



About This Issue

The Spring 2006 edition of The South Jersey Economic Review (SJER) represents the inaugural issue of a bi-annual publication that will analyze major economic and social trends affecting the South Jersey regional economy and its residents. The SJER is part of a broader and on-going Stockton College initiative whose aim is to provide the region's stakeholders and policy-makers timely, high-quality research products and technical assistance that focus on the region's economy, its development, and its residents' well-being. The SJER will be produced and distributed exclusively as an electronic journal. If you would like to be electronically notified of future releases of the Review, send an email to sjer@loki.stockton.edu with the subject line "Subscribe SJER."

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Atlantic City's and Vineland-Millville-Bridgeton's Job Growth Stronger than Originally Estimated

Newly revised employment data reveal stronger job growth in Atlantic City and Vineland-Millville-Bridgeton, but weaker growth in Ocean City

The New Jersey Department of Labor and Workforce Development's recent annual benchmark revisions to establishment (payroll) employment data show that recent job growth in the Atlantic City and Vineland-Millville-Bridgeton metropolitan areas was previously underestimated.¹ (See *Charts 1 and 3*) In fact, the upward revisions to these two South Jersey metropolitan areas' employment estimates ranked as the largest in the state.² (See *Table 1*) The upward revisions received by these two metro areas stood in stark contrast to the downward revision that Ocean City received. (See *Chart 2*)

As *Charts 1 through 3* show, because the employment estimates produced via the annual benchmark revision process incorporate information drawn from a far more complete record of New Jersey employers (as opposed to the much smaller sample generally used to estimate monthly payroll employment), they provide a more accurate picture of recent job trends in the South Jersey region.

Which industries accounted for the recent revisions?

Atlantic City. Two industries accounted for the majority of Atlantic City's 2005 upward revision

of 2,000 jobs: restaurants and bars and government. Both industries' 2005 employment levels were increased by 1,000 as a result of the benchmarking process. One other notable upward revision occurred in construction which saw its 2005 employment estimate increased by 300. Industries that saw their 2005 employment estimates revised downward included: professional and business services (-300), and financial activities (-300). The metro area's retail trade sector, similarly, saw its 2005 job estimate lowered (-100).

Ocean City. As a result of the benchmarking process, Ocean City's 2005 employment estimate was revised downward by 1,800 jobs (-4%). A downward revision of 600 jobs (to a revised 8,800 from an original estimate of 9,400) in the accommodations industry accounted for a large part of the revision. Other industries that saw their job estimates lowered included retail (-200), and educational and health services (-200).

Vineland-Millville-Bridgeton. Several industries were responsible for the upward revision to Vineland-Millville-Bridgeton's 2005 employment estimate, which constituted 1,000 jobs. Wholesale

contd. p. 3

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Chart 1: Revisions to Atlantic City's employment data show that job growth in 2004 and 2005 was stronger than originally estimated

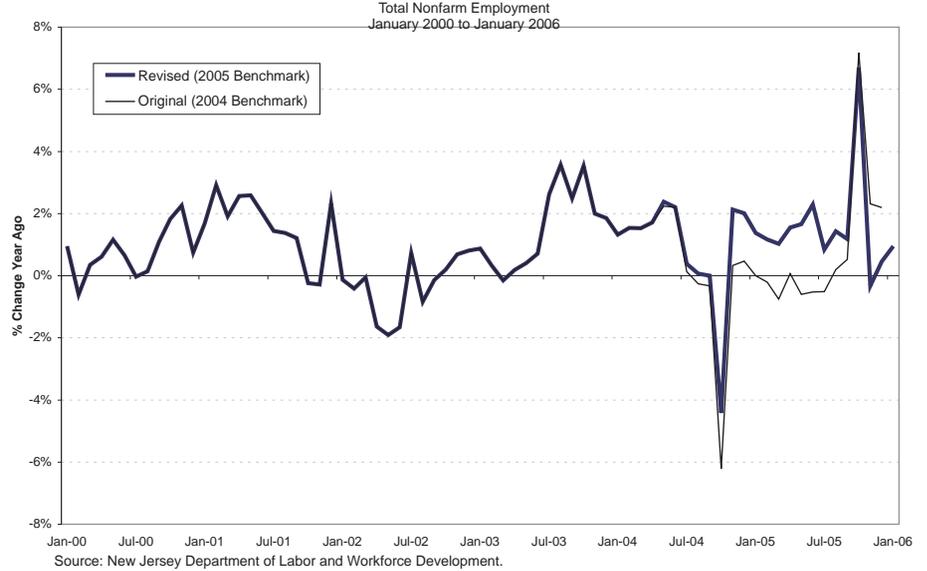


Chart 2: Revisions to Ocean City's employment data show the job growth in 2004 and 2005 was significantly slower than previously estimated

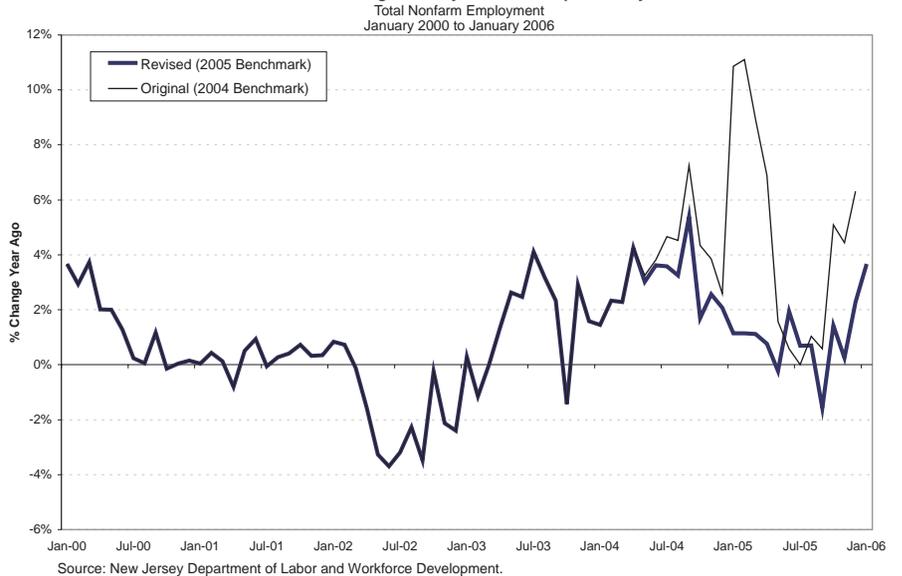


Table 1: Annual benchmark revisions for New Jersey's metropolitan areas.

