

Second Annual Educators' Conference on Machining

October 28-29, 2011

LoneStar College CyFair, Houston, Texas

- 51 participants from academia
- 29 participants from industry
- 8 states: FL, IA, KS, MI, NJ, NY, TX, VA
- 10 presentations
- Exhibition & posters



Society of
Manufacturing
Engineers





Haas Technical Education Centers

<http://www.HTECnetwork.org>

<http://www.HTECnetwork.eu>

Wayne Hung

*HTEC, TAMU
Texas A&M University*

Andrew Jones

*HTEC, CyFair
LoneStar College*

Bob Skodzinsky

*HTEC Network, North American
Haas Automation, Inc.*

Second Annual HTEC Conference
LoneStar College CyFair, Houston, Texas
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AGENDA

1. Manufacturing in Texas
2. Manufacturing: future, issue, and challenge
3. Haas Technical Education Centers (HTECs)
 - ☐ Motivation
 - ☐ Global network
 - ☐ Recent activities
4. Summary

Texas wins in U.S. economy shift

By Dennis Cauchon, USA TODAY

6/21/2011

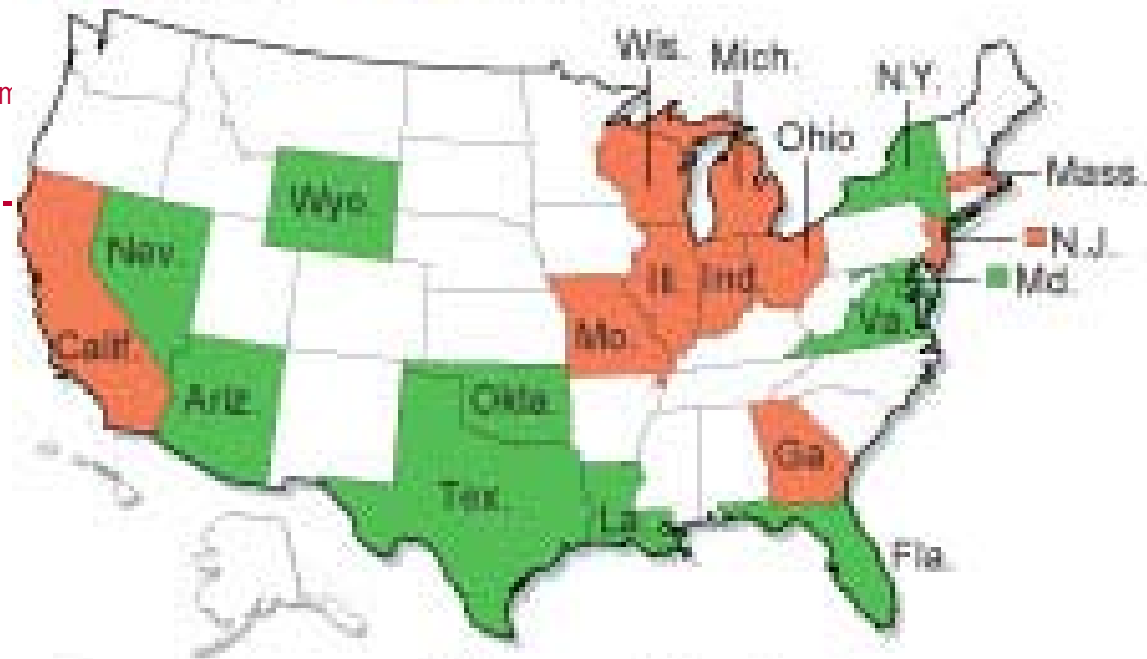
http://www.usatoday.com/money/economy/2011-06-20-state-gdp-growth_n.htm

Texas became the USA's second-largest economy during the past decade — displacing New York and perhaps heading one day toward challenging California — in one of the biggest economic shifts in the past half-century.

