# NASSAU COUNTY OFFICE OF THE COMPTROLLER



# Nassau County's Competitive Position And its Long-Term Employment Trends

An Analytical Review Based on Data from 1980-2000

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### NASSAU COUNTY OFFICE OF THE COMPTROLLER

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#### I. INTRODUCTION

For much of the last two decades, Nassau County has under-performed the nation in job gains, posting one of the lowest growth rates of any county in the United States. While the county's employment base expanded by 15.5 percent (or 80,250 jobs) between 1980 and 2000, the nation posted a gain of 31.7 percent during those two decades. If the county's economic pace had kept up with the nation's, an additional 83,982 jobs would have been created in Nassau.

The relatively poor performance of the county's economy is largely attributable to its failure to remain economically competitive with other localities. This report does not attempt to measure the impact of specific local factors on the economy. Rather, it aims to isolate the competitive position of the county from the impact of national trends and the industrial mix in analyzing employment trends during the period extending from 1980 to 2000, using a conceptual tool known as shift-share analysis.

Nassau County's relatively high concentration of high-growth industries – in particular the FIRE (finance, insurance, and real estate) and the service sectors – resulted in the creation of 61,686 jobs. However, this positive industrial structure effect was offset by the local competitive effect, which cost the county 145,668 jobs. In other words, local factors – such as high energy and labor costs, a relatively high tax burden and inadequate infrastructure – may have impeded the creation of more jobs in Nassau Country during the time period studied.

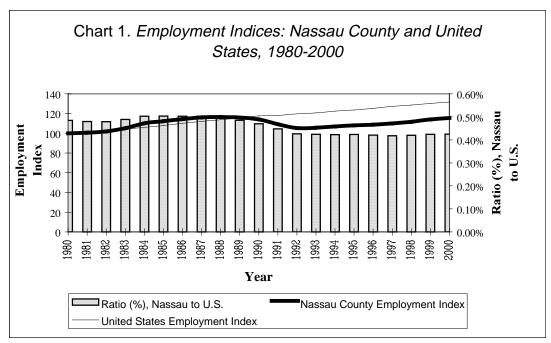
This report is comprised of five sections. Section I serves as the introduction. Section II presents a brief analysis of long-term employment trends for both Nassau County and the nation. Section III examines the changing structure of the county's economy. Section IV describes the shift-share method and reports the results of our analysis. Recommendations are presented in section V.

#### II. NASSAU'S LONG-TERM EMPLOYMENT TRENDS

Employment in Nassau County reached a peak of 604,028 jobs in 1988. From 1983 to 1988, the county's economic performance bested the nation's. The county's employment grew at an average annual rate of 2.1 percent, while the nation's rose an average 1.7 percent annually.

Nassau County entered a long and protracted recession in the early 1990s, following the national recession and the flight from Long Island of much of the aviation industry that was its economic engine. The county lost 58,316 jobs between 1988 and 1992, or close to one out of every ten jobs. Since then, employment has rebounded, with the county recouping 90.6 percent of the job losses between 1992 and 2000.

Chart 1 shows the employment indices (1980 = 100) for the both Nassau County and the nation, with the county's share of national employment depicted on the right axis. The county's share of national employment reached a peak of 0.5 percent in 1985, fell



Source: U.S. Department of Labor

to a low of 0.43 percent in 1992, and has since remained at that level.

In sum, Nassau County's employment has recovered from the worst impact of the early 1990s recession. But the blow to the local economy was so severe that even after gaining jobs at a rate comparable to that of the nation – close to 1.2 percent annually between 1992 and 2000 – the county has yet to achieve the peak employment level it reached in 1988.

#### III. TRANSFORMATION OF THE NASSAU COUNTY ECONOMY

Like most economies in transition, Nassau County's has experienced some transformations during the last twenty years. As the economy moves up the value ladder, some sectors have stagnated or disappeared, while others have emerged – that take advantage of new technologies and develop new product mixes and new markets for them. This is part of the dynamic process that Schumpeter refers to as "the gales of creative destruction." The challenge is to nurture new industries – particularly high-value-added industries – and to foster job-creation programs to absorb displaced workers from the decaying industries. As long as the process is gradual, the new sectors or the surviving but dynamic ones will create more than enough jobs to replace the old ones.

#### a. Sectoral Shift

In this section, we provide a brief analysis of the economic sectors that have undergone some changes during the past two decades. Nassau County's manufacturing base has shrunk, triggered in part by major cutbacks in national defense spending. In relative terms, the trade and government sectors have also declined. Growing sectors include business and financial services, construction and transportation.

