



WISCONSIN



DWD

Department of Workforce Development

THE FACE OF WISCONSIN'S WORKFORCE – CHANGES, PROJECTIONS

Wisconsin Apprenticeship 26th Biennial Conference



Dennis K. Winters
Chief, Office of Economic Advisors
Wisconsin Department of Workforce Development

January 28, 2014



The Face of
Wisconsin's
Workforce



Wisconsin is Open for Business

ITEMS IN TODAY'S PRESENTATION

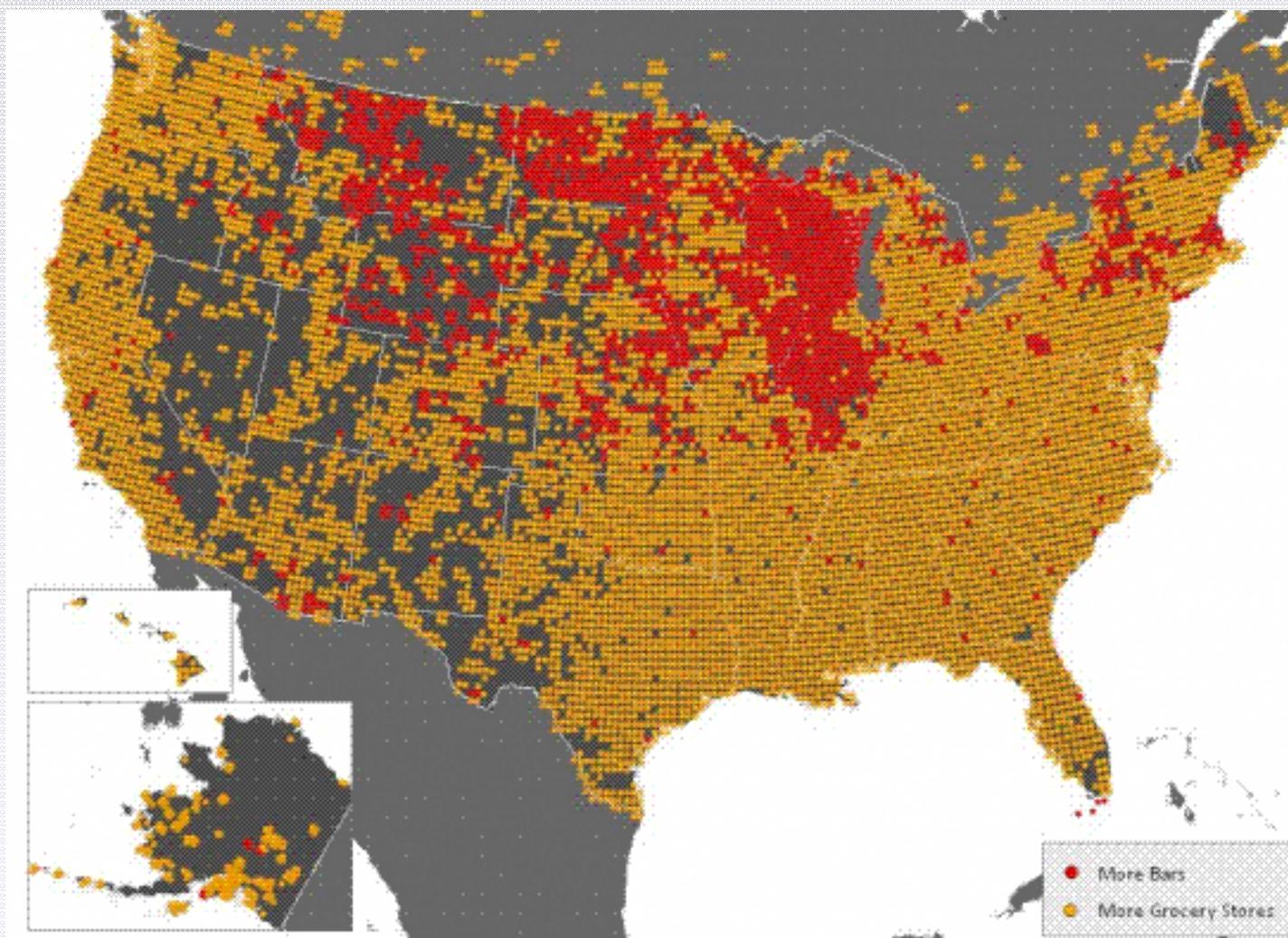
- **NEW FACES IN WISCONSIN'S WORKFORCE**
- **WORKFORCE QUANTITY CONSIDERATIONS**
- **ECONOMIC OUTLOOK**
- **APPRENTICESHIP CHARACTERISTICS**



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FIRST OF ALL, YOU NEED TO UNDERSTAND WISCONSIN'S ECONOMY

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FACES OF WISCONSIN'S WORKFORCE



Spencer Thiel is in the electro-mechanical apprenticeship program at Lakeshore Technical College and working for Curt G. Joa in Sheboygan Falls.

http://www.youtube.com/watch?v=C9eS_VbnKK0&feature=youtu.be

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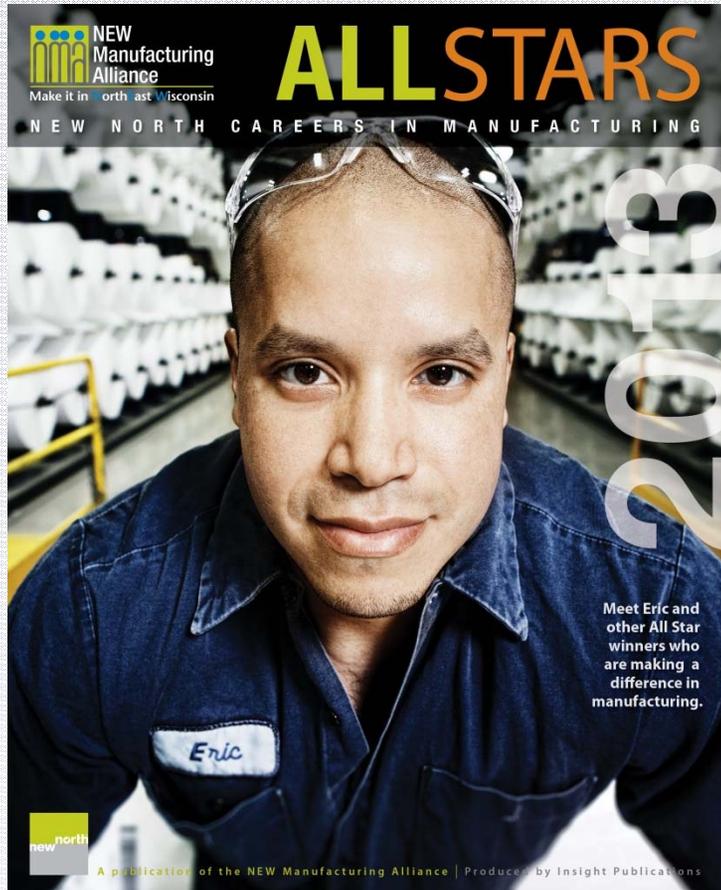


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Erin Stillman is a welder with Fox Valley Metal-Tech, with a welding diploma from Northeast Wisconsin Technical College.

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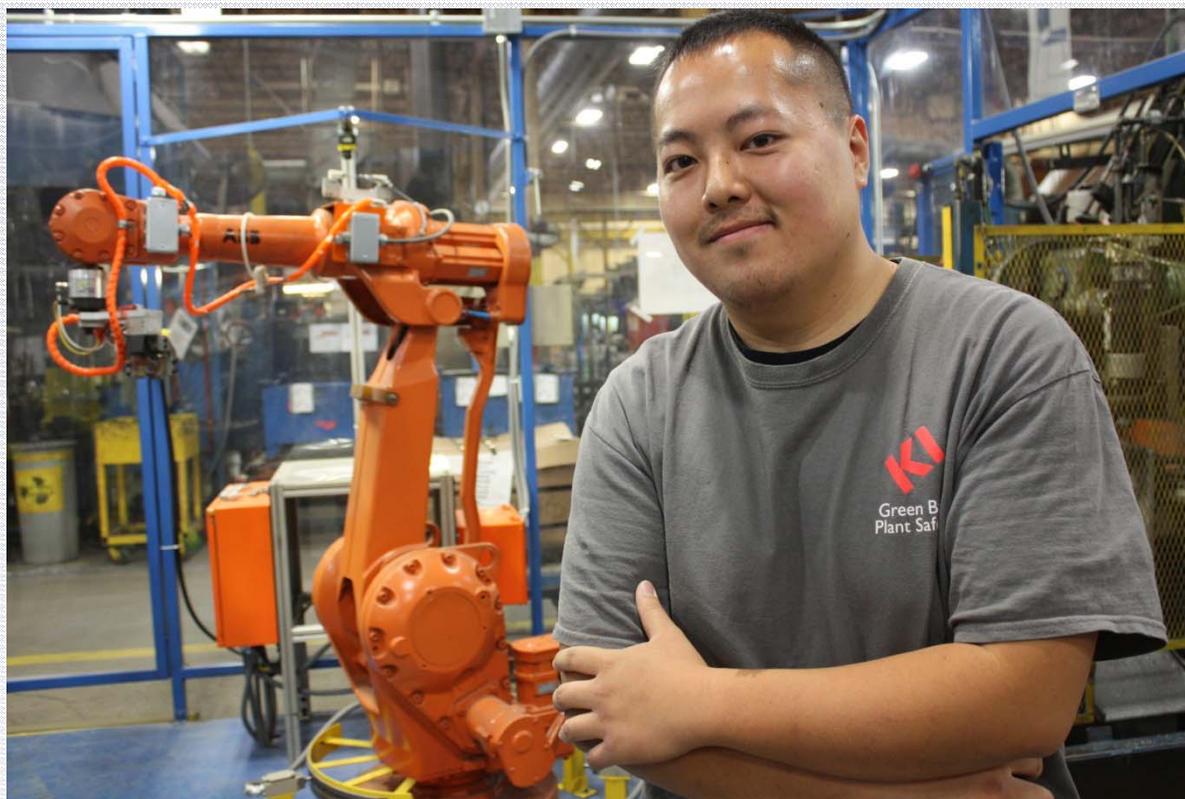
Eric Aguire works for Rockline Industries and is in the electrical and mechanical apprenticeship program at Lakeshore Technical College.



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Long Xiong is an Automation Specialist with KI; Associate's degree in electro-mechanical technology and industrial maintenance certificate from Northeast Wisconsin Technical College.



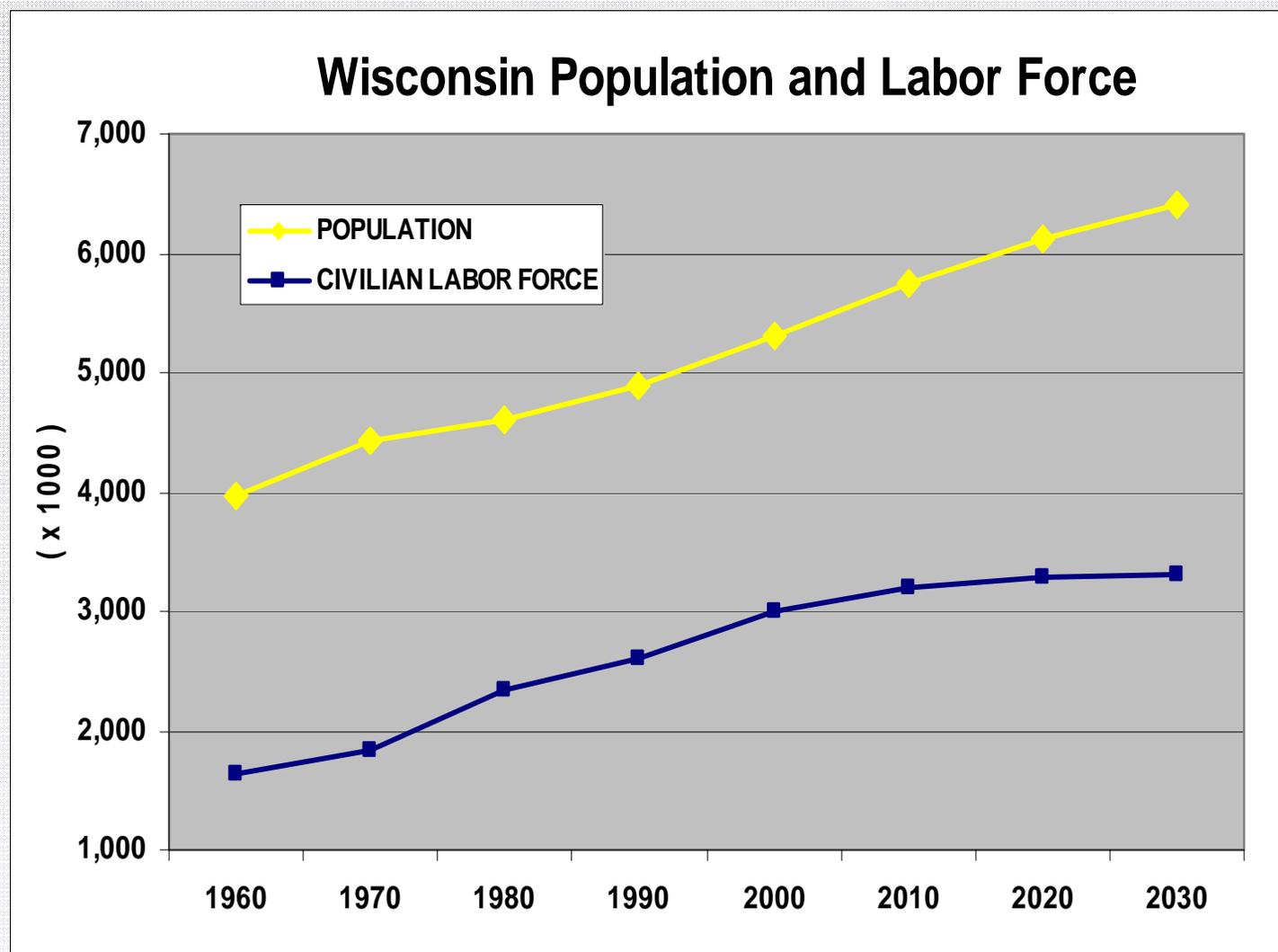
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QUANTITY



WISCONSIN'S WORKFORCE GROWTH BECOMES FLAT

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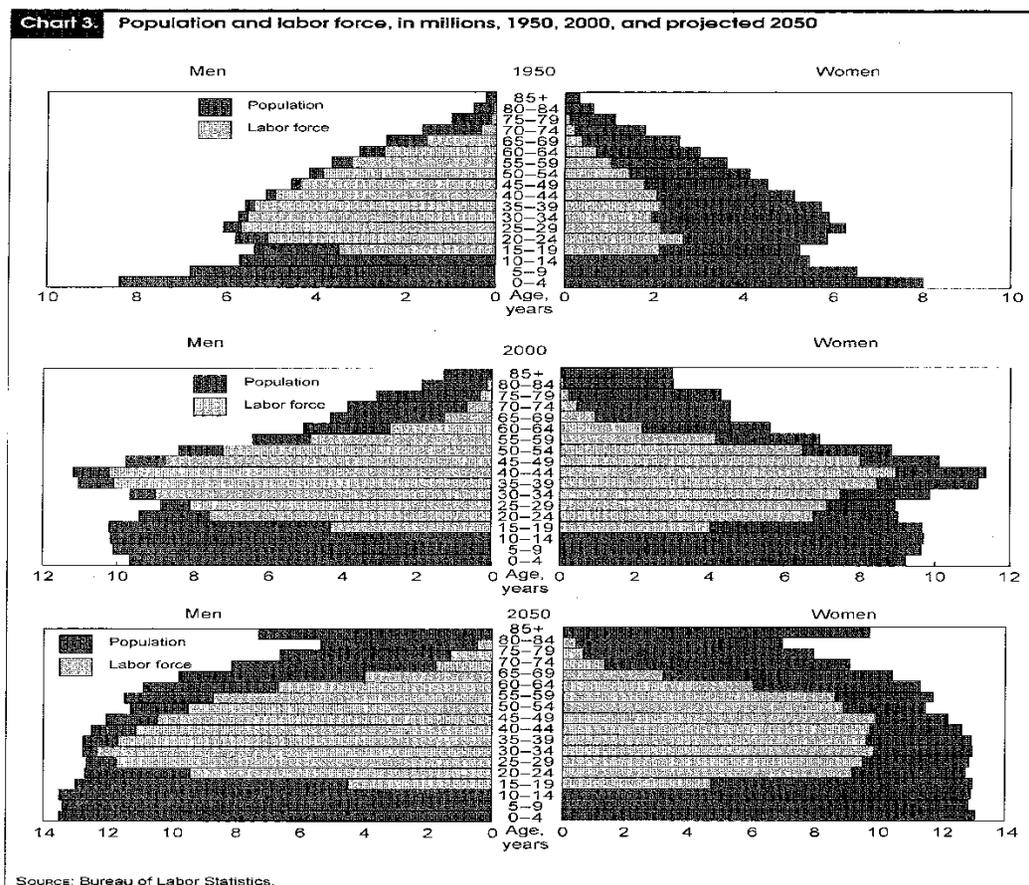
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Source: Bureau of Labor Statistics, OEA

WORKFORCE GROWTH GUYS AND GALS

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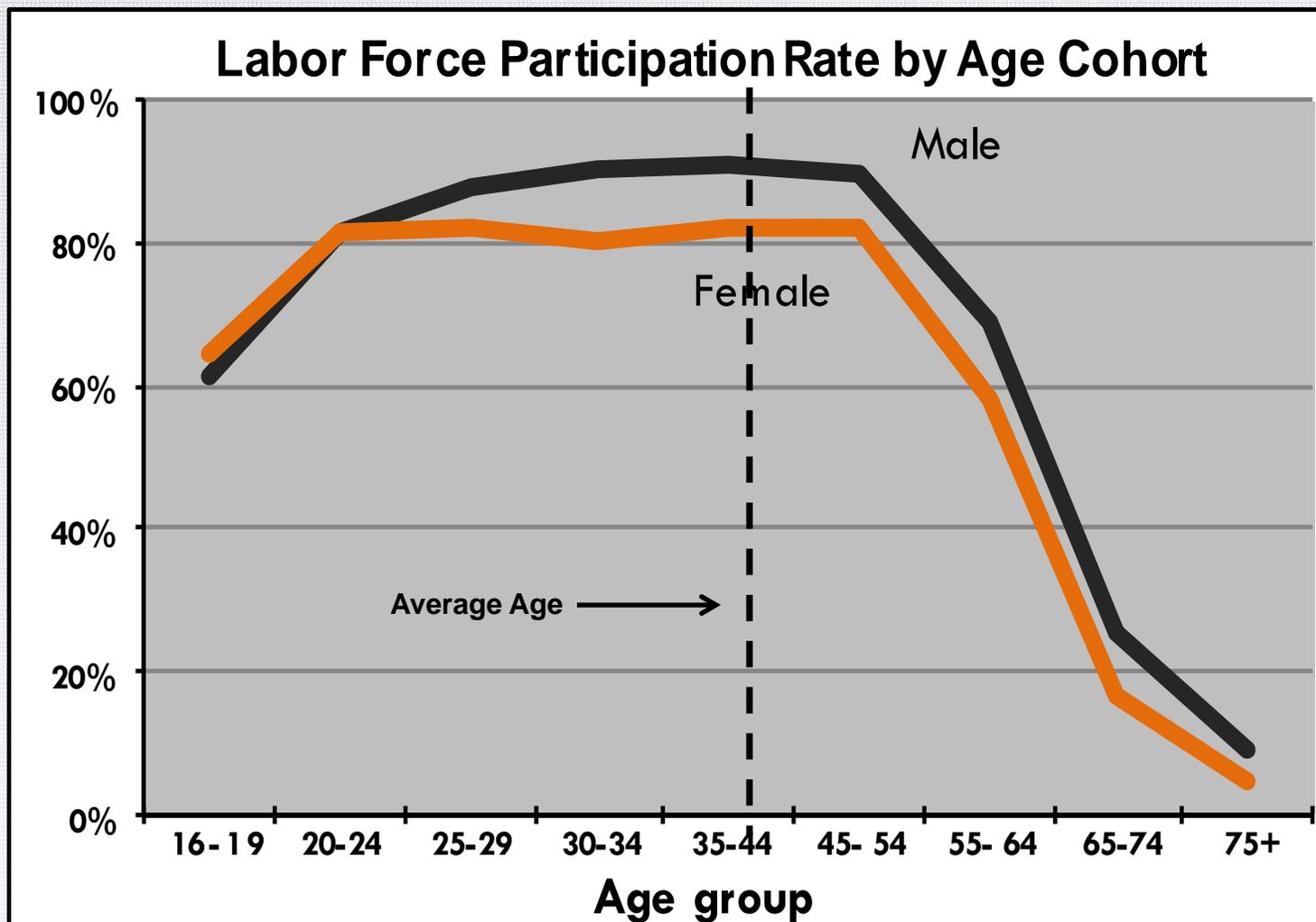
Long-Term Labor Force