Who's up, down

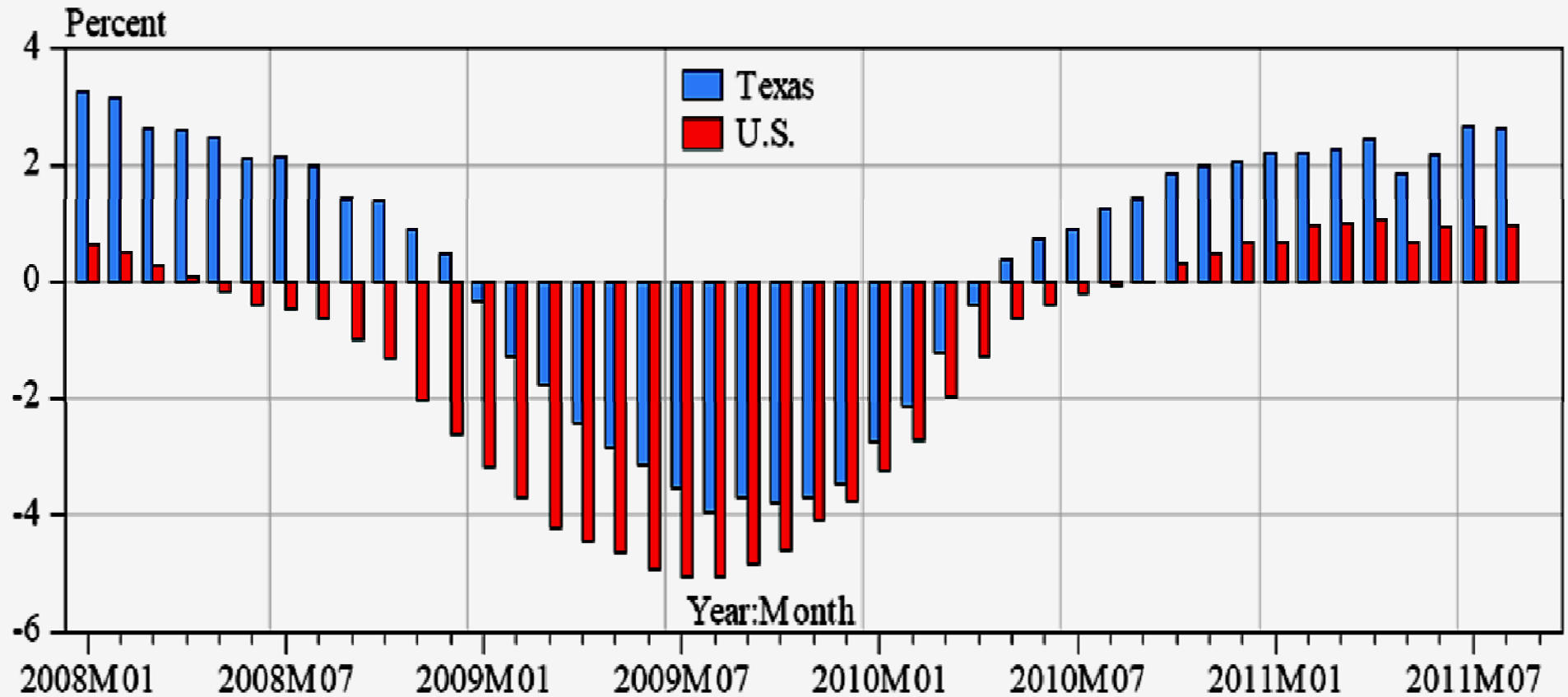
States whose importance in the national economy grew most and least, 2000-10:

