

**Identifying Labor Shortages and
Influencing Policy in Massachusetts**
for the
Economic Policy Institute
symposium on
Labor Shortages and Comprehensive Immigration Reform

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Agenda

- Identifying Labor Shortages
- Massachusetts Job Vacancy Survey
- Critical Vacancies and Persistent Vacancies
- Other Measures of Labor Shortages
- Policy Applications
- Issues & Questions

Identifying Labor Shortages

- Massachusetts conducts a Job Vacancy Survey twice a year
- In order to identify areas for further investigation and potential policy intervention, the Commonwealth Corporation, a quasi-government agency, working with the Massachusetts Executive Office of Labor and Workforce Development developed the “Critical” and “Persistent” vacancies or occupations
- “Critical” and “Persistent” are the focus of further analysis to understand trends
- Critical and Persistent vacancies are used to help focus workforce development efforts
- It is recognized that critical vacancies do not necessarily indicate labor shortage

Massachusetts Job Vacancy Survey-1

- Conducted twice a year by the Massachusetts Department of Workforce Development
- Reference dates last business day of March, September
- Sample:
 - Sampling Frame: Quarterly Census of employment and Wages (ES 202)
 - Stratified random sample 7 regions, 7 size strata among 20 major industries.
- 10,000 employers
- Job Vacancy Definition: A position for which employers are actively recruiting from outside the company. Includes full, part-time, temporary, permanent and seasonal positions.
- Telephone survey (Computer Aided Telephone Interview-CATI)

Massachusetts Job Vacancy Survey-2

Estimates are produced for the following levels:

- Industry
- Employment Size Class
- Geography
- Occupation
- Education
- Experience
- Job Type—full-time/Part-time

Vacancy estimates prepared for occupations at the 6-digit standard occupational classification (SOC) level are used for further analysis

Critical and Persistent Vacancy Criteria

- (1) Median Annual salary \geq \$25,000;
(Jobs that meet self-sufficiency standards; also filters out high turnover, entry-level jobs)
- (2) Occupational Employment \geq 1,000;
(to filter out occupations with very low employment)
- (3) Excludes residual occupations (with "all other " in occupation name; e.g. Engineers, All other);
- (4) Vacancy rate \geq 5% in the latest survey; or
- (5) Number of Vacancies \geq 200 in the latest survey; or
- (6) Average No. of Vacancies since Q4, 2004 \geq 300.

“Persistent” Vacancies:

Occupational vacancies that met the criteria for “critical vacancies” in three previous surveys

