

U.S. Metro Economies

Gross Metropolitan Product
October 2004
Economic Forecast

GMP – The Engines of America’s Growth

Prepared for:

The United States
Conference of Mayors
and The Council for
the New American City

Prepared by:



THE UNITED STATES CONFERENCE OF MAYORS

THE ROLE OF METRO AREAS IN THE U.S. ECONOMY

Prepared for:

**The United States
Conference of Mayors**

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INTRODUCTION

Metropolitan areas play a central role in the development, strength and durability of the U.S. economy. Responsible for more than 80% of employment, income and production of products and services, metro area economies are key drivers of the nation's economic performance. Unlike states and nations, metro economies tend to be primarily defined and shaped by the nature of their economic activity. For example, New York is well known for its financial industry, Boston for its high-tech industry and Detroit for the automobile industry. A key element behind the economic development and success of metro areas is the close proximity of businesses and skilled labor. The easy access to resources such as labor, extensive business networks, and cutting-edge research performed at institutes of higher learning attracts both capital and entrepreneurs to metro areas. As a result, metro areas are often at the center of the development of many new technologies, such as biotechnology, and play a major role in shaping the future economic direction of the U.S. economy.

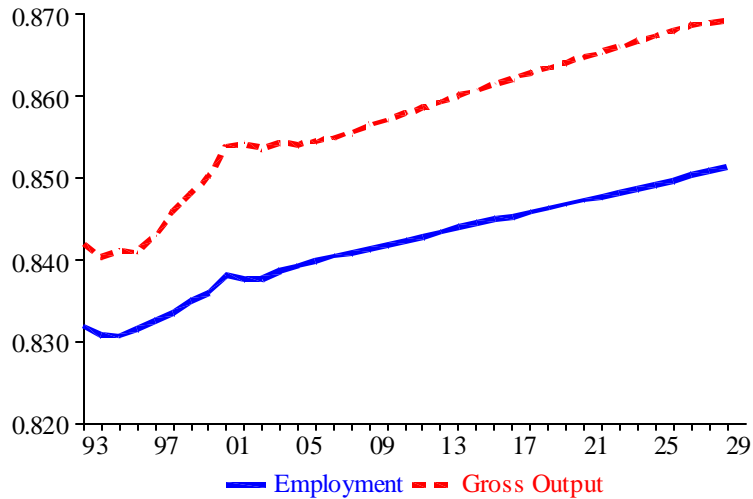
THE RECENT PERFORMANCE OF METROPOLITAN AREA ECONOMIES

Increasing economic activity in metro areas has been a key factor behind the recent improvement in national output. In 2003, slightly more than 80% of national output was derived from the metro economies, a statistic which highlights the importance of the metro areas to the nation. Last year, inflation-adjusted output in the metro areas increased by 3.2%, following growth of 2.3% in 2002. This compares with real GDP growth of 3.1% for the entire country in 2003 and underscores the key role played by the metro areas in pulling the U.S. economy out of the long, jobless recovery of the last few years. Indeed, 54% of the 318 U.S. metro areas grew faster than the nation in inflation adjusted terms in 2003, compared with 59% in 2002. A total of 305 metro areas posted positive real output growth in 2003, while in 2002 only 296 metro areas grew in real terms. With the metro areas growing slightly faster than the nation in 2003, non-metro area growth lagged behind the national economy during this period.

The total size of the metro economies has grown significantly since the early 1990s. Aggregate metro output stood at \$9.4 trillion in 2003, compared with \$5.5 trillion in 1993, which translates into average annual growth of 5.5%. As a result of this rapid expansion, metro economies now account for 85.4% of the nation's output of goods and services, compared with 84% in 1993. This trend is expected to continue through the next 25 years as the focus of economic growth and activity in the nation remains on the metro areas. Indeed, by 2029, Global Insight forecasts that 87% of U.S. gross domestic product, around \$39.5 trillion, will be derived from the nation's metro areas.