The county's relatively poor performance in recent years reflected both the absolute and relative decline of the manufacturing sector. Manufacturing peaked at 88,272 jobs in 1984. Since then, the manufacturing sector has shed 48,493 jobs, which represents a decline of 55 percent. In relative terms, manufacturing jobs comprised only 6.7 percent of the county's employment in 2000; that is down from 16.5 percent in 1980. (See Chart 2.)

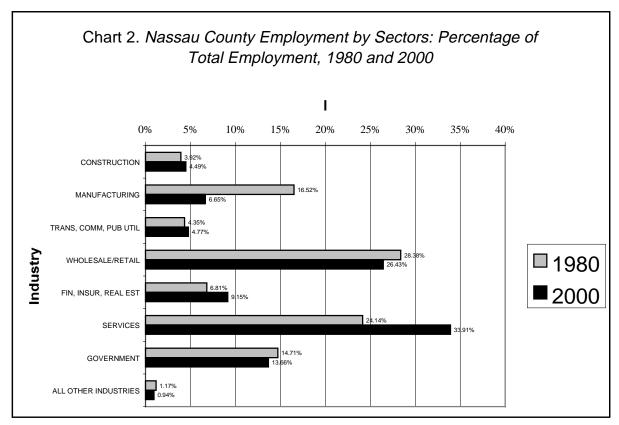
The fate of the county's manufacturing sector was tied to national defense spending. The end of the cold war and the associated cutbacks in defense spending led to plant closings in communities throughout the county. Grumman Corporation was one of the nation's most important defense contractors, and its downsizing has cost the county a number of good-paying jobs.

The wholesale and retail (trade) sector has exhibited some weaknesses in recent years. That sector peaked at 171,571 jobs in 1987. Between 1987 and 2000, the trade sector lost 13,350 jobs – a decline of 7.8 percent. Jobs in the trade sector represented 28.4 percent of the county's employment in 1980 and 26.4 percent in 2000. Although government employment rose by 150 percent between 1980 and 2000 – from 32,709 jobs in 1980 to 81,750 jobs in 2000 –, the share of government employment to total employment dropped slightly from 14.7 percent in 1980 to 13.7 percent in 2000.

Sectors that posted gains in both absolute and relative terms include transportation and public utilities, FIRE, and services. While the share of construction employment to total employment rose to 4.5 percent in 2000 from 3.9 percent in 1980, construction jobs peaked at 28,047 jobs in 1987 and have since declined to 26,849 jobs in 2000 after dropping to a low of 17,480 jobs in 1992. In sharp contrast to the manufacturing sector, the share of service employment to total employment rose by close to ten percentage points, from 24.1 percent in 1980 to 33.9 percent in 2000. The service sector gained 77,854 jobs in the last two decades, representing an increase of 62.2 percent. Financial services exhibited similar strength. FIRE jobs accounted for 9.2 percent of total employment in 2000, up from 6.8 percent in 1980. The FIRE sector created 19,494 jobs between 1980 and 2000 – a gain of 55.2 percent. The transportation and utilities sector has gained 6,032 jobs. As a result, its share of employment rose to 4.8 percent in 2000 from 4.4 percent in 1980.

#### **b.** Degree of Concentration

This section reports on the degree of concentration of Nassau County's industries. The county will benefit if it has a high concentration of the nation's fast-growing industries.



Source: U.S. Labor Department.

The county's industrial concentration ratio is computed as a sector's share of county's employment to that same sector's share of national employment. A sector with a ratio above one means that the county has a larger share of its employment in that sector than does the nation as a whole.

The concentration ratios for the different sectors are reported in Table 1. The three sectors with concentration ratios above one were FIRE, service and trade. However, while the FIRE sector's ratio exhibited an upward trend, the service and trade ratios have continuously declined. Since these are fast-growing sectors nationally, the declining ratios should raise some concerns. Manufacturing is the other sector that experienced a declining trend. Not only did Nassau County have fewer of its jobs concentrated in that sector than the nation as a whole, but also, over time, manufacturing became less and less relevant to the county as a source of job growth.