Top 10 Critical Vacancies in 2008 Q4

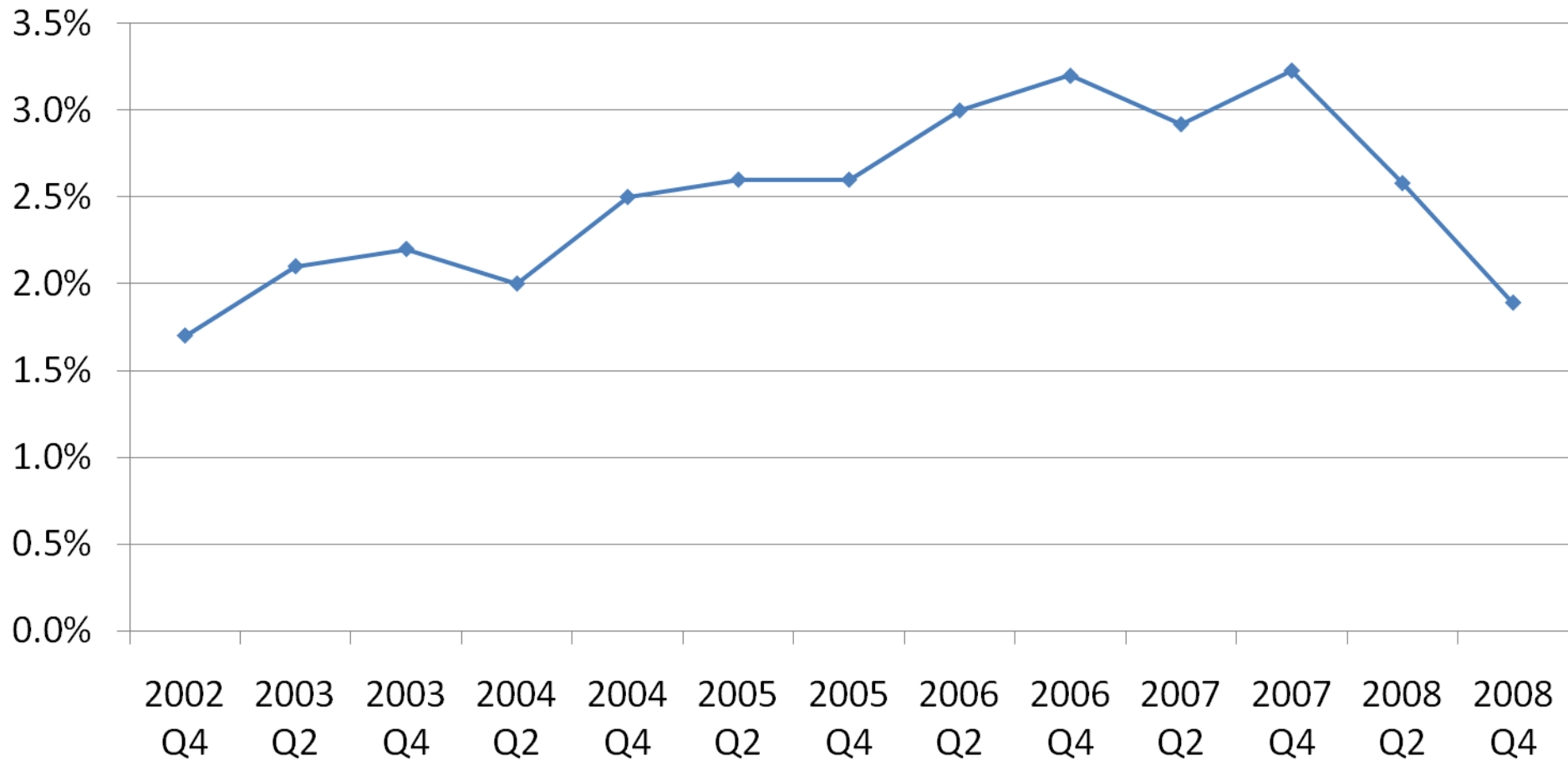
SOC_Code	SOC_Description	Estimated Vacancies	Employment	Vacancy Rate	Educational Requirement
29-1111	Registered Nurses	2,537	78,280	3.2%	Associate's
31-1012	Nursing Aides, Orderlies, and Attendants	1,264	40,950	3.1%	Vocational
43-4051	Customer Service Representatives	1,166	54,200	2.2%	High School
35-2014	Cooks, Restaurant	660	19,370	3.4%	High School
41-1011	First Line Supervisors/Managers of Retail Sales Workers	637	26,550	2.4%	High School
15-1031	Computer Software Engineers, Applications	609	23,140	2.6%	Bachelor's
13-2011	Accountants and Auditors	602	31,150	1.9%	Bachelor's
11-9111	Medical and Health Services Managers	594	7,930	7.5%	Bachelor's
13-2082	Tax Preparers	594	1,990	29.8%	Associate's
43-9061	Office Clerks, General	542	65,640	0.8%	High School