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AS WORKERS AGE LFPR DECLINES IN A HURRY

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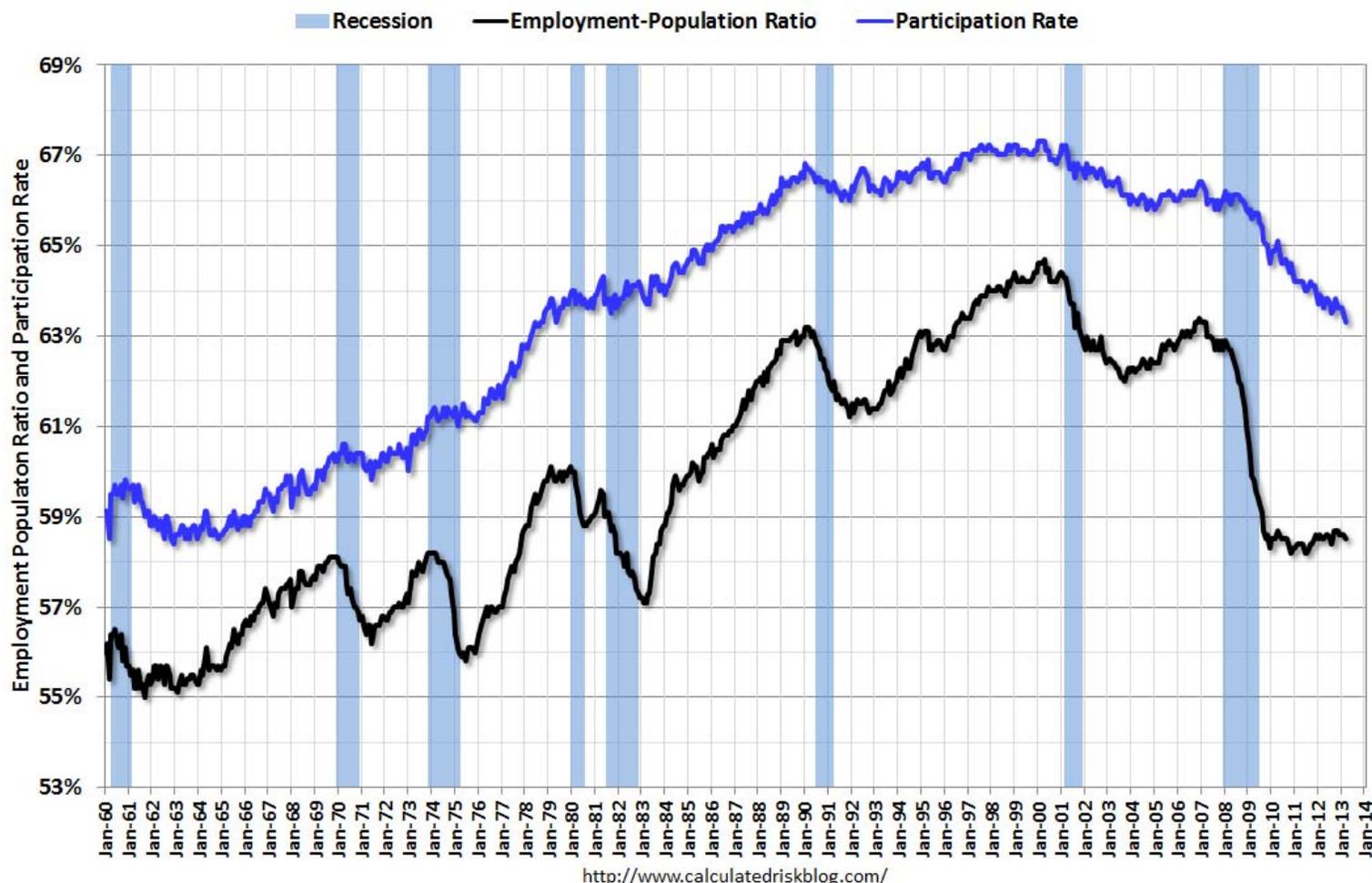
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Source: Bureau of Labor Statistics, OEA

WORKFORCE PARTICIPATION TRENDS DWARF FLUCUATION

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Employment Population Ratio and Participation Rate



WORKFORCE TRENDS ARE:

- **Unprecedented – we have never faced a declining workforce before;**
- **Assured – demographics will change little;**
- **Largely unalterable – demographics and migration patterns do not change abruptly.**



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Who and what **are in** demand?



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WAIT, WHAT HOW CAN YOU HAVE BOTH?!

... the number of unemployed persons (12.8 million) and the unemployment rate (8.3 percent) ... have shown little movement thus far in 2012. *BLS, July 2012 employment report, August 3, 2012*

US Employers post the most jobs in 4 years;

by Christopher S. Rugaber, AP economics writer, *Posted: Aug 07, 2012 9:42 AM CDT*

State manufacturers have jobs, need workers;

postcresent.com; by Holly Hartung, Grace Edquist and Matt Oleson, Wisconsin Center for Investigative Journalism, August 1, 2012

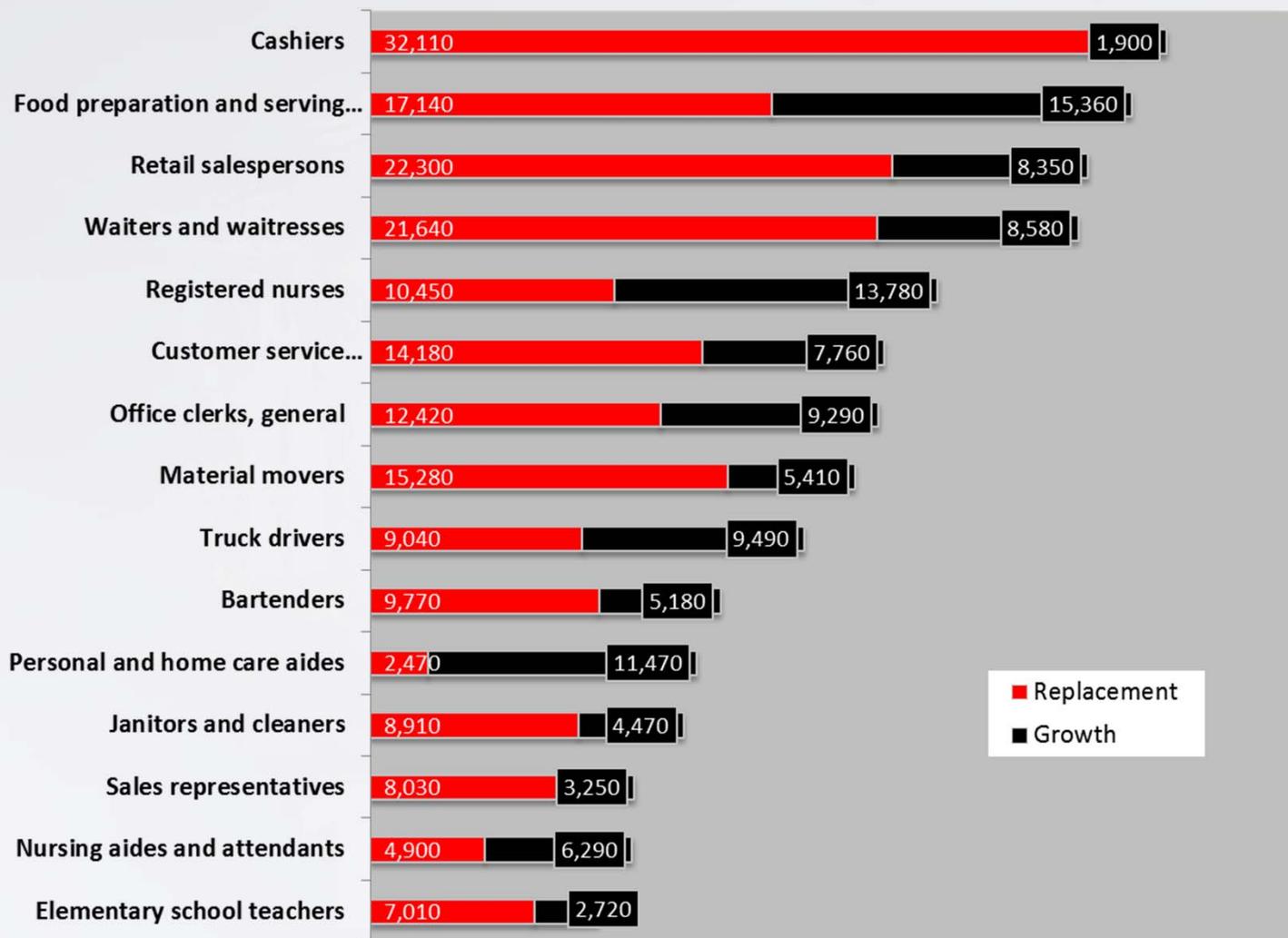
Marinette Marine struggles to attract young workers, Training, dozens of positions available, but applicants are few

By Rick Barrett of the Journal Sentinel, June 16, 2012



MOST JOB OPENINGS BY OCCUPATION

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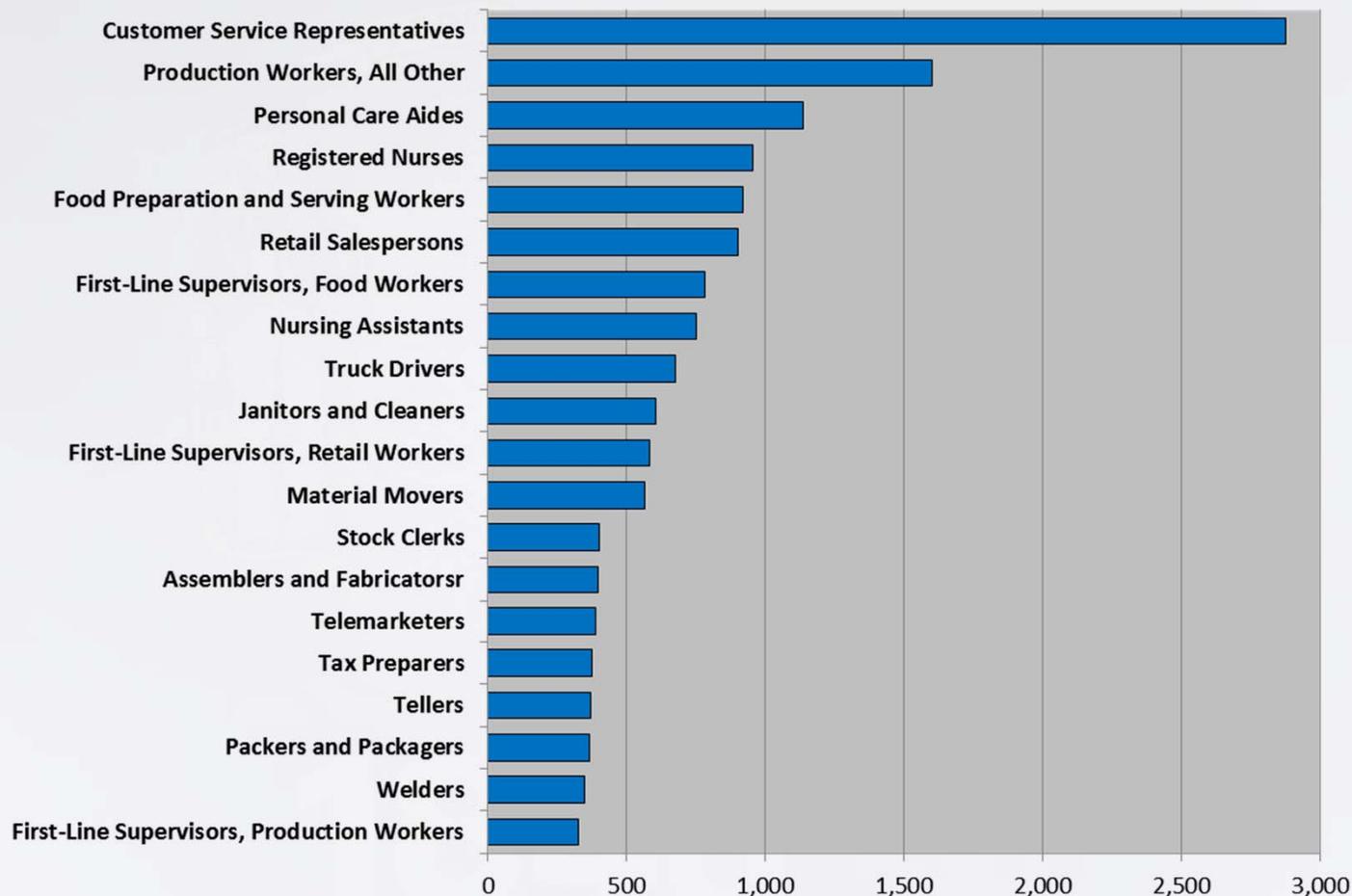
*Job Openings includes both turnover and new jobs that are created.



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MOST JOB OPENINGS ON JOB CENTER OF WISCONSIN

Job Center of Wisconsin Openings



MOST OFTEN HEARD POSITION CHALLENGES CHARACTERISTICS

Occupation	Annual % Growth	Growth Openings	Replacement Openings	Total Openings	Typical Entry Education	Median Wage
Heavy truck drivers	1.90	9,490	9,040	18,530	H.S. diploma	\$38,300
Welders	1.50	1,840	3,010	4,850	H.S. diploma	\$37,980
Customer service representatives	1.50	7,760	14,180	21,940	H.S. diploma	\$31,430
CNC machine operators	2.20	1,310	1,020	2,330	H.S. diploma	\$35,860
Maintenance workers, machinery	0.70	180	440	620	H.S. diploma	\$39,460
Nursing aides	1.50	6,300	4,900	11,200	Postsecondary	\$25,020
Registered nurses	2.20	13,780	10,450	24,230	Associate's degree	\$62,860
Mechanical engineers	0.70	470	2,010	2,480	Bachelor's degree	\$68,340
Food preparation and serving workers	2.30	15,360	17,140	32,500	< high school	\$17,910



WHAT TRAINING TO PURSUE FIVE MAKE ALL THREE LISTS

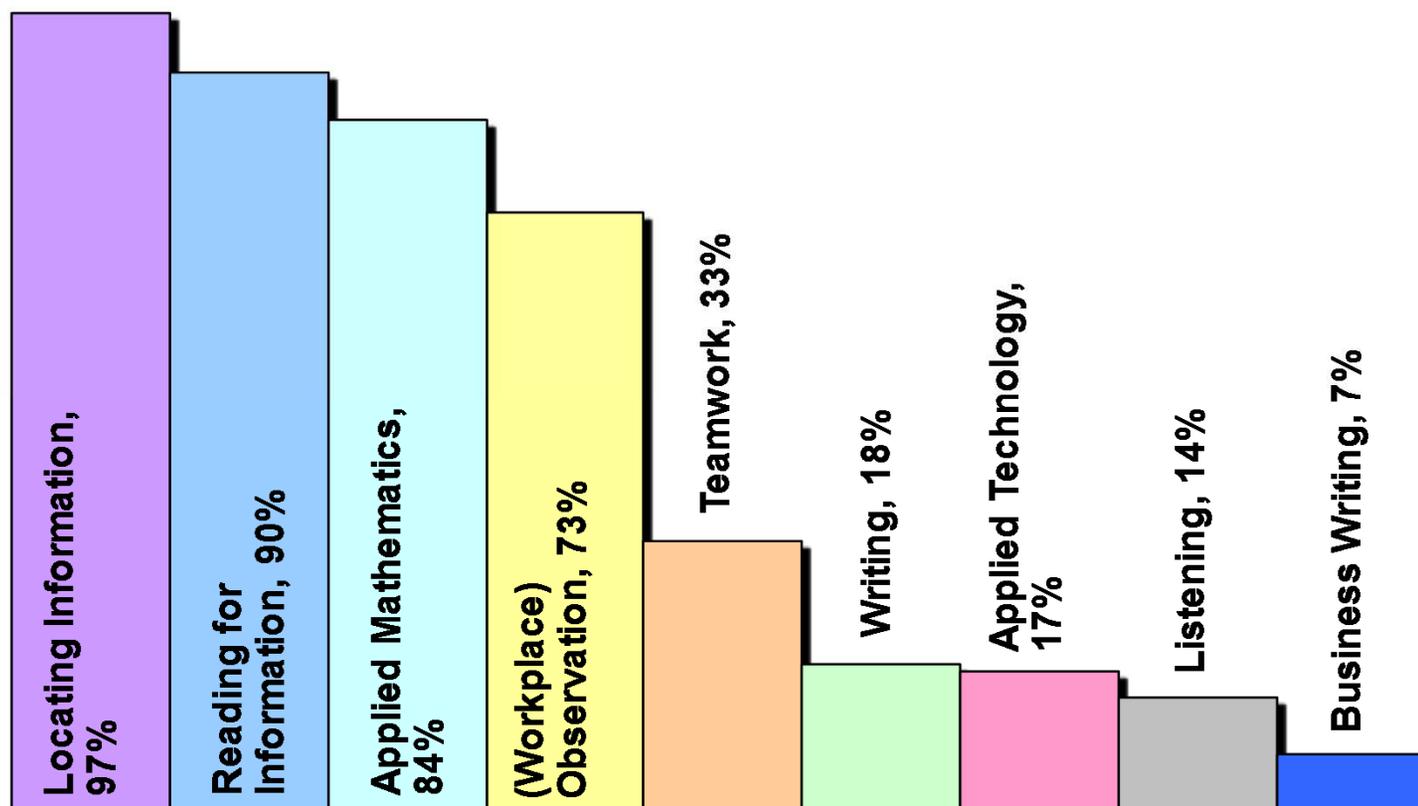
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Make all three lists	Total Openings	Typical Entry Education	Median Wage
Food preparation	32,500	< high school	\$17,910
Customer service	21,940	H.S. diploma	\$31,430
Registered nurses	24,230	AD/BS	\$62,860
Heavy truck drivers	18,530	H.S. diploma	\$38,300
Health care aides	11,200	Postsecondary	\$25,020
Make two lists			
Welders	4,850	H.S. diploma	\$37,980
Material Movers	38,900	H.S. diploma	\$23,590
Retail sales	69,030	< high school	\$20,570



ESSENTIAL SKILLS IN TODAY'S WORKPLACE

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Numbers are based on analysis of 18,000 jobs profiled from 2006 to 2010 in the ACT JobPro database.

