The Jacob France Institute
UNIVERSITY OF BALTIMORE

MARKET-RESPONSIVE EDUCATION & EMPLOYMENT TRAINING SYSTEM (MEETS)

Aligning Regional Education & Training Services with Business Needs to Take Advantage of Local Growth Opportunities

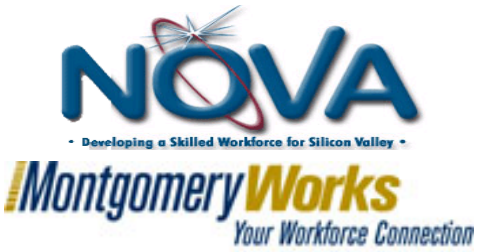
A Portfolio of Responses to Local Questions Using Census Bureau Local Employment Dynamics Program Quarterly Workforce Indicators

Prepared for:
Office of Policy Development & Research
Employment and Training Administration
U.S. Department of Labor

Prepared by:
The Jacob France Institute
Merrick School of Business University of Baltimore

March 2006

Pasco Hernando Jobs & Education Partnership Regional Board, Inc.



INTRODUCTION

The *Market-responsive Education & Employment Training System* (MEETS) staff partnered with ten local workforce development teams in five states to design, deliver and encourage proper use of new customized information using Census Bureau Local Employment Dynamics (LED) Program Quarterly Workforce Indicator (QWI) series data.

The MEETS pilot-stage priorities and activities have been defined and carried out in collaboration with the Census Bureau LED Program management team, each state's labor market information unit and other state and regional organizations.

The portfolio of seven customized documents presented here illustrates how MEETS extends what can be done in a self-service mode using the Census Bureau Longitudinal Employer-Household Dynamics Web site http://lehd.dsd.census.gov.

The High-Growth Job Training Initiative, Community-Based Job Training Grants, Workforce Innovation in Regional Economic Development awards, and anticipated Career Advancement Accounts place a heavy burden on traditional sources of labor market information; a test of decision-making relevance that challenges the best of the state and local partnerships.

The MEETS staff is poised to respond to new opportunities, serving as a 'bridge' between the Census Bureau LED Program Web site and state and local education and training providers who, without help, will overlook many of the valuable insights to be gleaned from the new information.

NEXT STEPS

Contingent upon level of renewed funding and ETA selection of priorities to be addressed, the MEETS staff can:

Refine current partnerships with state teams in California, Colorado and Florida—each having been partners in the pilot stage of MEETS—to deliver technical assistance for the California Coast, Denver Metro Region and Florida Panhandle recipients of WIRED funds. The technical assistance content will then be broadcast among the other recipients of WIRED and Community-Based Job Training Grant funds for adoption or adaptation to their own needs.

- Collaborate with the American Association of Community Colleges and selected state AACC affiliates to design and make available customized LED QWI information templates and case-studies of applications that can be adopted by state and local community college systems wanting to answer questions beyond the response capacity of the Census Bureau LED Program Web site. Jay Pfeiffer and David Stevens' on-going involvement in the U.S. Department of Education Data Quality Institute will permit rapid startup of and widespread interest in this module.

- Work with the Business Relations Group, designees from the U.S. Department of Education Office of Vocational and Adult Education and selected individuals from organizations interested in non-traditional employment issues to prepare and disseminate a guide to proper uses of the new age/gender information available in the Census Bureau LED Program Quarterly Workforce Indicator series. There is an urgent need to 'get out in front' of this public policy issue.

- Partner with two or more states to demonstrate how Census Bureau LED QWI series data can be used in the negotiation of performance targets for occupational education and skill training programs, including community college occupational programs in the proposed coverage.

Illustrative MEETS Documents

- Local Growth Industry Profile for the Universities at Shady Grove, Maryland

- Sector Hiring & Earning Profile: Citrus-Levy-Marion, Florida

- Biotechnology Employment Opportunity: San Diego County, California

- Summer Youth Hiring Profile: Pike’s Peak, Colorado

- Healthcare Employment Opportunity: North Valley (NOVA) Workforce Area, California

- Industry Retention Profile, Pasco-Hernando, Florida

- Manufacturing Impact Profile: Boone-Winnebago, Illinois.