Source: CommCorp analysis of Massachusetts DWD, Job Vacancy Survey data

May 20, 2009

Massachusetts Vacancy Rate Trend

Vacancy Rate increased through 2007 Q4 but has plummeted since

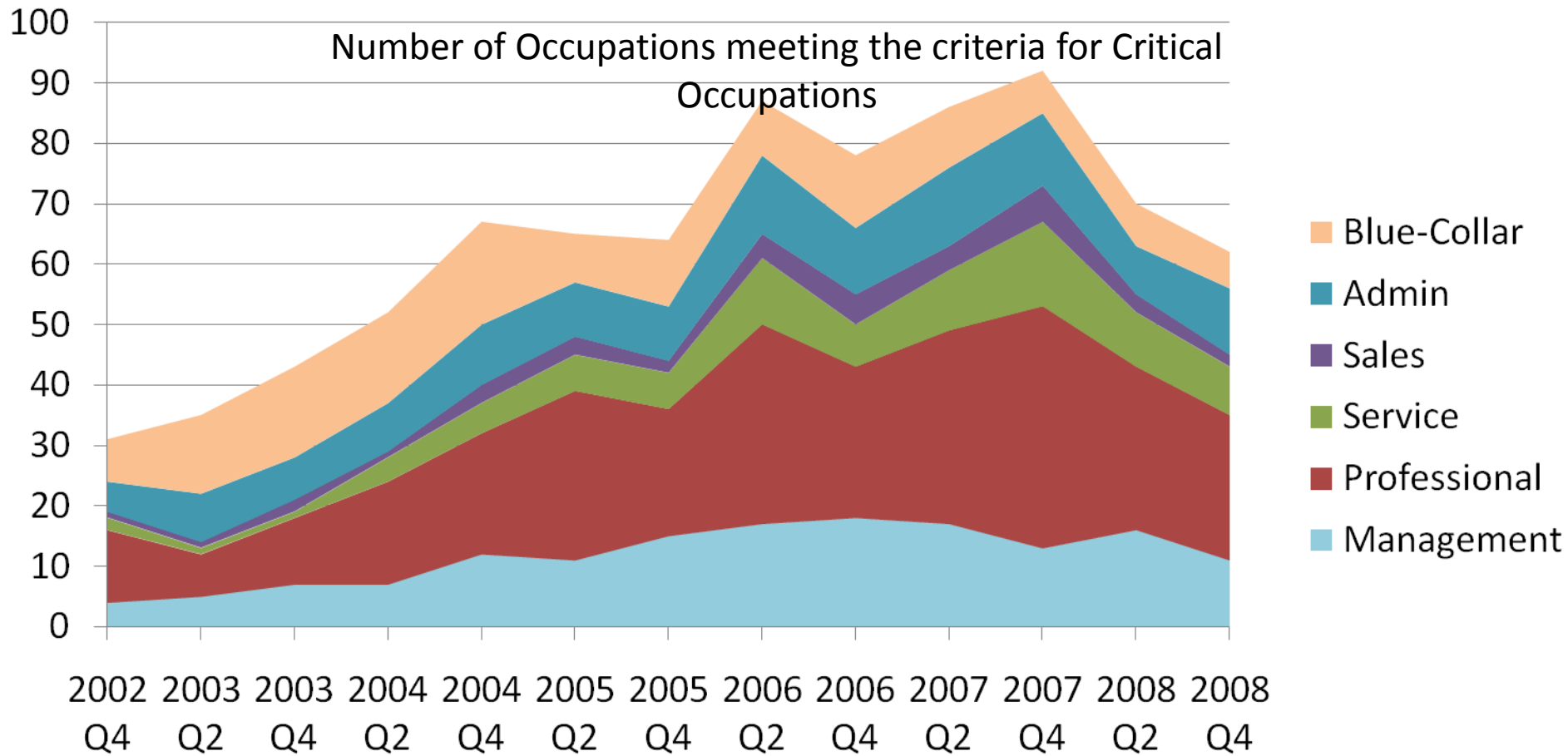


