

# Challenges for LMI Innovation in Maine



**JOHN DORRER, DIRECTOR  
CENTER FOR WORKFORCE RESEARCH AND  
INFORMATION  
MAINE DEPARTMENT OF LABOR**

# State -Level Labor Market Information Systems Under Stress



- **Disruptive and Discontinuous Change In State and Regional Economies and Labor Markets**
- **Limited Portfolio of Tools, Data Systems and Staff Capabilities**
- **Organizational Cultures and Systems Not Built for Innovation**
- **Long Term Funding Declines and Limited Funding Sources**

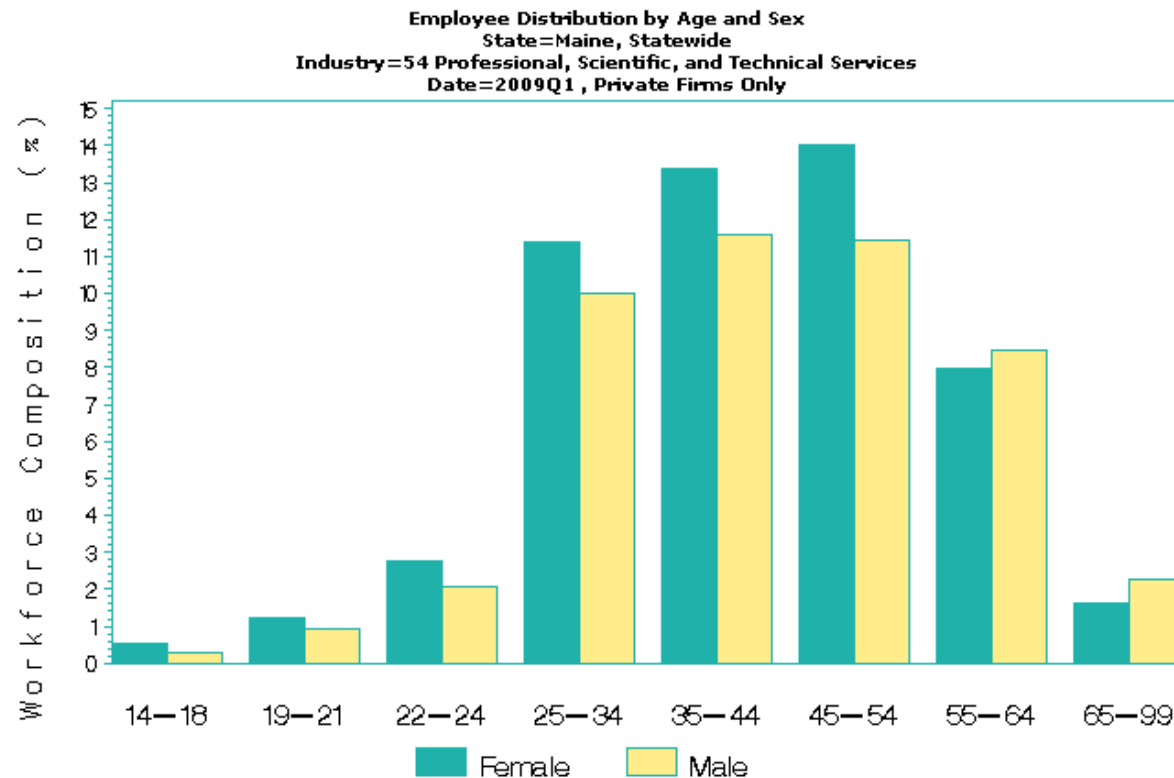
# Long Term Challenges-New Tools and Systems



- **Workforce Demographics/Skills Replacement**
  - ✦ Local Employment Dynamics
  - ✦ Projections Development/Improvement
- **Sector and Cluster Strategies for Economic Development**
  - ✦ Quarterly Census of Employment and Wages-Longitudinal
- **Aligning Education and the Economy**
  - ✦ IPEDS
  - ✦ Internet Job Postings
  - ✦ Skills/Qualifications Parsing
  - ✦ SLDS

# Maine's Most Educated and Skilled Workers are Heading towards the Exits

Industry Focus: Workforce Characteristics Results

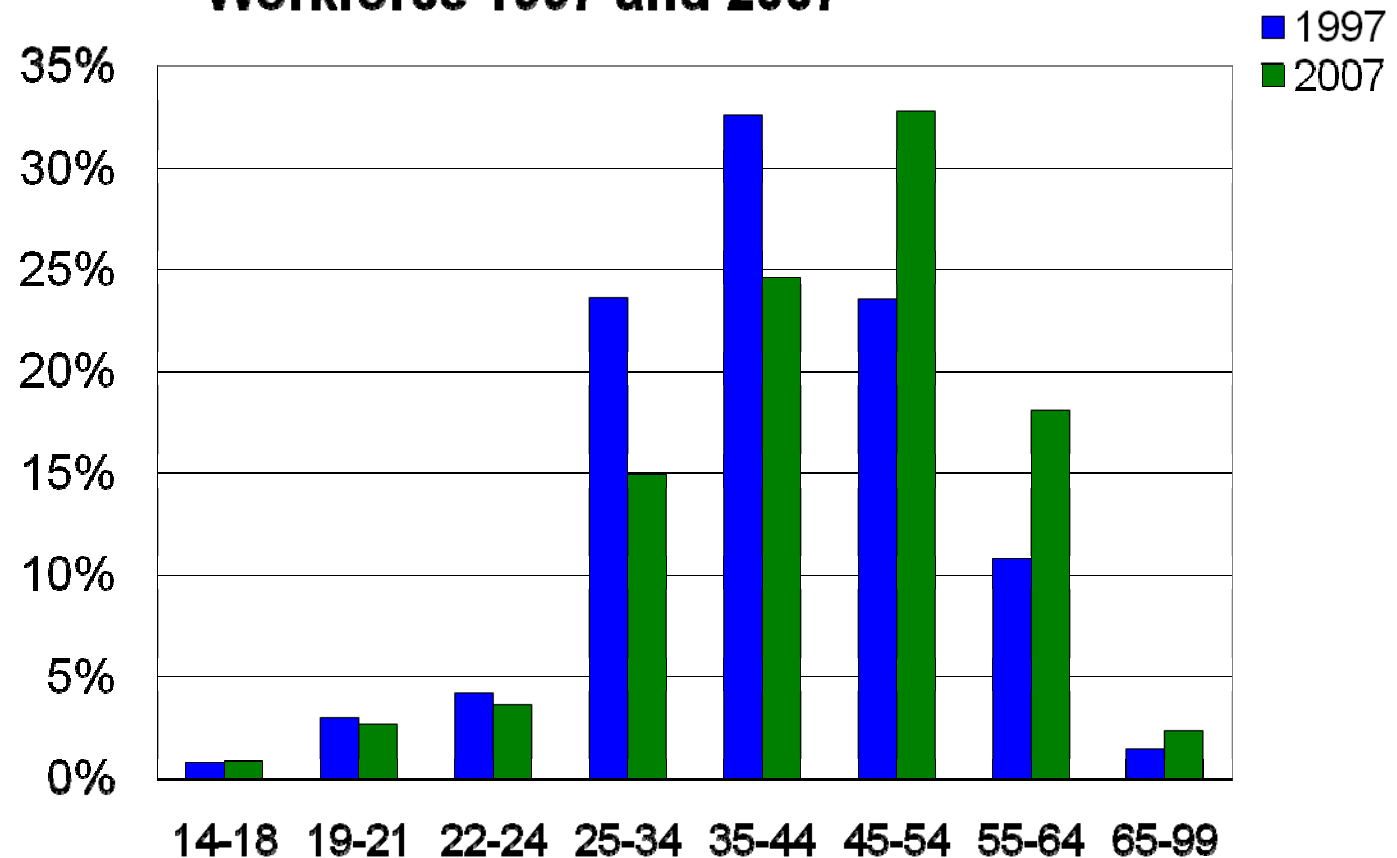


	14-18	19-21	22-24	25-34	35-44	45-54	55-64	65-99
Female	0.55%	1.25%	2.74%	11.41%	13.36%	14.01%	7.95%	1.63%
Male	0.3%	0.95%	2.08%	9.99%	11.61%	11.46%	8.45%	2.27%

