

# Growing a Knowledge-Based Economy



11/19/09

NC Economic Development Board



**CHAMBER**  
ALL YOU NEED TO GROW.

# The Chamber and Economic Development

- Chamber Mission
  - ▣ Expand, Grow, and Retain Local Businesses
  
- Business Retention and Expansion
  - ▣ 80% of New Jobs Come from Existing Businesses  
(likely more in today's economy)
  
- K-12 and Higher Education Strategies
  
- Focus on Technology-based Industries for 20 years

# Winston-Salem's Economy

## *A Brief Look*

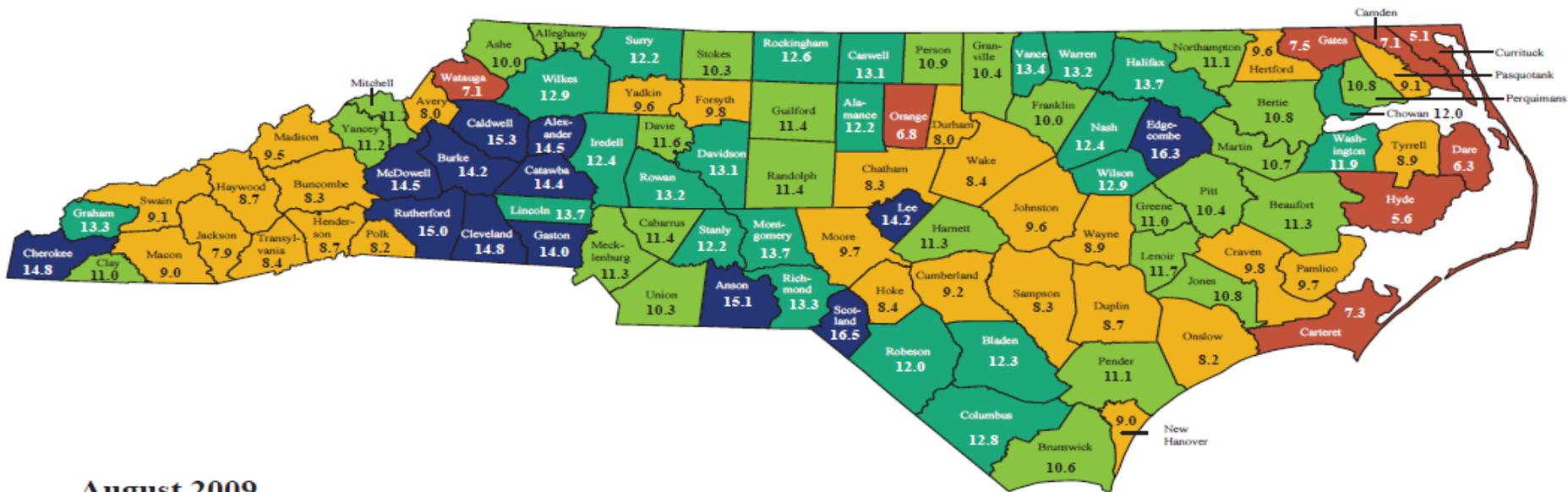
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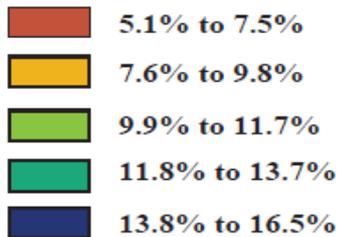


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# Unemployment Rates: Aug 2009



