

# Development of Regional Totals Key Factors Progress Report

May 5, 2009

# Global Insight Methodology

- Each economic area (metro and state) modeled individually and then linked into national: top-down/bottom-up
- Methodology captures internal growth dynamics and differential business cycle response
- Initial forecasts from econometric models with analyst judgments to make refinements due to behavioral relationships – Focus on judgements is short-term (5-8 years), econometric thereafter.

## Three Regional Definitions

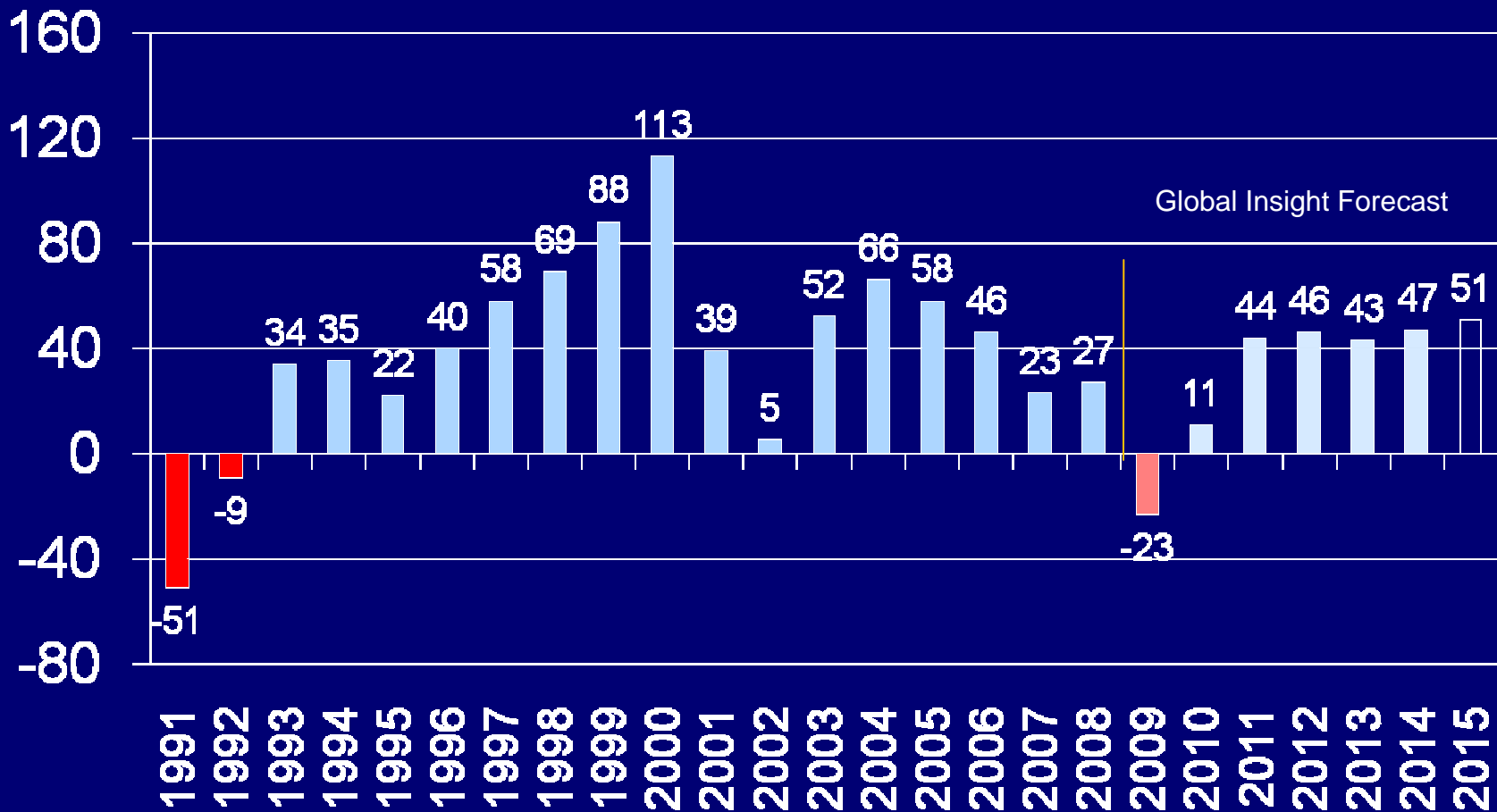
- COG Region (1983 MSA + Calvert, Charles, Stafford) = **COG**
- Washington Metropolitan Statistical Area (current) = **MSA**
- TPB Model Region (Current MSA - Warren + King George + Ann Arundel, Carroll, Howard, St Mary's) = **TPB**

## Key Factors to Date

- Short-Term Forecasts Given Economic Cycle
- Total Employment – Account for self-employed
- Forecasts by NAICS – develop subcategories for Retail, Wholesale, and Transp., Warehousing, Utilities from NAICS category of Trade, Transportation, Utilities