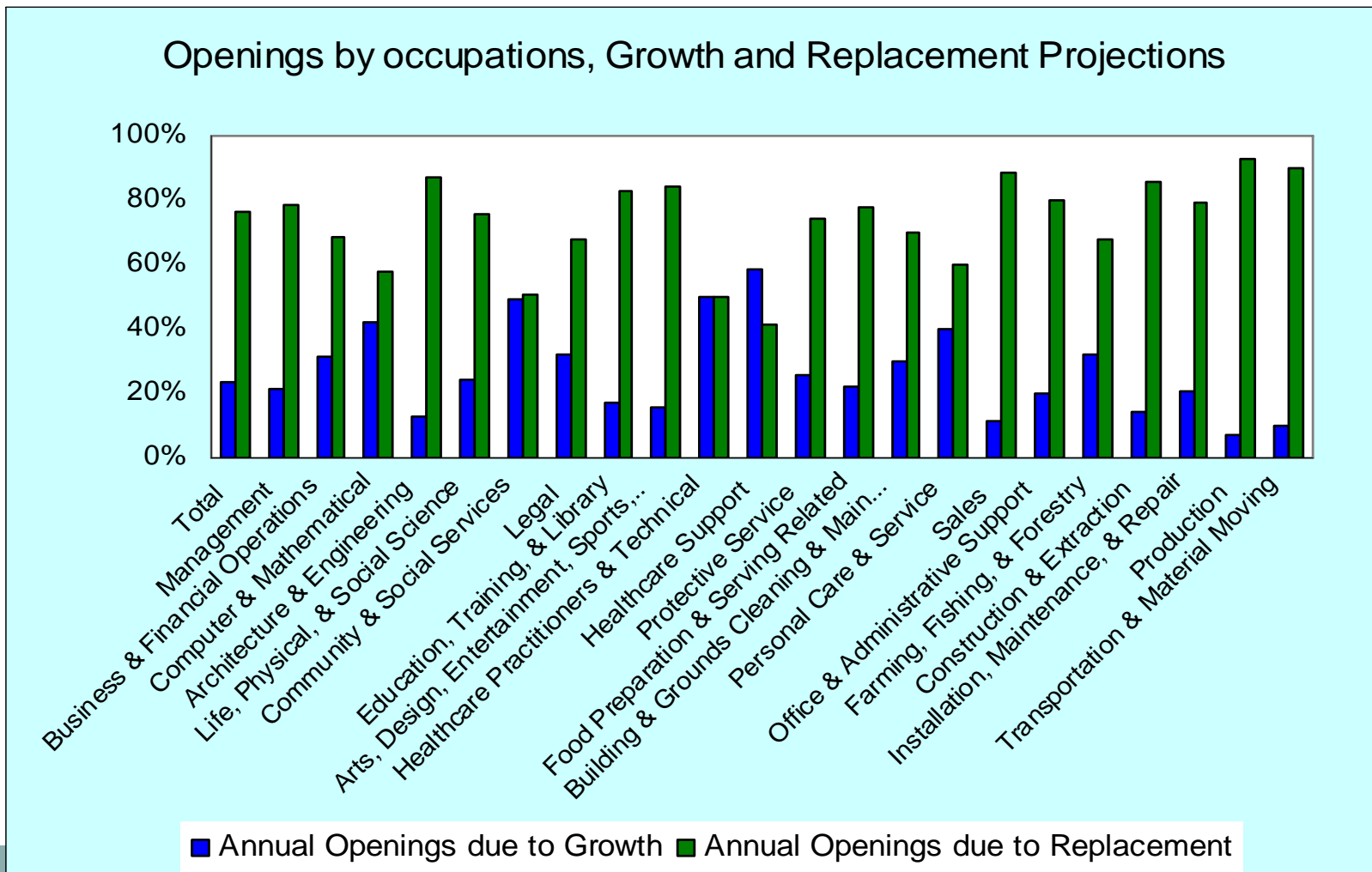
What do you want to find out about the workforce?

## Key Industries Are Disproportionately Impacted

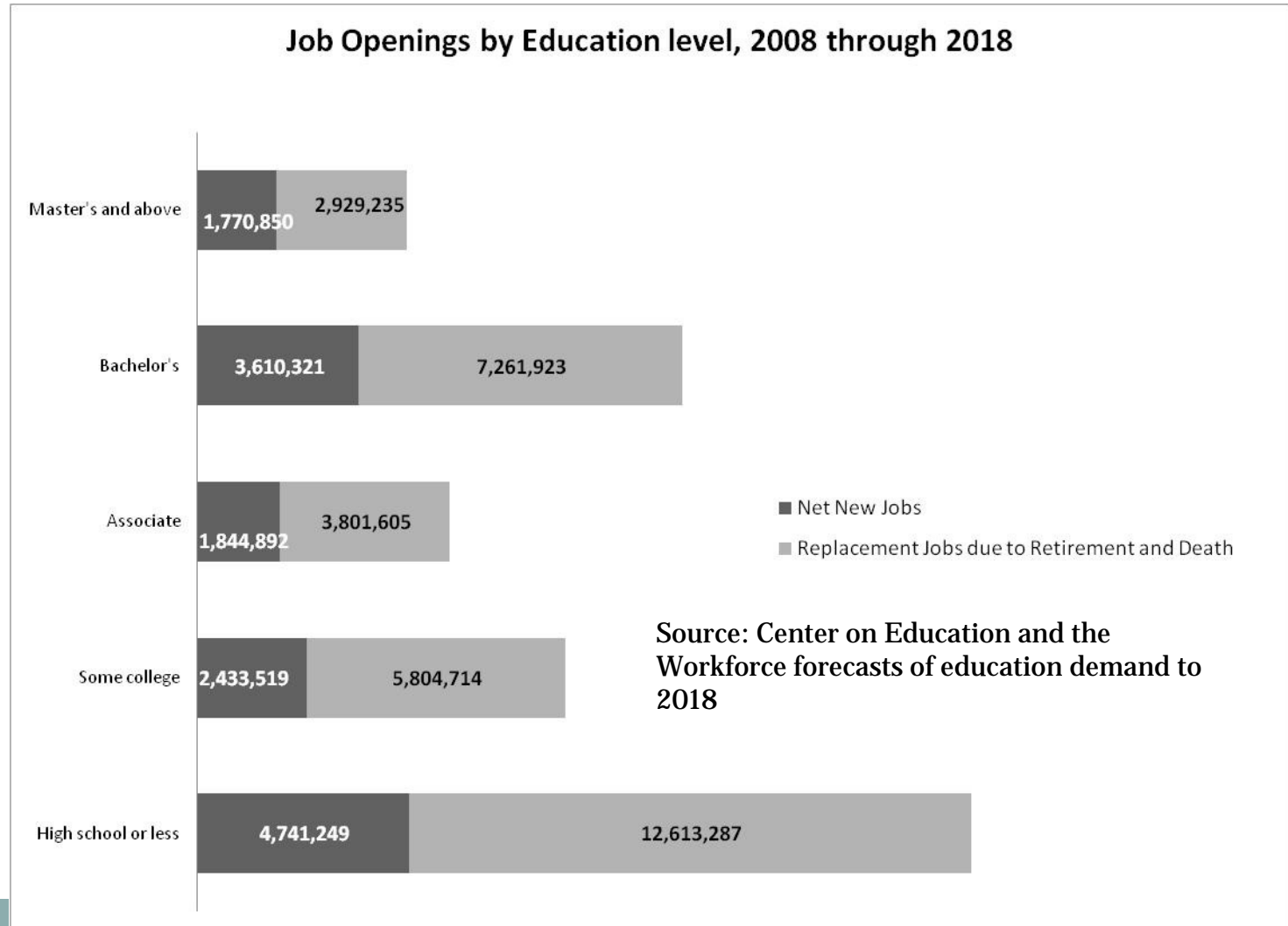
### Demographics of Maine's Manufacturing Workforce 1997 and 2007



