



CHMURA ECONOMICS & ANALYTICS

# Senate Finance Retreat: U.S. and Virginia Economic Forecast

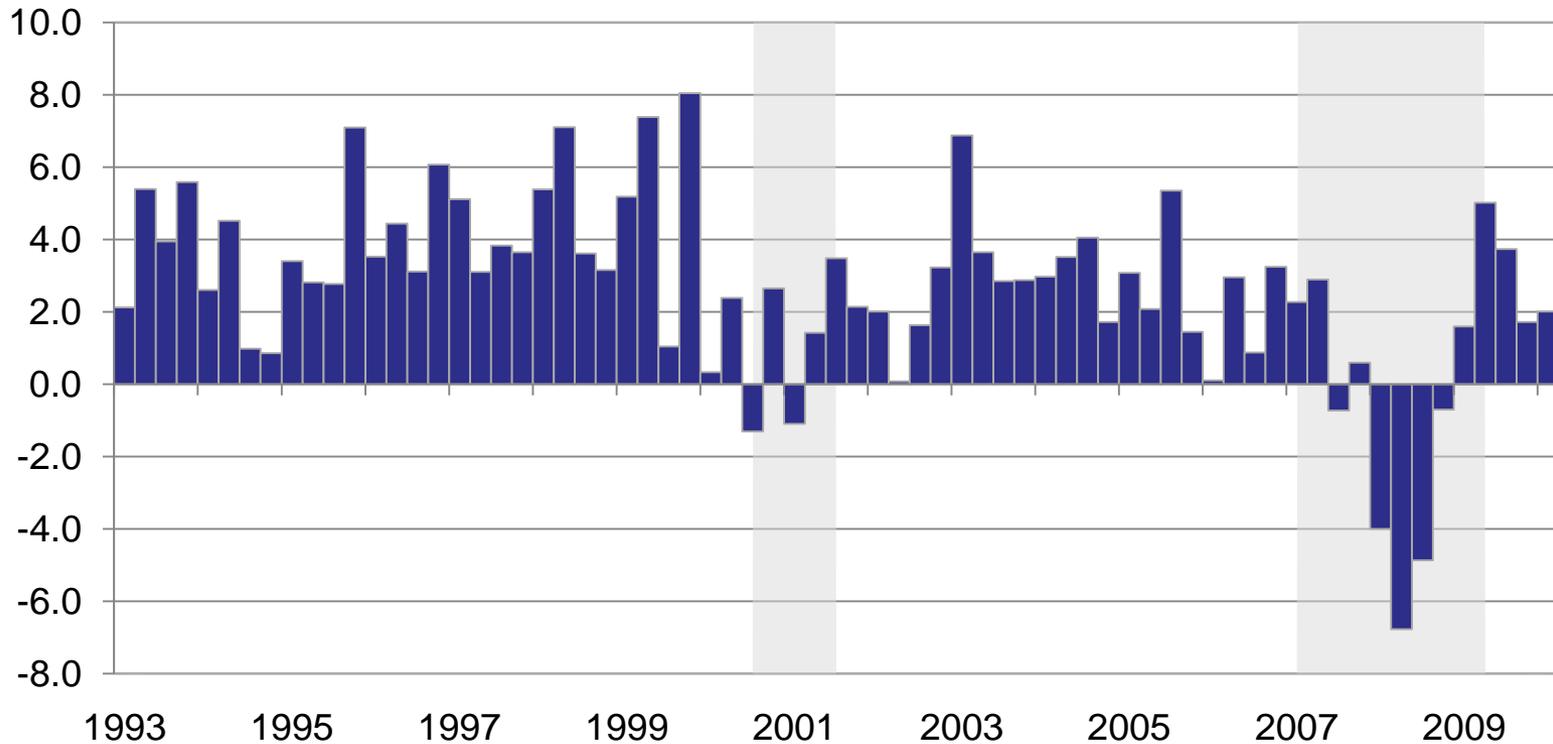
November 18, 2010

# Recession Officially Over, But it Doesn't Feel Like it

- Overview of national economy
  - Recession officially ended June 2009
  - Employment growth is sluggish
  - Manufacturing is driving growth
- Virginia recession not as bad as the nation
- Growth varies widely by region with Northern Virginia leading the state
- Virginia expected to grow faster than the nation (without defense cuts)

# We've Just Been Through the Worst Recession Since the Great Depression

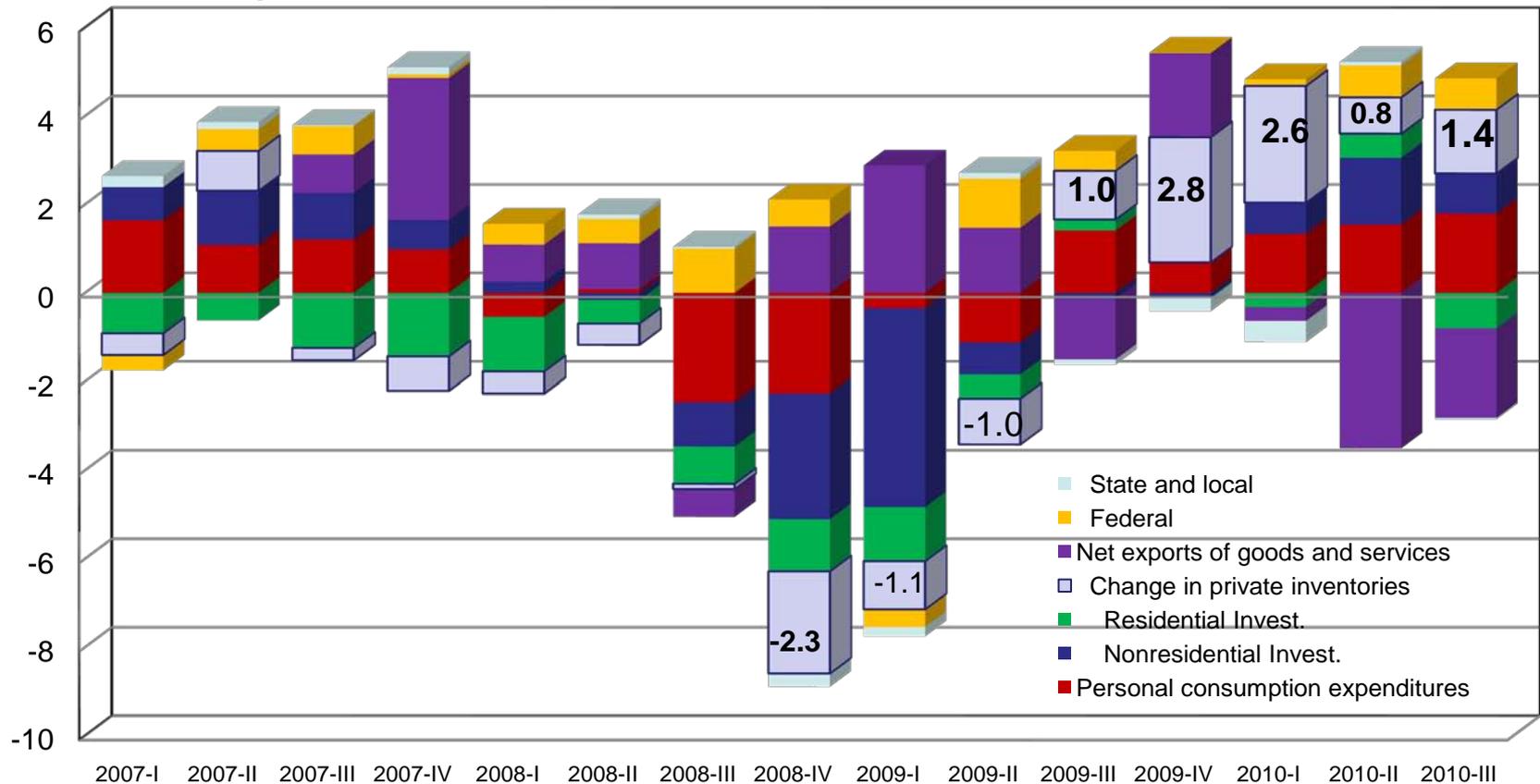
**Real Gross Domestic Product  
Quarterly Annualized Percent Change**



Data through 3<sup>rd</sup> quarter.

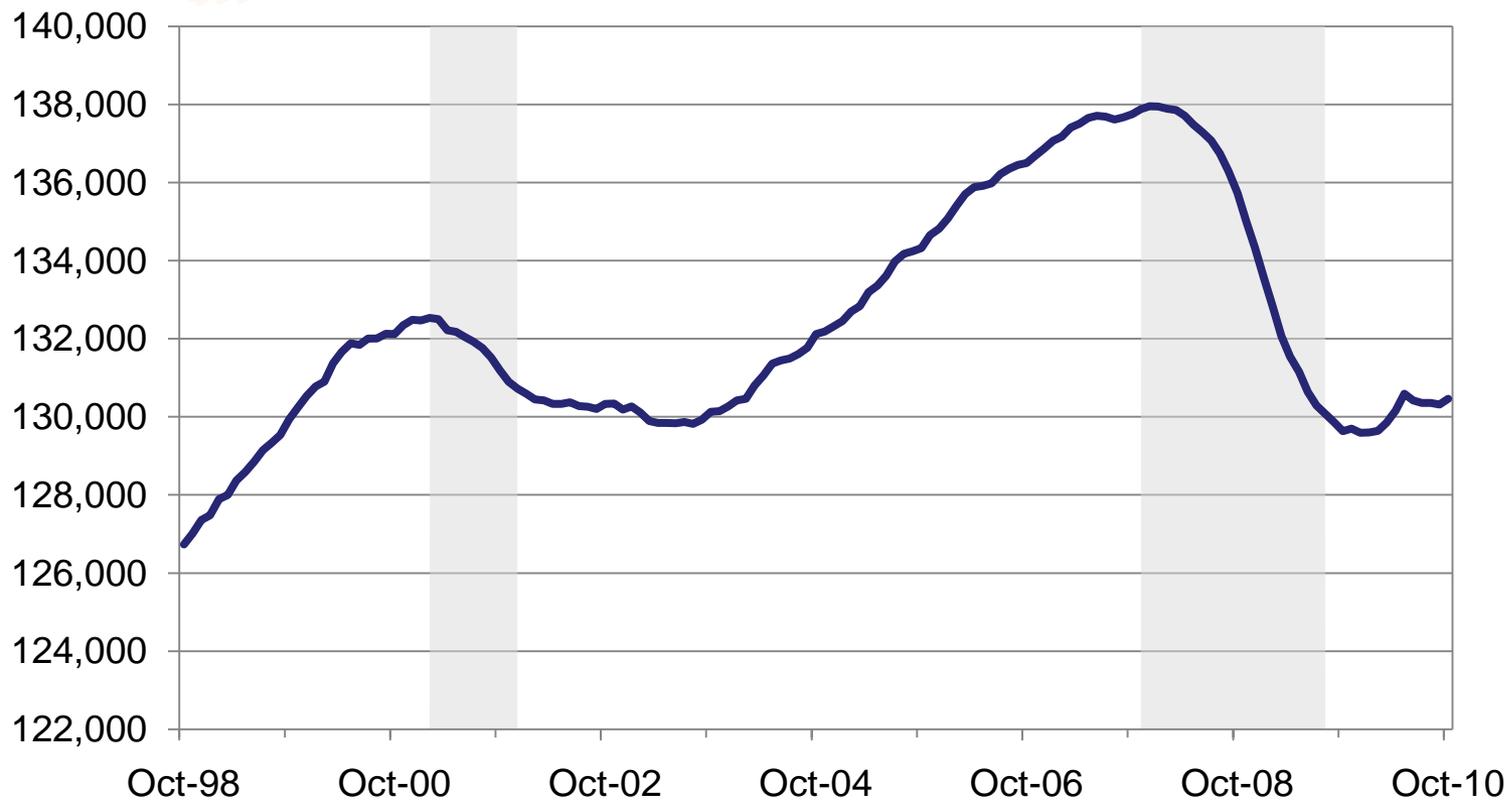
# The Role of Inventories in the Recession/Recovery

Percentage Contribution to Real GDP Growth



# Employment Fell 8.4 Million Since 12/07.... How Long Before Hit Previous Peak?

## Nonfarm Employment



Data through October 2010.

