

# New Hampshire's Changing Economy: Past, Present and Future

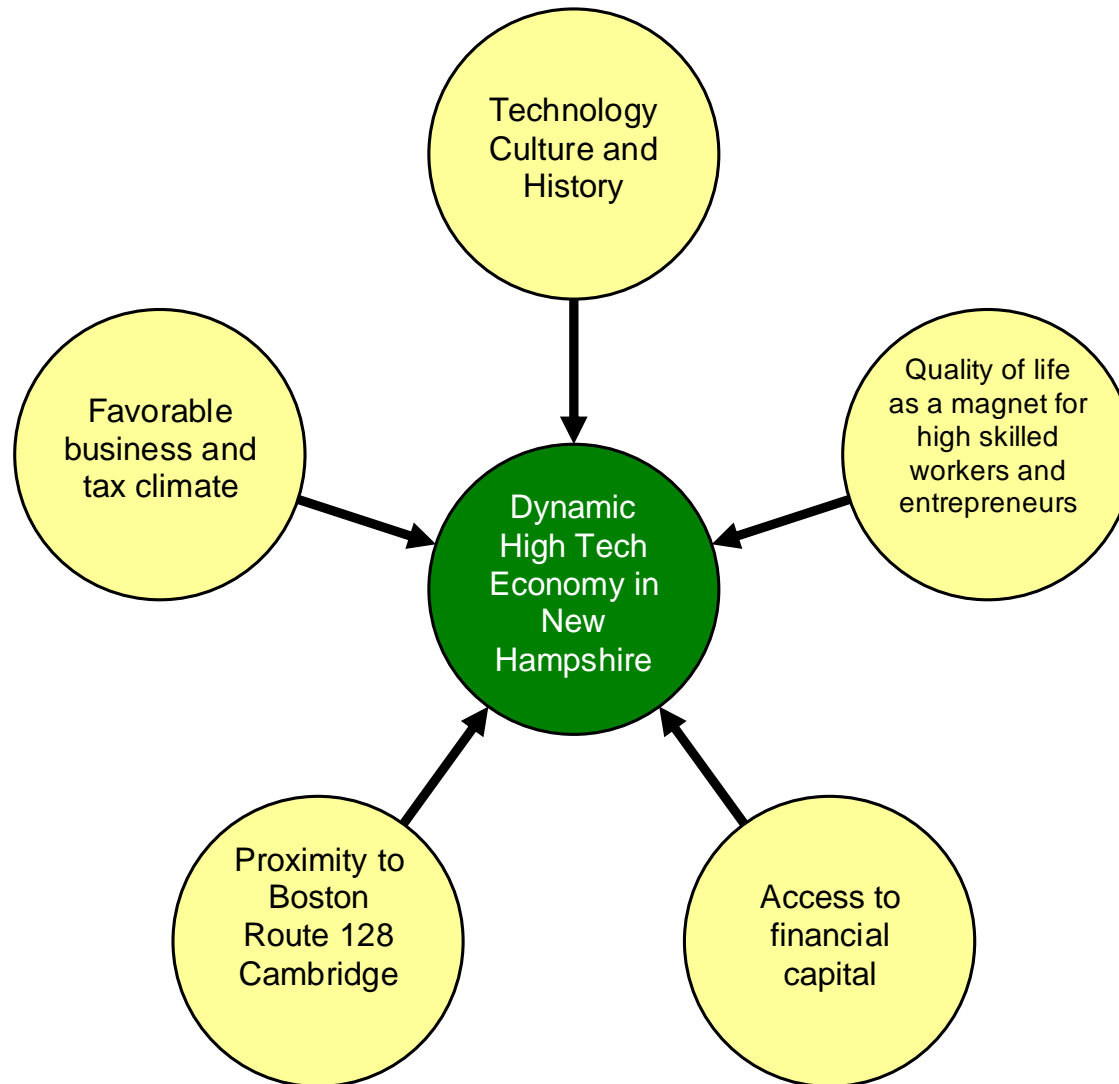
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# NH Economic Highlights

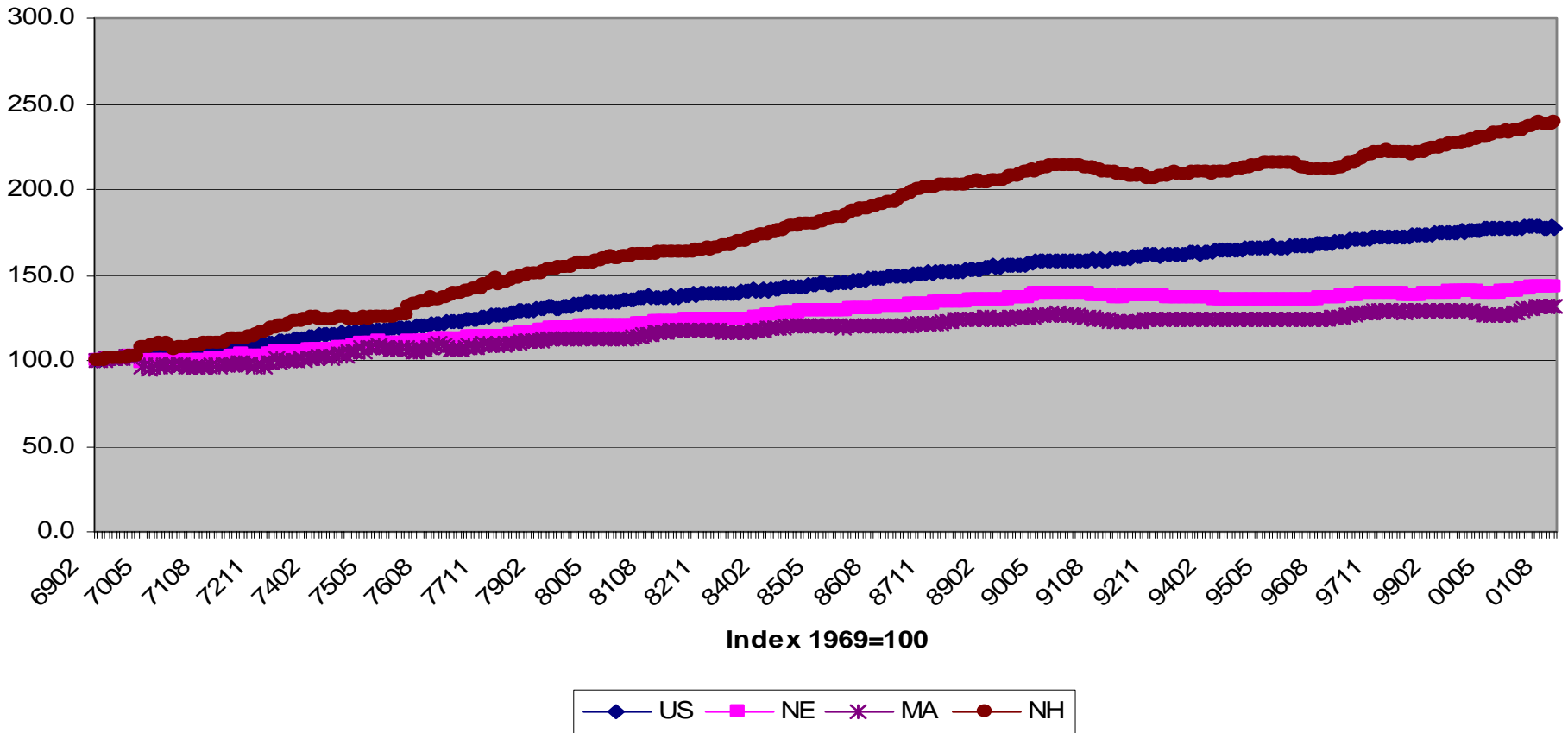
- Strongest economy –in population and employment growth – in New England and Northeast over last quarter century
- Rising per capita income... improving in rank among 50 states...from 25<sup>th</sup> to 6<sup>th</sup> in last quarter century
- Lowest poverty rate in the US
- Strong high technology industry positioning ...ranked 9<sup>th</sup> in employment concentration in high technology industries
- Not “one” NH economy but many economies ..there are characteristics of each of the other New England state economies in different regions of New Hampshire