Source: CommCorp analysis of Massachusetts DWD, Job Vacancy Survey data

May 20, 2009

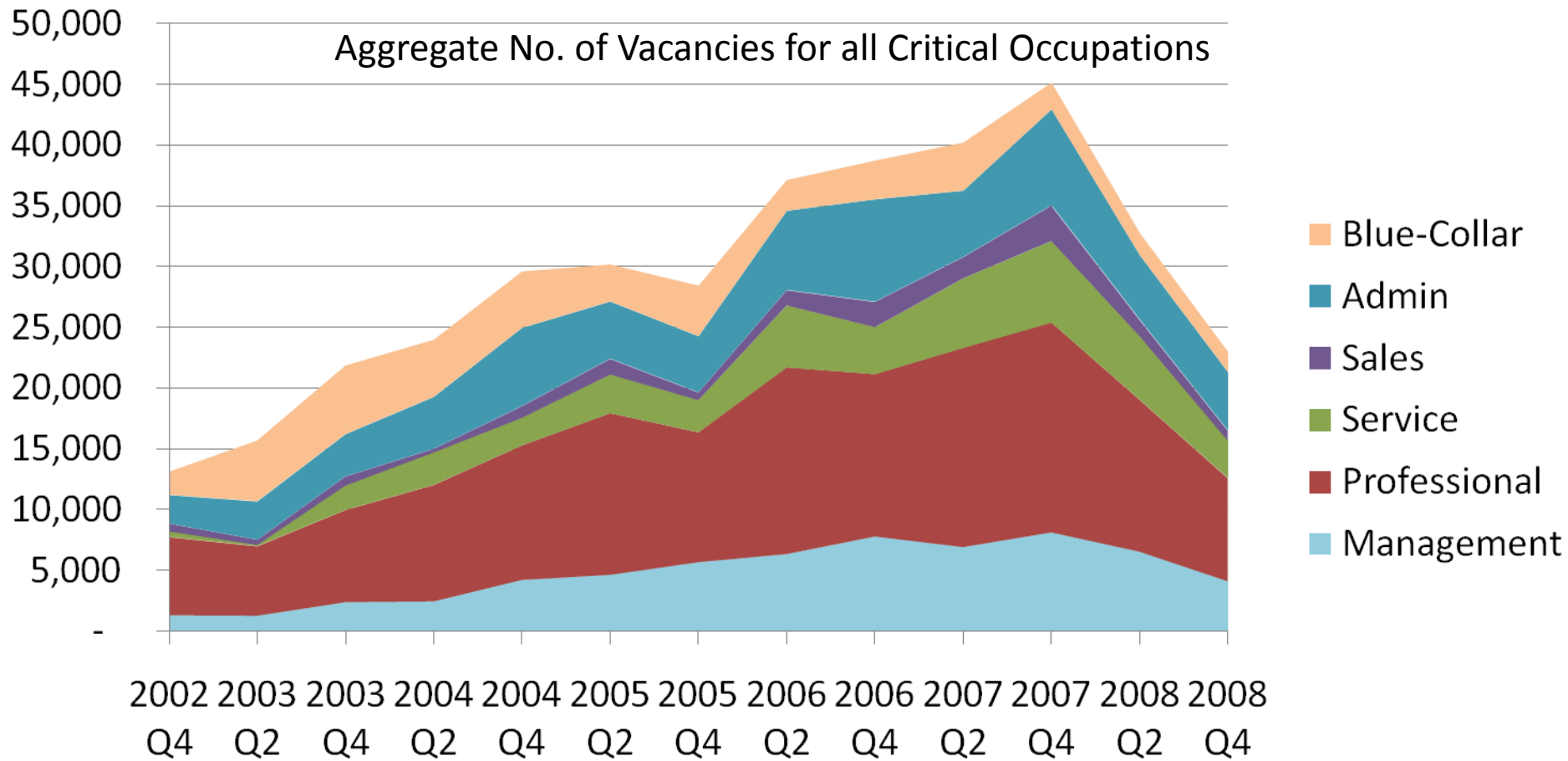
Trends in the Number of Critical Vacancy Occupations

Professional and Management occupations make up the bulk of “Critical vacancy” occupations



