


# New York's Competitiveness


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A Scorecard for 13 U.S. Metropolitan Areas



CITIZENS BUDGET COMMISSION

 In recent years New York has been riding a wave of national prosperity, but not distinguishing itself with unique gains.

 New York's fiscal policies, its health and social welfare status, and some elements of its physical infrastructure place it behind all or nearly all of its competitors.

## Introduction

A major goal of the leaders of state and local governments is to make their areas more attractive to current and prospective residents and employers. Attractiveness, however, is multidimensional; no one feature determines where people will live or where firms will place facilities. These choices take into account multiple factors, to which households and entrepreneurs assign different weights, and not all of which are determined by public policy.

An area's attractiveness also is judged in relation to that of its competitors. Performance is gauged on a scale that is relative, not one that is absolute or set outside the broader economic context.

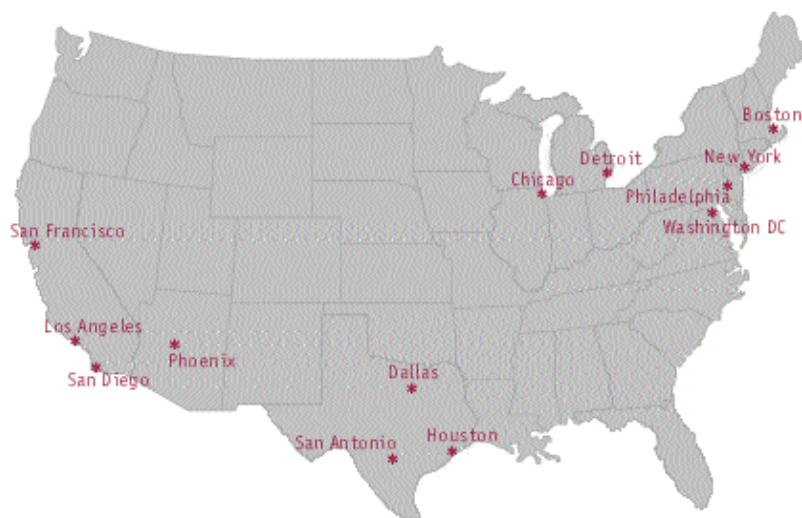
This Competitiveness Scorecard is designed to assess the performance of the New York metropolitan area over the past five years in a way that acknowledges these two important points. First, it is multidimensional, examining eight factors - population, jobs and income, technological innovation and entrepreneurship, labor force quality, public safety and tourism, fiscal policy, health and social welfare, and physical infrastructure. Moreover, each factor is judged with more than one indicator

in order to give a fuller picture. In total, this Scorecard presents 36 indicators.

The Scorecard also takes into account the relative nature of urban performance by comparing New York to 12 similar places. The method for selecting these metropolitan areas is described more fully in the next section.

In ranking New York's performance in each category, the Scorecard makes two summary judgments. New York's *current position* is designated as "top tier" (among the three best areas), "bottom tier" (among the three worst areas), or "middle tier" (among the remainder). New York's *performance over the past five years* is rated as "gaining" (among the three areas with the best rate of change), "lagging" (among the three worst in rate of change), or "keeping pace" (among the remainder). Performance is gauged in rates of change rather than absolute change to standardize for varying starting points.

In four instances, the multiple indicators for current position or recent performance show divergent results, and New York is ranked "mixed." The results are summarized in the accompanying table.



These findings point to three conclusions.

(1) *New York has three serious competitive deficiencies.* Its fiscal policies, its health and social welfare status, and elements of its physical infrastructure place New York at or near the bottom. Moreover, its performance in most of these factors in recent years, at best, kept pace with the average, leaving it at a marked disadvantage.

(2) *New York is gaining on competitors in two categories, public safety and tourism and fiscal policy.* However, in neither case does this gaining performance propel New York from the bottom to the top tier. In the case of public safety and tourism, New York did well in indicators for which it was already in or near the top tier, and the strong performance lengthened its lead. In contrast, New York's gains in cutting taxes started from a low point, and, while substantial, were still not great enough to lift it from the bottom tier.

(3) *The broadest conclusion is that in recent years New York has been riding a wave of national prosperity, but not distinguishing itself with unique gains.* New York either just kept pace with its competitors or actually lost ground on all factors other than public safety and tourism and fiscal policy. In good times, this lagging performance has been associated with absolute improvements, but it is not a gain in competitiveness. For example, in the past five years per capita personal income in New York grew 30 percent or by about \$8,800, but this growth was slower than in five other areas and caused New York to drop from first to second place. Since New York historically had achieved a strong position on many of the factors considered, it remains in good standing despite its recent, mediocre performance. But New York cannot ride on its earlier achievements indefinitely; a brighter future will require a stronger performance.

### Summary Rankings of the New York Metropolitan Area

<b>Current Position</b>	<b>5 Year Performance</b>
<b>Top Tier</b>	
Population	Mixed
Jobs and Income	Keeping Pace
Technological Development and Entrepreneurship	Keeping Pace
<b>Middle Tier</b>	
Labor Force	Keeping Pace
<b>Bottom Tier</b>	
Fiscal Policy	Gaining
Health and Social Welfare	Mixed
<b>Mixed Position</b>	
Public Safety and Tourism	Gaining
Physical Infrastructure	Lagging

## Compared to Where?

In identifying New York's competitors, this Scorecard reflects two key decisions. First, the primary units to be compared are metropolitan areas. Second, the selection criterion is based on population size.

Metropolitan areas consist of one or more central cities and their suburbs. These are the basic geographic units of economic life in the United States, and coincide with labor markets and media markets. They define the boundaries within which people commute to their jobs and look for new ones, and the newspapers, radio and television stations define their audiences in metropolitan terms.

Consistent with this metropolitan focus, data have been assembled for metropolitan areas, as defined by the federal Office of Management and Budget. A Metropolitan Statistical Area (MSA) is a collection of counties with a total population of at least 100,000 residents; 50,000 of whom live within a central city and 50,000 in the surrounding suburbs. When two or more MSAs are adjacent and the combined population exceeds 1 million people, then the area is classified as a Consolidated Metropolitan Statistical Area (CMSA).

For example, New York is a CMSA including the primary MSAs of New York City, Nassau-Suffolk, and Northern New Jersey.

San Francisco is a CMSA that spans that city and the area known as Silicon Valley, including San Jose. On the other hand, Phoenix is a MSA encompassing that city and its suburbs, but not adjacent to another large city that can join Phoenix as a CMSA. Among the 13 areas analyzed in this Scorecard, nine are CMSAs, three are MSAs, and Boston is a New England Consolidated Metropolitan Area, distinguished from a CMSA because its units are townships unique to New England rather than conventional counties.

For some indicators data have been collected for units smaller than the CMSA or MSA. In a few cases, data are not available for the metropolitan area, but are available for a city or county within the larger metropolitan area. Where this is the case, and when it is reasonable to assume the data for the smaller unit are representative of the entire metropolitan area, then the Scorecard uses the available data. For some other indicators, it is preferable to use data for the central city or county rather than the metropolitan area. This is the case when an area's competitiveness is likely to be judged by the standing of the central city rather than by an average of all its subunits. Examples include crime rates and state and local debt. For all the indicators used, the specific units to which the data apply are indicated in the relevant tables.

The accompanying table shows the size relationships between metropolitan areas and their constituent units. It illustrates the potential pitfalls of comparing the political units of central cities rather than the more economically meaningful units of metropolitan areas.