# New Hampshire's core economic strengths

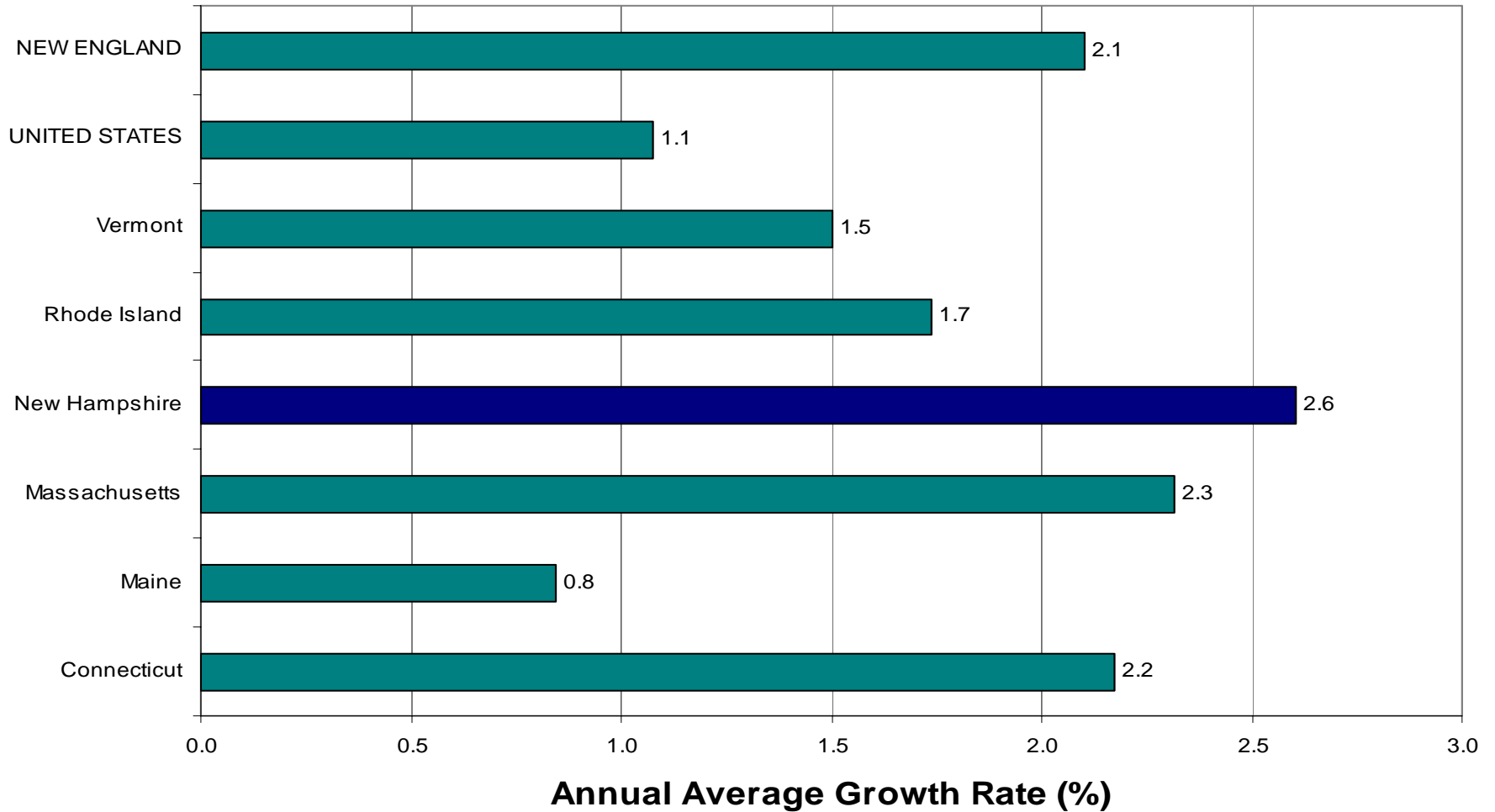


# NH (in brown) leads the New England region in labor force growth

Labor Force Growth Since 1969



# Productivity Leader...Growth in Output Per Employee, 1977-99



## Bachelor's Degree or Higher Educational Attainment, Population 25 and Older

State	Rank			Percent of the Population		
	1980	1990	2000	1980	1990	2000
Massachusetts	7	3	2	20.0	27.2	33.1
Connecticut	4	2	5	20.8	27.2	31.2
Vermont	12	8	7	18.7	24.4	29.7
New Hampshire	14	9	9	18.1	24.2	28.6
Rhode Island	27	19	18	15.6	21.1	25.7
Maine	37	28	27	14.0	18.5	23.3
U.S.				16.2	20.3	24.4

Source: 1980, 1990, and 2000 5% Census PUMS

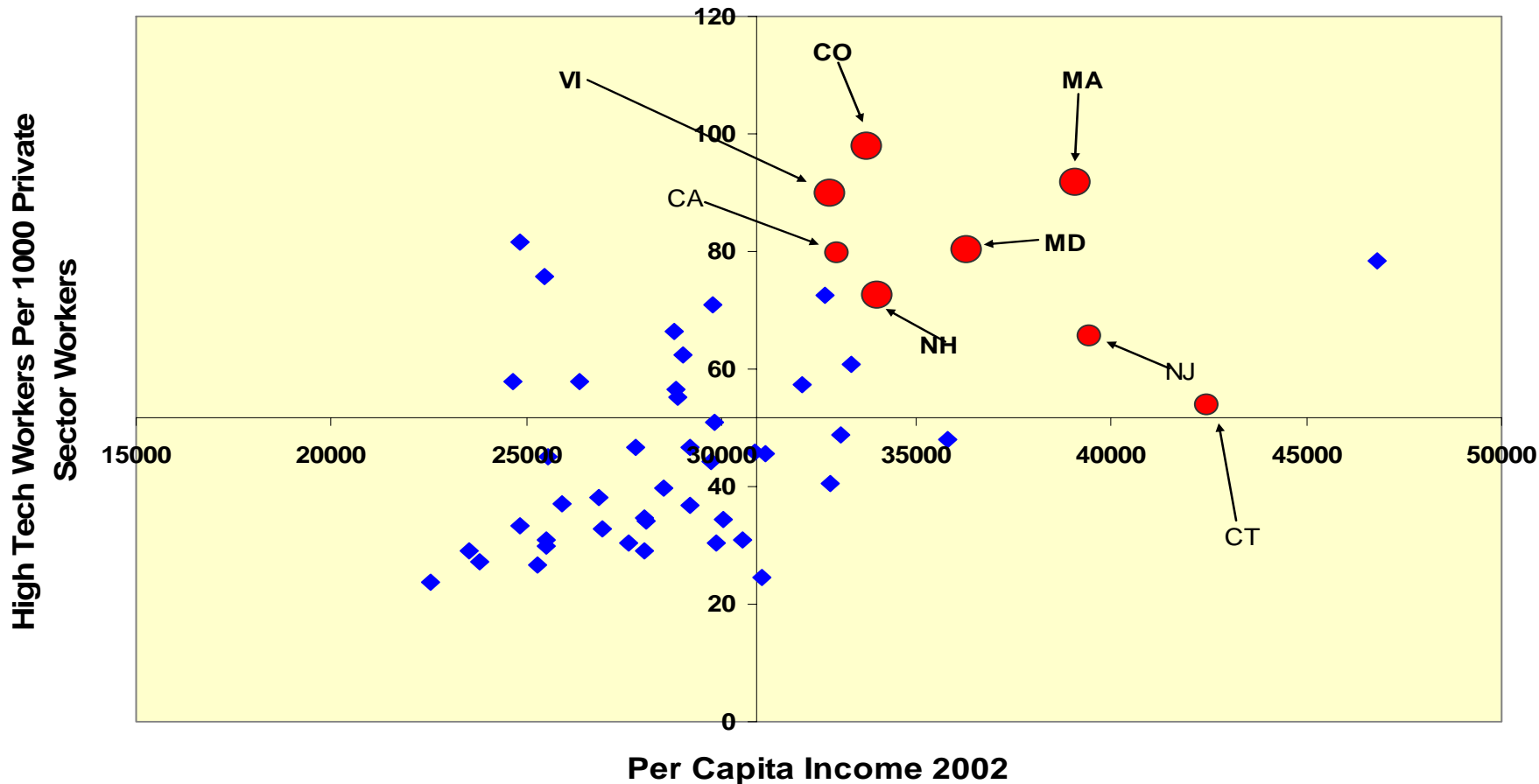
Notes: In each year, the District of Columbia ranked first. Other high-ranking states in 2000 were (3) Colorado, (4) Maryland, (6) New Jersey, (8) Virginia, and (10) Washington.