■ Winners ■ Losers

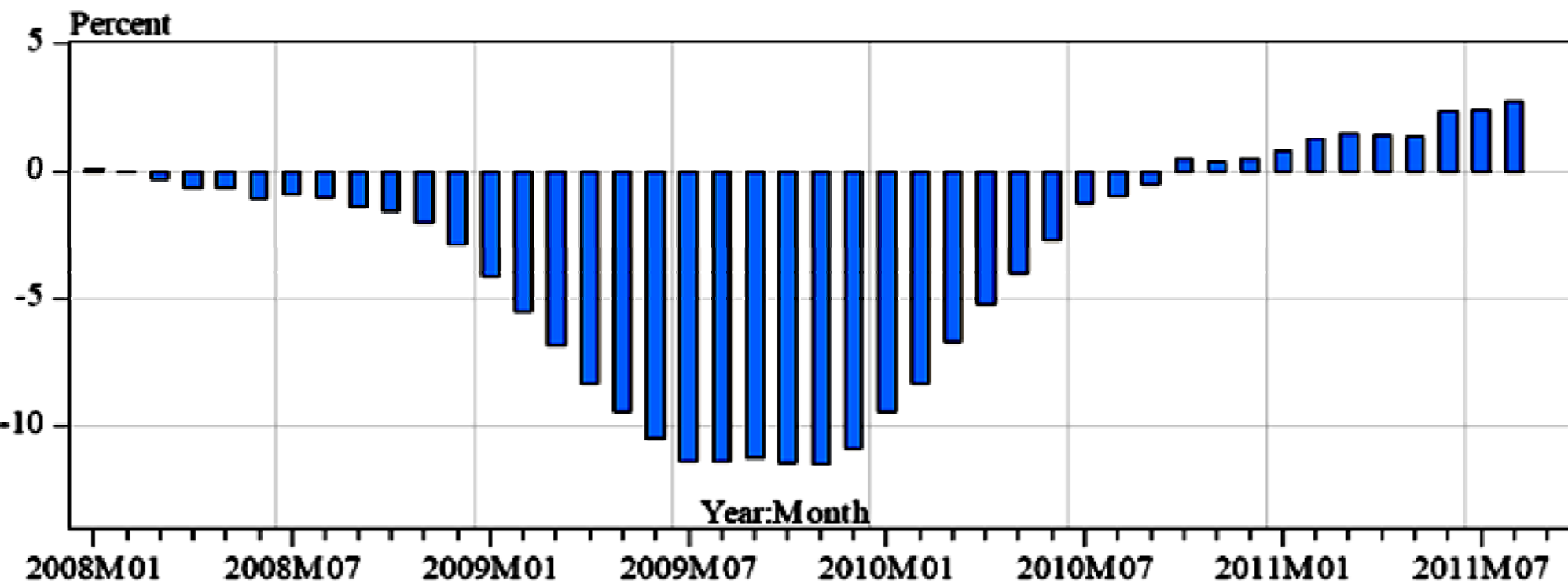


Source: Bureau of Economic Analysis
By Kristen O'Callaghan, USA TODAY

Nonfarm Employment Growth

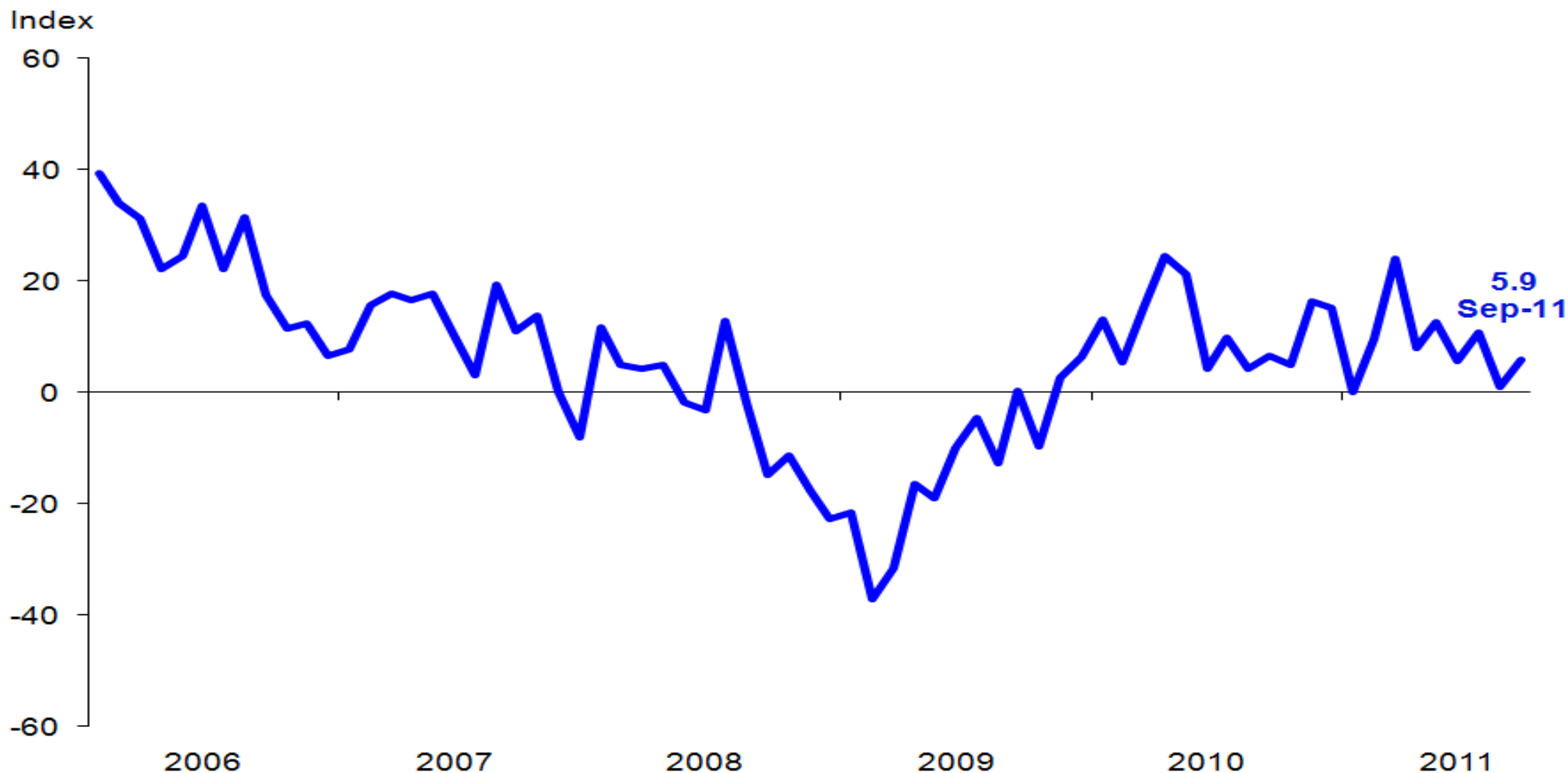


Texas Manufacturing Employment Growth

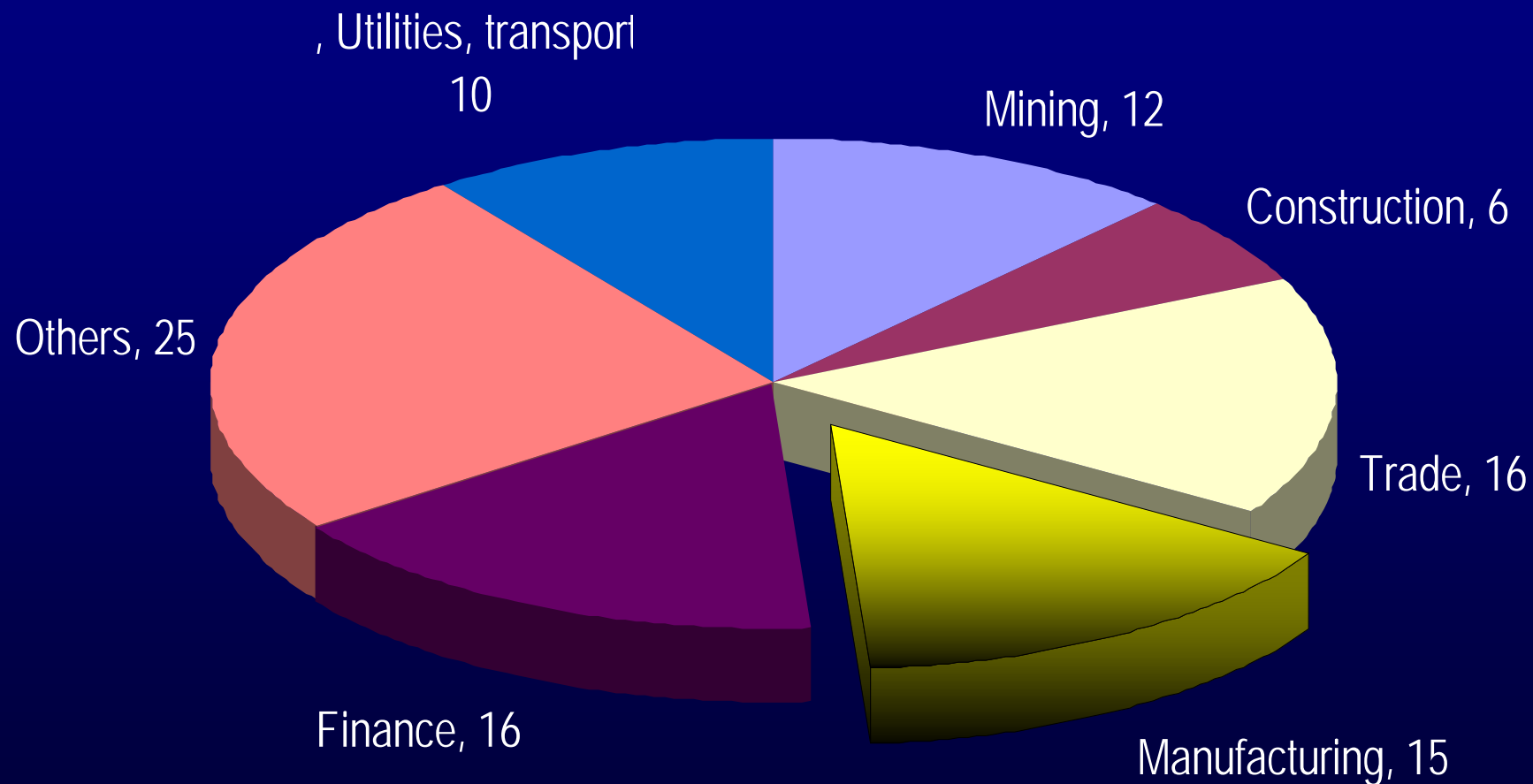


Sources: Texas Workforce Commission and Real Estate Center at Texas A&M University

Texas Manufacturing: Production Index



Texas Industry: %GDP, 1Q 2007

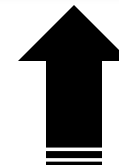
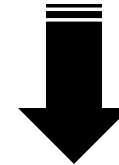
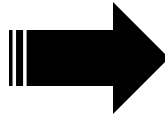


- ❑ Exploding demands. Growing needs and expectations from global population (~70 millions/year. Source: <http://www.indexmundi.com/g/g.aspx?c=xx&v=24>)
- ❑ Innovative solutions. Science and technology must develop new sources of energy, materials, and products.