Consider that the city of Boston, with a relatively small population of 589,000, comprises less than 10 percent of its metropolitan area's population; in contrast, the city of San Antonio comprises over 70 percent of its metropolitan area's population, in part because annexations have extended its boundaries to include suburban neighborhoods. New York City, with a population just over 8 million, houses about 38 percent of its CMSA's population of over 21 million. Comparing these political units may be much less meaningful than compar-

ing the complete metropolitan areas of which they are a part.

Among metropolitan areas, New York's competitors have been selected based on population size. First, the 10 largest metropolitan areas were identified. This yielded nine competitors ranging from Los Angeles, with over 16 million people, to Houston, with nearly 4.7 million. However, because central cities also are relevant in defining the competition, a second list of the 10 most populous central cities was identified. Phoenix, San Antonio, and San Diego are among the 10 largest central cities, but their metropolitan areas are smaller than the 10 largest CMSAs. The metropolitan areas containing these three large cities were added to the list of competitors to bring the total to 13, including New York.

**Central City Population Size and Share of County and Metropolitan Area, 2000**

2000 Rank	Central City	Population (thousands)	City as a Percent of		
			CMSA	MSA	County
1	New York (NY)	8,008	37.9%	86.0%	100.0%
2	Los Angeles (LA)	3,695	22.6%	38.8%	38.8%
3	Chicago (CH)	2,896	31.6%	35.0%	53.9%
4	Houston (HO)	1,954	41.8%	46.8%	57.4%
5	Philadelphia (PA)	1,518	24.5%	29.8%	100.0%
6	Phoenix (PX)	1,321	NAP	40.6%	43.0%
7	San Diego (SD)	1,223	NAP	43.5%	43.5%
8	Dallas (DA)	1,189	22.8%	33.8%	53.6%
9	San Antonio (SA)	1,145	NAP	71.9%	82.2%
10	Detroit (DT)	951	17.4%	21.4%	46.2%
11	San Francisco (SF)	777	11.0%	44.9%	100.0%
12	Boston (BO)	589	9.7%	NAP	85.4%
13	Washington DC (DC)	572	8.7%	14.7%	100.0%

Source: U.S. Census Bureau

NAP- not applicable

Position	Performance
Top Tier	Mixed

## Population

Population size is an intuitively sensible indicator of competitiveness. The more people who choose to live in an area, the more attractive it must be. This is especially true in a modern, mobile society where migration, rather than natural increase, is the major source of regional population growth.

The United States has collected data about metropolitan areas only since the middle of the twentieth century, but has counted the population of cities since the first census in 1790. At that time, New York was the nation's capital and its largest city, with 33,131 people or nearly 5,000 more than second-ranking Philadelphia. By 1850, New York was no longer the capital, but its population of more than 500,000 was nearly triple that of next-largest Baltimore. The consolidation in 1898 of New York and Brooklyn, then the first and third largest cities, yielded a greater New York that had more than

3.4 million residents in 1900, double the size of the "second city," Chicago. These two cities remained the major contenders through the first half of the twentieth century, and when metropolitan area data initially were reported in 1950, New York's population of 8.6 million substantially exceeded Chicago's 5.1 million. Then, rapidly growing Los Angeles gained second place among metropolitan areas in 1970 with 7 million residents compared to New York's 10 million.

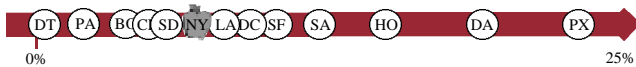
Currently, New York remains the largest metropolitan area with 21 million residents. Los Angeles, the next largest, has about 16.4 million, and third-ranked Chicago about 9.2 million.

New York's top tier ranking applies to international immigration as well as population size. Among the 13 competitors, New York ranks first, slightly ahead of Los Angeles, in the number of new residents attracted from abroad. Yet, New York also lost more of its residents to other parts of the country than it was able to attract domestically. This loss due to net domestic migration is far greater than that experienced by any other metropolitan area.

Over the last five years, New York's performance on the population indicators is mixed. Its overall rate of growth ranks eighth, near the middle of the group. This results from a combination of a gaining performance in international immigration and a lagging performance in domestic migration. The percentage increase in population due to international migration is greater in New York than in all competitors except Los Angeles and San Francisco. In contrast, New York has lost a greater share of its population due to net domestic migration than every other competitor.

### Population

#### 5 Year Change



Rank	Metropolitan Area	2000 (millions)	5 Year Change Percent	Rank
1	New York	21.2	6.8%	8
2	Los Angeles	16.4	7.3%	7
3	Chicago	9.2	6.0%	10
4	Washington DC	7.6	7.4%	6
5	San Francisco	7.0	7.5%	5
6	Philadelphia	6.2	3.6%	12
7	Boston	5.8	5.4%	11
8	Detroit	5.5	1.4%	13
9	Dallas	5.2	17.4%	2
10	Houston	4.7	12.5%	3
11	Phoenix	3.3	22.2%	1
12	San Diego	2.8	6.5%	9
13	San Antonio	1.6	9.4%	4
<b>United States</b>		<b>281.4</b>	<b>7.1%</b>	

Source: U.S. Census Bureau

### International Migration

#### 5 Year Change



Rank	Metropolitan Area	1999 (thousands)	5 Year Change Percent	Rank
1	New York	139.8	4.0%	3
2	Los Angeles	136.8	4.4%	1
3	San Francisco	57.5	4.4%	2
4	Chicago	45.6	2.5%	7
5	Washington DC	34.7	2.4%	8
6	Houston	23.8	3.0%	5
7	Dallas	22.9	2.5%	6
8	San Diego	17.1	3.4%	4
9	Boston	15.6	1.5%	10
10	Philadelphia	12.6	1.1%	12
11	Detroit	10.3	1.0%	13
12	Phoenix	6.8	1.4%	11
13	San Antonio	4.5	1.6%	9
<b>United States</b>		<b>851.5</b>	<b>1.6%</b>	

Source: U.S. Census Bureau

### Domestic Migration

#### 5 Year Change



Rank	Metropolitan Area	1999 (thousands)	5 Year Change Percent	Rank
1	Phoenix	47.3	11.1%	1
2	Dallas	37.3	4.3%	2
3	Houston	17.7	0.9%	4
4	San Diego	14.0	-1.1%	6
5	San Antonio	5.6	2.9%	3
6	Washington DC	2.6	-1.4%	7
7	Boston	-3.9	-0.7%	5
8	Philadelphia	-22.8	-2.5%	10
9	Detroit	-22.8	-2.1%	8
10	San Francisco	-43.6	-2.4%	9
11	Chicago	-55.6	-3.5%	11
12	Los Angeles	-65.7	-4.8%	12
13	New York	-158.2	-4.9%	13
<b>United States</b>		<b>NA</b>	<b>NA</b>	

Source: U.S. Census Bureau

Position	Performance
Top Tier	Keeping Pace

## Jobs and Income

The size of a region's economy is direct evidence of its competitiveness. An attractive metropolitan area will retain and enlarge its employment base and add to the income available to its residents.

Three indicators gauge economic size. Payroll employment is the number of non-agricultural jobs; earnings by place of work reflects the level of income generated by jobs and proprietorship. Personal income per capita is the total income (earnings plus government pensions and transfers, and dividends, interest and rent) available on average to an area's residents. This average figure does not necessarily reflect individual well-being, but it is a sound indicator of the size of the economy relative to the population.

