

The Editors



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Correction: The center figure, "What Connecticut Exports," on page 6 of the Spring issue should be expressed in hundreds of millions of dollars.

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CONNECTICUT ECONOMIC INDICATORS

(Percent change: 1997-Q2 to 1998-Q2)

INDICATORS OF CURRENT ECONOMIC ACTIVITY

Total Nonfarm Jobs	+2.0%
Number Unemployed	-28.0%
Manufacturing	
Jobs	+0.1%
Avg. Weekly Hours	+0.9%
Output Index	+3.5%
Avg. Hourly Earnings	+2.9%
New Auto Registrations	+19.2%
Travel and Tourism Index	+7.1%
Bradley Airport (Apr./May '97-Apr./May '98)	
Passengers	+1.0%
Freight	+15.0%
State Taxes:	
Sales	+6.7%
Income	+17.9%
Real Estate	+15.8%
Normalized Electricity Use	+4.8%
State Exports ('97-Q1 to '98-Q1)	-0.3%
Overall Consumer Confidence	+12.9%
Coincident GDI ('98-Q1 to '98-Q2)	+0.7%

INDICATORS OF FUTURE ECONOMIC ACTIVITY


Help-Wanted Ads	
<i>Hartford Courant</i>	+5.4%
<i>The Advocate of Stamford</i>	+4.8%
Job Orders	+5.5%
Avg. Initial Unemp. Claims	-9.3%
Housing Permits	+14.7%
Net New Business Starts	+19.4%
Confidence in Future	-1.0%
Leading GDI ('98-Q1 to '98-Q2)	-0.4%

A Two-Fisted Assessment of the Economy

Harry Truman reportedly was on the lookout for a one-armed economist—someone who couldn't say "On the one hand...but on the other hand." "Give-'em-Hell" Harry would likely turn thumbs down on our two-fisted summary of Connecticut's economy.


-  Job growth slowed in the first two quarters of 1998, raising questions about whether the current expansion's best days are behind us. **But the fourth quarter of 1997 experienced the best job growth in more than a decade. After each such spurt, job growth has taken a breather for a quarter or more, so the recent slowdown is to be expected (see pages 12-13).**
-  The Asian crisis hurts Connecticut exports, slowing the manufacturing sector. **The Asian crisis cooled the red hot U.S. economy enough to head off an interest rate hike by Fed head Greenspan.**
-  Manufacturing slipped to a smaller share of output in Connecticut than in the nation. **Despite the retrenchment of manufacturing, Connecticut's knowledge workers stretched out the state's per capita income lead over the rest of the nation. For example, Fairfield County's success occurred despite manufacturing growth that trailed the state average (see page 18).**
-  A sharp downturn in the stock market would hit Connecticut harder than the nation because of the high stock-ownership levels of state residents. **A splash of cold water on an overvalued stock market would hurt temporarily, but could have a beneficial long-term effect if people turn from chasing paper assets to building new businesses.**
-  With a few exceptions, such as in Fairfield County, the state's housing market has not seen the property appreciation during the 1990s witnessed in most other states. **Since Connecticut housing prices have grown little during the current expansion, the state's business climate has grown more competitive.**
-  Income grows unevenly across the state. For example, per capita income in Fairfield County most recently grew to 63% above the average for the rest of the state, up from 54% two years earlier. **Although Fairfield County is a powerful engine, the rest of the state would, if a state, still rank third in the nation in per capita income (see page 19).**
-  After falling several years, Connecticut's labor force has not grown for the last three years. How can the economy grow if the labor force doesn't? **Connecticut employers have dug deeper into that flat labor force to add more than 100,000 new jobs (see pages 12-13).**
-  The median age of the state's population is above the nation's. People over 65 represent a larger share of the population in Connecticut than in the nation (see the chart below). **Although Connecticut's median age is above the nation's, the difference has actually declined since 1980.**

Good news



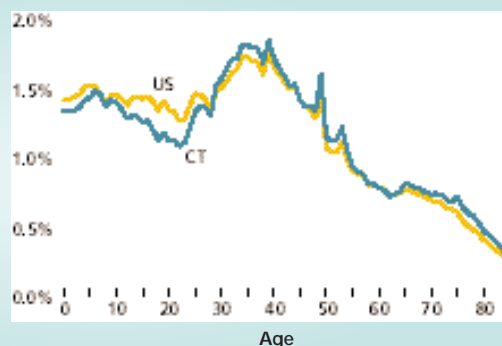
+19.4%
Net New Business Starts

Bad news



-0.4%
Leading General Drift Indicator

Population Distribution by Age: Connecticut and U.S.



Developed by *The Connecticut Economy* based on population estimates for July 1, 1996, by the U.S. Census Bureau.

A Retail Tale

By Edwin L. Caldwell

This is a story of retail sales in Connecticut so far in the nineties. Sales started off very slowly in the early years, as shown in the line chart below, and then picked up steam as the state's economy returned to vigorous growth after recovery from the last recession. For the decade as a whole, the weakness of the early nineties kept the state's average growth rate of retail sales, at 3.9%, well under the national rate. Nutmeggers spend a substantially smaller share of income on retail items than the national average even though we have more stores per capita. Yet sales per capita in Connecticut exceed those in the nation by 14%, a reflection of our higher incomes.

Here's Where the Money Goes

It has frequently been noted that if we didn't have to eat and drive a car, we all would be rich. Together, food and automotive products take 38% of the retail dollars in the state. Of course, another blockbuster item in the family budget, housing, is not considered a part of retail sales. However, the category of miscellaneous retail stores by itself captures the largest share of the state's retail dollar — 25%. This diverse collection sells liquor, drugs, books, jewelry, fuel, flowers, and other items.

Home furnishings and appliances registered the largest growth rate in the nineties in the state. This is somewhat surprising in view of the depressed condition of our housing market during much of this time. Other growth leaders were miscellaneous retail stores and general merchandise stores. The latter consist mainly of department and variety stores.

It is interesting that the percentages of total sales among the sectors in 1997 were similar, in most instances, in Connecticut and the nation. But there were some major differences. Connecticut spent a larger share of its retail dollar at home furnishing and miscellaneous retail stores and a

smaller share at hardware stores and eating and drinking places. The lack of sales growth at hardware stores between 1990 and 1997 was probably due to a shift of this business to discount and home improvement outlets, such as Home Depot.

How Much Do We Have Left?

Retail spending takes a smaller share of personal income in Connecticut than in the nation as a whole. In both the early and later nineties, people in Connecticut spent a little over 30% of their personal income in retail stores, whereas people in the nation as a whole spent close to 40%. However, the percentage spent in the nation did drop a little over the decade. The difference between the region and the nation is probably related to per capita income levels—incomes are much higher in Connecticut than in the nation, more so than prices. That means, of course, that people in the region have to spend a smaller share of their incomes to get a similar basket of goods to the one bought in the nation.

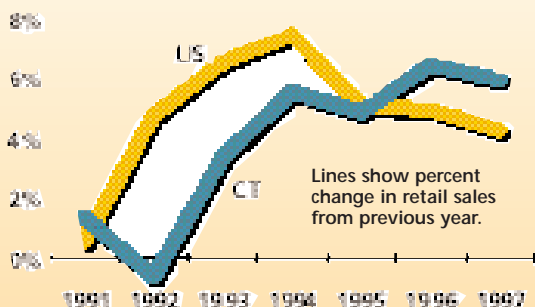
It is tempting to conclude that there is room for more super-salesmanship in retailing in Connecticut. If the average citizen in the nation parts with close to 40% of his or her personal income for retail items, perhaps the average Nutmegger could be persuaded to spend a bit more lavishly. Even a small percentage gain would mean many more dollars for retailers.

Concentration of Retail Stores

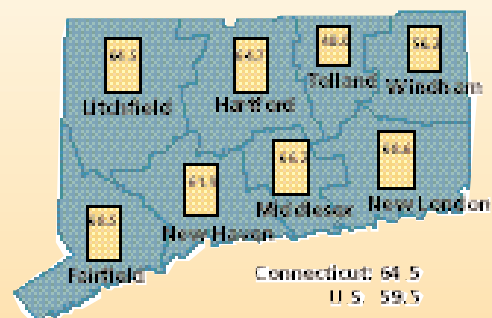
How many retail stores does it take to service the wants and needs of the populace? The number varies considerably. In 1995 there were 59.5 retail establishments for every 10,000 persons in the nation and 64.5 in Connecticut. There is a wide variation from this average in Connecticut when the tabulation is done by county, as is shown in the map below.

One would expect Fairfield County to have the largest number of stores per capita to go along with its top personal income. But it is not clear why New London County should match it. And it certainly seems that some enterprising entrepreneurs should take a close look at the possibilities in Tolland and Windham counties. It is a fairly long drive from both to the Buckland Hills Mall in Manchester.

Connecticut Retail Sales Now Growing Faster Than Nation



Retail Establishments Per 10,000 Residents Across Connecticut Counties



All exhibits were developed by *The Connecticut Economy* based on data from the U.S. Census Bureau, the U.S. Department of Commerce, the Connecticut Department of Revenue Services, and *County Business Patterns - 1995*.

Concentration of Retail by Category

There are more eating and drinking places per 10,000 people in Connecticut than in any other category — 18.7. By contrast, there are only 7.0 food product stores, which is probably indicative of the popularity of eating out, as opposed to cooking, and the larger size of food stores than restaurants. You have to look rather diligently for a hardware store in some parts of Connecticut, as there are only 2.6 per 10,000 persons in the state as a whole. There is also a rather small number of home furnishings and appliance stores in the state. As noted earlier, this category had by far the largest growth rate in dollar value of sales of any other sector of retailing in the state so far in the nineties. That should provide an interesting possibility for entrepreneurs to investigate.

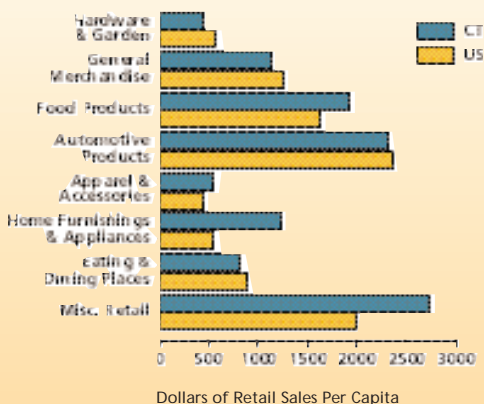
The bar chart below shows a comparison of per capita sales of the several sectors in Connecticut and the nation. The national data are from the U.S. Census Bureau and the state data are from the Connecticut Department of Revenue Services.

So?

Retailing seems to have returned to vigor in the last few years as the state's economic recovery gained momentum. Connecticut provides a very hospitable climate for retailing as the intrepid shopper, armed with a fat wallet, can quickly explore a wide range of possibilities due to our small geographical area and dense population.

The return to strong growth of retail sales in the last several years apparently impressed developers in the Greater Hartford area. According to Finard & Co. of Burlington, MA, which tracks the market for commercial space in 26 towns around Hartford, the region's total retail space rose by 3.4% to 32.5 million square feet (or about 1.2 square miles) in the first quarter of 1998 compared to the same period in 1997. But the vacancy rate also rose from 7.8% to 10.4%. Some knowledgeable people on the local retail scene think the vacancy rate has peaked. Now if we could only raise retail spending out of personal income a percentage or two, perhaps that surplus would evaporate and retailers would dance all the way to the bank.