Priority-setting for Rapid Growth on the Universities at Shady Grove Campus

Question: Can MEETS help The Universities at Shady Grove to select a demand-driven portfolio of offerings?

Response: A customized MEETS release titled *Local Growth Industry Profile for the Universities at Shady Grove, Maryland* that was designed to satisfy requests for new information from a planning workgroup including local business partners.

Answer: Top 10 rankings of industries by employment level, number of hires and rate of change of employment; each prepared for Montgomery County only, a surrounding five county service region and the state of Maryland were delivered to the planning group.

Conclusion: The planning group members saw that industry rank based on employment growth rate is sensitive to the definition of target market—core county, region or state. Awareness of these differences and the availability of age/gender enhancements supports better decisions about demand-driven curriculum offerings.

The Jacob France Institute
UNIVERSITY OF BALTIMORE

MEETS

LOCAL GROWTH INDUSTRY PROFILE

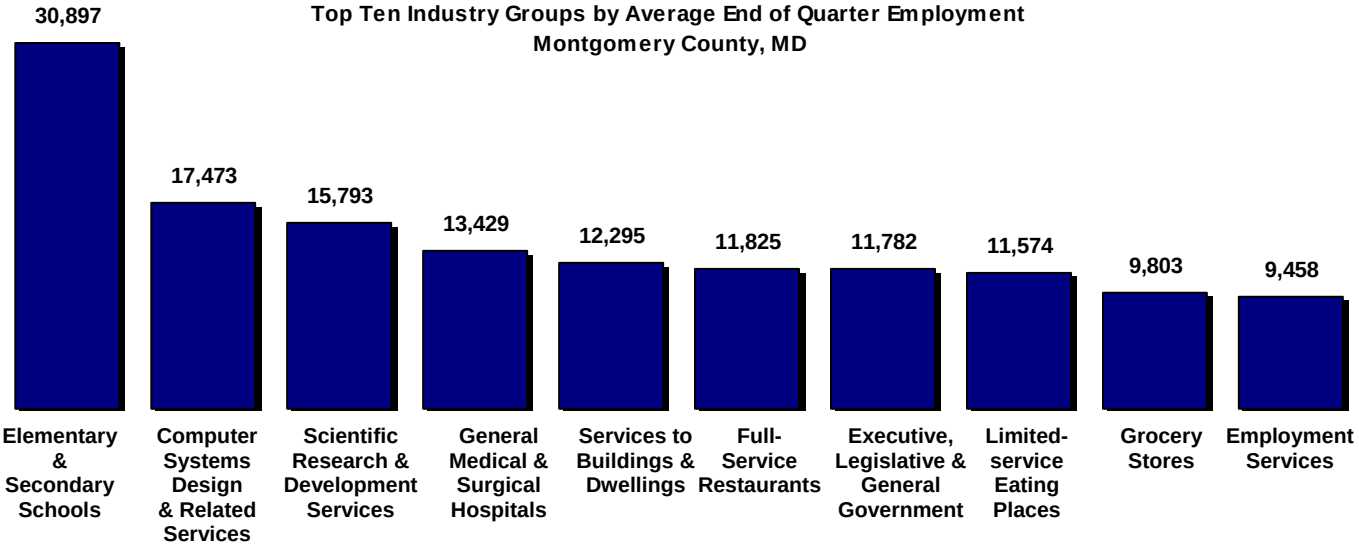
for the Universities at Shady Grove, Maryland

August 2005

THE UNIVERSITIES AT SHADY GROVE

This profile uses Local Employment Dynamics (LED) data to identify the top industry groups in Montgomery County, MD, based on three different measures, over a one-year period. It also illustrates where those industry groups rank in both the service region (Montgomery, Howard, Frederick, Carroll, and Prince George's counties) and the state of Maryland.

Fig. 1



	#1	#2	#10	#8	#9	#3	#4	#5	#7	#11
Service Region	64,657	32,404	20,009	23,902	22,407	31,049	28,410	27,724	25,201	17,899
	#1	#9	#16	#2	#11	#3	#5	#4	#7	#10
Maryland	144,052	50,621	29,388	73,181	42,432	72,533	64,622	66,818	54,276	45,215

Source: U.S. Census Bureau Local Employment Dynamics (LED) Data for 2003.