	Table 1: CONCENTRATION RATIO OF NASSAU COUNTY'S INDUSTRIES RELATIVE TO THE NATION, 1980-2000									
	CONSTRUCTION	MANUFACTURING	TRANS, COMM, PUB UTIL	WHOLESALE/ RETAIL	FIN, INSUR, REAL EST	SERVICES	GOVERNMENT	ALL OTHER INDUSTRIES		
1980	0.799	0.754 0.817 1.562 1.412		1.412	1.432	0.948	0.094			
1981	0.784	0.766	0.824	1.521	1.400	1.439	0.951	0.098		
1982	0.823	0.787	0.846	1.490	1.408	1.420	0.945	0.095		
1983	0.829	0.798	0.884	1.492	1.446	1.382	0.920	0.096		
1984	0.805	0.794	0.852	1.498	1.454	1.393	0.890	0.091		
1985	0.837	0.772	0.842	1.497	1.482	1.367	0.883	0.089		
1986	0.879	0.740	0.834	1.487	1.541	1.357	0.880	0.084		
1987	0.897	0.736	0.844	1.490	1.530	1.342	0.864	0.087		
1988	0.894	0.710	0.842	1.488	1.584	1.334	0.887	0.082		
1989	0.850	0.652	0.821	1.451	1.711	1.370	0.905	0.082		
1990	0.801	0.628	0.909	1.389	1.743	1.401	0.927	0.074		
1991	0.756	0.612	0.903	1.383	1.834	1.395	0.943	0.069		
1992	0.676	0.587	0.863	1.377	1.902	1.406	0.919	0.077		
1993	0.690	0.567	0.857	1.366	1.860	1.424	0.907	0.084		
1994	0.710	0.540	0.877	1.369	1.870	1.382	0.942	0.075		
1995	0.693	0.502	0.855	1.385	1.866	1.377	0.956	0.087		
1996	0.719	0.467	0.847	1.376	1.811	1.382	0.973	0.093		
1997	0.725	0.475	0.852	1.374	1.755	1.371	0.988	0.096		
1998	0.796	0.468	0.854	1.361	1.711	1.355	0.996	0.092		
1999	0.816	0.470	0.864	1.335	1.730	1.334	0.984	0.084		
2000	0.806	0.462	0.849	1.351	1.705	1.313	0.989	0.093		

#### IV. SHIFT-SHARE ANALYSIS

Shift-share analysis is a conceptual tool used to decompose the growth (or decline) of a local economy over a given time period into three components: a national-growth effect, an industrial-structure effect, and local competitive effect. The national growth component analyzes the degree of change in a local economy that is attributable to changes in the nation's macroeconomic environment. The local economy is affected by fiscal and monetary policies put in place at the national level. For instance, changes in interest rates impact the county's housing market; movements in the exchange rates affect the competitiveness of its export sector. And changes in government spending, including national defense, impact the county's job markets. The national growth component is the change in the county's employment attributable to the rate of growth (or decline) of employment in the nation as a whole.

The industrial-mix effect is the change in employment the local economy would have experienced had each of its industries expanded at their national rates, after adjusting for the national-growth effect. If the local economy has a high concentration of high-growth industries, the industrial-mix effect would be positive. On the other hand, a local economy with a high concentration of low-growth industries will experience a negative industrial-mix effect.

Local employment is also affected by the degree of competitiveness of the locality. The growth of local industries is, at times, impacted by factors that are unique to the local economy. These factors include, but are not limited to, the state of the physical infrastructure of the local economy; the availability of a skilled and flexible workforce; the tax burden; the abundance of natural resources; the crime rate; and the business climate. The local competitiveness effect measures the extent to which local factors contribute to economic growth or decline.

The results of the shift-share analysis are presented in Table 2. Briefly, Nassau County's employment base grew from 518,279 jobs in 1980 (column a) to 598,529 jobs in 2000 (column c) – a net increase of 80,250 jobs (column e). In percentage terms, this represents an increase of 15.48 percent for the county (column f). During the period investigated, the nation's employment grew by 31.69 percent (column g). If the county's employment had expanded at the national rate, it would have gained 164,232 jobs (column h). However, the county only gained 80,250 jobs between 1980 and 2000 (column e). The difference between the actual employment increase and the hypothetical gain if the county had grown at the same pace as the nation is 83,982 jobs (column i).

As noted earlier, local factors accounted for Nassau County's relatively poor performance. The county's industrial mix provided a positive boost of 61,686 jobs (column k) because many of its jobs were concentrated in the nation's fast-growing industries. Local competitive factors cost the county 145,668 (column j).