The last decade...NH the only New England state above US mean/median in employment growth at the same time (unlike the “sunbelt” states) per capita income also rising

Region	Employment Change 1990-2003	Rank	Per Capita Income 2003	Rank
US	16.8%		31,632	
New England	12.4%		38,171	
<b>NH</b>	<b>22.7%</b>	<b>11</b>	<b>34,702</b>	<b>6</b>
ME	16.7%	25	28,831	34
VT	16.0%	27	30,740	22
RI	12.5%	37	31,916	17
MA	12.2%	38	39,815	3
CT	7.3%	49	43,173	1
<b>Leading State</b>	<b>61.9% Nevada</b>		<b>43,173 Conn</b>	
<b>Bottom State</b>	<b>5.3% Hawaii</b>		<b>23,448 Mississippi</b>	

High positive correlation between high tech employment concentration and per capita income... states in upper right also rank high in percent of adults with Bachelors+

Number of High Tech Workers Per 1000 Private Sector Workers Compared to Per Capita Income 2002 (Median Lines Denote US Average {30906,51.6})



# “Importing in a High Tech/High Per Capita Income Economy.

NH attracting skilled workers and entrepreneurs for many reasons

*(3 of 4 adults with Bachelors+ were born in another state)*

- Unique Quality and Character of Life
  - Mountains and Seacoast (as do most of other top ranked tech states)
  - Strong Communities (social capital)
  - New England History and Character
- Ranked First in Nation
  - Favorable Tax Climate (as percent of income)
  - Safest State (crimes per capita)
  - Lowest Poverty Rate
- Ranked Among Top 3 in US
  - Child and Family Well Being (Casey, 2003)
  - Healthiest State (Morgan Quitno, 2003)
  - Most Livable State (Morgan Quitno, 2003)

# NH's Economy Today

# Leading 20 NH Industries

<b>NAICs CODE</b>	<b>INDUSTRY</b>
5613	Employment services
5415	Computer systems design & related services
6221	General medical & surgical hospitals
7222	Limited-service eating places
6113	Colleges, universities & professional schools
3345	Measuring, medical, control instruments mfg
5416	Management, sci & tech consulting services
5112	Software publishers
6211	Offices of physicians
2357	Concrete contractors
4227	Petroleum & petroleum products whsle
6231	Nursing care facilities
7221	Full-service restaurants
4451	Grocery stores
2332	Residential building construction
4411	Automobile dealers
5617	Services to buildings & dwellings
2358	Water well drilling contractors
2354	Masonry, drywall, insulation, tile contractors
4213	Lumber & other construction materials whsle

# New Hampshire: Top Employers

<b>CODE</b>	<b>INDUSTRY</b>	<b>Percent Emp 2001</b>
5613	Employment services	4.5%
7221	Full-service restaurants	3.9%
6221	General medical & surgical hospitals	3.8%
4451	Grocery stores	3.4%
7222	Limited-service eating places	2.6%
6113	Colleges, universities & professional schools	2.6%
4521	Department stores	2.2%
3344	Semiconductor & oth electronic component mfg	2.1%
5241	Insurance carriers	1.8%
7211	Traveler accommodation	1.6%

# New Hampshire: Highest Paying Industries

<b>CODE</b>	<b>INDUSTRY</b>	<b>Ave Annual Pay 2001</b>	<b>Pct of Employment</b>
5112	Software publishers	74,936	0.9%
5415	Computer systems design & related services	73,272	1.1%
6211	Offices of physicians	69,922	1.3%
5417	Scientific R&D services	67,635	0.3%
5222	Nondepository credit intermediation	64,638	0.2%
3341	Computer & peripheral equipment mfg	63,730	0.2%
5416	Management, sci & tech consulting services	62,689	0.4%
4227	Petroleum & petroleum products whsle	59,771	0.1%
3345	Nav, measuring, medical, control instruments mfg	59,467	1.4%
4214	Professional & commercial equip & supp whsle	59,196	0.7%

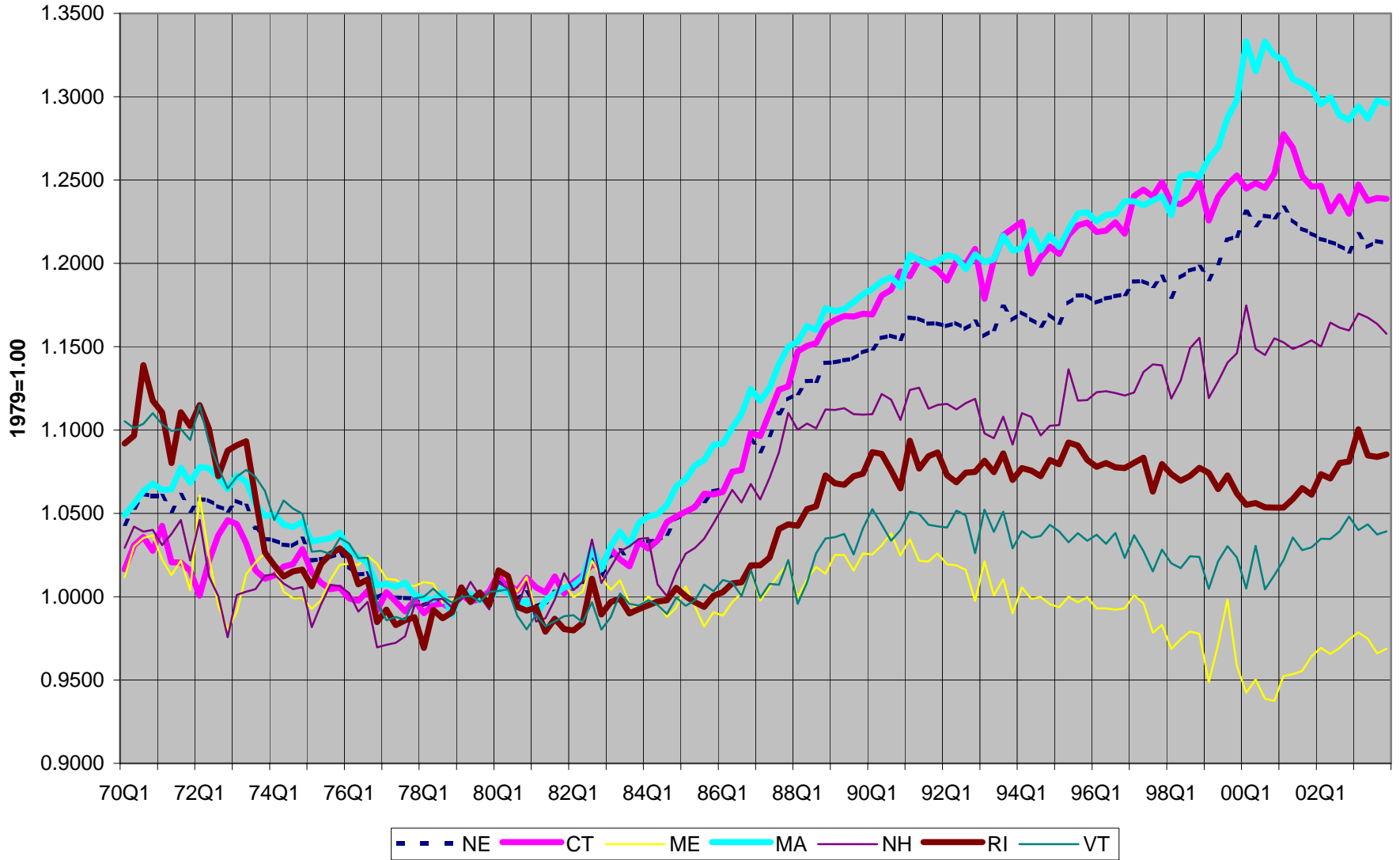
# Massachusetts' 20 Leading Industries

<b>CODE</b>	<b>INDUSTRY</b>
5415	Computer systems design & related services
5239	Other financial investment activities
5613	Employment services
3345	Measuring, medical, control instruments mfg
6113	Colleges, universities & professional schools
8112	Electronic & precision equipment R&M
7213	Rooming & boarding houses
5417	Scientific R&D services
5416	Management, sci & tech consulting services
6221	General medical & surgical hospitals
5511	Management of companies & enterprises
7221	Full-service restaurants
5413	Architectural, engineering & related services
6117	Educational support services
6231	Nursing care facilities
5411	Legal services
5133	Telecommunications
4214	Professional & commercial equip & supp whsle
5617	Services to buildings & dwellings
2359	Other special trade contractors

# Comparing Leading Industries in NH, Mass, Maine and Vermont: NH more similar to Mass than other Northern states

SUMMARY OF TOP 20 INDUSTRIES IN NORTHERN NEW ENGLAND STATES				
	Massachussettes	New Hampshire	Maine	Vermont
<b>Employment 2001</b>	1,022,615	172,434	167,758	64,435
<b>Employment Change 1998-2001</b>	13.5%	14.9%	17.6%	10.3%
<i>Top20 Emp as Percentage of Total Emp</i>	32.7%	31.0%	33.5%	24.8%
<b>Average Wage 2001</b>	57,388	42,638	34,584	31,333
<b>Average Wage Change 1998-2001</b>	22.8%	22.1%	18.4%	16.9%
<i>Top20 Avg Wage as a proportion of State Avg Wage</i>	1.33	1.28	1.22	1.12

