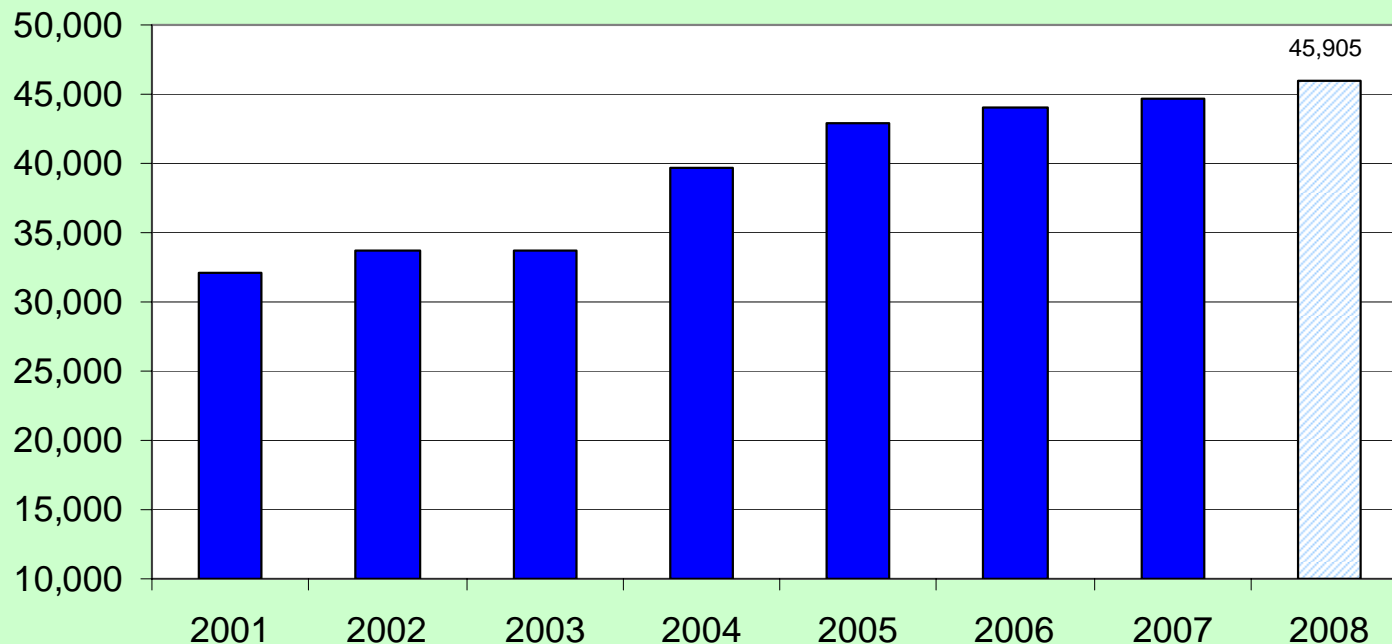





Massachusetts Biotechnology Council

# Biotechnology Employment & Investment Update

## Massachusetts Biotechnology Employment, 2001-2008\*



  
**42.6%  
Growth  
Since  
2001**

\*2008 figure is a projection based on analysis of state ES-202 data.

Source: U.S. Bureau of Labor Statistics, County Business Patterns, 2001-2007; Massachusetts ES-202 report, 2008; MBC analysis.

**The Massachusetts biopharma industry grew by 42.6% between 2001 and 2008, as compared to overall Massachusetts employment which declined by 56,000 jobs, or 1.7% during roughly the same period (2001-2007).**

