportation sector plays a large role in the economy. The metro area is currently home to numerous high-tech and telecommunications firms, including MCI, Ericsson, Fujitsu, Rockwell International, and Nortel Networks.
- The Dallas economy slowed in the first half of 2001, and fell into negative territory in the third quarter. The metro area was already feeling the effects of the national recession and the fall-off in the technology sectors, and the aftermath of the events of September 11 was enough to cause negative employment growth that has lasted into 2002. Total employment growth was 0.7% in 2001.
- First-quarter 2002 job losses (1.4% year-over-year) were felt across the board, as most sectors reported negative employment growth. Manufacturing employment dove in 2001, with employment levels in the sector at their lowest level since 1995.
- Dallas' economic activity is expected to gain in the second half of this year, but growth is not expected to reach pre-recession levels over the next ten years. Local employment will average 1.7% gains per year through 2012. Manufacturing's downturn will continue to stem Dallas' growth potential. Service employment is forecasted to make a relatively strong recovery, starting later in 2002, and averaging 3.1% growth through 2012.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

	1990 to 2000	2001	2002 to 2012
Total Employment	1.5%	-2.5%	0.6%
Manufacturing	0.5%	-6.1%	-0.3%
Services	3.2%	-1.7%	1.1%
Trade	0.9%	-1.5%	0.7%
Transp'n & Utilities	1.1%	-1.3%	0.5%
Financial	0.2%	0.6%	0.2%
Government	0.2%	-0.2%	0.3%
Mining & Const'n	4.0%	-6.9%	0.7%
Real Income	2.6%	-0.3%	2.3%
Real GMP	3.3%	-1.9%	2.4%

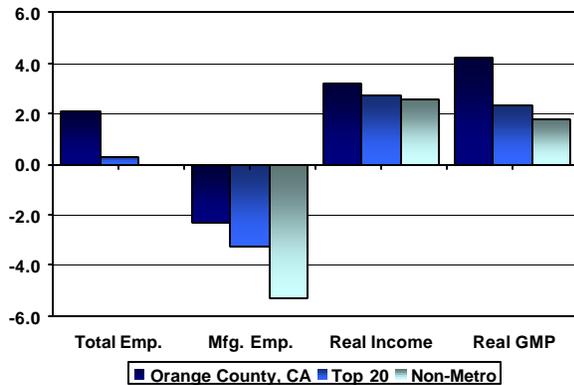
➤ Manufacturing accounted for 20.1% of the metro area's total employment in 2001, the ninth-highest concentration among DRI-WEFA's Top 114 metro areas. The Motor City is home to the nation's three largest automotive manufacturers — General Motors, Ford, and DaimlerChrysler. Furthermore, a dozen assembly plants and countless auto parts suppliers are located here. Diversification efforts and consolidation in the auto industry have lessened Detroit's reliance on its manufacturing base, however. A large population and high incomes sustain vibrant trade and services sectors. Situated between two of the Great Lakes, Detroit is also a regional center for the transportation, distribution, and warehousing industries.

➤ The Detroit economy is struggling to come out of the recent recession as it was among the hardest hit of the top 20 metros due to its heavy reliance on manufacturing, which declined 6.1% in 2001. Total employment declined 2.5% in 2001, with practically all major sectors losing jobs over the period.

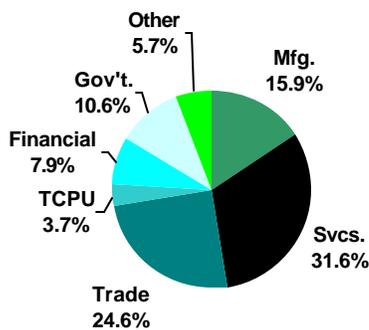
➤ With four straight months of growing manufacturing production and brisk auto sales, the downward employment trend should reverse itself. But the health of the major auto producers is likely to delay the turnaround in the labor market. The second half of the year should see some improvement in the labor market, though.

➤ The real recovery should happen next year. Manufacturing employment will start to recover around the end of the year, and will grow by about 2% in 2003. This sharp increase will be a reaction to the prolonged manufacturing recession, rather than genuine long-term growth. The winner will be the services sector, which should start recovering by the middle of the year, and then it has the potential to grow by more than 1% annually for the next ten years.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