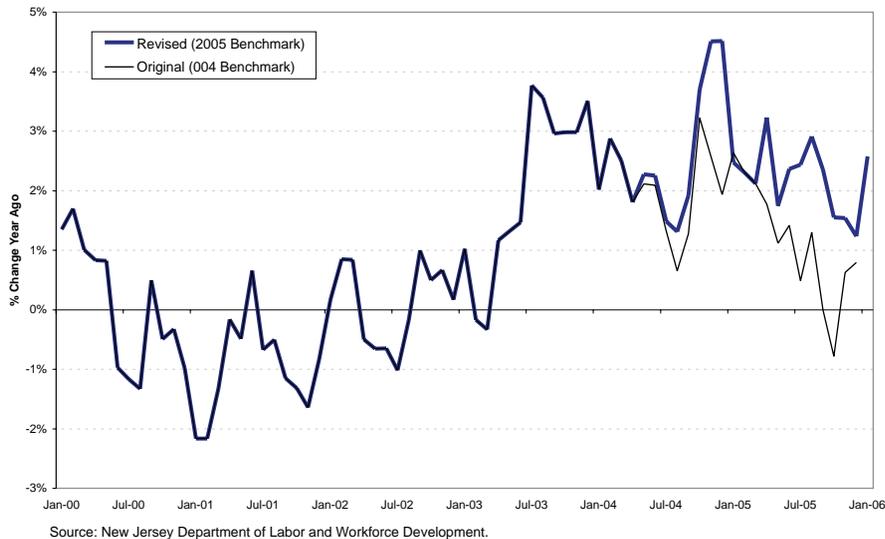
Metro Area/Division	2004 Total Job Growth		2005 Total Job Growth		2005 growth revised up or down ?
	Original Estimate	Revised Estimate	Original Estimate	Revised Estimate	
Atlantic City MSA	0.4%	0.9%	0.8%	1.6%	up
Bergen-Hudson-Passaic	-0.3%	-0.3%	0.5%	0.2%	down
Camden	2.2%	2.3%	2.7%	0.9%	down
Edison	0.7%	0.7%	1.2%	0.9%	down
Newark-Union	-0.5%	-0.2%	-0.7%	-0.5%	up
Ocean City	3.9%	3.1%	4.1%	0.8%	down
Trenton-Ewing MSA	1.8%	2.1%	1.7%	1.9%	up
Vineland-Millville-Bridgeton	2.0%	2.6%	1.1%	2.2%	up
<i>New Jersey</i>	0.6%	0.5%	1.3%	1.1%	down

Source: New Jersey Department of Labor and Workforce Development.

trade's upward revision of 600 jobs accounted for a significant share of the revision. Other industries that contributed to the revision included: professional and business services, educational and health services, transportation, warehousing and utilities, and other services. Each of these industries saw its 2005 employment estimate increase by 300. One significant downward revision occurred in the area's retail trade sector whose employment estimate last year was revised downward to 7,700 from an original estimate of 8,700.

Chart 3: Revisions to Vineland-Millville-Bridgeton's employment data show that job growth in 2004 and 2005 was stronger than originally estimated

Total Nonfarm Employment
January 2000 to January 2006



Source: New Jersey Department of Labor and Workforce Development.

Assessing South Jersey's Recent Economic Performance

Chart 4 compares the South Jersey region's (as represented by its major metropolitan areas) employment trajectory with the state's since each geographic unit's last cyclical employment peak. South Jersey's last cyclical employment peak occurred in the second quarter of 2001, while the state's occurred in the fourth quarter of 2000. As shown, while the South Jersey region's downturn was more pronounced (employment declined 1.6% from peak to trough) than the state's (employment declined 1.1% from peak to trough), it was significantly shorter than the state's. Whereas it took the South Jersey region 27 months to regain the employment it lost during the downturn, it took the state 51 months.

South Jersey's economy's relatively short downturn allowed it to significantly outpace both the state and the nation in 2003 and 2004. (See Chart 5.) The pace of job growth in South Jersey moderated last year, however, as job growth slowed to 1.3% from 2% in 2004. This slowing was in contrast to the acceleration in job growth recorded

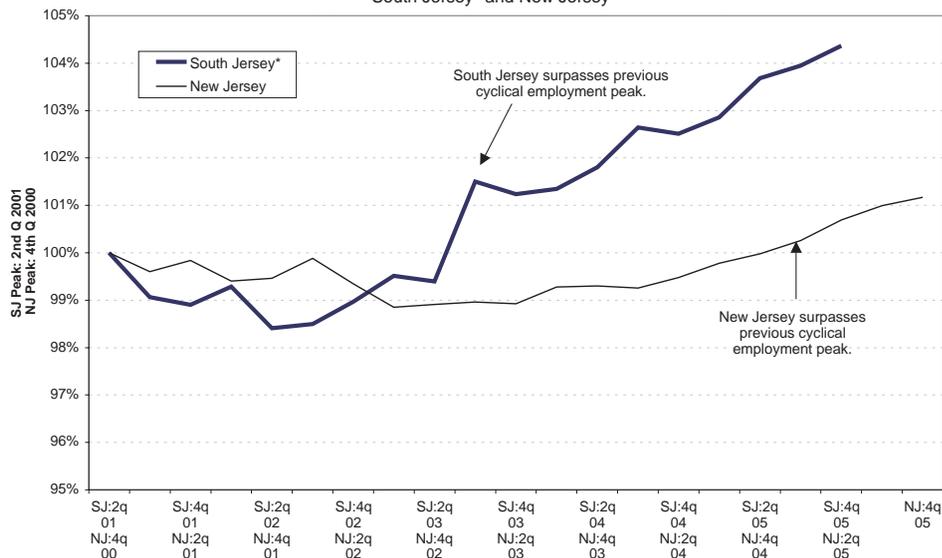
on both the state and the national levels in 2005. Still, despite last year's slowing, the region's growth outpaced the state's 1.1%, though it trailed the U.S. 1.5% increase.

South Jersey's metro areas' growth since the last cyclical trough: an industry perspective

Atlantic City. Atlantic City's economy out-performed the state and the nation in 2003 and 2004. This out-performance was

notable as it represented a reversal on the metro area's late-1990s significant under-performance.⁴ The question of whether or not this out-performance continued last year is difficult to answer, however. This is because the interpretation of the metro area's economy's recent performance (as measured by employment growth) is largely a function of whether or not some accounting is made for the

Chart 4: Employment Trajectories Since Last Cyclical Employment Peak
South Jersey* and New Jersey



* South Jersey = Atlantic City, Ocean City, and Vineland-Millville-Bridgeton metropolitan areas.
Source: Establishment employment. New Jersey Department of Labor and Workforce Development. All data seasonally adjusted.