# Annual Change in Jobs COG Region 1991 - 2015

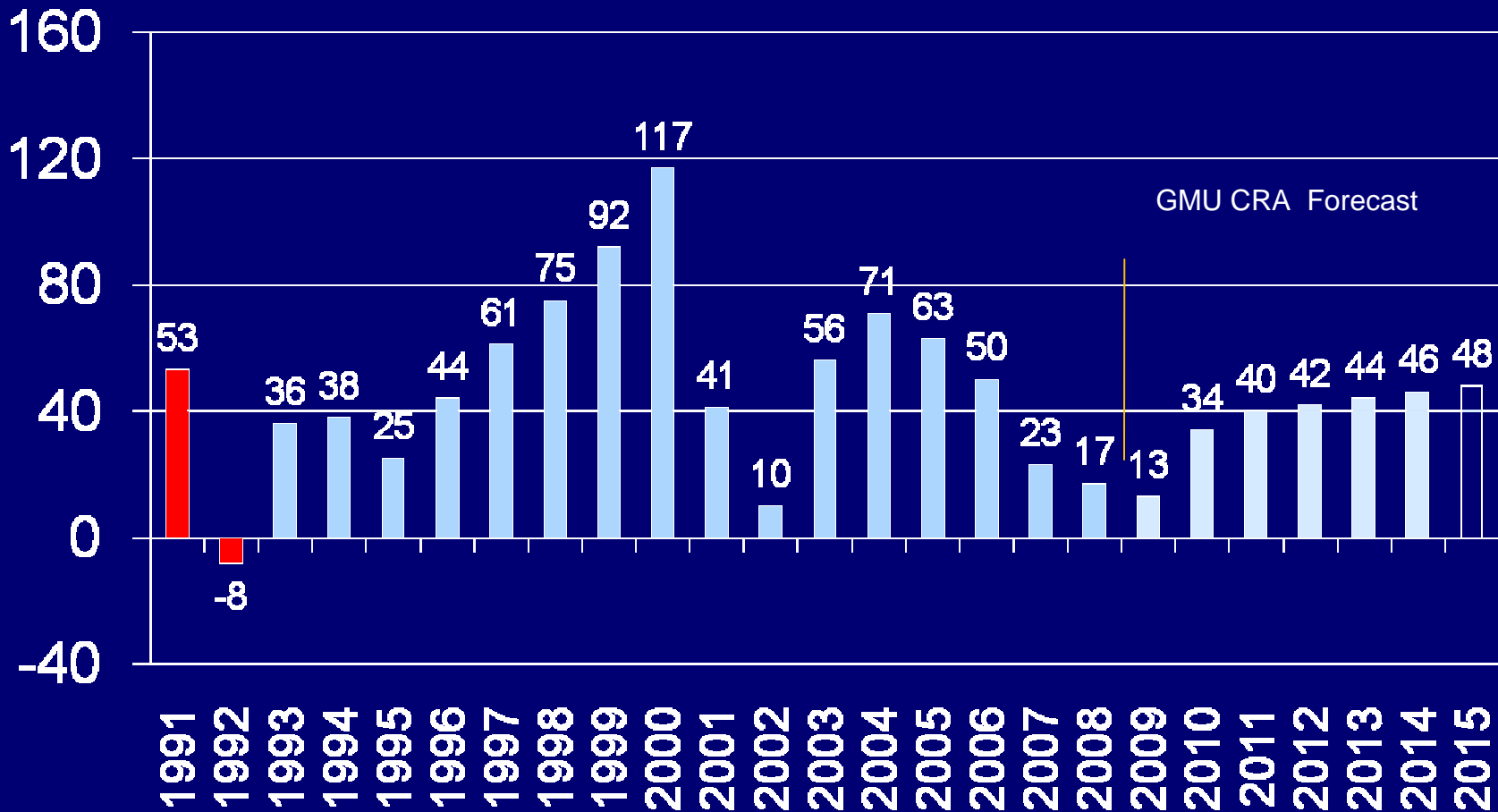
Thousands



Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis, Global Insight

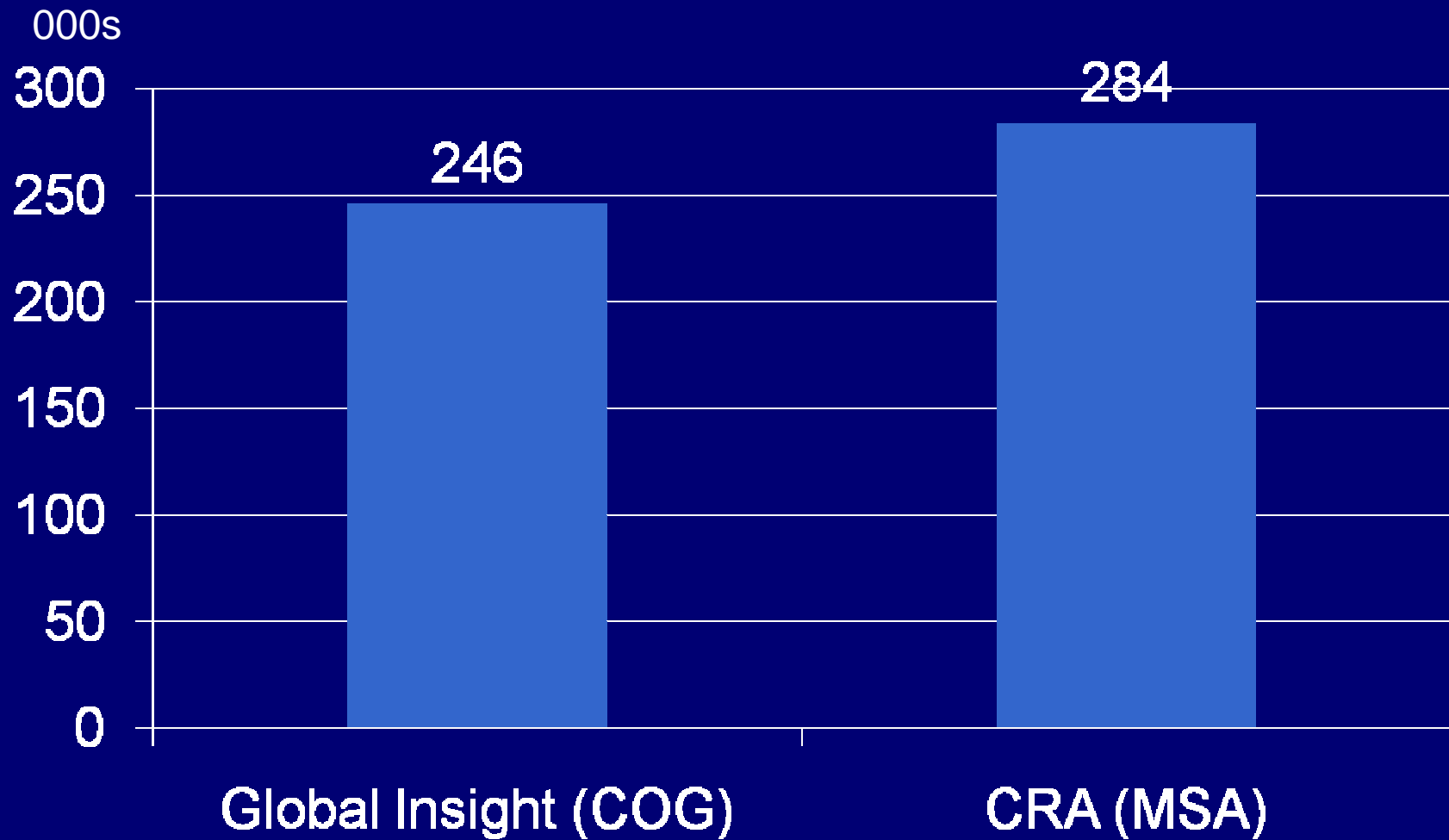
# Annual Change in Jobs Washington MSA 1991 - 2015