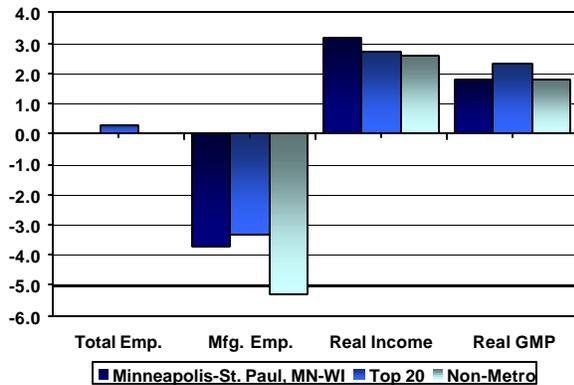


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

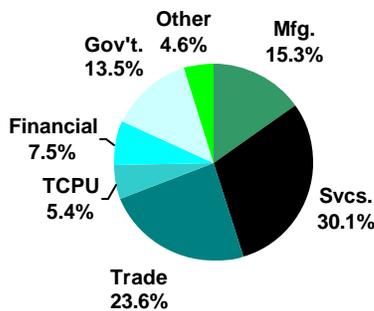
	1990 to 2000	2001	2002 to 2012
Total Employment	1.7%	2.1%	1.8%
Manufacturing	-0.6%	-2.3%	0.7%
Services	3.4%	2.6%	2.8%
Trade	1.3%	2.7%	1.6%
Transp'n & Utilities	3.4%	2.7%	2.5%
Financial	1.0%	5.7%	1.2%
Government	1.5%	2.9%	1.3%
Mining & Const'n	3.0%	3.5%	1.5%
Real Income	2.8%	3.2%	3.6%
Real GMP	3.6%	4.2%	3.7%

- With more than 2.8 million residents, Orange County is the second-largest metro area in California in population and employment levels. The metro area originated as a bedroom community to Los Angeles in the 1970s and 1980s, but since then has emerged as a diverse and robust independent economy with a large manufacturing base.
- The aerospace industry has fostered the development of numerous innovative companies that manufacture computer components, industrial machinery, medical equipment, and scientific instruments. Of late, the region has emerged as a hub of semiconductor and communications equipment manufacturing. The metro area is also a popular tourism and convention destination.
- Momentum from strong growth in 2000 continued into early 2001. However, declines in the manufacturing and business services sectors pulled down employment gains, as did decelerations in construction and TCPU. Yet overall, the metro's economy fared quite well last year. The high concentration of wealth in Orange County kept spending solid, even though national economic news was negative. Strong spending supported gains in finance, services, and trade. Total job growth in 2001 was 2.1%.
- Orange County's economic outlook remains quite strong for the next five years. Weakness in the computer and electronics industries will keep manufacturing employment negative this year. Trade and transportation, communications, and utilities will also soften this year, but the metro's other sectors will buoy employment growth, particularly business services, which will bounce back this year. A lingering dark cloud is high energy costs and tight electricity supplies, which could place a strain on future growth.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

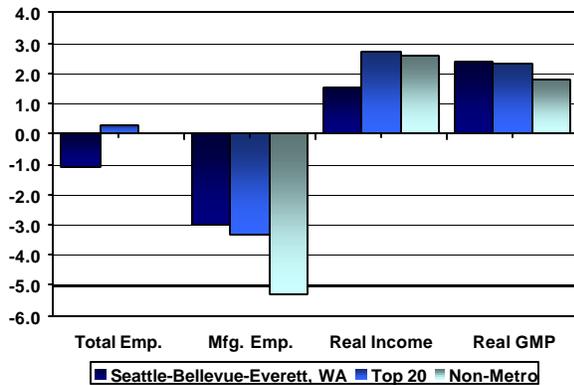


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

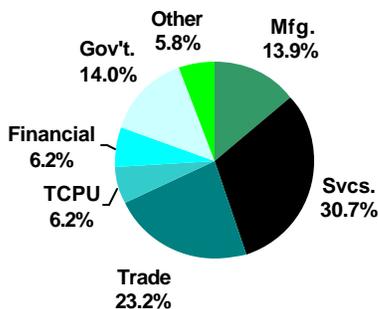
	1990 to 2000	2001	2002 to 2012
Total Employment	2.3%	0.0%	1.5%
Manufacturing	0.5%	-3.7%	0.5%
Services	3.6%	0.4%	2.3%
Trade	2.0%	0.9%	1.1%
Transp'n & Utilities	2.0%	-1.7%	1.4%
Financial	2.8%	1.8%	1.1%
Government	2.1%	0.6%	1.7%
Mining & Const'n	4.4%	3.4%	1.3%
Real Income	4.1%	3.2%	3.2%
Real GMP	4.3%	1.8%	2.4%