October 2004 strike that affected employment in the hotel casino industry.⁶ Official estimates (i.e., the newly benchmarked payroll data) indicate that the pace of job growth in Atlantic City increased in 2005, to 1.6% from 0.9% in 2004. Thus, official estimates suggest that Atlantic City once again outperformed both the state and the nation in 2005. A minor adjustment to the employment data that treats the strike as a significant

but nevertheless transitory event suggests, in contrast, that Atlantic City's economy slowed last year (to 1% from 1.4% in 2004), and lagged state and national rates of job growth. (See Chart 7.)

Since its last cyclical trough, which occurred in 2002, Atlantic City's economy has added 6,000 jobs, a gain of 4.1%.³ This rate of job growth significantly outpaced job gains of 1.5% and 2.4% on the state and national levels respectively

over the same period (2002-2005). (See Chart 6.)

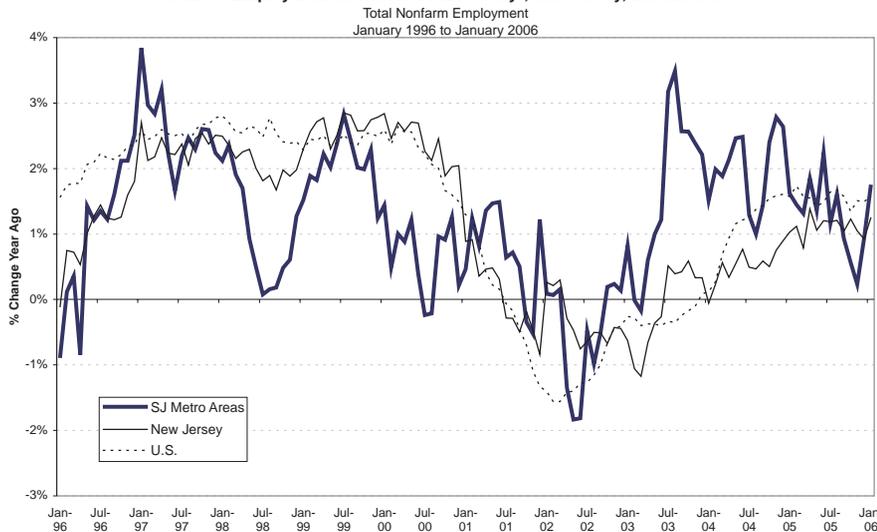
Four industries accounted for the majority of the metro area's new jobs during the past three years: retail trade (+800), educational, health, and social services (+1,100), restaurants and bars (+1,000), and government (+1,600). As Table 2 shows, the rate of job growth in these industries in Atlantic City outpaced rates of growth on the state and national level. The only exception to this pattern was the 6.3% job gain experienced in the metro area's education, health and social services industry which lagged the nation's 7.1% increase.

Other industries that recorded job gains during the 2002-2005 period included wholesale trade and other services (which includes industries such as repair and maintenance, personal services, and religious/grant-making/civic institutions). The 700 job increase in the metro area's wholesale trade industry represented a huge 24% increase. This compared to a 0.2% decline in wholesale trade

employment statewide, and a 1.7% increase nationally over the same period. (See Table 2.)

Job growth in Atlantic City's professional and business services industry was significantly below that recorded on the national level, as the industry's 1.8% gain between 2002 and 2005 represented less than one third the industry's gain nationally. Among others, this generally high-paying industry includes: legal, accounting,

Chart 5: Employment Growth in South Jersey*, New Jersey, and the U.S.



* South Jersey Metro Areas: Atlantic City, Ocean City, and Vineland-Millville-Bridgeton. Sources: New Jersey Department of Labor and Workforce Development and the U.S. Bureau of Labor Statistics.

Table 2: Atlantic City's Recent Job Growth in Context

Industry	Atlantic City Employment (thousands)		2002-2005 % Change		
	2002	2005	Atlantic City	NJ	U.S.
Total Nonfarm	146.7	152.7	4.1%	1.5%	2.4%
Total Private Sector	124.9	129.2	3.5%	0.9%	2.6%
Natural Resources, Mining, and Construction	6.4	6.5	2.0%	3.8%	8.3%
Manufacturing	4.4	4.3	-1.8%	-10.5%	-6.7%
Wholesale Trade	2.5	3.2	24.0%	-0.2%	1.7%
Retail Trade	15.2	16.1	5.5%	1.5%	1.5%
Trans. & Warehousing, Utilities	3.0	2.9	-4.2%	-3.6%	1.7%
Information	1.4	1.1	-20.9%	-14.2%	-9.7%
Financial Activities	4.1	4.3	3.9%	1.3%	3.8%
Professional and Business Services	9.6	9.8	1.8%	2.0%	5.7%
Educational, Health & Social Services	16.6	17.7	6.3%	5.9%	7.1%
Hospitals	6.2	6.4	2.5%	1.0%	3.3%
Leisure and Hospitality	57.6	59.1	2.6%	7.5%	6.8%
Accommodation	46.5	46.3	-0.4%	0.3%	1.9%
Casino Hotels	43.6	43.2	-1.0%	-1.4%	3.8%
Food Services and Drinking Places	9.4	10.4	10.4%	9.4%	8.0%
Other Services	4.0	4.4	9.4%	6.6%	0.3%
Government	21.8	23.4	7.6%	4.6%	1.3%

Sources: New Jersey Department of Labor and Workforce Development and the U.S. Bureau of Labor Statistics.

bookkeeping, architectural, engineering, computer systems design, management consulting, and research and development services. (See Table 2.)

The pattern of growth in Atlantic City's financial industries was roughly comparable to the patterns experienced state- and nationwide. The 21% decline in employment in the metro area's information industry (which includes publishing, broadcasting, internet related services, and telecommunications) was larger than the declines experienced at the state and national levels. (See Table 2.)

While employment in the casino hotels industry continues to constitute a significant share (28%) of Atlantic City's employment base, employment in the industry fell by 400 between 2002 and 2005. (See Chart 8, p. 9) This fact is somewhat surprising given the opening of the

Borgata (among the metropolitan area's largest private employers) in mid-2003. In fact, the newly benchmarked payroll data show that since peaking at 47,700 in 1998, employment in the casino hotels industry has declined 9.5%. Of course, the industry's overall

economic significance to the metro area and region cannot be measured solely by jobs. The spate of various expansion and development projects that have occurred in recent years as well as those that are on-going have important spillover effects in other industries, most

Chart 6: Employment Growth in Atlantic City, New Jersey, and the U.S.