# Biotechnology Payroll in Massachusetts, 2007

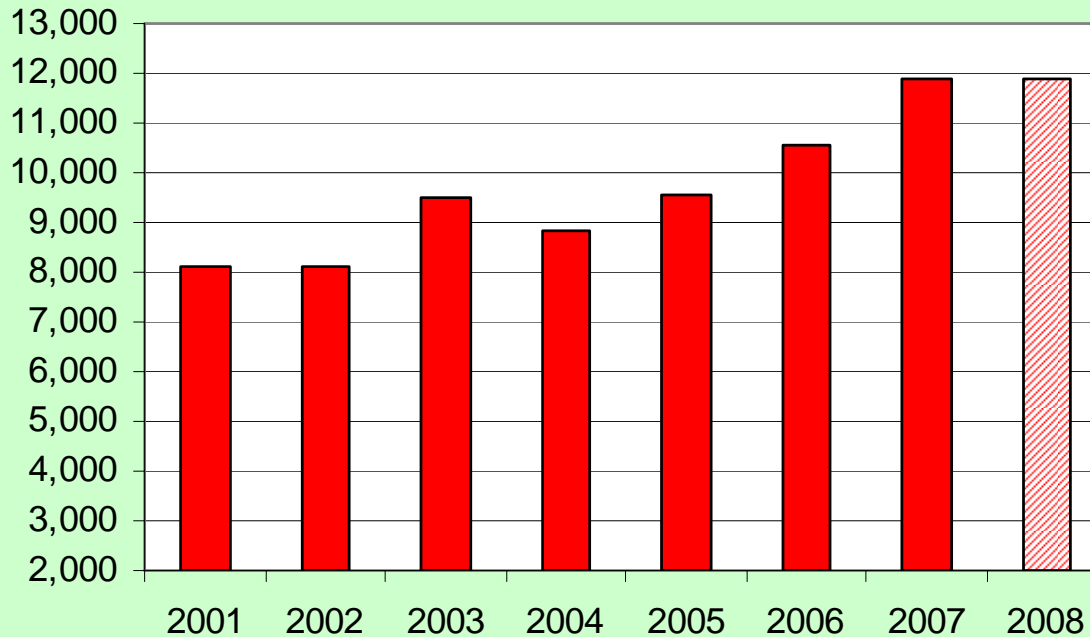
2007 MA Biotech Payroll = **\$4,015,172,807**


Average MA Biotech Salary = **\$89,829**

Average MA Salary\* = \$51,151

\* Average salary is not to be confused with *per capita income*. Average salary equals total payroll divided by total employed workforce. Per capita income is an average obtained by dividing aggregate income by the total population of an area

## Growth in BioPharmaceutical Manufacturing Employment in MA, 2001-2007



  
**43.6%  
Growth  
Since  
2001**

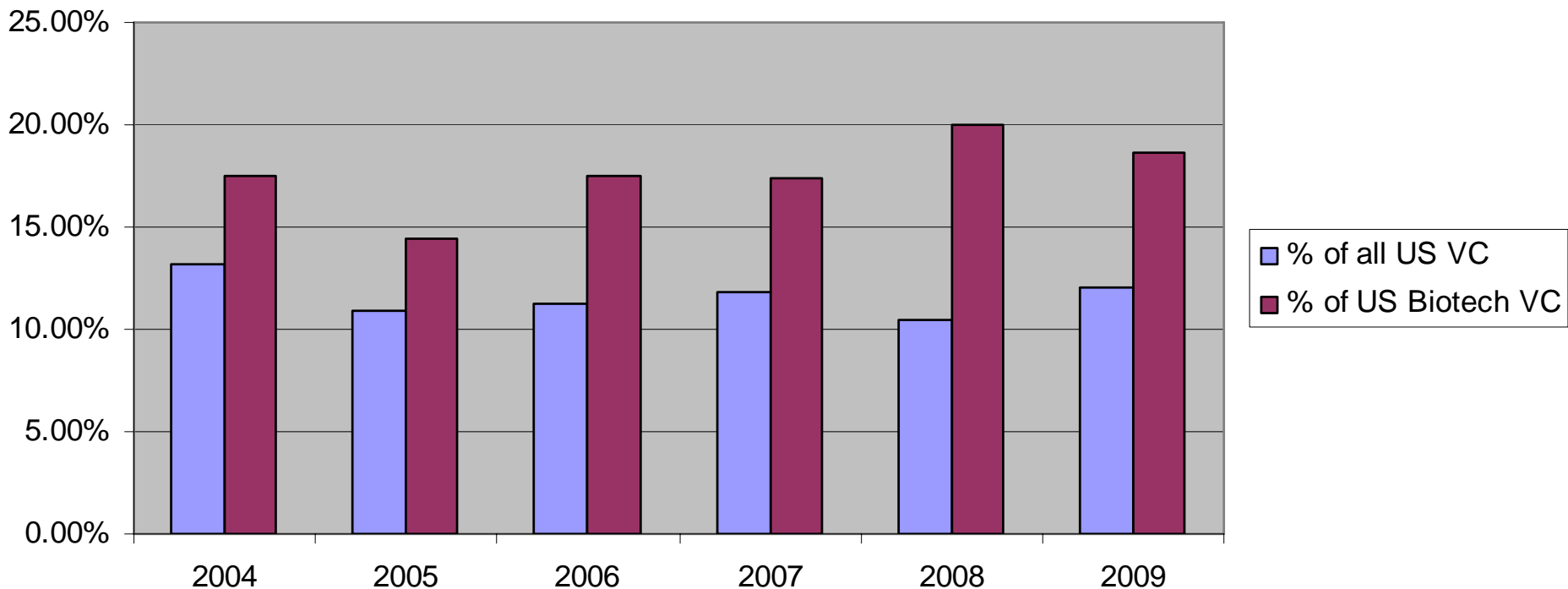
\*2008 figure is a projection based on analysis of state ES-202 data, NAICS 3254.