1997 Retail Sales Per Capita



Saving the Farm

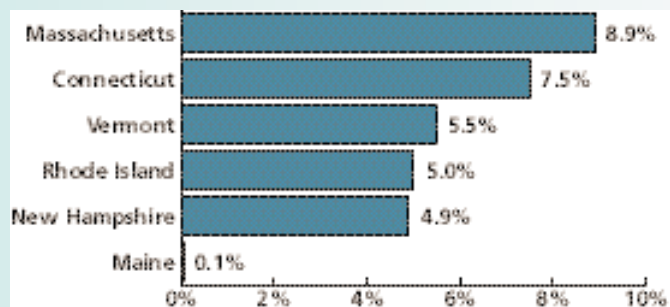
By Linda Fisher and Dennis Heffley

Even before Cary Grant and Myrna Loy emptied their hearts and wallets to build their country home, Connecticut was viewed as New York's rustic neighbor. Pastures gave way to bedrooms in the 1948 movie classic, "Mr. Blandings Builds His Dream House." More recently, bedrooms have yielded to corporate headquarters. Nevertheless, many Connecticut towns retain some of the rural charm that has lured so many New York workers into lengthy commutes.

For two decades, Connecticut policymakers have debated how much we should pay to protect farmland. Since 1978, the state has spent about \$76 million to preserve nearly 26,000 acres — an area about the size of Middletown — on 172 farms. Instead of buying land outright, as in conservation trusts, Connecticut's Farmland Preservation Program purchases farmers' development rights only, restricting the land to agricultural uses while leaving it in private hands. Eighteen states operate purchase of development rights (PDR) or conservation easement programs; others employ alternative methods to protect farmland, including tax breaks, zoning reforms, and transferable development rights.

Connecticut has preserved 7.5% of its crop and pasture land, placing it second among New England states (see bar chart). The program's goal of preserving 130,000 acres would limit development on about 38% of Connecticut's existing crop and pasture land. Federal help in reaching that goal has been available since 1996, but states still bear most of the direct costs. Less clear are the size and incidence of the indirect costs of PDR programs.

Connecticut Ranks 2nd Among New England States in the Percentage of Crop and Pasture Land Preserved (1997)



Sources: Connecticut's Farmland Preservation Program, Annual Report, 1998; and Statistical Abstract of the United States, 1997.

Operation and Costs

Here's how the program works. Farmers start the process by offering to sell their development rights to the state. Whether the state opts to purchase the rights depends on development pressure — the probability that the land will be sold for other purposes — as well as acquisition cost, productivity and suitability of the land for farming, and the farm's contribution to Connecticut's agricultural viability. An assessment of the market value of the land in commercial or residential use, less the value of the land in agricultural use, determines the "value of development rights" — a lid on what the state will pay, but a figure that depends on the accuracy of the developed and agricultural assessments. An overly optimistic developed assessment or an unrealistically low agricultural assessment gives a higher bargaining limit. The state may negotiate a payment below this figure.

Farmland preservation, however, also entails costs beyond the direct public outlay. There are two main indirect costs of the PDR program. First, by trimming the supply of developable land, thereby boosting its market price, the

PDR program raises the cost of new construction. The resulting higher prices of housing and nonresidential space potentially benefit current property owners, but home-seekers, renters, or new businesses might suffer. The size of this “supply-restriction effect” depends on the total acreage set aside, the location of preserved areas relative to growth centers, the costs of clearing other land, especially woodland, and the demand for in-state development. The effect can be minimized if development right purchases occur mainly in low-density areas, where development pressure is weak, but this conflicts with the goal of protecting the most threatened areas. In Connecticut, 88% of the preserved farmland lies in towns with population densities below the statewide average of about one person per acre, so effects on the market price of developable land are probably small, thus far. But the state has purchased development rights for only a fifth of the farmland it plans to preserve.

Another potential indirect cost of preservation arises because participants are not required to keep the property. After securing payment for the development rights, a farmer may later sell the land. The buyer must conform to agricultural uses, but, as some communities have found, the new activity may be a more intensive (offensive) agricultural use than the one it replaced. Livestock or poultry production, for example, or activities that make heavy use of pesticides can jeopardize groundwater quality and wildlife habitat.



Benefits

One goal of the program is to maintain in-state farm production. Keeping local farmers in business clearly benefits them, but the benefits to consumers of having local foods should be reflected in a willingness to pay more for native products. If fresh, local foods were sufficiently valued, farmers might need little more incentive to keep their farms active. But, in a world where consumers are unwilling to pay a large premium for local products and where even perishable foods are routinely shipped thousands of miles and sold at lower prices, despite the transport costs, it's difficult to argue that Connecticut needs to be any more self-sufficient in agriculture than in fuel oil or other essential goods.

Advocates also claim that the PDR program provides essential open-space. But there are other public and private programs, such as the Connecticut Recreation and Natural Heritage Trust Program, that purchase open-space outright, allow better public access for recreation, and provide more permanent protection from development.

Under the PDR program, if the landowner petitions and receives approval by the local governing body and the Commissioner of Agriculture, based on public interest considerations, a simple majority of local referendum voters can lift the restriction, allowing the landowner to repurchase the development rights.

Yet valid reasons exist to back farmland preservation through PDRs, and polls show that many taxpayers endorse the concept. Economists describe most of the perceived benefits of preservation programs as “positive externalities” — advantages that accrue to third parties without direct payments. A recent Rhode Island survey, for example, found that protecting groundwater and wildlife habitat, preserving natural places, and providing local food are key motives for public support of preservation programs. Other surveys cite cultural and historical values as important factors. And, even though farmers can deny public access to PDR farmland, visual access may be enough. Environmental economists have documented individuals' willingness to pay simply to ensure the *existence* of some resources, even ones they never see or visit.

Overpaying?

Support for farmland preservation also depends on public perceptions of whether the program is fairly and efficiently run. Fairness is tough to judge. Because location, soil quality, and other factors affect the market value of development rights, farmers should (and do) get paid different amounts. For the fourteen purchases made by the Department of Agriculture in 1995-1997, development right prices ranged from \$1,667 to \$5,095 per acre. Over the full history of the program, the range is even larger—from virtual gifts to the state to more than \$10,000 per acre. Of more concern than the dispersion of prices, some evidence suggests that the average payment of almost \$3,000 per acre may be too high.

If farmers are being paid the true market value of their development rights, selling their rights to the state should offer the same expected payoff as keeping their rights and selling the land outright with no restrictions. Differently put, if payments are “about right,” farmers might have to be actively recruited into the program. But the program's 200 pending applications, covering an additional 24,000 acres, suggest that expected PDR payments are quite attractive.

In any event, program efficiency might benefit from a more competitive application process, where farmers must indicate the lowest price they will accept for development rights on a specific parcel, understanding that too high a price, or too poor a parcel, may exclude them from consideration. But economics does not always govern policy. Public support for farmland preservation is strong and, as the Blandings' lawyer and close friend observed, “Maybe there are some things you should buy with your heart and not your head. Maybe those are the things that really count.”

Price Differences Widen Across Regions of the State

By Steven P. Lanza

According to *The Connecticut Economy's* annual survey of regional prices, there is a widening gap between the price levels of the state's highest and lowest priced regions. Part of the explanation for this growing disparity in prices may well lie in the differential economic forces of recovery at work in the regions.

Each quarter we conduct a general price survey to measure statewide price changes. This quarter we examined grocery and department store prices in four population centers in the state—Hartford, New London, New Haven, and Stamford—to compare differences in the cost of living and to explore differences in price changes across regions. Regional housing costs, which we report each quarter in our labor market data pages (pp. 16-17), were not part of this special survey. Results from the survey suggest that, with prices moving up faster in high-priced Stamford, and more slowly in low-priced New London, the gap in regional prices is once again widening.

The Price Level

In past years, our regional price surveys showed a narrowing gap in prices across the state. But since our survey last year, that gap has grown. In 1997, prices varied from 2.9% above to 1.7% below the average for the state as a whole. This year, prices vary from 3.9% above to 4.2% below the statewide average.

As expected, Stamford remains the high-price leader. Prices in Stamford averaged 3.8% above typical Connecticut prices. With the exception of alcoholic beverages, prices for all other types of items exceeded statewide averages. Discount and department store items cost 3.6% more than average, groceries cost 3.5% more than average, and fast food costs 7.9% more than average. But beer, liquor and wine cost about 2.6% less in Stamford than in other parts of the state, reflecting, perhaps, stiffer competition from New York merchants.

Knocking Hartford out of the coveted low-price position, New London this quarter registered prices that were 4.2% lower than the average of the other four regions. And, coincidentally, New London's prices were the opposite of Stamford's. With the exception of alcoholic beverages, prices for all other types of items in New London fell short of statewide averages. Discount and department store items cost 5.0% less than

average, groceries cost 1.3% less than average, and fast food costs 7.4% less than average. Alcohol, however, costs 0.9% more in New London than in the other regions.

Despite losing its low-price distinction, Hartford's prices remain low—3.8% below average, in fact. All categories of items cost less than statewide averages. Discount and department store items cost 5.4% less than average, while groceries cost 1.9% less. Fast food is 8.0% below average and alcoholic beverages are 2.1% below average.

And in a reversal over the year before, New Haven moved from being a below average to being an above average cost region. Only grocery items, at 1.2% below average, cost relatively less here. Fast food averages 2.7% higher, discount and department store items average 3.7% higher, and alcoholic beverages average 4.7% higher.

Price Changes

The reason for the growing price gap and for the shifting fortunes of the regions is found in the behavior of prices over the past year. Since we last surveyed them, in 1997-Q2, average prices in the four regions have increased by 4.8%. But Stamford prices have risen 5.5%. Since prices there rose faster than average, Stamford widened its lead over the rest of the state in its high cost of living. By contrast, Hartford's prices were, last year, the lowest of the regions. And prices there rose at a below average rate of 2.1%. But New London's prices last year were also lower than the statewide average. And this year, prices rose just 0.9%. Since New London's prices rose much more slowly than the other regions, and since its prices were already low, New London became this year's low cost region. In New Haven, however, prices rose faster than in any other region—6.7%. Although New Haven was a below average cost region last year, that sharp price rise was enough to turn it into an above average cost region this year.

Why should prices rise quickly in some regions and slowly in others? Economists have long recognized that prices reflect the influence of local forces of demand and supply, from income, tastes, population, and the availability of substitutes, to the competitive conditions of the market, the cost of production and proximity to sources of supply. Connecticut's regional price changes may well reflect influences on demand and supply from differing

forces of recovery in the different regions of the state.









In general, prices are rising more rapidly in those areas of the state where prices are already high and workplace earnings are growing the fastest. In New Haven, for example, average weekly manufacturing earnings grew about 4.3% this past year—the fastest of the four regions. Prices, too, grew faster there than in any other region of the state. By contrast, prices are rising more slowly in those areas of the state where jobs are plentiful. In New London, for example, jobs grew about 2.6% this past year—the fastest of the four regions. Meanwhile, prices rose just 0.9%.