## August 2009



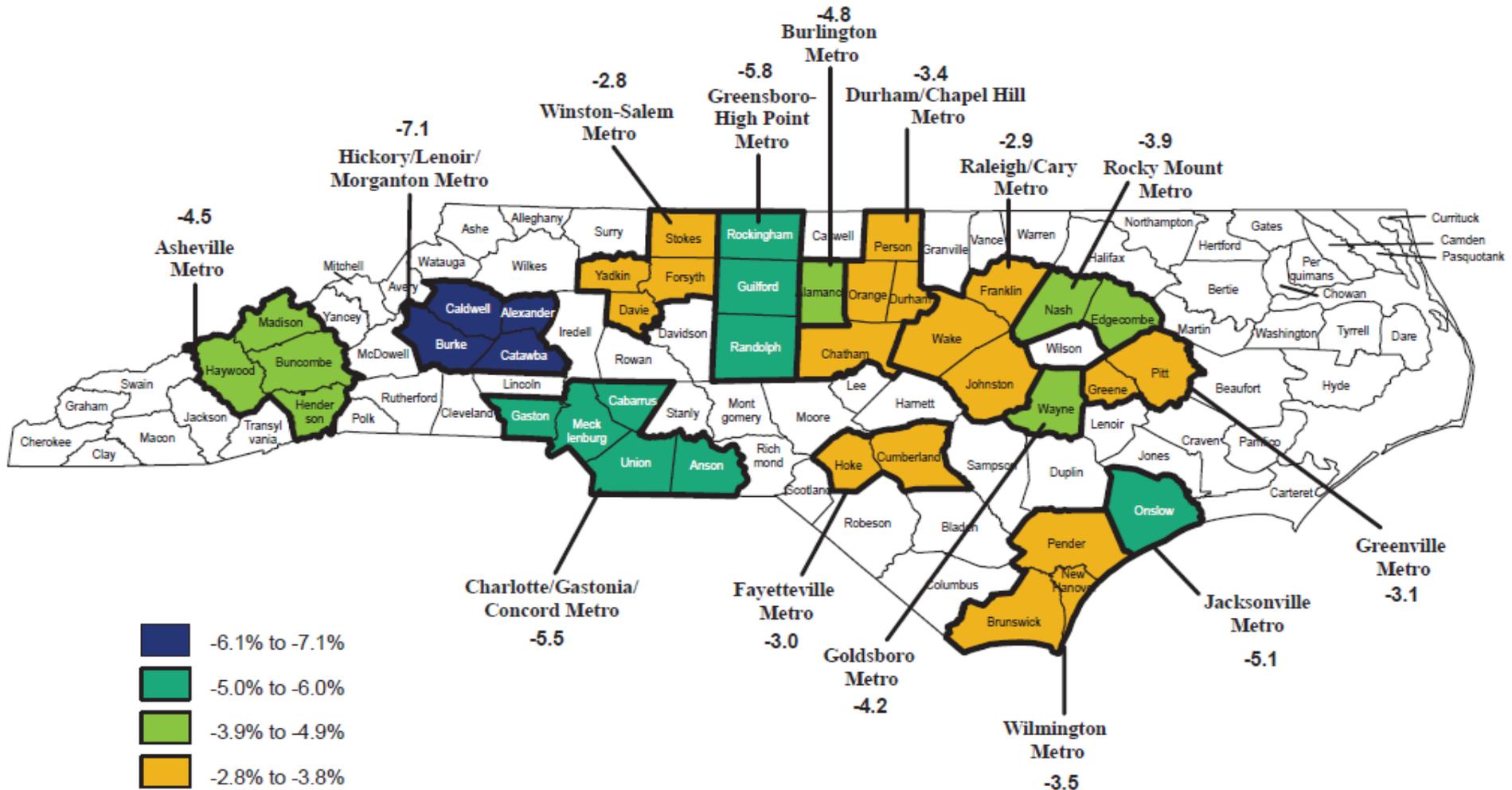
- ^ 6 Counties Higher Than Previous Month
- ∨ 90 Counties Lower Than Previous Month
- ≡ 4 Counties Same as Previous Month