Source: U.S. Bureau of Labor Statistics, County Business Patterns, 2001-2007 – NAICS 3254; Massachusetts ES-202 report, 2008; MBC analysis.

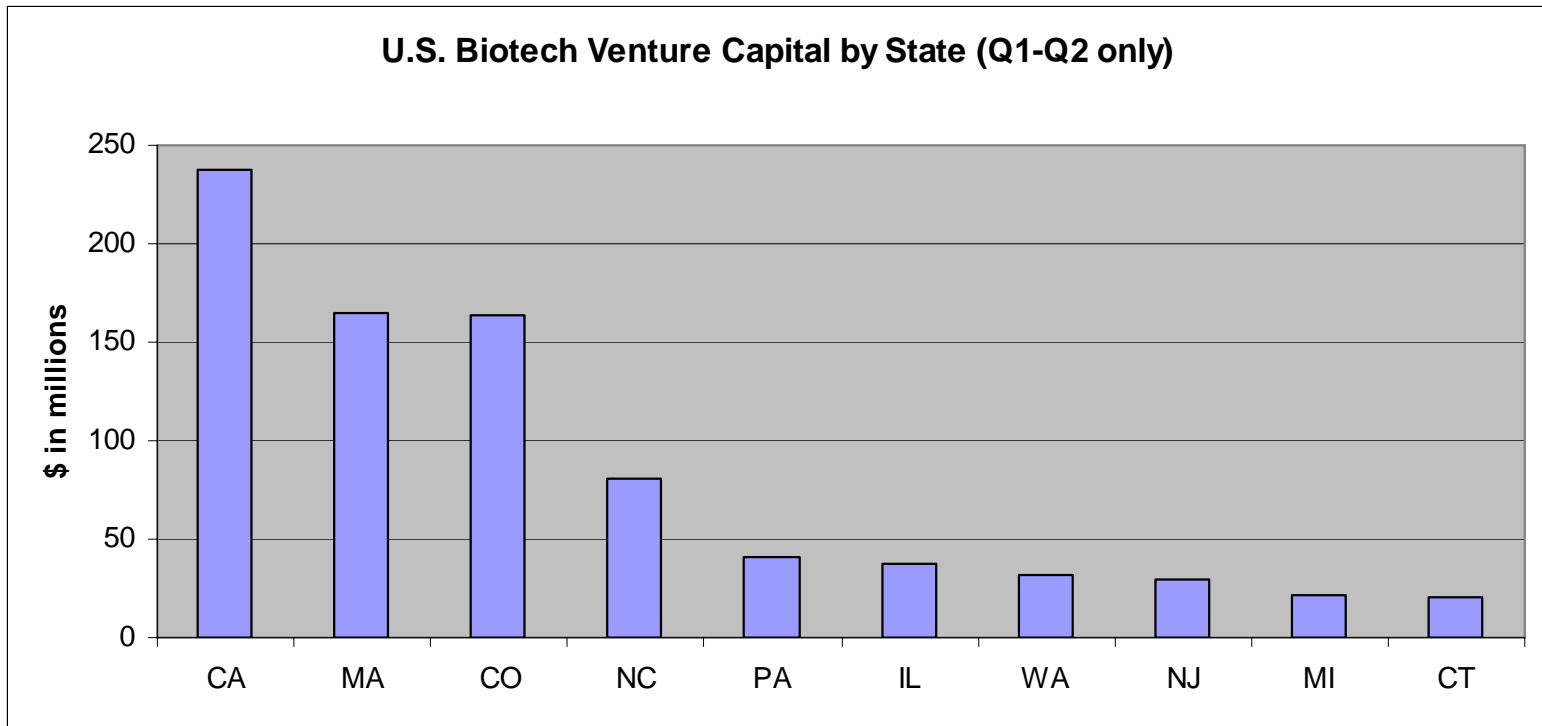
**Contrary to popular perception, even within the industry, biopharma manufacturing employment growth outpaced that of the industry as a whole between 2001 and 2008, at 43.6% versus 42.6% growth.**