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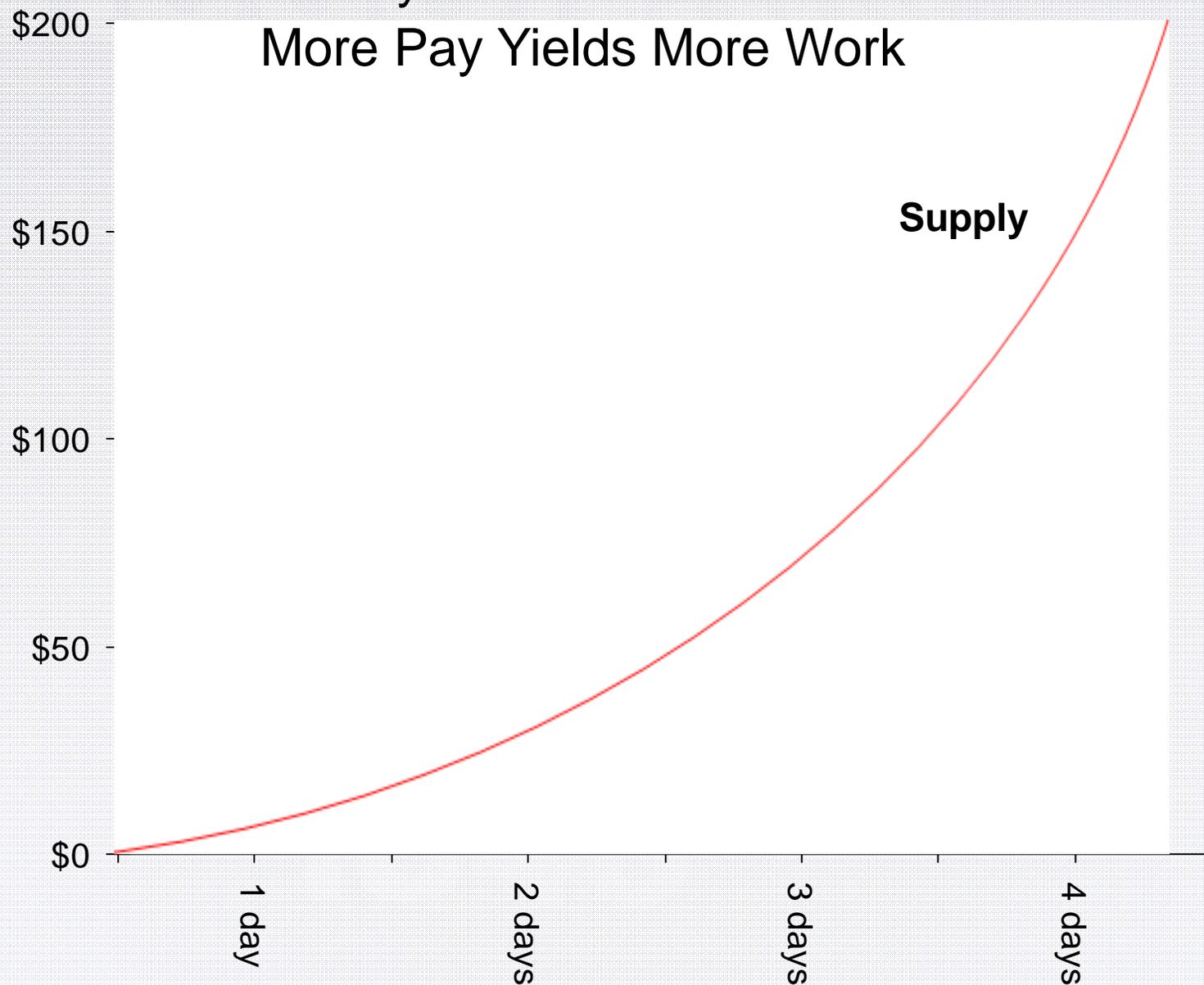
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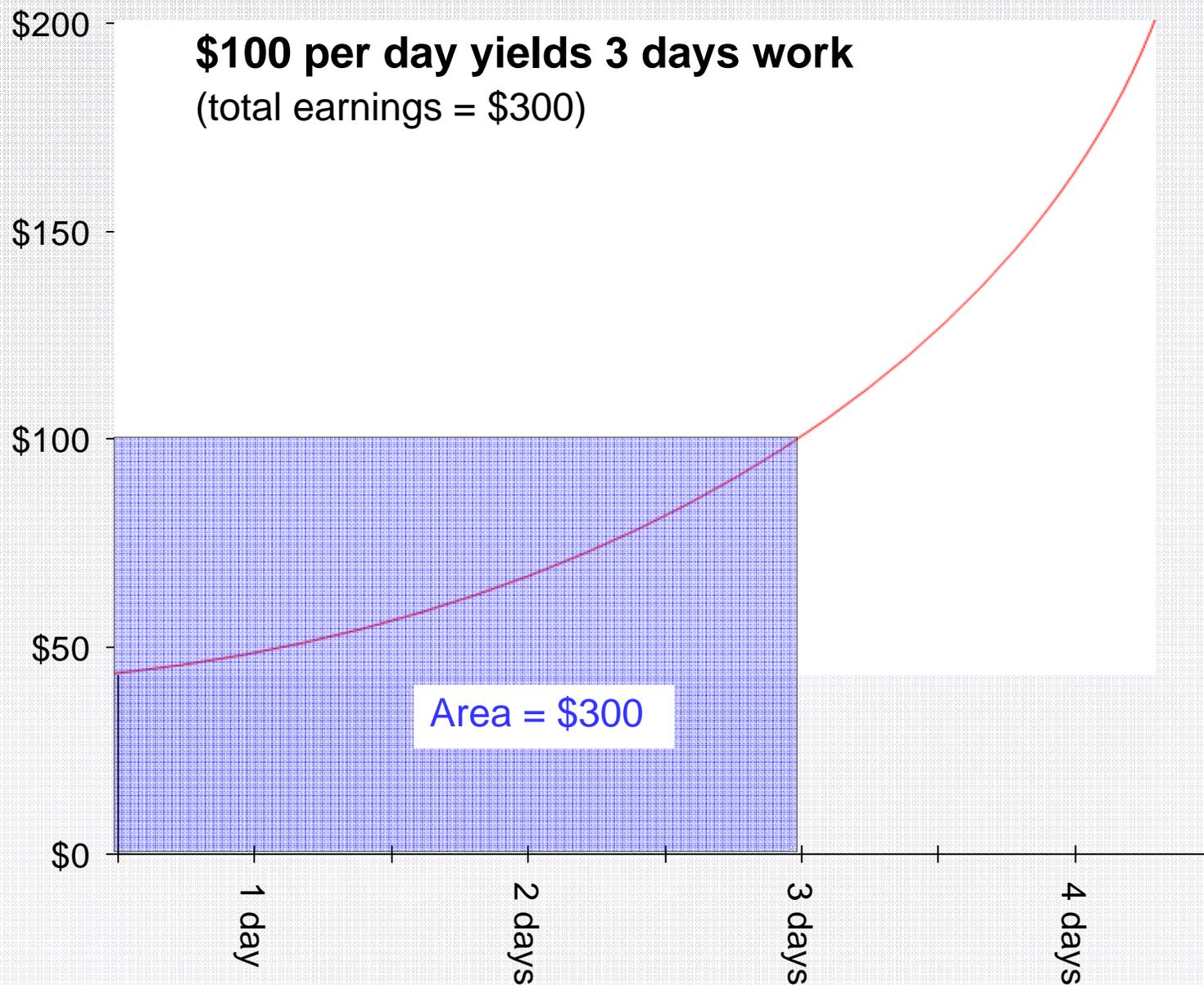
Forgive me, A little economic theory



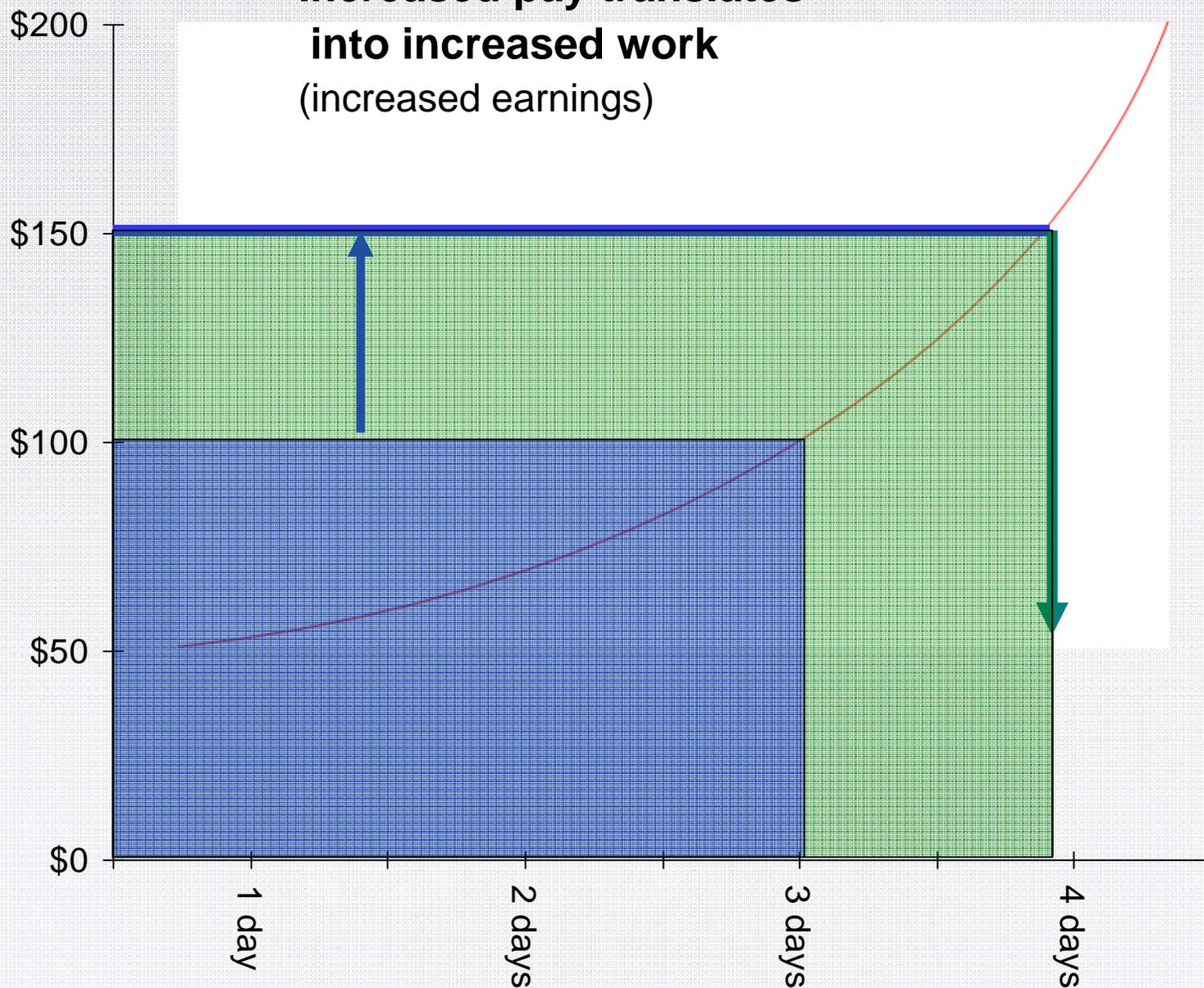
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Theory Tells Us More Pay Yields More Work

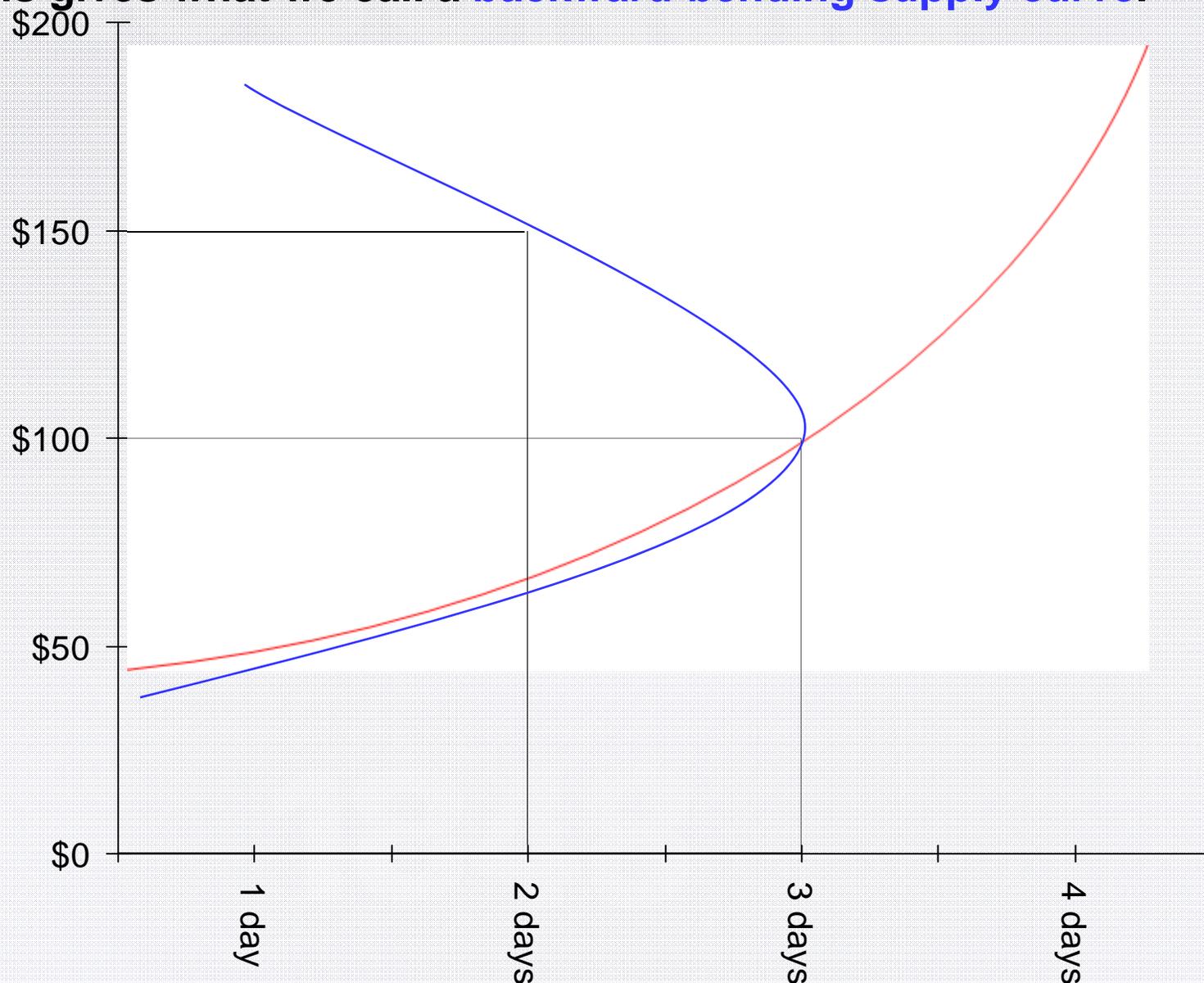


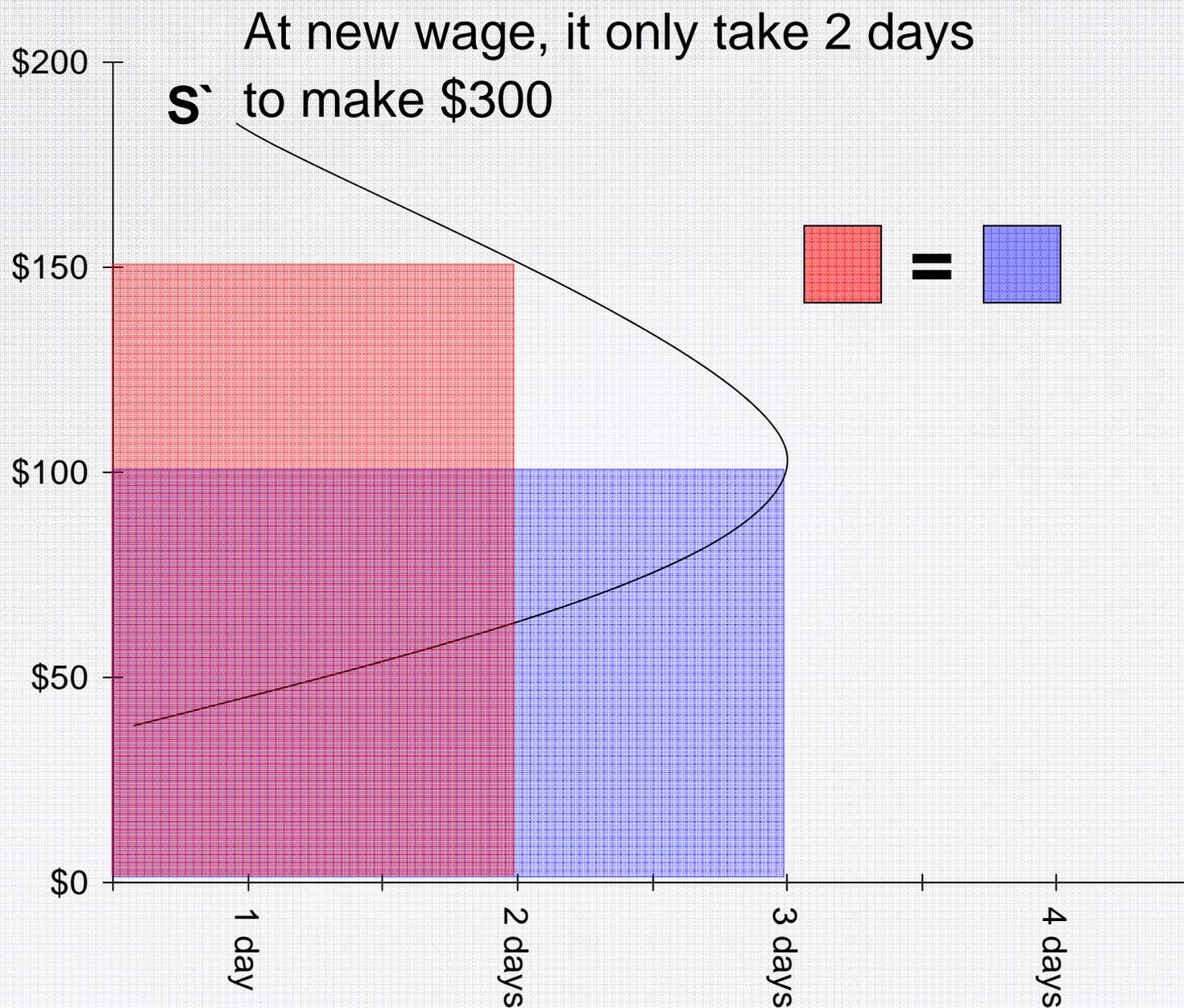


Increased pay translates into increased work (increased earnings)



Well, the guy only shows up for two days.
This gives what we call a **backward-bending supply curve**.