# Openings in Maine Occupations will be fueled by replacement demand rather than by growth in all occupations except one



# Responding to New Projections Methodologies

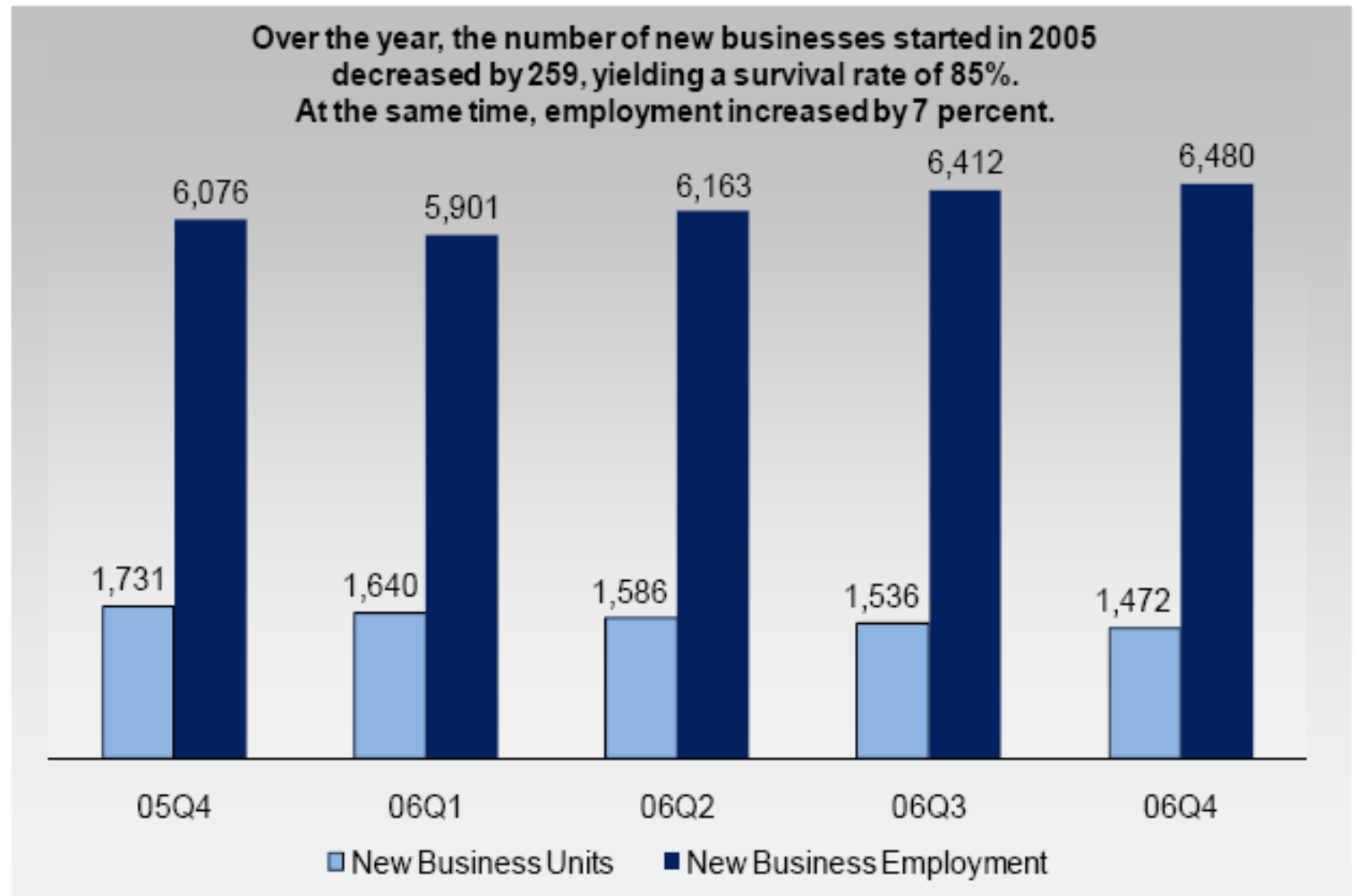


## Growing Demand to Support Sector and Cluster Studies

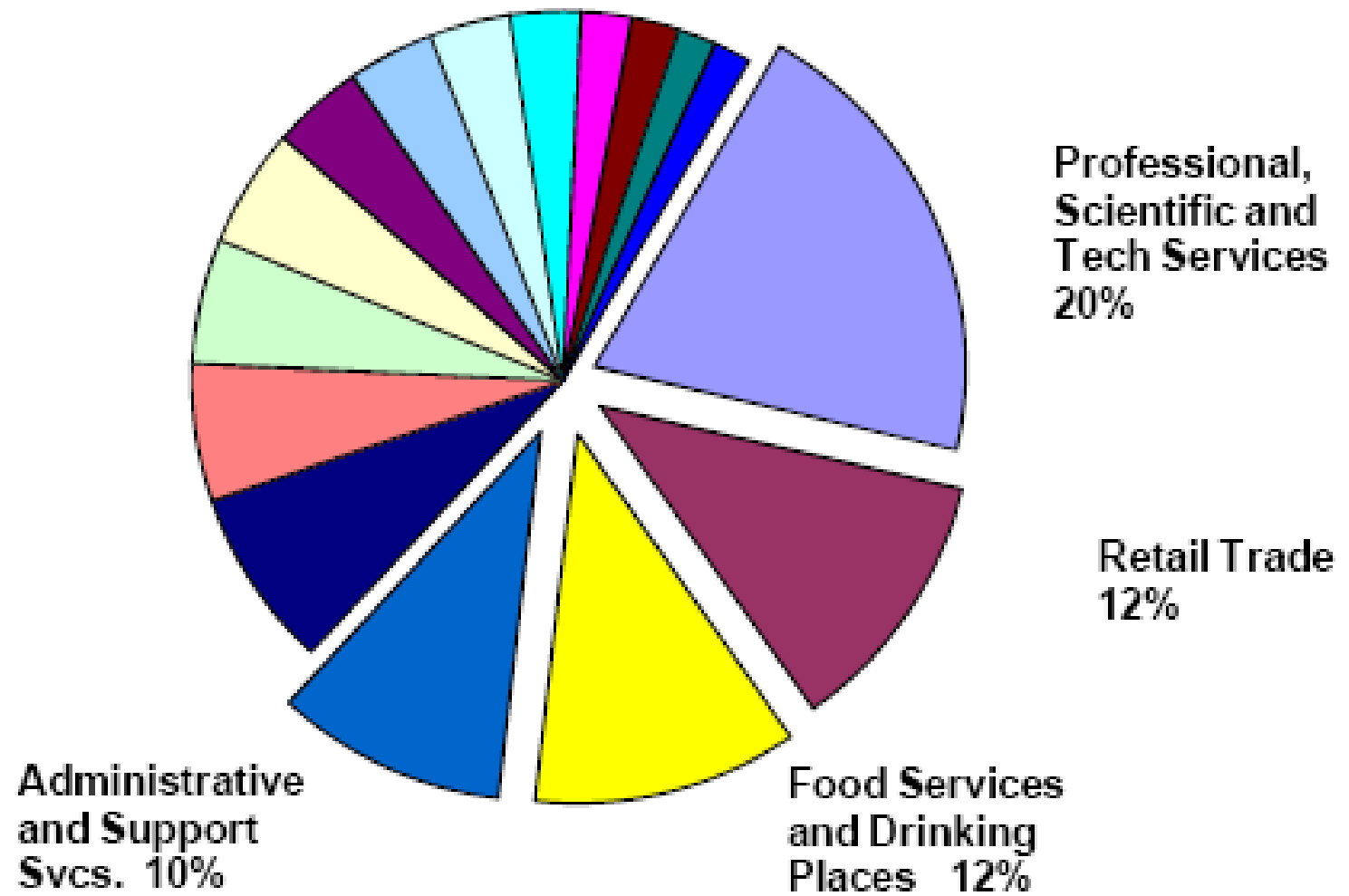




## Using the QCEW for Longitudinal Tracking of Newly Forming Businesses



## New Business Units by industry



# Aligning UMS Educational Output and Labor Market Demands

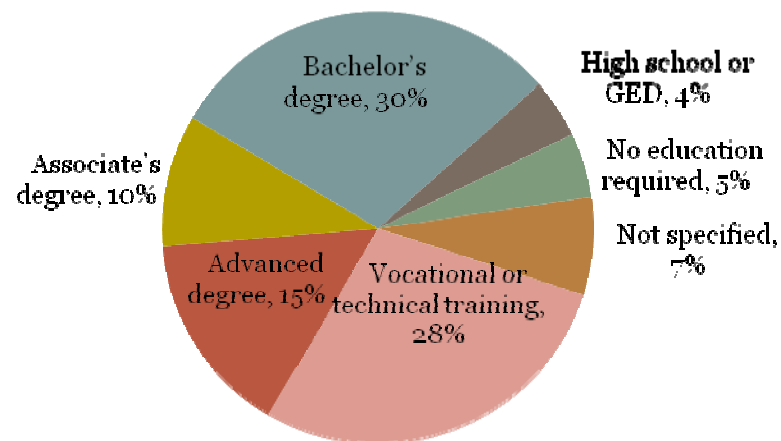
Degree	Employment		Completers / Grads Entering Labor Force			
	2008	2016	2006	2007	2008	2009
Business and Management	39,240	44,209	514 / 449	527 / 450	531 / 442	475 / 397
Education	20,970	20,751	686 / 198	786 / 350	689 / 261	644 / 228
Engineering	18,260	19,244	290 / 254	244 / 208	269 / 211	291 / 259
Health Professions	16,610	19,463	448 / 383	508 / 431	538 / 478	542 / 456
Social Sciences	5,740	5,474	456 / 443	445 / 428	483 / 474	460 / 442
<b>Total</b>	<b>100,820</b>	<b>109,141</b>	<b>2394 / 1727</b>	<b>2510 / 1867</b>	<b>2510 / 1866</b>	<b>2412 / 1782</b>

Degree	UMS Labor Market Entrants / Employment	Annual Internet Job Postings Volume				Average Wage 2008
	2008	2006	2007	2008	2009	
Business and Management	1.13%	16,024	18,551	16,962	13,180	\$53,388
Education	1.24%	1,062	1,852	1,706	1,246	\$41,668
Engineering	1.16%	9,051	11,100	11,346	8,311	\$58,988
Health Professions	2.88%	17,429	30,336	26,980	19,524	\$59,779
Social Sciences	8.26%	2,159	2,494	2,961	1,965	\$41,762
<b>Total</b>	<b>1.85%</b>	<b>45,725</b>	<b>64,333</b>	<b>59,955</b>	<b>44,226</b>	<b>-</b>