Thousands

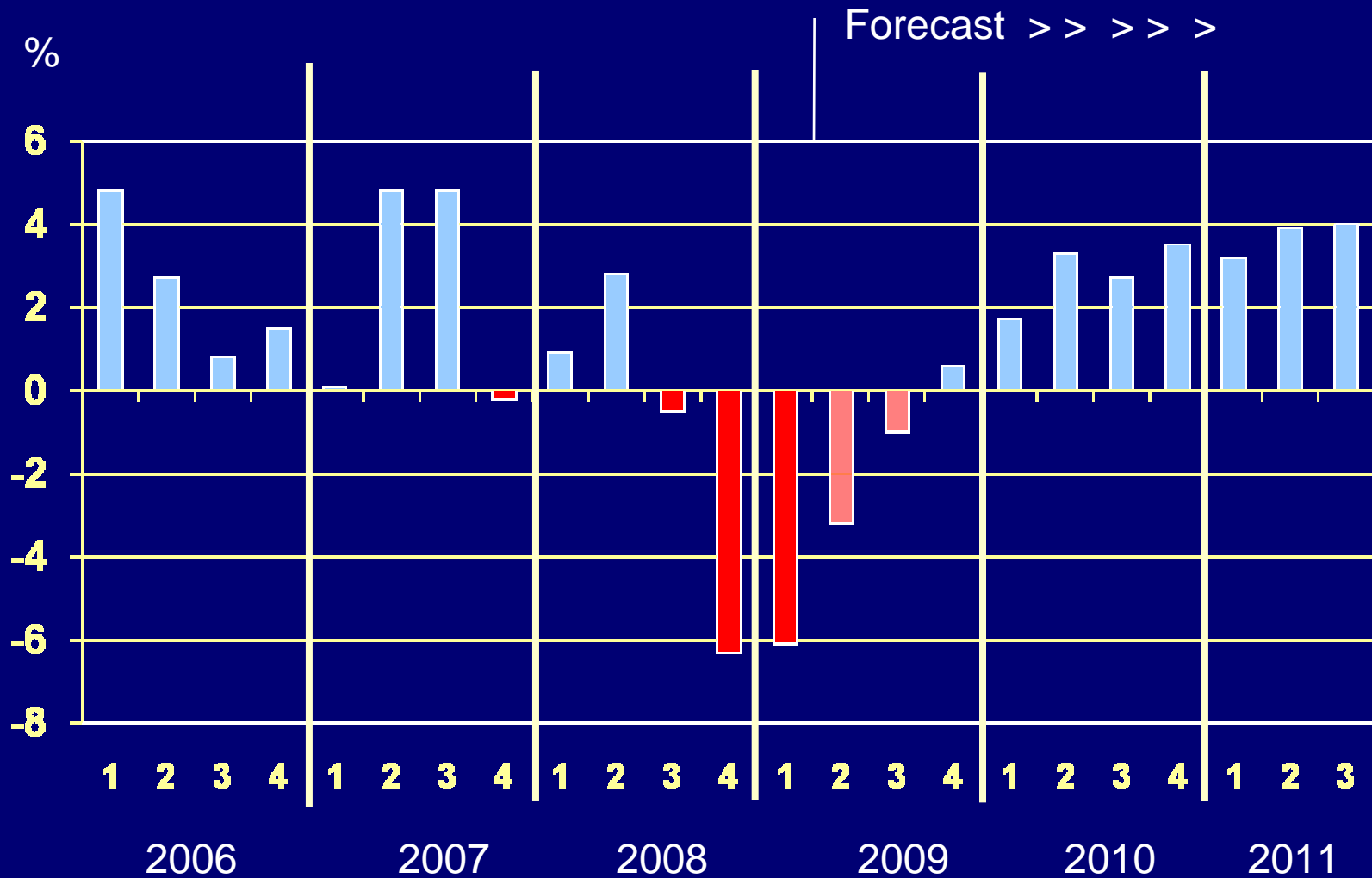


Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis, Global Insight