There may be good reason why earnings fuel inflation while job growth dampens it. High earnings would be expected to place demand side pressure on prices while rising jobs reflect an expanding capacity to supply output, which could cushion prices. Still, with such limited data, there is a risk in overstating these conclusions. And there is no guarantee that earnings are spent in markets where they're earned, or that output is supplied in markets where it's produced. Nevertheless, Connecticut's experience with differential price increases is consistent with what economic principles might lead one to expect.

The graphic below shows the results of this quarter's regular statewide survey.

Changing Connecticut Prices

Percent Change 1997-Q2 to 1998-Q2

	Food	3.6%
	Housing	3.0%
	Apparel	4.8%
	Transportation	1.8%
	Medical	2.2%
	Entertainment	4.6%
	Miscellaneous	5.8%
	Overall	0.4%

Defying Setbacks, GDI Advances Yet Again

By Steven P. Lanza

Despite a disappointing performance from four of seven measures of economic fitness, the General Drift Indicator (GDI) continued to add to the gains it has made throughout the current recovery. Indexed so 1985 = 100, the GDI measures quarter-to-quarter changes in three coincident and four leading, seasonally-adjusted economic variables.

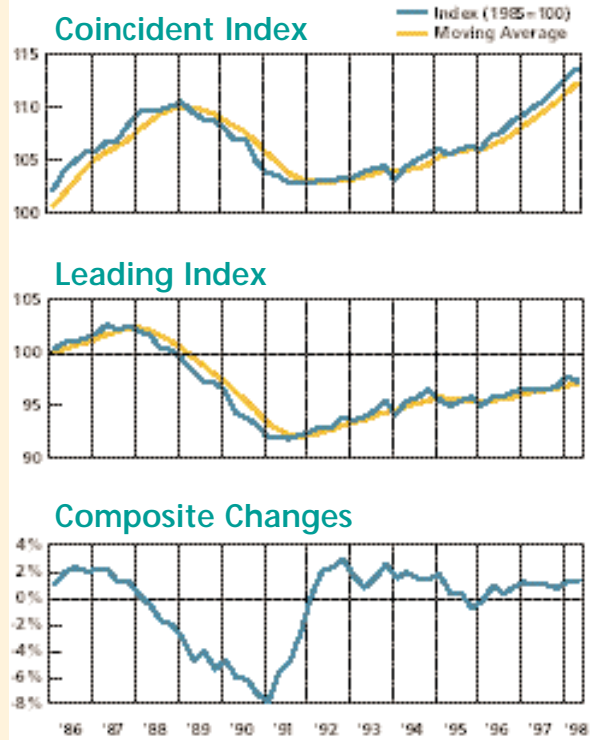
The coincident index, which tracks the state's economy through its cyclical highs and lows, measured 113.6 in 1998-Q2, up 0.7% from a revised 112.7 in 1998-Q1. Since the recovery began, the index has averaged quarter-to-quarter gains of 0.4%; so this quarter's gain is better than usual.

Even so, the growth in the coincident index can be attributed almost exclusively to an increase in only one of its three components—

personal income. Seasonally adjusted employment registered a tepid 0.2% increase between 1998-Q1 and 1998-Q2 (although it was up fully 2% over the same period the year before). Manufacturing output grew at a comparably lackluster 0.1% between quarters. Personal income, however, logged an impressive 2.3% rise between quarters, enough to pull the coincident index up to yet another record high.

But the leading index, which tries to anticipate the condition of the economy several quarters ahead, buckled under the burden of rising initial unemployment claims and falling housing permits and dropped from a revised 97.7 in 1998-Q1 to 97.3 in 1998-Q2. Initial unemployment claims, although down 7.6% from one year ago, rose 7.9% between 1998-Q1 and 1998-Q2. And housing permits, up 14.7% from one year ago, fell 16.5% between the quarters. A 5.3% rise in help wanted ads, however, limited the drop in the leading index to just 0.4%.

GDI Components



Connecticut Economy: Strong for How Long?

By Kathryn Parr, Fernando Lugo-Camacho and Stan McMillen

Our current forecast predicts that growth in Connecticut's total jobs will moderate over the coming year. We expect jobs to increase by 1.5%, 0.8%, 1.0% and 1.4% in year-over-year rates from 1998-Q3 through 1999-Q2. These trends reflect seasonal changes in the demand for labor and indicate a steady upward trend in employment levels (see the accompanying graph). A tight labor market may slow job growth even more. Our model fails to address labor supply tightness.

Our forecast of jobs is driven by four economic variables: the record of job growth to this point, gross domestic product, Connecticut housing permits, and average weekly real earnings in Connecticut manufacturing.

After strong growth in the first quarter of 1998 relative to the first quarter a year ago (47%), growth in housing permits dropped to 19% in quarter two. We

expect a lower, 17%, growth next quarter, and 24% growth in the last quarter of this year.

The growth in Connecticut average weekly real manufacturing earnings is also expected to moderate. Real earnings are expected to grow by only 1.6% in 1998-Q3, which is a notable decline. Thereafter, year-over-year growth rates hover between 2% and 3%, declining to less than 1% in 2000-Q4.

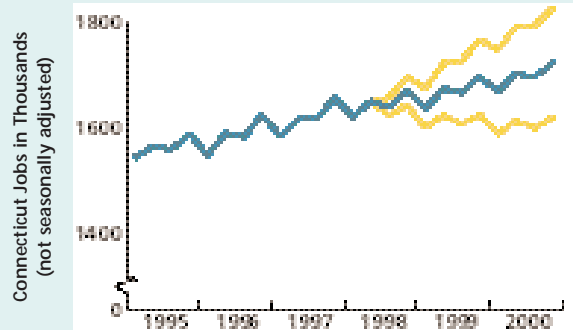
With low inflation and the uncertain impact of the Asian crisis, the Fed has so far held interest rates steady. In addition,

during the second quarter of 1998, the total unemployment rate for Connecticut was quite low at 3.8%. This is below what is typically regarded in the United States as full employment and may result in further tightening of the local labor market and more inflationary pressure.

Further deterioration in Asia or an increase in inflation could cause a slowdown in the economy. Overall, our forecast predicts good growth in the immediate future with moderated growth through the beginning of next year.

Jobs Trend Upward Despite Seasonal Swings

Beyond 1996-Q2, the green line shows the predicted value of jobs, and the yellow lines show the margin of error for the prediction.



Dip in Consumer Confidence: Speed Bump or Slowdown Ahead?

By Chase H. Harrison,
University of Connecticut Center
for Survey Research and Analysis

July's consumer confidence dipped slightly in Connecticut, New England, and the nation. Despite this dip, confidence remains at extremely high levels. Consumer confidence has rocketed upward in the past three years, in part due to strong economic conditions. As a whole, consumers—unlike some analysts—have not had substantial concerns about an impending end to this economic boom. What remains to be seen is whether July's slight dip is a temporary decline or the start of a continuing drop in consumer confidence.

The national Consumer Confidence Index (CCI) dropped to 135.4, down from 137.2 in April, while the Connecticut CCI dropped to 137.1 from an April measure of 142.3 and the New England CCI dropped to 124.9 from an April measure of 136.5. The more modest national drop is caused by a slight increase in current assessments, which was offset by a slightly larger dip in future expectations. Although assessments of current economic conditions and expectations for the future both dropped slightly in Connecticut and New England, Connecticut consumers

remain slightly more optimistic about the present and the future when compared to consumers across the nation. The Consumer Confidence Index is scaled against a national base of 100, recorded by the Conference Board in 1985.

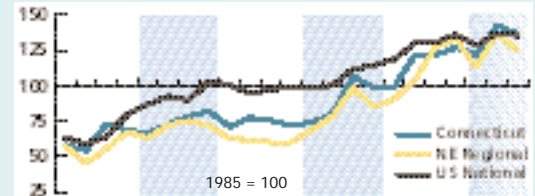
This quarter marks the second time in the past year that consumer confidence, measured on a quarterly basis, has experienced a slight dip. The first dip followed the Asian economic crisis at the end of last year. Although the Asian crisis only caused a temporary fluctuation in the upward trajectory of consumer confidence, many analysts have predicted that lower exports to Asian nations will lead to a more sluggish U.S. economy.

Consumers are more optimistic about current economic conditions than they are about prospects for the future. This is consistent with an interpretation that finds consumer expectations coming into line with those of professional analysts. Consumers, however, were also considerably more sanguine about the economy, compared to professional economists, before the Asian crisis. So this disparity is nothing new. The July dip could be the start of an extended slowdown or a mere pause for a speed bump on an open road.

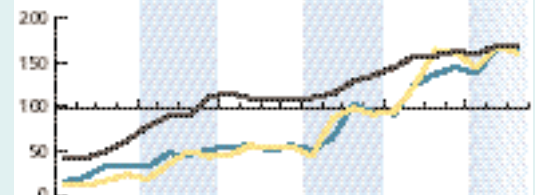


Consumer Confidence Survey

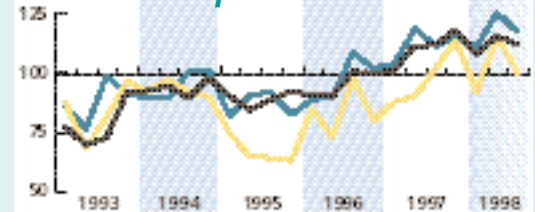
Overall Confidence



Current Assessments



Future Expectations



Source: National and New England data are from the Conference Board, Inc.

Beyond the Traditional Labor Force: Parents and Retirees

By Chase H. Harrison

Connecticut businesses may need to develop new ways to help employees mix work with parenting responsibilities or retirement as they attempt to fill new jobs with a shrinking labor-force. William A. McEachern has outlined the simultaneous growth in jobs and decline in total labor-force participation in Connecticut (see articles by him in this issue). Although the labor-force is traditionally defined as those working or looking for work, an alternative way of looking at the labor-force is to explore the potential labor-force, or all adults in the state. A new survey commissioned by *The Quarterly* and conducted by the University of Connecticut Center for Survey Research

and Analysis explored the reasons why people do not work, or work less than full-time.

Part-time workers have been absorbed into the current Connecticut full-time workforce at a small but notable rate. Although 91% of Connecticut residents who currently work full-time have worked full-time for the past two years, about one-in-fifty (2%) full-timers have worked part-time during this period.

One possibility for filling new jobs is to convert more part-time workers into full-time workers. Although nearly one-in-ten (9%) of all Connecticut adults currently works part-time, 27% of these part-timers are also seeking additional work. The remaining part-time workers—representing 7% of all adults in Connecticut—are people who work part-time by choice. The most common reasons these people work part-time, rather than full-time, is because they have parental responsibilities or are retired.

Since retirees and people with parental responsibilities comprise an important component of the part-time workforce, retirees and parents who do not work at all represent a prospective source of new part-time workers. Approximately 3% of all Connecticut adults do not work because of parental responsibilities, and approximately 14% of all Connecticut adults are retired. Converting these adults into part-time workers can represent an additional source of labor not measured by unemployment statistics, which are based exclusively on individuals actively looking for work.