# **Education and Economy Alignment – Research/Analysis/Support**

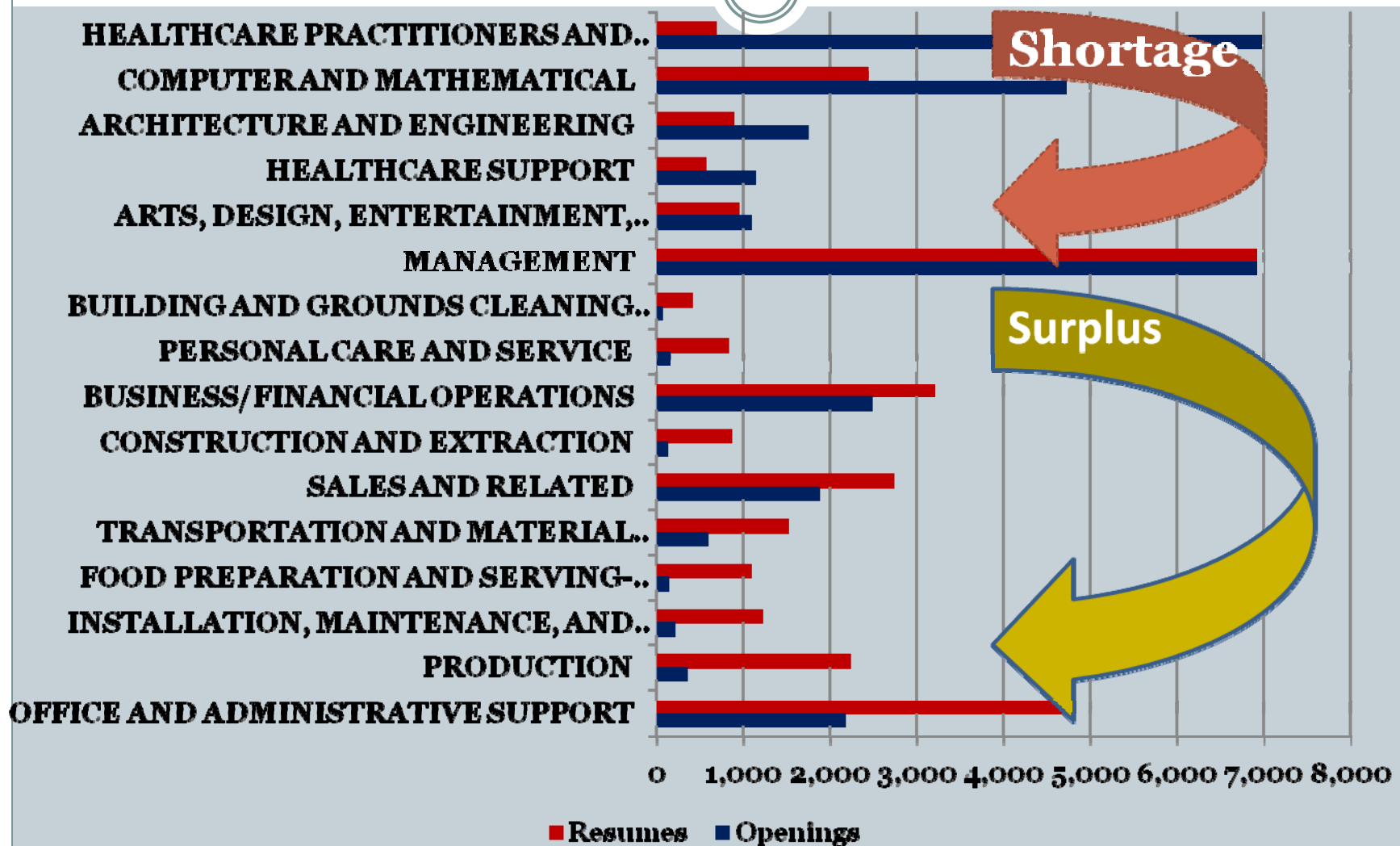
## **Educational Requirements for Maine Job Vacancies for Healthcare Practitioners**



# Using Internet Job Postings To Track Supply & Demand by Occupation Group



Data from Burning Glass Technologies:

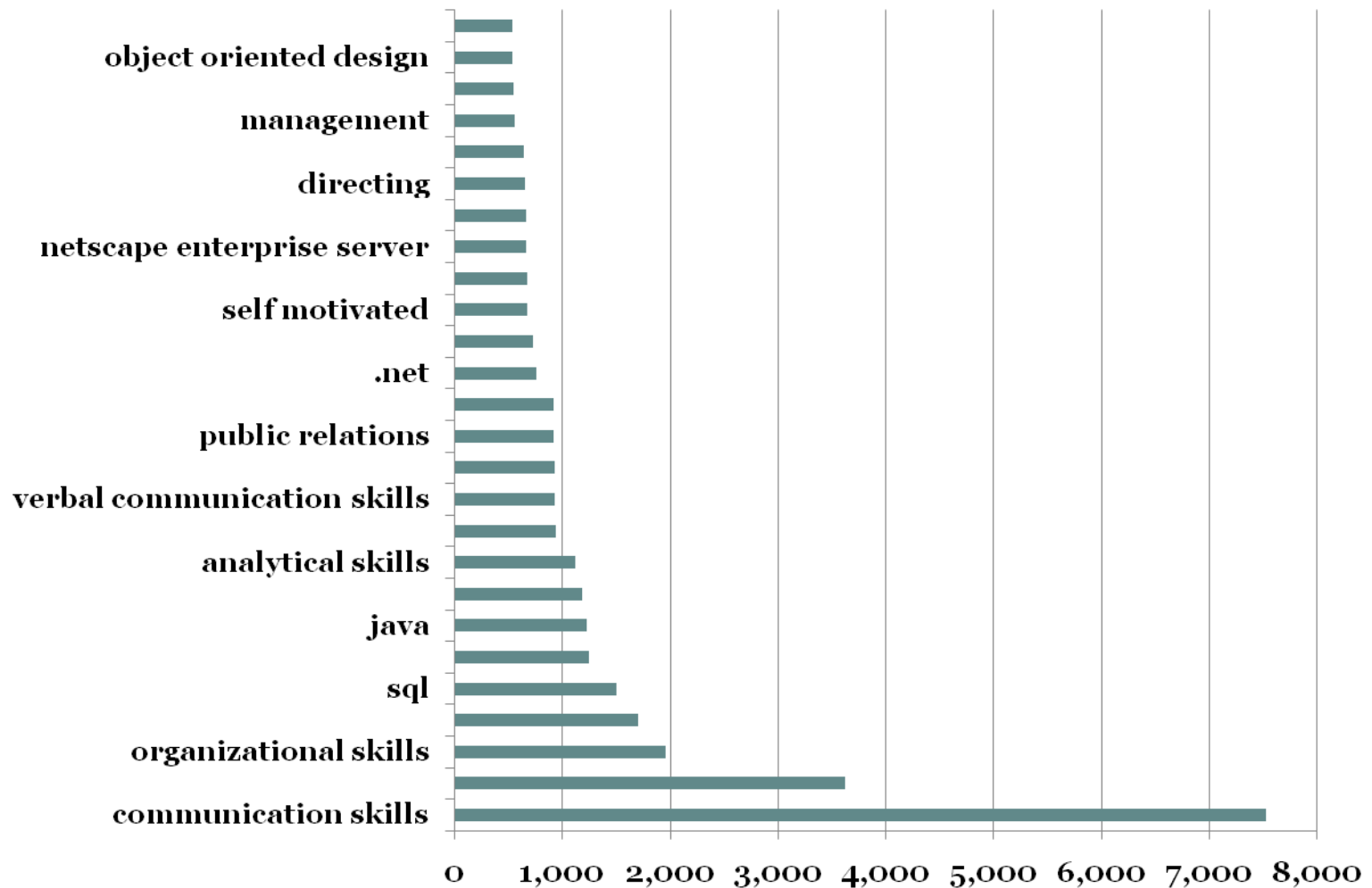


# Parsing Internet Job Postings with AI Software

## Data from Burning Glass Technologies:

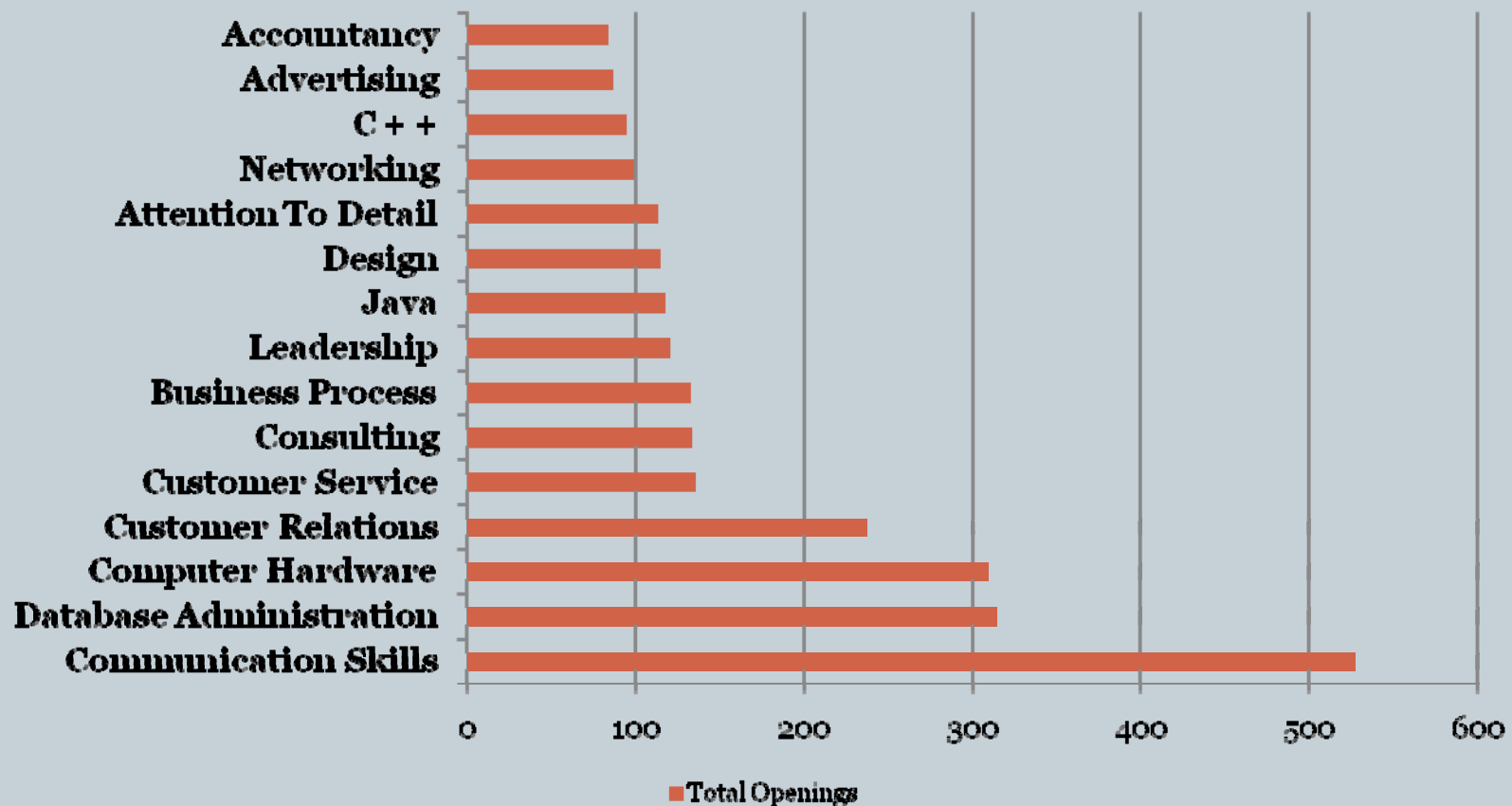