# MA Biotech continues to maintain strong share of national biotech Venture Capital

## U.S. Venture Capital Investment in MA Companies, 2004-2009\*



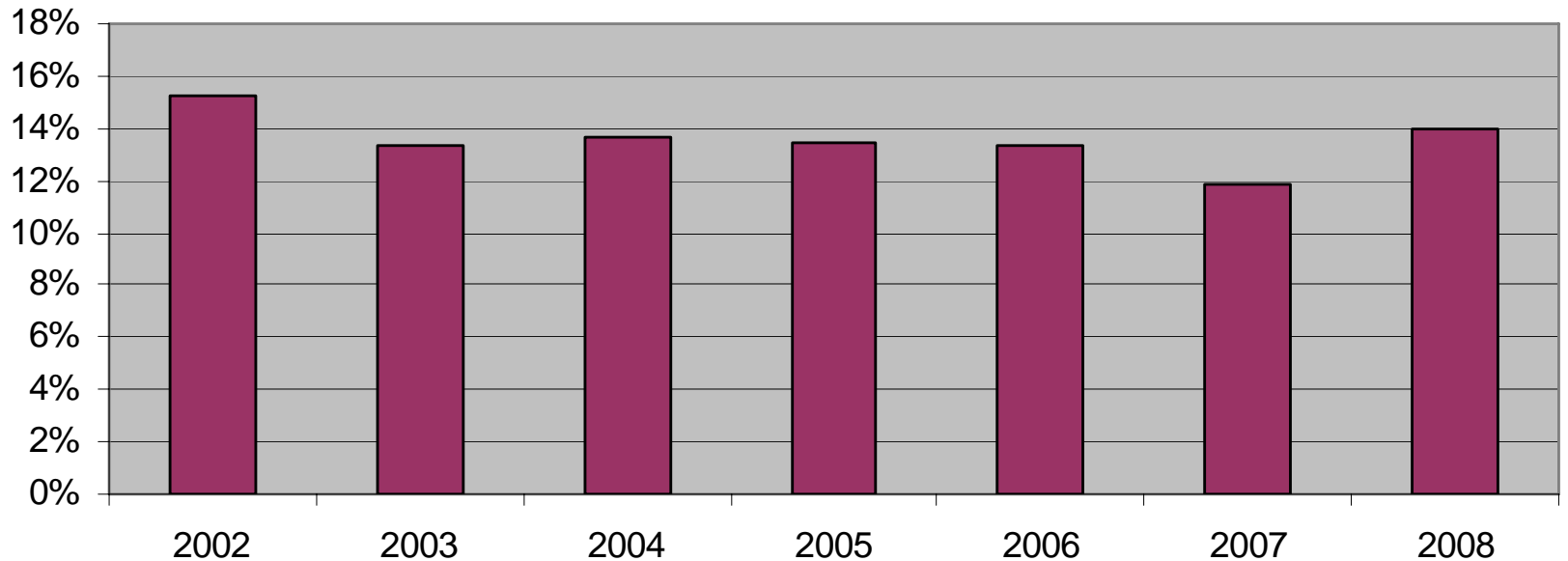
Source: 2009 PricewaterhouseCooper/Thomson Reuters/NVCA MoneyTree Survey, MBC analysis.