# How Long Before Back to Employment Level at Start of Recession?

<b>Jobs Created Per Month in Recovery</b>	<b>8.4 M Jobs Lost</b>	<b>11 M Jobs Lost with Marginally Attached or Prefer Full Time</b>
200,000	42 months or 3.5 yrs	55 months or 4.6 yrs
250,000	34 months or 2.8 yrs	44 months or 3.7 yrs
300,000	28 months or 2.3 yrs	37 months or 3.1 yrs
400,000	21 months or 1.8 yrs	28 months or 2.3 yrs

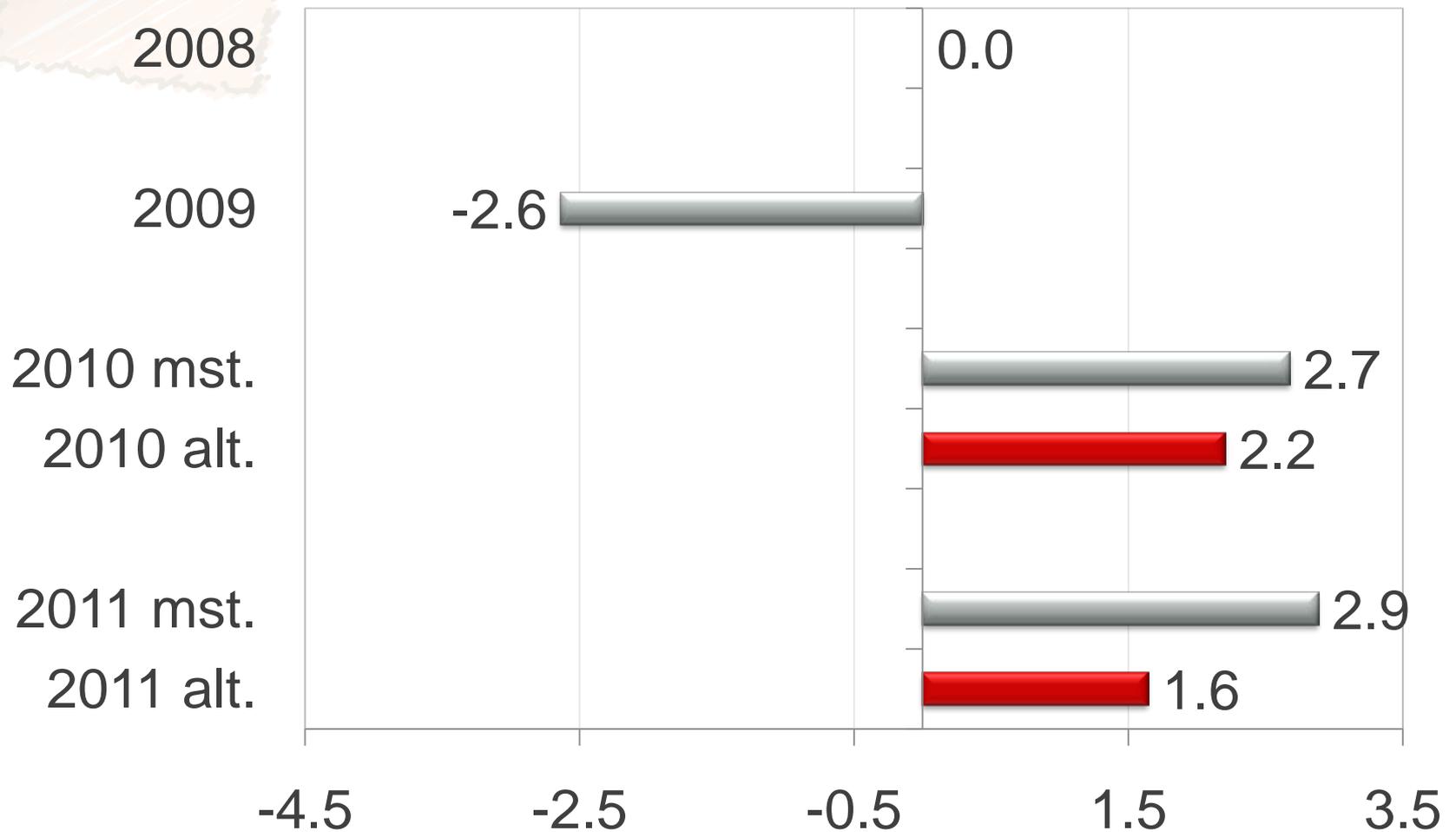
# National Forecast

	2009-10 Actual				2010-11 Forecast			
	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr2	Qtr3
Real Gross Domestic Product	5.0	3.7	1.7	2.0	2.4	3.3	3.1	3.1
Consumptions Expenditures	0.9	1.9	2.2	2.6	2.5	2.2	2.0	2.3
Residential Investment	-0.8	-12.3	25.6	-29.1	5.1	7.0	8.6	9.2
Nonresidential Investment	-1.5	7.8	17.2	9.8	13.3	12.5	12.7	11.5
Equipment and Software	14.6	20.4	24.8	12.0	15.4	15.1	13.8	13.1
Government Expenditure	-1.4	-1.6	3.9	3.4	3.0	3.0	2.5	2.4
Net Exports(Bil. 2005\$)	-329.7	-337.9	-448.5	-531.3	-520.5	-512.1	-515.9	-518.8
Consumer Price Index	<b>Percentage Change From a Year Ago (%)</b>							
	1.5	2.4	1.8	1.2	1.1	1.4	1.8	1.7
	<b>Yields (%)</b>							
Federal Funds Rate	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.9
Prime Rate	3.3	3.3	3.3	3.3	3.2	3.2	3.4	3.9
10-Year Treasury	3.5	3.7	3.5	2.8	2.6	2.9	3.3	3.5
30-Year Mortgage	4.9	5.0	4.9	4.4	4.2	4.5	4.7	4.9

Source: Chmura Economics & Analytics. Note: Yields reported for the average of the quarter

GDP based on preliminary figures

# Real GDP Annual Percentage Growth Rate

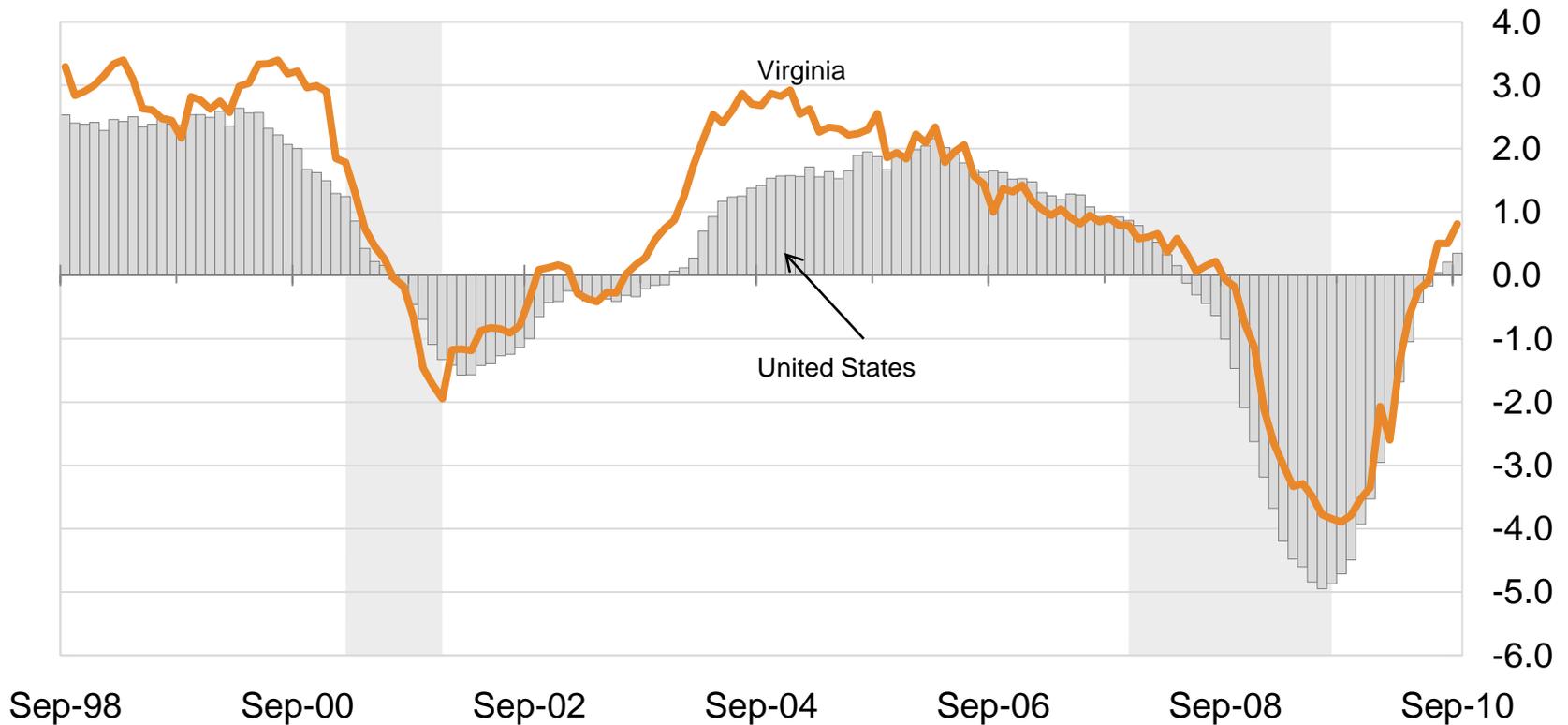


# Risks to the Recovery

- Higher taxes
  - Federal debt
  - Health care reform
- International investors pull out of U.S.
  - Bond yields rise
  - Further issues in real estate
- Deflation (short run) / Inflation (longer run)