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THINGS HAVE CHANGED BREAKING NEW GROUND

- **We face a serious quantity challenge**
- **We face a serious quality challenge**
- **Many are not prepared technically or civilly**
- **Backward-bending supply curve for labor.**



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ECONOMIC OUTLOOK



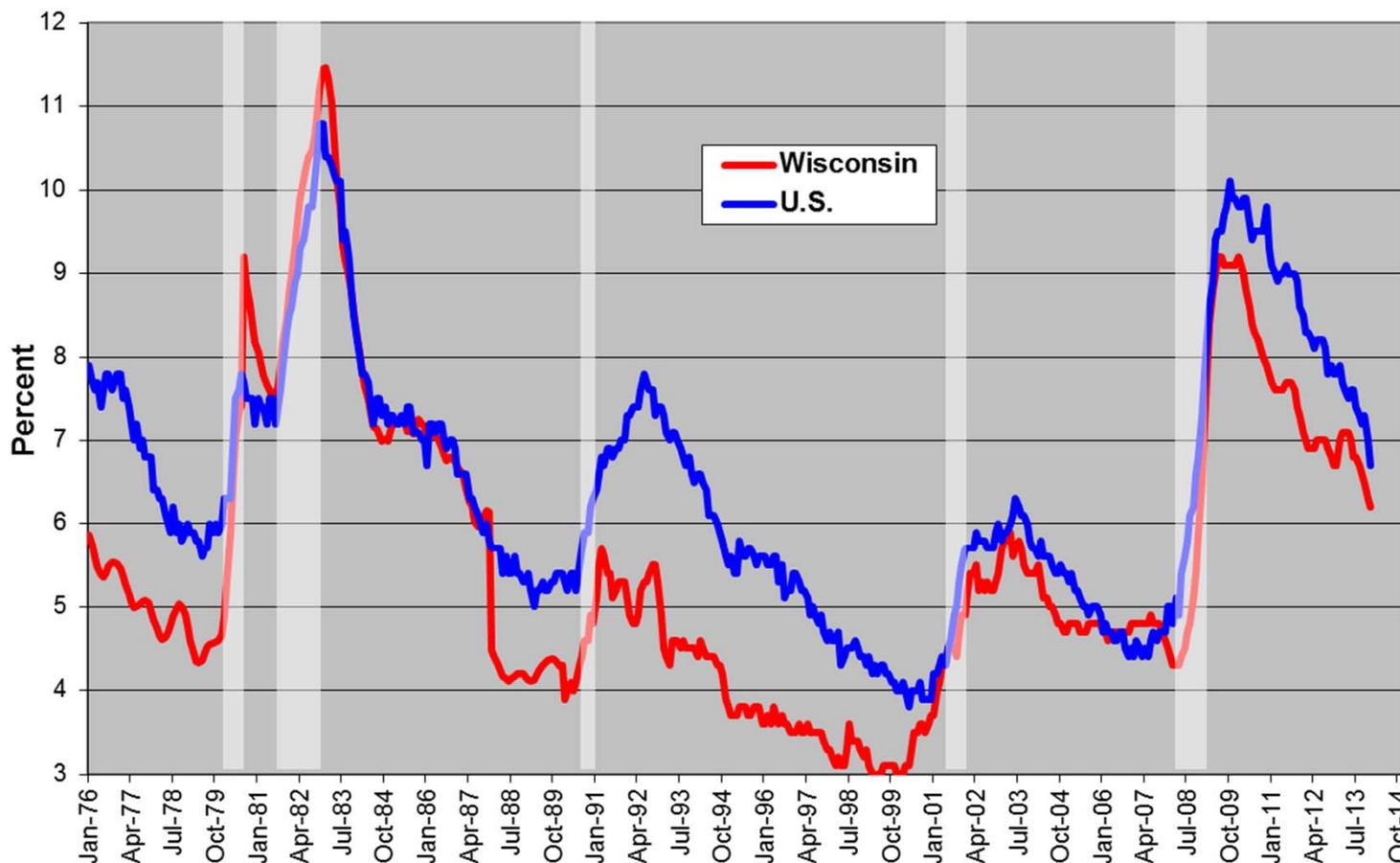
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UNEMPLOYMENT RATE MAKING STEADY PROGRESS

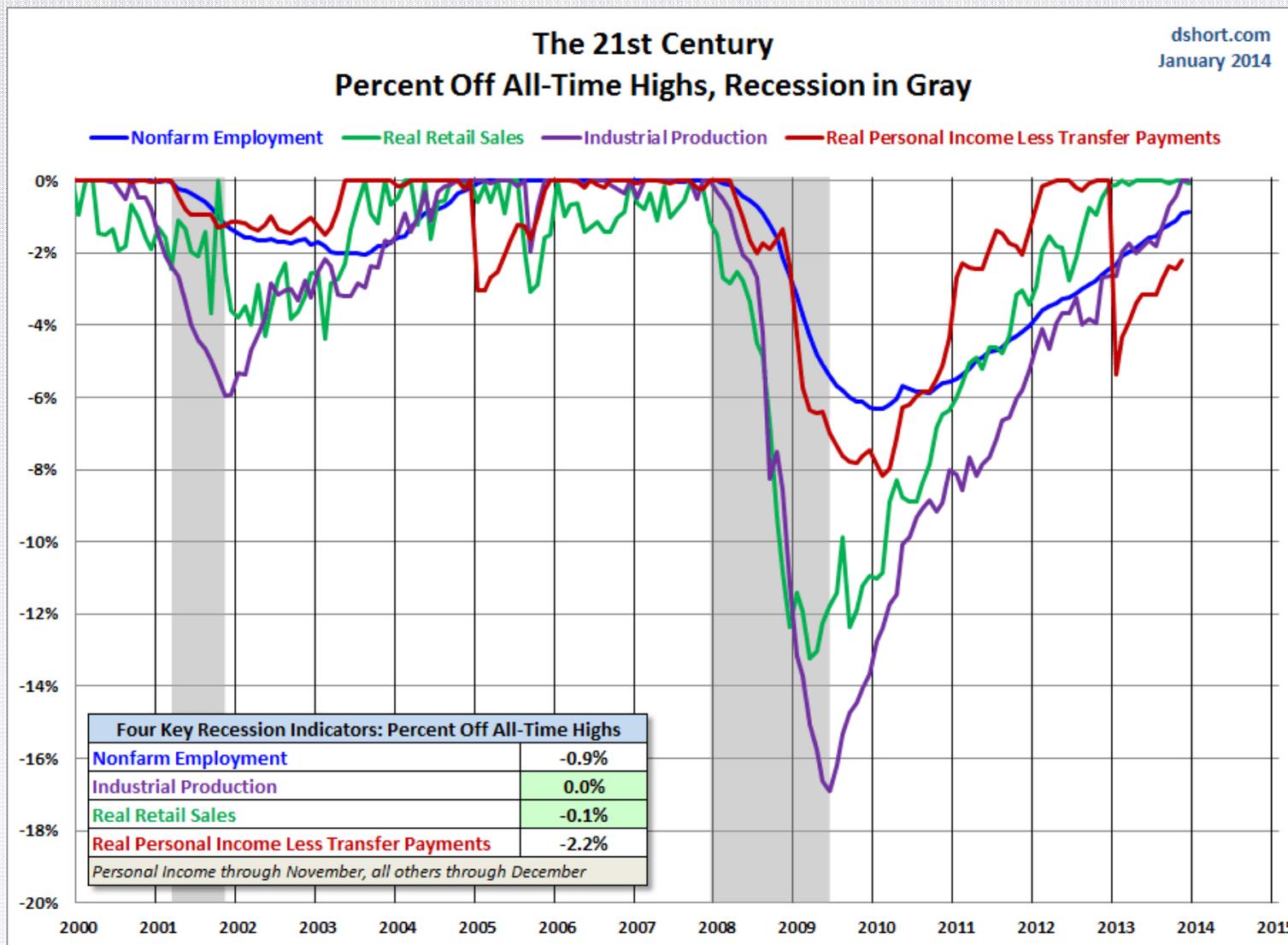
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Unemployment Rates (seasonally adjusted)



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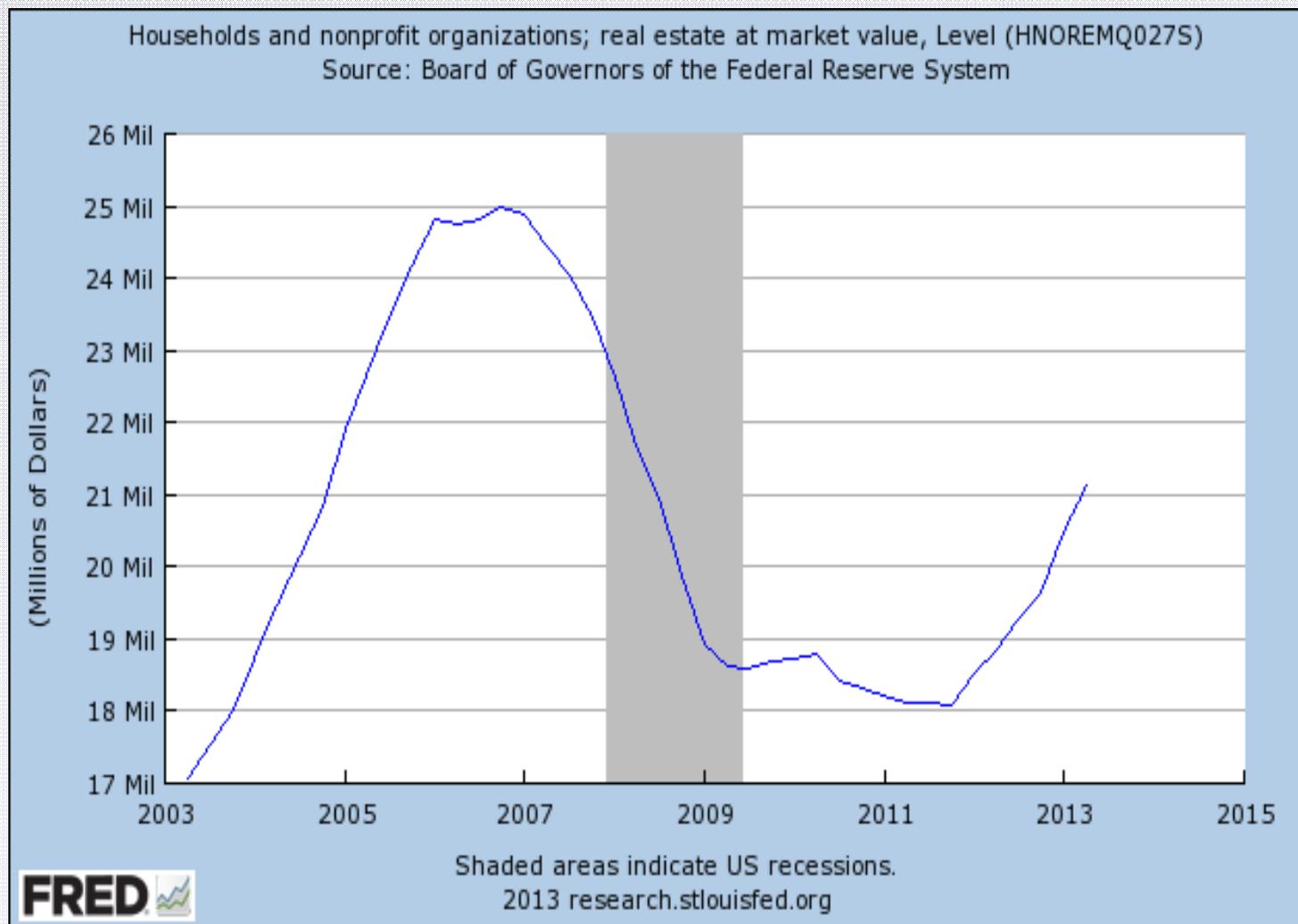
PRIMARY INDICATORS ARE CLOSE



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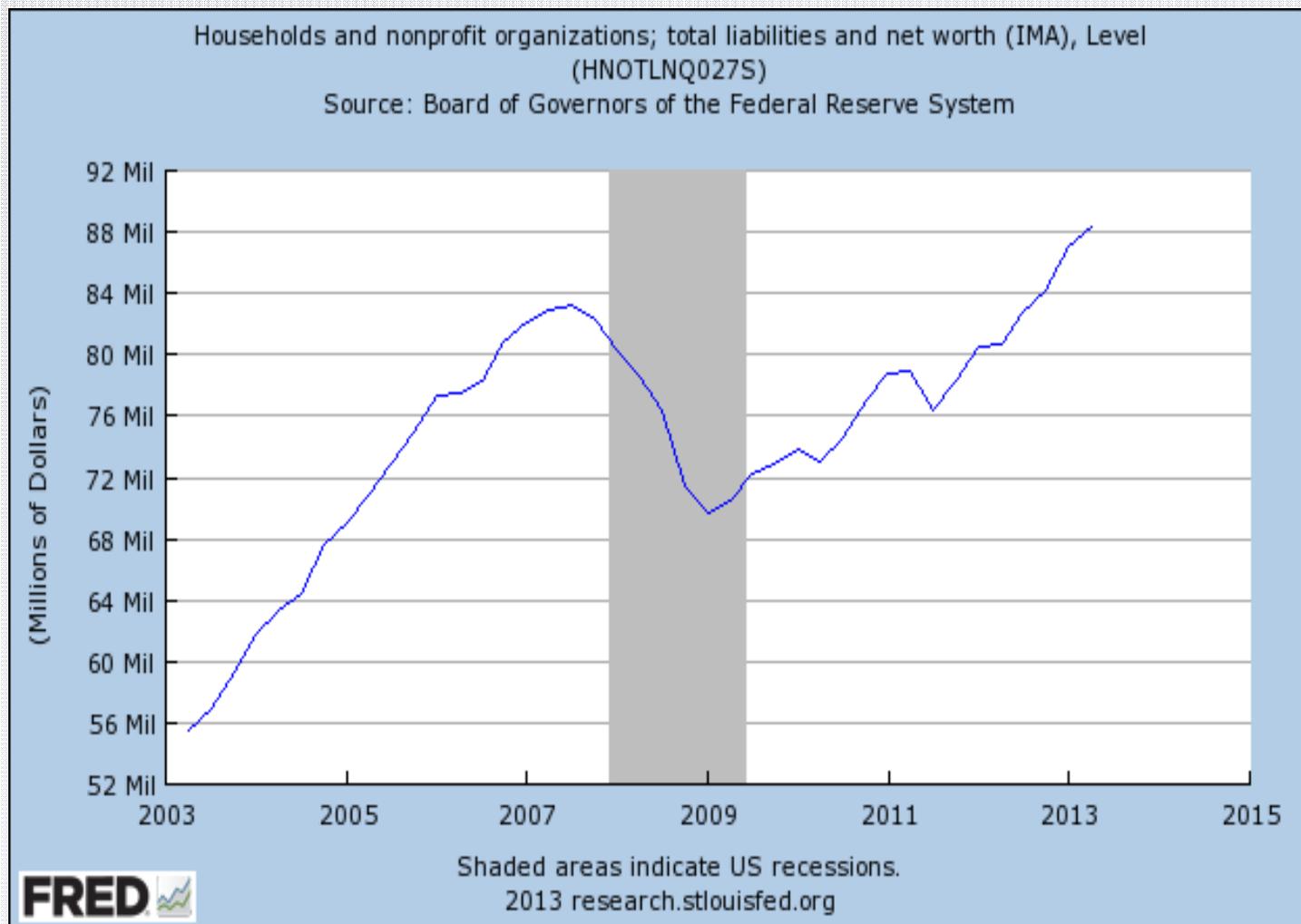
REAL ESTATE EQUITY GETTING A NICE REBOUND

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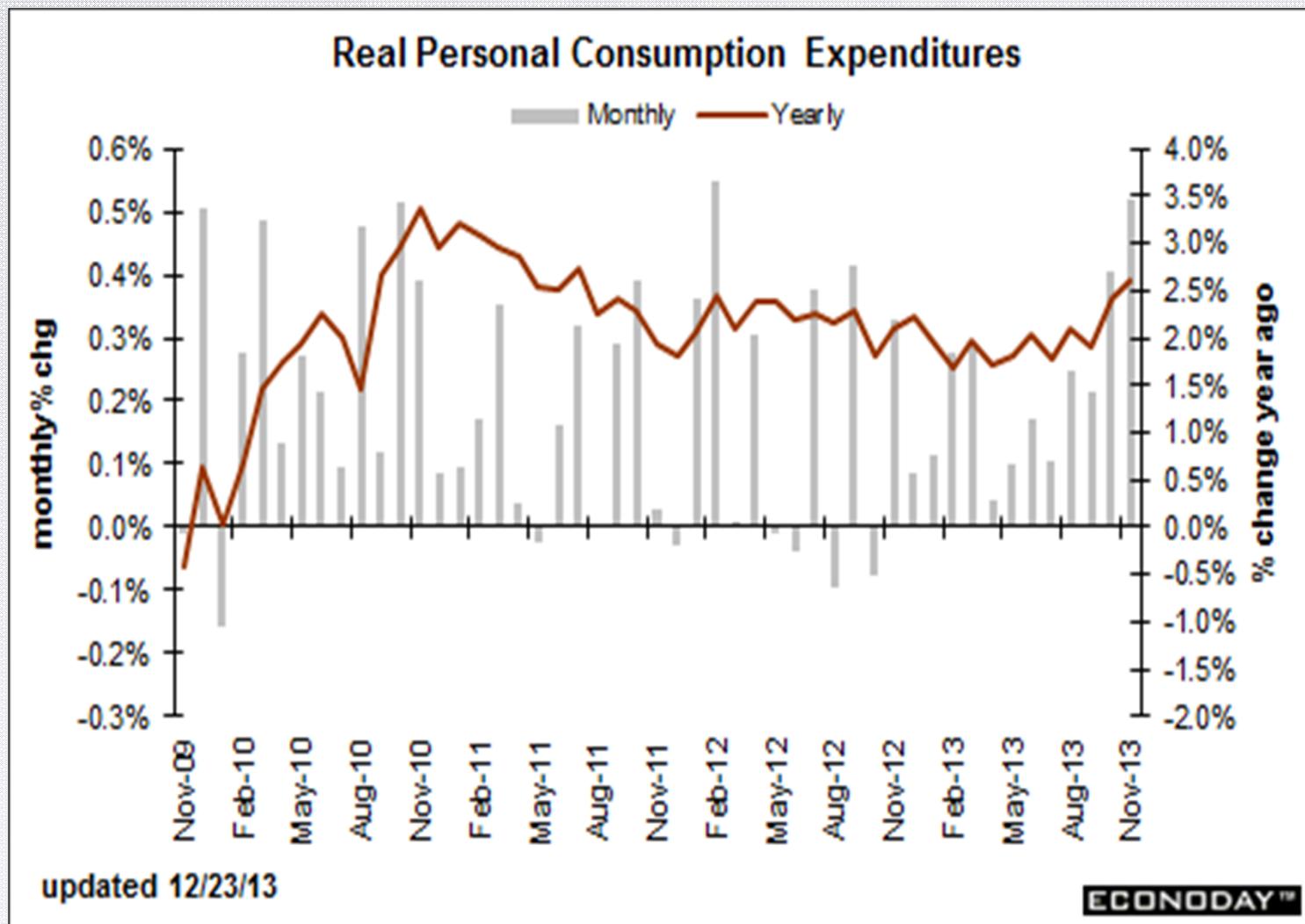
SECURITIES' APPRECIATION IS GETTING US BACK OVER THE HUMP

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CONSUMPTION SECTOR SHOWING STEADY GAINS