**North Carolina Rate 10.7%**  
**Not Seasonally Adjusted**

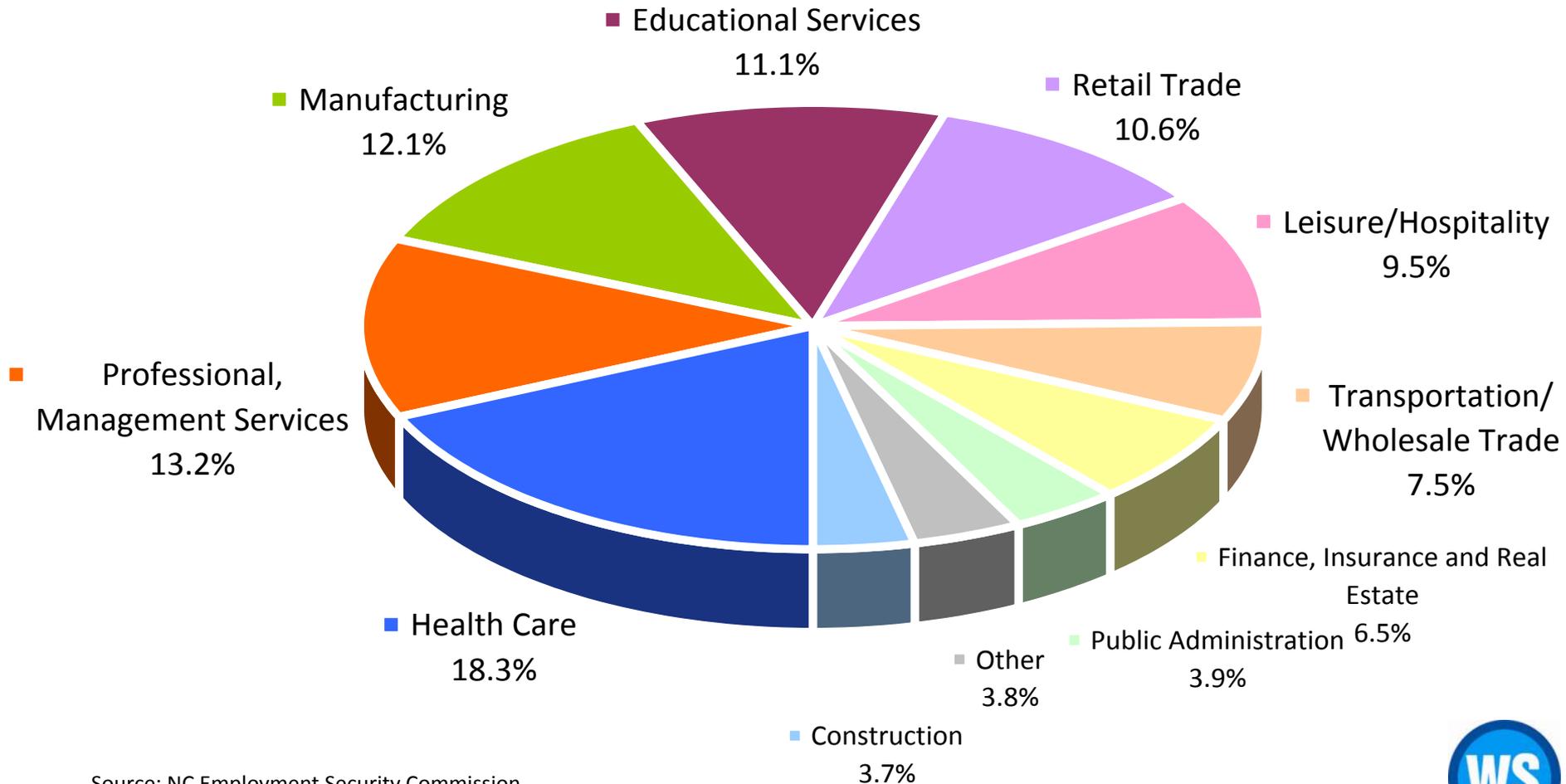
Note: August 2009 data are preliminary.