### Proportional Change in Ratio of WSD per Payroll Worker to U.S.



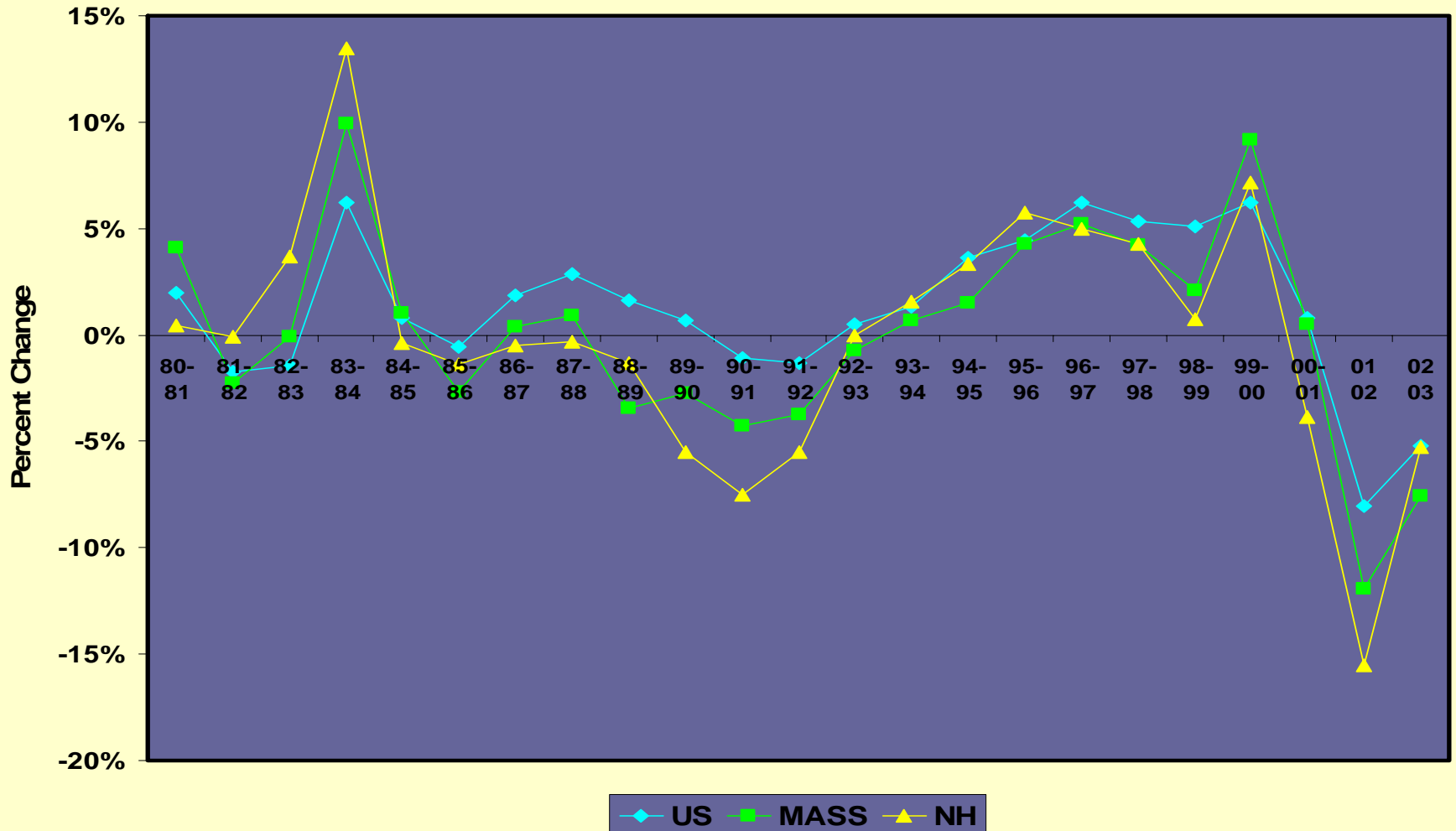
# The most recent economic performance

# **Strong period of growth mid-to-late 90s followed by sharp downturn in “tech bust”**

- NH’s manufacturing and high tech based economy closely tied to US and global business investment cycles
- With globalization of the economy and rapid advances in technology and its application, business cycles ...and therefore cycles in NH’s economy ...will be more pronounced over time
- NH’s economy has been resilient with relatively quick (compared to other NE states) recovery from significant downturns..

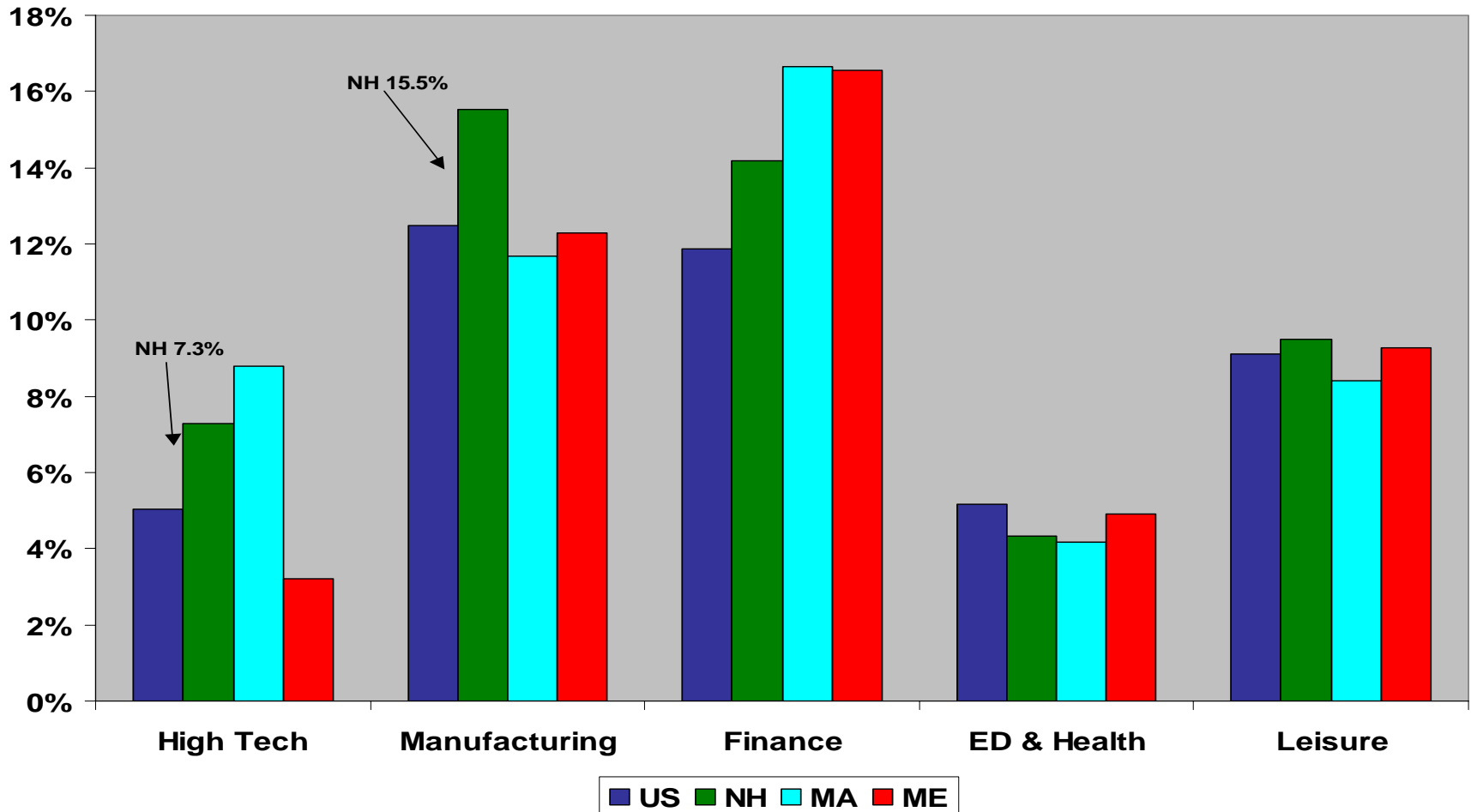
# High Tech employment changes since 1980, NH (in yellow) compared to US (blue) and Mass. (green) annual growth (yr-to-yr)... *lower lows ..more rapid recovery*