The New York metropolitan economy is the largest in the United States, measured by payroll employment and

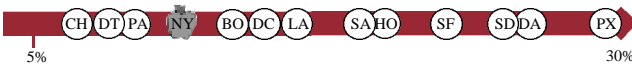
earnings by place of work, and is the second largest measured by per capita personal income. This places the area firmly in the top tier.

Like its population, New York's job base has always been the largest among the nation's metropolitan areas and surpasses its competitors by a considerable margin. Its job base is nearly 47 percent greater, and its earnings by place of work fully 70 percent higher, than that of second-place Los Angeles. However, New York has not always been the leader in per capita income. Since these data were first available in 1969, San Francisco has more consistently claimed the top spot. San Francisco had the greatest per capita income in 1969 and 1979, but New York rose from fifth to first place during the 1980s. San Francisco again pushed New York to second place in 1999.

New York's recent performance kept pace with several other metropolitan areas. For growth of payroll employment, the region ranks tenth; for earnings by place of work, it ranks eighth; and for growth of personal income per capita, it ranks sixth.

### Payroll Employment

#### 5 Year Change

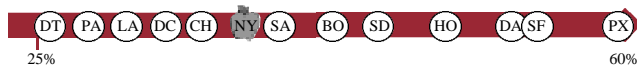


2000		2000	5 Year Change	
Rank	Metropolitan Area	(millions)	Percent	Rank
1	New York	9.8	11.0%	10
2	Los Angeles	6.7	14.0%	7
3	Chicago	4.6	8.1%	13
4	Washington DC	4.0	13.3%	8
5	San Francisco	3.6	19.0%	4
6	Boston	3.1	12.6%	9
7	Philadelphia	3.0	10.0%	11
8	Dallas	2.8	23.5%	2
9	Detroit	2.7	9.7%	12
10	Houston	2.2	16.7%	5
11	Phoenix	1.6	29.2%	1
12	San Diego	1.2	22.3%	3
13	San Antonio	0.7	16.2%	6
<b>United States</b>		<b>131.8</b>	<b>12.4%</b>	

Source: Bureau of Labor Statistics

### Earnings by Place of Work

#### 5 Year Change



1999		1999	5 Year Change	
Rank	Metropolitan Area	(billions)	Percent	Rank
1	New York	\$573	36.0%	8
2	Los Angeles	335	30.7%	11
3	Chicago	228	34.5%	9
4	San Francisco	222	54.5%	2
5	Washington DC	208	32.1%	10
6	Boston	164	40.5%	6
7	Philadelphia	139	28.8%	12
8	Dallas	134	53.4%	3
9	Detroit	128	25.9%	13
10	Houston	118	48.5%	4
11	Phoenix	63	60.2%	1
12	San Diego	60	44.0%	5
13	San Antonio	29	37.7%	7
<b>United States</b>		<b>\$5,631</b>	<b>33.7%</b>	

Source: Bureau of Economic Analysis

### Per Capita Personal Income

#### 5 Year Change



1999		1999	5 Year Change	
Rank	Metropolitan Area	Amount	Percent	Rank
1	San Francisco	\$40,858	39.1%	1
2	New York	38,539	29.8%	6
3	Boston	36,285	33.2%	2
4	Washington DC	35,797	25.1%	10
5	Chicago	33,857	28.5%	8
6	Philadelphia	32,397	26.6%	9
7	Dallas	32,482	32.3%	4
8	Houston	31,543	32.8%	3
9	Detroit	31,140	23.6%	12
10	San Diego	29,489	28.9%	7
11	Los Angeles	28,050	23.0%	13
12	Phoenix	27,617	29.1%	5
13	San Antonio	24,716	24.3%	11
<b>United States</b>		<b>\$28,546</b>	<b>26.4%</b>	

Source: Bureau of Economic Analysis

Position	Performance
Middle Tier	Keeping Pace

## Labor Force

In a modern information-based economy, human resources have become critically important for competitiveness. Therefore, the size and quality of a region's labor force are key elements of competitiveness.

Four indicators gauge this factor. First, the number of people in the labor force shows the magnitude of the labor pool. Second, the share of the population over age 25 with a bachelor's degree indicates the availability of well-educated workers. Third, bachelor and postgraduate degrees granted by local institutions per 1,000 people in the labor force measures the potential flow of locally educated workers into the labor force. Fourth, the percentage of households with a computer shows the extent to which the local population has embraced the prevailing technology of the information age.

Notably absent from the indicators is a measure of the quality of elementary and secondary schools. Reliable

### Labor Force

#### 5 Year Change



2000		2000	5 Year Change	
Rank	Metropolitan Area	(millions)	Percent	Rank
1	New York	10.1	5.9%	9
2	Los Angeles	8.2	11.3%	4
3	Chicago	4.7	5.7%	10
4	Washington DC	4.0	5.2%	11
5	San Francisco	3.9	10.1%	5
6	Boston	3.1	5.1%	12
7	Philadelphia	3.1	4.9%	13
8	Dallas	2.9	14.6%	1
9	Detroit	2.8	6.2%	8
10	Houston	2.4	8.5%	7
11	Phoenix	1.6	14.3%	2
12	San Diego	1.4	12.7%	3
13	San Antonio	0.8	8.6%	6
<b>United States</b>		<b>140.5</b>	<b>6.6%</b>	

Source: Bureau of Labor Statistics

### Degrees Granted by Local Institutions

#### 5 Year Change



1998		1998	5 Year Change	
Rank	Metropolitan Area	(per 1,000 labor force)	Percent	Rank
1	Boston	20.2	1.0%	5
2	San Diego	13.6	-2.4%	9
3	Washington DC	13.6	6.3%	1
4	Philadelphia	12.8	2.9%	4
5	New York	12.6	0.5%	7
6	San Francisco	11.4	-5.0%	12
7	Chicago	11.1	3.2%	3
8	Detroit	11.0	0.8%	6
9	Phoenix	9.9	-1.1%	8
10	Los Angeles	8.6	-7.5%	13
11	San Antonio	8.2	5.0%	2
12	Dallas	8.0	-3.2%	11
13	Houston	5.5	-3.1%	10
<b>United States</b>		<b>12.6</b>	<b>-1.2%</b>	

Source: National Center for Education Statistics

and comparable data for local school systems' performance are not available.

By these yardsticks, New York's current standing is middle tier. New York places fifth in the share of its population with a bachelor's degree and in the local production of college graduates. Its percentage of households with a computer ranks tenth, below the national average. Only the size of New York's labor force, which largely reflects the size of its population, is top tier.

New York's recent performance kept pace with several competitors. Labor force growth places ninth, the increase in production of college graduates is seventh, and the increase in households with a computer is fifth. Despite ranking third in increasing the share of the population with a bachelor's degree, the recent performance of the other measures indicates little or no competitive gain in New York's labor force quality.