# Job Forecasts: 2008 - 2015

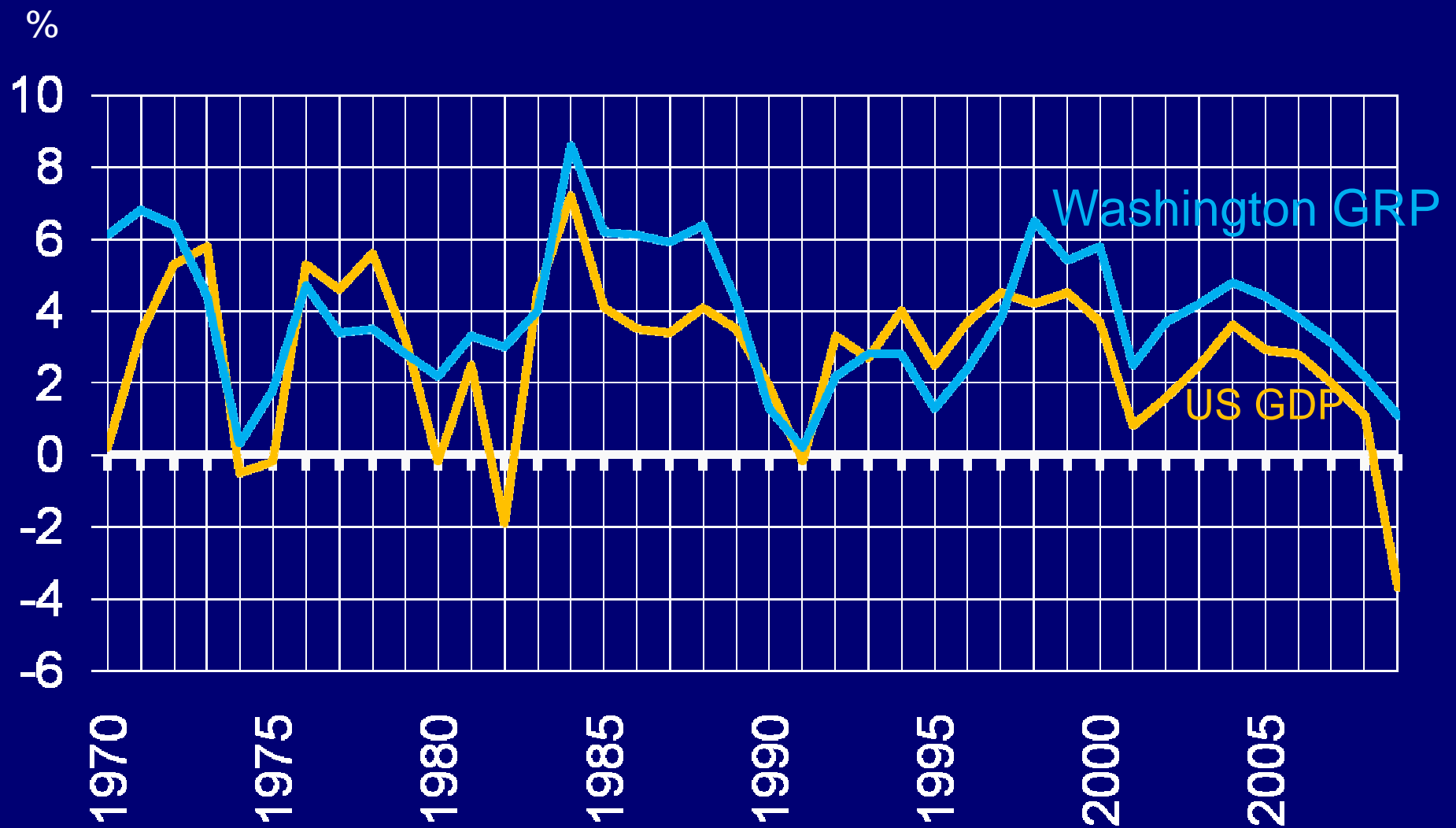


# U.S. Gross Domestic Product Quarterly Change: 2006 – 2011



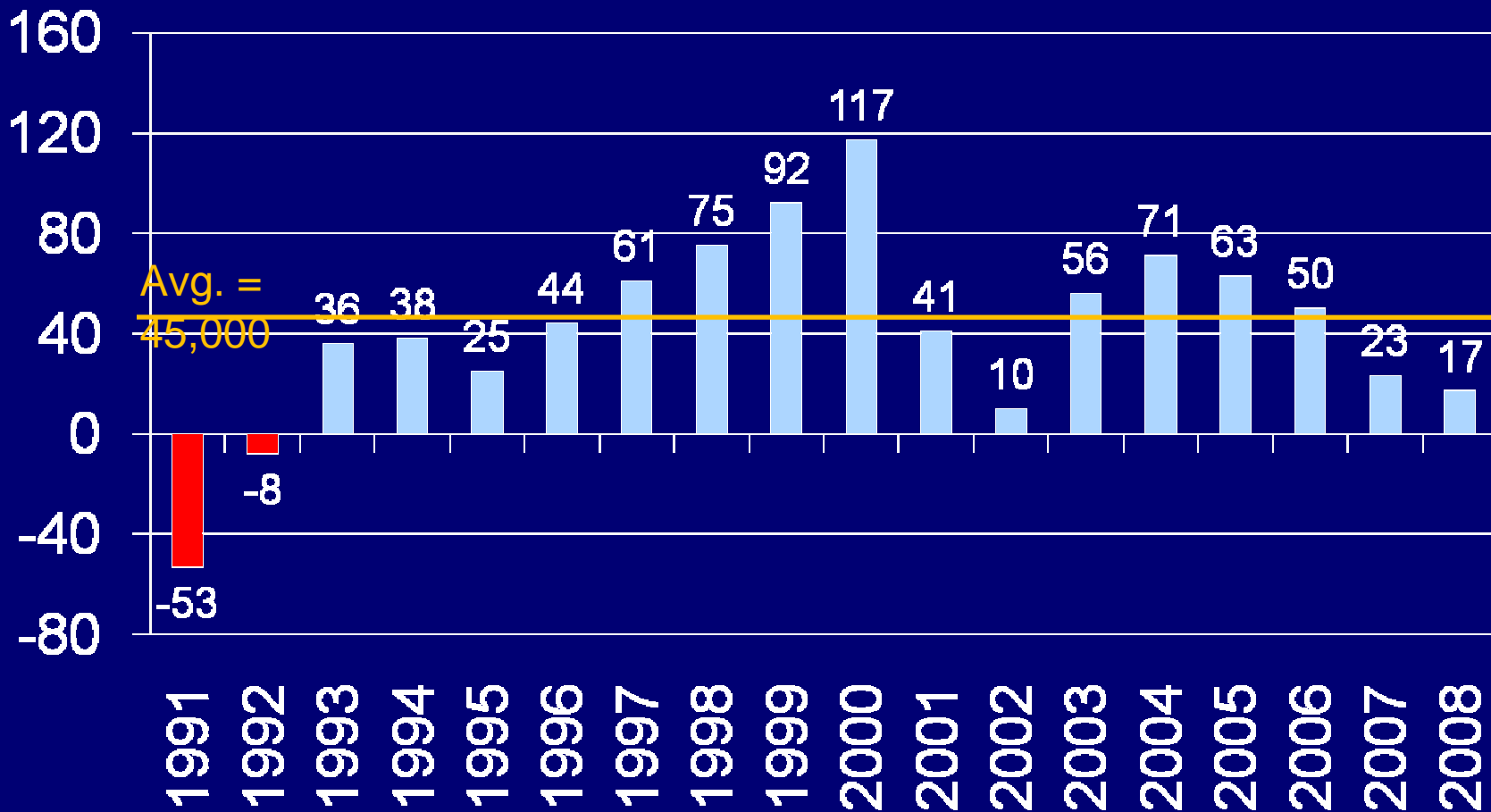