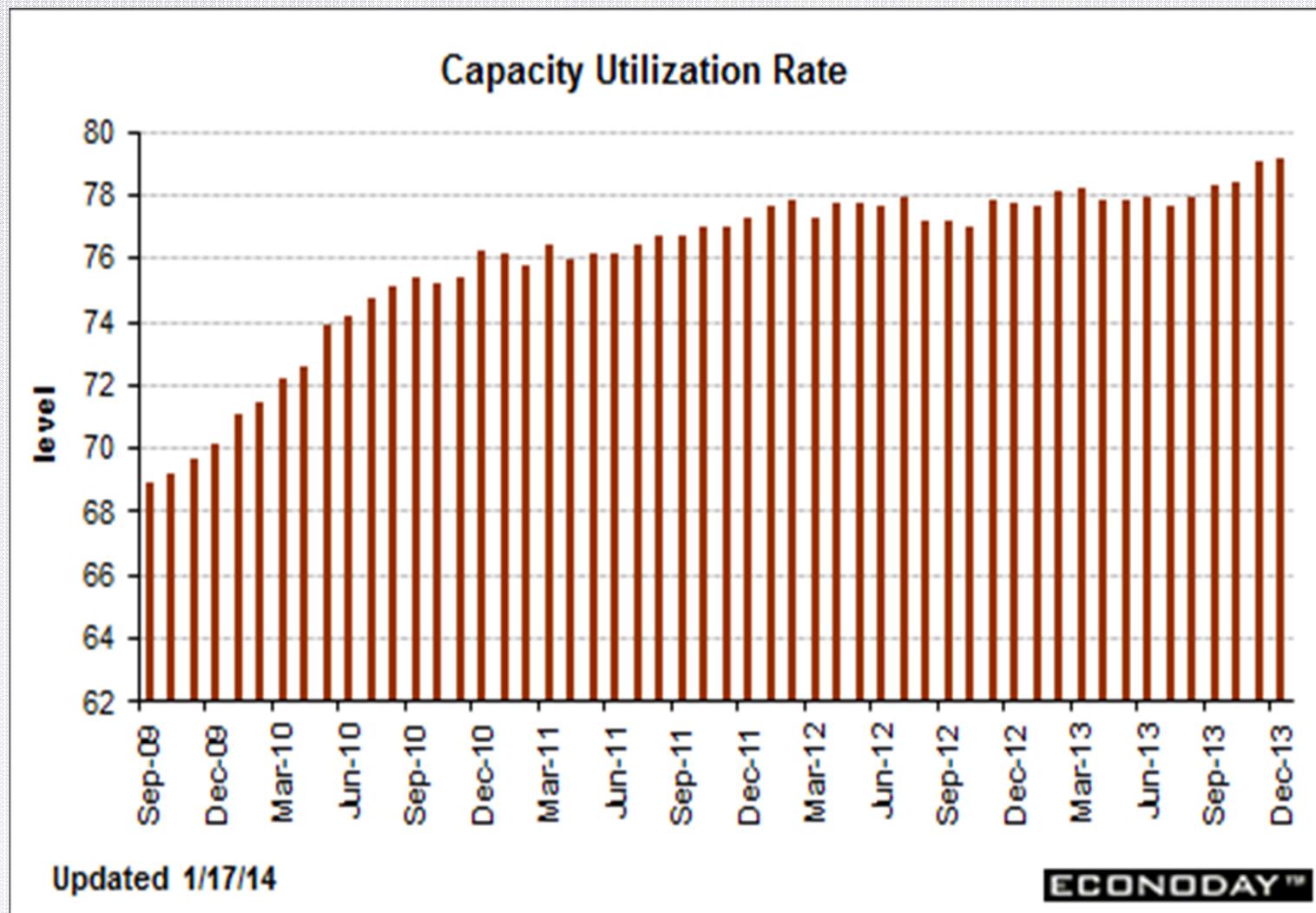
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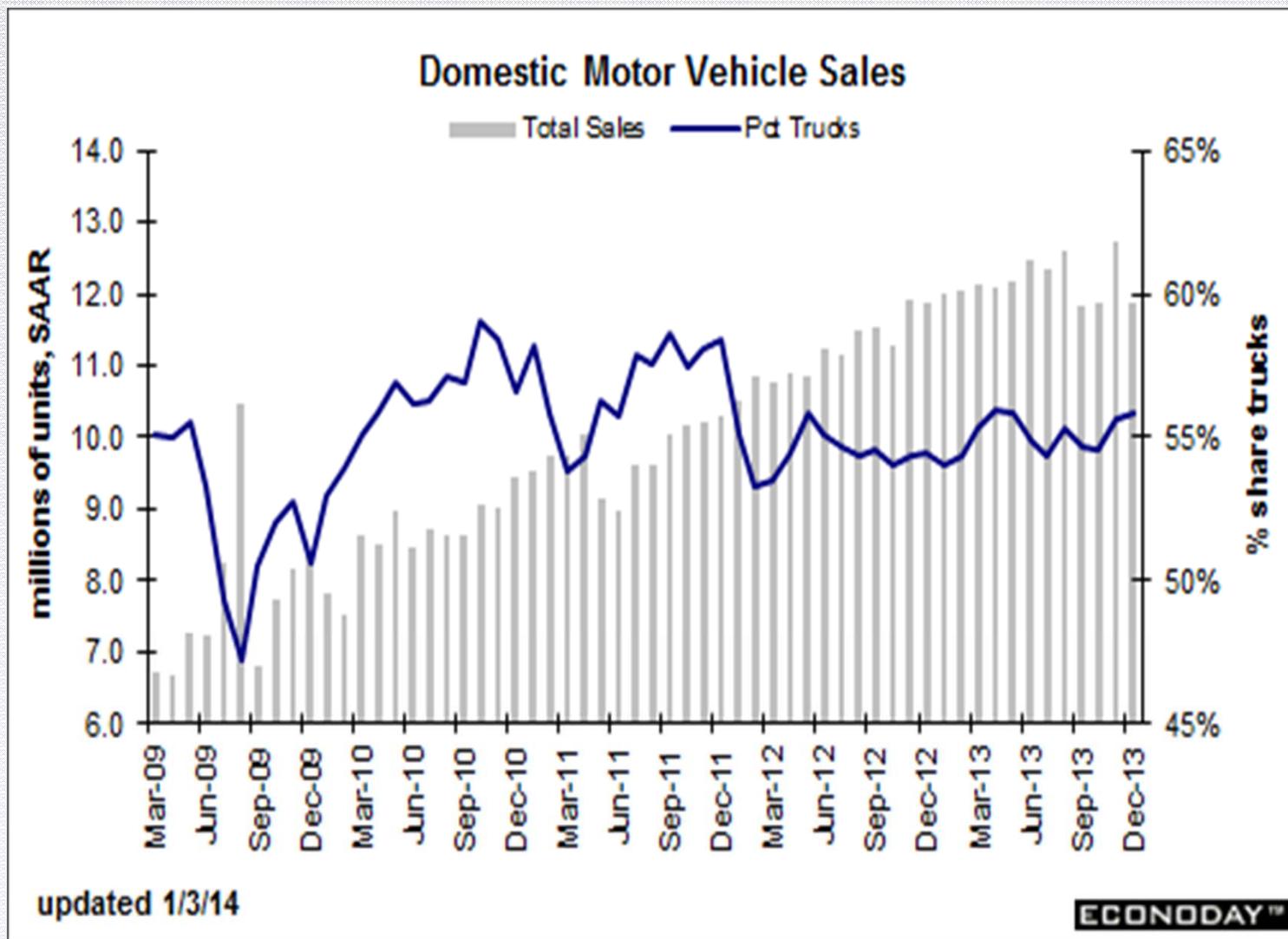
CAPACITY UTILIZATION INTO NEW GEAR

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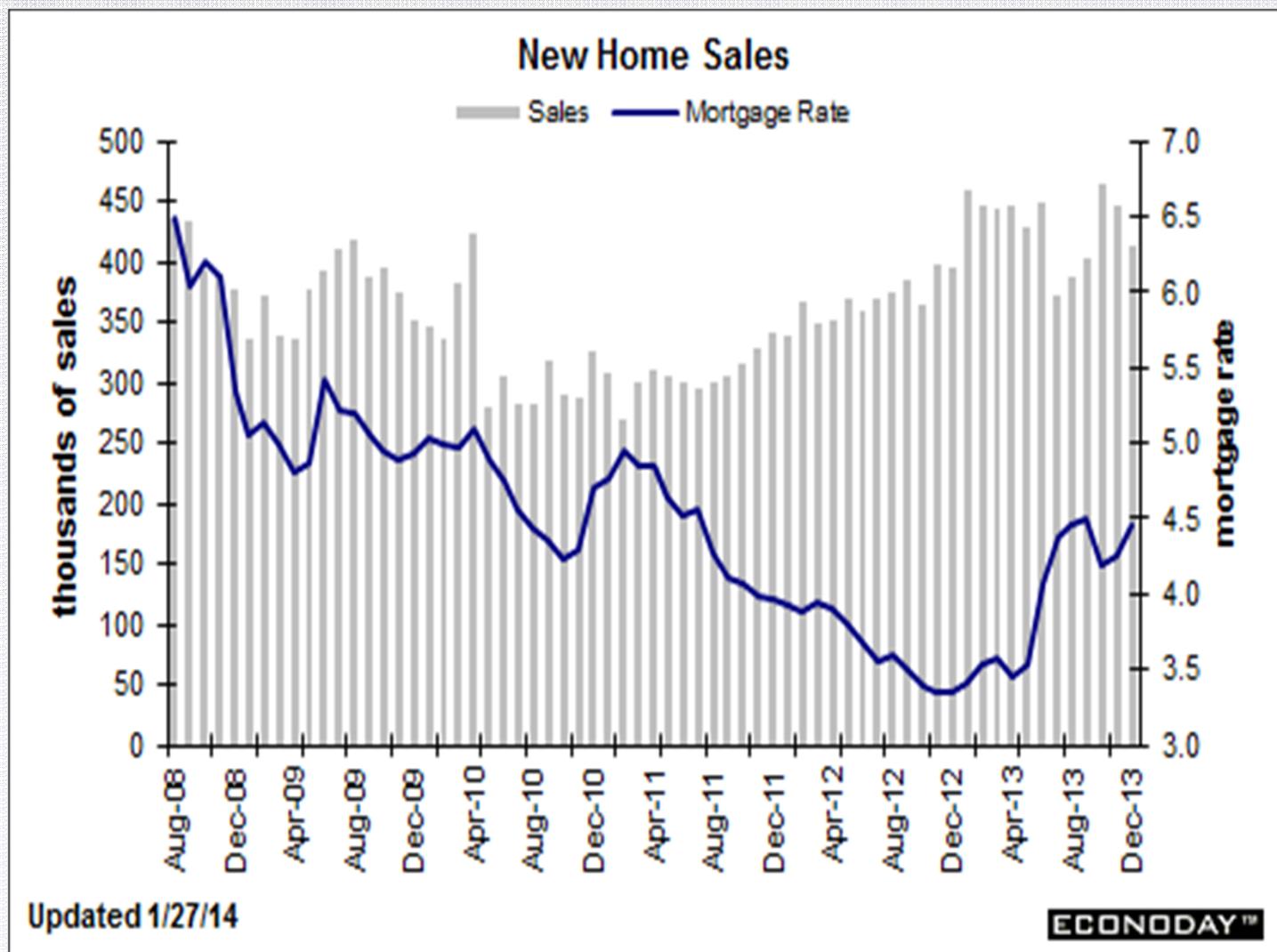
AUTO SALES CONTINUE TO SURPRISE

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NEW HOME SALES ARE ENCOURAGING

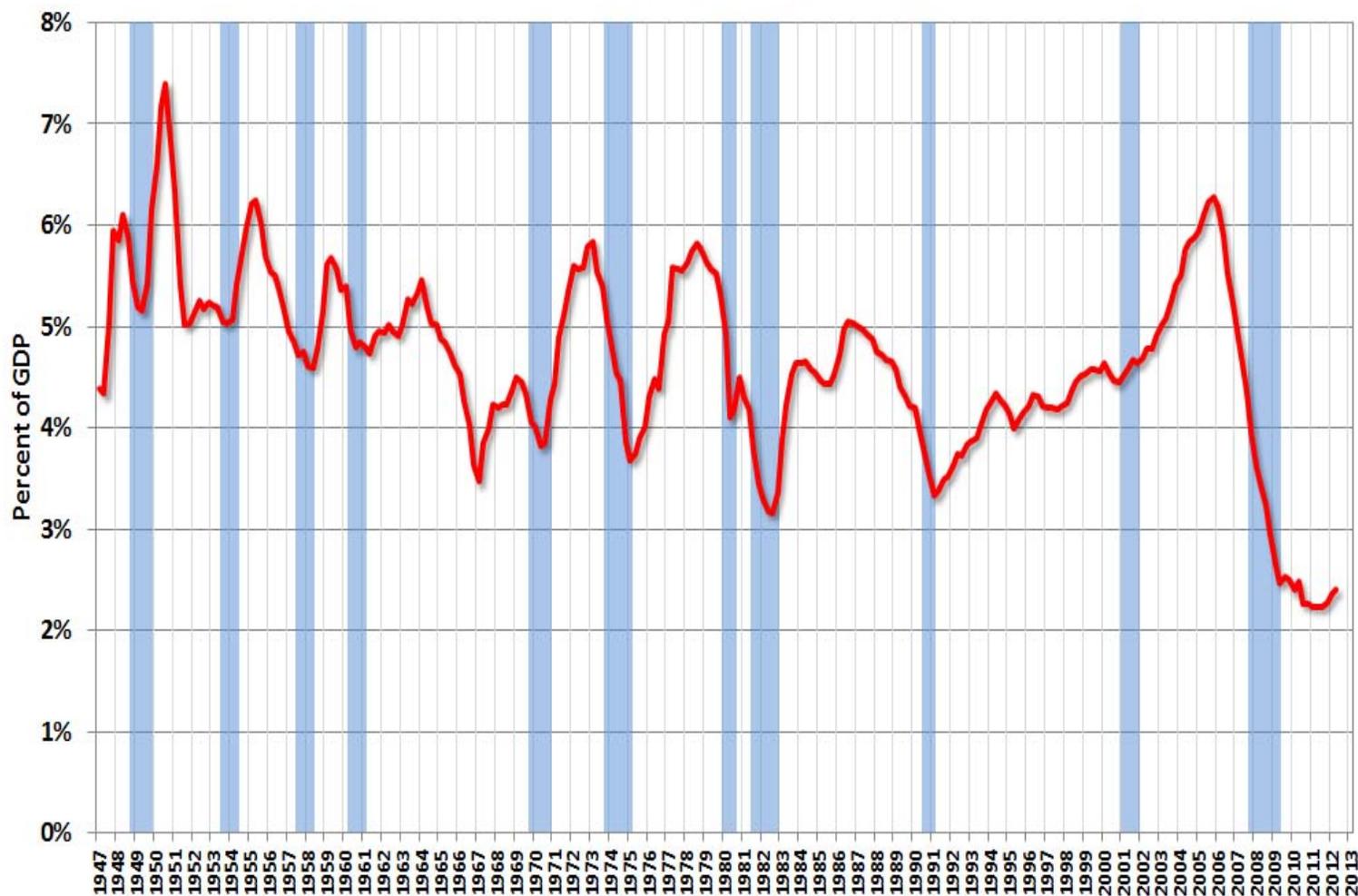
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REAL ESTATE INVESTMENT WELL BELOW AVERAGE

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Residential Investment as Percent of GDP