- Today, key manufacturing industries in the Minneapolis-St. Paul metro area include printing and publishing, computers, medical instruments, measuring and control instruments, as well as its traditional food products. The metro area is also the headquarters for 3M, its largest manufacturing employer, and Andersen Windows, Cargill, Pillsbury, and General Mills. The metro area has a higher-than-average concentration of manufacturing employment.
- The area has easy access to northern markets via Duluth on Lake Superior and southern markets via the Mississippi River. Its proximity to the Midwest's agricultural production and its distribution advantages have attracted large food-processing companies, earning Minneapolis the nickname "Mill City."
- Minneapolis, like many U.S. metros, succumbed to the national slowdown. Employment was stagnant in 2001. Both the manufacturing and transportation, communications, and public utilities industries experienced net job losses in over the course of the year. Other industries posted gains, but at much lower rates than the past 10 years.
- Although employment growth will continue to slow through the first half of 2002, the second half of the year is forecasted to be the start of a rebound in the Minneapolis economy. As the economy strengthens, employment growth will increase, averaging 1.5% per year over the next 10 years. Services will be the growth engine of the economy, posting 2.3% average annual growth through 2012.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

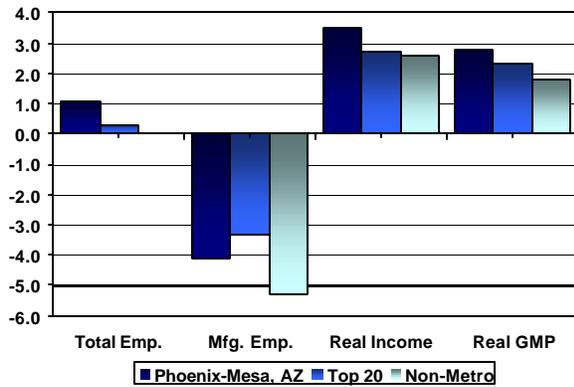
	1990 to 2000	2001	2002 to 2012
Total Employment	2.4%	-1.1%	1.3%
Manufacturing	-1.0%	-3.0%	0.5%
Services	4.8%	-1.6%	1.7%
Trade	2.2%	-1.7%	1.6%
Transp'n & Utilities	2.4%	-1.4%	1.2%
Financial	1.4%	3.9%	1.3%
Government	2.3%	2.9%	1.0%
Mining & Const'n	3.0%	-4.6%	0.9%
Real Income	4.9%	1.5%	2.7%
Real GMP	4.7%	2.4%	1.9%

➤ With a population of 2.4 million, Seattle is the most-populous urban area in the Pacific Northwest. It is home to nationally renowned firms, including Boeing, Microsoft, Starbucks, Amazon.com, Nordstrom, Paccar, and Weyerhaeuser. Key industries are high-tech manufacturing, aerospace, software development, health-care services, and financial services. The metro area's diverse manufacturing base also includes food processing, printing and publishing, fabricated metals, industrial machinery, and textiles and apparel. International trade is a major component of the metro area's economy. On the downside, Seattle's high exposure to volatile, cyclic industries such as aircraft manufacturing, shipping, and computer manufacturing leave it vulnerable to recessions at home, and to weak international economic growth.

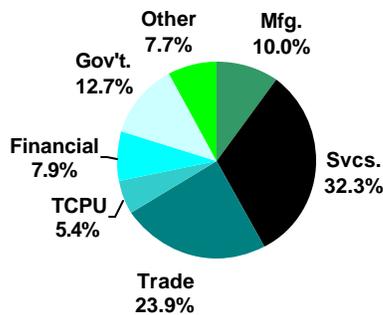
➤ Following the terrorist attack on September 11 and the subsequent announcement by Boeing of additional layoffs, Seattle's economy began to slow more noticeably. Total employment contracted in 2001, and not by a little. With a decline of 1.1%, Seattle lost over 15,000 jobs last year. As expected, the manufacturing and transportation, communications, and public utilities sectors took the biggest hits, with annual employment declines of 3.0% and 1.4%, respectively. The growth rate also declined in two other sectors that had been major sources of job growth in recent years—services and trade.

➤ This will be a difficult year for the Seattle economy. Although the metro area will face some challenges in 2002, the long-term outlook is positive. Over the forecast horizon, Seattle can expect modest but steady growth, particularly once manufacturing recovers in 2004. Annual employment gains will average 1.3% over the next 10 years.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

	1990 to 2000	2001	2002 to 2012
Total Employment	4.5%	1.1%	2.4%
Manufacturing	1.5%	-4.1%	1.0%
Services	6.4%	0.3%	3.7%
Trade	4.0%	1.7%	1.6%
Transp'n & Utilities	3.6%	2.0%	2.1%
Financial	4.8%	4.5%	2.3%
Government	3.1%	3.2%	1.8%
Mining & Const'n	7.1%	2.2%	1.8%
Real Income	5.4%	3.5%	3.4%
Real GMP	6.8%	2.8%	4.3%

➤ The Phoenix-Mesa metro economy has more than four times the national average of industrial concentration in copper mining, semiconductors, and aircraft and parts. Several large computer-chip and related-equipment manufacturing plants have established local facilities, fueling strong growth in manufacturing employment. Motorola, AlliedSignal, Intel, Honeywell, and Boeing anchor the high-tech sector. Many of Phoenix's manufacturers, large and small, retain a defense component in their final sales.