# US GDP and Washington GRP



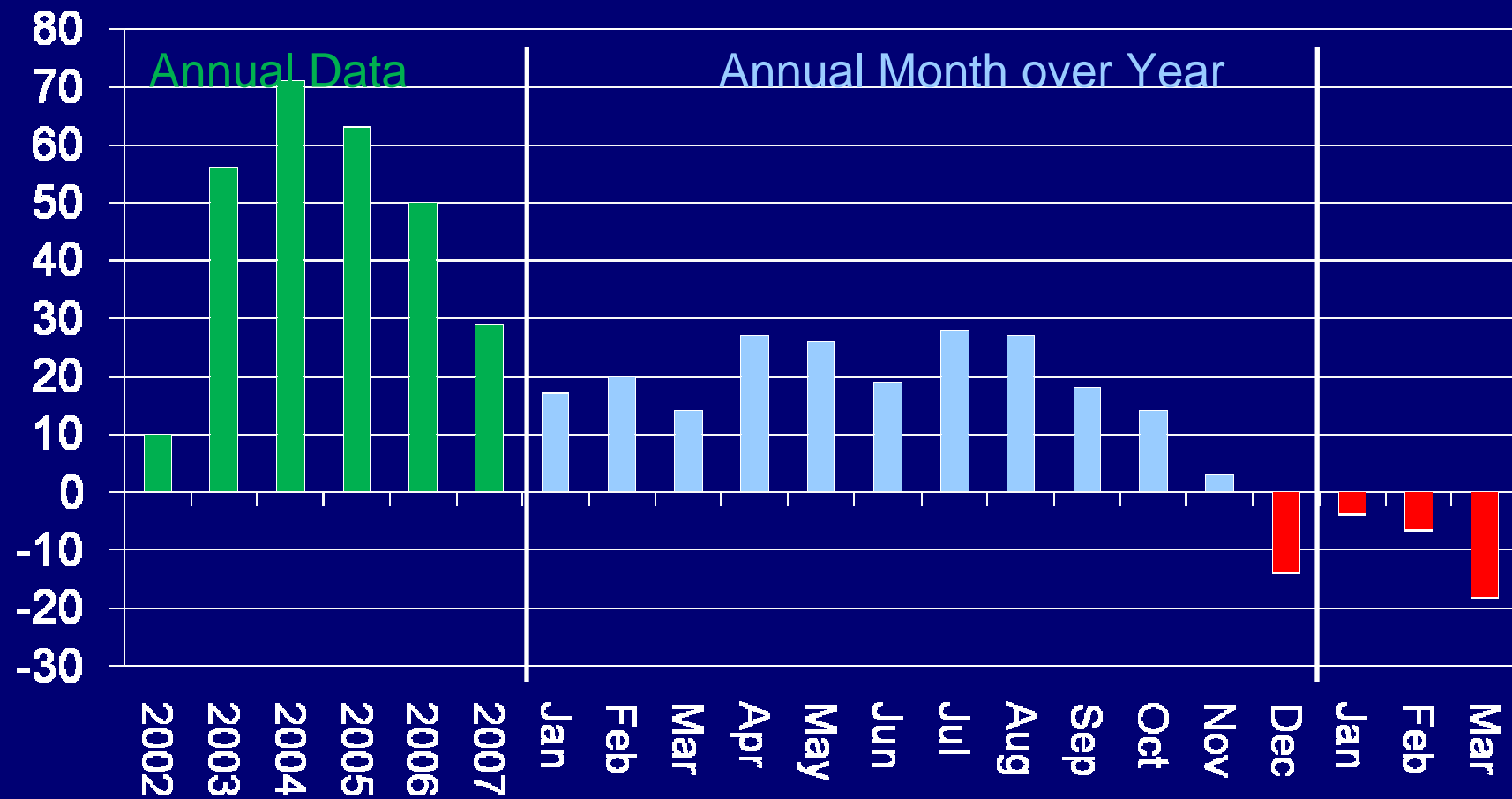
# Annual Change in Jobs Washington Metro Area 1991 - 2008