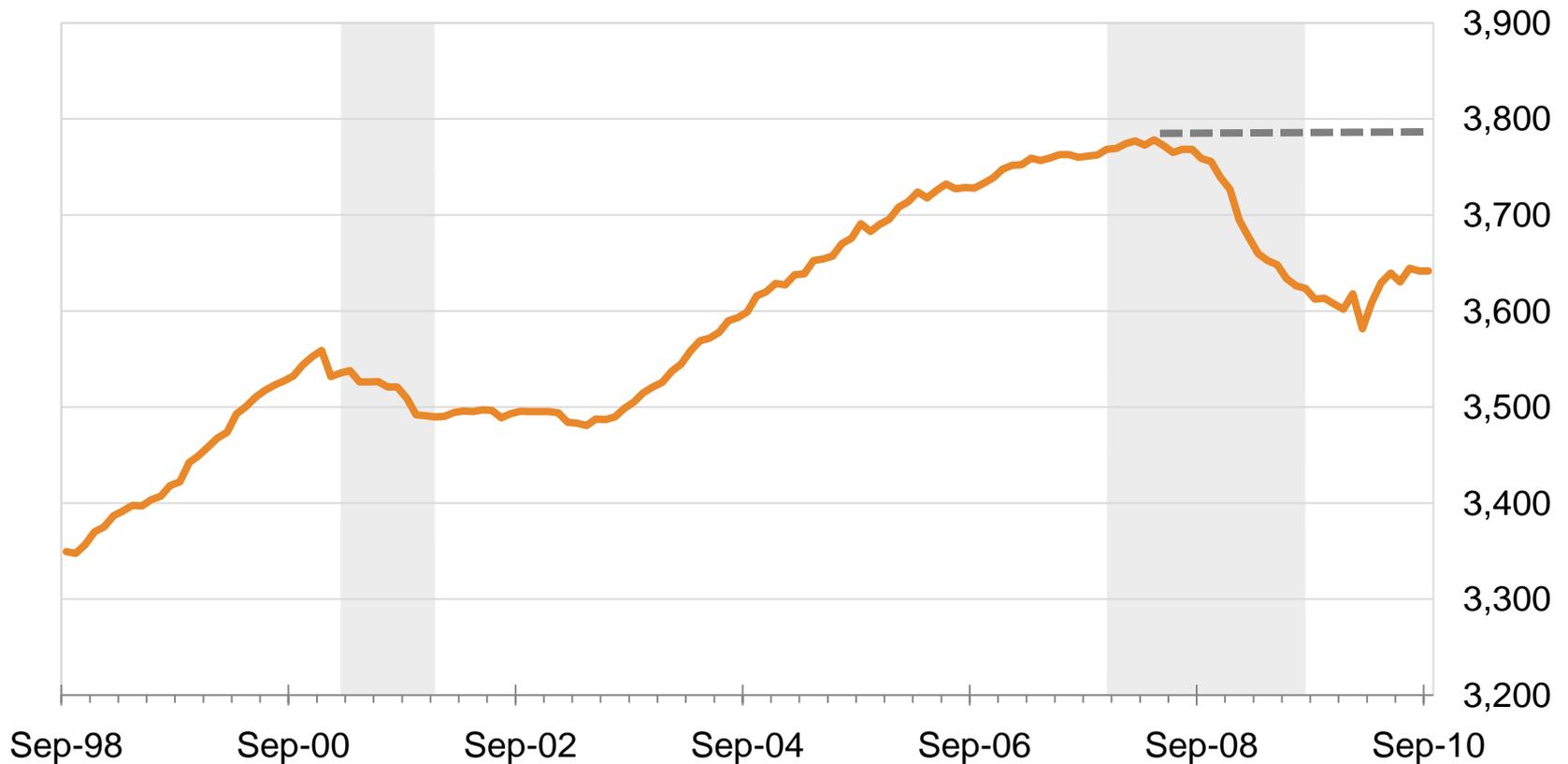
# Virginia Has Performed Better than the Nation in the Recession

Employment Growth  
Percent Change, Year-Over-Year



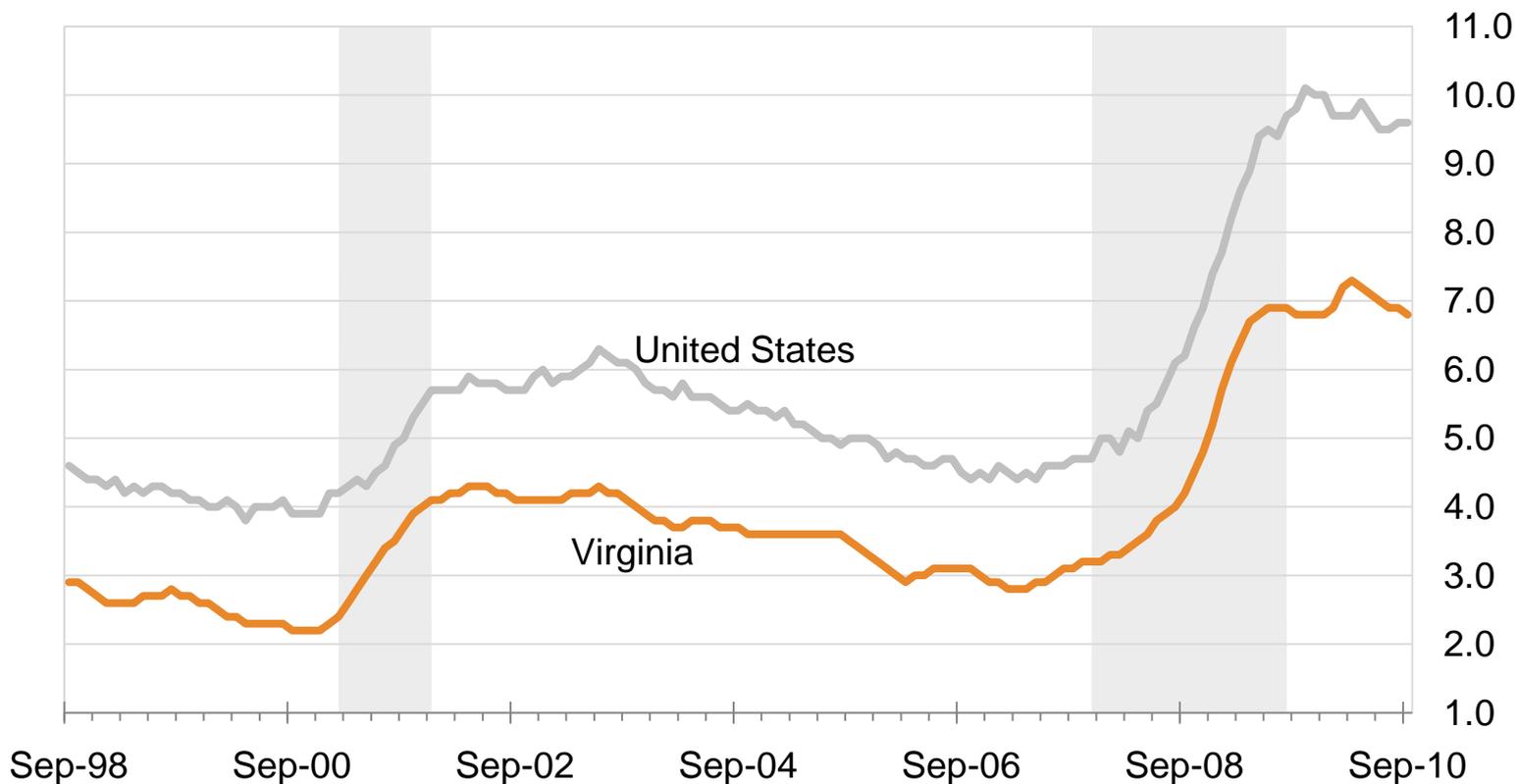
# Total Employment in Virginia is 138,000 Below Recession Peak Levels

Virginia Nonfarm Employment  
(Thousands of Jobs)



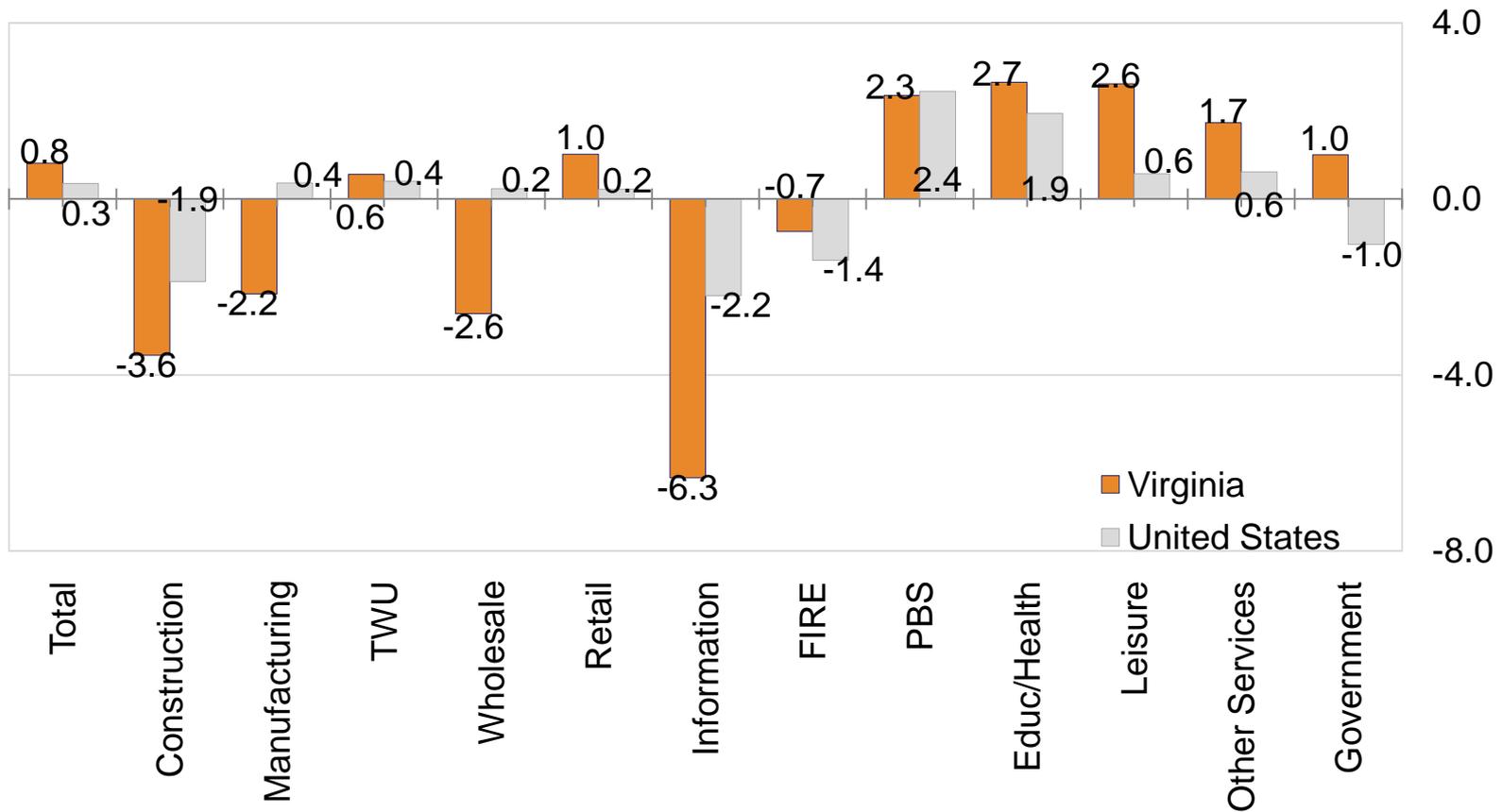
# More Highly Educated Workforce Keeps VA Unemployment Rate < U.S.