Annual High Tech Employment Change 1980-2003



NH (in green) with highest employment concentration in manufacturing (in the region) and the highest concentration of high tech employment in manufacturing (2/3rds) ... had a more pronounced percentage decline in NH in total and high tech employment than US average

Percent of Total Employment in Selected Super Sectors 2001



While Tech and Manufacturing employment declined by 1/5<sup>th</sup> in 2001-03 in NH...Education&Health, Construction and Leisure industries all grew ...*diversity in economy helped during downturn in business investment cycle*

	High Tech 2001-2003	Manufacturing 2001-2003	Finance 2001-2003	ED & Health 2001-2003	Construction 2001-2003	Leisure & Hospitality 2001-2003
US	-12.8%	-11.7%	2.1%	6.0%	-1.5%	0.8%
NH	-20.0%	-17.8%	4.3%	4.9%	5.8%	4.2%
MA	-18.6%	-16.0%	-3.0%	3.7%	-1.3%	2.7%
CT	-14.1%	-12.0%	0.3%	4.2%	-6.0%	4.9%
RI	-6.9%	-13.1%	4.2%	6.6%	9.1%	5.1%
ME	-12.3%	-14.6%	-1.1%	6.1%	2.2%	3.2%
CO	-20.9%	-14.2%	4.1%	6.2%	-10.4%	-0.8%
VA	-10.5%	-10.5%	4.1%	6.8%	0.3%	2.0%

# The Economy Going Forward

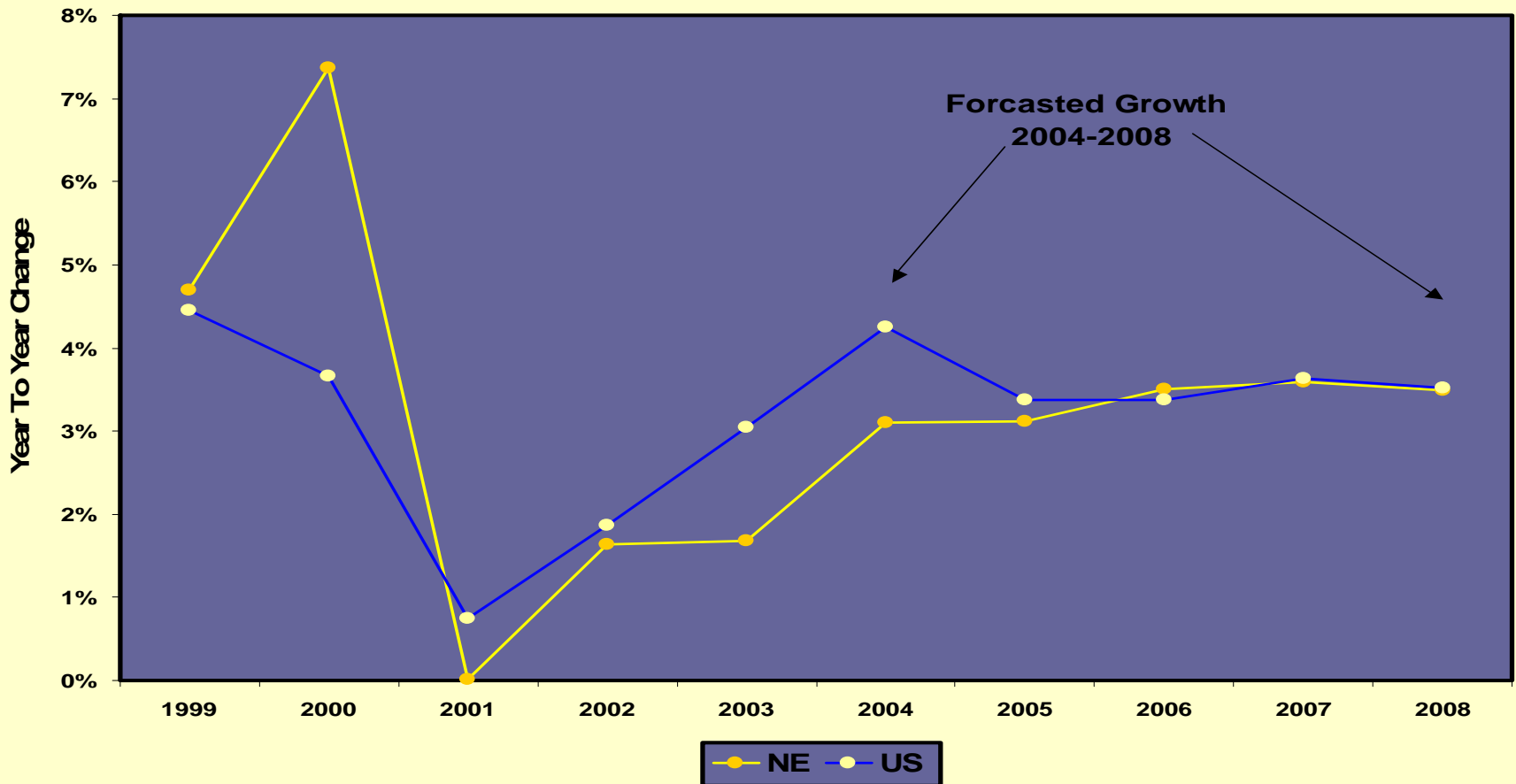
## New England Economic Overview

*(New England Economic Partnership. 2004)*

- Early 2000s recession in New England and employment decline (3%) in the region more severe than the US average
- Recovery of employment base taking longer in the 6-state region than US
- Employment not expected to recover in the region till 3rd quarter of 2006, a full year after the US recovery

*Recession deeper in New England, recovery slower than US but region now catching up...NH leads the region..closer to US average*

**GSP ---- Year To Year Changes**

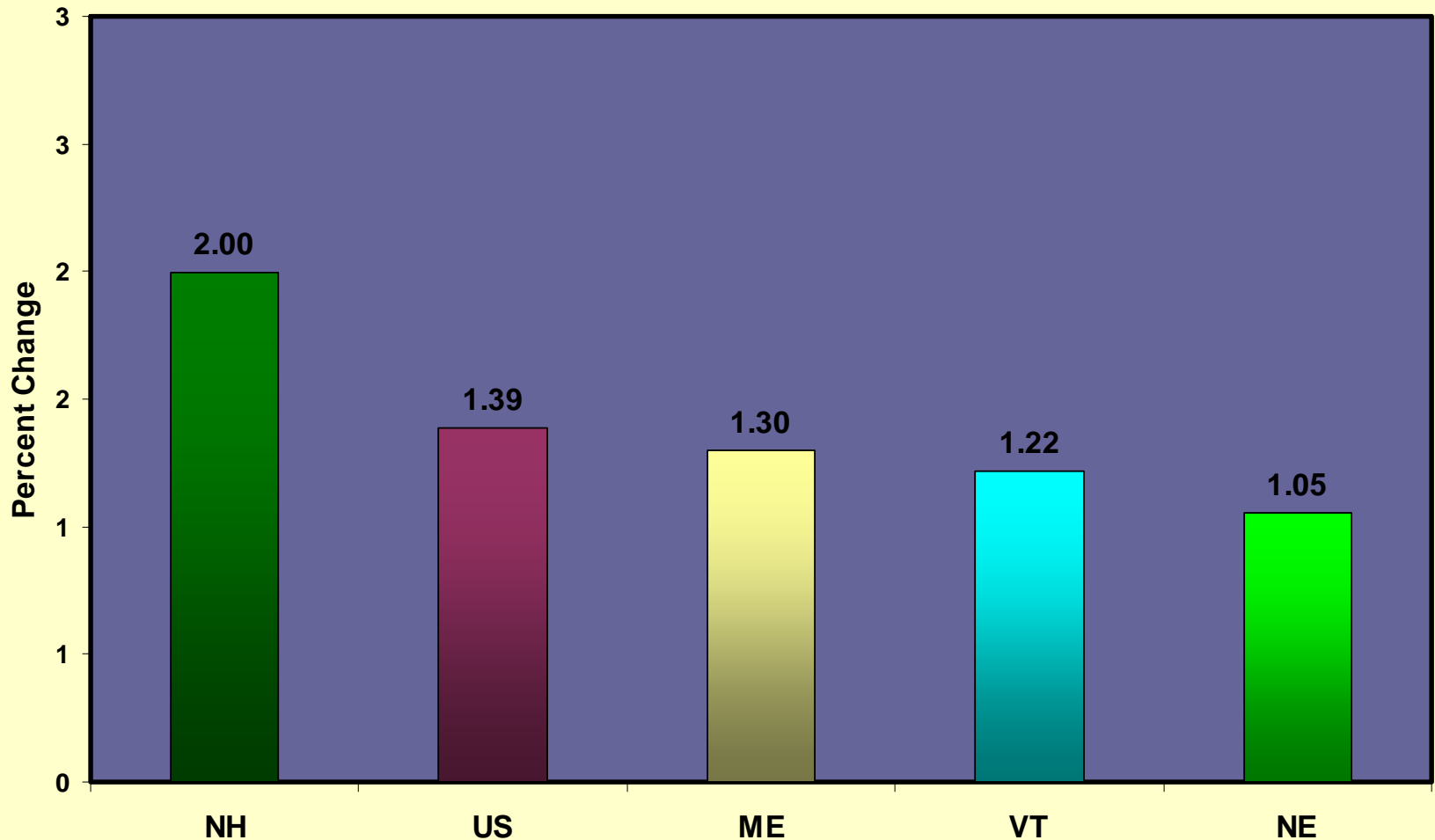


# New England Economic Partnership (NEEP) Forecast

- New Hampshire expected to have the highest growth in employment and with CT the highest GSP growth
- Maine and Vermont anticipated to have the weakest overall (GSP) economies
- Massachusetts has been the slowest to recover but growth in GSP 2004-2008 expected to be close to NH and CT. Employment growth still relatively low.
- Unemployment over the forecast period is expected to be near the US average of 5% with NH lowest and Massachusetts the highest averages