### Population Over Age 25 with a Bachelor's Degree

#### 6 Year Change



2000		2000	6 Year Change	
Rank	Metropolitan Area	Percent	Percent	Rank
1	San Francisco	37.3%	10.7%	9
2	Washington DC	37.2%	-0.3%	10
3	Boston	34.4%	-0.6%	11
4	San Diego	34.0%	20.6%	1
5	New York	32.6%	18.5%	3
6	Chicago	30.7%	13.7%	6
7	Dallas	30.7%	17.2%	4
8	Philadelphia	27.8%	13.0%	7
9	Detroit	26.2%	15.4%	5
10	Houston	25.7%	-2.7%	13
11	Los Angeles	25.6%	11.3%	8
12	Phoenix	23.9%	18.9%	2
13	San Antonio	15.9%	-1.2%	12
<b>United States</b>		<b>25.6%</b>	<b>15.3%</b>	

Source: U.S. Census Bureau

### Households with a Computer

#### 3 Year Change



2000		2000	3 Year Change	
Rank	Metropolitan Area	Percent	Percent	Rank
1	San Francisco	67.4%	21.0%	9
2	San Diego	64.1%	29.8%	2
3	Washington DC	59.6%	7.2%	13
4	Phoenix	59.1%	23.1%	6
5	Dallas	58.8%	18.3%	10
6	Detroit	55.5%	27.6%	4
7	Boston	54.5%	9.4%	12
8	Philadelphia	54.2%	27.8%	3
9	Chicago	51.0%	15.9%	11
10	New York	50.4%	25.1%	5
11	Los Angeles	50.2%	22.1%	8
12	Houston	49.2%	22.7%	7
13	San Antonio	41.9%	31.3%	1
<b>United States</b>		<b>51.1%</b>	<b>20.5%</b>	

Source: U.S. Census Bureau

# Technological Development and Entrepreneurship

A culture of innovation and entrepreneurship may provide a competitive edge, because an area's firms are more likely to develop and use new products and technologies. In a period when communications, computers, and biotechnology are viewed as potential sources of rapid growth, innovation and entrepreneurship in those fields are particularly important.

Five indicators are used to capture the innovative character of the metropolitan areas. In the absence of direct measures of research and development activity, grants from the National Science Foundation (NSF) and the National Institutes of Health (NIH) measure investment in the development of new products. New product

development itself is gauged by the number of patents granted to individuals in the area, while the volume of venture capital investment in the area indicates the success of its entrepreneurs in convincing investors of the promise of new products or services. The scale of advanced communications and computer services industries in a region is measured by the number of jobs in these fields.

New York is in the top tier on all of these measures. It has more communications and computer services jobs than any other area. New York ranks second to Boston, the premier medical research center, in NIH grants, and second to Washington, DC, the home of the National

## National Science Foundation Grants

### 5 Year Change



2000		2000	5 Year Change	
Rank	City	(millions)	Percent	Rank
1	Washington DC	\$219.9	-9.9%	10
2	<b>New York</b>	<b>82.6</b>	<b>10.9%</b>	<b>7</b>
3	Los Angeles	64.1	31.4%	5
4	Chicago	52.8	10.2%	8
5	Philadelphia	43.0	7.8%	9
6	Boston	37.9	47.4%	3
7	San Francisco	23.9	46.7%	4
8	Houston	19.8	-23.0%	11
9	Detroit	10.6	14.9%	6
10	San Diego	6.2	-75.5%	13
11	San Antonio	6.1	163.9%	2
12	Dallas	2.6	-48.5%	12
13	Phoenix	2.0	729.6%	1
<b>United States</b>		<b>\$3,746</b>	<b>9.4%</b>	

Source: National Science Foundation

## National Institutes of Health Grants

### 5 Year Change



2000		2000	5 Year Change	
Rank	City	(millions)	Percent	Rank
1	Boston	\$1,078	66.8%	3
2	<b>New York</b>	<b>865</b>	<b>37.6%</b>	<b>10</b>
3	San Diego	681	65.6%	4
4	Philadelphia	561	56.8%	6
5	Los Angeles	418	53.7%	7
6	Chicago	363	70.3%	2
7	Houston	359	83.4%	1
8	San Francisco	334	53.6%	8
9	Washington DC	188	29.1%	12
10	Dallas	131	63.5%	5
11	San Antonio	123	51.8%	9
12	Detroit	84	31.3%	11
13	Phoenix	0	0%	13
<b>United States</b>		<b>NA</b>	<b>NA</b>	

Source: National Institutes of Health

## New Patents Granted

### 5 Year Change



1999		1999	5 Year Change	
Rank	Metropolitan Area	Number	Percent	Rank
1	San Francisco	9,405	148.2%	1
2	<b>New York</b>	<b>7,841</b>	<b>35.4%</b>	<b>8</b>
3	Los Angeles	4,500	28.8%	11
4	Boston	3,806	53.7%	6
5	Chicago	3,051	30.7%	10
6	Detroit	2,539	31.3%	9
7	Philadelphia	2,328	22.8%	12
8	Washington DC	1,969	42.3%	7
9	Dallas	1,930	56.5%	5
10	San Diego	1,748	86.8%	2
11	Houston	1,714	21.7%	13
12	Phoenix	1,152	64.3%	4
13	San Antonio	257	77.2%	3
<b>United States</b>		<b>84,029</b>	<b>49.6%</b>	

Source: U.S. Patent and Trademark Office

Position	Performance
Top Tier	Keeping Pace

Academy of Sciences, the Library of Congress, and the Smithsonian, in National Science Foundation grants. New York takes second place to San Francisco, the home of Silicon Valley, in venture capital investments and new patents.

New York's high current standings are jeopardized by a performance in recent years that has kept pace with only about half the competitors. While New York's economic growth in the second half of the 1990s was fueled in part by communications and computer services, 10 other regions did even better. New York ranks tenth in the growth of NIH grants, causing it to fall in standing from the number one slot five years earlier.

Although outpacing the national average, the growth of NSF grants awarded to New York City institutions ranks seventh, with the most rapid growth in Phoenix, San Antonio, and Boston. New York, like the nation as a whole, has experienced a tremendous growth in venture capital investments, but nonetheless, lags five competitors with Washington, DC, Houston, and Boston the greatest gainers in this category. Finally, despite growth of 70 percent in communications and computer services employment, New York outpaced only Philadelphia and Los Angeles, ranking eleventh.

### Venture Capital Investments

#### 5 Year Change



2000		2000	5 Year Change	
Rank	Metropolitan Area	(millions)	Percent	Rank
1	San Francisco	\$34,871	1,634%	5
2	<b>New York</b>	<b>12,428</b>	<b>1,413%</b>	<b>6</b>
3	Boston	9,928	1,786%	3
4	Washington DC	7,594	2,493%	1
5	Los Angeles	7,475	1,190%	7
6	Dallas	4,357	779%	10
7	San Diego	2,845	1,151%	8
8	Chicago	2,631	669%	11
9	Philadelphia	1,860	814%	9
10	Houston	994	1,828%	2
11	Detroit	650	599%	12
12	Phoenix	547	433%	13
13	San Antonio	37	1,674%	4
<b>United States</b>		<b>\$120,821</b>	<b>1,046%</b>	

Source: Venture Economics/National Venture Capital Association

### Communications and Computer Services Employment

#### 5 Year Change



1999		1999	5 Year Change	
Rank	Metropolitan Area	(thousands)	Percent	Rank
1	<b>New York</b>	<b>250.7</b>	<b>70.0%</b>	<b>11</b>
2	Washington DC	214.5	71.5%	10
3	San Francisco	191.6	88.4%	8
4	Los Angeles	137.0	43.8%	13
5	Dallas	117.6	223.1%	4
6	Boston	116.1	123.7%	6
7	Chicago	106.8	86.4%	9
8	Detroit	59.5	62.1%	12
9	Philadelphia	51.8	150.2%	5
10	Houston	40.7	236.4%	3
11	San Diego	36.3	89.1%	7
12	San Antonio	17.5	993.8%	1
13	Phoenix	17.3	268.1%	2
<b>United States</b>		<b>2,005</b>	<b>53.7%</b>	

Source: Bureau of Labor Statistics

# Public Safety and Tourism

Tourism is desirable because it brings money to a local economy through visitor spending for hotels, restaurants and amusement. In addition, tourists join local residents to provide an expanded audience and financial base for cultural institutions, which further enhance an area's attractiveness. Because a sense of security is essential to drawing visitors and retaining residents, tourism and public safety can be assessed jointly.