Unemployment Rate



# What Will Drive Growth?

Employment Growth by Sector  
Percent Change, Year Ending September 2010

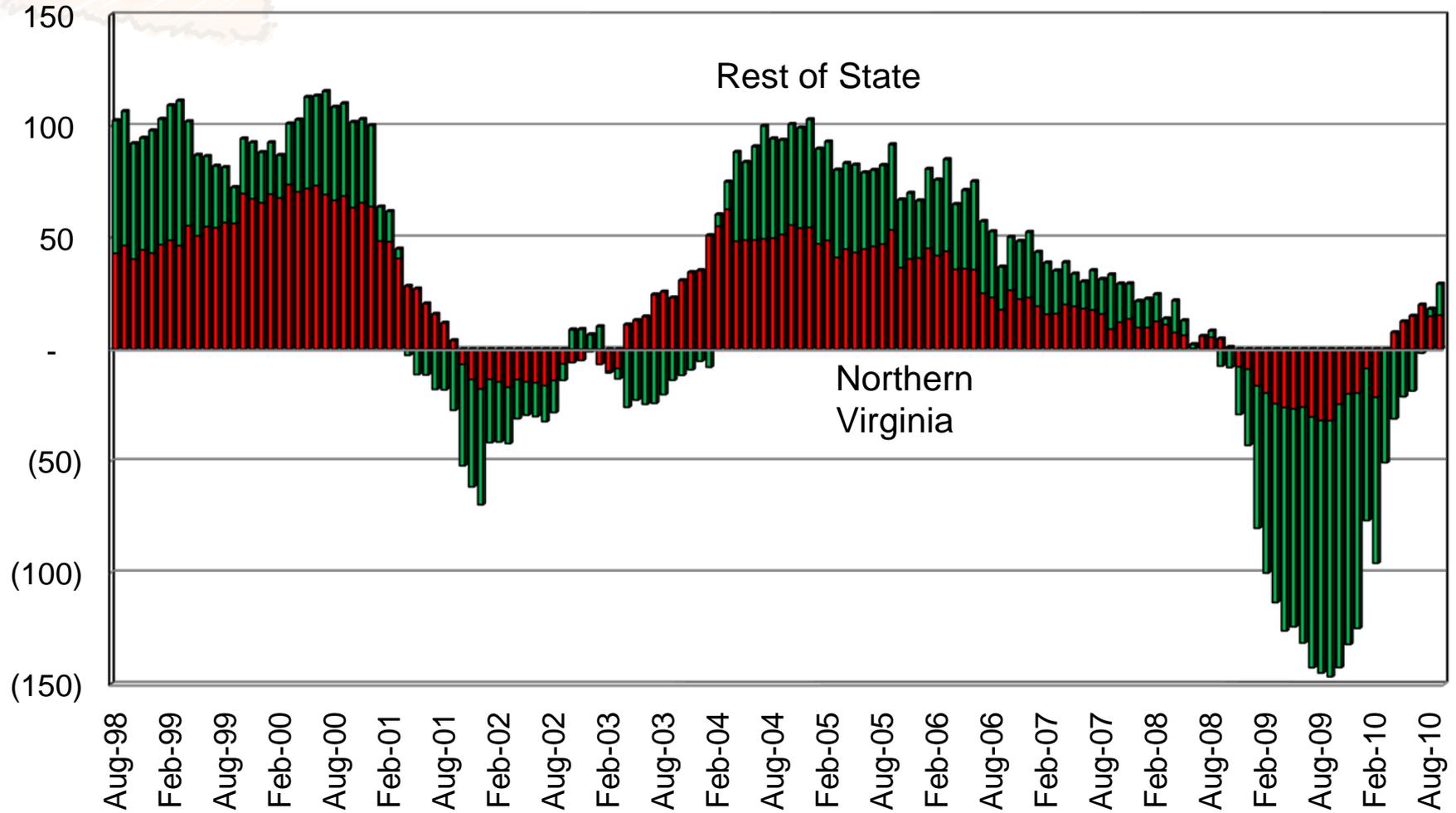


Industry	Four Quarters Ending with 2010q1		Empl. Aver. Annual % Change (2007q1-2010q1)		Projected Change in Employment 2010q1-2020q1	
	Employment	Avg. Annual Wages	Virginia	USA	Total Employment	Avg. Annual Percent
Agriculture, Forestry, Fishing and Hunting	11,652	\$26,637	-2.6%	-0.5%	-467	-0.4%
Mining, Quarrying, and Oil and Gas Extraction	8,354	\$60,442	-4.2%	1.3%	-657	-0.8%
Utilities	19,019	\$74,371	1.4%	0.8%	-1,306	-0.7%
Construction	195,917	\$45,569	-8.9%	-7.7%	28,925	1.4%
Manufacturing	242,726	\$50,249	-6.1%	-5.7%	-31,265	-1.4%
Wholesale Trade	111,578	\$65,460	-2.4%	-1.9%	569	0.1%
Retail Trade	403,470	\$25,135	-2.2%	-1.8%	1,920	0.0%
Transportation and Warehousing	120,038	\$45,066	-2.5%	-1.8%	4,440	0.4%
Information	84,805	\$73,939	-4.2%	-2.5%	2,627	0.3%
Finance and Insurance	121,987	\$71,746	-3.3%	-2.2%	2,435	0.2%
Real Estate and Rental and Leasing	53,500	\$42,412	-3.2%	-2.9%	3,838	0.7%
Professional, Scientific, and Technical Services	385,159	\$88,535	2.6%	0.4%	142,039	3.2%
Management of Companies and Enterprises	74,107	\$97,113	-0.6%	1.3%	1,227	0.2%
Administrative and Support and Waste Management and Remediation Services	195,142	\$33,978	-3.2%	-4.8%	28,695	1.4%
Educational Services	349,764	\$40,200	1.5%	1.2%	74,333	1.9%
Health Care and Social Assistance	422,769	\$43,127	3.2%	2.5%	91,949	2.0%
Arts, Entertainment, and Recreation	63,761	\$23,859	0.6%	0.5%	7,721	1.1%
Accommodation and Food Services	294,913	\$16,005	-0.1%	-0.1%	10,386	0.3%
Other Services (except Public Administration)	117,887	\$37,781	0.0%	0.0%	11,520	0.9%
Public Administration	237,085	\$67,283	2.4%	1.1%	17,579	0.7%
Unclassified	2,319	\$37,865	-25.4%	-10.8%	147	0.6%
<b>Total All Industries</b>	<b>3,515,952</b>	<b>\$48,481</b>	<b>-1.1%</b>	<b>-1.3%</b>	<b>394,944</b>	<b>1.1%</b>