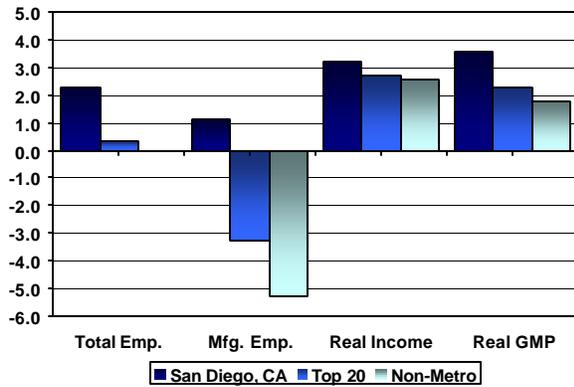
➤ Phoenix-Mesa managed 1.1% net job gains in 2001. Only the manufacturing sector, which accounts for a smaller-than-average share of metro area employment, declined in 2001. The remaining industries decelerated over the course of the year, and by year-end, many industries were in monthly year-over-year declines. While Phoenix did not lose (net) jobs in 2001, 2002 will see net job losses as weak employment carries over into this year.

➤ Employment is expected to decline in the Phoenix metropolitan area by 1.0% in 2002. The employment sectors that will drag on the economy in 2002 are services, construction, and transportation. All sectors of the economy will slow significantly through 2002 and then rebound nicely in 2003 and carry strong growth rates through the forecast horizon. The mining sector had been experiencing double-digit declines through the late 1990s, and although the sector continues to decline, the rates are within 1% on either side of zero going forward.

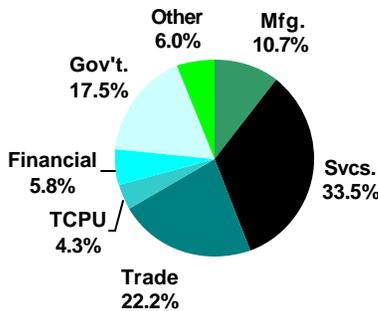
➤ All employment sectors will slow from the growth rates of the late 1990s to more moderate and sustainable rates. Total employment growth will ease from the 4.5% rate of the last ten years to a still-strong 2.4% over the next ten years. Services and financial industry

employment will be the engines of growth over the next 10 years.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

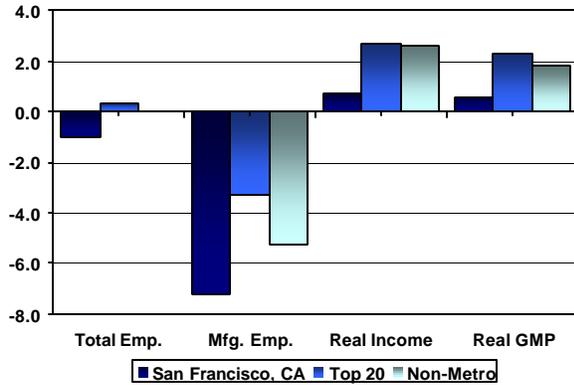
	1990 to 2000	2001	2002 to 2012
Total Employment	2.1%	2.3%	1.8%
Manufacturing	-0.4%	1.1%	0.7%
Services	4.1%	2.6%	2.6%
Trade	1.3%	1.1%	1.7%
Transp'n & Utilities	3.5%	2.4%	3.1%
Financial	0.8%	1.7%	1.5%
Government	1.5%	3.6%	1.2%
Mining & Const'n	3.0%	4.6%	1.3%
Real Income	3.2%	3.2%	3.6%
Real GMP	3.6%	3.6%	3.7%

➤ During the late 1980s, San Diego's considerable prosperity was somewhat narrowly based, with a large component of defense industry activity. By the end of that decade, federal policy was committed to streamlining and downsizing defense procurement, and military spending was substantially reduced. However, by nearly all measures, the economic reconfiguration of San Diego has outpaced the transition process in most of the rest of Southern California. In addition, San Diego has become a leader in telecommunications, electronics, computers, software, and biotechnology—an emergence in which the presence of the educated, high-tech-ready labor force that originally located in the area to work in defense-related industries has played a leading role.