Prepared by the Labor Market Information Division, Employment Security Commission of North Carolina 9\_2009

# Metro Employment Growth: Sep 2008 – Sep 2009

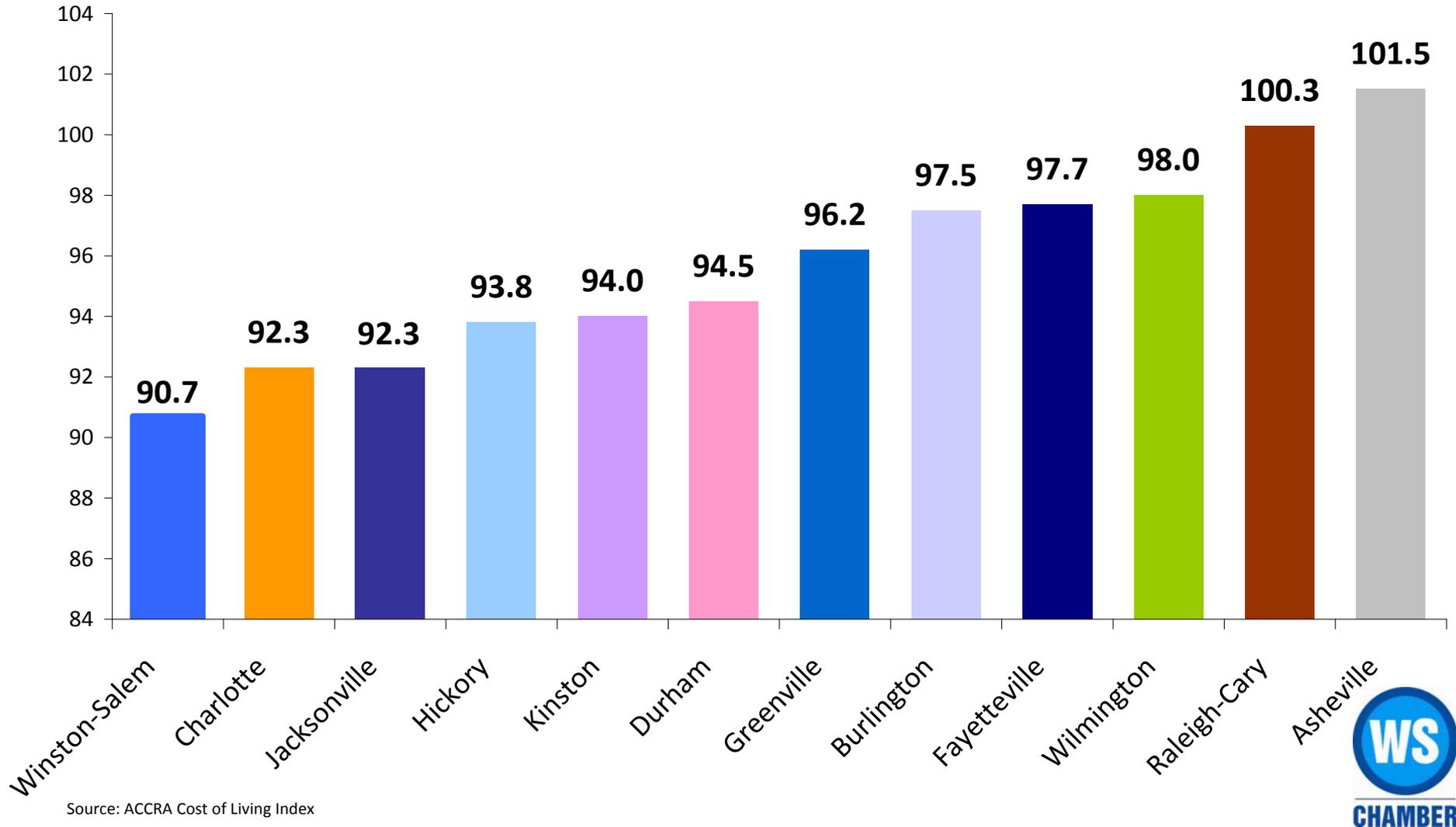


# Industry Structure: 2009Q1



Source: NC Employment Security Commission

# Cost of Living: 2009Q1



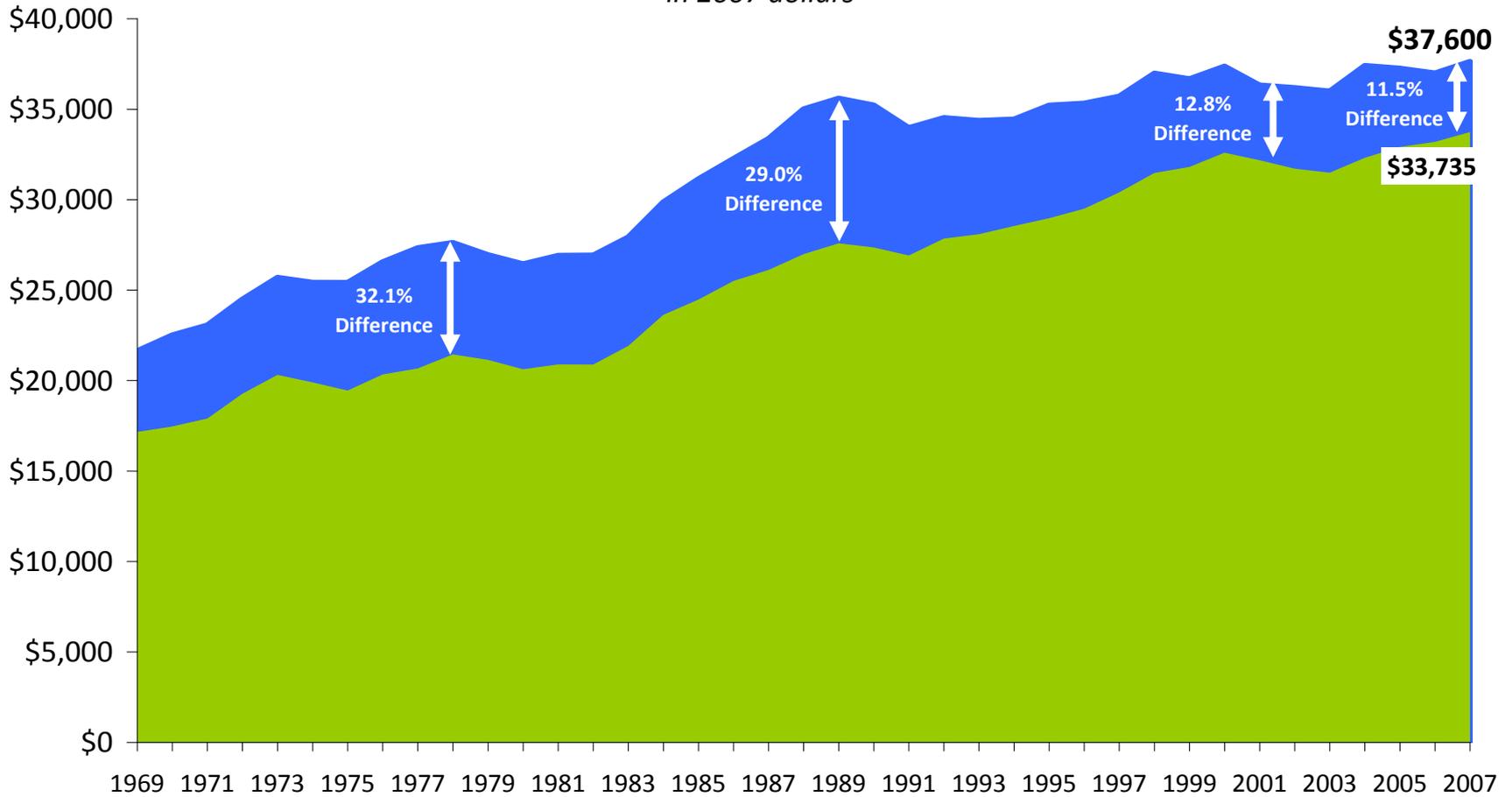
Source: ACCRA Cost of Living Index



# Per Capita Income

## Real Per Capita Income: 1969-2007

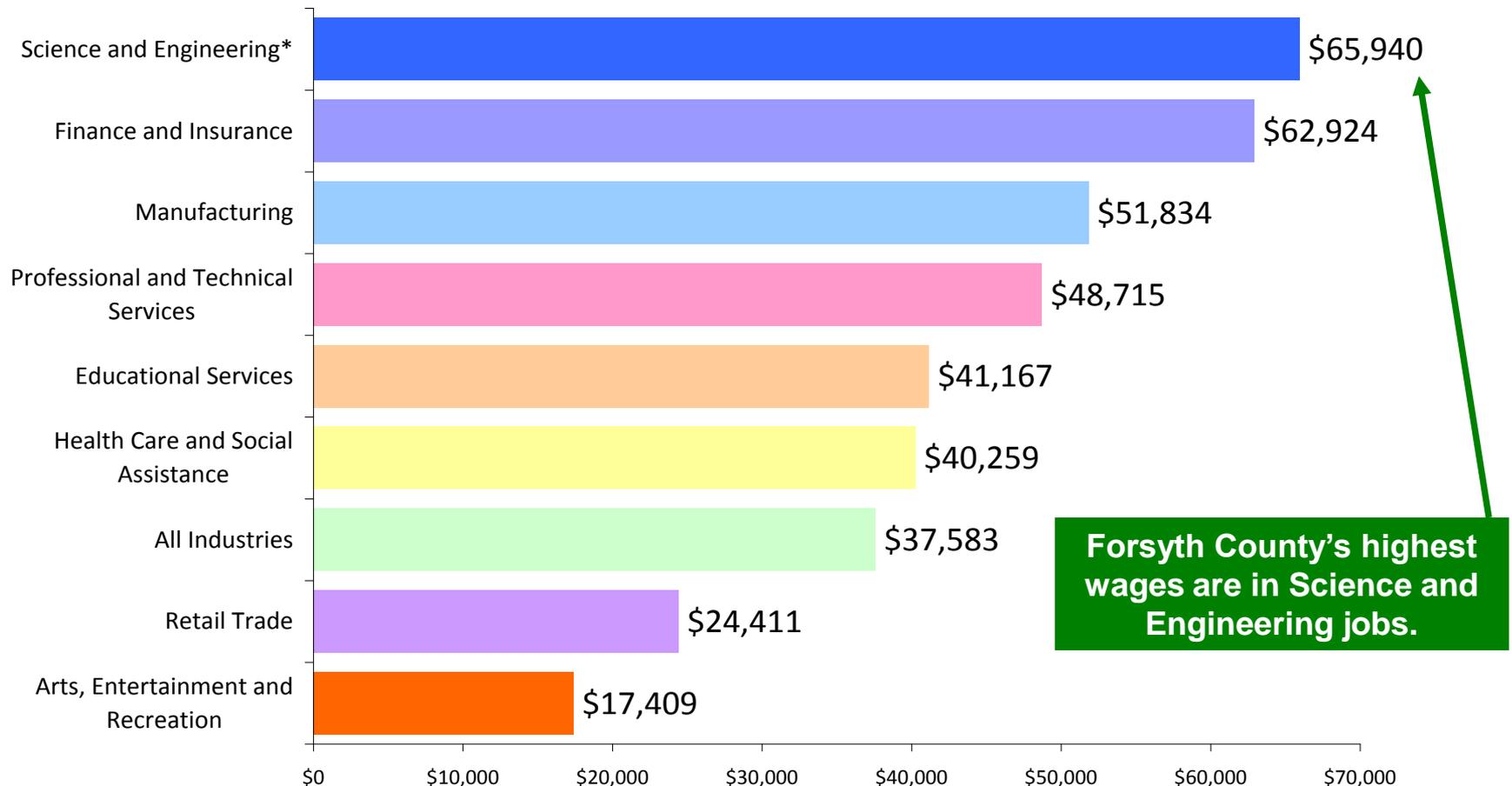
*in 2007 dollars*



# Earnings by Industry

## Average Annual Earnings by Industry in Forsyth County

May 2006



\*Science and Engineering Salary is for Winston-Salem MSA.

# Winston-Salem

## *A Technology Timeline*

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# Technology-Based Economic Development

**1989**

- Tech Council established.

**1991**

- Worked with consultant to focus on biomedicine.

**1992**

- Downtown site identified for a research park (what is now PTRP). Master plan developed.