Source: JobsEQ(R). Chmura Economics & Analytics

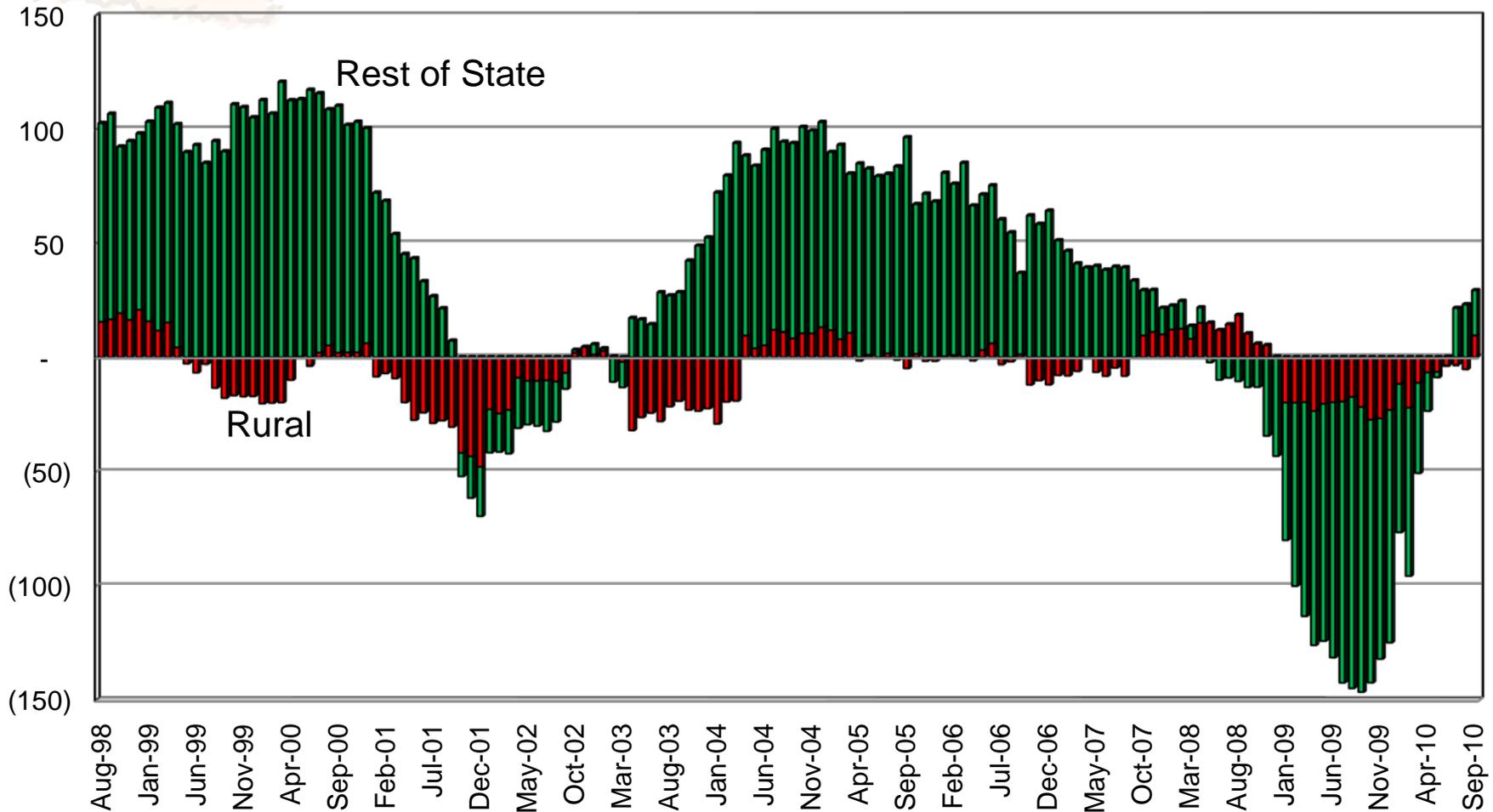
# NVA is a Driver of Growth in VA

Change From a Year Ago, In Thousands, NVA vs. Rest of State



# Rural VA Has Not Enjoyed the Job Gains of the Rest of the State

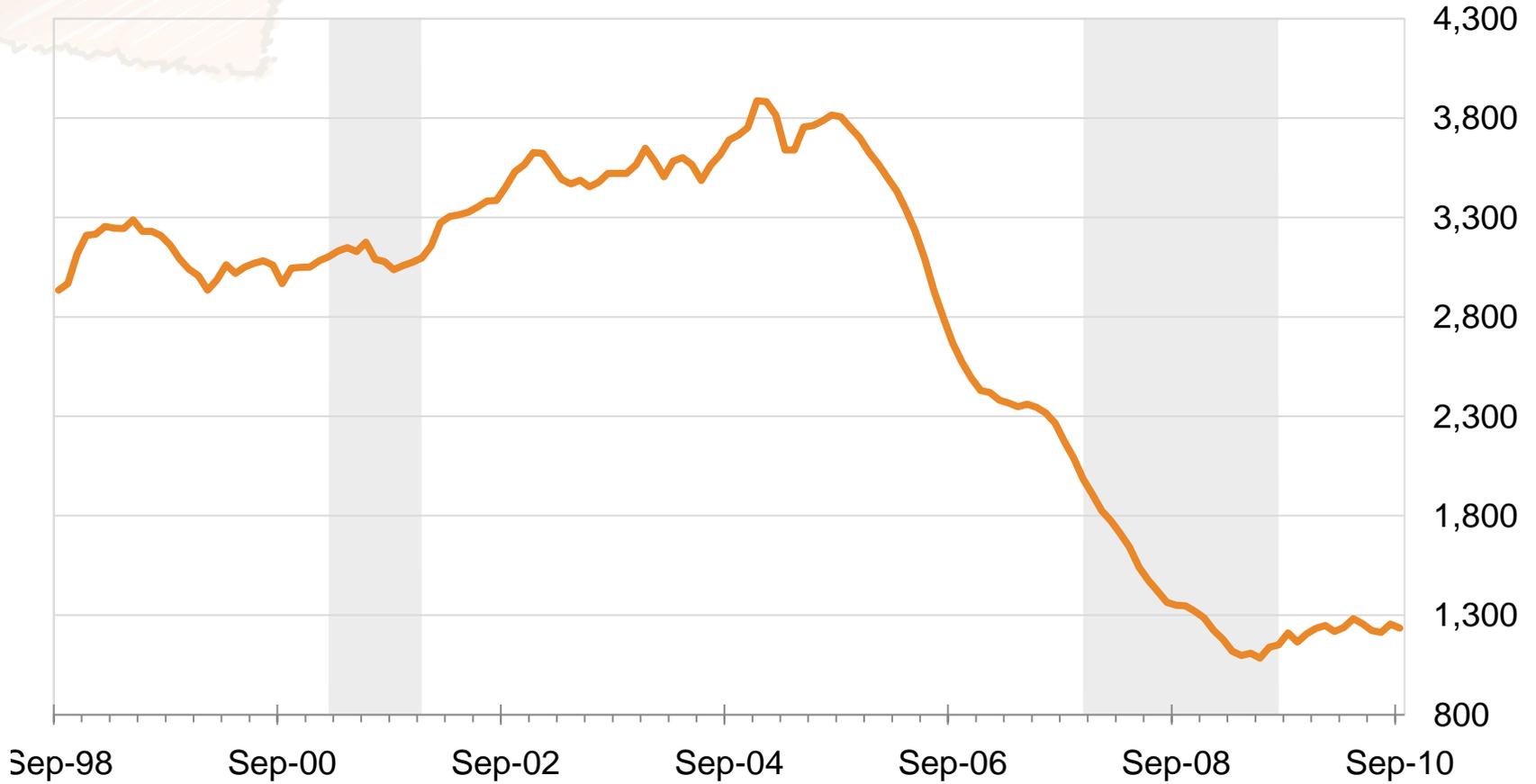
Change From a Year Ago, In Thousands, Rural vs Rest of State



## Retail Sales, Percent Change Year-Over-Year, Six-Month Moving Average

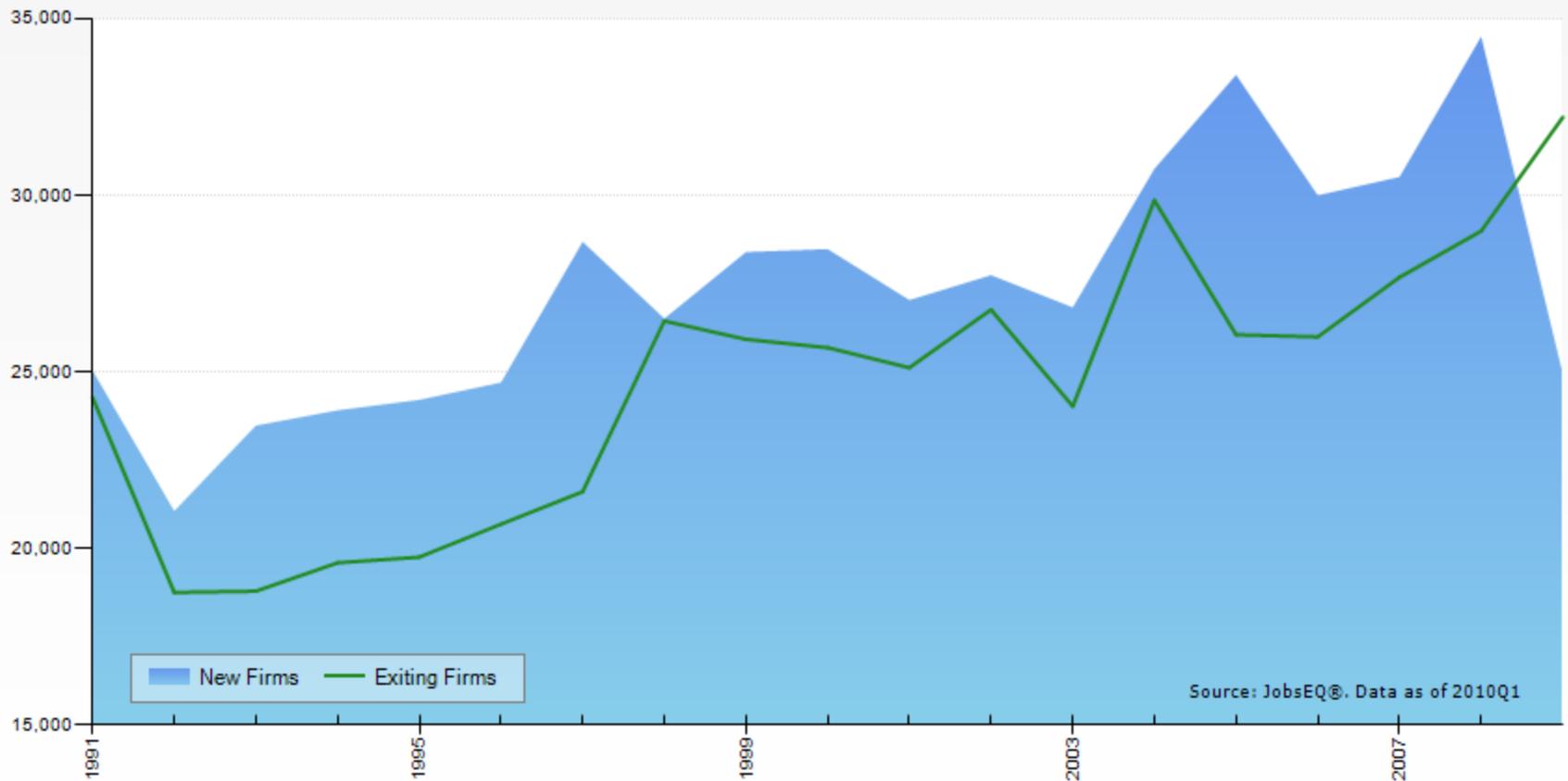


# Single-Family Building Permits Six-Month Moving Average



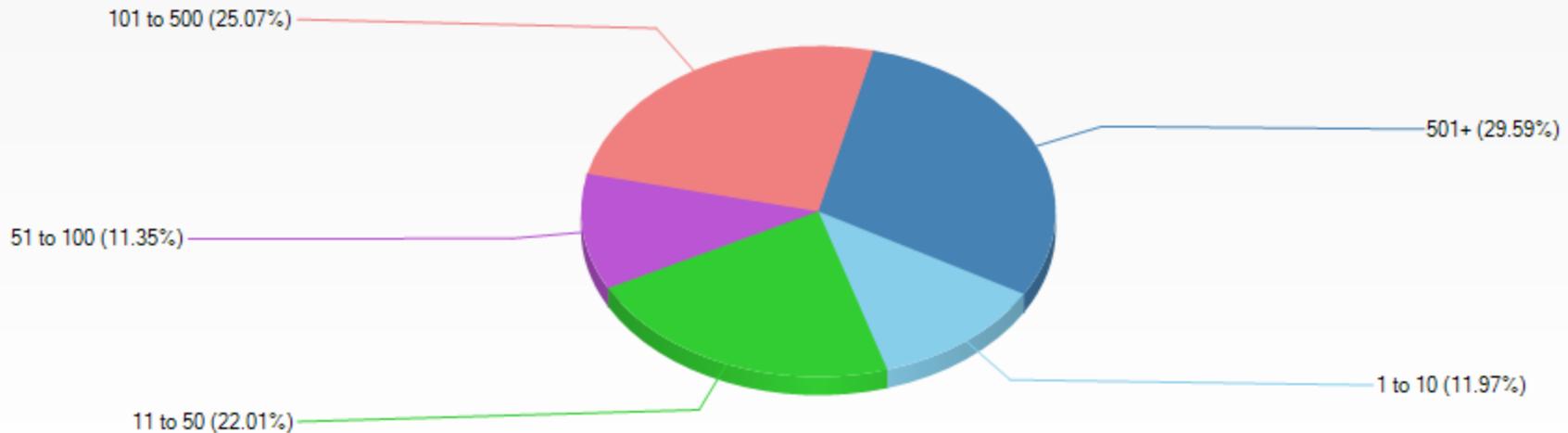
# Small Businesses (Firms with 10 Employees or Less) were Hit Hard During Recession