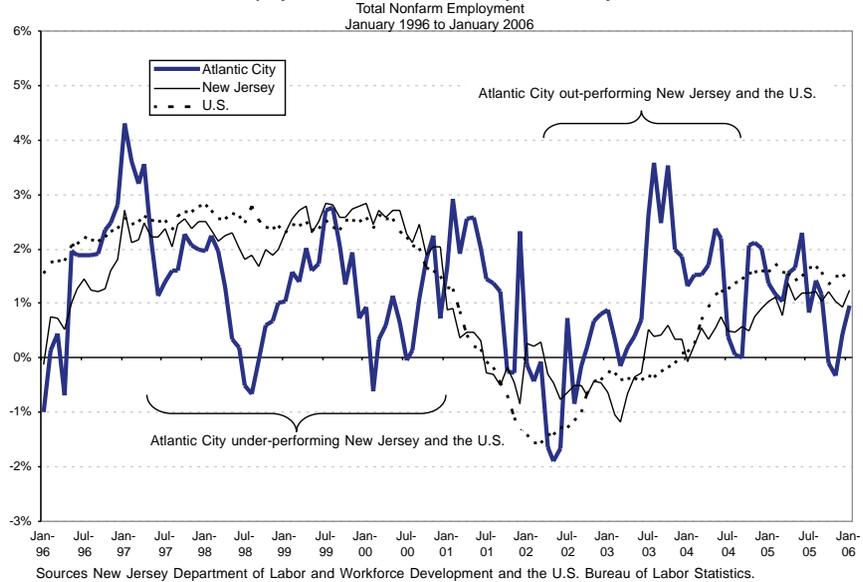


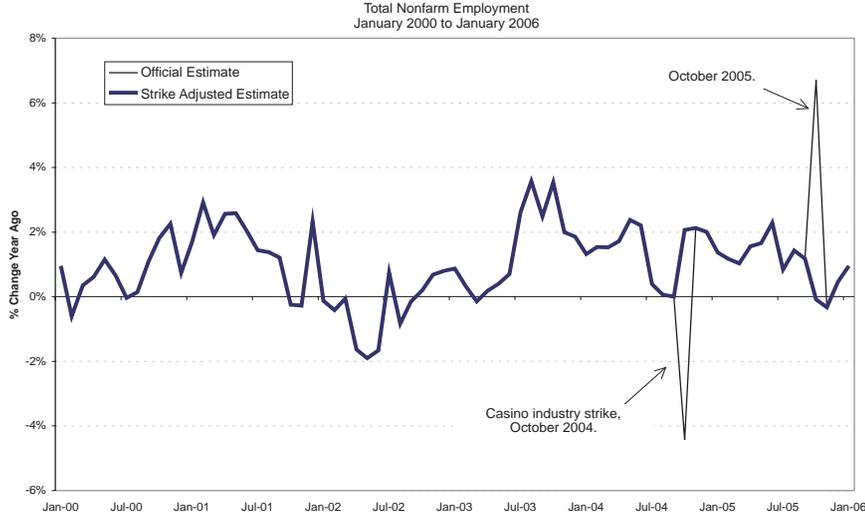
Table 3: Assessing the Quality of Job Growth in Atlantic City: 2q 2002 to 2q 2005

	2q 2002		2q 2005		2q 2002 - 2q 2005		Avg Annual Wage 3q 2004 to 2q 2005
	Average Employment	Share of Private Employment	Average Employment	Share of Private Employment*	Lost/Gained Share?	Lost/Gained Jobs?	
Industries that lost employment share							
Utilities	736	0.6%	674	0.5%	lost share	lost jobs	\$72,604
Information	1,370	1.1%	1,139	0.9%	lost share	lost jobs	\$46,373
Agriculture, forestry, fishing and hunting	1,621	1.3%	1,185	0.9%	lost share	lost jobs	\$18,944
Administrative and waste services	4,050	3.3%	4,009	3.2%	lost share	lost jobs	\$26,206
Manufacturing	4,503	3.7%	4,383	3.5%	lost share	lost jobs	\$36,073
Professional and technical services	4,670	3.9%	4,673	3.7%	lost share	gained jobs	\$57,286
Construction	6,480	5.4%	6,617	5.2%	lost share	gained jobs	\$48,198
Accommodation and food services	54,838	45.3%	56,176	44.5%	lost share	gained jobs	\$29,293
Total	78,268	64.6%	78,856	62.5%			
	Total share loss				-2.1%		
Annual average wage of industries losing share							\$34,168
Industries that gained employment share							
Management of companies and enterprises*	542	0.4%	656	0.5%	gained share	gained jobs	\$105,050
Educational services	758	0.6%	889	0.7%	gained share	gained jobs	\$38,850
Real estate and rental and leasing	1,456	1.2%	1,684	1.3%	gained share	gained jobs	\$31,318
Transportation and warehousing	2,101	1.7%	2,211	1.8%	gained share	gained jobs	\$30,644
Arts, entertainment, and recreation	1,887	1.6%	2,372	1.9%	gained share	gained jobs	\$22,643
Finance and insurance	2,175	1.8%	2,452	1.9%	gained share	gained jobs	\$50,846
Wholesale trade	2,554	2.1%	2,970	2.4%	gained share	gained jobs	\$50,408
Other services, except public administration	3,002	2.5%	3,260	2.6%	gained share	gained jobs	\$23,841
Health care and social assistance	13,951	11.5%	15,315	12.1%	gained share	gained jobs	\$41,151
Retail trade	14,400	11.9%	15,506	12.3%	gained share	gained jobs	\$24,690
Total	42,284	35.4%	47,316	37.5%			
	Total share gain				2.1%		
Annual average wage of industries gaining share							\$37,562
Total Private Sector excluding mining/natural resources and unclassified)	121,093		126,172				

* Because of confidentiality-related data suppression, employment data for this industry are not available for 2q 2005. The 2q 2005 figure shown represents the average of the prior four quarters employment level for the industry.

Source: Employment and wage data are from the New Jersey Department of Labor and Workforce Development's covered employment (unemployment compensation (ES-202) program. Calculations by author.

Chart 7: Official vs. Strike-adjusted Employment Growth in Atlantic City*



* The two time series shown are identical except for the October 2004 and October 2005 data points.
Source: New Jersey Department of Labor and Workforce Development. Calculations for the strike-adjusted series by author.
Details available upon request.

notably, construction.⁵

Ocean City. Since its last cyclical employment trough, which occurred in 2002, Ocean City's economy has added 2,400 jobs, a gain of 5.6%. This rate of job growth was significantly greater than job gains of 1.5% and 2.4% on the state and national levels, respectively, over the same period (2002-2005).