Due to the jobless nature of the recovery from the 2001 recession, employment growth in the nation's metro areas slowed rapidly in 2001 and fell in the subsequent two years. Following a drop of 1.1% in 2002, employment declined by 0.3% in 2003 as the economy continued to see little in the way of positive payroll growth. These declines essentially matched the percentage decline in payrolls across the entire United States during these two years. As economic activity started to quicken through the end of 2003, nominal gross metro product (GMP) picked up to 4.8% and inflation-adjusted output increased by 3.2%. While nominal GMP in the metro areas was essentially the same as national GDP in 2003, in real terms metro output grew slightly faster during this period, underscoring the competitive nature of the nation's metro areas, which in turn helped to keep prices in check.

FIGURE 1: THE CONTRIBUTION OF METRO AREAS TO THE NATIONAL ECONOMY WILL CONTINUE TO GROW
(Ratio of Metro Economies to the U.S.)



THE ROLE OF U.S. METROPOLITAN AREAS IN THE GLOBAL ECONOMY

While states and nations are defined by geographic and political boundaries, metro areas are acutely shaped by economic activity that crosses not only state, but also 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, compete in a truly global marketplace, alongside politically defined states and 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 similar benefits as transportation infrastructure concentration.

Because of all of these advantages, metro areas are at the core of new industry development. They are crucial for the rise of innovation and invention, and allow for higher wages than non-urban areas. 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, accelerating the rate of innovation, growth, and expansion of economic clusters
- Knowledge spillovers create an environment in which ideas move from person to person and from firm to firm, improving productivity and quality of life.
- 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.

THE CONTRIBUTION OF METROPOLITAN AREAS TO THE NATIONAL ECONOMY

THE SCOPE OF METRO AREA ECONOMIES

The economic ties of the metro areas often cross international borders. As such, it is useful to consider how these engines of growth compare in a broader international context. Indeed, when comparing the output of the nation's metro economies with those of international economies, the importance of metros to the U.S. is clearly revealed. Out of the 100 largest international economies in the world, 47 are U.S. metro areas, with New York, Los Angeles-Long Beach, and Chicago all in the top 20. Nonetheless, the sluggish nature of the recovery during 2002-03, combined with a weakening dollar, saw some of the nation's top metro areas falling in the rankings between 2002 and 2003. New York dropped from the 14th to the 16th largest economy in the world in this period. Both Los Angeles-Long Beach and Chicago also fell in the rankings, but did remain in the top 20.

Moving the focus to a national, rather than international stage, the size and importance of the metro areas is readily apparent. In 2003, the output from the ten largest metro areas was greater than the combined gross state product of the 31 smallest states.

Going one step further, the importance of the metro areas within a state is also clear. In many cases a metropolitan area is the largest component of a state's economy, and across the nation 16 metro areas account for more than 50% of the output in their state. Likewise, an additional 28 metro areas individually account for more than 25% of the output of their respective states. For example, Atlanta is responsible for 57% of Georgia's total output and 56% of employment in the state. These figures underscore the fact that in highly urbanized states the majority of economic activity occurs in metro areas. California metros, for example, generate 97% of the state's employment and output. Furthermore, in 30 states the combined metro economies contribute 75% or more of the state's total economic output.

EMPLOYMENT AND OUTPUT

The contribution of the metro areas to the national economy in terms of output and employment is considerable. In 2003, a total of 109 million workers were employed in metro areas, amounting to 84% of total national employment. Metro areas were also responsible for 85.4% of U.S. gross domestic product in 2003, producing goods and services with a total value of \$9.4 trillion. The concentration of economic activity in metro areas is also highlighted when considering their geographic nature. Metro areas cover only 21% of the U.S.

land area, yet account for more than 80% of the nation's population, employment and output. The concentration of businesses and people in such a small area is a key reason why metro areas are able to provide such a large contribution to the U.S. economy. Indeed, the intertwining of businesses, skilled labor and consumer markets serve to drive competition and innovation, which in turn helps to keep downward pressure on costs and allows the metro areas to be more productive by population and by unit of land.