Entrepreneurial Activities Yearly for Virginia



# SBA Defines Small Business as Less Than 500 Employees

Labor Inventory by Firm Size for Virginia



Source: JobsEQ®. Data as of 2010Q1

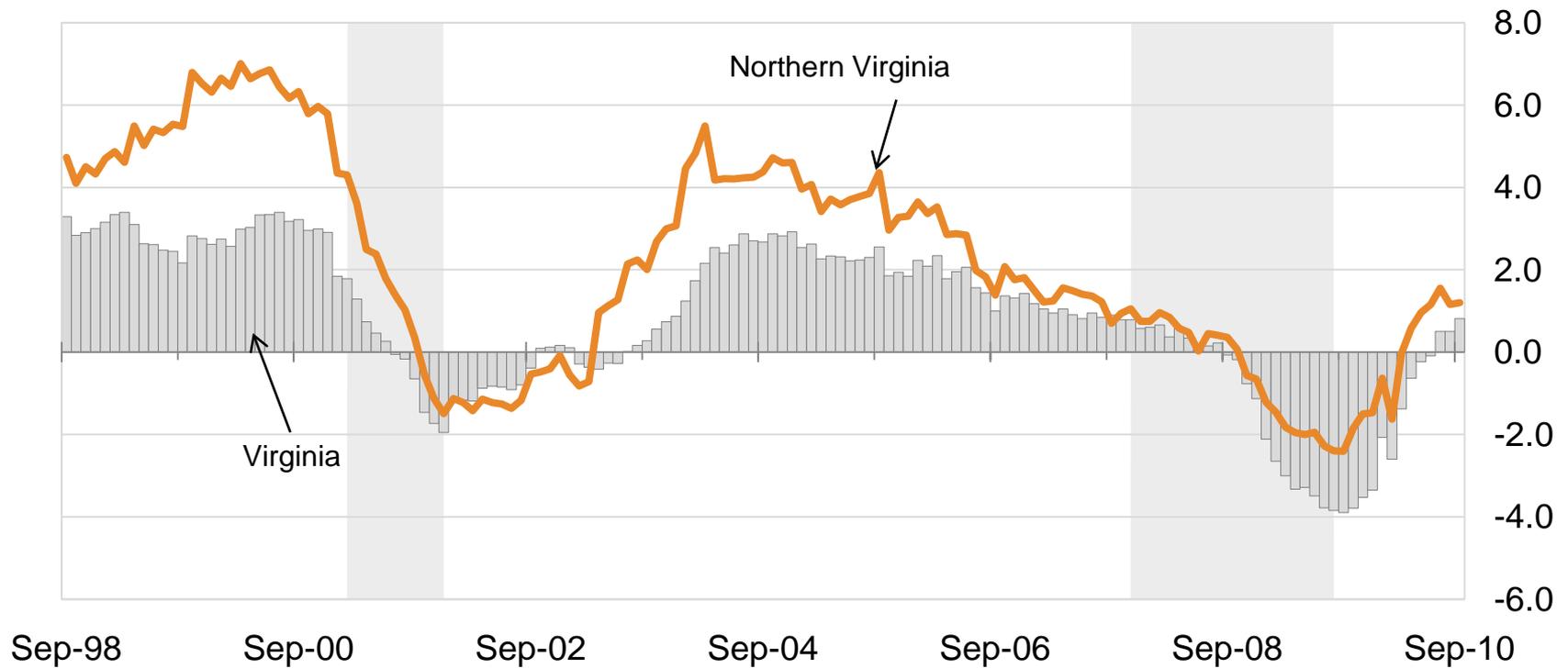
# National View of Small Business

- They employ about half of U.S. workers
- Generated 65% of net new jobs over the past 17 years
- Creates more than 50% of nonfarm GDP
- Hired 43% of high-tech workers (scientists, engineers, computer programmers, etc.)
- Produces 13 times more patents per employee than large patenting firms

Source: SBA, [www.sba.gov/advo](http://www.sba.gov/advo)

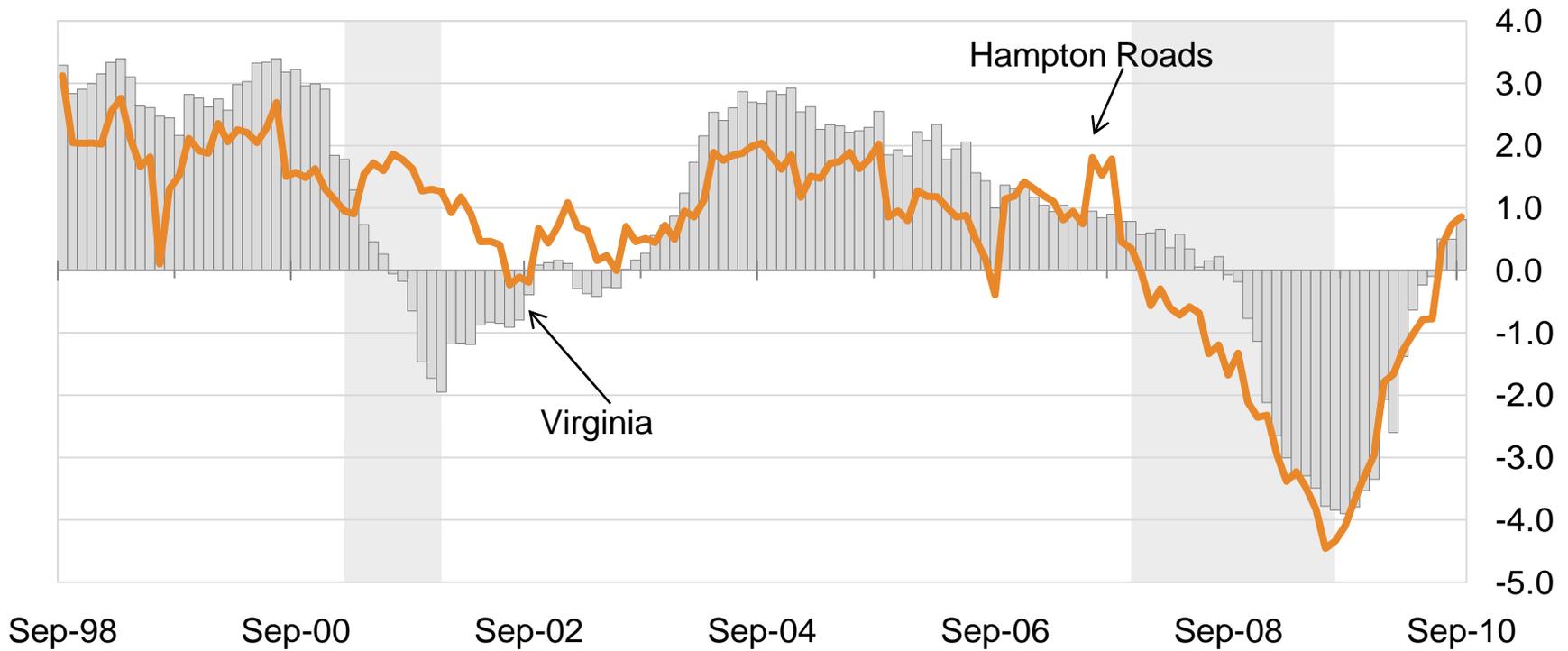
# Northern Virginia Employment

Employment Growth  
Percent Change, Year-Over-Year



# Hampton Roads MSA Employment

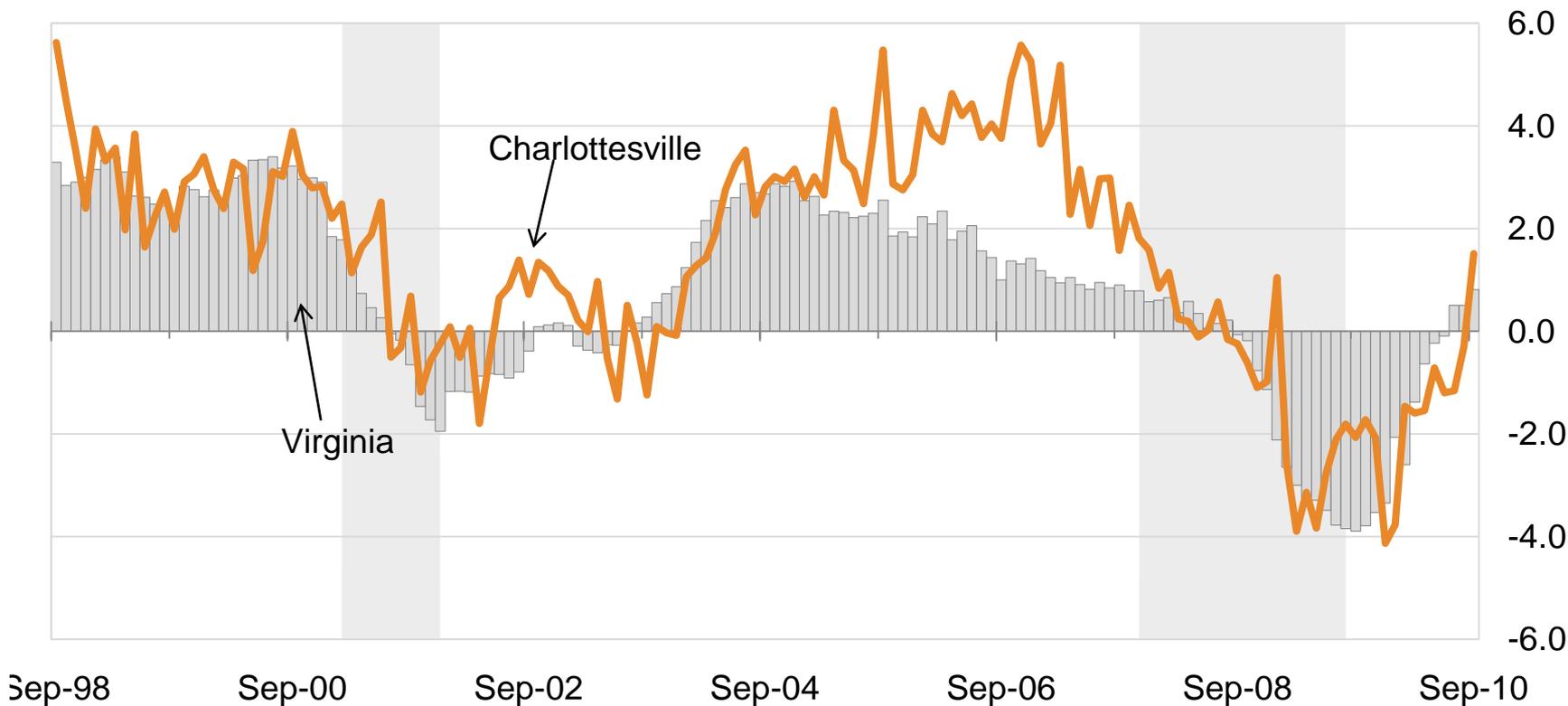
Employment Growth  
Percent Change, Year-Over-Year