The top ten industry groups, based on each measure, are graphed in Figures 1-3 for Montgomery County. Below each graph, those same industry group totals and rankings in that measure are shown for both the service region and the state.

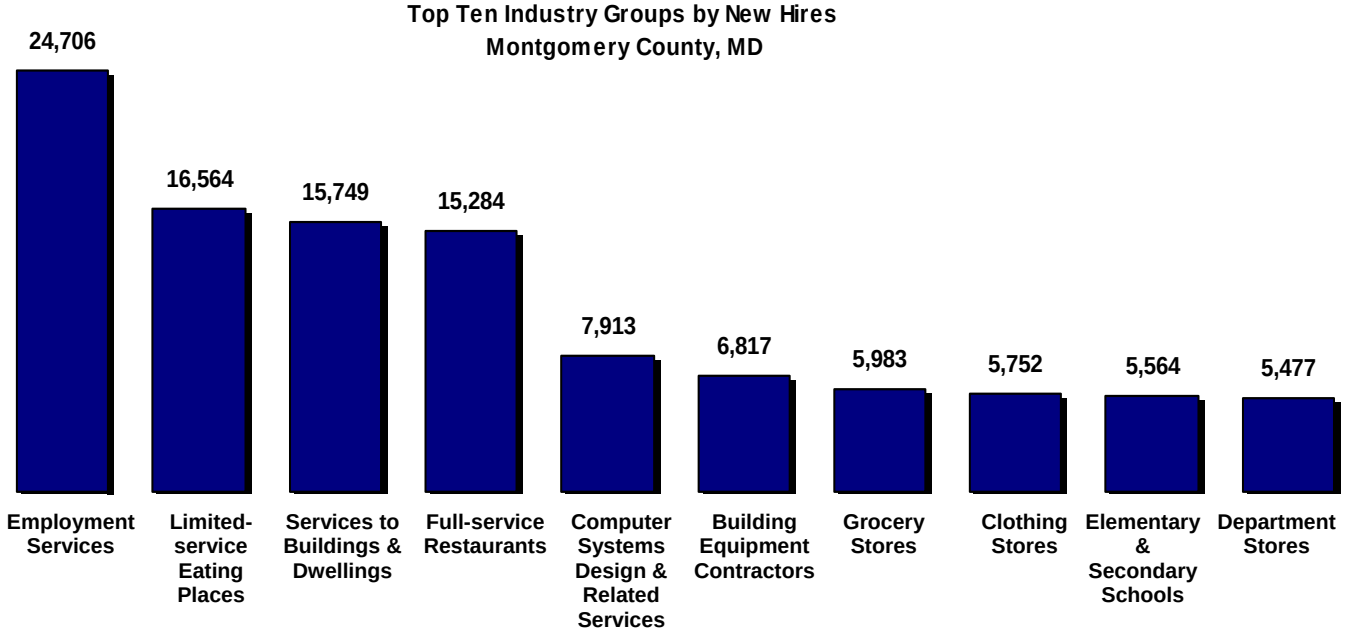
In both Fig. 1 (average employment by quarter) and Fig. 2 (new hires), the top ten rankings for county, service region, and state are largely consistent. Nine out of the top ten industry groups by employment in Montgomery County also rank in the top ten in the services region, and eight rank in the top ten for the state. Similarly, in rankings by new hires, the county and service region share the same top ten industry groups (in varying order), with nine of those ten appearing in Maryland's top ten.

Fig. 3 provides a sharp contrast between local industry group rankings and those of the service region and state. In employment change rate, none of the top ten industry groups for Montgomery County was among the top ten the service region, and only one made the cut at the state level. Further, several of the top ten industry groups in the county showed negative growth in the service region and/or Maryland.

This format shows the importance of looking at various growth measures, particularly when comparing multiple geographic areas. While growth measures show remarkable consistency for Montgomery County, those same measures reveal where the county is similar to the service region and the state and where it is dramatically different.