Source: CommCorp analysis of Massachusetts DWD, Job Vacancy Survey data

Trends in Aggregate No. of Vacancies for Critical Vacancy Occupations

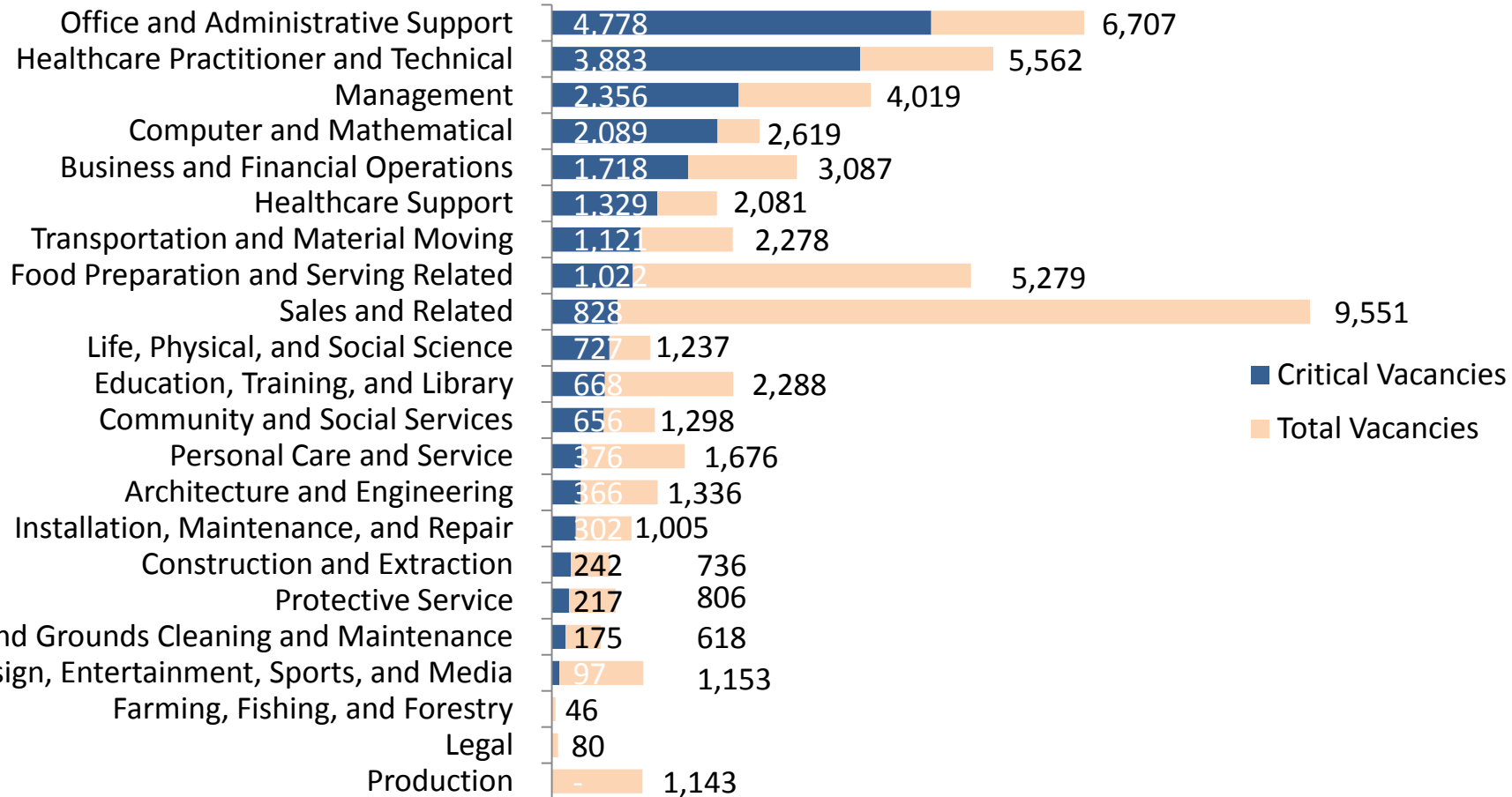


Source: CommCorp analysis of Massachusetts DWD, Job Vacancy Survey data

May 20, 2009

Critical Vacancies and Total Vacancies by Major Occupational Group– Q4, 2008

Healthcare and Computer /Mathematical have a very large share of Critical Vacancies