The survey was conducted by the Center for Survey Research and Analysis at the University of Connecticut. A total of 503 randomly selected adults were interviewed by telephone from July 8 - 15, 1998. The sample error for a survey this size is + /- 5%.

	Jobs	Empl.	J/E(%)
Bridgeport LMA	182,200	209,323	87.0
Ansonia	4,380	8,251	53.1
Beacon Falls	790	2,736	28.9
Bridgeport	47,580	57,753	82.4
Derby	4,940	6,067	81.4
Easton	760	3,121	24.4
Fairfield	22,330	25,895	86.2
Milford	30,080	25,308	118.9
Monroe	5,850	9,286	63.0
Oxford	1,580	4,654	33.9
Seymour	4,050	7,266	55.7
Shelton	19,480	19,024	102.4
Stratford	26,360	23,800	110.8
Trumbull	14,020	16,162	86.7
Danbury LMA	84,310	105,647	79.8
Bethel	6,020	9,460	63.6
Bridgewater	220	927	23.7
Brookfield	7,030	7,906	88.9
Danbury	43,000	34,746	123.8
New Fairfield	1,460	6,852	21.3
New Milford	8,840	13,507	65.4
Newtown	6,400	11,444	55.9
Redding	860	4,341	19.8
Ridgefield	8,500	11,816	71.9
Roxbury	220	1,013	21.7
Sherman	330	1,614	20.4
Washington	1,430	2,021	70.8
Danielson LMA	20,180	31,694	63.7
Brooklyn	1,220	3,601	33.9
Eastford	410	794	51.6
Hampton	170	1,001	17.0
Killingly	7,230	8,282	87.3
Pomfret	1,700	1,908	89.1
Putnam	5,530	4,254	130.0
Scotland	140	792	17.7
Sterling	380	1,423	26.7
Thompson	1,550	4,510	34.4
Union	90	382	23.6
Voluntown	270	1,223	22.1
Woodstock	1,490	3,524	42.3
Hartford LMA	594,910	560,828	106.1
Andover	290	1,469	19.7
Ashford	410	2,031	20.2
Avon	8,340	6,957	119.9
Barkhamsted	590	1,945	30.3
Berlin	10,620	8,572	123.9
Bloomfield	16,770	9,542	175.7
Bolton	1,030	2,572	40.0
Bristol	19,800	30,265	65.4
Burlington	850	4,084	20.8
Canton	2,390	4,402	54.3
Chaplin	320	1,107	28.9
Colchester	3,290	6,241	52.7
Columbia	750	2,507	29.9
Coventry	1,040	5,724	18.2
Cromwell	5,800	6,412	90.5
Durham	1,520	3,234	47.0
East Granby	4,240	2,328	182.1
East Haddam	1,690	3,778	44.7
East Hampton	1,670	5,801	28.8
East Hartford	31,110	24,380	127.6
East Windsor	6,060	5,270	115.0

	Jobs	Empl.	J/E(%)
Ellington	2,380	6,427	37.0
Enfield	19,270	21,881	88.1
Farmington	25,750	10,589	243.2
Glastonbury	13,430	14,805	90.7
Granby	2,130	5,003	42.6
Haddam	1,320	3,957	33.4
Hartford	123,260	50,354	244.8
Harwinton	500	2,774	18.0
Hebron	1,410	3,991	35.3
Lebanon	750	3,222	23.3
Manchester	29,730	26,514	112.1
Mansfield	9,170	8,718	105.2
Marlborough	1,350	2,883	46.8
Middlefield	1,330	2,121	62.7
Middletown	28,440	22,491	126.5
New Britain	25,620	32,305	79.3
New Hartford	1,380	3,260	42.3
Newington	17,340	14,777	117.3

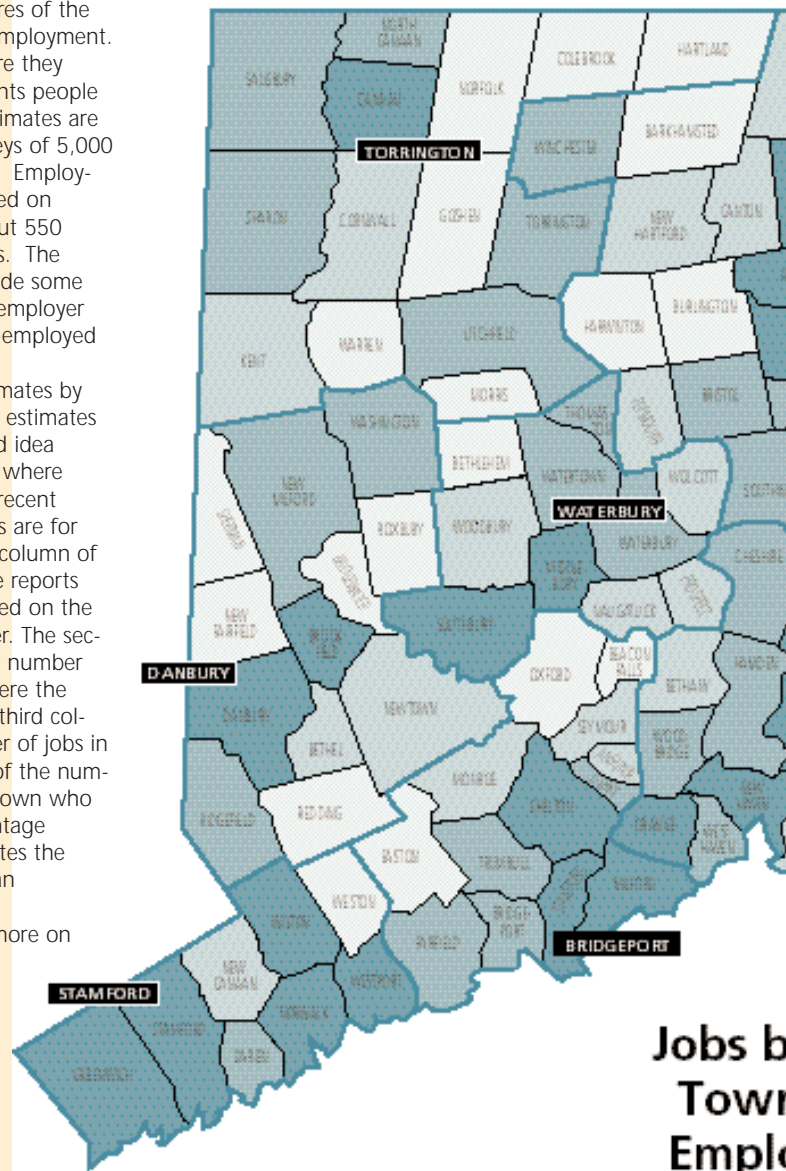
	Jobs	Empl.	J/E(%)
Plainville	8,510	8,861	96.0
Plymouth	2,470	6,025	41.0
Portland	2,850	4,385	65.0
Rocky Hill	11,510	9,111	126.3
Simsbury	12,160	11,155	109.0
Somers	2,020	3,844	52.5
South Windsor	11,120	12,624	88.1
Southington	16,590	19,868	83.5
Stafford	4,000	5,464	73.2
Suffield	3,510	5,470	64.2
Tolland	2,860	6,525	43.8
Vernon	9,680	15,806	61.2
West Hartford	26,390	26,282	100.4
Wethersfield	9,940	11,652	85.3
Willington	940	3,404	27.6
Winchester	4,100	5,727	71.6
Windham	9,020	9,595	94.0
Windsor	19,320	13,906	138.9

Reading the Centerfold

There are two measures of the work force: jobs and employment. Jobs count people where they work. Employment counts people where they live. Job estimates are based on monthly surveys of 5,000 Connecticut employers. Employment estimates are based on monthly surveys of about 550 Connecticut households. The household surveys include some workers missed by the employer survey, namely, the self-employed and domestic workers.

By comparing job estimates by town with employment estimates by town, we get a good idea where the jobs are and where workers live. The most recent town-level job estimates are for June of 1997. The first column of the accompanying table reports the number of jobs based on the location of the employer. The second column reports the number employed based on where the worker lives. And, the third column shows the number of jobs in the town as a percent of the number of residents in the town who are employed. A percentage exceeding 100% indicates the town has more jobs than employed residents.

See pages 18-19 for more on jobs and employment.



Developed by *The Connecticut Economy* based on estimates published by the Connecticut Department of Labor.

	Jobs	Empl.	J/E(%)
Windsor Locks	14,780	6,431	229.8
Lower River LMA	9,580	12,108	79.1
Chester	1,840	2,105	87.4
Deep River	1,290	2,515	51.3
Essex	3,510	3,268	107.4
Lyme	130	1,127	11.5
Westbrook	2,810	3,093	90.9

New Haven LMA	243,260	260,977	93.2
Bethany	990	2,642	37.5
Branford	13,920	15,261	91.2
Cheshire	12,610	12,758	98.8
Clinton	4,270	6,998	61.0
East Haven	6,720	13,805	48.7
Guilford	5,720	10,855	52.7
Hamden	19,050	27,715	68.7
Killingworth	590	2,766	21.3
Madison	4,850	7,816	62.1

	Jobs	Empl.	J/E(%)
Meriden	24,320	28,434	85.5
New Haven	72,040	54,169	133.0
North Branford	3,510	7,614	46.1
North Haven	22,180	11,686	189.8
Orange	8,370	6,294	133.0
Wallingford	23,410	21,492	108.9
West Haven	17,730	26,838	66.1
Woodbridge	2,980	3,834	77.7

New London LMA	133,360	132,705	100.5
Bozrah	740	1,428	51.8
Canterbury	460	2,586	17.8
East Lyme	4,690	9,085	51.6
Franklin	800	1,085	73.7
Griswold	1,770	5,518	32.1
Groton	28,060	17,398	161.3
Ledyard	16,420	7,913	207.5
Lisbon	600	2,169	27.7