Employment in Ocean City's retail trade sector grew 7.9% (+500) between 2002 and 2005. This compared to retail trade job growth of 1.5% at the state and national levels over the same period. The metro area's retail trade sector now accounts for 16.2% of its total employment, compared to a national benchmark of 11.5%. The area's accommodation and food services industries meanwhile (which accounts for 20% of total employment in the metro area) recorded an employment decline of 100 between 2002 and 2005.

Vineland-Millville-Bridgeton. Largely reflecting its significant manufacturing sector, which accounts for 19% of total employment compared to a national benchmark of 10.6%, Vineland-Millville-Bridgeton's last cyclical employment trough

occurred in 2001, prior to its regional metropolitan neighbors', the state's and the nation's.⁷ Since 2001, however, the metropolitan area has gained 4,100 jobs – an increase of 7.1%. Thus, on this basis (i.e., from last cyclical employment trough to 2005), Vineland-Millville-Bridgeton has outperformed both the Atlantic City and Ocean City metropolitan areas. Of course, in Vineland-Millville-Bridgeton's case, this period represents four years, whereas it represents only three years for Atlantic City and Ocean City.

Industries that have contributed to the area's solid job growth in recent years have included: construction, mining, and natural resources (+900), wholesale trade (+900), professional and business services (+1,000), educational and health services (+1,200). These gains have worked to offset continued job losses in the metropolitan area's manufacturing sector, especially those experienced in the area's historically important glass products manufacturing industry (-1,100). ■

The Quality of Job Growth in Atlantic City

Assessing the quality of recent job growth in Atlantic City

In addition to the analysis of recent employment trends in the region, it is important to consider the *quality* of the jobs gained relative to those lost. Over the course of the latest recovery and subsequent expansion, many locales across the nation have experienced an erosion in job quality, as higher-paying jobs (e.g., those in manufacturing, information, and professional and business services) have been replaced by lower-paying ones (e.g., those in retail trade, accommodations, and food services). This type of dynamic, in tandem with the fact that wages are rising more slowly within specific industries, has the potential to significantly slow the growth of living standards for working families.

Table 3 assesses the quality of job growth in Atlantic City between the second quarter of 2002 and the second quarter of 2005.⁸ As shown, since the metro area's last cyclical trough (which occurred in the second quarter of 2002), industries whose share of total private employment increased had an average annual wage of \$37,562.⁹ Industries whose share of total private employment declined had an average annual wage of \$34,168. This suggests that the industrial composition of Atlantic City's job growth over the recent past resulted in a higher average annual wage. Thus, on this basis, the composition of job growth during this period in Atlantic City improved the overall quality of its employment base.¹⁰ ■

Atlantic City Among Nation's Hottest Single-family Housing Markets

Sales prices soar in Atlantic City's single-family housing market

The median sales price of an existing single-family home in the Atlantic City metropolitan area climbed to \$251,700 in 2005, according to recently released National Association of Realtors sales price data. This represented a 27.2% increase on 2004's \$197,900 figure. As Table 4 shows, this rate of growth ranked as the twelfth-fastest among the 156 major metropolitan areas the National Association of Realtors tracks.

While intense debate continues to swirl around the question of whether or not a national housing bubble exists, a growing number of analysts hold that there are more likely to be "local" bubbles. While the question of whether or not Atlantic City's current housing market represents such a bubble is

complex (and is not answered here), one way to contextualize the recent sales price appreciation in Atlantic City is to consider it in light of recent job and population growth.

Another important question that such rapid price appreciation raises regards housing affordability in the metro area. The question of housing affordability is important, especially in the context of the metro area's future economic development. Housing affordability can impinge strongly on an area's cost of living, which, in turn, often plays an important role in households' and businesses' location decisions. Table 4 sheds some light on these important issues.

One way to assess the 2005 median sales price of an existing single-family home in Atlantic

City is to compare it to the metro area's per capita income. As shown in Table 4, last year's median sales price of an existing single-family home was eight times the area's 2003 per capita income.¹¹ This multiple was below the median multiple of 8.5 for the rest of the metro areas shown (i.e., those whose 2005 sale price appreciation ranked in the top fifteen of all metro areas tracked by the National Association of Realtors). This suggests that the sales price appreciation experienced in Atlantic City's existing residential home market is not especially different than that experienced in other areas with hot residential home markets. At the same time, it remains true that Atlantic City's multiple is larger than the national benchmark of 6.6.

Table 4: The appreciation of single-family home prices in Atlantic City is among the nation's largest.
Top 15 Metro Areas Ranked by 2005 Sales Price Growth

Rank	Metropolitan Area	Median Sales Price of Existing Single-Family Homes (thousand \$)			2004-2005 % Change	2003 Per Capita Income (thous.\$)	2005 Median Sales Price/2003 Per Capita Income	Population Growth July 2000-July 2004	Payroll Emp. Growth 2003-2005	Residential Emp. Growth 2003-2005	Total Single-Family Units Permitted 2003-2005 / 2003 Population
		2003	2004	2005*							
1	Phoenix-Mesa-Scottsdale, AZ	152.5	169.4	247.4	46.0%	29.6	8.4	13.3%	7.8%	5.8%	4.4%
2	Cape Coral-Fort Myers, FL	151.9	187.2	269.2	43.8%	31.5	8.5	15.9%	11.7%	11.4%	9.5%
3	Orlando, FL	145.1	169.6	243.6	43.6%	28.1	8.7	12.4%	9.4%	9.4%	4.2%
4	Sarasota-Bradenton-Venice, FL	193.3	255.7	354.2	38.5%	37.1	9.5	10.0%	11.1%	10.8%	4.8%
5	Palm Bay-Melbourne-Titusville, FL	123.7	153.4	209.0	36.2%	28.7	7.3	8.7%	8.4%	8.3%	3.7%
6	Deltona-Daytona Beach-Ormond Beach, FL	124.9	148.6	194.0	30.6%	25.2	7.7	7.6%	6.5%	7.0%	2.8%
7	Ocala, FL	N/A	110.1	143.5	30.3%	23.5	6.1	11.9%	7.8%	7.7%	6.3%
8	Tucson, AZ	156.3	177.3	231.0	30.3%	25.9	8.9	6.9%	6.8%	5.0%	3.2%
9	Miami-Fort Lauderdale-Miami Beach, FL	231.6	286.4	371.1	29.6%	N/A	N/A	6.6%	5.6%	6.4%	1.4%
10	Tampa-St.Petersburg-Clearwater, FL	138.1	159.7	205.3	28.6%	29.9	6.9	7.6%	6.6%	6.7%	2.8%
11	Honolulu, HI	380.0	460.0	590.0	28.3%	32.5	18.2	2.8%	5.1%	4.5%	0.8%
12	Atlantic City, NJ	166.5	197.9	251.7	27.2%	31.7	7.9	6.2%	2.5%	3.8%	2.2%
13	Riverside-San Bernardino-Ontario, CA	221.0	296.4	374.2	26.2%	24.5	15.3	15.7%	6.7%	7.6%	3.4%
14	Hagerstown-Martinsburg, MD-WV	141.8	165.9	209.3	26.2%	26.8	7.8	9.5%	2.2%	3.2%	3.9%
15	Washington-Arlington-Alexandria, DC-VA-MD-WV	277.9	339.8	424.7	25.0%	44.1	9.6	6.6%	5.8%	5.4%	1.6%
	Median for group	154.4	177.3	247.4	0.3	29.1	8.5	8.7%	6.7%	6.7%	3.4%
	U.S.	170.0	184.1	207.3	12.6%	31.5	6.6	4.1%	2.4%	3.8%	