- ❑ Shrinking resources. Sustainable solutions face ecological, environmental and resources challenges. Manufacturing propels industrial growth but must be efficient to meet decreasing resources.

- ❑ Shrinking technical population. Declining number of young people choosing science, engineering, and technology. Critical shortage of skilled manufacturing technologists. Estimate 30% shortage by 2015.
- ❑ Offshore competition. Continuing trend of offshore subcontracting.



Where does Haas fit in?



- HTEC INDUSTRY PARTNERS -



HTEC's Vision:

To develop, deliver, and disseminate collectively the best educational methods and techniques for advanced manufacturing education in the world.

HTEC's Mission:

To promote and advance manufacturing and productivity through excellence in manufacturing education.

☐ HTEC Network – North America

- 986 institutes (154 high schools, 187 vocational centers, 407 community colleges, 238 universities)
- 2350 Haas CNC machines
- ~35,000 trained students per year

☐ HTEC Network – Europe

- 15 countries, 424 institutes
- 727 Haas CNC machines
- ~10,000 trained students per year.

☐ HTEC's have become effective incubators and catalysts for local economic & entrepreneurial growth.

HTEC Recent Activities

Illinois

October 19, 2011
Rock Valley Community College
Rockford, IL

Missouri/So. Illinois

October 21, 2011
Southwestern Illinois College
Granite City, IL

Pennsylvania

October 28, 2011
Pennsylvania College of Technology
Williamsport, PA

Texas

October 28-29, 2011
LoneStar College CyFair
Houston, TX

New York

October 29, 2011
Hudson Valley Community College
Troy, NY

Wisconsin

November 4, 2011
Waukesha County Technical College
Pewaukee, WI

California, Oregon, Washington

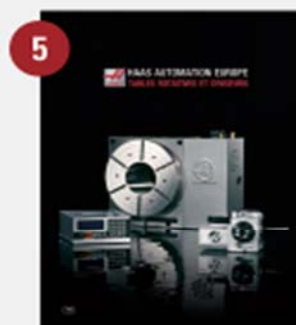
November 12, 2011
Chabot College
Hayward, CA

National HTEC

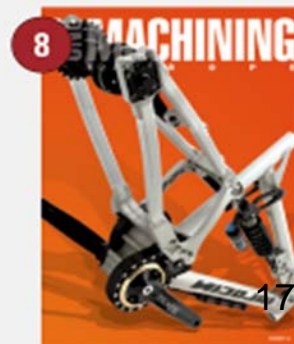
Hudson Valley Community College
July 17-19, 2012
Troy, NY