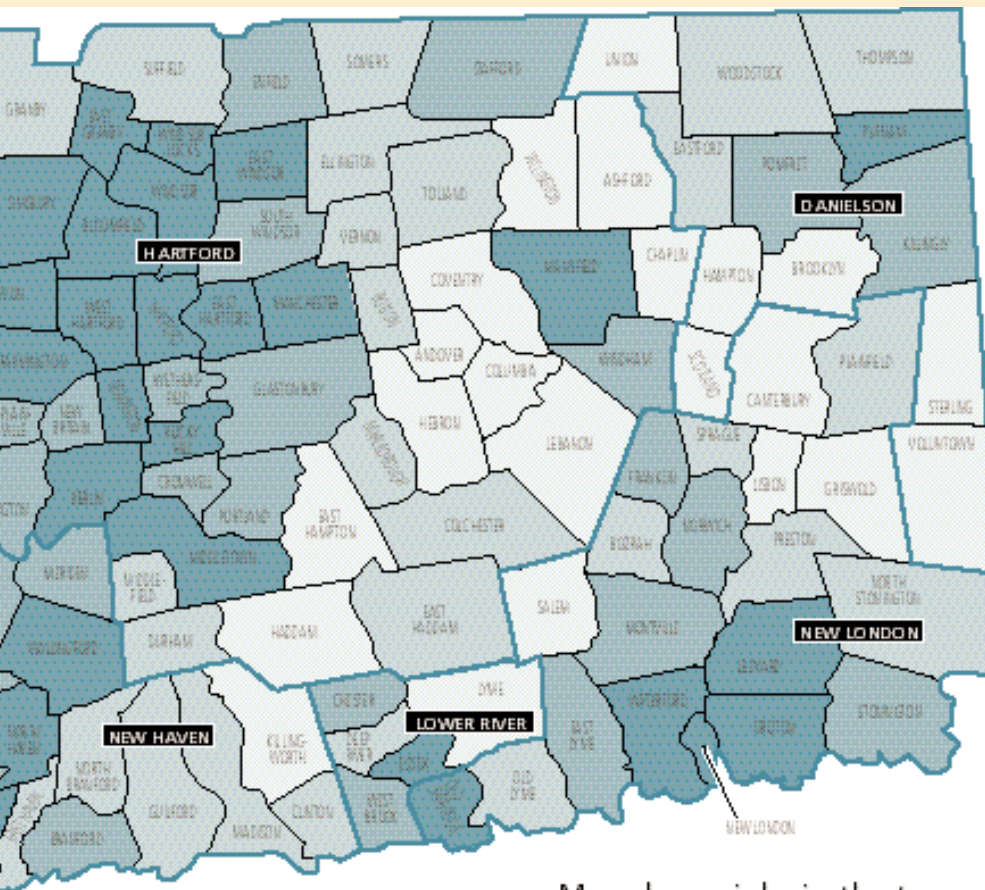
	Jobs	Empl.	J/E(%)
Montville	9,250	9,574	96.6
New London	16,590	11,941	138.9
North Stonington	1,450	2,817	51.5
Norwich	16,860	18,310	92.1
Old Lyme	1,990	3,717	53.5
Old Saybrook	5,580	5,550	100.5
Plainfield	4,770	7,539	63.3
Preston	1,130	2,731	41.4
Salem	700	2,035	34.4
Sprague	880	1,617	54.4
Stonington	7,180	9,689	74.1
Waterford	13,440	10,003	134.4

Stamford LMA	201,670	190,936	105.6
Darien	8,090	9,583	84.4
Greenwich	35,020	31,537	111.0
New Canaan	5,520	9,383	58.8
Norwalk	48,550	47,857	101.4
Stamford	78,020	64,779	120.4
Weston	970	4,765	20.4
Westport	16,350	14,190	115.2
Wilton	9,150	8,842	103.5

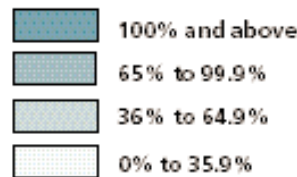
Torrington LMA	28,850	38,145	75.6
Canaan	890	656	135.7
Colebrook	80	801	10.0
Cornwall	350	841	41.6
Goshen	470	1,321	35.6
Hartland	170	993	17.1
Kent	1,170	1,951	60.0
Litchfield	3,530	4,293	82.2
Morris	240	1,119	21.4
Norfolk	350	1,087	32.2
North Canaan	1,630	2,097	77.7
Salisbury	2,270	2,294	99.0
Sharon	1,280	1,930	66.3
Torrington	16,340	18,103	90.3
Warren	80	659	12.1

Waterbury LMA	86,080	113,045	76.1
Bethlehem	420	1,900	22.1
Middlebury	3,380	3,300	102.4
Naugatuck	9,010	16,378	55.0
Prospect	2,180	4,525	48.2
Southbury	8,920	6,691	133.3
Thomaston	2,970	3,999	74.3
Waterbury	44,080	51,444	85.7
Watertown	9,900	11,919	83.1
Wolcott	3,140	7,945	39.5
Woodbury	2,080	4,944	42.1

Statewide **1,584,000** **1,655,000** **95.7%**



Map shows jobs in the town as percent of town residents who are employed



by Town Compared to n Residents Who are employed as of June 1997

Are Labor Shortages Killing the Expansion?

By William A. McEachern

In the Spring issue of *The Quarterly*, I expressed concern about Connecticut's flat labor force, suggesting that worker shortages might choke off the recovery ("Job Totals Rising, Labor Force Shrinking? Go Figure."). As if on cue, the following headline appeared recently "above the fold" on the *Hartford Courant's* front page: "Economic Growth Slowing in State" (7/30/1998). The report warned that, while a recession is not necessarily imminent, "the evidence of a slowdown is all around us." (Fleet Bank economist Nick Perna mused in the story "To me the real question right now is, are we going to start using the 'R' word again pretty soon.")

The placement and tenor of that story make it arguably the most visible and the most negative report on the state economy in the last half-dozen years. The story's main piece of evidence is that "since December, only 2,400 jobs have been added" to the state's economy. Let's review the evidence, particularly the jobs picture. Then we'll consider how additional jobs might be filled, even if the state's labor force remains flat.

Is Job Growth Slowing, or Just Taking A Breather?

The *Courant* story underscored the State Labor Department's estimates showing that Connecticut added only 2,400 new jobs between December 1997 and June 1998. That much is true. But let's put those job estimates in context. The point of initial reference, December, was an extraordinary month of job growth; December added 8,000 jobs above November totals on a seasonally-adjusted basis. In fact, the entire fourth quarter of 1997 was exceptional, with a growth of 18,200 jobs above the third quarter level. That was triple the average quarterly growth since the recovery began, and the largest job growth in more than a decade.

The history of Connecticut's current recovery shows that after every strong quarter of job growth, growth slowed considerably for the next quarter or two. The chart on the facing page depicts the percentage growth in seasonally-adjusted job totals from quarter to quarter since the job recovery began in earnest in the second quarter of 1994. Note that following each of the four "spikes" of exceptional growth, growth declined by more than half in the subsequent quarter. What's more, after three of the four growth spikes, job growth remained low for at least two quarters. So each quarter of sharp growth has been followed by a quarter or more of relatively modest growth. The

economy seems to catch its breath to absorb the growth spurt.

Thus, it should come as little surprise that the 4.6% growth rate in the fourth quarter of 1998, the highest in more than a decade, was followed by two quarters of much lower growth. In fact, a third quarter of slow growth may be in the cards. Still, jobs in the second quarter of 1998 stood 8,100 above the fourth-quarter 1997 level. This gain is in line with what followed earlier quarterly surges. The economic slowdown may have already begun, as the *Courant* story suggests, but we think that one or two more quarters of slack performance are necessary before making such a call.

We know that the job market is tight. For example, a recent study by the MetroHartford Millennium Project says that at the end of 1997, there were 4,622 open jobs among the 32 major Greater Hartford employers surveyed, 6.8% of the total number employed at these companies. The current concern is not so much that of flagging demand (though Asian problems and a cooling national economy loom), but the tightening labor supply. How can Connecticut's expansion continue if we run out of fresh troops? The balance of this article explores ways that job totals could grow even if the labor force doesn't.

Adding Jobs from the Existing Labor Force

Since estimates of Connecticut's labor force—the total employed plus those looking for work—have remained essentially flat for the last three years, it makes little sense to rely on an expanding labor force to fill new jobs. Given a flat labor force, where will new workers come from? Let me count the ways.

1. The ranks of the unemployed. The unemployment rate dropped to 3.8% in the second quarter of 1998. The lowest unemployment rate in the last two decades was the 3.0% achieved in 1988. If the unemployment rate dipped to that historic low, we could squeeze an additional 14,000 workers from the ranks of those currently unemployed.

2. Part-time workers. Based on *The Quarterly's* most recent poll, part-time workers account for about one in eight workers. And of those working part time, about one in eight say they are seeking full-time employment. Consequently, part-timers seeking full-time work represent a potential labor pool to fill about 30,000 full-time positions. Another subset of part-time workers actively seeks additional part-time employment; this group could take the jobs of part-timers who find full-time work.

3. Workers under 16. Although not counted in the labor force, 14- to 15-year olds can work part time during the school year and longer during the summer. The point is not that young people represent a critical labor pool but rather that every young worker who takes a job bagging groceries frees up an adult who can move to more produc-

tive, and higher paying, work. According to Connecticut's most recent demographic profile (see the chart on page 3), the number of 14- and 15-year olds will increase by about 5,000, or 6.2%, in the next two years.

4. The self-employed. Job estimates reported by the Labor Department do not include the self-employed, though this group is counted in total employment, a second measure of work activity (See "Straws in the Wind" on page 18 for the distinction between jobs and employment). A crude indicator of self-employment emerges by subtracting the job total from the employment total. In 1992, for example, employment exceeded jobs by 154,000. At that time many who had lost jobs, some still drawing severance pay, became self-employed consultants. Some actually were consultants, often working for the firm that let them go, but others preferred to call themselves consultants rather than unemployed. Since then, apparently a huge number of those who were self-employed found regular jobs—enough to narrow the gap between employment and jobs from 154,000 in 1992 to only 10,000 by the second quarter of 1998. Jobs in Connecticut jumped from 90.8% of employment in 1992 to 99.4% in 1998. Since one person can hold more than one job, no iron law keeps jobs from exceeding employment, but that has never occurred. The national ratio of jobs to employment in 1998 was only 80.9%. That's a remarkable difference—perhaps an unbelievable difference, as will be noted shortly.

An Expanding Labor Force

Granted, none of the alternatives discussed so far are very promising, particularly in terms of the skill level of workers. Diminishing returns set in as employers dig deeper into the labor force. And fewer workers are likely to be available with the skills in greatest demand, such as information technology. But you should remember that the Connecticut economy has added more than 100,000 jobs since the current recovery began, while the labor force was declining or flat. The workers who filled these jobs came from somewhere—they came from the above list of alternatives.

Labor force expansion is a more long-run solution. Here are two possibilities.

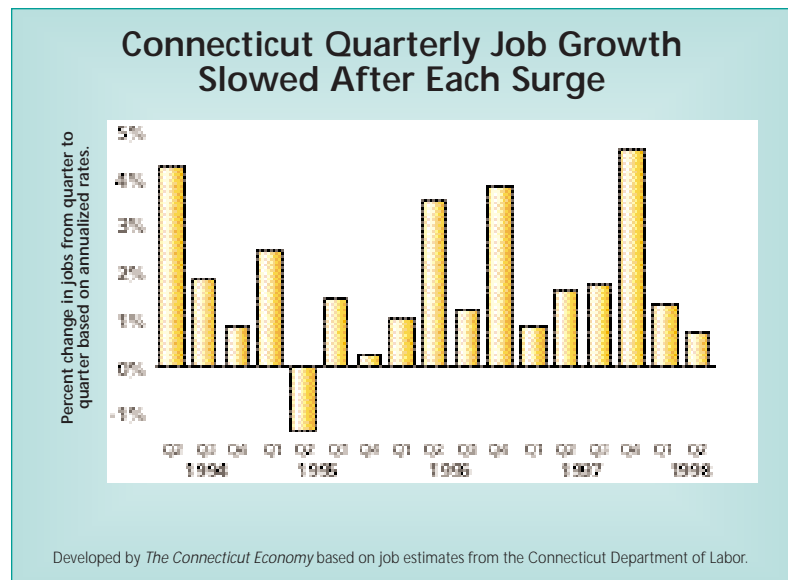
1. Draw Connecticut adults back into the labor force. There are tens of thousands of adults in Connecticut—retirees, so-called discouraged workers, non-working spouses, those now on welfare—who for one reason or another dropped out of the labor force or failed to join it. Connecticut's population of adults not now in the labor force represents the most promising source of additional workers.