Of the five indicators in this category, two relate to public safety - the incidence of property crime and of

violent crime. The other three gauge the capacity for and level of tourism - the number of hotel rooms, the size of the largest convention facility, and the number of international visitors. In each case the data relate to the central city rather than the entire metropolitan area, because that is the prime tourist destination and where the dangers of crime have the most competitive impact.

New York's current standing is mixed, with the indicators divided between the top tier and the middle tier. For the number of international visitors and for property crime, New York ranks first, with Los Angeles its closest com-

## Property Crimes per 100,000 Residents

5 Year Change

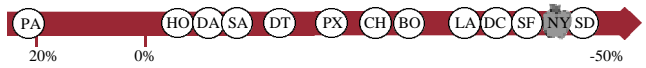


1999		1999		5 Year Change	
Rank	City	Number	Percent	Rank	
1	New York	2,969	-44.7%	1	
2	Los Angeles	3,305	-42.8%	2	
3	San Diego	3,405	-37.9%	3	
4	San Francisco	4,859	-29.4%	5	
5	Boston	4,986	-35.8%	4	
6	Philadelphia	5,687	11.2%	13	
7	Houston	6,084	1.8%	11	
8	Chicago	6,196	-16.0%	9	
9	San Antonio	6,232	-23.3%	7	
10	Washington DC	6,454	-23.3%	6	
11	Phoenix	6,888	-23.2%	8	
12	Detroit	8,162	-11.6%	10	
13	Dallas	8,201	4.0%	12	
<b>United States</b>		<b>3,742</b>	<b>-19.7%</b>		

Source: Federal Bureau of Investigation

## Violent Crimes per 100,000 Residents

5 Year Change



1999		1999		5 Year Change	
Rank	City	Number	Percent	Rank	
1	San Antonio	561	-13.3%	10	
2	San Diego	598	-44.5%	1	
3	Phoenix	832	-23.0%	8	
4	San Francisco	866	-40.7%	3	
5	New York	1,063	-42.9%	2	
6	Houston	1,187	-9.2%	12	
7	Los Angeles	1,283	-37.7%	5	
8	Boston	1,302	-32.0%	6	
9	Dallas	1,414	-11.0%	11	
10	Philadelphia	1,605	21.3%	13	
11	Washington DC	1,628	-38.9%	4	
12	Chicago	1,911	-28.8%	7	
13	Detroit	2,254	-16.1%	9	
<b>United States</b>		<b>525</b>	<b>-26.7%</b>		

Source: Federal Bureau of Investigation

Position	Performance
Mixed	Gaining

petitor in each case. Additional data (not shown) suggest New York does well in other aspects of tourism. It ranks third (behind Chicago and Dallas) in the number of convention visitors; ranks first in the number of museums, with 82 compared to Washington's 67; and ranks first in the value of grants from the National Endowment for the Arts, receiving more than double the amount of second-place Washington, DC. But New York ranks fifth in the size of its convention center and its violent crime rate, and ranks fourth in the number of hotel rooms.

New York's recent performance is judged as gaining based on ranking first in the reduction in property crime, second in the reduction in violent crime (behind San Diego), and second in the growth in international visitors (behind Dallas). The progress against property crime and the growth in international tourism reinforced the region's top tier standing in these areas. However, not all the indicators warrant a gaining designation; New York trails six cities in expanding its convention facility and eight in expanding its supply of hotel rooms.

### International Visitors

#### 4 Year Change



1999		1999		4 Year Change	
Rank	City	(thousands)	Percent	Rank	
1	New York	5,505	29.5%	2	
2	Los Angeles	3,572	7.5%	9	
3	San Francisco	2,789	9.8%	7	
4	Washington DC	1,297	-18.4%	13	
5	Chicago	1,272	20.8%	4	
6	Boston	1,199	23.6%	3	
7	San Diego	807	11.8%	6	
8	Dallas	416	34.2%	1	
9	Houston	416	-3.9%	11	
10	Philadelphia	343	3.9%	10	
11	Detroit	294	9.7%	8	
12	Phoenix	294	-16.2%	12	
13	San Antonio	122	18.4%	5	
<b>United States</b>		<b>48,491</b>	<b>11.9%</b>		

Source: International Trade Administration

### Hotel Rooms

#### 5 Year Change



1999		1999		5 Year Change	
Rank	City	Number	Percent	Rank	
1	Los Angeles	93,500	2.7%	13	
2	Chicago	77,000	17.2%	7	
3	Dallas	67,500	21.2%	6	
4	New York	63,800	8.7%	9	
5	Phoenix	49,500	41.4%	2	
6	San Diego	46,500	5.7%	11	
7	Houston	45,800	38.8%	3	
8	Detroit	35,000	25.0%	5	
9	San Francisco	31,000	4.4%	12	
10	San Antonio	27,300	33.8%	4	
11	Washington DC	25,700	8.0%	10	
12	Boston	22,000	10.0%	8	
13	Philadelphia	8,800	46.7%	1	
<b>United States</b>		<b>NA</b>	<b>NA</b>		

Source: PKF Consulting, NYC&Company, Detroit Metro Convention & Visitors Bureau

### Major Exhibit Hall - Total Exhibit Space

#### 4 Year Change



2000		2000		4 Year Change	
Rank	City	(thousands sq. ft.)	Percent	Rank	
1	Chicago	2,200	0.0%	10	
2	Houston	1,400	-9.8%	13	
3	Dallas	1,019	19.9%	6	
4	Los Angeles	866	0.1%	9	
5	New York	814	14.0%	7	
6	Detroit	800	0.0%	10	
7	Phoenix	750	108.3%	2	
8	Washington DC	725	90.3%	3	
9	Philadelphia	700	60.9%	4	
10	San Diego	616	8.5%	8	
11	San Francisco	542	22.6%	5	
12	Boston	513	135.3%	1	
13	San Antonio	292	0.0%	10	
<b>United States</b>		<b>NA</b>	<b>NA</b>		

Source: Tradeshow Week, NYC&Company

## Fiscal Policy

Residents and businesses want good public services, but they want them at a reasonable cost. Therefore, competitive cities must operate with relatively low tax and debt burdens.

Four indicators shed light on the competitiveness of New York's fiscal policy. Three relate to the combined state and local tax burden on low, moderate, and high-income households. The other relates to the amount of local debt relative to the value of property in the city, adjusted to standardize for the division of responsibility

between state and local governments. In each case, the data are for the area's central city, typically the most fiscally significant entity in a metropolitan area.