**FIGURE 2: MOST ECONOMIC ACTIVITY OCCURS IN METRO AREAS
(2003)**

		Metro Areas	Rest of United States	United States
Size	Population (Millions)	235	56	291
	Share of US	81%	19%	
	Land Area (Square Miles, 000s)	716	2,780	3,496
	Share of US	21%	79%	
Jobs & Output	Employment (Millions)	109	21	130
	Share of US	84%	16%	
	Gross Domestic Product (Billions)	\$9,413	\$1,604	\$11,017
	Share of US	85%	15%	
High Value-Added Employment Sec- tors	Financial Services (Thousands)	7,194	780	7,973
	Share of US	90%	10%	
	Transportation & Utilities (Thousands)	4,000	744	4,744
	Share of US	84%	16%	

The clustering of two of the nation's highest value-added sectors in urban locations also magnifies metro areas' contribution to the national economy. In 2003, 90% of financial services employment and 84% of transportation, warehousing, and utilities sector employment were located within metropolitan areas. Financial services companies choose to locate in metro areas for their proximity to major securities and commodity markets and their 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. Moreover, the access to knowledge-based workers, along with the need to be close to hubs of economic activity, attracts high-value-added businesses such as computer system design and biotechnology research firms to metro areas. In 2003, 92% of professional and business services employment was in the nation's metro areas.

Further underscoring the importance of metros to the national economy, recent evidence shows that most of the economic growth in the U.S. is derived from the metro areas. In fact, some 13 million (88%) of the 14.6 million jobs added across the nation during the boom years of 1995 through 2000 were in the metro areas. This shows the critical role the metro areas play in driving economic growth across the country. Likewise, when the U.S. economy weakens, the metro areas usually feel the brunt of any slowdown. Between 2001 and 2003, the U.S. economy saw around 2 million jobs disappear, more than 80% of which were located in the metro areas. As the nation's economy recovers, however, metro areas will account for around 90% of all the new jobs created through 2005.

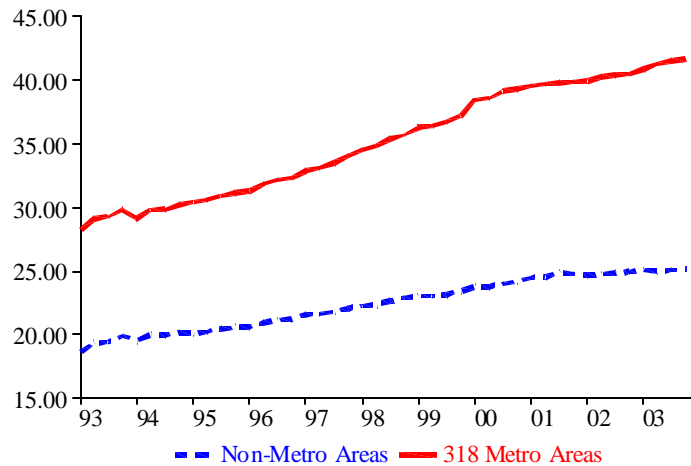
**FIGURE 3: MOST ECONOMIC GAINS ARE MADE IN METRO AREAS, AS WERE MOST JOB LOSSES
(ADDITIONS TO U.S. ECONOMY, 2003)**

		Metro Areas	Rest of United States	United States
Size	Population (Thousands)	2,529	304	2,833
	Share of US	89%	11%	
Jobs & Output	Employment (Thousands)	-357	-73	-430
	Share of US	83%	17%	
	Gross Domestic Product (Billions)	433	81	514
	Share of US	84%	16%	
High Value Added Employment Sectors	Financial Services (Thousands)	114.8	5.8	120.6
	Share of US	95%	5%	
	Transportation & Utilities (Thousands)	-70.9	10.7	-60.2
	Share of US	N/A	N/A	