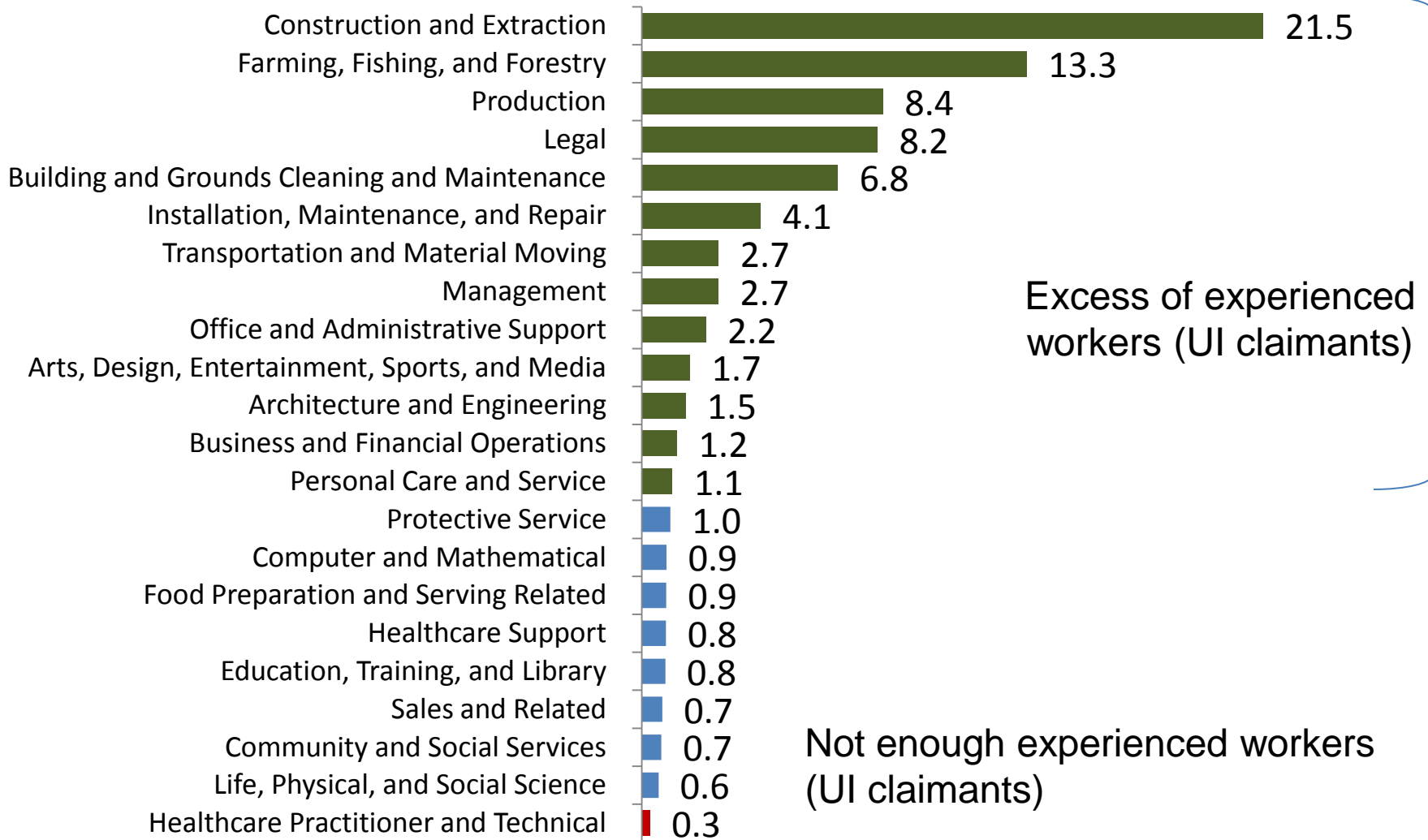
Source: CommCorp analysis of Massachusetts DWD, Job Vacancy Survey data

No. of Critical Occupations by Major Occupational Group

	Q4, 2008
Office and Administrative Support	11
Management	7
Computer and Mathematical	6
Healthcare Practitioner and Technical	6
Transportation and Material Moving	4
Business and Financial Operations	4
Community and Social Services	3
Education, Training, and Library	3
Life, Physical, and Social Science	3
Architecture and Engineering	2
Personal Care and Service	2
Sales and Related	2
Food Preparation and Serving Related	2
Healthcare Support	2
Arts, Design, Entertainment, Sports, and Media	1
Building and Grounds Cleaning and Maintenance	1
Protective Service	1
Construction and Extraction	1
Installation, Maintenance, and Repair	1
Total	62