New York's fiscal policies put it in the bottom tier. Its tax burden for upper income families is highest among the nine cities for which data are available and is \$1,400 more than second-worst Philadelphia. For middle-income families, New York is also in the bottom tier, ranking eighth among the nine. (The available data are from studies of the largest city in each state; hence

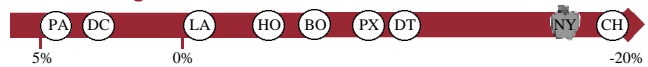
**State and Local Tax Burden:  
Family of Four, \$25,000 Annual Income**  
5 Year Change



1999		1999		5 Year Change	
Rank	City	Amount	Percent	Rank	
1	Houston	\$1,567	-4.9%	5	
2	Phoenix	1,881	-3.9%	6	
3	Los Angeles	1,973	18.4%	9	
<b>4</b>	<b>New York</b>	<b>1,987</b>	<b>-24.8%</b>	<b>1</b>	
5	Boston	2,021	-19.4%	3	
6	Chicago	2,110	-21.6%	2	
7	Washington DC	2,157	4.2%	7	
8	Detroit	2,218	-14.7%	4	
9	Philadelphia	3,339	7.8%	8	
	Dallas	NA	NA		
	San Antonio	NA	NA		
	San Diego	NA	NA		
	San Francisco	NA	NA		
<b>51 City Average</b>		<b>\$2,024</b>	<b>-4.1%</b>		

Source: Government of the District of Columbia, Office of Tax and Revenue

**State and Local Tax Burden:  
Family of Four, \$50,000 Annual Income**  
5 Year Change



1999		1999		5 Year Change	
Rank	City	Amount	Percent	Rank	
1	Houston	\$2,812	-5.2%	6	
2	Phoenix	3,703	-8.2%	4	
3	Los Angeles	3,968	-0.8%	7	
4	Chicago	4,279	-19.8%	1	
5	Washington DC	4,680	3.3%	8	
6	Detroit	4,849	-10.2%	3	
7	Boston	5,056	-5.2%	5	
<b>8</b>	<b>New York</b>	<b>5,522</b>	<b>-17.9%</b>	<b>2</b>	
9	Philadelphia	6,218	4.9%	9	
	Dallas	NA	NA		
	San Antonio	NA	NA		
	San Diego	NA	NA		
	San Francisco	NA	NA		
<b>51 City Average</b>		<b>\$4,296</b>	<b>-2.7%</b>		

Source: Government of the District of Columbia, Office of Tax and Revenue

Position	Performance
Bottom Tier	Gaining

large cities which are not the largest in their state are excluded.)

Among the 12 comparable cities, New York's debt burden puts it in the bottom tier with Detroit and Philadelphia. (Washington, DC is unique, combining state and local government.) The only exception to the bottom tier standing is the tax burden on low-income households, where New York ranks fourth among the nine cities for which data are available.

In recent years New York's fiscal policies earn a "gaining" designation. Its 25 percent cut in the low-income tax burden ranks first, and its 18 and 14 percent cuts in the middle and high-income tax burdens rank second in each case. Much of the improvement is due to reductions in state and local personal income taxes, and the strong gain for low-income families reflects an enhanced state Earned Income Tax Credit. New York's increase in debt is fifth among the 12 relevant competitors. If it can prudently continue its pace of tax cutting and curb its debt issuance, the city may climb up from its current low standing.

### State and Local Tax Burden: Family of Four, \$100,000 Annual Income

5 Year Change

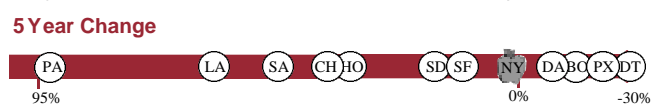


1999		1999	5 Year Change	
Rank	City	Amount	Percent	Rank
1	Houston	\$5,628	-4.8%	7
2	Phoenix	8,068	-10.5%	3
3	Chicago	8,894	-18.0%	1
4	Detroit	10,187	-9.1%	4
5	Los Angeles	10,626	-5.3%	6
6	Boston	10,805	-8.1%	5
7	Washington DC	11,007	2.1%	8
8	Philadelphia	12,021	3.8%	9
9	<b>New York</b>	<b>13,422</b>	<b>-14.0%</b>	<b>2</b>
	Dallas	NA	NA	
	San Antonio	NA	NA	
	San Diego	NA	NA	
	San Francisco	NA	NA	
<b>51 City Average</b>		<b>\$9,371</b>	<b>-4.6%</b>	

Source: Government of the District of Columbia, Office of Tax and Revenue

### Adjusted Debt as a Percent of Real Property Value

5 Year Change



2000		2000	5 Year Change	
Rank	City	Percent	Percent	Rank
1	San Francisco	1.4%	10.3%	6
2	San Diego	2.1%	11.1%	7
3	Boston	2.1%	-14.8%	3
4	Los Angeles	2.9%	49.5%	11
5	Dallas	2.9%	-14.5%	4
6	Phoenix	3.4%	-18.7%	2
7	Chicago	6.0%	32.0%	9
8	Houston	6.4%	31.4%	8
9	San Antonio	8.0%	37.9%	10
10	<b>New York</b>	<b>9.1%</b>	<b>3.1%</b>	<b>5</b>
11	Philadelphia	11.4%	92.8%	12
12	Detroit	15.7%	-28.9%	1
	Washington DC	NA	NA	
<b>12 City Average</b>		<b>6.0%</b>	<b>10.2%</b>	

Source: Individual Cities Annual Financial Reports for Fiscal Year 1995 and 2000.

## Health and Social Welfare

An attractive and competitive social environment is one in which opportunities are available to virtually all residents and in which those who encounter obstacles in their efforts to succeed have a reasonable safety net. In the United States federal system, states and localities create diverse health and welfare policies, and an area's competitiveness includes how well these programs perform.

Health and welfare performance is difficult to assess, but five indicators together provide a fairly comprehensive picture. The availability of economic opportunities is reflected in the share of the adult population that is employed. With respect to inadequate income, the share

of the population in such distress can be gauged with the federal government's poverty threshold. With respect to health status, three important measures are the share of the population without health insurance, the age-adjusted mortality rate, and the level of air pollution. (The latter two measures are for the county containing the central city, and air pollution is gauged using a federally established standard known as the Pollution Standards Index.)

New York falls in the bottom tier in health and social welfare. Its share of adults employed is lower than that of all competitors except Philadelphia; and it has a greater share of residents lacking health insurance than

### Percent of Adult Population Employed

#### 5 Year Change



1999		1999		5 Year Change	
Rank	County	Percent	Percent	Rank	
1	Dallas	74.1%	4.4%	10	
2	Houston, Harris Co.	68.4%	1.3%	12	
3	Phoenix, Maricopa Co.	67.1%	7.5%	2	
4	Chicago, Cook Co.	63.7%	5.8%	7	
5	Boston, Suffolk Co.	63.6%	7.2%	3	
6	San Francisco	63.5%	5.2%	9	
7	San Antonio, Bexar Co.	62.6%	1.1%	13	
8	Los Angeles	60.9%	6.1%	6	
9	Washington DC	60.5%	2.6%	11	
10	San Diego	59.7%	5.4%	8	
11	Detroit, Wayne Co.	56.7%	6.8%	5	
12	<b>New York</b>	<b>54.4%</b>	<b>7.8%</b>	<b>1</b>	
13	Philadelphia	54.1%	6.9%	4	
<b>United States</b>		<b>62.3%</b>	<b>2.9%</b>		