**1996**

- Blueprint for Technology created.

**1997**

- Blueprint for K-12 Technology Development created.

**1998**

- Idealliance (now PTRP) established.

**2001**

- Touched by Technology raised \$8 million for K-12 technology education.



# Technology-Based Economic Development

## 2002

- Wake Forest University announced an expansion of the Piedmont Triad Research Park to 200 acres.

## 2003

- Chamber won “Technology-Based Economic Development Award” from the International Economic Development Council.

## 2004

- Anthony Atala recruited from Harvard University to direct the Institute for Regenerative Medicine at Wake Forest University School of Medicine.

## 2005

- The Center for Design Innovation was created between NCSA and WSSU, partnering with Forsyth Tech. The Chamber is a partner in this effort.

## 2008

- Chamber produced “Technology Roadmap” as plan for future development.

# Winston-Salem

## *Strengths in Technology*

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# Higher Education



WAKE FOREST  
UNIVERSITY



UNIVERSITY OF NORTH CAROLINA  
SCHOOL *of the* ARTS



# Technology Expertise

- Bioscience
  - ▣ Regenerative Medicine
  - ▣ Cancer Therapeutics
  - ▣ Medical Devices
  - ▣ Biomedical Engineering
- Advanced Manufacturing
- Nanotechnology
  - ▣ Nanomedicine
  - ▣ Green technologies (solar, high efficiency lighting)
- Arts/Design/Media Technologies
  - ▣ Center for Design Innovation
  - ▣ UNC School of the Arts – Filmmaking; Design & Production

# A Cluster of Innovation



TARGACEPT



SilkRoad technology



tengion

Regenerative medicine  
brought to life.



PureLux



O U T O F O U R M I N D S  
a n i m a t i o n s t u d i o s

# Entrepreneurship

- WFU Angell Center
- WFU Babcock Demon Incubator
- WFU Office of Technology Asset Management
- Kauffman/National Science Foundation Grants
- Wet Lab LaunchPad™
- Forsyth Tech Small Business Center/SBTDC

# Quality of Life – Assets for the Creative Class

- Low Cost of Living/Housing
- Short Commutes
- Outdoor Recreation
- Downtown Revitalization
- Top 7 Intelligent Community
- Forbes: Best Places to Live and Launch



# Technology Roadmap

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# Goals

- Improve WS economy and quality of life
  - ▣ Increase number of jobs
  - ▣ Increase average wages
  - ▣ Increase tax base
- Be demonstrated leader in enabling a knowledge-based local economy
- Be known as a center of high-tech
- Move to next level as technology community
- Be at forefront of innovation to improve people's lives

# Selected Strategies

- Establish and recruit regenerative medicine and nanomedicine companies
- Expand PTRP and additional technology infrastructure
- Establish funding and management for bio-medicines start-ups
- Provide seed capital, venture funds, and matching grants for tech companies
- Brand and market Winston-Salem
  - **City of Arts and Innovation**
- Expand our thriving technology and leadership network

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