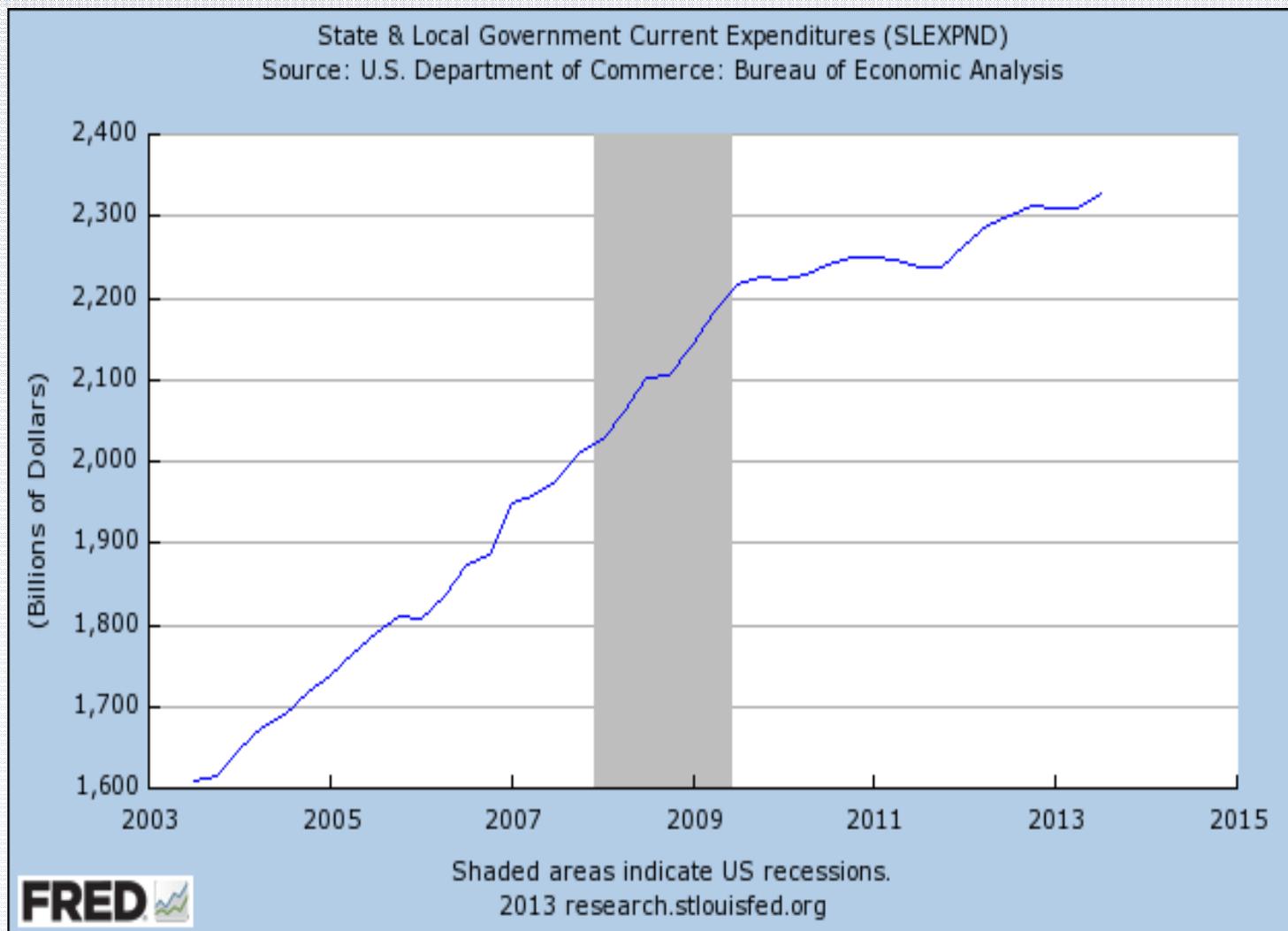
<http://www.calculatedriskblog.com/>





STATE AND LOCAL SPENDING ON A NEW TRAJECTORY

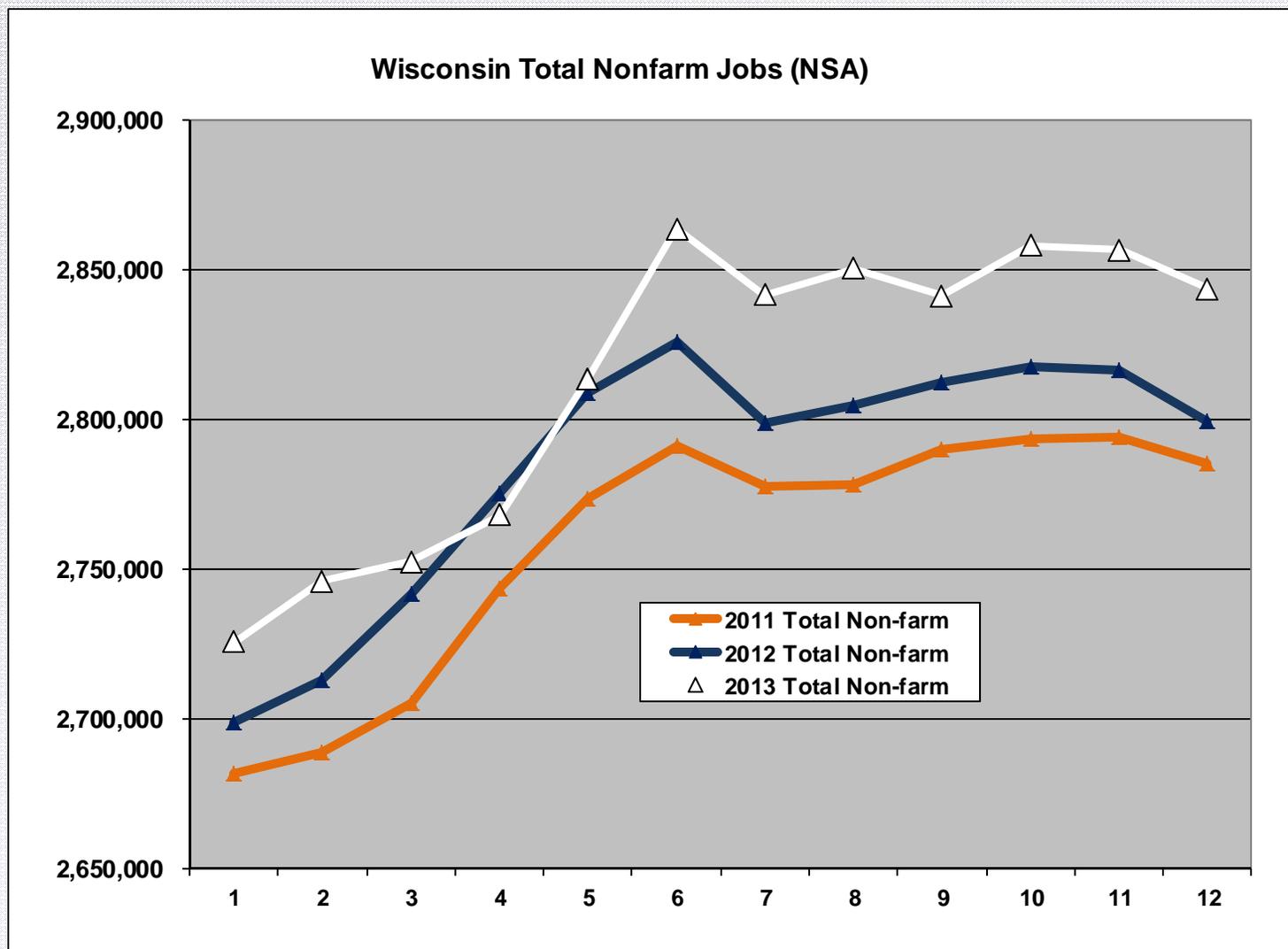
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JOBS LEVELS KEEP CLIMBING

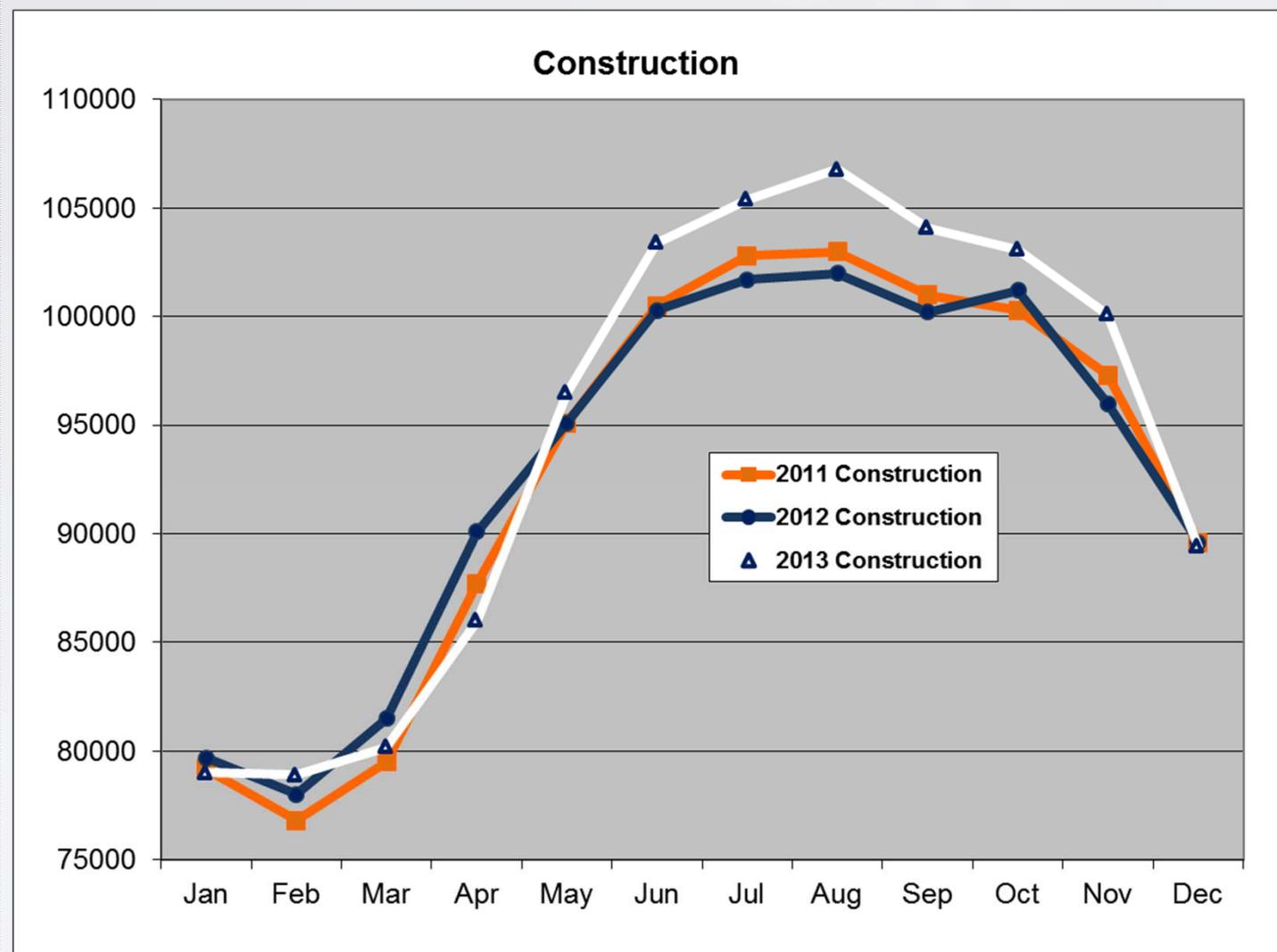
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Wisconsin Total Nonfarm Jobs (NSA)



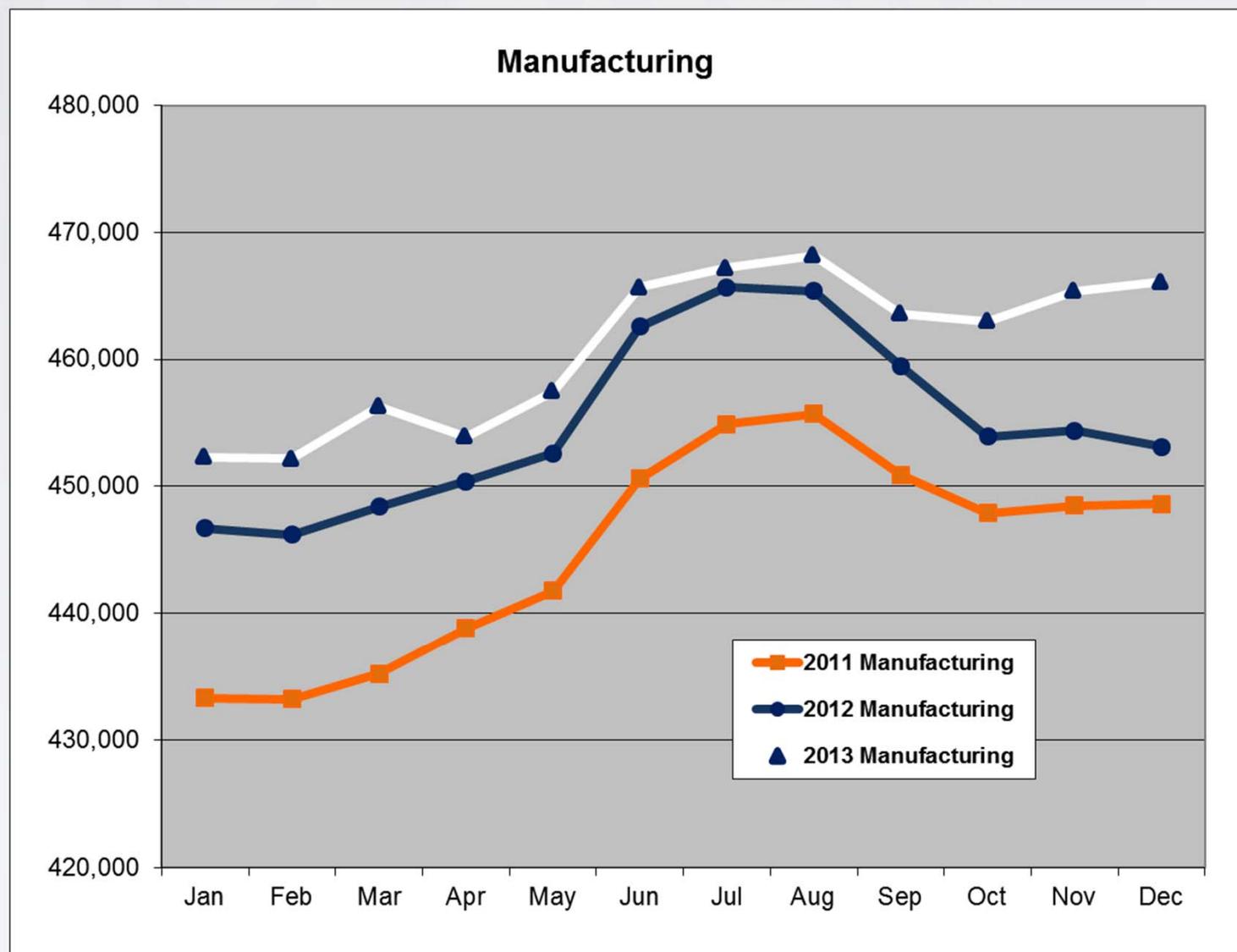
JOBS LEVELS KEEP CLIMBING

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JOBS LEVELS KEEP CLIMBING

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IN CONCLUSION **CONTINUED RECOVERY**

- **Recovery is self-sustaining.**
- **Employment expected to continue to increase.**
- **Strength of recovery subject to consumer income and business uncertainty.**

Risks

- **Slow employment gains dampens income growth.**
- **Does federal activity tip the balance.**
- **European and Asian economic recoveries.**



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APPRENTICESHIP CHARACTERISTICS

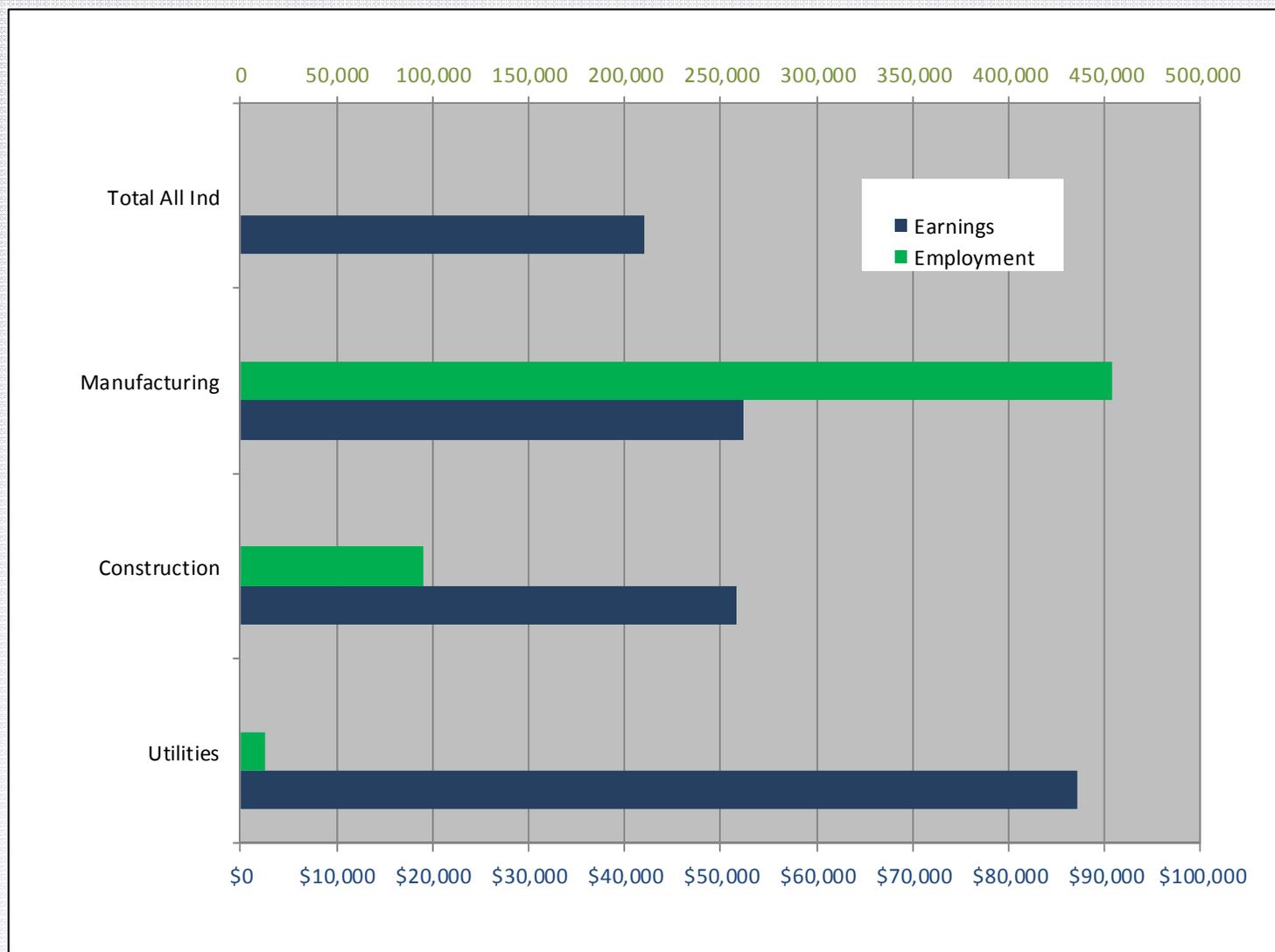


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SECTOR CHARACTERISTICS

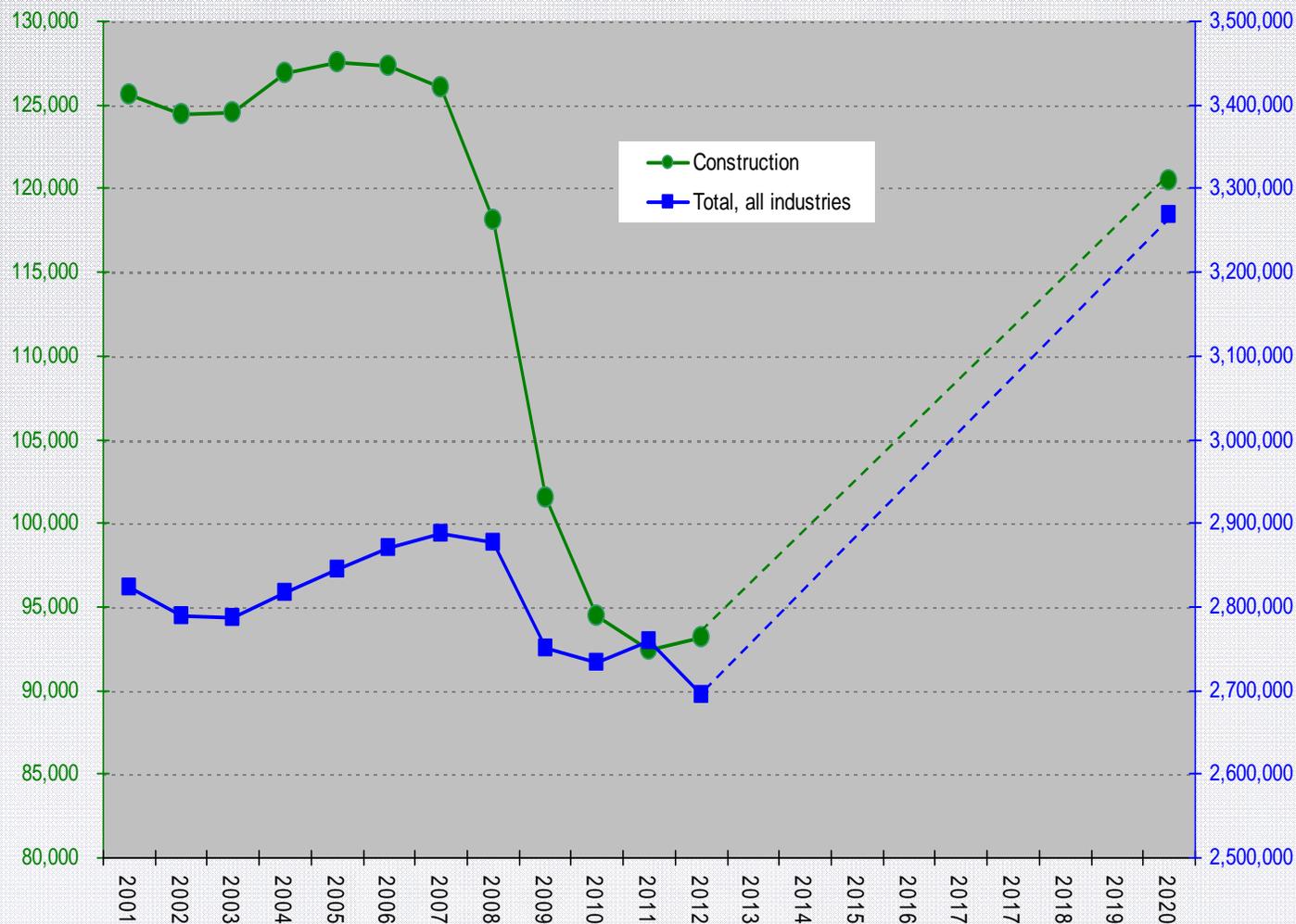
EARNINGS AND EMPLOYMENT

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Construction Employment & Total all-industries employment