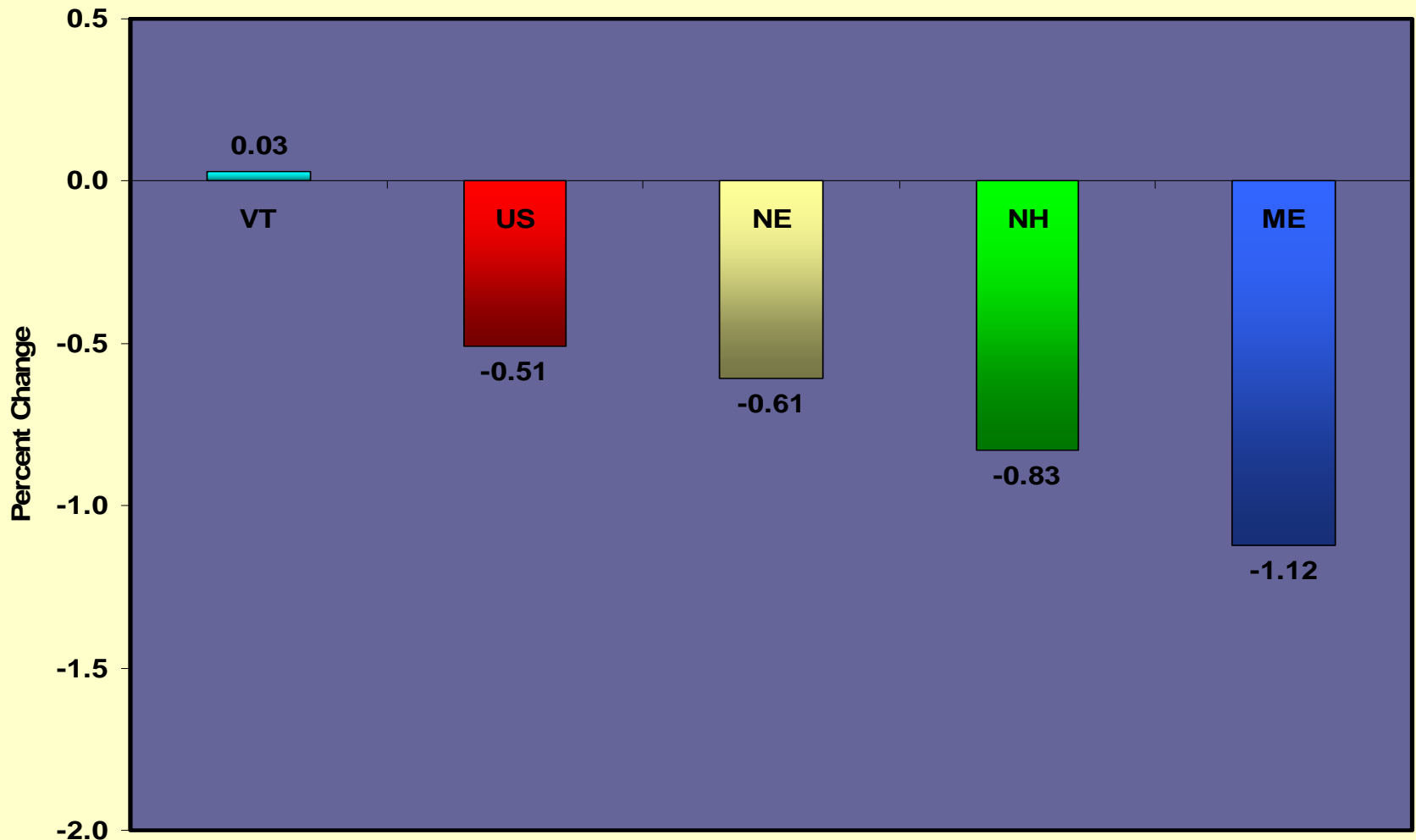
# Total Employment: Only NH above US in forecast period

Forecasted Total Employment Change 2003-2008



# Manufacturing Employment.. continued decline expected in US and region...

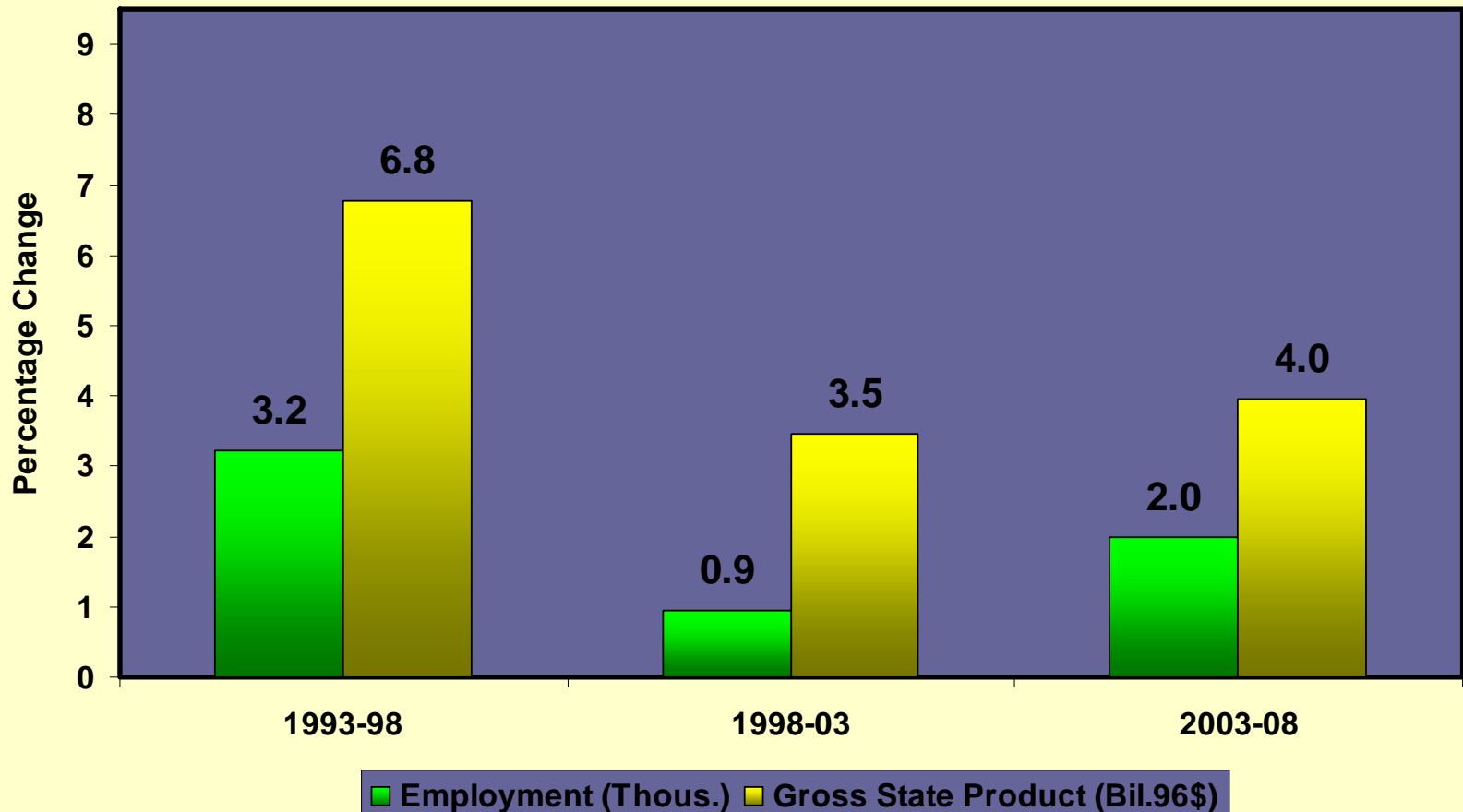
Forcasted Employment Change 2003-2008 In Manufacturing Sector