2. Attract workers from other states. The loss of workers through net migration contributed to Connecticut's current labor shortage. Attracting workers from other states could be part of the solution. According to migration research, few workers during the 1990s came to Connecticut on spec—that is, without a job in hand. But a tightening job

market along with attractive pay, sooner or later, should attract workers from other regions. Unfortunately, nearly all regions around the country are doing well (some with unemployment rates below 2.0%), so our tight job market has less magnetic appeal. One solution has companies bringing their own labor supply. For example, Pratt & Whitney reportedly plans to bring much of its Florida-based Government Engine Business staff to Connecticut, a move that could result in a net increase of well over 1,000 workers. You might say that Pratt is moving the operation to Connecticut lock, stock, and barrel (an apt expression since Eli Whitney invented mass production using interchangeable parts—specifically the locks, stocks, and barrels of muskets).

Maybe Labor Force Estimates Are Too Low

Finally, another possibility won't itself solve Connecticut's tight labor market, but it might help explain some of what's been going on. Our labor force might, in fact, have expanded in recent years, but surveys have simply missed that growth. The federal government estimates employment, unemployment, and the labor force each month based on a survey of about 550 Connecticut households. In contrast, job totals are estimated by the state through a monthly survey of 5,000 Connecticut employers. Thus, job estimates are likely more reliable than the unemployment, employment, and labor force estimates. The wild difference between Connecticut and the nation in the ratio of jobs to employment (i.e., 99.4% versus 80.9%) suggests that estimates of Connecticut's employment, and hence the labor force, are simply too low. If the labor force is underestimated, this does not in itself resolve the current tightness in the job market, but it at least raises the possibility that a growing labor force will supply growing job demands.



The Regions: More Growth in the Second Quarter

By Edwin L. Caldwell

All ten regions registered employment increases in the first quarter of 1998 over the same period last year. In the second quarter, it was almost unanimous again, but not quite. One region, New Haven, suffered a negligible loss of jobs from the year before. Nevertheless, it joined the other nine regions in posting a decrease in the unemployment rate. New Haven was also the only region to report a decline in housing starts compared with the very strong second quarter last year.

BRIDGEPORT

Bridgeport added 925 Jobs to bring its total to 185,000 in 1998-Q2, a gain of less than 1% over the same period last year. Gains occurred in construction, trade, services, and government while FIRE (finance, insurance, and real estate), manufacturing, and transportation, communications, and utilities sustained losses. The unemployment rate dropped from 6.2% in 1997-Q2 to 4.5% in this latest quarter. Permits for the construction of new housing units increased 12% over a year ago, with the towns of Bridgeport, Fairfield, and Shelton showing particular strength. It now appears that Sikorsky Aircraft in Stratford will be humming through next year as Congress provides for substantial increases in both the Black Hawk and Comanche helicopter programs.

DANBURY

Danbury added close to 1,400 jobs to its payrolls in the last year, a gain of 1.6% over 1997-Q2. Construction and FIRE were particularly strong and services and government also added jobs. Trade and manufacturing experienced minimal losses and transportation, communications, and utilities saw a reduction of about 5%. The region's unemployment rate dropped to 2.6% in this latest quarter from 3.5% in the same period last year. Housing permits were on a roll in the second quarter, increasing more than 75% over 1997-Q2 on strength from very large projects in Danbury and Newtown.

DANIELSON

Jobs in Danielson increased by 2% in the second quarter, a gain of a little over 400 to a total of about 20,600. Only government posted a loss. Transportation, communications, and utilities and FIRE held steady while construction, trade, services, and manufacturing added jobs. Manufacturing registered the

largest percentage gain among the regions, but was only an eyelash ahead of Hartford and Lower River. Nevertheless, the highest unemployment rate in the state, 5.5%, continued to grip Danielson. But that was a substantial improvement over the 6.8% of a year ago. Permits granted for the construction of new housing units were up a strong 21% over last year with Pomfret and Woodstock providing much of the punch.

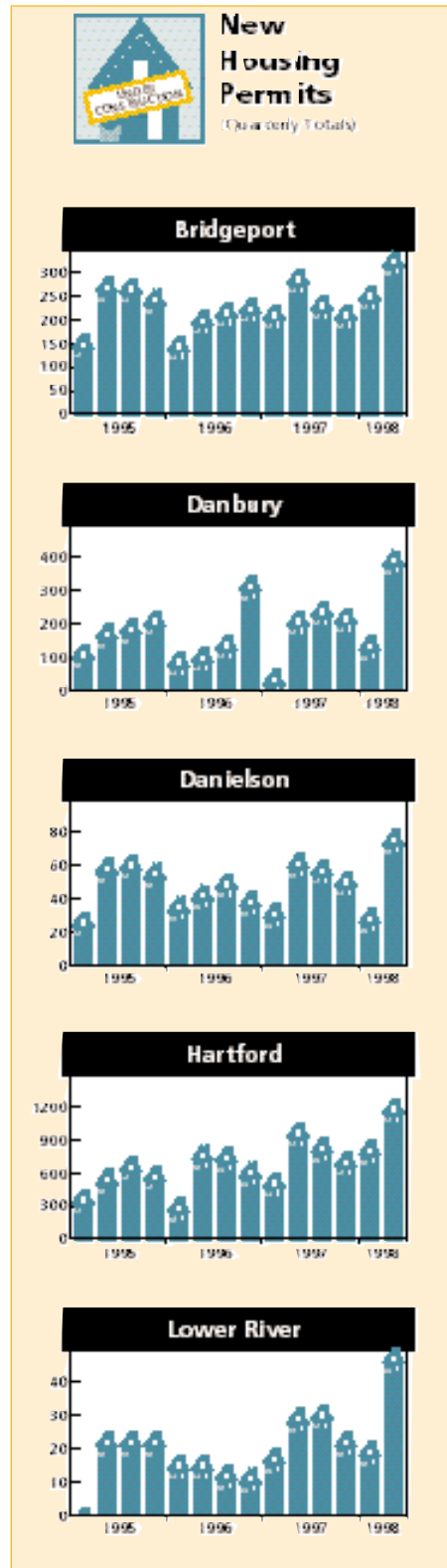
HARTFORD

Hartford posted a minimal gain to bring its total jobs to 601,500 in the second quarter. Among the sectors, increments were posted in manufacturing, services, and government. Losses were sustained in construction; trade; transportation, communications, and utilities; and FIRE. The loss in FIRE was very small, providing hope that the worst might be over for that sector. The unemployment rate dropped to 3.9% from 5.5% a year ago to about equal the state rate of 3.8%. But plenty of jobs are still available. Job orders registered with the State Job Service came to a little over half of all jobs listed for the state. Permits granted for the construction of new housing units increased 21% over the same period last year. Manchester led the pack and Avon, Ellington, Glastonbury, Middletown, Newington, and Southington were in the race.

The Hartford area received a lot of good news during this latest reporting period. Colt Manufacturing Co. of West Hartford received two contracts, together worth \$21 million, to produce new and rework old M-16 rifles, with options worth \$9 million for the same type of work. Precision Wood Products, a furniture and cabinet factory run by a non-profit agency in Hartford, opened recently and will provide 25 new jobs by the end of the year. EDS will create a new technology center in downtown Hartford to serve New England's insurance industry, bringing 300 new jobs in the next five years. Coca-Cola is planning a major expansion, potentially creating several hundred new jobs in East Hartford. APS Technology, which develops drill heads for the oil drilling and exploration industry, is moving its headquarters to Cromwell from Pennsylvania, which will create 30 new jobs for that area.

LOWER RIVER

Lower River continued its winning ways during this latest reporting period. It posted the largest percentage increase in jobs of all the regions—



more than 4%—and almost twice the rate of any other region to bring its total to more than 9,900. All sectors either gained or held steady. The increases in FIRE, government, and transportation, communications, and utilities were especially strong. The unemployment rate, at 2.7%, was among the lowest in the state. Permits granted for the construction of new housing units increased more than 50% over last year, with Westbrook contributing the largest share of the action.

NEW HAVEN

New Haven had the dubious distinction of being the only region to suffer a decrease in jobs, but the loss was tiny, -0.1%. Among the sectors, construction, trade, and transportation, communications, and utilities gained, services held steady, and the other sectors lost. In spite of its poor quarter, however, New Haven's unemployment rate remained at a respectable 3.8%—lower than five of the regions. But New Haven was the only region to experience a reduction in housing permits from 1997-Q2—down 24%. That was due primarily to failure to match the large numbers racked up last year by Cheshire and East Haven. This year Guilford and Wallingford were the leaders.

NEW LONDON

New London had another good quarter, adding more than 3,000 jobs to reach a level of more than 139,300. Its percentage gain was just a shade behind Stamford and Waterbury. All the sectors except manufacturing experienced increases. Manufacturing lost fewer than 300 jobs over the year, a small change compared with the losses of last year and before as the defense industries downsized. These past reductions have yet to be fully absorbed, resulting in an unemployment rate of 4.4% during this latest reporting period. That's only a touch under the rates in Bridgeport and Waterbury. New London had a satisfactory increase of 17% in the number of permits issued for the construction of new housing units in the most recent quarter compared to a year ago. East Lyme, Groton, Ledyard, Stonington, and Waterford were the leaders. Electric Boat got the good news that it will receive a contract for 13.6 million hours of design, planning, engineering, and technical services for the Seawolf, special mission attack, and Ohio class submarines. And the Southeastern Private Industry Council of New London awarded jointly a \$750 thousand grant from the U.S. Department

of Labor to the University of New Haven, Computer Science Corp., and Sonalysts to train dislocated workers for technical jobs.

STAMFORD

Of all the major regions, Stamford posted the largest rate of increase of jobs in 1998-Q2 over the same period last year, 2.8%, or nearly 6,000 jobs. But it was a mixed bag.