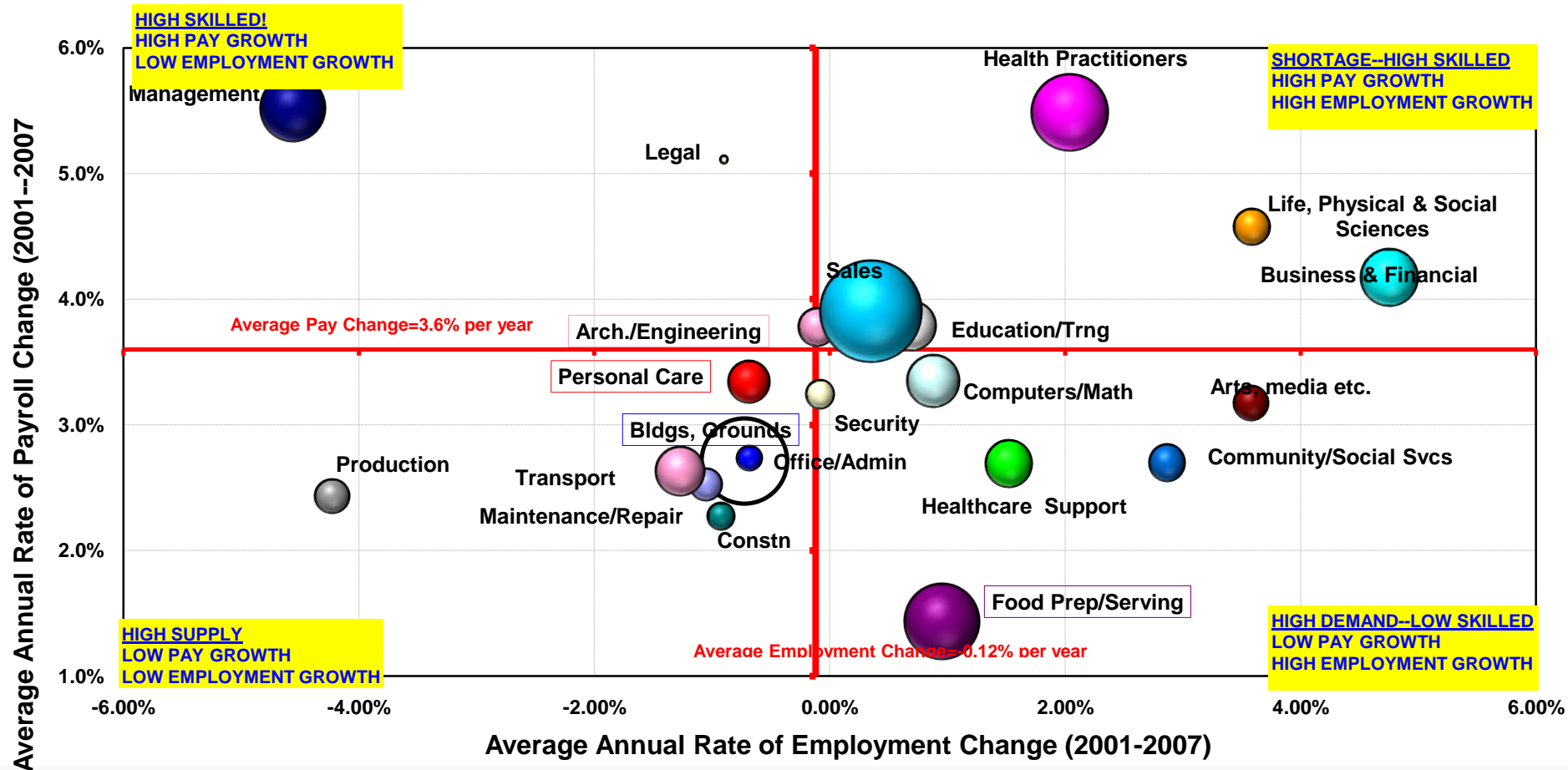
Source: CommCorp analysis of Massachusetts DWD, Job Vacancy Survey data
May 20, 2009

Additional Measure: No. of Unemployment Insurance (UI) Claimants for every Vacancy



Additional Measure: Using Pay Growth Rates/ Employment Growth to Study Labor Shortage

Occupational Supply and Demand
Bubble sizes show # Job Vacancies 4Q 2008



Use of Critical Vacancies for a Workforce Development Program -- IPSEM

IPSEM: Integrated Post-Secondary Educational Models

Purpose of the Program:

- To create innovative educational models that combine traditional developmental education, occupational training and degree granting academic coursework into an integrated learning experience which meets targeted occupational workforce needs and, upon completion, results in the award of a certificate or degree
- The Request for Proposals (RFP) identified selected “Critical” occupations that applicants might target. Applicants could target other occupations too but would have to demonstrate employer need or demand whereas they would not need to for “Critical” occupations

IPSEM: Occupations targeted by Funded Projects

Commonwealth Corporation issued an RFP identifying the following “Critical” occupations to for a workforce development project:

1. Bookkeeping, Accounting, Auditing Clerks
2. LPN; Licensed Practical Nurse
3. RN; Registered Nurse
4. Medical Secretary
5. Paramedic
6. Medical/Clinical Lab Tech
7. Diagnostic Sonographer (Ultrasound)
8. Auto Service Tech
9. Pre School Teacher
10. Social/Human Service Assistants
11. HVAC; Heating, Ventilation, and Air Conditioning Technician
12. Respiratory Therapist
13. Pharmacy Technician

Funded Projects targeted these occupations

Issues

- Reasons for vacancies vary, and need further investigation
- Vacancies fall off the list, and policy implications have to be managed
- Some vacancies maybe critical but have a declining employment trends
- Critical need but low numbers in certain occupations/industries, especially emerging occupations and industries (CNC machinist, Project Managers in Biotech) may not be reflected in the results of the survey

**Additional Slides:
Examples of Detailed Information Published
for Critical Vacancy Occupations**

Critical Office & Administrative Support Occupations in Massachusetts Q4, 2008

Description	Educational Attainment	Median Annual Salary	Estimated Vacancies	Mass. Employment	Vacancy Rate
Customer Service Representatives	High School	\$ 35,180	1,166	54,200	2.2%
Office Clerks, General	High School	\$ 28,710	542	65,640	0.8%
Postal Service Mail Carriers	High School	\$ 44,920	513	9,160	5.6%
Receptionists and Information Clerks	High School	\$ 25,760	505	24,450	2.1%
Executive Secretaries and Administrative Assistants	High School	\$ 45,120	499	43,790	1.1%
First Line Supervisors/Managers of Office and Administrative Support Workers	Varies	\$ 50,250	352	33,220	1.1%
Couriers and Messengers	High School	\$ 25,430	277	2,840	9.8%
Tellers	High School	\$ 26,270	273	14,880	1.8%
Bookkeeping, Accounting, and Auditing Clerks	Associate's or Bachelor's degree	\$ 36,830	267	48,210	0.6%
Data Entry Keyers	High School	\$ 29,000	256	6,510	3.9%
Medical Secretaries	Associate's or Bachelor's degree	\$ 33,820	128	18,100	0.7%

Sources: CommCorp Analysis of DWD Massachusetts Job Vacancy Survey & Bureau of Labor Statistics, Occupational Employment Statistics, May, 2007

Critical Office & Administrative Support Occupations in Massachusetts, cont'd

Occupation	Largest Industry Employing the Occupation	Industry share of Occupational Employment	Employment Projections 2006 - 2016		Persistent Vacancy
			Projected Job Openings	Growth Rate	
Customer Service Representatives	Insurance Carriers, etc.		23,330	16%	TRUE
Office Clerks, General	Educational Services	15%	15,480	5%	TRUE
Postal Service Mail Carriers		13%	2,630	-6%	
Receptionists and Information Clerks	Ambulatory Health Care Services		9,330	11%	TRUE
Executive Secretaries and Administrative Assistants	Educational Services	18%	11,810	8%	TRUE
First Line Supervisors/Managers of Office and Administrative Support Workers	Credit Intermediation and Related Activities	17%	6,820	-1%	TRUE
Couriers and Messengers	Ambulatory Health Care Services	9%	770	-1%	
Tellers	Credit Intermediation , etc.	9%	8,170	9%	TRUE
Bookkeeping, Accounting, and Auditing Clerks	Professional, Scientific, and Technical Services	91%	10,980	6%	TRUE
Data Entry Keyers	Administrative and Support Services	10%	1,680	-9%	
Medical Secretaries	Ambulatory Health Care Services	23%	4,660	9%	TRUE

Sources: CommCorp Analysis of DWD Massachusetts Job Vacancy Survey & Bureau of Labor Statistics, Occupational Employment Statistics, May, 2007