INCOME CREATION

Along with output and employment, the metro areas are also responsible for most of the nation's income growth. This trend is clearly evident in both total wages and salaries earned and wages per worker. In 2003, workers in the nation's metro areas earned a combined \$4.5 trillion in wages and salaries, compared with \$579 billion that went to those employed in the non-metro areas of the country. With higher paying jobs, such as in the financial services sector, being clustered in the metros, these workers also tend to have considerably higher wages. In 2003, a metro area worker earned an average of \$40,700 in wages and benefits, while the average non-metro area worker earned \$25,000. The difference in wage income between metro and non-metro workers, which now stands at \$15,700, has grown steadily since 1985 when it was only \$4,800. Part of the reason behind this growing disparity is the higher productivity of workers and businesses in metro areas. Figure 4 provides an indirect measure of the difference in productivity in metro and non-metro areas. Productivity growth in metro area economies is driven in large part by the clustering of businesses and skilled workers, which allows for the easy transfer of innovation and production efficiencies from company to company. Given the relative importance of income growth in the metro areas to the nation's economy, the resumption of wage growth, following the sluggish years from 2001 to 2003, is going to be a key factor in helping to create a sustainable U.S. economic recovery.

FIGURE 4: METRO AREA WORKERS EARN MORE THAN NON-METRO AREA WORKERS (\$ THOUSANDS)



THE WAGE GAP IN THE US

Global Insight and the U.S. Conference of Mayors recently examined the quality of jobs lost and gained over the recent business cycle in the nation as a whole.¹ The report highlighted a wage gap between the jobs lost from the beginning of the recession through the end of 2003, and those that have been added back to the economy during 2004 and the types of jobs that will continue to return over the next two years. The average annual wage of \$43,950 in the sectors that lost jobs during the 2000–03 period, will not be matched by the average wage of \$38,839 in those sectors adding jobs through 2006. Job gains would come in those sectors where wages average only 88% of those in the sectors hit hardest by the recession. This 11.6% gap reflected, in part, the higher-than-average wages paid in the declining manufacturing sectors. Many of those manufacturing jobs and others lost in the information sector, had been sent overseas due to outsourcing, or were lost due to firm and plant closings because of oversupply as demand waned.

Figure 5: US Jobs

Wages of US Jobs	
Jobs Lost (2000 to 2003)	1,950,167
Average Wage of Jobs Lost	\$43,950
Jobs Gained (2004 to 2006)	5,771,384
Average Wage of Jobs Gained	\$38,839

Global Insight has also calculated this same wage gap for US States, for example in Ohio where Manufacturing job loss dominated, the gap was larger 15.6%. Missouri’s wage gap is

¹ Please see *U.S. Metro Economies: Types of Jobs Lost and Gained 2000-2006, June 2004*

20.8% as many high wage jobs are replaced in the economic recovery by jobs that only pay on average 79.2% as much. In appendix table 10, the top 10 jobs lost in the recession are illustrated with their average wages and the Top 10 jobs gained in the current recovery are listed with their average wages.

GENERATING NEW INDUSTRIES

With few exceptions², 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, including a diverse and ample supply of labor, financial and physical capital, access to national and international markets, and a local base of technical knowledge, which 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 6 shows that two of the key segments of the U.S. economy—financial services and professional and business services—are almost entirely concentrated within metro areas. In particular, the professional and business services sector contains some of the nation’s newest and most innovative industries including computer systems design, management consulting, and biotechnology research. Despite the recent dot-com bust and high-tech slowdown, it is still desirable to have these fast-growing industries within a metro area. Nevertheless, maintaining a high level of diversity is also critical to help insulate a metro area from the sector-specific slowdowns that inevitably occur.

**FIGURE 6: MOST FINANCIAL AND BUSINESS SERVICES
EMPLOYMENT IS LOCATED IN METRO AREAS
(2003)**

High Growth Employment Sectors	Rest of		
	Metro Areas	United States	United States
Financial Services (Thousands)	7,194	780	7,973
Share of US	90%	10%	
Prof. And Business Services (Thousands)	14,547	1,347	15,894
Share of US	92%	8%	

² 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 2003 TOP 20 METROPOLITAN ECONOMIES

The performances of the largest U.S. metro economies areas play a key role in shaping the economic health of the entire nation. Highlighting the importance of this relationship, in 2003 the top 20 metro areas accounted for 36% of national output. Furthermore, the top 20 metro areas accounted for 42% of total gross metropolitan output of all of the nation's 318 metropolitan areas. During 2003, gross output in the top 20 metro economies increased by 4.6% and totaled nearly \$4.0 trillion.