Thousands



# Annual Job Change Washington MSA

000s

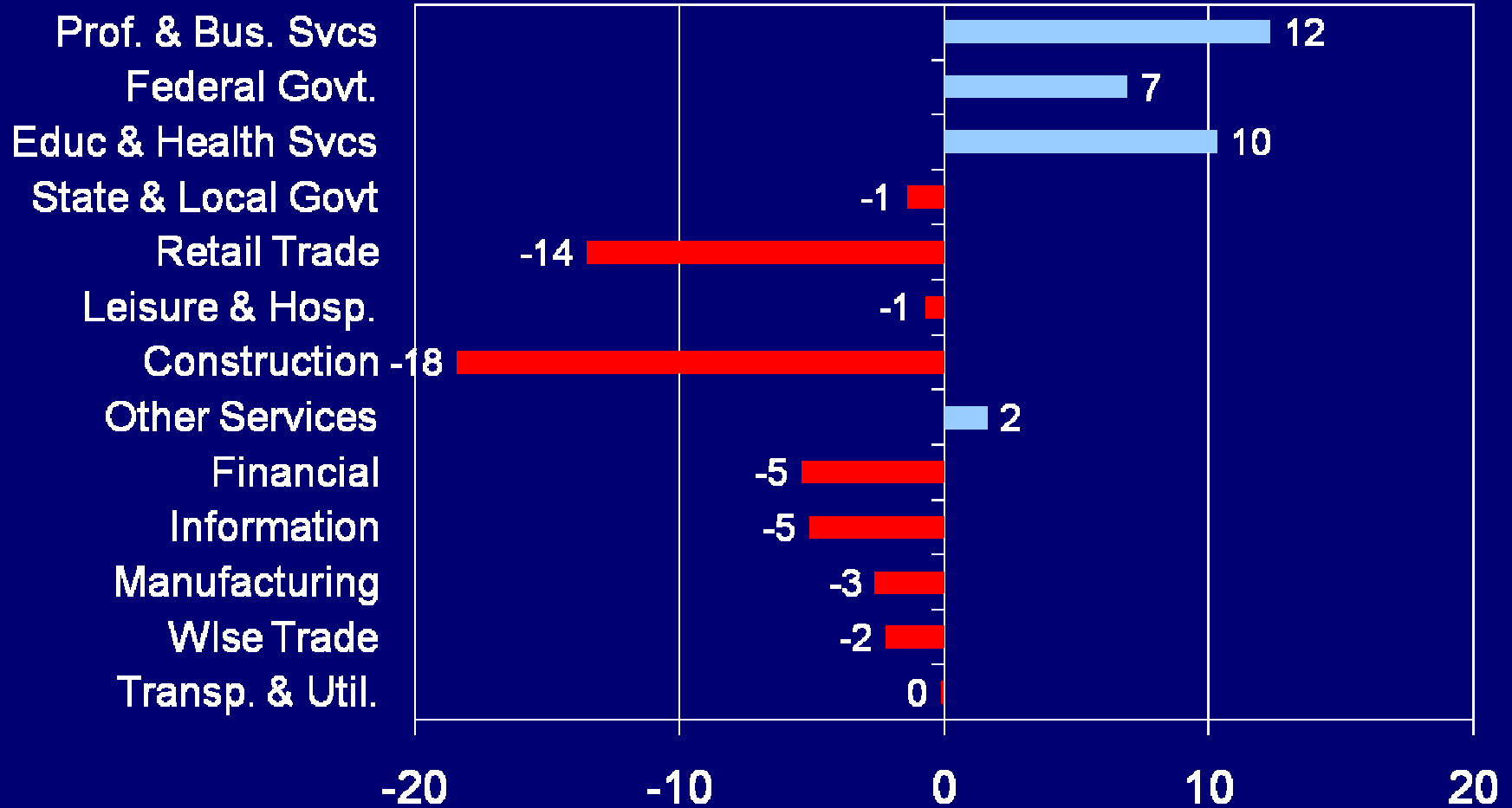


Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis

# Job Change by Sector March 2008 – March 2009

## Washington MSA (000s)

Total - 18,300



Source: BLS March 2009 Benchmark, GMU Center for Regional Analysis

# Self-Employed from 2000 Census

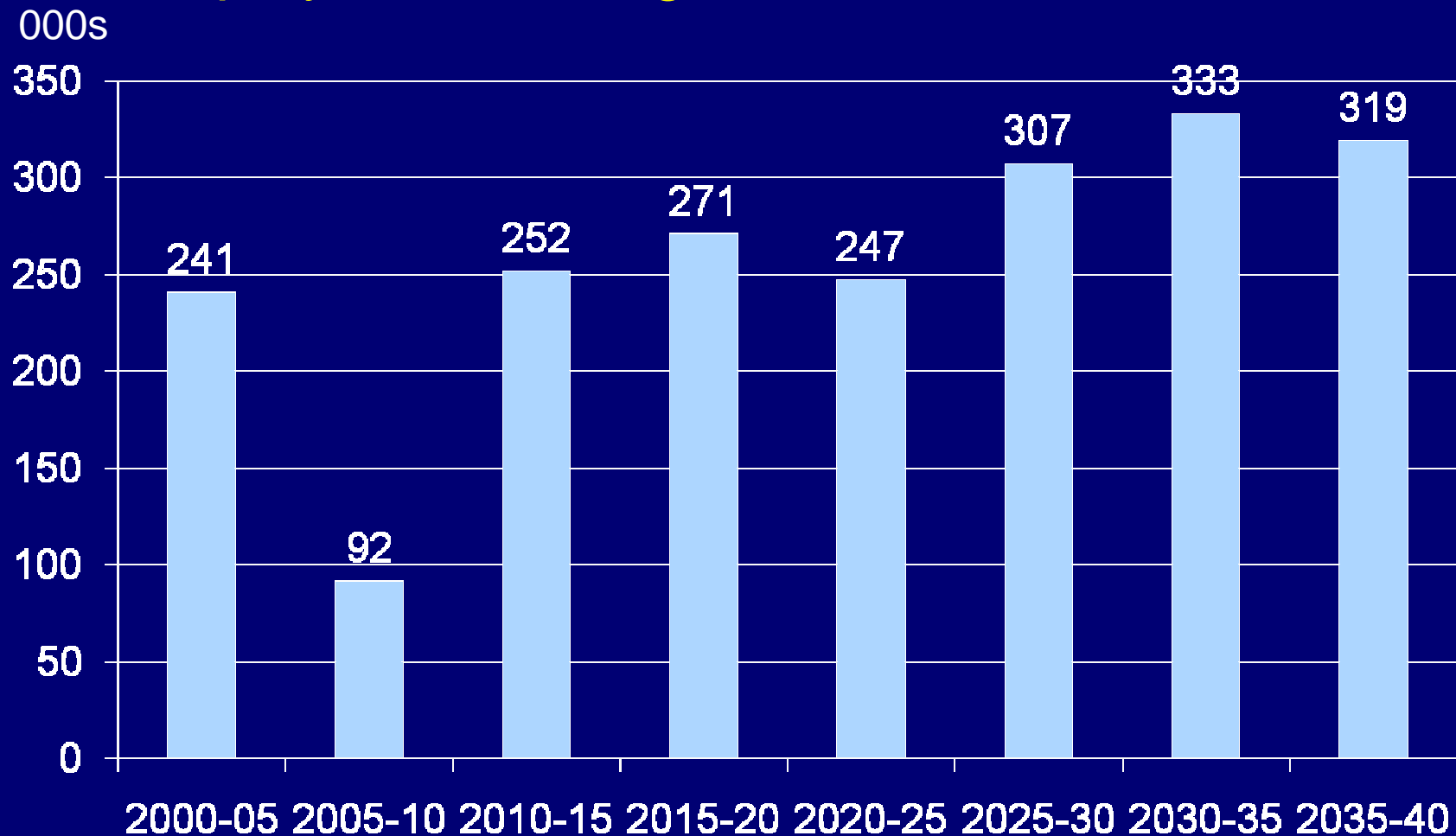
A. Private for-profit Wage & Salary	1,566,193
1. Employee	1,491,427
2. Self-employed in own Incorporated business	74,766
B. Private not-for-profit Wage & Salary	236,548
C. Government	604,721
Total Wage & Salary = A1 + B + C	2,332,696
D. Self-employed in not own incorporated business	136,947
Total Self-employed = A2 + D	211,713
Unpaid Family Workers	4,557
Total Employment = Wage & Salary + Self-Employed	2,548,966