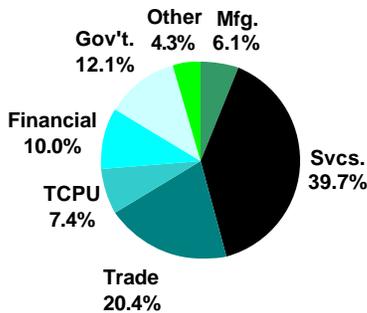
➤ San Diego employment expanded at a 2.3% rate in 2001, the strongest growth of the top 20 metro areas in that year. The metro area made it through the first three quarters of 2001 without any net job losses. However, both manufacturing and transportation, communications, and public utilities declined in the fourth quarter. These two industries are expected to continue to decline through the first half of 2002. Other industries, however, will continue to chug along, although at lower rates than the past few years.

➤ The medium-term outlook for San Diego remains positive, given its specialization in two industries with at least a decade of strong growth ahead of them: biotechnology and wireless communications. Employment gains over the next ten years will average 1.8% per year, only slightly below the rate of the previous ten-year period. Transportation, communications, and public utilities will be the metro area's engines of growth over that period.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

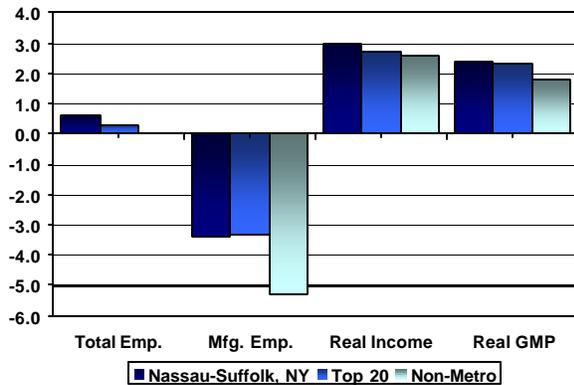


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

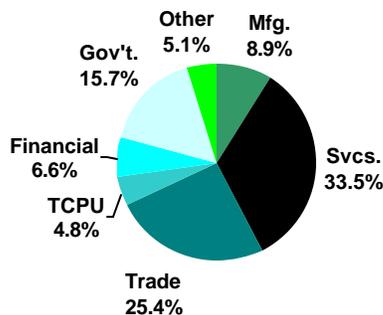
	1990 to 2000	2001	2002 to 2012
Total Employment	1.3%	-1.0%	1.2%
Manufacturing	-1.1%	-7.2%	0.7%
Services	3.3%	0.0%	1.9%
Trade	0.5%	-1.5%	1.0%
Transp'n & Utilities	0.8%	-3.6%	1.4%
Financial	0.1%	0.8%	0.1%
Government	-0.6%	-0.8%	0.2%
Mining & Const'n	3.6%	1.4%	0.9%
Real Income	3.8%	0.7%	2.7%
Real GMP	2.7%	0.6%	2.9%

- San Francisco is the West Coast finance and business-services hub. The area is home to the largest cluster of venture capitalists in the nation, and has a vibrant tourist industry. San Mateo County includes the San Francisco International Airport, the Bay Area's primary air terminal. The bedroom communities of San Mateo and Marin, along with the Oakland metro area, supply a large portion of San Francisco's work force.
- For more than two decades, San Francisco has been a full partner with the San Jose area in fostering the birth of emerging technologies in communications and biosciences. The metro's strong performance in 2000 carried it to a solid first-quarter 2001, but could not generate enough momentum for the rest of the year, as wave after wave of tech layoffs and bankruptcies emptied its office buildings, limited local spending, and caused the miniscule unemployment rate to rise.
- Annual employment growth made a striking reversal from a 4.0% gain in 2000 to a 1.0% contraction in 2001. Every sector was hurting, especially manufacturing, which declined 7.2%, and transportation, communications, and public utilities, which dropped 3.6%.
- San Francisco's fall from the peak to the nadir of economic strength has been well documented, but what is less well known is what its recovery will look like. Having stepped off the dot-com roller coaster, San Francisco will find itself economically in the middle of the road over the next ten years, posting 1.2% average annual employment growth, a far cry from its recent heyday. A rebound next year will bring a return to solid, if more modest growth, as the metro capitalizes on its technology and business base.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