### Greatest Skill Shortages

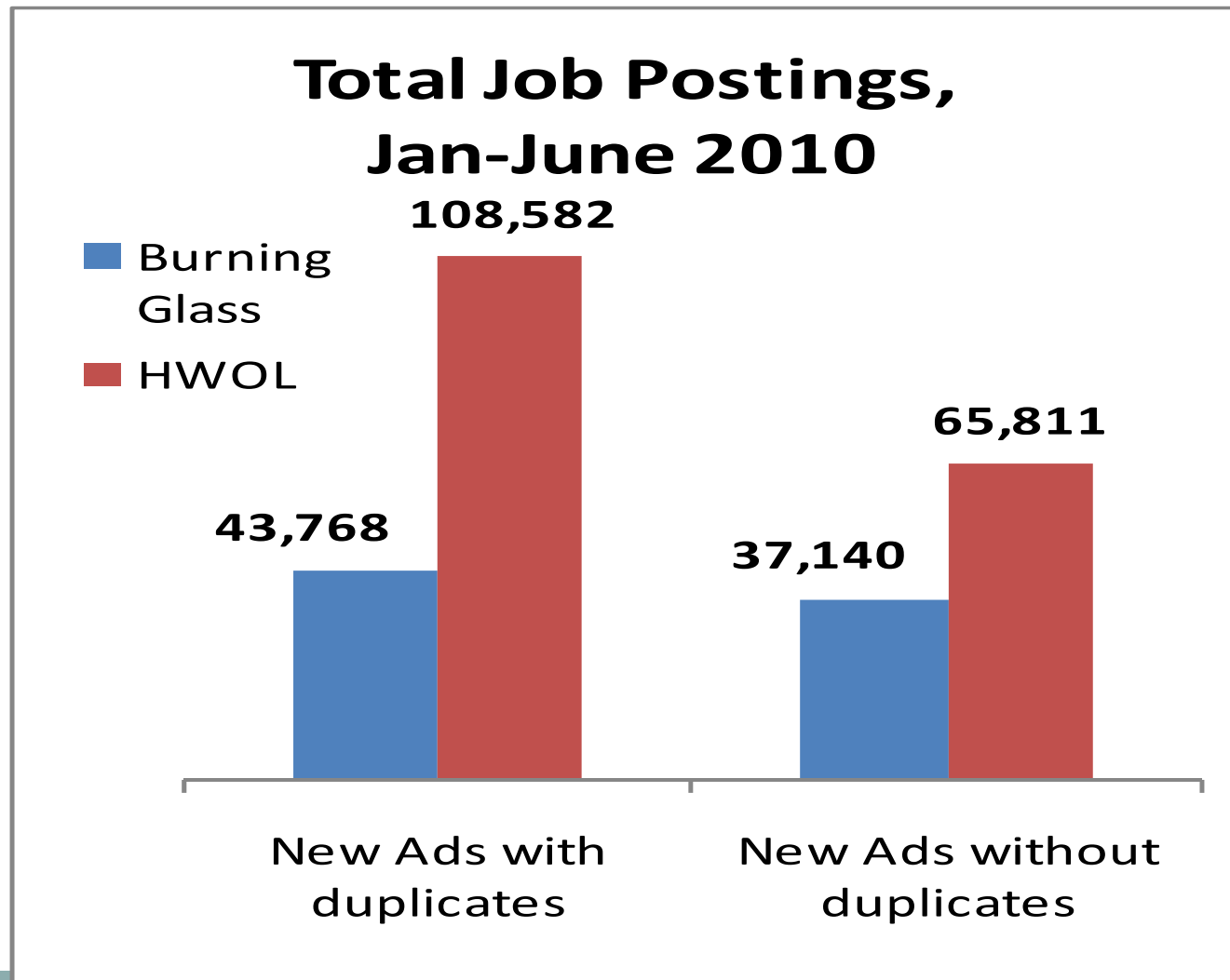


Drilling Down to Job Skills -Data from  
Burning Glass Technologies:

## Hear Employers Speak: Skills-Level Data on What They Are Asking For Skill Requirements for IT jobs

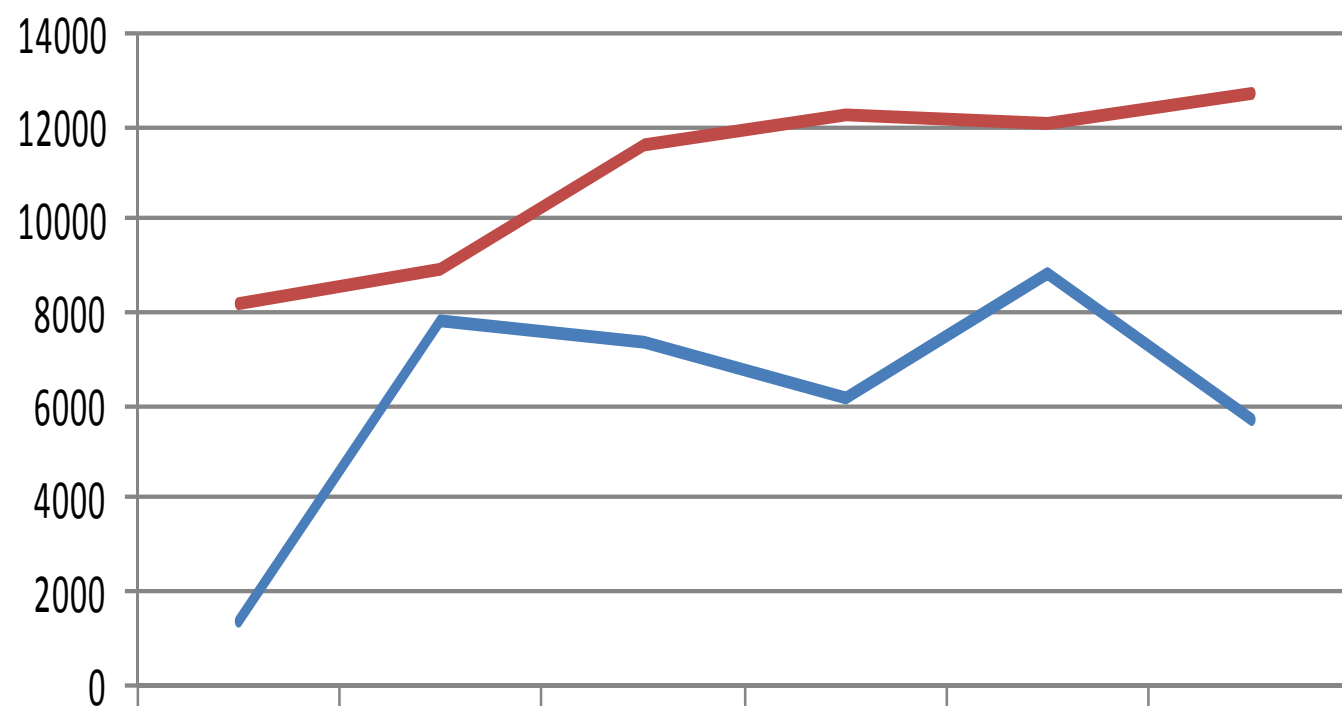


## A Quick Note on Internet Job Postings





## Jan-June 2010 Job Postings, New ads without duplicates by month, by source

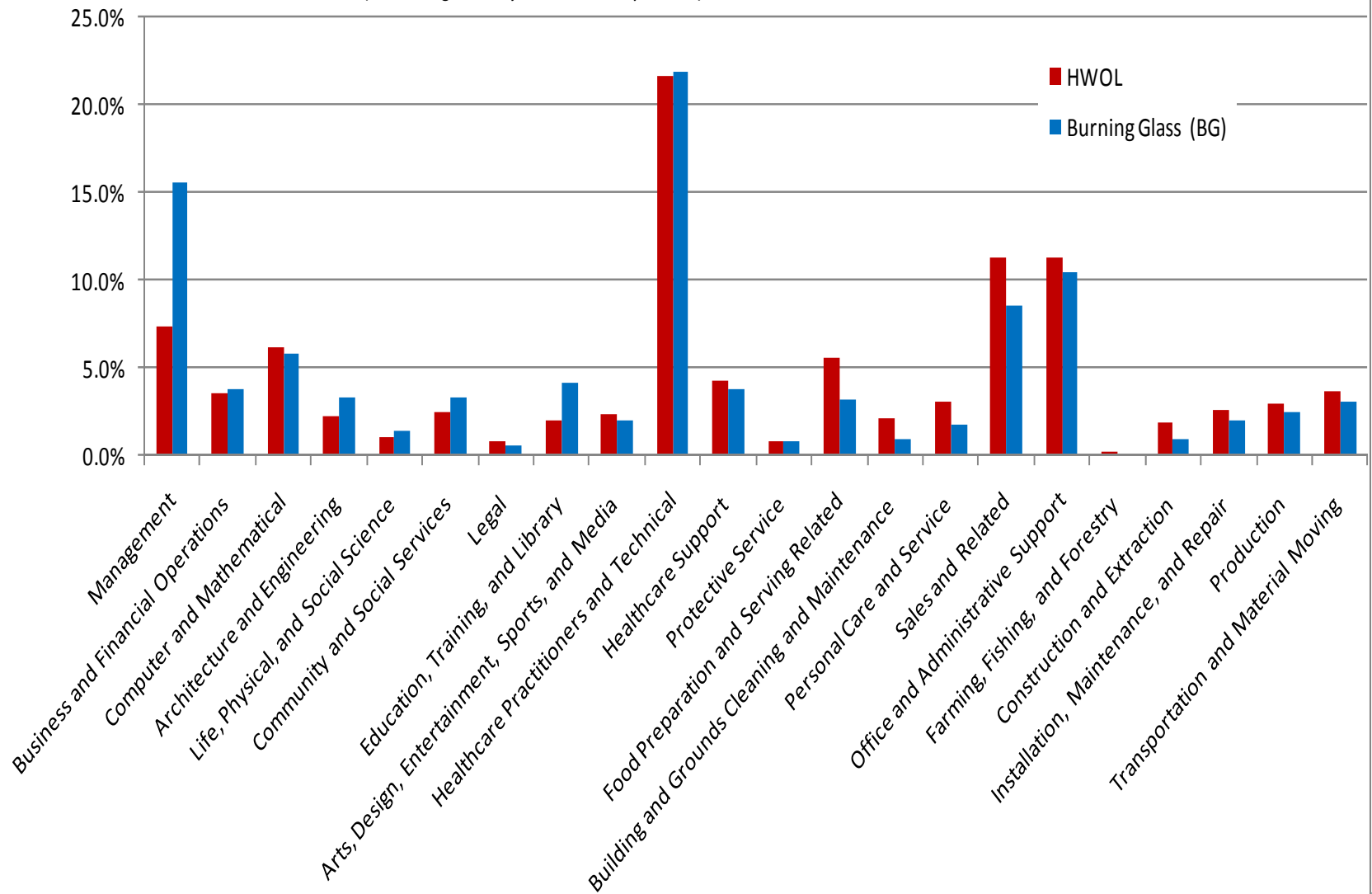


<span style="color: blue;">—</span> Burning Glass	1328	7853	7353	6119	8802	5685
<span style="color: red;">—</span> HWOL	8221	8903	11607	12266	12077	12737