Local factors also impeded the growth of the trade, service and manufacturing sectors. For instance, Nassau County's trade sector, which employed 147,086 workers

#### SHIFT-SHARE ANALYSIS OF NASSAU COUNTY EMPLOYMENT, 1980-2000

	Employment						D		Components of Changes			
Industry	1980	Percent of Total	2000	Percent of Total	Net Change, 1980-2000	Percent Change, 1980-2000		Total Chara	Shift			
Industry						Nassau	U.S.	Total Share	Total	Local	Industry	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(i)	(k)	
ALL INDUSTRIES	518,279	100.00%	598,529	100.00%	80,250	15.48%	31.69%	164,232	(83,982)	(145,668)	61,686	
CONSTRUCTION	20,339	3.92%	26,849	4.49%	6,510	32.01%	49.12%	6,445	65	(3,481)	3,546	
MANUFACTURING	85,617	16.52%	39,779	6.65%	(45,838)	-53.54%	-13.51%	27,130	(72,968)	(34,267)	(38,701)	
RANS, COMM, PUB UTIL	22,526	4.35%	28,558	4.77%	6,032	26.78%	39.16%	7,138	(1,106)	(2,788)	1,682	
WHOLESALE/RETAIL	147,086	28.38%	158,221	26.43%	11,135	7.57%	41.82%	46,608	(35,473)	(50,382)	14,909	
FIN, INSUR, REAL EST	35,294	6.81%	54,788	9.15%	19,494	55.23%	46.53%	11,184	8,310	3,072	5,238	
SERVICES	125,098	24.14%	202,952	33.91%	77,854	62.23%	101.71%	39,641	38,213	(49,378)	87,591	
GOVERNMENT	76,247	14.71%	81,750	13.66%	5,503	7.22%	17.23%	24,161	(18,658)	(7,633)	(11,025)	
LL OTHER INDUSTRIES	6,068	1.17%	5,629	0.94%	(439)	-7.23%	6.10%	1,923	(2,362)	(809)	(1,553)	

es:

(h)=(a)\*U.S. Total Employment Growth Rate between 1980 and 2000 (or 31.69%)

(i) = (e) - (h) or (j) + (k)

(j) = (a) \* [(f) - (g)] or (i) - (k)

 $(k) = (a) * [(g_n) - U.S.$  Employment Growth Rate of 31.69%] or (i) - (j)

Where the subscript n refers to the n<sup>th</sup> industry.

Figures may not add due to rounding.

in 1980, gained 11,135 jobs in 2000 (column e). If that sector had kept pace with the national economy, it would have gained 46,608 jobs (column h). The difference between the actual increase and the hypothetical increase is a negative 35,473 jobs (column i). If it were not for a positive industrial mix effect of 14,909 jobs (column k), the loss could have been much larger (50,382 jobs, column j) because of poor local competitive factors. Simply stated, local factors handicapped the development of the trade sector during the last two decades. That sector gained jobs only because of a positive national growth effect and a positive industrial-structure effect.

The FIRE sector is the only one that experienced a positive local competitive effect (3,072 jobs, column j). The county's comparative advantage in financial services stems from its proximity to New York City, the world's financial capital. The county's financial services out-performed the nation's in job growth, resulting in a gain of 55.2 percent (column f). Between 1980 and 2000, employment in the nation's financial sector expanded by 46.5 percent (column g). The county's financial services also benefited from a positive industrial mix, which contributed 5,238 jobs (column k). Moreover, because the county's financial services grew faster than the nation's in general -- and the nation's financial services in particular -- the actual job gain of 19,494 (column e) was 8,310 more than would have occurred had the financial sector grown at the national rate.

#### V. RECOMMENDATIONS

During the last two decades, Nassau County has successfully diversified its economic base from a dependence on manufacturing – in particular, defense-oriented businesses – to the service sector, including financial and professional services. The county is now fortunate to have a large share of its employment base in the nation's fast-growing industries. As these industries prosper, Nassau County will reap the benefits.

However, unless the county addresses many of the local competitive factors that impeded its growth and development over the last two decades, its economic potential will be limited. While this report does not identify the specific local issues that may have hindered the development of Nassau County between 1980 and 2000, it unambiguously attributes its under-performance relative to the nation to local competitive factors. Many of these factors are influenced by actions taken by state and local government officials. Accordingly, coordinating state and local initiatives is imperative. These initiatives must also take into account budgetary constraints faced by both the state and the county. For instance, initiatives to address the county's high tax burden and aging infrastructure will inevitably be costly. They can also put contradictory demands on public resources. A reduction in the sales-tax rate to make the county tax-competitive will leave fewer resources available for infrastructure investment.

These are difficult choices. Nonetheless, the county must free up resources for economic development. The key to solving Nassau County's budgetary difficulties is economic growth and prosperity that will generate the tax revenues necessary to, not only balance its books, but also to improve the county's physical and human infrastructure and meet its obligations to its neediest residents.