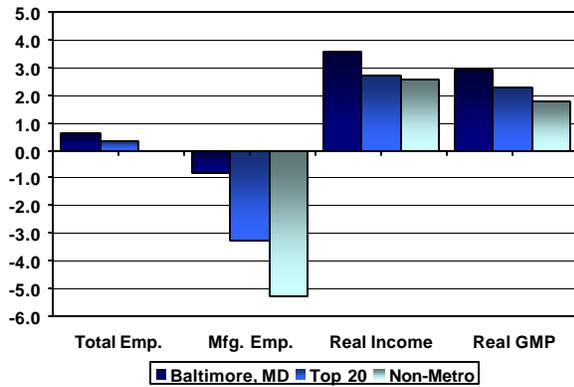


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

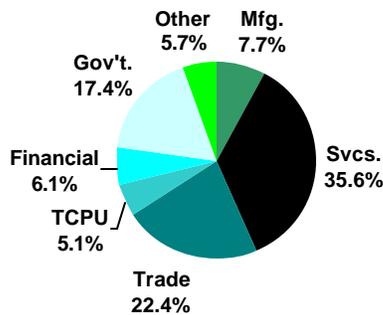
	1990 to 2000	2001	2002 to 2012
Total Employment	0.8%	0.6%	1.5%
Manufacturing	-2.9%	-3.4%	0.3%
Services	2.6%	2.4%	1.8%
Trade	0.7%	0.1%	1.5%
Transp'n & Utilities	1.3%	1.6%	2.1%
Financial	0.3%	-3.4%	1.7%
Government	0.3%	1.2%	0.7%
Mining & Const'n	1.4%	0.9%	1.6%
Real Income	1.9%	3.0%	3.6%
Real GMP	2.9%	2.4%	3.5%

- Nassau has historically been a center for defense-related manufacturing; consequently, durable goods manufacturing formed the base of its economy. The prominence of durables manufacturing has decreased, however, and recent defense-related cutbacks have accelerated the erosion in durables manufacturing employment. While the aerospace and defense industries contracted, though, biotechnology, communications, electronics, computer software, and other high-tech industries boomed, increasing the diversity of the metro area's manufacturing sector.
- The Nassau-Suffolk metro area has shown signs of recovering after slowing in the second half of 2001. The metro area squeezed out 0.6% employment growth in 2001, largely due to manufacturing's small share of employment. Thus, 3.4% declines in manufacturing and financial employment job growth and modest growth in other sectors, allowed total employment to grow, albeit not much, in 2001.
- The presence of the aerospace and defense industries in the metro area will help to boost employment in the coming years as the government spending ramps up in these sectors. Manufacturing employment will reverse its 10-year decline, and grow at a modest 0.3% rate over the next ten years. Not a boom, but certainly a reversal of the 2.9% average annual declines experienced over the last 10 years.
- Other high-tech growth industries will also support the Nassau economy in the coming years. Transportation, communications, and public utilities will see the most growth on average over the next 10 years, at 2.1% per year.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)

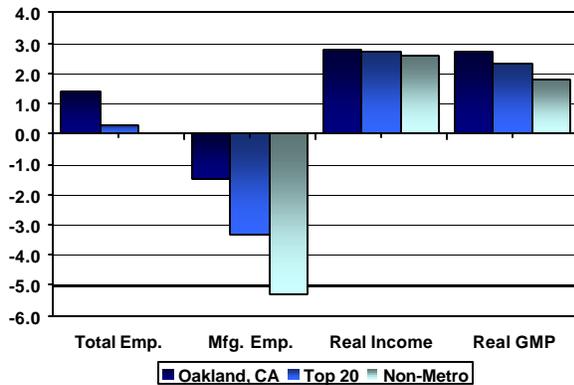


**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

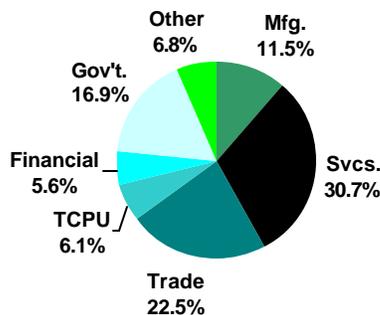
	1990 to 2000	2001	2002 to 2012
Total Employment	0.8%	0.6%	0.9%
Manufacturing	-2.8%	-0.8%	-0.5%
Services	2.9%	1.0%	1.8%
Trade	0.5%	-0.3%	0.5%
Transp'n & Utilities	1.2%	2.7%	0.8%
Financial	-0.3%	2.4%	0.4%
Government	0.1%	0.6%	0.4%
Mining & Const'n	-0.2%	-0.5%	0.2%
Real Income	2.2%	3.6%	3.1%
Real GMP	2.3%	2.9%	2.9%