## Distribution of Occupations, percent of total coded job postings

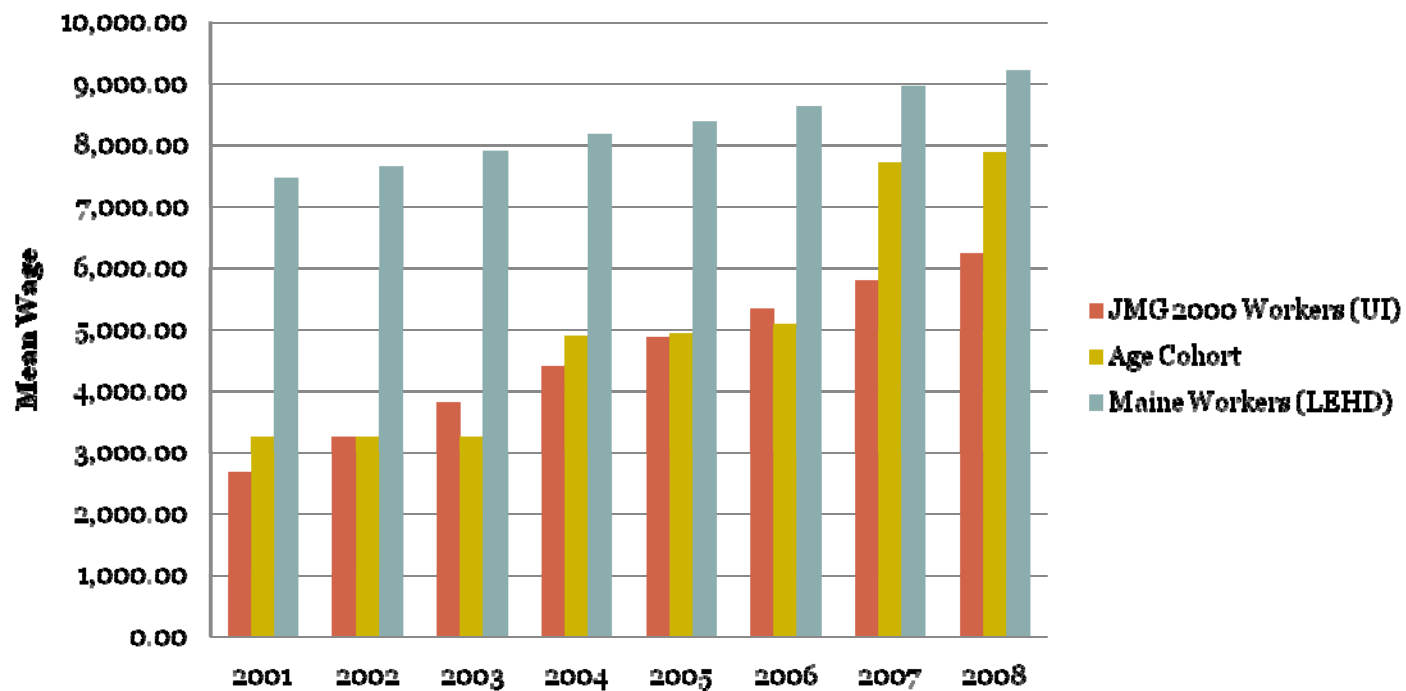
January 2010 - June 2010

(excluding military related occupations)



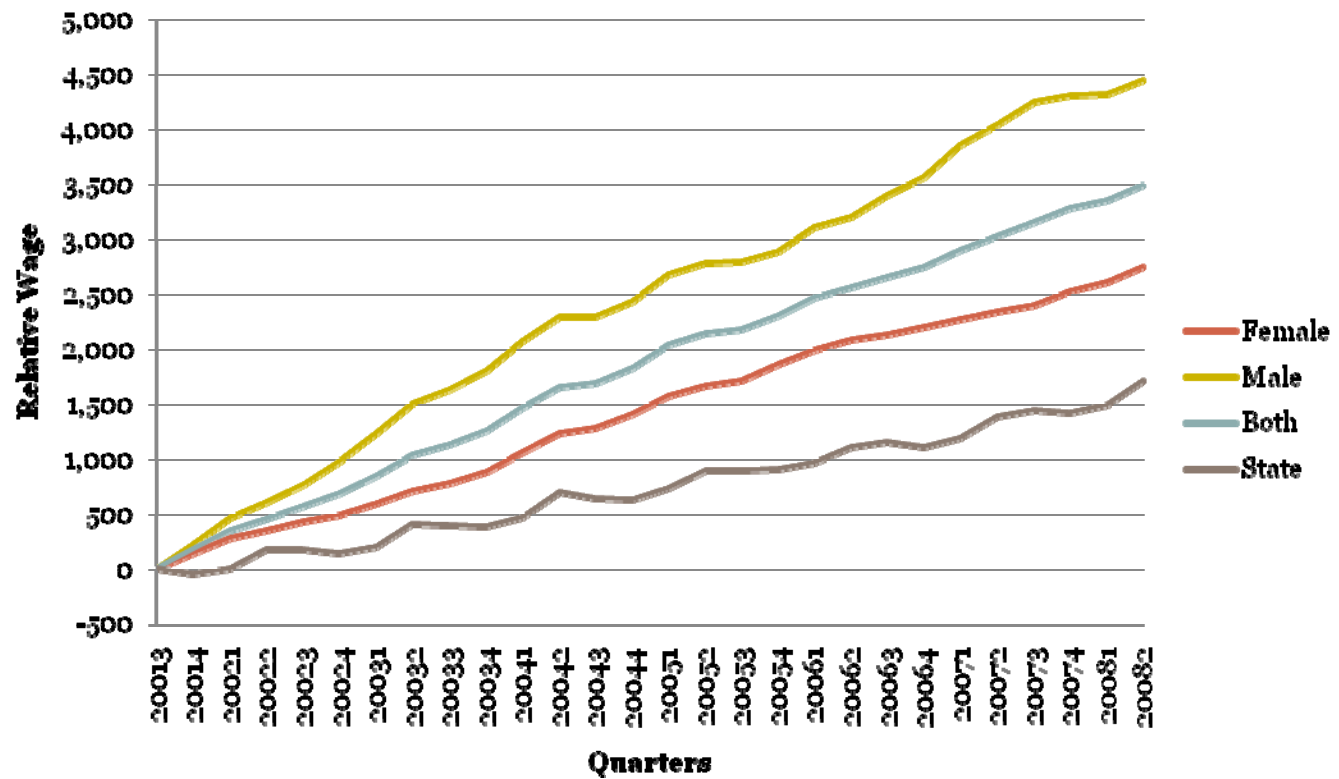
## Add Labor Market Context to State Longitudinal Data Systems

### JMG Graduating Class of 2000: Wage Comparison Average QUARTERLY WAGE



## Contextualization of Longitudinal Data

### JMG Graduating Class of 2000: Rate of Change Wages



# Summary



- **Being Responsive Means Broadening Scope of LMI Shop**
- **Expanded Scope Requires Added Resources and New Talent**
- **LMI Shops Need Strategic Partners/New Business Model**
  - University-Based Researchers
  - Private Consultants
  - Project Based