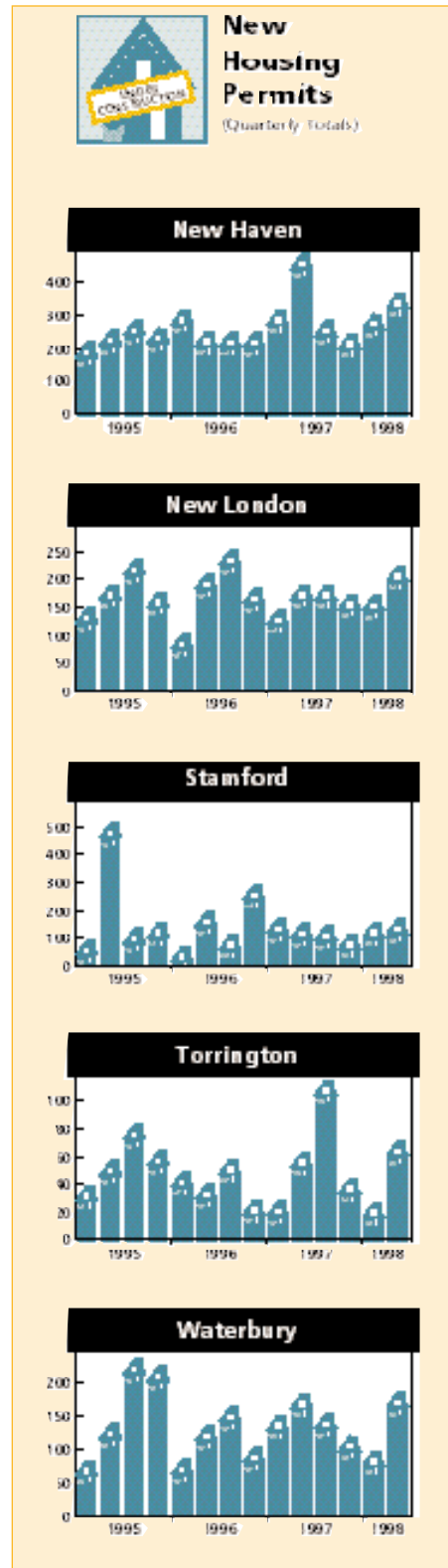
Construction; manufacturing; and transportation, communications, and utilities all suffered losses. The other sectors posted gains, some quite large, especially in FIRE, as Stamford continues to challenge Hartford as the state's leader in this industry. Once again Stamford posted the lowest unemployment rate among the regions at 2.5%. Permits granted for the construction of new housing units showed a satisfactory gain of about 10% in 1998-Q2 over the same period last year. The towns of Stamford and Greenwich reported substantial gains. Citibank Global Management plans to relocate about 300 people from Manhattan to Stamford and hire roughly 300 more workers over the next several years. And Arthur Andersen plans to add about 100 employees to its Stamford office. Good luck to both in finding them.

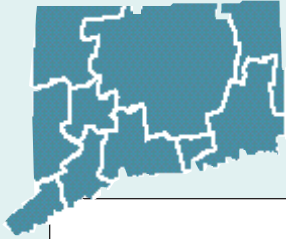
TORRINGTON

Torrington eked out a very small gain in 1998-Q2 to raise its job total to 29,000. Construction had a very large percentage gain and trade and government contributed more modestly. FIRE held steady and manufacturing, services, and transportation, communications, and utilities sustained losses. In spite of the small gain in overall employment, Torrington retained, at 2.9%, the fourth lowest unemployment rate among the regions. Permits issued for the construction of new housing increased 13% in 1998-Q2 over the same period last year. The towns of Litchfield and Torrington were responsible for most of the increase.

WATERBURY

Waterbury was second only to Stamford among the major regions in the percentage increase in total jobs in 1998-Q2 over the same period last year—2.5%, or about 2,200 jobs. Large increments appeared in construction and trade and smaller ones in manufacturing, services, and transportation, communications, and utilities. Government and FIRE suffered small losses. In spite of its substantial gains in employment over the past several quarters, the unemployment rate remains relatively high, tied with Bridgeport at 4.5% for the highest among the regions. Permits granted for the construction of new housing units remained nearly unchanged from a year ago. Southbury granted the most permits, but it was followed closely by seven other towns. Only Bethlehem and Middlebury lagged behind.





LABOR MARKET DATA

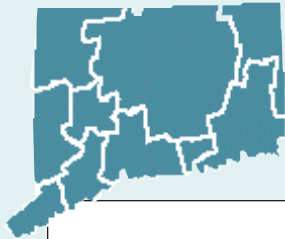
Labor Market Area	Labor Force		Nonfarm Jobs		Manufacturing Jobs	
	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago
Bridgeport	218.2	-0.9	185.0	0.5	39.8	-0.3
Danbury	109.1	1.1	86.8	1.6	18.8	-0.2
Danielson	33.7	0.9	20.6	2.0	6.1	2.2
Hartford	584.5	-0.8	601.5	0.4	94.6	2.2
Lower River	12.5	1.9	9.9	4.2	3.1	2.2
New Haven-Meriden	269.3	-1.8	250.4	-0.1	39.3	-1.1
New London-Norwich	155.3	0.8	139.3	2.2	24.4	-1.2
Stamford	197.0	2.1	208.5	2.8	27.3	-4.1
Torrington	39.1	-0.5	29.0	0.9	6.1	-3.7
Waterbury	119.4	1.2	88.4	2.5	19.2	1.2
Statewide	1720.9	-0.2	1647.4	2.0	277.1	0.1

Labor Market Area	Construction Jobs		Trade Jobs		FIRE* Jobs	
	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago
Bridgeport	6.7	5.8	41.4	0.5	10.2	-0.3
Danbury	3.9	10.5	21.7	-0.2	4.8	9.1
Danielson	0.9	3.7	4.7	1.5	0.6	0.0
Hartford	20.1	-0.7	123.3	-0.8	69.0	-0.2
Lower River	0.3	0.0	2.2	3.2	0.4	33.3
New Haven-Meriden	9.2	1.1	52.7	0.4	12.9	-1.5
New London-Norwich	4.6	2.2	27.9	0.6	3.8	2.7
Stamford	5.7	-1.7	46.2	1.8	26.4	13.2
Torrington	2.2	19.6	6.5	4.3	0.9	0.0
Waterbury	3.5	9.3	18.8	8.3	4.2	-1.6
Statewide	60.4	4.4	357.4	1.8	135.3	3.1

* Finance, Insurance & Real Estate

Labor Market Area	Service Jobs		Government Jobs		Utilities Jobs	
	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago
Bridgeport	58.7	0.6	21.1	1.1	7.2	-0.9
Danbury	25.1	2.6	10.1	2.0	2.5	-5.1
Danielson	4.7	5.2	3.1	-2.1	0.5	0.0
Hartford	173.2	0.8	93.9	0.3	27.3	-0.4
Lower River	2.6	0.0	0.9	12.5	0.4	20.1
New Haven-Meriden	88.8	0.0	31.2	-1.0	16.2	1.9
New London-Norwich	35.4	1.8	36.4	6.0	6.7	3.1
Stamford	74.9	4.0	18.1	1.7	10.0	-1.3
Torrington	9.2	-1.1	3.4	2.0	0.6	-14.3
Waterbury	26.6	1.1	12.4	-0.8	3.7	2.8
Statewide	512.3	3.3	228.1	0.4	76.7	1.9

Sources: Data provided by Connecticut Department of Labor. Statewide totals are not necessarily the sums of individual labor market areas.



LABOR MARKET DATA

Labor Market Area	Number Unemployed		Unemployment Rate (%)		Initial Unemployment Claims	
	1998-Q2 (000)	% Change Year Ago	1998-Q2	1997-Q2	1998-Q2	% Change Year Ago
Bridgeport	9.9	-27.4	4.5	6.2	1,246	5.7
Danbury	2.8	-24.1	2.6	3.5	413	11.0
Danielson	1.9	-17.6	5.5	6.8	216	-2.6
Hartford	22.6	-30.3	3.9	5.5	3,330	-12.0
Lower River	0.3	-28.7	2.7	3.8	*	*
New Haven-Meriden	10.3	-33.0	3.8	5.6	1,248	-28.9
New London-Norwich	6.8	-22.2	4.4	5.6	740	1.7
Stamford	4.8	-22.5	2.5	3.2	831	38.8
Torrington	1.1	-27.7	2.9	4.0	263	-12.3
Waterbury	5.3	-25.9	4.5	6.1	605	-6.1
Statewide	65.5	-28.0	3.8	5.3	8,519	-9.3

* Lower River included in Hartford LMA.

Labor Market Area	Average Weekly Earnings		Average Weekly Hours		Average Hourly Earnings	
	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago
Bridgeport	\$642.66	1.3	42.1	-0.9	\$15.26	2.3
Danbury	636.53	-1.4	42.9	-1.6	14.84	0.3
Danielson	465.04	-1.4	40.3	-1.7	11.53	0.2
Hartford	661.98	1.6	42.7	-0.2	15.50	1.8
Lower River	529.20	1.0	40.5	-3.3	13.07	4.6
New Haven-Meriden	617.75	2.1	42.0	-1.4	14.70	3.6
New London-Norwich	637.56	2.6	41.6	-1.2	15.31	3.7
Stamford	545.88	-2.1	39.9	-2.2	13.67	-0.2
Torrington	545.91	0.5	42.2	-1.6	12.95	2.2
Waterbury	600.97	0.9	43.1	-2.7	13.95	3.8
Statewide	\$632.86	3.9	42.9	0.9	\$14.76	2.9

Labor Market Area	State Job Service Postings		Housing Prices		Housing Permits	
	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago	1998-Q2 (000)	% Change Year Ago
Bridgeport	1,134	-23.7	\$196.2	4.1	341	12.2
Danbury	591	25.5	261.5	3.5	419	75.3
Danielson	189	6.8	*	*	81	20.9
Hartford	6,548	10.4	122.3	-1.1	1,260	20.6
Lower River	*	*	*	*	50	56.3
New Haven-Meriden	1,496	30.1	127.7	11.6	364	-24.2
New London-Norwich	575	24.2	184.1	11.5	224	17.3
Stamford	418	-38.8	449.4	0.2	168	9.8
Torrington	385	14.2	106.2	13.6	71	12.7
Waterbury	1,140	1.1	153.0	2.2	186	1.1
Statewide	12,476	5.5	\$215.8	2.9	3,164	14.7

* Lower River included in Hartford LMA. * Markets are too small for reliable estimates.

Sources: Labor data are from CT Department of Labor. Statewide totals are not necessarily the sums of individual labor market areas. Housing permits from CT Department of Economic and Community Development. Housing prices, from UConn's Center for Real Estate and Urban Economic Studies, are preliminary.

Job Machines and Bedroom Communities

This issue's centerfold (pp. 10-11) focuses on two measures of the work force: jobs and employment. The job total, which is based on a survey of about 5,000 Connecticut employers, including nearly all the large ones and a sampling of smaller ones, gets the most attention. Job totals are reported monthly for the entire state and for each of the ten labor markets. Estimates for each town appear only once a year with a substantial lag. The most recent town estimates are for June 1997.

The second measure of the work force, *employment*, reflects a federal survey of about 550 Connecticut households and is reported monthly statewide, by labor market, and by town. This survey captures some workers missed by the employer survey, such as the self-employed and domestic workers, but has a greater margin of error.

Jobs and employment measure worker activity in different ways. Jobs count people where they work; employment, where they live. For example, someone working in Hartford and living in Bristol gets counted in Hartford's job total and in Bristol's employment total. By comparing job estimates with employment estimates by town, we can get a good idea where the jobs are and where workers live.

The first column of the centerfold's table reports the number of jobs in each town. The second column identifies the number of people in each town who are employed. The third column shows the number of jobs in the town relative to the number of residents in the town who are employed; a figure exceeding 100% indicates that the town has more jobs than employed residents, and thus imports workers on balance (or exports jobs on balance).