Source: U.S. Census Bureau, Bureau of Labor Statistics

### Population with Income Below Poverty Threshold

#### 5 Year Change



1999		1999		5 Year Change	
Rank	Metropolitan Area	Percent	Percent	Rank	
1	Philadelphia	6.8%	-20.0%	7	
2	San Francisco	7.2%	-33.3%	2	
3	Chicago	8.6%	-32.8%	3	
4	Houston	9.1%	-43.5%	1	
5	Dallas	10.1%	29.5%	10	
6	Boston	10.9%	12.4%	9	
7	Detroit	11.7%	-23.5%	5	
8	<b>New York</b>	<b>11.9%</b>	<b>-20.1%</b>	<b>6</b>	
9	Washington DC	13.7%	-16.5%	8	
10	Los Angeles	14.9%	-24.7%	4	
	Phoenix	NA			
	San Diego	NA			
	San Antonio	NA			
<b>United States</b>		<b>11.8%</b>	<b>-18.6%</b>		

Source: U.S. Census Bureau

Position	Performance
Bottom Tier	Mixed

all competitors except Houston and Los Angeles. The most recent data on the share of the population in poverty are available only for the 10 largest metropolitan areas, and New York ranks eighth ahead of only Los Angeles and Washington, DC. When poverty is gauged using the share of the population receiving public assistance (data not shown), New York ranks eleventh among the 13. New York's air quality and mortality fall in the middle tier, but the bulk of the evidence warrants the bottom tier classification.

share of adults employed rose faster than that of all other areas; its mortality rate improved more rapidly than in all areas except San Francisco; and its air quality improved more rapidly than in all areas except Los Angeles and Philadelphia. However, the share of the population in poverty fell more slowly in New York than in five of the 10 largest areas, and its public assistance population declined more slowly than in eight competitors. Trend data are not available for the population without health insurance.

The recent performance in health and social welfare is mixed. On three measures New York is gaining. Its

### Population without Health Insurance Coverage

#### Current Position

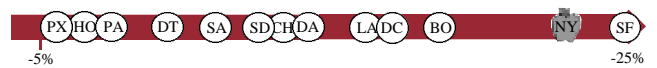


1997		1997		5 Year Change	
Rank	Metropolitan Area	Percent	Percent	Rank	
1	Detroit	13.4%	NA	NA	
2	Philadelphia	14.9%	NA	NA	
3	Boston	15.3%	NA	NA	
3	Chicago	15.3%	NA	NA	
3	Washington DC	15.3%	NA	NA	
6	San Diego	21.9%	NA	NA	
7	San Francisco	23.1%	NA	NA	
8	San Antonio	23.9%	NA	NA	
9	Dallas	24.7%	NA	NA	
10	Phoenix	26.1%	NA	NA	
<b>11</b>	<b>New York</b>	<b>27.1%</b>	<b>NA</b>	<b>NA</b>	
12	Houston	29.5%	NA	NA	
13	Los Angeles	31.5%	NA	NA	
<b>Metropolitan Area Average</b>		<b>17.1%</b>	<b>NA</b>		

Source: The Commonwealth Fund

### Age Adjusted Mortality Rates per 1,000 Residents

#### 5 Year Change



1998		1998		5 Year Change	
Rank	County	Rate	Percent	Rank	
1	San Francisco	7.5	-25.0%	1	
2	San Diego	7.6	-9.5%	8	
3	Los Angeles	7.7	-12.5%	5	
<b>4</b>	<b>New York</b>	<b>7.9</b>	<b>-19.5%</b>	<b>2</b>	
5	Phoenix, Maricopa Co.	8.0	-5.9%	13	
6	San Antonio, Bexar Co.	8.5	-8.6%	9	
7	Dallas	8.8	-10.2%	6	
8	Boston, Suffolk Co.	9.0	-14.3%	3	
9	Houston, Harris Co.	9.0	-6.3%	12	
10	Chicago, Cook Co.	9.2	-9.8%	7	
11	Detroit, Wayne Co.	9.9	-7.5%	10	
12	Washington DC	10.8	-12.9%	4	
13	Philadelphia	11.3	-6.6%	11	
<b>United States</b>		<b>8.8</b>	<b>-5.4%</b>		

Source: Center for Disease Control

### Median Pollution Standards Index

#### 5 Year Change



2000		2000		5 Year Change	
Rank	County	Index	Percent	Rank	
1	San Francisco	26	-10.3%	6	
2	Boston, Suffolk Co.	34	-2.9%	13	
3	Washington DC	40	-11.1%	5	
4	Detroit, Wayne Co.	41	-8.9%	8	
5	Philadelphia	41	-19.6%	2	
<b>6</b>	<b>New York</b>	<b>42</b>	<b>-14.3%</b>	<b>3</b>	
7	San Antonio, Bexar Co.	43	-6.5%	9	
8	Dallas	45	-4.3%	11	
9	Chicago, Cook Co.	47	-6.0%	10	
10	San Diego	55	-11.3%	4	
11	Houston, Harris Co.	58	-9.4%	7	
12	Phoenix, Maricopa Co.	64	-3.0%	12	
13	Los Angeles	65	-24.4%	1	
<b>United States</b>		<b>NA</b>	<b>NA</b>		

Source: Environmental Protection Agency

## Physical Infrastructure

In order to thrive, an urban economy needs an extensive physical infrastructure. The public sector provides transportation systems including roads and airports; the private sector provides housing and commercial facilities including office space; and public utilities, typically private firms subject to regulation, supply and distribute energy and provide telecommunications capacity.

Multiple measures are required to assess these different elements of physical infrastructure. The adequacy of the highway system is gauged with an index of road congestion that relates average daily traffic volume in the central city to the capacity of the city's freeways and principal arterial streets. The competitiveness of the metropolitan areas' airports is reflected in their total volume of departing passengers and the on-time perfor-

mance of arriving flights. Energy production is assessed with a measure that relates the electrical generating capacity of plants in the area to the area's peak demand for electricity; positive numbers indicate some excess capacity, while negative numbers indicate the need to import electricity. The scale and modernity of communications infrastructure is reflected in the capacity of Internet connections from a metropolitan area to other regions. Commercial facilities are assessed using the scale of office space in the central city, and the housing indicator relates the construction of new housing units to the size of the population.

In New York, there is a wide divergence in the competitive position of the different elements of physical infrastructure, leading to a mixed ranking. On three of the seven measures, New York exceeds all its competitors. It

### New Housing Units per 1,000 Residents

#### 5 Year Change

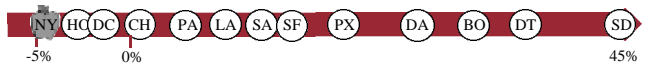


2000		2000	5 YearChange	
Rank	Metropolitan Area	Number	Percent	Rank
1	Phoenix	13.9	-1.4%	13
2	Dallas	8.6	3.8%	12
3	Houston	7.7	47.0%	5
4	Washington DC	6.8	17.5%	7
5	San Antonio	6.7	16.7%	8
6	San Diego	5.5	121.8%	1
7	Chicago	4.6	9.0%	10
8	Detroit	4.6	4.0%	11
9	San Francisco	3.9	63.4%	3
10	Philadelphia	3.7	23.5%	6
11	Los Angeles	3.4	77.8%	2
12	Boston	3.0	11.4%	9
13	<b>New York</b>	<b>2.8</b>	<b>58.7%</b>	<b>4</b>
<b>United States</b>		<b>5.7</b>	<b>11.6%</b>	