* 2005 data are preliminary.

Sources: Sale price data: National Association of Realtors. Population data: U.S. Census Bureau. Per Capita Income data: Bureau of Economic Analysis. Payroll employment data: U.S. Bureau of Labor Statistics. Residential Employment: U.S. Bureau of Labor Statistics. Permit data: U.S. Census Bureau.

Household formation and population growth are usually the primary drivers of residential demand. While timely data on household formation for all metropolitan areas do not exist, intercensal population estimates do. Atlantic City's population grew 6.2% between July 2000 and July 2004. This rate of population growth was considerably below the median rate of population growth (8.7%) recorded by the rest of the metro areas shown in Table 4. Similarly, payroll and residential employment growth in Atlantic City (two other possible proxies of the demand for single-family homes) were considerably below the median rates for the group.¹² Whereas payroll and residential employment in Atlantic City grew 2.5% and 3.8% respectively between 2003 and 2005, the median rate of growth for the group of metro areas shown in Table 4 was 6.7% (for both payroll and residential employment). These statistics, in conjunction with the rapid appreciation in single-family home sales prices, may suggest that recent demand for single-family homes in Atlantic City may not stem from usual sources. (See *discussion below*.)

The total number of single-family homes permitted in Atlantic City, meanwhile, totaled 5,858 between 2003 and 2005. This number of units represented 2.2% of the metro area's 2003 population. As Table 4 shows, this ratio was below a median figure of 3.4% for other metro areas whose single-family markets have seen rapid rates of sale price appreciation.¹³

The implications of the above analysis for Atlantic City's single-family home market, especially as they relate to questions of a price bubble and affordability, are

complicated by the reality of second home-buying in Atlantic City. Clearly, to the extent that some of the recent price appreciation in the metro area reflects these types of purchases, the usual indicators of demand for single-family homes (which generally reflect only metropolitan area-specific economic conditions) are likely to prove inadequate measures of the real demand for single-family homes in Atlantic City. As a recent *New York Times* article suggests, rapid sales price appreciation and residential development in Atlantic City reflect buyers' and investors' views that Atlantic City represents one of the last places on the Jersey Shore to buy and invest, as prices elsewhere have already appreciated considerably.¹⁴ Further, recent and on-going casino industry investment, especially as it relates to industry attempts to capture a younger, hipper, and wealthier client base have helped to elevate the metro area's amenity portfolio (e.g., high-end dining, spas, and shopping), and thereby the overall quality of the entertainment experience commodity the industry produces. In conjunction with the relative prices (i.e., Atlantic City's vis-à-vis those in other Shore locales), such high-end amenities have worked to attract second-home buyers who obviously have the financial means to benefit from them.

One final issue that deserves mention in the context of assessing the current and future state of Atlantic City's single-family home market regards recent immigration to Atlantic City. Intercensal population estimates show that a significant portion of the metro area's recent population growth is attributable to positive net *international* migration. Such

migration may represent yet another important source of single-family home demand. ■

Diversification, volatility, and economic development in Atlantic City

While job growth receives considerable attention in economic development arenas, the important issue of volatility often goes unexamined. A region's or area's economy's volatility is closely related to its industrial makeup. There is an important connection between an area's volatility and the overall economic well-being of its residents. A high-volatility economy – which will exhibit an above-average number of starts and stops – will impinge upon the health of the area's labor market and may thereby disrupt the stability of income flows and consumption expenditures.

Volatility can be separated into two components. The first, *business cycle* sensitivity, measures how closely an area's economic growth mirrors the nation's. In this sense, it is similar to the concept of a company's beta (which represents the covariation of a stock in relation to the rest of the stock market), since the area's performance is measured against a benchmark as represented by the overall economy. Given the expectation of a national downturn, "high beta" areas generally represent increased risk (at any rate of growth) from the perspective of certain investors (e.g., banks), since the area will tend to exaggerate the effects of a downturn.¹⁵ By contrast, low-beta areas display a more muted response to the business cycle.

The second component of volatility reflects variations in a region's economy that are not attributable to the national business

cycle, i.e., these variations reflect some other market-specific factor that can shift economic conditions regardless of general U.S. business conditions. In many cases, high *local volatility* is linked to an area's dependence upon an industry or a set of industries that exhibit significant volatility independent of the nation's overall growth pattern. An example of an area with significant local volatility is

San Jose, whose heavy dependence upon the often-volatile high-tech sector results in abrupt swings in its economy. By contrast, an area that boasts a more diversified or balanced economy, e.g., Chicago, will generally tend to have less local volatility and track the national business cycle more closely.

Table 5 compares Atlantic City's employment volatility with that of a select group of other metropolitan areas: Chicago, Las Vegas, Philadelphia, and San Jose.¹⁶ As shown, Atlantic City's business cycle volatility measure of 0.69 suggests that its economic growth (as measured by job growth) tends to exhibit a somewhat muted response

to changes in U.S. employment growth. This is in contrast to Chicago whose business cycle volatility measure of 1.03 suggests that its pattern of job growth mirrors nearly perfectly that at the national level. San Jose's beta of 2.45 means that its pattern of economic growth (again, as reflected in jobs) tends to significantly exaggerate the nation's.