The centerfold maps town-by-town information on the relation of jobs to employment. The darkest green towns have more jobs than employed residents, and thus are net job producers. In all, 40 of the state's 169 towns have more jobs than employed residents. The biggest cluster of net job producers occurs in the Hartford region, shown by the dark green patch of 15 towns. A dark green streak also runs south along the spine of the state, following Interstate 91 from the Hartford cluster to a smaller cluster in the New Haven region, and then runs west along the coast to Stamford, where five of the eight towns in that labor market area are dark green. The only other notable cluster of net job producers in the

state is a four-town bunch in the New London area.

Hartford ranks first in percentage terms as a net job producer at 244.8%, meaning that the city's 123,260 jobs were 244.8% of the 50,354 employed city residents. The balance of the top six ranking towns are Farmington, Windsor Locks, Ledyard, North Haven, and East Granby. On average, in these top six towns, there are about two jobs relative to each employed resident. Five of the top six towns also ranked in the top six in 1992; the newcomer, Ledyard, is the home of Foxwoods.

The bottom six towns in percentage terms are Colebrook, Lyme, Warren, Hampton, Hartland, and Scotland. These small, rural, "bedroom" communities could be described as where people go to "get away from it all." But all lie within commuting distance of Greater Hartford's job machine—three east of the Connecticut River and three west. These bottom six towns average only about one job relative to seven employed residents. Half these towns also ranked in the bottom six in June of 1992.

If jobs in the town exceed the number of employed residents, then the town most likely imports workers to fill town jobs. Thus, we could also rank towns based on the *number* of "imported" workers and "exported" workers. The top six net importers of workers, measured (in parentheses) as jobs in the town minus employed residents, are Hartford (72,906), New Haven (17,871), Farmington (15,161), Stamford (13,241), Groton (10,662), and North Haven (10,494). These same six towns also ranked as the top six net importers of workers in June of 1992, demonstrating remarkable stability in this measure.

On the flip side, the top six net "exporters" of workers, measured as employed residents minus jobs in town, are Bristol (10,465), Bridgeport (10,173), West Haven (9,108), Hamden (8,665), Naugatuck (7,368), and Waterbury (7,364). Perhaps it's a sign of the times that two of the state's largest cities, Bridgeport and Waterbury, did not generate enough jobs to match the number of employed residents. Dare we call them bedroom communities?

FIRE Up, Manufacturing Down

Connecticut's real gross state product (GSP) was revised upward by federal statisticians for 1993, from a decline of 0.1% to a growth of 0.8% (national growth that year was 2.3%). For 1994 GSP growth was revised upward from 1.8% to 3.0%

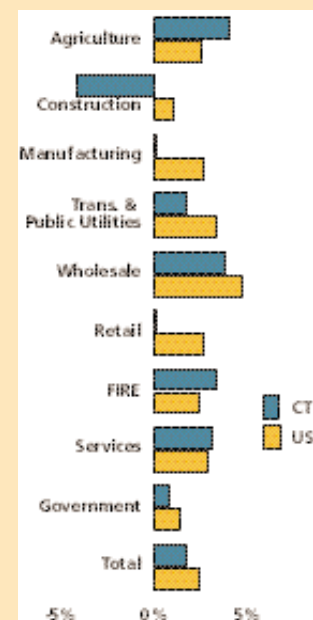
(national growth was 4.2%). GSP grew an estimated 3.0% in 1995 (national, 2.6%) and 2.6% in 1996 (national, 3.2%). Between 1992 and 1996, real GSP grew an average of 2.3% per year versus a national average of 3.1%. But GSP *per capita* grew at an average annual rate of 2.3% in Connecticut between 1992 and 1996 (versus a national average of 2.1%).

Let's step back and take a longer view. Between 1987 and 1996, Connecticut's real GSP growth averaged 1.8% per year; the nation averaged 2.4%. The accompanying bar chart compares growth by sector between 1987 and 1996 for Connecticut and the nation. While six of Connecticut's nine sectors lagged the national average, agriculture, FIRE (finance, insurance, and real estate), and services grew faster than the national average.

Connecticut's manufacturing output grew hardly at all—averaging only 0.1% per year from 1987 and 1996. U.S. manufacturing output growth averaged 2.7% per year. The value of manufacturing as a percent of all output in Connecticut dropped from 21.3% in 1987 to 18.4% in 1996. Nationally, that share *increased* from 18.6% to 19.1%. Connecticut's manufacturing share thus has gone from ranking above the national average to ranking below it.

But manufacturing jobs still account for a larger fraction of all jobs in Connecticut than in the nation. Being above average

Average Annual Change in Real Output by Industry in Connecticut and the Nation: 1987 to 1996



Developed by *The Connecticut Economy* based on annual output estimates from the U.S. Department of Commerce.

in job share but below average in output share suggests either that Connecticut's manufacturing workers are less productive than those in the nation, or that Connecticut's non-manufacturing workers are more productive than their counterparts across the nation. I think the latter explanation is more likely, as evidenced by Fairfield County's success, which we turn to next.

Fairfield County Dynamo

Although manufacturing output in Connecticut now accounts for a smaller fraction of all state output than is the case nationally, the state continues to rank first in the nation in per capita income, with a growing lead on second ranked New Jersey. And keep in mind that per capita income excludes capital gains. County-level estimates indicate that Fairfield County is a dynamo. Per capita income in Fairfield County climbed to \$47,982 in 1996, ranking second among the more than 3,000 counties nationally.

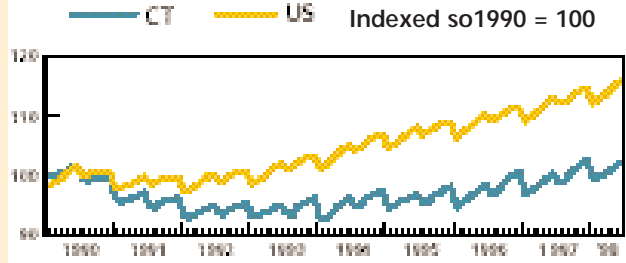
The average for the balance of the state was \$29,465, or 39% below Fairfield County's figure. In 1994 the balance of the state trailed by only 35%. Still, the rest of the state, by itself, in 1996 would, if a state, rank third in the nation, behind New Jersey at \$31,265 and Massachusetts at \$29,808. Fairfield County's income surged despite losing manufacturing jobs at a faster rate than the rest of the state. Hello financial services!



ECONOMIC SCORECARD

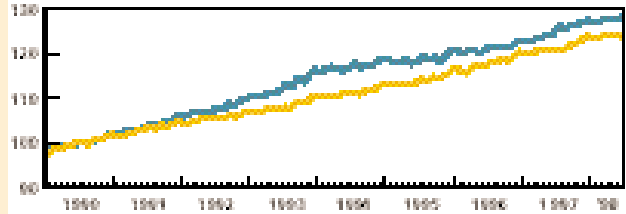
Job Totals

(not seasonally adjusted)



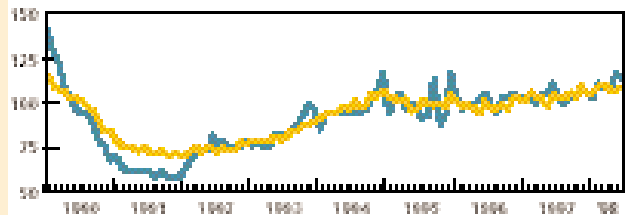
Average Hourly Earnings in Manufacturing

(seasonally adjusted)



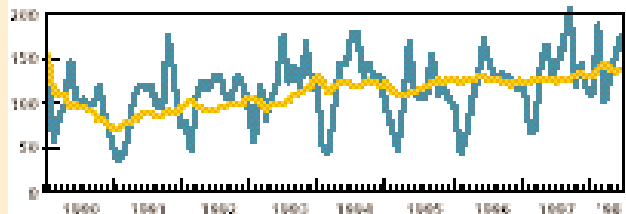
Help-Wanted Ads

(seasonally adjusted)



New Housing Permits

(not seasonally adjusted)



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Connecticut Travel and Tourism Index

The overall index increased 7.1% in the second quarter compared to the same quarter the year before. The index consists of hotel-motel revenues, hotel-motel occupancy rates, attendance at six major tourist attractions, and traffic on tourist roads.

Hotel/Motel Rev.	s	8.9%
Occupancy Rate	t	-2.8%
Attendance	s	16.6%
Traffic	s	5.8%
Overall	s	7.1%

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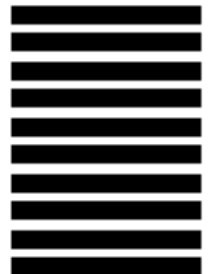
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Good for the Environment, Good for the Economy

By Representative Jessie Stratton (left) and
Senator Eileen Daily (right), Co-chairpersons, Environment
Committee, Connecticut General Assembly



Environmental mandates can have significant costs. Recent experience, however, demonstrates that sound environmental policies can also offer significant economic benefits and opportunities. Connecticut's initiatives on electric utility restructuring, open space acquisition and the national Heritage River Designation illustrate the possible benefits of sensible environmental management policies.

The push for electric utility competition came primarily from Connecticut companies eager to cut their high energy costs. The economic and environmental benefits are potentially significant but, given the lack of anyone's real experience, also uncertain. Environmental provisions in the legislation that support development and use of sustainable energy sources and energy conservation are the strongest in the nation and have prompted other states to adopt similar measures.

Many environmentalists feared that, although power marketers would have strong incentives to keep kilowatt rates as low as possible, they would also encourage as much use as possible to maximize profits. If less expensive power resulted in increased usage, the ultimate loser in restructuring would be the environment. The solution was to make conservation and cleaner energy investments part of the competitive process.

A Renewables Investment Fund will encourage Connecticut power producers and technology companies to develop cleaner, more sustainable energy sources. And the legislation requires that suppliers sell a small, but increasing, percentage of renewable power, thus creating a market for that energy. In both instances, policies that offered environmental benefits became politically possible because they also benefited the economy.

The legislation also seeks to minimize the potentially negative environmental and economic impacts of increased generation of cheap, highly polluting power plants upwind from

Connecticut. Out-of-state suppliers might sell us cheap power and also send dirty air along with it. Increased air pollution would trigger national emission offset standards for in-state producers, raising costs for those seeking to locate or expand in Connecticut. The legislation, however, directs the DEP to limit the emissions of out-of-state electricity producers who would sell to Connecticut consumers, thus leveling the playing field.

In the instance of open-space acquisition, the easily understood environmental and aesthetic value of preserving natural areas is complemented by many ways in which open space is integral to the state's economy. Besides protecting the quality of life that attracts and keeps many of us in Connecticut, the health of the state's environmental resources is key to maintaining and expanding its tourism, its commercial and sport fishing industry and countless other sources of economic growth that depend upon preserving the quality of our natural resources.

The recent campaign by environmentalists and state officials to nominate the Connecticut River as an American Heritage River was strongly supported by the state's business organizations because they understood that commerce, industry, recreation and the environment all stood to benefit. Now, the Farmington and the Connecticut Rivers enjoy prestigious national designations that are increasingly attracting events, businesses and development that rely upon and enhance the environmental quality of these rivers.

Our experience offers us confidence that achieving environmental and economic benefits is both possible and probable. Perhaps now we can leave behind the view that environmental protection is an economic luxury, and redouble our commitment to policies that are good for the environment and good for Connecticut's economy.



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