Sources: BLS QCEW and WI DWD OEA Projections



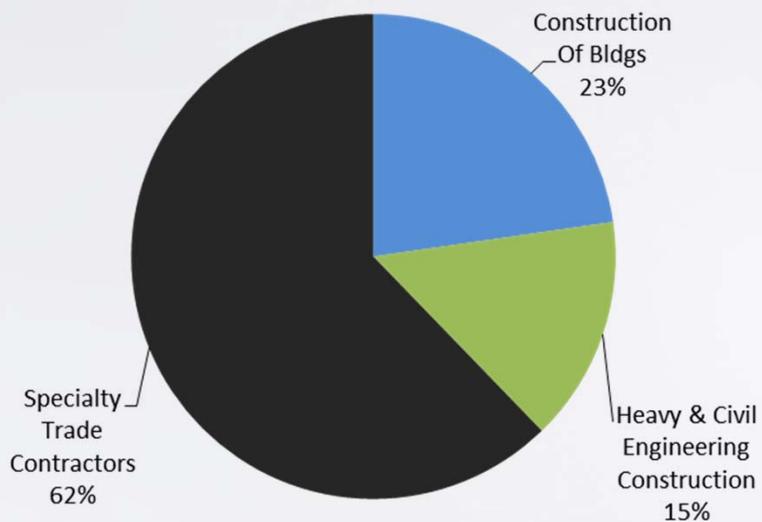
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CONSTRUCTION SECTOR CHARACTERISTICS

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Construction Employment in 2012



Average Annual Wage in 2012



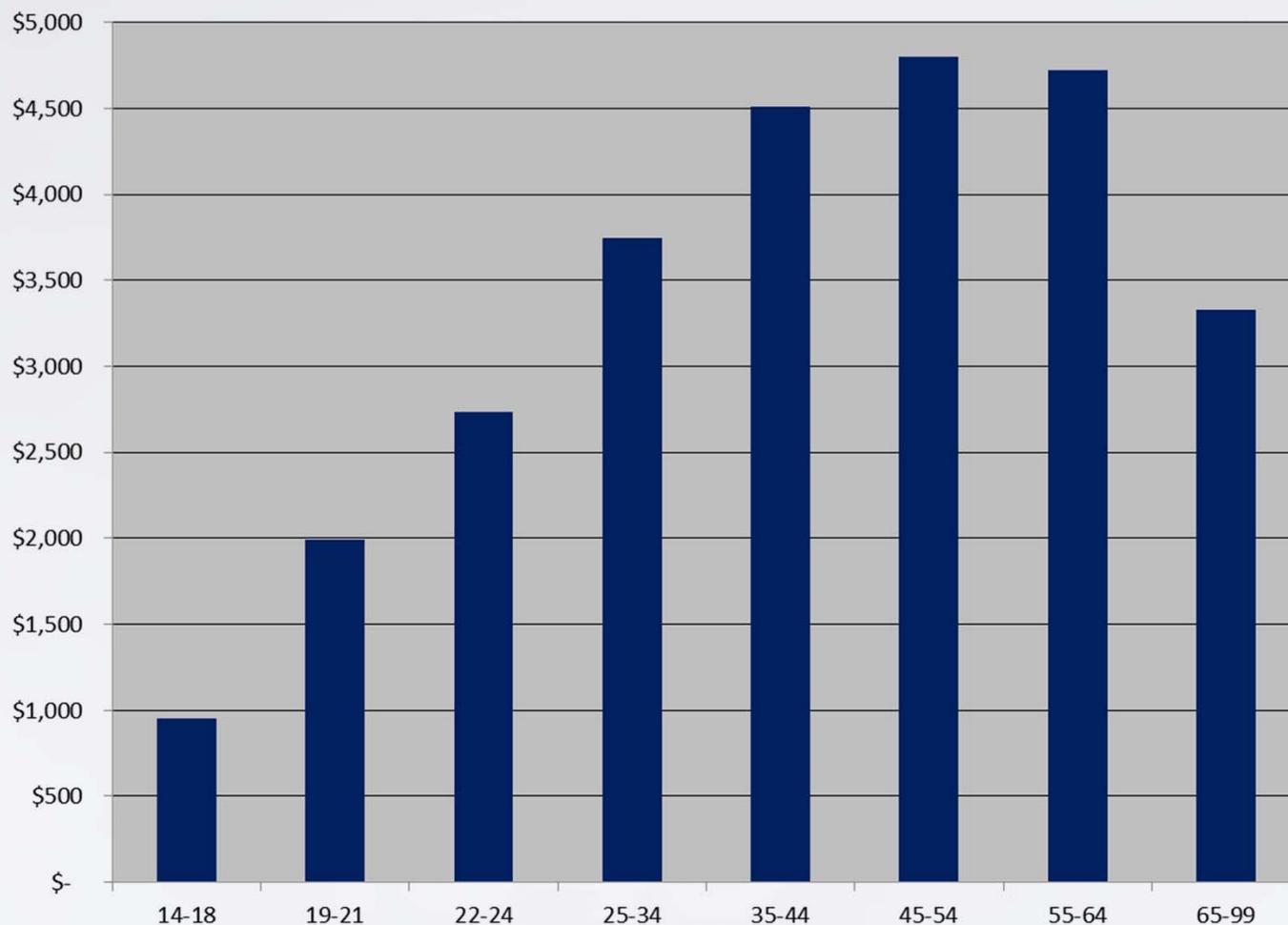


CONSTRUCTION SECTOR CHARACTERISTICS

EARNINGS AND EMPLOYMENT

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Construction Monthly Earnings by Age Cohorts

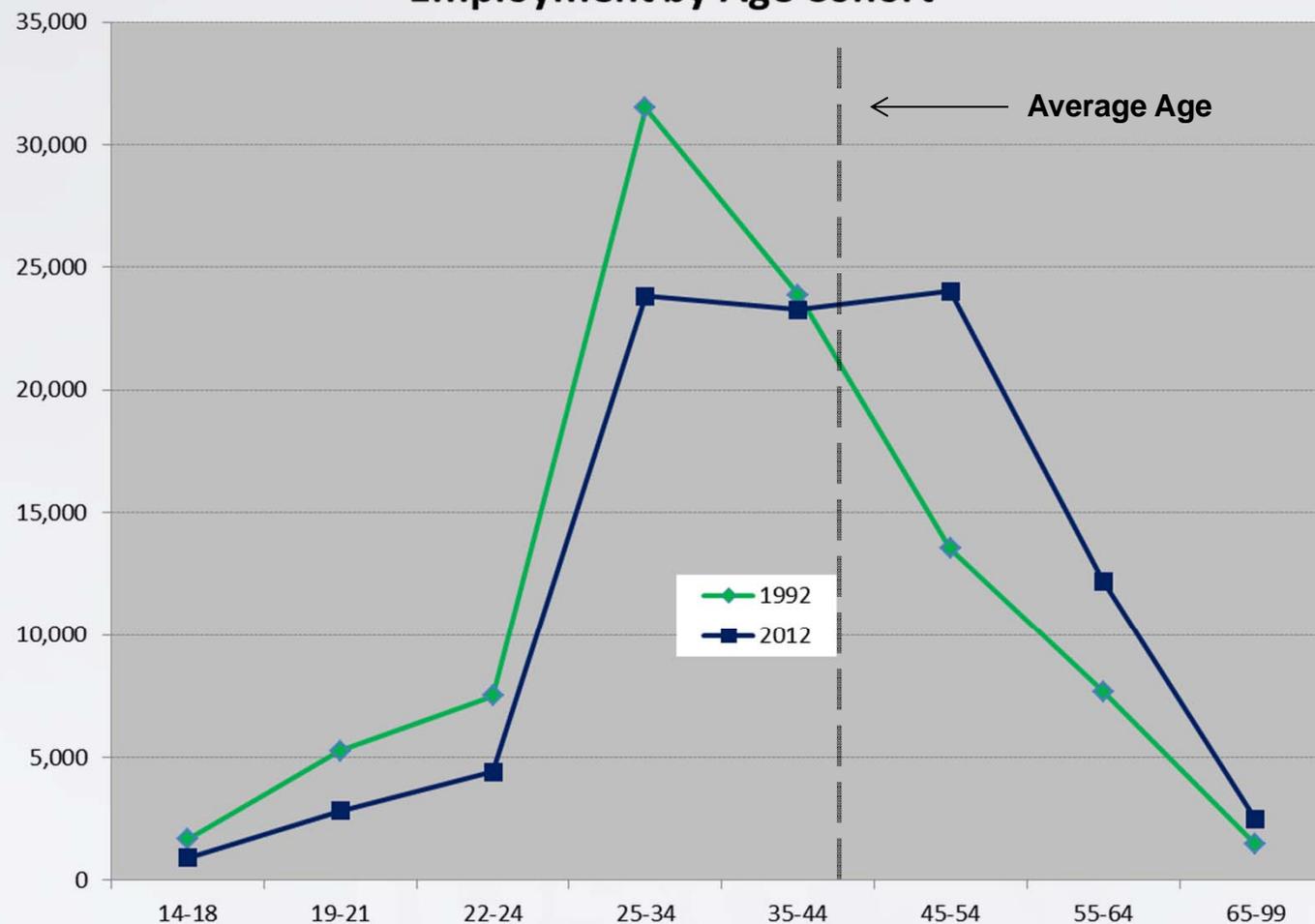


CONSTRUCTION SECTOR CHARACTERISTICS

EARNINGS AND EMPLOYMENT

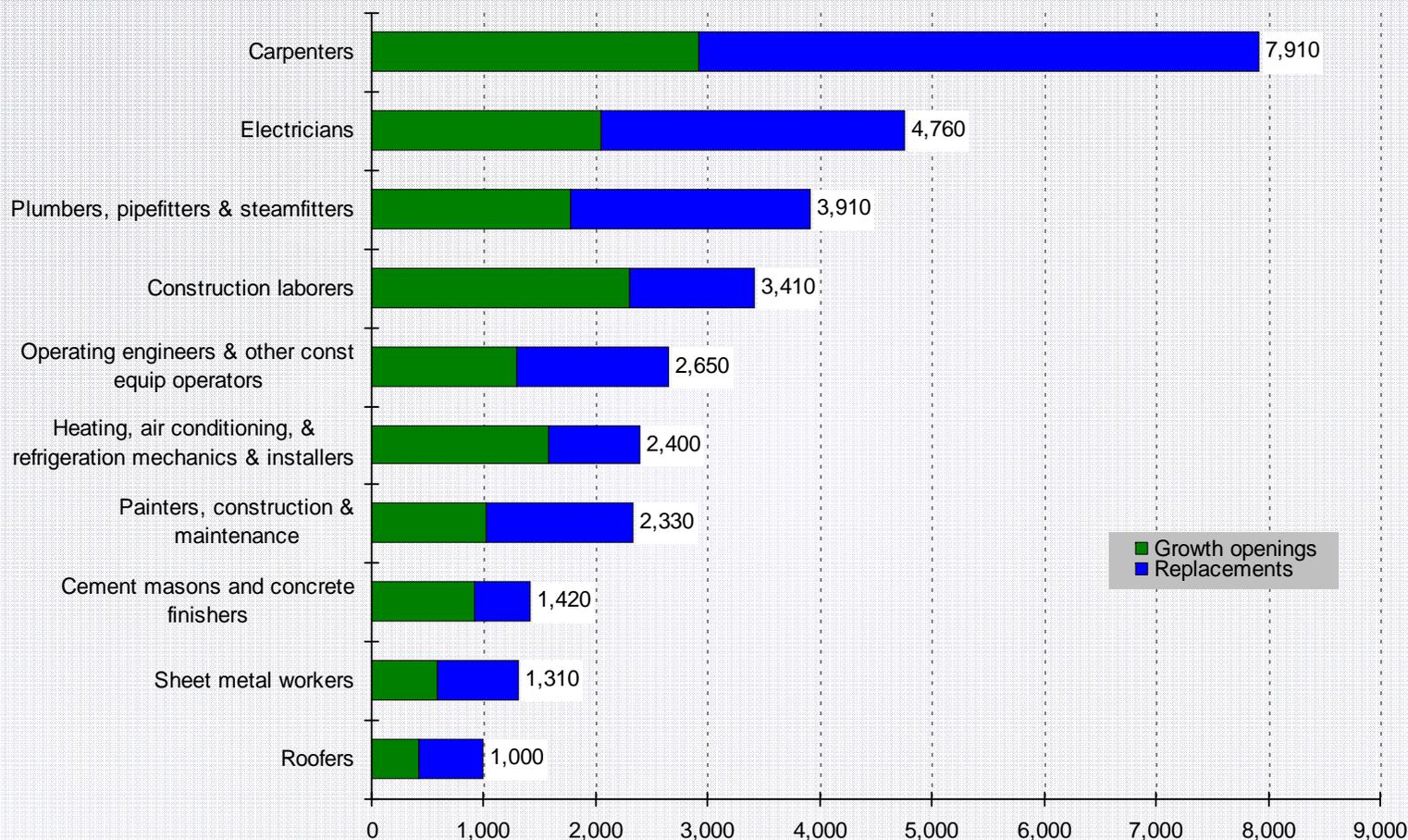
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Employment by Age Cohort



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Total Projected Job Openings 2010-2020 in Occupations with Construction-Related Apprenticeships



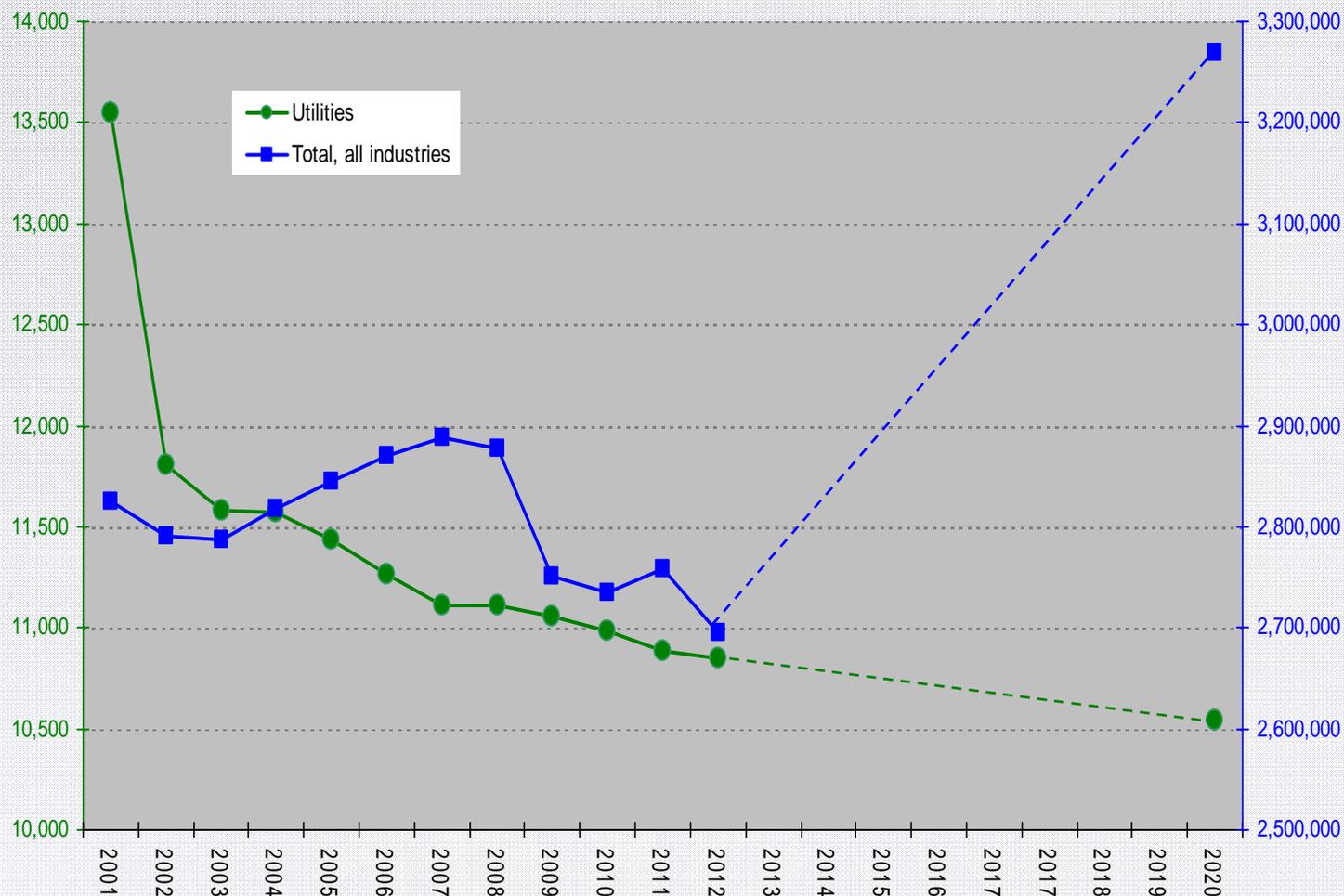
Source: WI DWD OEA Projections, BLS Projections



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Utilities Employment & Total all-industries employment



Sources: BLS QCEW and WI DWD OEA Projections

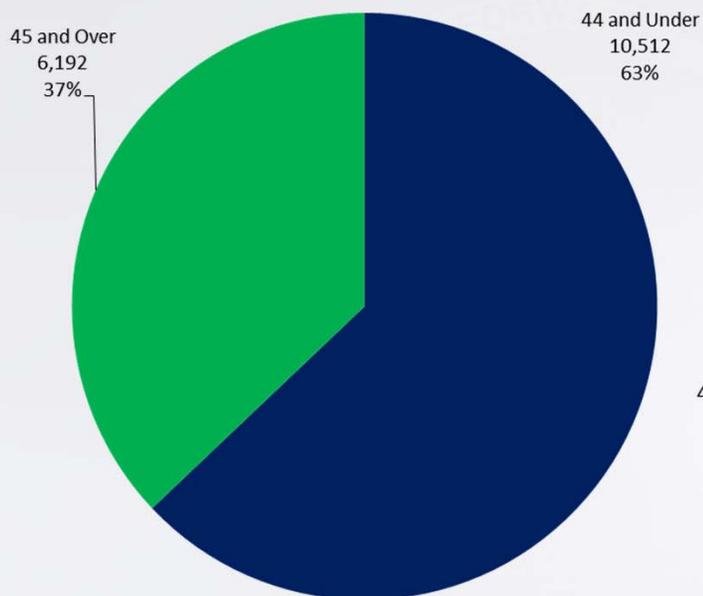


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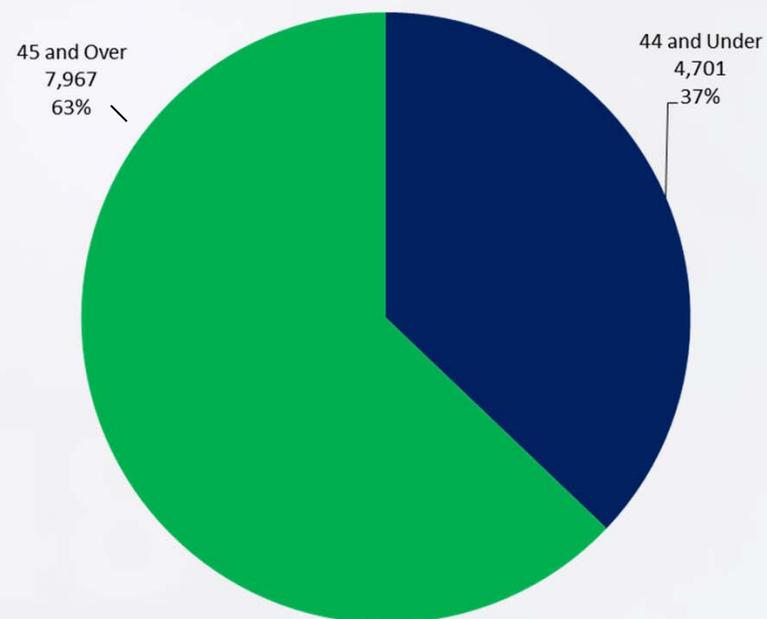
UTILITY SECTOR CHARACTERISTICS EARNINGS AND EMPLOYMENT