Atlantic City's local volatility, at 0.15, while three times as large as Chicago's is less than Las Vegas'. Casino hotels employment of course constitutes a significant share of both Atlantic City's (28%) and Las Vegas' (19%) employment base. (See Chart 8.) Thus, it appears that Atlantic City's reliance on the casino hotel industry for a significant share of employment – and the relative lack of diversification this reliance implies – does not translate into significantly above-average local volatility (as is often the case with areas that rely heavily on a particular industry, e.g., San Jose, whose local volatility measure at 0.29 is nearly two times Atlantic City's). At the same time, this reliance nevertheless constrains to some extent the area's ability to take advantage of robust job growth in other high-growth and/or emerging industries.¹⁷

Analyzing a regional economy's volatility can be an important part of designing local economic and workforce development strategies. In particular, policies that work to increase an area's industrial diversification may help reduce its volatility. Improved stability should prove beneficial not only to an area's business community, but may also work to attract outside investment. Perhaps most importantly, there is evidence that suggests that increased industrial diversity is associated with lower rates of unemployment.¹⁸ In diverse areas, employment

Table 5: Employment Volatility: Atlantic City vs. Selected Metropolitan Areas, January 1991 to December 2005

Metro Area	Business Cycle Volatility	Local Volatility	Total Volatility*
Atlantic City	0.69	0.015	0.018
Chicago	1.03	0.005	0.016
Las Vegas	1.80	0.019	0.032
Philadelphia	0.88	0.009	0.015
San Jose	2.45	0.029	0.045

* Total volatility represents the standard deviation of year-on-year monthly job growth over the period January 1991 to December 2005.

Source: Establishment employment from U.S. Bureau of Labor Statistics. Calculations by author.

Table 6: Unemployment rates in the South Jersey region

Year	New Jersey	Cape May County	Atlantic County	Cumberland County	3 Counties	U.S.
2000	3.7	6.4	4.7	5.8	5.3	4.0
2001	4.3	6.6	4.7	6.5	5.6	4.7
2002	5.8	8.0	6.0	7.6	6.8	5.8
2003	5.9	8.0	6.2	7.9	7.1	6.0
2004	4.8	6.9	5.6	6.6	6.1	5.5
2005*	4.2	6.3	5.0	6.1	5.5	5.1

percentage point change

2000-2005 0.5 -0.1 0.3 0.3 0.2 1.1

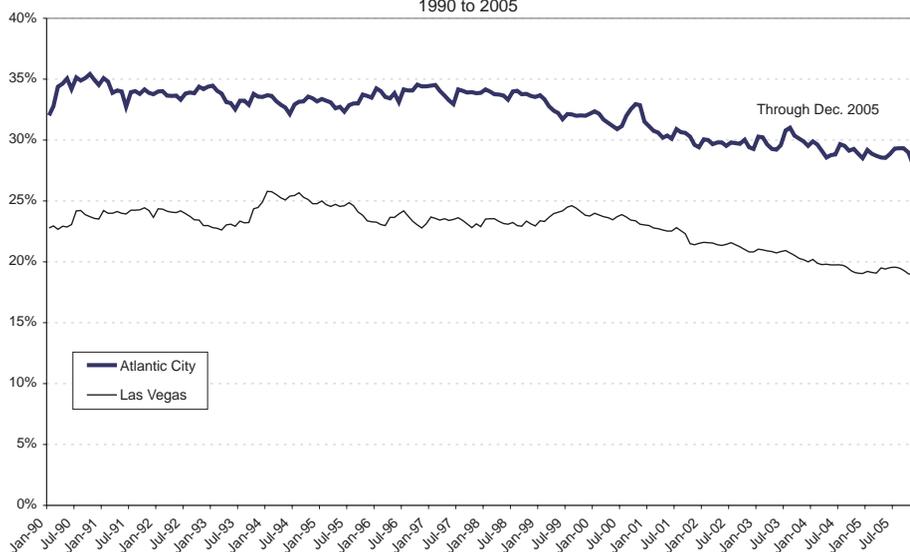
percentage point change

2003-2005 -1.7 -1.7 -1.2 -1.8 -1.5 -0.9

* Preliminary estimate

Source: U.S. Bureau of Labor Statistics.

**Chart 8: Casino Hotels Employment as a Share of Total Employment
Atlantic City and Las Vegas
1990 to 2005**



Sources: New Jersey Department of Labor and Workforce Development and the U.S. Bureau of Labor Statistics.

declines in one industry will not necessarily translate into sharp increases in overall unemployment, as the industry's workers represent a smaller share of the area's total workforce. This in turn works to mitigate the potential multiplier effects that can emerge as a result of job declines in a single industry that accounts for a significant share of employment in a particular area. Further, greater diversity may result in a demand for a wider variety of labor skills.¹⁹ This in turn can prove to have beneficial effects for an area's workforce, as the economy's capacity for absorbing labor with various skill sets, experiences, and educational attainment levels is increased.²⁰ ■

Unemployment and labor force growth in the South Jersey region

While the unemployment rate in the South Jersey region continued to decline last year (falling to 5.5% from 6% in 2004), it remained above state and national benchmarks. (See Table 7, page 9) Since peaking at 7.1% in 2003, the region's unemployment rate has declined 1.5 percentage points. This compared to percentage point declines of 1.7 and 0.9 at the state and national levels over the same period. At the same time, the South Jersey region has experienced significant labor force growth. Between 2003 and 2005, the region's labor force increased 4%. This rate of increase was significantly above rates of increase of 1.6% and 1.9% on the state and national levels over the same period. ■

Endnotes

¹ Benchmark revisions are performed every year and are generally released in late February or early March, along with the new year's January employment data. The establishment (or, payroll, or nonfarm) employment estimates are developed each month from a sample of approximately 7,500 New Jersey employers. Each year (as required by the U.S. Bureau of Labor Statistics) the Department of Labor revises previous employment estimates (approximately the prior 21 months worth of estimates) to a benchmark or universe count of employment derived from unemployment insurance records of over 230,000 New Jersey employers. The data collected through unemployment insurance records represent a nearly complete count of employment including, farms, forestry, and fisheries. More than 96% of total wage and salary civilian jobs are counted by the unemployment insurance program because employers are required by law to provide the state a quarterly count of the number of employees covered under unemployment insurance. The employment estimates produced via the annual benchmark revisions process thus provide a more accurate picture of recent job trends, as they redress limitations inherent in survey sample based estimation techniques. More specifically, because the sample used to derive the monthly establishment employment estimates tends to over-represent large firm employment, sampling errors can be large in industries dominated by small firms. An example: a sample of 60 firms used to estimate employment in a small region may include 10 large establishments and 50 small ones. Small establishments dominate the sample by a 5 to 1 margin. However, if employment in the 10 large establishments is 8,000 and employment in the small firms is 500 then the large establishments' employment dominates the sample by a ratio of 16 to 1. This problem is

often exacerbated near business cycle turning points because the survey does not fully capture small firms that are going out of business during a downturn or the rapid business creation (and, job creation) during a recovery.