# Charlottesville MSA

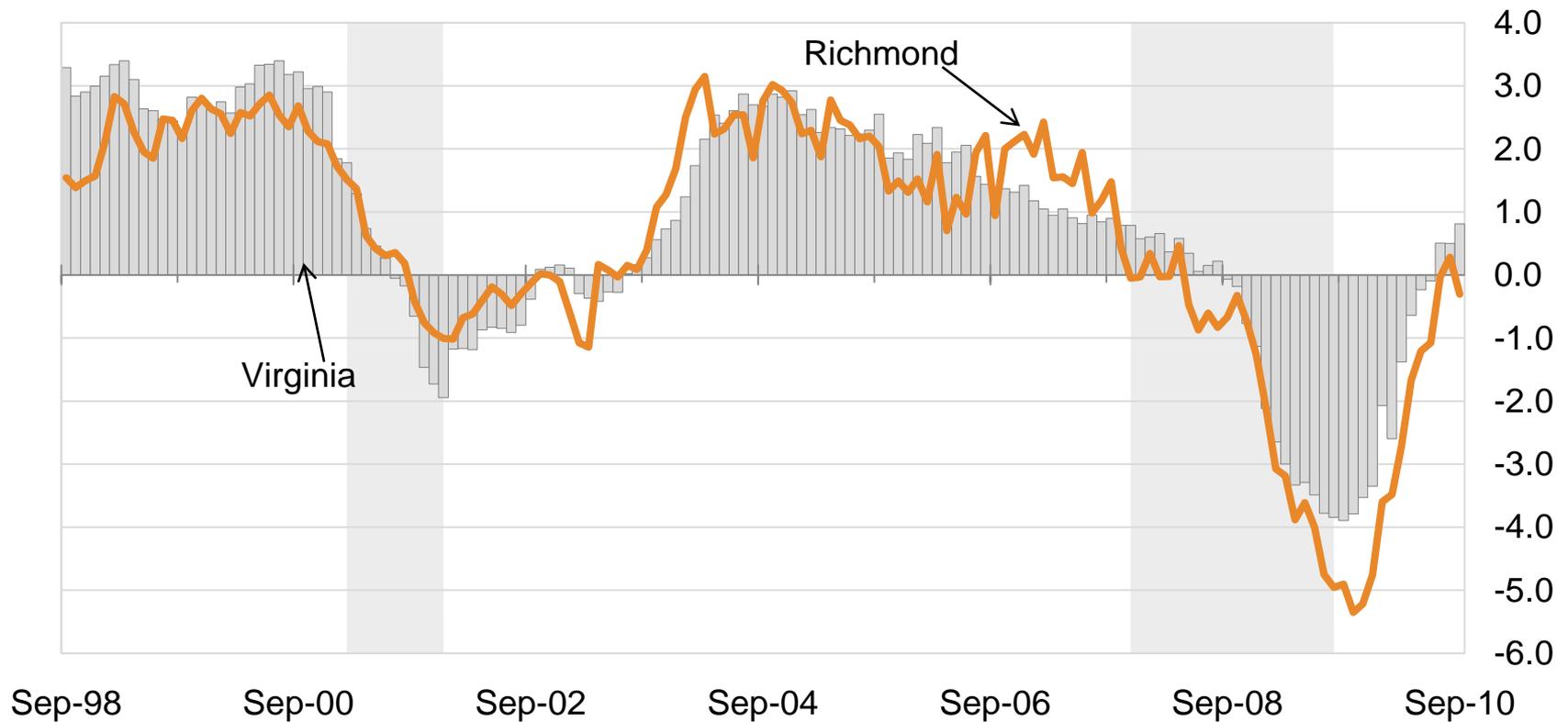
## Employment

Employment Growth  
Percent Change, Year-Over-Year



# Richmond MSA Employment

Employment Growth  
Percent Change, Year-Over-Year



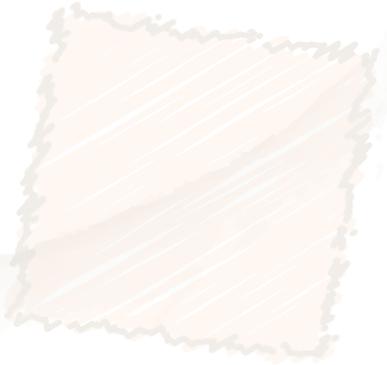
## Virginia Forecast Summary: Most Likely Scenario

### Annual Average Change

	Actual			Forecast		
	2007	2008	2009	2010	2011	2012
<b>Charlottesville</b>						
Total Employment*	2.8%	0.0%	-2.9%	-0.4%	1.9%	2.1%
Wages and Salaries**	6.7%	2.0%	-0.2%	1.3%	5.4%	5.4%
Real Retail Sales	0.6%	-6.1%	-7.6%	0.8%	4.3%	5.2%
Building Permits	-15.3%	-30.5%	-18.4%	14.0%	8.4%	13.4%
<b>Hampton Roads</b>						
Total Employment*	1.0%	-1.1%	-3.5%	-0.2%	0.2%	0.2%
Wages and Salaries**	5.2%	2.1%	-1.5%	0.7%	3.2%	3.7%
Real Retail Sales	0.8%	-7.1%	-5.1%	-1.2%	2.5%	2.7%
Building Permits	-21.8%	-28.7%	-10.4%	12.2%	4.6%	7.6%
<b>Lynchburg</b>						
Total Employment*	1.0%	1.0%	-4.2%	-0.9%	1.5%	1.8%
Wages and Salaries**	4.5%	3.5%	-3.3%	0.7%	5.0%	2.7%
Real Retail Sales	-1.1%	-0.1%	-9.8%	2.3%	2.6%	3.5%
Building Permits	-17.5%	-41.3%	-34.3%	10.3%	9.7%	14.7%
<b>Northern Virginia</b>						
Total Employment*	1.2%	0.3%	-1.6%	0.6%	2.4%	2.8%
Wages and Salaries**	5.5%	3.1%	0.1%	2.9%	5.3%	6.3%
Real Retail Sales	-0.7%	-6.0%	-3.8%	1.2%	5.9%	5.8%
Building Permits	-22.8%	-35.6%	-2.9%	12.8%	7.8%	13.8%
<b>Richmond</b>						
Total Employment*	1.2%	-0.4%	-3.9%	-0.4%	1.6%	1.5%
Wages and Salaries**	6.3%	1.4%	-4.7%	1.5%	4.9%	4.2%
Real Retail Sales	2.0%	-5.3%	-5.9%	-1.1%	4.1%	4.2%
Building Permits	-23.3%	-32.8%	-31.6%	2.0%	2.6%	5.6%
<b>Roanoke</b>						
Total Employment*	0.5%	-0.6%	-4.5%	-0.5%	0.3%	0.5%
Wages and Salaries**	5.2%	2.5%	-1.5%	1.2%	3.5%	1.8%
Real Retail Sales	-1.7%	-2.8%	-10.9%	-1.4%	2.7%	3.2%
Building Permits	-24.4%	-16.9%	-44.5%	7.1%	3.6%	7.6%
<b>VA-Totals</b>						
Total Employment*	0.9%	0.1%	-3.2%	0.1%	1.5%	1.9%
Wages and Salaries**	5.5%	2.5%	-1.2%	2.0%	4.7%	5.1%
Real Retail Sales	0.1%	-5.4%	-5.3%	0.3%	4.2%	5.3%
Building Permits	-23.5%	-34.0%	-16.6%	8.3%	6.5%	10.5%

\*Employment refers to nonagricultural employment.

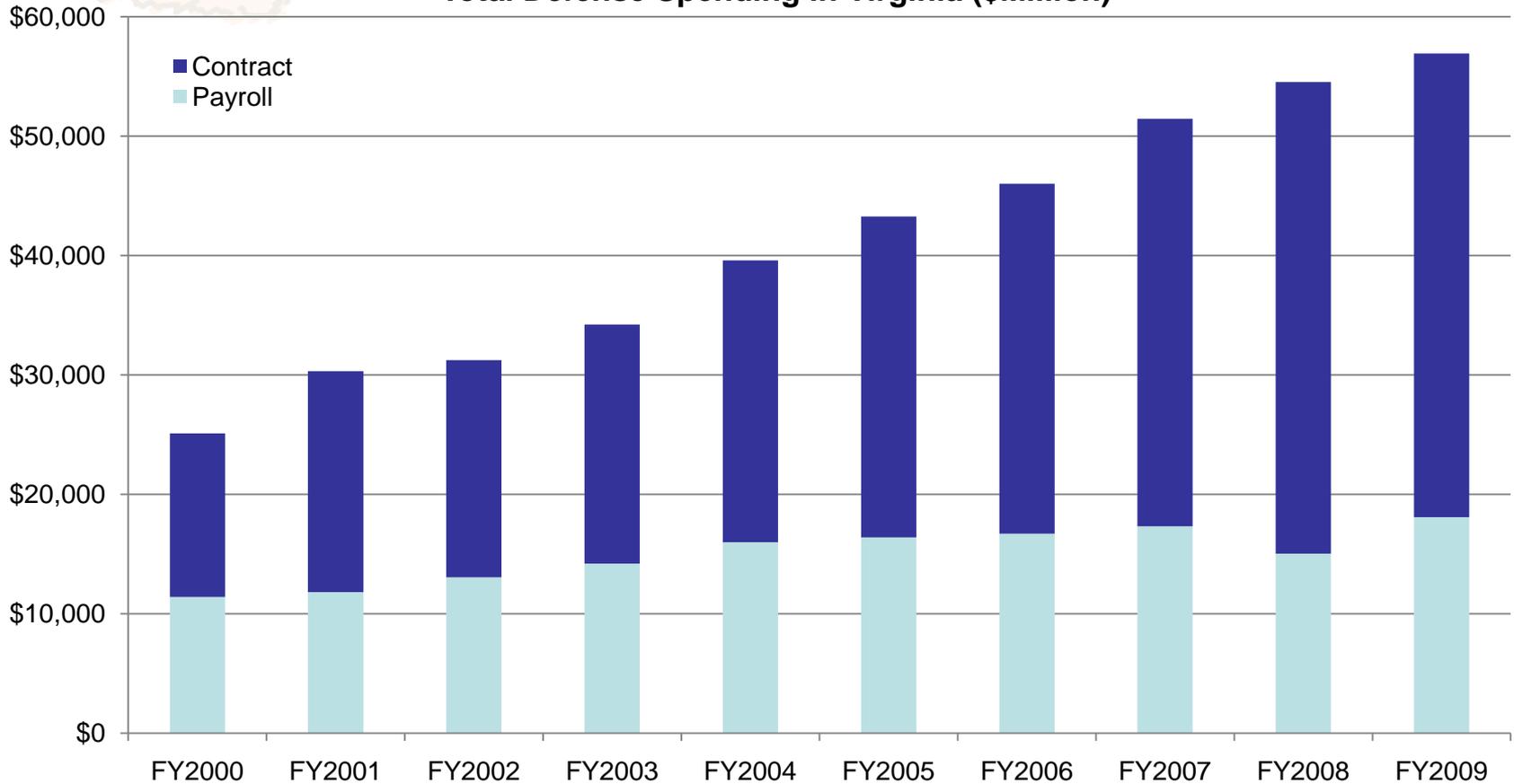
\*\*Wages and salaries include some options that were exercised.