Source: 2009 PricewaterhouseCooper/Thomson Reuters/NVCA MoneyTree Survey, MBC analysis.

**Massachusetts continues to trail only California in biotech VC investment. Colorado, driven by one major deal, surged to third among states through the first two quarters of 2009. Overall VC investment will be down by as much as 50% nationally in 2009.**

## Massachusetts Share of Federal Small Business Innovative Research (SBIR) Grants, 2002-2008



Source: National Institutes of Health, SBR Reports and MBC analysis

**While overall national SBIR investment decreased in 2008, Massachusetts gained in share of the national investment. The \$77.8 million in SBIR funds flowing to Massachusetts accounted for 13.94% of national SBIR funding in 2008.**

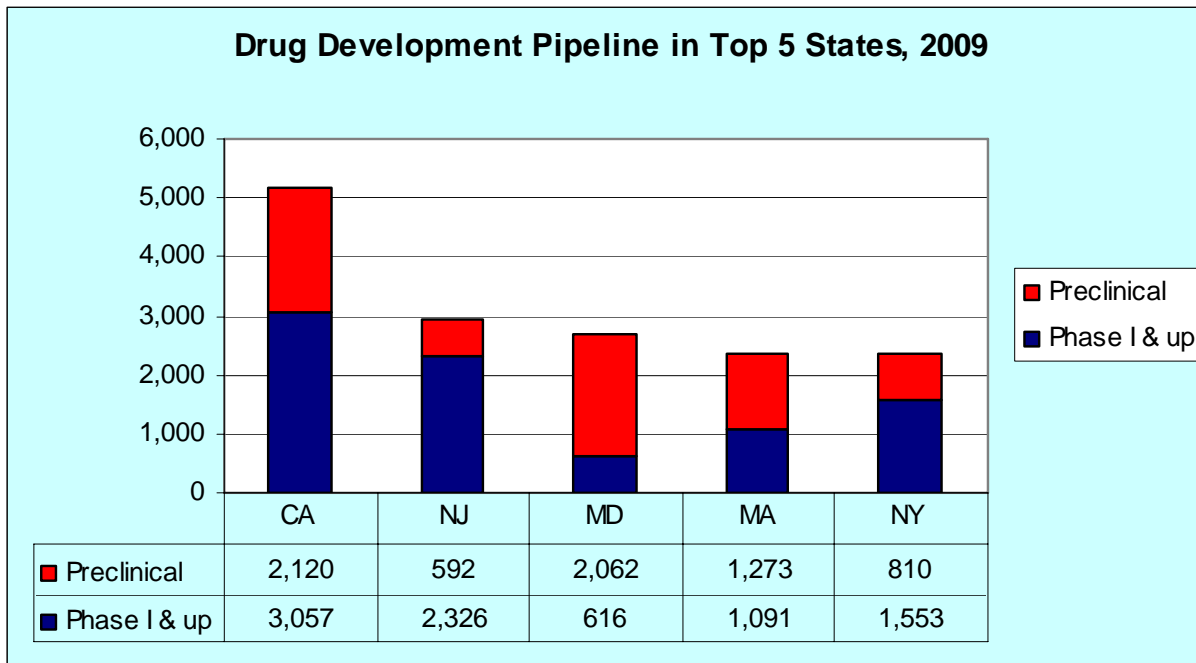
# Massachusetts and the Global Drug Development Pipeline