² It should be noted that a strike in the casino hotel industry in October 2004 has the effect of lowering the official average annual 2004 estimate for total payroll employment in Atlantic City. After accounting for this strike in the data (from an analytical perspective the strike should be considered a transitory event, i.e., it did not reflect underlying business cycle conditions in the metro area), I estimate that the metro area's 2004 job growth was likely 0.5 percentage points *higher* than official estimates indicate, and that 2005's growth rate was 0.6 percentage points *lower* than official estimates suggest. Regardless of whether or not some allowance is made for the October 2004 strike, it remains true that job growth in Atlantic City was previously (prior to the recent benchmark revision) underestimated. Adjusting for the strike (which Table 1 *does not* do), I estimate that the recent revision would have increased the 2005 job growth figure to 1% from 0.2% (instead of increasing it to 1.6% from 0.8%, as shown in Table 1.)

³ In addition to representing Atlantic City's last cyclical employment trough, 2002 also marked the first year since 1991 that total payroll employment declined in the metro area.

⁴ This under-performance is in part explained by the relative lack in Atlantic City of the types of industries (e.g., high-tech oriented service and manufacturing ones) the experienced robust job growth during the late 1990's business cycle expansion.

⁵ Surprisingly, the rapid pace of residential and commercial development in the Atlantic City metropolitan area in recent years has not generated robust job growth in the metro area's construction industry. This likely reflects the fact that many of the construction jobs that

have been generated in recent years appear on the payrolls of establishments (construction companies) whose home base lies outside the metropolitan area.

⁶ See footnote two.

⁷ On the national level, the manufacturing sector began losing jobs at a significant rate in early 2001 in conjunction with the onset of the national recession which began in March 2001.

⁸ Data availability dictated the choice of time periods used; the second quarter of 2005 represents the last quarter for which covered employment and wage data are (at the time of publication) publicly available. At the same time, the second quarter of 2002 represented the Atlantic City metropolitan area's last cyclical employment trough. Thus, the analysis presented examines the quality of job growth in the Atlantic City metro area since its last cyclical employment trough.

⁹ Methodology. Data are from the state's "covered" employment program (ES-202) and are for private-sector employment only. Industry shares (for the major industries shown) of total employment are calculated at the two points in time. The difference in each industry's share over the period is then calculated. These differences are negative for industries contracting ("contracting industries") as a share of total employment and positive for industries gaining ("gaining industries") as a share of total employment. Industry weights are then created by taking each industry's "share change" as a share of the total change in its group, i.e., "contracting" or "gaining" industries. Thus, the set of weights sum to one for each group. These weights are then multiplied by average annual wages for the industries using average annual wage data drawn from the state's unemployment insurance program. The average annual wages are based on the latest four quarters of wage data available, i.e., third quarter 2004 to second quarter 2005. This wage vector is held constant so that the results are

only affected by the shift in industry shares, not by wage changes.

¹⁰ There are other ways to quantify the quality of growth in an area—the approach used above represents but one approach. Further, because averages are affected by outliers (in this case high earners), the finding presented above should be interpreted with some caution. For example, the result shown is sensitive to the job change in the management of companies and enterprises industry which has an average annual wage of over \$100,000. The second quarter 2005 employment figure shown is an estimate. (See note in Table 3) A more complete picture of the quality of the area's job growth would include, among other things, an analysis of its hourly wage distribution.

¹¹ Personal income data at the metropolitan level are produced with a significant time lag. 2003 data represent the most recent year available.

¹² Residential (or, household) employment is based on the monthly Current Population Survey (CPS) which is used to derive unemployment and labor force statistics.

¹³ 2005 data are year-to-date through December.

¹⁴ See: "Developers (and Buyers) Are All In for the Second-Home Market" Louise Tutelian, *New York Times* online, March 3, 2006. Freddie Mac's Conventional Mortgage Home Price Indices (CMHPI) for metropolitan areas show that whereas single-family home prices in Atlantic City appreciated 106.1% between the first quarter of 2000 and the third quarter of 2005, they appreciated 117% in Ocean City. For more information on the CMHPI, see: <http://www.freddiemac.com/finance/cmhpi/faq.htm#howWork>.

¹⁵ It should be noted that the interpretation of a high beta (in a region) that stems from better-than-national growth in an expansion is quite different from one that stems from severe contraction during a downturn. Because of this possibility, two areas that exhibit similarly high

betas may represent quite different upside and downside risks. Areas with high betas stemming from over-performance in expansion periods might be considered to have an upward bias. Such a bias should be taken into account in assessing the area's overall volatility.

¹⁶ In addition to *employment* volatility, *income* volatility represents another important type of volatility that can be analyzed. The significant lag in the timeliness of personal income data at the metropolitan area level of detail precluded an analysis of income volatility.

¹⁷ Such ability is often reflected in a high beta (as in the cases of Las Vegas and San Jose). Atlantic City's beta is well below one. This fact, at least in part, reflects its relative lack of the type of industries that tend to generate robust job growth in expansions, e.g., various high-tech industries during the late-1990s. The relative lack of these types of industries, moreover, helps explain Atlantic City's late-1990's under-performance vis-à-vis New Jersey and the U.S. (See the discussion on page X and Chart 6). Agglomeration economies often play an important role in this context, as the ability of a particular area to attract high-growth industries and sectors is in part related to whether or not these industries and sectors have achieved or are nearing achieving a critical mass in a particular area. These masses often tend to feed on themselves—especially in up-cycles.

¹⁸ See, E.E. Malizia, and Shanzi Ke, "The influence of economic diversity on employment and stability." *Journal of Regional Science*, 33 (2), pp. 221-235 (1993).

¹⁹ Thus, diversification-enhancing development policies can influence the *composition* of the labor demand in an area, as opposed to merely its magnitude.

²⁰ Diversification-enhancing policies may play an important role in redressing high unemployment in particular areas (especially "skills-mismatch")

forms of it). Atlantic City proper, as is the case in many urban cores, has unemployment rates in particular neighborhoods well above metro-, state-, and national benchmarks. Moreover, the three-county South Jersey region of Atlantic, Cape May, and Cumberland accounts for 6% of the state's payroll employment, but 8% of its total unemployment. It should also be noted that consideration of the occupational composition of industries is also important in this context. On one hand, the greater the occupational homogeneity that exists across an area's industries, the easier re-employment is likely to be for workers displaced from a faltering industry. On the other hand, as noted above, greater occupational diversity across an area's industries may improve the economy's capacity for absorbing labor with various skill sets, experiences, and educational attainment levels.

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