# Defense Spending

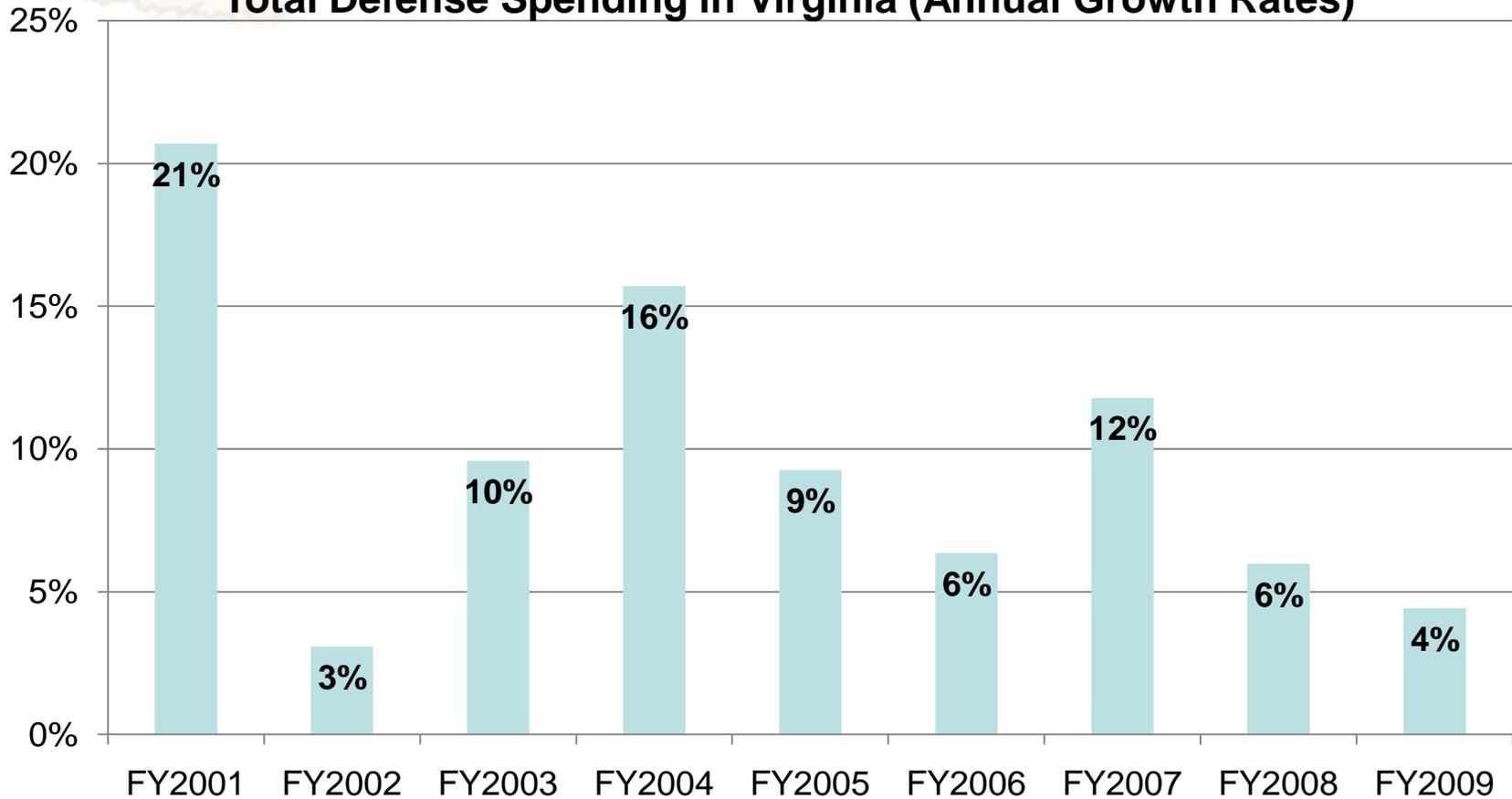
# Total Defense Spending Reached \$56.9 Billion in Virginia

Total Defense Spending in Virginia (\$Million)



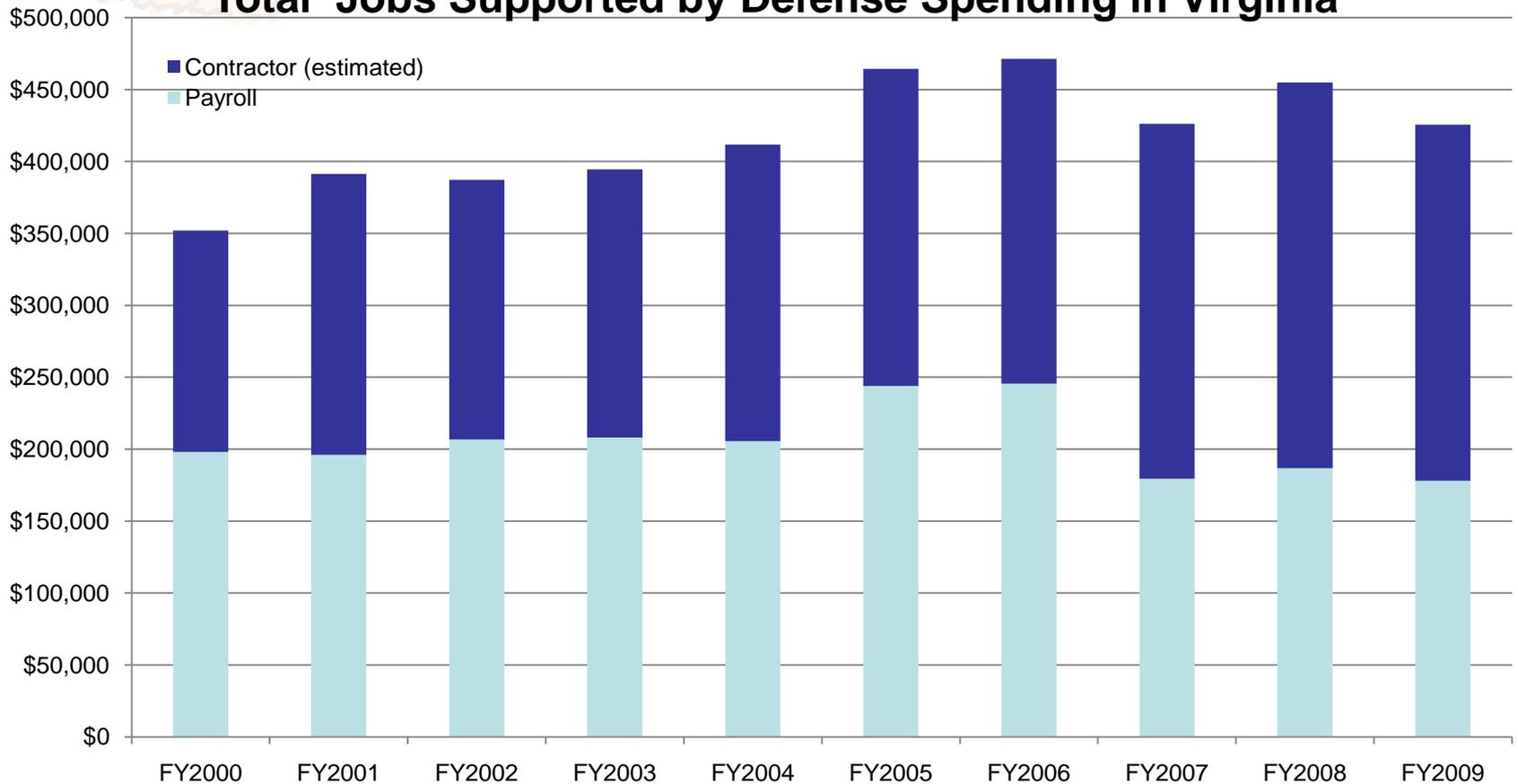
# Growth Averaged 9.5% per Year, but Slowed in Recent Years

Total Defense Spending in Virginia (Annual Growth Rates)



# More than 400,000 Jobs are Supported by Defense Spending

## Total Jobs Supported by Defense Spending in Virginia



\* Steve Fuller, "The Economic and Fiscal Impact of DOD Spending on the Commonwealth of Virginia." In FY 2008. In FY 2008, \$1 million federal contractor spending supported 6.8 jobs in Virginia

# Impact of Defense Cuts Uncertain

## Because Cuts Uncertain

- Gates plans to save \$100 billion in 5 years
- 10% cuts on 'support contractors' (professional, administrative, and IT), for 3 years have been proposed...uncertain of the amount of cuts
- Anecdotally, some defense firms are cutting staff to prepare for "more fixed priced incentive fee contracts" promised by Secretary Gates as he tries to cut waste
- Gates is expected to retire next year

# Take Aways

- Headwinds continue to slow recovery
  - Bank credit is tight
  - More mortgage defaults to come
  - Unemployment rate is high
- Aids to recovery
  - Federal Reserve Bank action and Fed stimulus
  - Low interest rates
- Biggest risks
  - Higher taxes
  - Deflation fears
  - International investors pull out of U.S. bonds
- Biggest risk to Virginia: cuts in federal contracts