**FIGURE 7: TOP 20 METROS 2003 GMP
RANKED BY 2003 GROWTH**

Gross Metropolitan Product	(US\$ Billions)			
	2002	2003	%Chg	% Chg Real GMP 2003
Orange County, CA	144.1	153.8	6.7%	5.1%
San Diego, CA	121.4	129.0	6.2%	4.6%
Phoenix-Mesa, AZ	121.7	129.1	6.1%	4.2%
Newark, NJ	99.2	105.1	5.9%	4.2%
Nassau-Suffolk, NY	116.4	122.9	5.6%	3.6%
Minneapolis-St. Paul, MN-WI	128.0	135.0	5.4%	3.8%
Washington, DC-MD-VA-WV	242.1	255.0	5.3%	3.5%
Philadelphia, PA-NJ	191.3	201.0	5.1%	3.5%
Los Angeles-Long Beach, CA	391.5	410.8	4.9%	3.3%
Atlanta, GA	179.4	188.2	4.9%	3.2%
Chicago, IL	351.4	366.3	4.2%	2.6%
Houston, TX	182.9	190.6	4.2%	2.6%
New York, NY	469.5	488.8	4.1%	2.1%
Oakland, CA	101.6	105.8	4.1%	2.5%
Baltimore, MD	103.5	107.6	4.0%	2.3%
Seattle-Bellevue-Everett, WA	120.6	125.4	4.0%	2.3%
Boston, MA	286.7	298.0	3.9%	2.2%
Detroit, MI	155.9	161.7	3.7%	2.1%
Dallas, TX	166.8	172.0	3.1%	1.5%
San Francisco, CA	108.8	110.9	2.0%	0.4%
Top 20	3,782.9	3,957.0	4.6%	3.0%

Following a sluggish start to 2003, which coincided with the economic uncertainty surrounding the onset of the Iraq war, the latter half of the year saw the national economy finally gain momentum on the road to recovery. In particular, the third quarter of the year (when nominal GDP surged by 10%) seems to have marked the point when the economy finally emerged from the drawn-out downturn that started in 2001. The upswing in the national economy was mirrored in the top 20 metro areas, where economic activity and output growth quickened as the year progressed. In terms of output growth, the strongest performances were registered in those top 20 metro areas in the sunbelt region of the country, which in general benefited from robust population growth, a relatively small manufacturing sector, and low exposure to the lingering hangover from the high-tech bust of 2001. In addition, the rapid growth in federal defense spending over the past year also played a role in

bolstering economic growth in Southern California's large metros. Despite the improvement in business spending on high-tech equipment during 2003, metro areas such as Boston and San Francisco—which depend on the high-tech sector to fuel their growth—continued to struggle to work through the excesses of the 1990s boom. Finally, those metro areas with a high concentration of manufacturing, such as Detroit, also lagged behind the U.S. economy in recovery.

Even though economic activity was rising, employment growth in the top 20 metros continued to lag behind the rest of the nation. In 2003, total employment in the top 20 metro areas, which accounts for 32% of national employment, declined by 0.6%, compared with a 0.3% drop across the nation. Due in large part to the sizable concentration of high-tech and financial industries that have struggled since the end of the 1990s boom, the top 20 metro areas have clearly felt the brunt of the economic slowdown of the past few years.

As we move towards the end of 2004, the nation's economy continues to demonstrate positive signs of recovery and expansion. Despite a pause in economic activity during the middle part of 2004—in large part due to the rapid run up in oil prices that crimped consumer spending—payrolls across the U.S. have continued to expand. The latest employment numbers from the Bureau of Labor Statistics underscore this positive trend. In July and August 2004, the U.S. economy added 73,000 and 144,000 new jobs respectively, with payrolls in the manufacturing sector rising in both months. Mirroring the general improvement in the national economy, in July 2004 the top 20 metro areas saw employment increase by around 62,000, or roughly 85% of total employment growth across the nation during that month. Although the recent improvement in job growth is encouraging, payroll gains did moderate during the summer months, compared with strong growth earlier in the year, and by August 2004, total U.S. employment was around 1 million below the peak reached in March 2001.