U.S. Investigational Drug Pipeline as % of Global Pipeline: 63%

U.S. Biologics Pipeline as % of Global Biologics Pipeline: 70%

MA Drug Pipeline as % of Global Pipeline: 6.4%

MA Biologics Pipeline as % of Global Biologics Pipeline: 7.9%



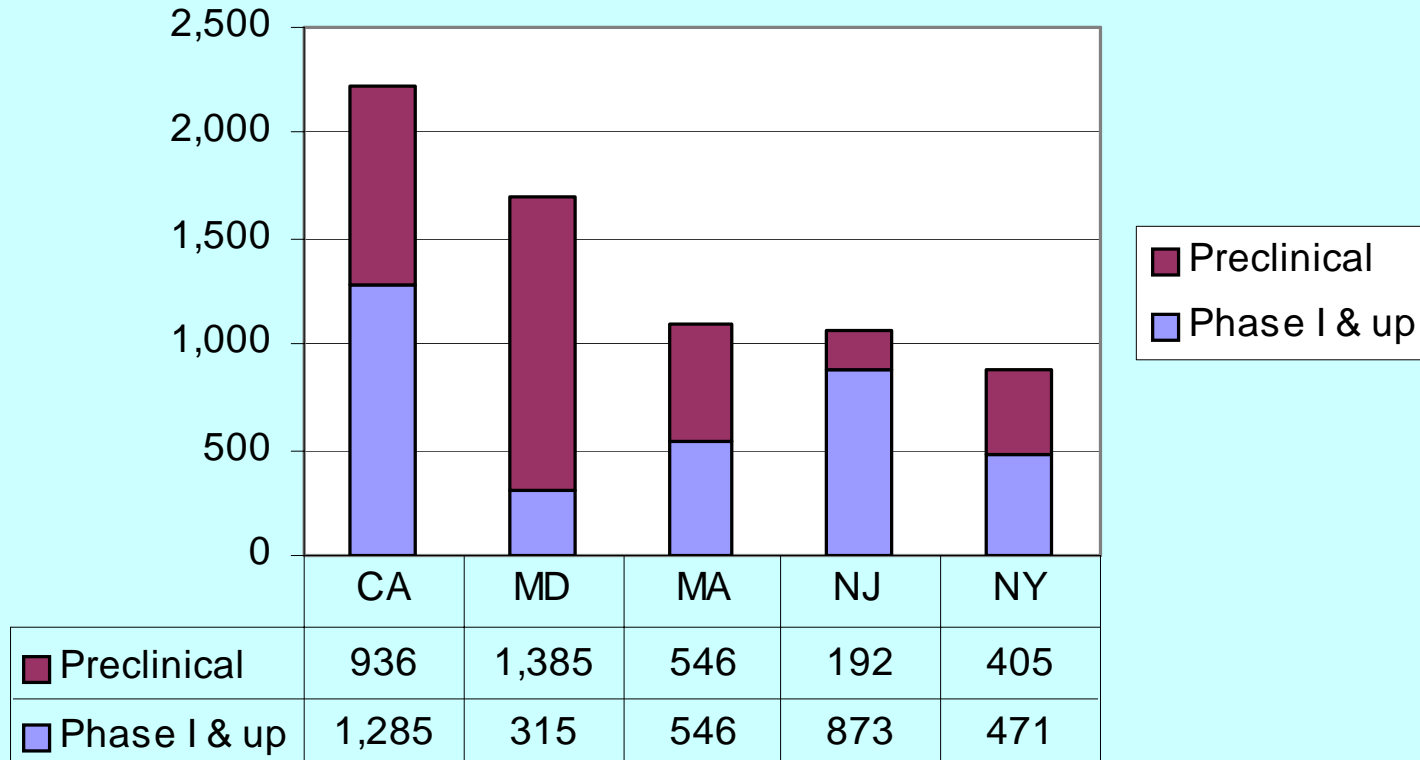
**Massachusetts has the fourth highest number of drugs in development.**

**Its pipeline is balanced with approximately half of its candidates preclinical and half in clinical phases.**

Source: BioPharm Insight, 2009; MBC analysis



## Biologics Development Pipeline in Top 5 States, 2009



Source: BioPharm Insight, 2009; MBC analysis

**Massachusetts is third among states in large molecule drug development. It hosts the same number of discovery/preclinical candidates as it does clinical stage candidates.**