Factor to get Total Jobs from Wage & Salary =  $2,548,966 / 2,332,696 = 1.093$

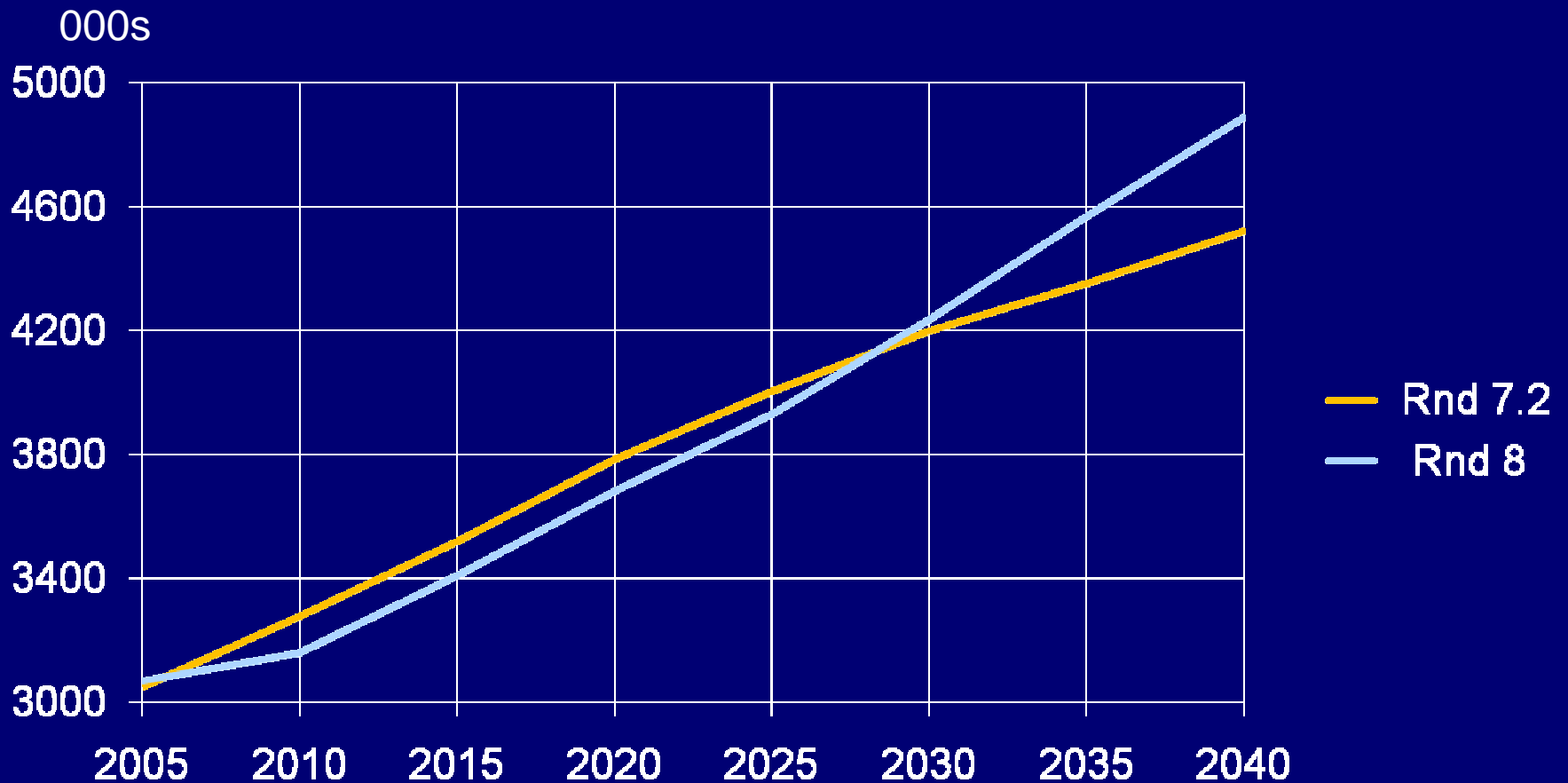
# COG Region Employment

NAICS Industry Categories	2005	2040	Change
Construction	174.1	294.8	120.7
Manufacturing	59.4	46.4	-13.0
Retail Trade	252.7	299.7	47.0
Wholesale Trade	66.9	81.2	14.2
Transp., Warehousing, Utilities	62.7	80.2	17.5
Information	98.3	178.2	79.9
Financial Activities	155.9	189.6	33.7
Professional and Business Services	636.9	1566.9	930.0
Education and Health Services	294.7	510.4	215.7
Leisure & Hospitality	231.2	300.5	69.2
Other Services	161.4	209.7	48.3
Federal Government	339.1	332.8	-6.3
State & Local Government	274.9	385.5	110.6
Military	75.9	77.5	1.6
<b>Total Nonfarm</b>	<b>2,808.4</b>	<b>4,473.8</b>	<b>1,665.4</b>

## COG Region Employment Change in Five-Year Increments



# Employment COG Region





- Additional Employment Issues?
  - Adjust long-term totals?
  - Adjust Federal sector forecasts?
- Household/Population Factors
  - Labor Force/Job Relationship
  - In-commuting Levels?

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