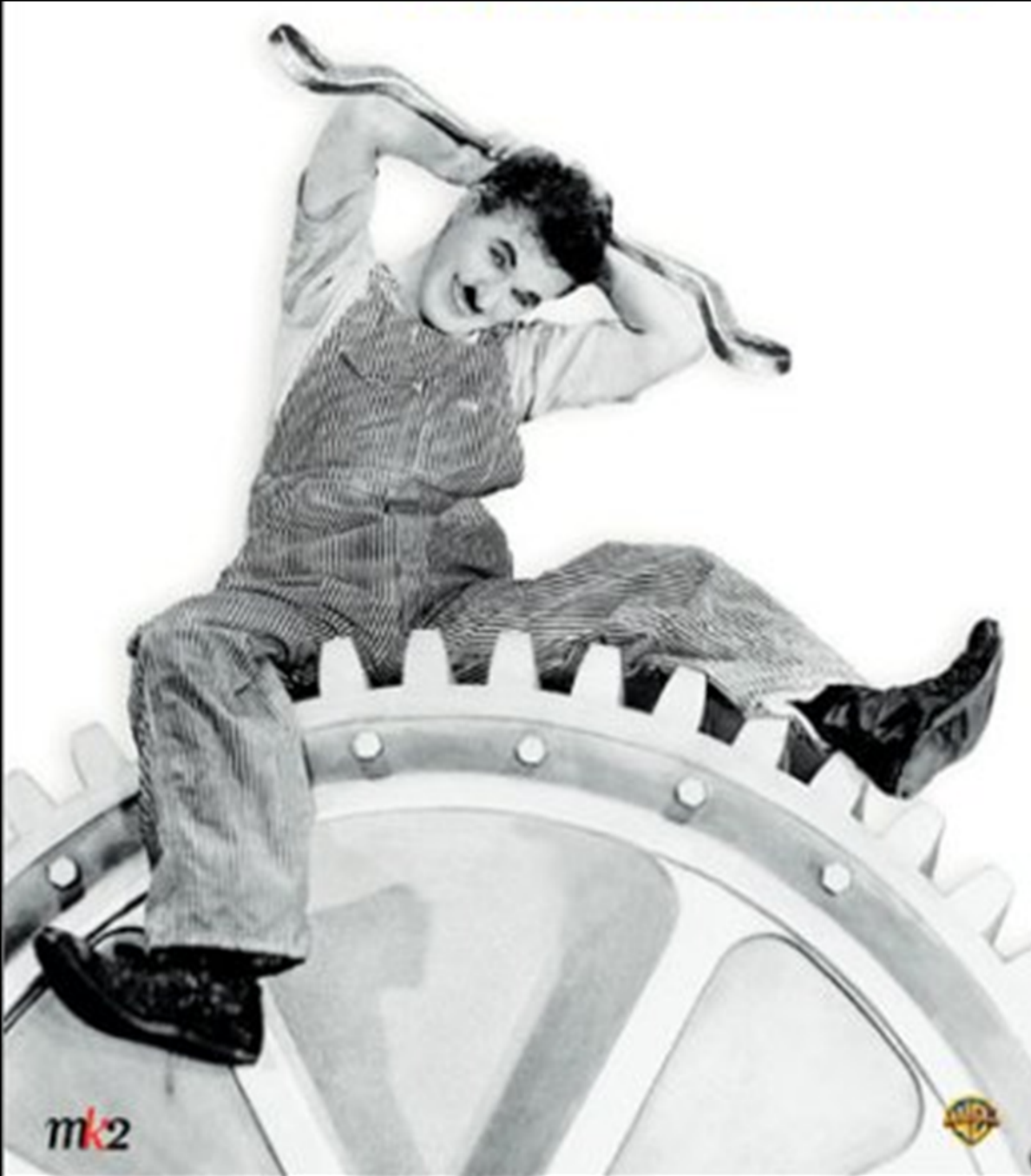
Training Materials

Haas control
simulators
in 20 languages



Haas brochures
in 15 languages







HTEC @ Sweden



HTEC @ Austria



HTEC @ TAMU



HTEC @ TAMU

□ Texas:

- ✓ Ranks #2 in the USA for economic growth
- ✓ Manufacturing contributes ~ 15% to state GDP

□ Haas, HTEC, and industrial partners:

- ✓ Provide educational opportunities to students
- ✓ Improve technical-skill imbalance
- ✓ Maintain and enhance economic growth