Source: U.S. Census Bureau

### Stock of Office Space

#### 5 Year Change



1999		1999	5 YearChange	
Rank	City	(millions sq.ft.)	Percent	Rank
1	<b>New York</b>	<b>408.6</b>	<b>-3.8%</b>	<b>13</b>
2	Chicago	148.7	0.7%	10
3	Dallas	148.1	27.3%	4
4	Boston	114.3	30.2%	3
5	Houston	107.6	-3.7%	12
6	Los Angeles	97.7	7.4%	8
7	Philadelphia	87.7	5.8%	9
8	Washington DC	80.6	-3.5%	11
9	Detroit	74.8	34.4%	2
10	San Francisco	63.9	10.4%	6
11	San Diego	61.8	45.3%	1
12	Phoenix	27.5	20.0%	5
13	San Antonio	17.3	9.2%	7
<b>United States</b>		<b>NA</b>	<b>NA</b>	

Source: Hugh Kelly Associates; Cushman & Wakefield

### Electric Generating Capacity Minus Demand

#### 5 Year Change



1999		1999	5 YearChange	
Rank	City	(megawatts)	Percent	Rank
1	Chicago	4,895	24.4%	1
2	Houston	1,291	-63.4%	5
3	Phoenix	1,093	-43.0%	3
4	Philadelphia	412	-59.6%	4
5	San Antonio	81	-87.9%	6
6	Detroit	-305	-132.9%	9
7	Dallas	-419	-114.1%	8
8	Los Angeles	-430	-637.5%	12
9	Boston	-946	-375.4%	11
10	San Diego	-2,092	-88.0%	7
11	<b>New York</b>	<b>-4,214</b>	<b>-189.8%</b>	<b>10</b>
12	Washington DC	-5,121	-5.5%	2
13	San Francisco	-6,714	-797.6%	13
<b>United States</b>		<b>NA</b>	<b>NA</b>	

Source: Energy Information Administration

### Internet Bandwidth Connecting Metropolitan Areas

#### 3 Year Change



2000		2000	3 YearChange	
Rank	Metropolitan Area	(gigabits/sec)	Percent	Rank
1	<b>New York</b>	<b>234</b>	<b>3,362%</b>	<b>6</b>
2	Chicago	222	2,794%	8
3	Washington DC	208	2,560%	10
4	San Francisco	202	2,588%	11
5	Dallas	184	3,151%	7
6	Los Angeles	141	2,682%	9
7	Houston	80	4,158%	5
8	Boston	75	5,564%	2
9	Philadelphia	74	4,507%	4
10	Detroit	53	5,818%	1
11	Phoenix	46	2,327%	12
12	San Diego	42	4,735%	3
<b>United States</b>		<b>NA</b>	<b>NA</b>	

Source: Gorman and Malecki, 2001

Position	Performance
Mixed	Lagging

has the largest stock of office space, the greatest volume of air passengers, and the largest inter-metropolitan Internet capacity.

But for three other measures, New York is at or near the bottom of the rankings. It has the greatest gap in electrical energy production capacity. Although this may be offset by effective arrangements for importing energy, additional data (not shown) on average energy prices indicate New York also has the highest cost per kilowatt-hour among the 13 large utilities serving each metropolitan area. Housing production in New York lags that of every competitor, and the on-time performance of flights to New York's airports is worse than in every other metropolitan area except Chicago. For the final measure, highway congestion, New York ranks fifth, putting this aspect of infrastructure in the middle tier.

While the current position of New York's infrastructure is decidedly mixed, its recent performance is more consistently in the lagging category. It is one of only three cities (with Houston and Washington, DC) to experience a contraction in office space in the last five years. The gap in its electrical generating capacity widened by more than every other area except San Francisco, Los Angeles and Boston, and its average cost per kilowatt-hour also increased more rapidly than in all areas but two. Highway congestion worsened more in New York over the last five years than in all areas except Phoenix and San Antonio. The on-time performance of arriving flights deteriorated more rapidly in New York than in all other areas except Chicago and Philadelphia, causing New York to fall from tenth place with an on-time performance of 77 percent in 1995 to its latest rank of twelfth with less than two-thirds of the flights arriving on-time.

The performance was better, but still only keeping pace, on the other three indicators. New York's airports rank ninth in growth of passenger volume, and Internet capacity expanded more rapidly in five of the other 12 competitor areas. While New York's increase in housing production ranks fourth, the growth was from the smallest starting base of all the areas and can hardly be judged impressive. For housing production, New York started and ended the period last.

### Roadway Congestion Index

#### 5 Year Change



1999		1999		5 Year Change	
Rank	City	Index	Percent	Rank	
1	San Antonio	1.02	25.9%	13	
2	Dallas	1.05	8.2%	6	
3	Philadelphia	1.06	6.0%	4	
4	Houston	1.10	11.1%	9	
5	<b>New York</b>	<b>1.15</b>	<b>11.7%</b>	<b>11</b>	
6	Detroit	1.20	4.3%	3	
7	Phoenix	1.21	17.5%	12	
8	San Diego	1.25	11.6%	10	
9	Boston	1.28	8.5%	7	
10	Chicago	1.31	9.2%	8	
11	Washington DC	1.34	-1.5%	1	
12	San Francisco	1.39	3.0%	2	
13	Los Angeles	1.58	7.5%	5	
<b>68 City Average</b>		<b>1.14</b>	<b>NA</b>		

Source: Texas Transportation Institute

### Departing Airline Passengers

#### 5 Year Change

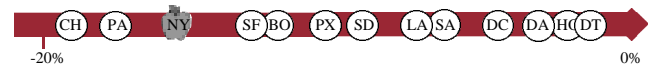


1999		1999		5 Year Change	
Rank	Metropolitan Area	(millions)	Percent	Rank	
1	<b>New York</b>	<b>45.8</b>	<b>16.7%</b>	<b>9</b>	
2	Los Angeles	41.2	18.5%	8	
3	Chicago	40.3	13.4%	10	
4	Dallas	31.4	5.9%	13	
5	San Francisco	29.7	19.8%	6	
6	Washington DC	25.2	30.6%	5	
7	Houston	19.5	33.8%	2	
8	Detroit	17.5	33.5%	3	
9	Phoenix	16.8	31.9%	4	
10	Boston	13.2	10.4%	12	
11	Philadelphia	12.2	37.2%	1	
12	San Diego	7.7	19.3%	7	
13	San Antonio	3.4	11.9%	11	
<b>United States</b>		<b>682.6</b>	<b>19.0%</b>		

Source: U.S. Department of Transportation

### On-Time Airplane Arrivals

#### 5 Year Change



2000		2000		5 Year Change	
Rank	Metropolitan Area	Percent	Percent	Rank	
1	Detroit	78.9%	-3.1%	1	
2	Houston	78.5%	-3.7%	2	
3	Dallas	77.8%	-4.3%	3	
4	San Antonio	74.5%	-8.3%	5	
5	Washington DC	73.9%	-6.6%	4	
6	Phoenix	71.2%	-10.0%	8	
7	San Diego	70.0%	-10.0%	7	
8	Los Angeles	67.6%	-8.6%	6	
9	Philadelphia	66.7%	-16.4%	12	
10	San Francisco	66.2%	-12.2%	10	
11	Boston	65.5%	-11.8%	9	
12	<b>New York</b>	<b>65.5%</b>	<b>-14.9%</b>	<b>11</b>	
13	Chicago	65.2%	-17.9%	13	
<b>United States</b>		<b>70.4%</b>	<b>-10.2%</b>		

Source: U.S. Department of Transportation

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