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in 1992



in 2012

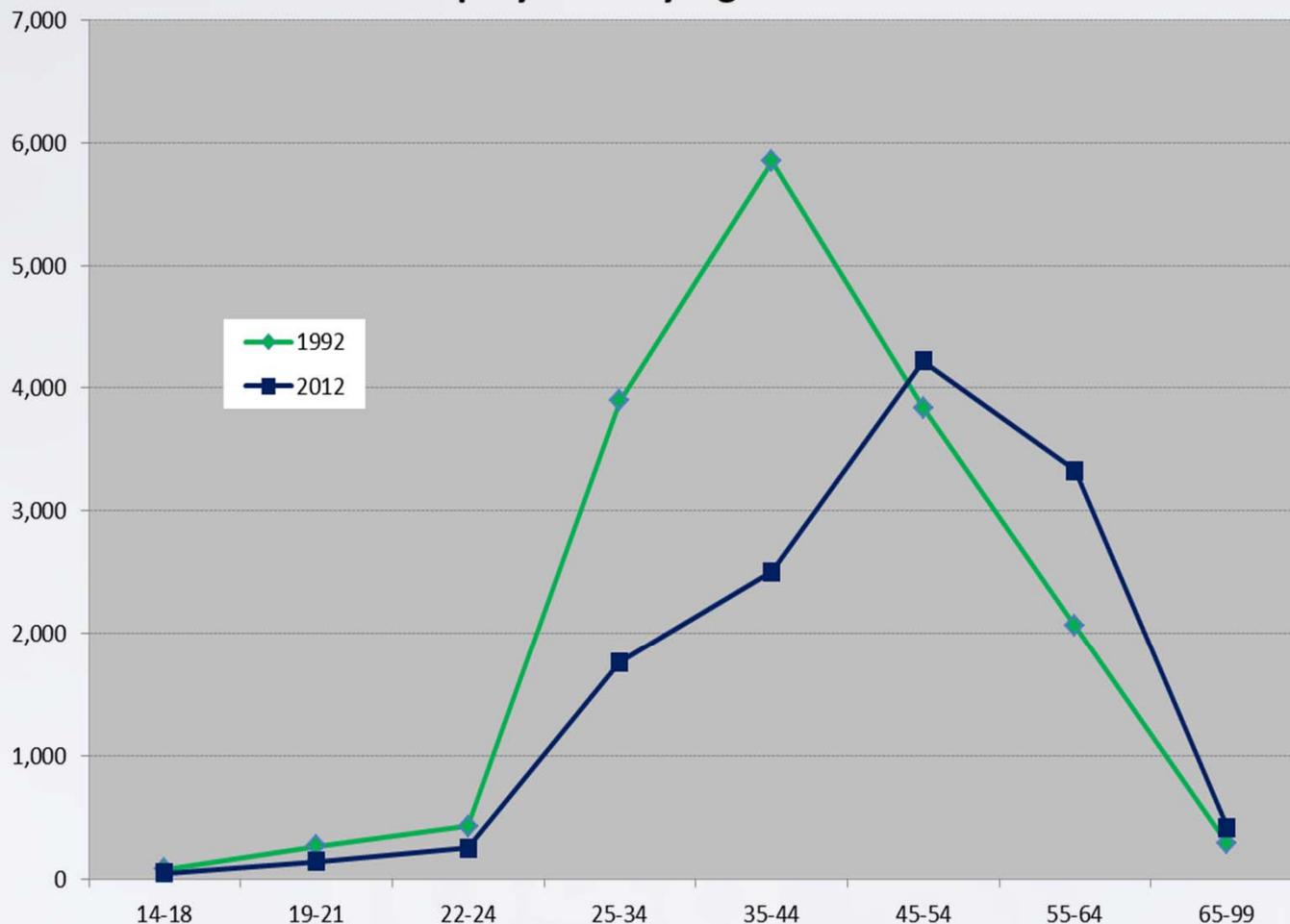


UTILITY SECTOR CHARACTERISTICS

EARNINGS AND EMPLOYMENT

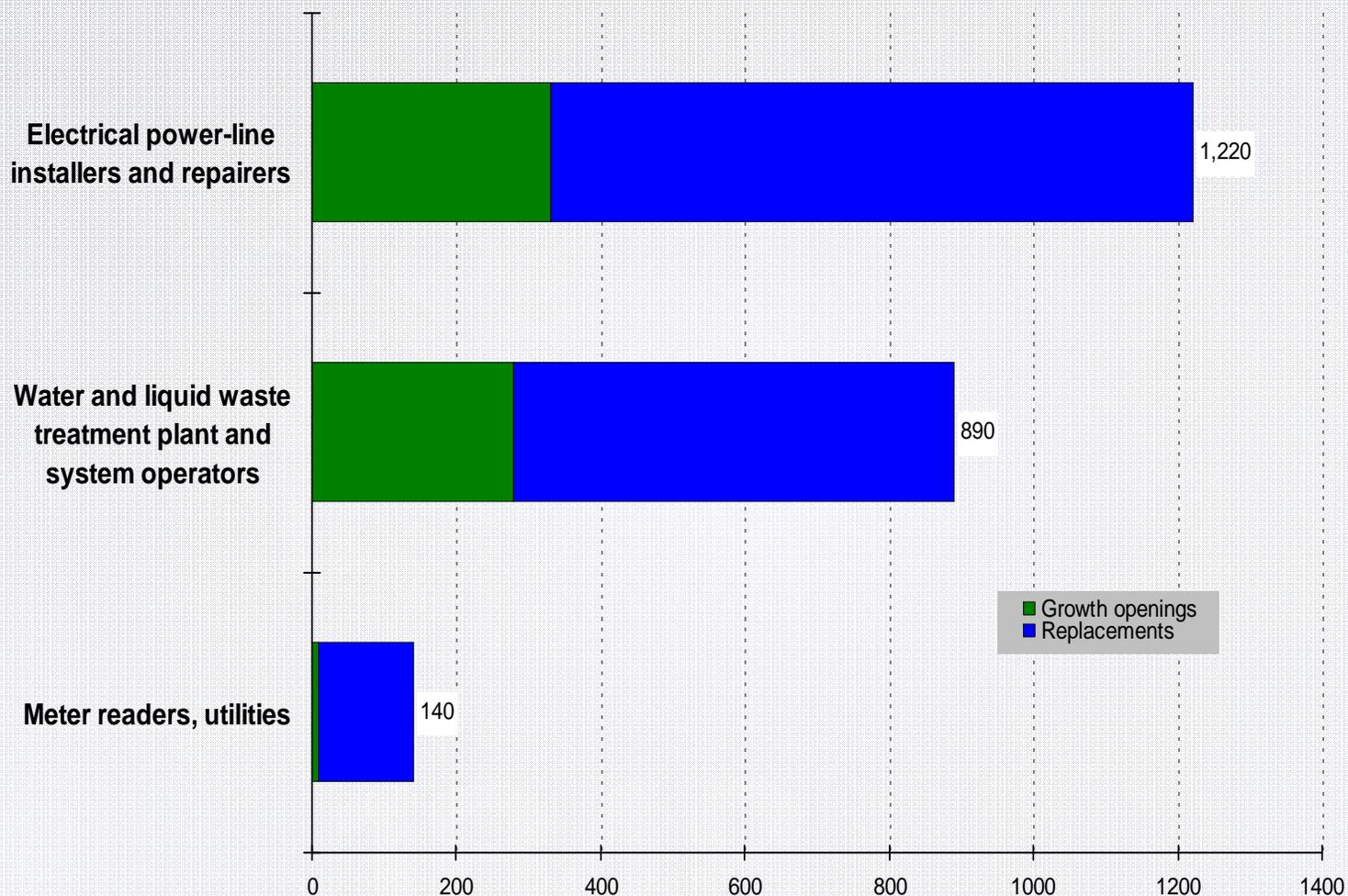
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Employment by Age Cohort



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Total Projected Job Openings 2010-2020 in Occupations with Utilities-Related Apprenticeships



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Source: WI DWD OEA Projections, BLS Projections

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Manufacturing Employment & Total all-industries employment



Sources: BLS QCEW and WI DWD OEA Projections



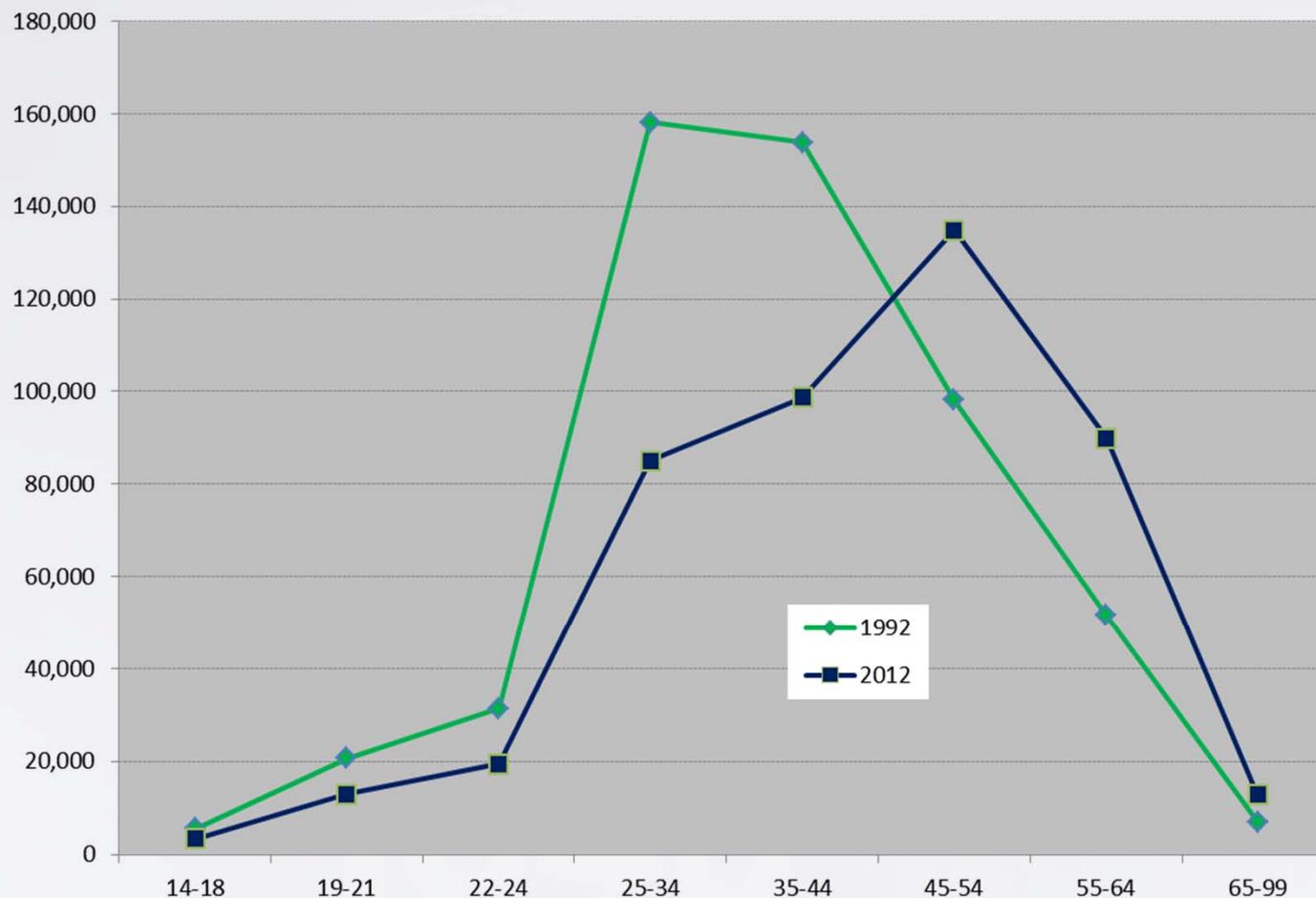
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MANUFACTURING SECTOR CHARACTERISTICS

EARNINGS AND EMPLOYMENT

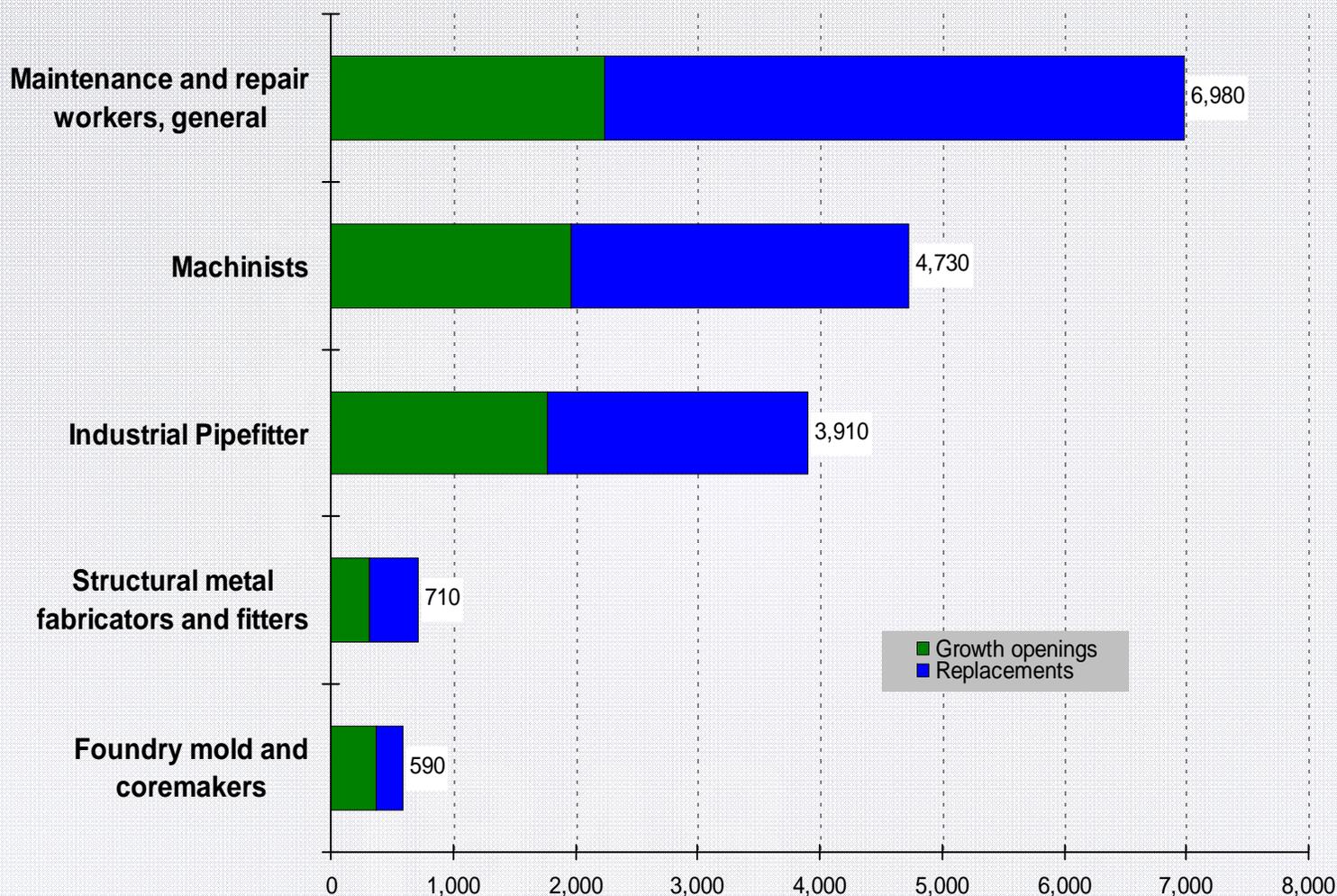
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Employment by Age Cohort



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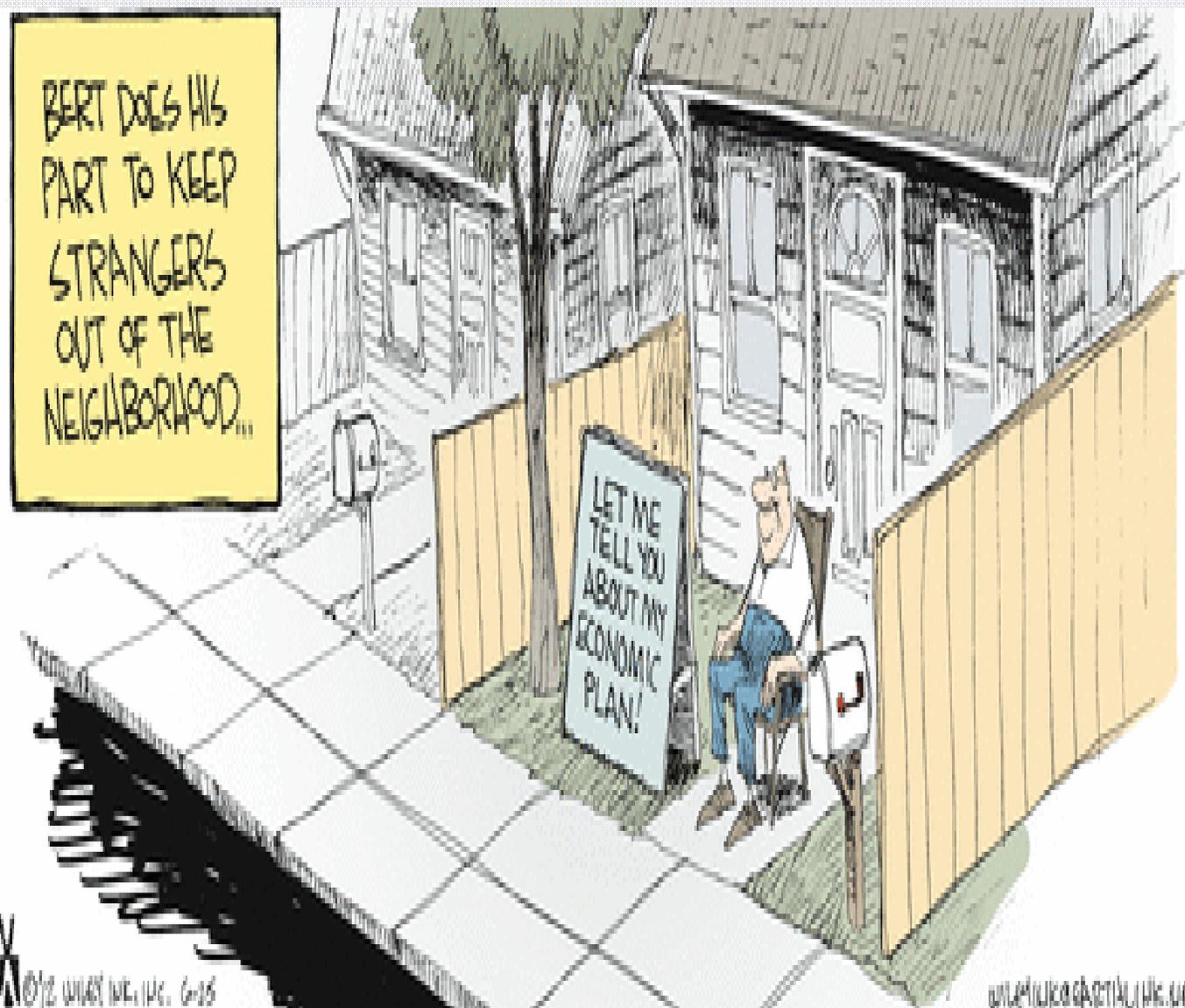
Total Projected Job Openings 2010-2020 in Occupations with Manufacturing-Related Apprenticeships



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Source: WI DWD OEA Projections, BLS Projections

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