Notwithstanding the recent economic soft patch, employment gains should now become more broad-based and accelerate through the end of 2004 and into 2005. Nonetheless, the pattern of job growth across the top 20 metro areas will be diverse. Between the second half of 2004 and the end of 2005, Global Insight forecasts that the strongest payroll gains will come in the sunbelt metros. San Diego, Phoenix, Dallas and Atlanta will all experience payroll growth averaging more than 2.0% annually during this period, while Washington DC will see employment growth slightly less than 2.0%, helped by strong federal government spending. Conversely, ongoing structural changes in the manufacturing sector will continue to weigh heavily on payroll growth in Detroit, while relatively high business costs and slow population growth will lead to slower employment gains in some of the major northeastern metro areas such as New York and Philadelphia. In addition, dampened by only moderate recoveries in their high-tech sectors, Boston and San Francisco will experience a relatively slow jobs recovery.

Employment growth in the top 20 metro areas will be led by a marked improvement in the professional and business services sector. Sparked by an upswing in corporate confidence and spending, employment in this sector is expected to increase 1.8% in 2004 and 4.2% in 2005. Metro areas such as Boston, Atlanta, and San Diego will benefit in particular from sharply stronger activity in the professional and business services sector. Improving global trading conditions and a weakening dollar will aid the manufacturing sector through 2004. Indeed, in 2005, manufacturing employment in the top 20 metro areas is expected to post year-over-year growth for the first time since 1998. The financial services sector should also contribute jobs during 2004, although payroll gains will slow slightly from 2003. In particular, the recent rise in interest rates is likely to moderate demand for those businesses involved in mortgage refinancing, and will offset some of the growth now being experienced in the broader financial services sector. This trend will continue into early-mid 2005, before employment growth in the financial services sector shows clear signs of improvement. Rising economic activity should also bolster employment growth in the transportation, ware-

housing, and utilities sector. Nonetheless, high oil prices will hinder profitability, and ultimately, growth in the nation's commercial airline industry.

Mirroring the general improvement in the national economy, the output of the top 20 metro areas is expected to grow by 6.2% (4.6% in inflation adjusted terms) in 2004 and 5.3% (3.7%) in 2005. These nominal growth rates are the most robust since the end of the boom in 2000, with gross metropolitan output expected to reach \$4.4 trillion in 2005. During this period, the top 20 metros should be growing faster than other parts of the country, and they will play an important role in propelling the nation's overall economic recovery.

FIGURE 8: TOP 20 METROS EMPLOYMENT GROWTH 2003-04

Top 20 Metro Employment		% change		Change (Thousands)	
Rank		03	04	03	04
1	New York, NY	-1.3	0.8	-52.7	34.3
2	Los Angeles-Long Beach, CA	-0.9	0.5	-36.7	21.5
3	Chicago, IL	-1.1	0.0	-43.5	1.2
4	Boston, MA	-2.0	-0.2	-62.5	-5.6
5	Washington, DC-MD-VA-WV	0.6	2.8	17.3	77.8
6	Philadelphia, PA-NJ	-0.1	0.6	-1.4	14.2
7	Houston, TX	-0.8	0.8	-16.2	17.8
8	Atlanta, GA	-0.5	1.1	-9.9	23.2
9	Dallas, TX	-1.5	0.7	-28.4	14.1
10	Detroit, MI	-1.6	-1.1	-33.2	-21.8
11	Orange County, CA	1.6	0.7	21.8	9.6
12	Minneapolis-St. Paul, MN-WI	0.1	1.5	1.1	25.9
13	Phoenix-Mesa, AZ	1.3	2.7	20.6	43.9
14	San Diego, CA	0.9	1.4	11.3	16.9
15	Seattle-Bellevue-Everett, WA	-1.0	1.4	-13.5	19.0
16	Nassau-Suffolk, NY	0.6	1.2	7.2	15.2
17	San Francisco, CA	-3.5	-0.4	-34.3	-3.6
18	Baltimore, MD	-0.3	1.1	-3.9	14.1
19	Oakland, CA	-1.5	0.2	-15.1	2.2
20	Newark, NJ	0.2	1.0	1.8	10.4