# New Hampshire: Employment and GSP expected to recover but with growth rates 50% lower than 1990s

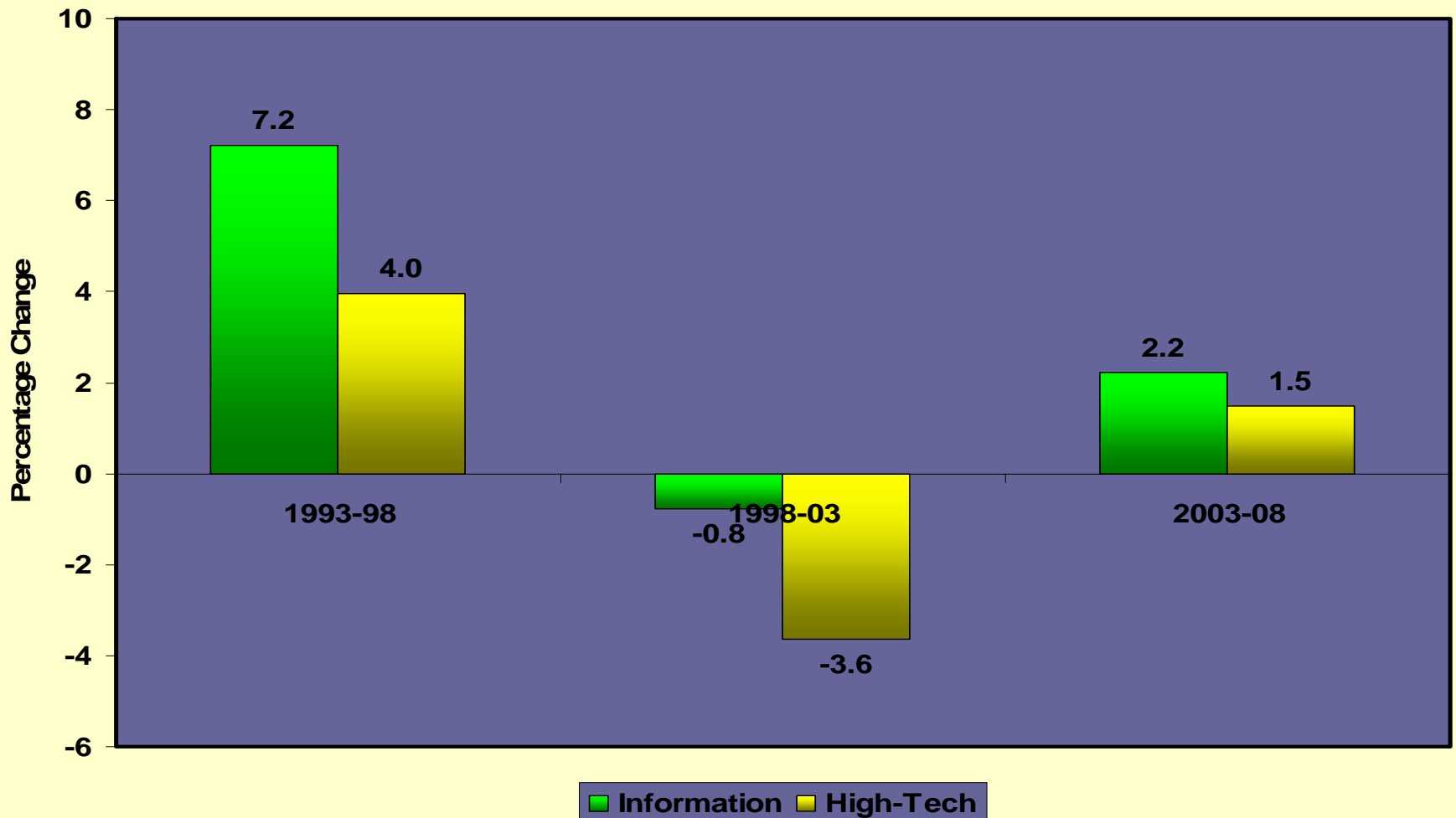
Change in Total Employment and GSP over selected time periods (NHT

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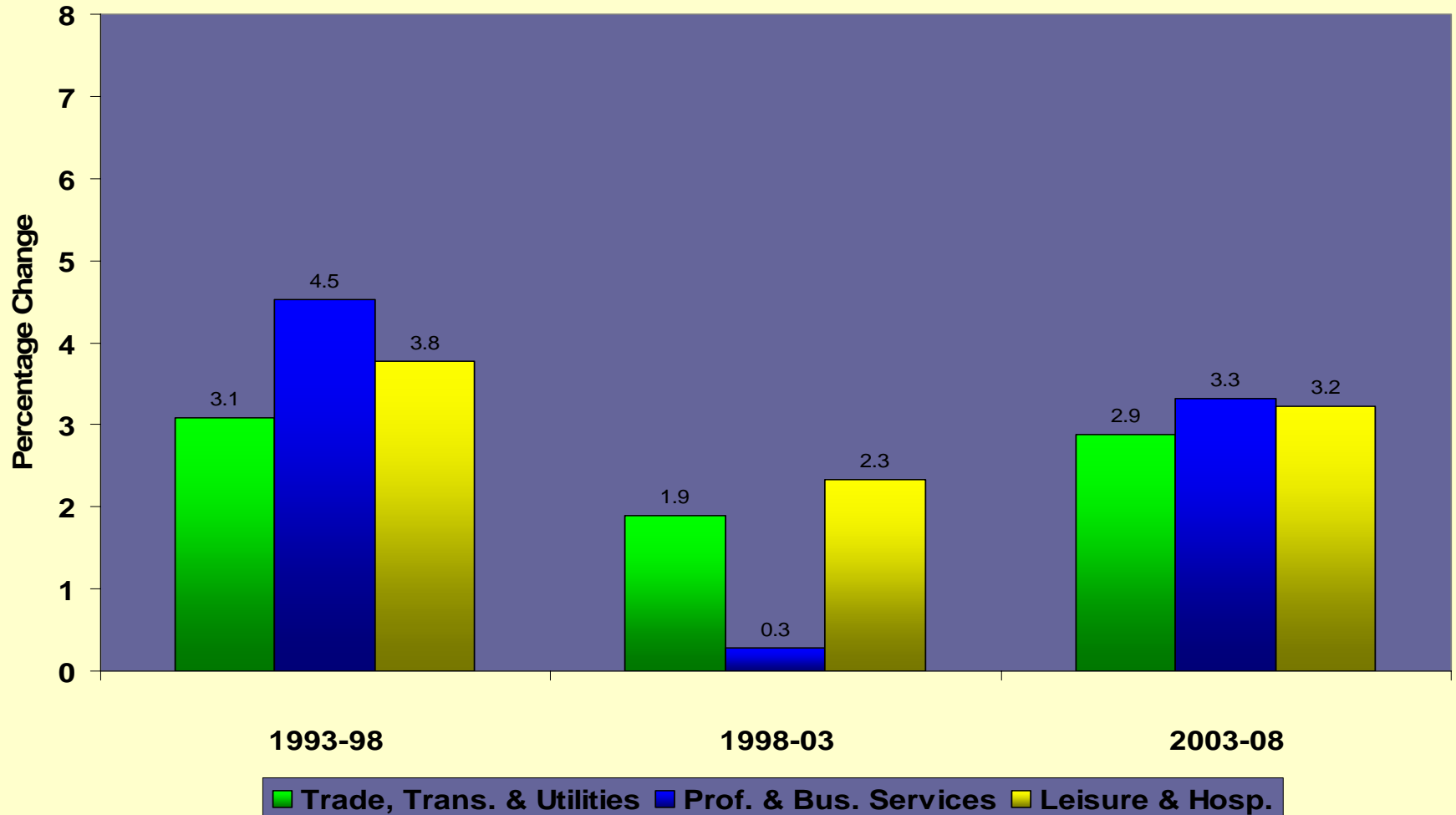
# New Hampshire: Information and High Tech Industries.. growth rates 1/3<sup>rd</sup> of 1990s

Employment change in High Tech and Information Industries over selected time periods (New Hampshire)



# New Hampshire: Trade, Prof. & Bus. Service and Leisure and Hospitality growth rebound nearly back to 1990s rates

Employment Change in other Supersectors over selected time periods (New Hampshire)