- Traditionally, Baltimore's proximity to Washington, D.C. has made it a popular site for defense-related industries. The end of the Cold War led to massive reductions in defense budgets, though, costing the area thousands of well-paying jobs. These, as well as many non-military-related manufacturing positions in the city of Baltimore, have been replaced by relatively low-wage service and finance jobs. As the structure of the metro economy has changed, manufacturing has become less important, accounting for only 7.7% of employment in 2001—the U.S. share was 13.3%.
- Baltimore's location on one of the largest and busiest deepwater ports on the East Coast has made Baltimore an attractive location for transportation industries, while robust growth in trade in recent years has led to a significant increase in shipping volume.
- Total employment in the Baltimore metro area expanded by a modest 0.6% in 2001. The metro area's extremely small manufacturing base shielded it from the nation-wide manufacturing recession. Only manufacturing, trade, and mining and construction experienced modest (less than 1%) declines in 2001.
- Brisk activity around the BWI airport will continue, as high-tech and transportation-related companies expand and relocate to the area. The high-tech sector is becoming the flash point for local growth, particularly in the burgeoning biotech field, prompted by expansions at Johns Hopkins University and the Biotechnology Institute of Maryland.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

	1990 to 2000	2001	2002 to 2012
Total Employment	1.7%	1.4%	1.6%
Manufacturing	1.0%	-1.5%	0.7%
Services	3.8%	1.7%	2.4%
Trade	0.8%	1.1%	1.5%
Transp'n & Utilities	0.9%	0.2%	2.1%
Financial	0.4%	2.3%	0.9%
Government	0.5%	1.2%	1.0%
Mining & Const'n	3.5%	6.4%	1.1%
Real Income	3.6%	2.8%	3.3%
Real GMP	3.3%	2.7%	3.4%

➤ Often referred to as the "East Bay," the Oakland metro area is an important link in the Bay Area economy. Its industrial base ranks as one of the most diverse in the nation, with high concentrations of employment in magnetic- and optical-recording media, chemicals, petroleum products, containers, and medical instruments. Alameda has transformed itself from a military town into a high-tech center with a mix of software, biotech, and telecommunications companies.

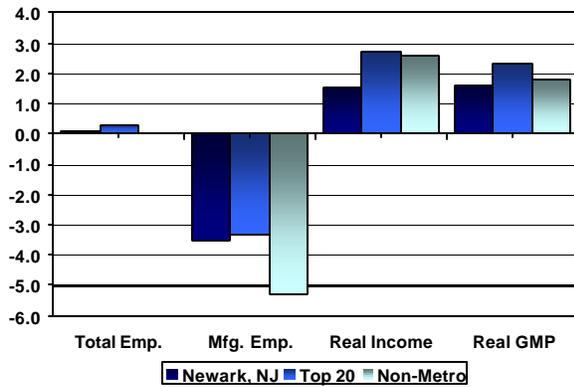
➤ Wholesale trade and distribution activities are significant in the Oakland metro area, reflecting its extensive port, rail, trucking, and airport facilities. As an emerging intermodal transportation mecca, the Port of Oakland serves more than 9.8 million passengers and handles more than 950 million pounds of cargo annually. It is ranked eighth in the United States, and annually handles 12% of West Coast cargo.

➤ As a later subscriber to the dot-com frenzy, Oakland did not enjoy the skyrocketing economic gains of some of its neighbors, but it is also better insulated now that the giddy gains have turned to woes. Total employment growth decelerated substantially last year, but still posted a moderate gain of 1.4%. The manufacturing sector took a big hit from the downturn in high-tech manufacturing, contracting 1.5%. The services sector was buoyed by strong growth in both health (3.1%) and "other" services (5.9%). The construction sector seemed to be impervious to recession, posting a 6.6% employment gain last year.

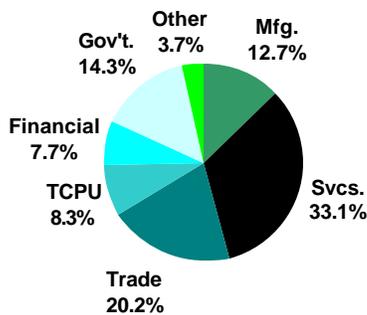
➤ Growth this year will remain positive, but just barely at 0.7%. Most sectors will struggle this year as the national economy eases back into a more healthy growth track. "Other" and health services will be this metro area's bright spots in 2002 and beyond. Services will

expand at a 2.4% annual rate over the next ten years.