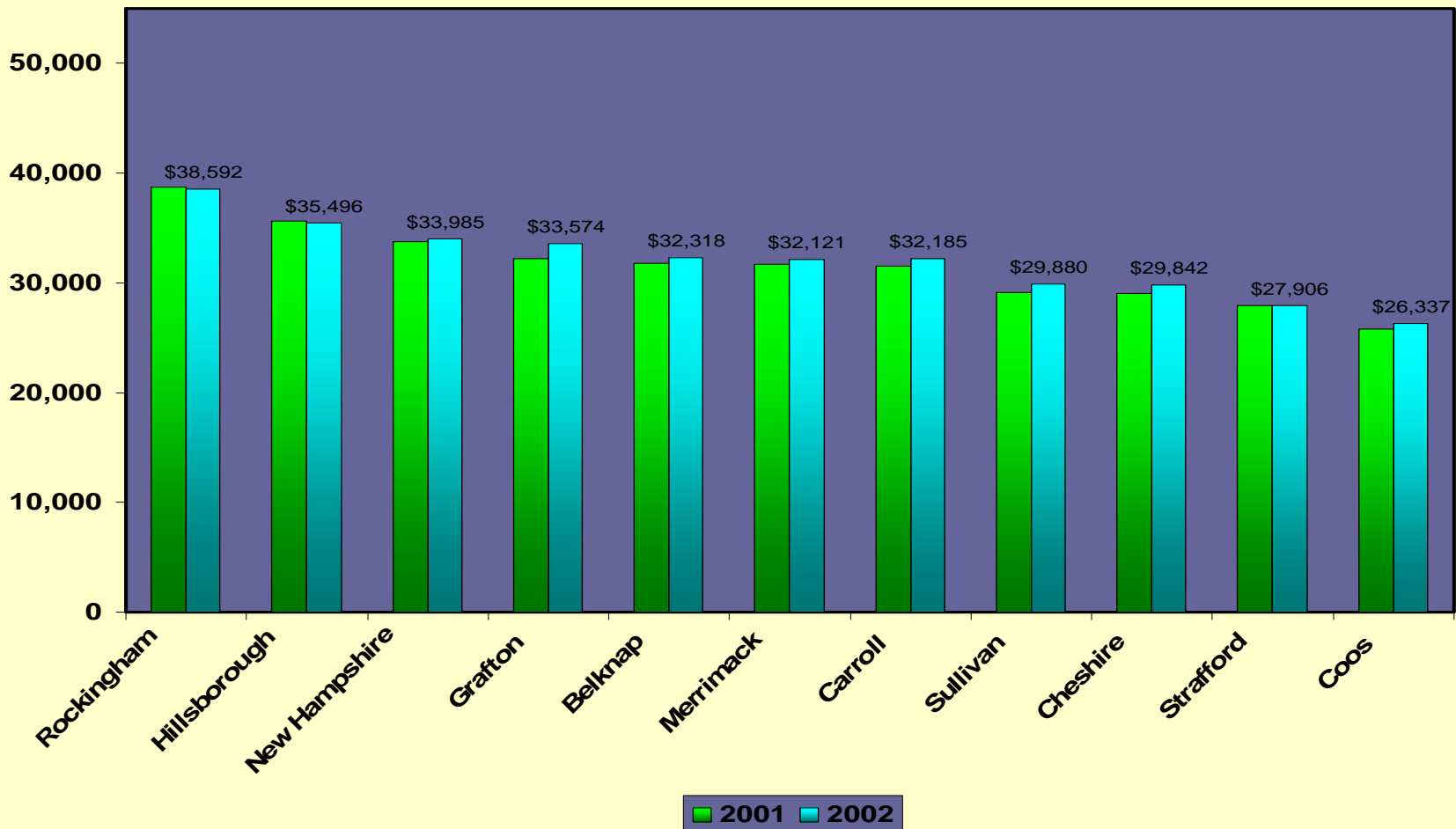
# Looking Forward

- Shortcomings
  - Economic growth and opportunity concentrated in southeastern corner of the state
  - Access to economic opportunity is through advancement in education ...and education opportunity is not available broadly
- Opportunities
  - Expand access to economic opportunity
  - Strengthen NH as a high tech “destination” state

# The Different NH Economies

# Per Capita Income in NH counties..only southeastern counties above state average

Percapita Income In New Hampshire Counties 2001 and 2002



# Strong Correlation between education and income also strong correlation of education to high tech concentration...

**Rank of 10 NH Counties plus bordering Southeastern Counties in Maine and Mass.**

<u>County</u>	<u>Median HH Income</u>	<u>Per Capita Income</u>	<u>% adults with 4-yr college</u>	<u>%adults with grad degree</u>
Middlesex,MA	1	1	1	1
Rockingham	2	2	2	4
Hillsborough	3	4	3	6
Essex, MA	4	3	4	3
Merrimack	5	5	5	5
Strafford	6	12	9	7
York,ME	7	10	11	12
Belknap	8	6	10	8
Cheshire	9	11	7	9
Grafton	10	7	6	2
Sullivan	11	9	12	11
Carroll	12	8	8	8
Coos	13	13	13	13



# Looking Forward: Key Economic Opportunities

- Investment in human capital ... *is most critical in a innovation and knowledge-based economy*
- Expand economic opportunity for individuals through improved access to quality K-16+ education... *this is the best economic investment for the future*
- Expand economic opportunity geographically across the state..*drawing on different strengths and unique characteristics of NH's regions and towns*
- Expand and improve NH's currently favorable position in economy ..with a focus on high value-added well paying industries...
- Link higher education institutions more closely to economy
- Broaden perspective on the economy and economic growth to capture benefits of the creative economy...

# *Looking Forward*

- The state can benefit from shift within manufacturing ...with greater concentration:
  - *In innovation and new product-based manufacturing, e.g., medical equipment, environmental management equipment, industrial machinery, homeland security, and defense goods*
  - *Of skilled workers in environmental and industrial engineering, computer controlled machine operations*

# *Address NH High Tech and Manufacturing Weaknesses*

- Improve federal R&D pipeline (DoD, NIH, Homeland Security) working with congressional delegation and industry and universities
- Increase private industry R&D investment with promotion and with tax incentives and other policies
- Address business taxes “creep up” ., i.e, the increasing tax burden on businesses. NH currently 4th highest in per capita corporate income taxes, (*Federation of Tax Administrators, 2003*)
- Enhance workforce development tied to high tech and manufacturing economy with strategic initiatives with colleges and universities and in NH schools throughout the state in engineering, computer science, life and environmental sciences...

# Leveraging NH's Quality of Life Advantage...

*“The Creative Economy”*

*as a growing industry with innovative people defining and designing new products and services and as a quality of life magnet for skilled workers and entrepreneurs*

### **Creative Class, New Hampshire Cities**

<i>Rank</i>	<i>City</i>	<i>% Creative Class</i>
1	Portsmouth	46.6%
2	Lebanon	44.6%
3	Nashua	42.6%
4	Dover	42.3%
5	Concord	41.0%
6	Keene	38.1%
7	Manchester	32.3%
8	Somersworth	32.2%
9	Laconia	30.0%
10	Rochester	28.8%
11	Franklin	26.3%
12	Berlin	23.7%
13	Claremont	23.4%
-	New Hampshire	38.8%
-	United States	36.0%

Source: Ross Gittell and Edinaldo Tebaldi - WSBE-UNH  
Data from US 2000 Census

# Diversity and the Economy *(NH cities ranked ordered from most to least diverse)*

City	% Foreign Born Population	Rank	Bohemian	Rank	Gays	Rank	Total Rank
Portsmouth	4.9%	5	3.7%	1	1.1%	1	7
Dover	5.0%	4	2.4%	3	1.0%	2	9
Nashua	10.1%	1	1.4%	9	0.8%	4	14
Conway	2.8%	10	1.7%	6	0.9%	3	19
Manchester	9.4%	2	1.7%	5	0.5%	10	17
Keene	2.7%	11	3.4%	2	0.7%	6	19
Lebanon	5.8%	3	1.7%	7	0.3%	12	22
Concord	4.3%	7	1.9%	4	0.4%	11	22
Berlin	4.6%	6	0.8%	12	0.7%	7	25
Laconia	3.5%	8	1.4%	10	0.5%	9	27
Rochester	2.5%	13	1.2%	11	0.8%	5	29
Franklin	2.6%	12	1.6%	8	0.2%	13	33
Somersworth	1.8%	14	0.5%	13	0.6%	8	35
Claremont	3.5%	9	0.3%	14	0.1%	14	37
US	11.1%		1.9%		0.6%		
New England	9.9%		1.6%		0.7%		
NH	4.4%		1.8%		0.6%		