**RELATIVE PERFORMANCE**  
(2001 GROWTH)



**EMPLOYMENT DISTRIBUTION**  
(2001)



**KEY ECONOMIC INDICATORS**  
(ANNUAL GROWTH)

	1990 to 2000	2001	2002 to 2012
Total Employment	0.5%	0.1%	0.7%
Manufacturing	-2.2%	-3.5%	-0.1%
Services	2.1%	0.8%	1.3%
Trade	0.7%	-0.6%	0.9%
Transp'n & Utilities	1.2%	-1.4%	0.2%
Financial	0.0%	4.1%	-0.5%
Government	0.0%	0.7%	0.2%
Mining & Const'n	-0.1%	2.4%	1.0%
Real Income	2.5%	1.5%	2.8%
Real GMP	2.4%	1.6%	2.3%

➤ Employment in Newark is heavily concentrated in the services and transportation industries. Newark International Airport and the ports of Elizabeth and Newark anchor the transportation sector. Manufacturing and trade constitute a smaller portion of the local economy than the national average. Much of the metro area's retail-trade activity is lost to the Bergen-Passaic metropolitan area, which is widely recognized for its numerous malls and retail areas. As a result of Bergen's superior competitive position in retail trade, Newark has one of the smallest proportions of retail-trade employment among DRI-WEFA's Top 114 metro areas.

➤ Newark had finally broken out of a low-growth rut. Last year, though, the metro's luck ran out, as the recession struck its major growth sectors. Services, which had generated 5.0% job gains in 2000, decelerated to a meager 0.8% gain, as consumers cut back on spending. Trade was also hurt, particularly warehouse trade, which is a large factor in Newark's important transportation and distribution economy. Transportation, communication, and utilities, contracted 1.4%, a loss of over 1,200 jobs. The manufacturing sector fell deeper into its long recession. The finance, insurance, and real estate sector was the standout of the metro's economy last year, gaining 4.1%. This employment growth is directly tied to the terrorist attacks on New York City and subsequent exodus.

➤ Newark's lower office rents and proximity to New York City will sustain an influx of new businesses into the area over the next few years. Total employment will expand at a 0.7% annual rate, higher than its historical trend. However, the metro area still faces several challenges, among them training and finding qualified workers

that will sustain the continued expansion of the economy.

## DEFINITIONS

The United States Office of Management and Budget (OMB) defines metropolitan areas (metro areas) according to published standards that are applied to Census Bureau data. The general concept of a metro area is that of a core area containing a large population nucleus, together with adjacent communities having a high degree of economic and social integration with that core. Currently defined metro areas are based on application of 1990 standards (which appeared in the Federal Register on March 30, 1990) to 1990 decennial census data and to subsequent Census Bureau population estimates and special census data. Current metro area definitions were announced by OMB effective June 30, 1999.

The current standards provide that each newly qualifying metro area must include at least:

- One city with 50,000 or more inhabitants, or
- A Census-bureau defined urbanized area (of at least 50,000 inhabitants) and a total metropolitan population of at least 100,000 (75,000 in New England).

Under the standards, the county (or counties) that contains the largest city becomes the “central county” (counties), along with any adjacent counties that have at least 50% of their population in the urbanized area surrounding the largest city. Additional “outlying counties” are included in the metro area if they meet specified requirements of commuting to the central counties and other selected requirements of metropolitan character (such as population density and percent urban).

The OMB defines NECMAs as a county-based alternative to the city- and town-based New England MSAs. The NECMA defined for an MSA includes:

- all of the counties in the MSA for which at least half of the county is part of the MSA

As of June 1999, according to OMB definitions, there were 306 MSAs in the United States outside of New England, and 12 NECMAs within New England.

DRI-WEFA creates a 319<sup>th</sup> metro area by dividing the Boston, MA-NH NECMA along the MA/NH border into Boston, MA and Manchester, NH.

A full list of the metropolitan areas and their county-based definitions is available on the Internet at: <http://www.census.gov/population/www/estimates/metrodef.html>

## DATA SOURCES

Population	U.S. Census Bureau and DRI•WEFA
Land Area	U.S. Census Bureau
Labor Income	Bureau of Economic Analysis, U.S. Department of Commerce, and DRI•WEFA
Transportation Infrastructure	Bureau of Transportation Statistics, U.S. Department of Transportation, and DRI•WEFA
Household Income	Current Population Survey, U.S. Census Bureau
Employment	Bureau of Labor Statistics, U.S. Department of Labor, and DRI•WEFA
Labor Force Characteristics	Current Population Survey, U.S. Census Bureau
Gross Metro Product	DRI•WEFA
Gross State Product	Bureau of Economic Analysis, U.S. Department of Commerce, and DRI•WEFA
Gross Domestic Product (U.S.)	Bureau of Economic Analysis, U.S. Department of Commerce
Gross Domestic Product (International)	DRI•WEFA