Fig. 2

Top Ten Industry Groups by New Hires
Montgomery County, MD

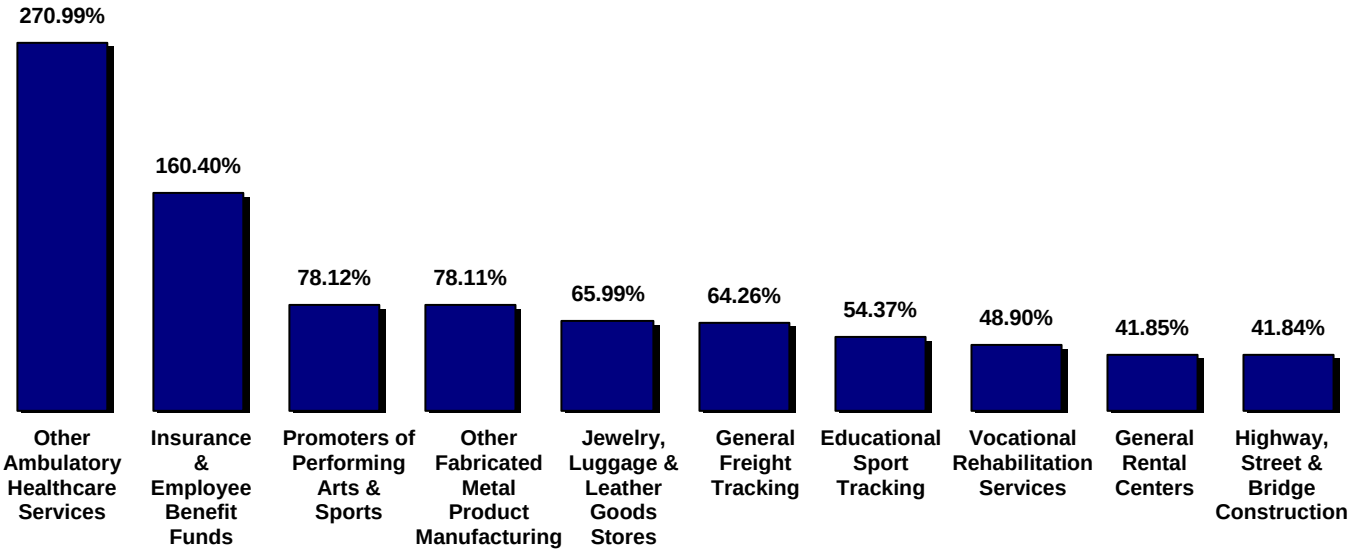


	#1	#3	#4	#2	#7	#5	#6	#10	#9	#8
Service Region	46,230	43,030	28,776	44,133	15,308	21,196	16,742	14,812	14,830	15,085
	#1	#2	#4	#3	#12	#6	#5	#9	#8	#7
Maryland	131,859	108,915	56,195	105,609	24,022	40,623	41,763	30,568	33,112	36,166

LED Data for 2003.

Fig. 3

Top Ten Industry Groups by Employment Change Rate
Montgomery County, MD



	#20	#15	#26	#222	#25	#42	#17	#204	#18	#52
Service Region	41.11%	47.49%	29.61%	-17.73%	30.60%	17.47%	42.18%	-11.74%	41.62%	12.61%
	#86	#7	#191	#244	#98	#127	#24	#151	#299	#15
Maryland	5.24%	39.96%	-1.90%	-6.43%	4.48%	2.35%	17.46%	0.77%	-82.80%	23%

LED Data for 2003

This Market-responsive Education and Employment Training System (MEETS) profile was prepared by The Jacob France Institute, University of Baltimore, MEETS Project Manager Jeff Gabriel, jgabriel@ubalt.edu, 410-837-5276.

Ranking of Industries by Employment Growth and Earnings Level in Citrus, Levy and Marion Counties

Question: Can MEETS help the Citrus-Levy-Marion One-Stop Workforce Connection target the most promising opportunities for students and trainees based on new information about hiring and earnings levels?

Response: A customized MEETS release titled *Sector Hiring & Earning Profile: Citrus-Levy-Marion, Florida*.

Answer: This presentation of new information gives those involved in local economic development decisions a common visual and data-based reference for selection of industries to be targeted for aggressive workforce development investment.

Conclusion: This MEETS Profile focuses local attention on a few promising target industries; a necessary step to bring educators and training providers together with local personnel managers in these industries to plan strategic demand-driven refinements of curricula and student/trainee recruitment. Age/gender enhancements can be added.

The Jacob France Institute
UNIVERSITY OF BALTIMORE

MEETS

SECTOR HIRING & EARNING PROFILE

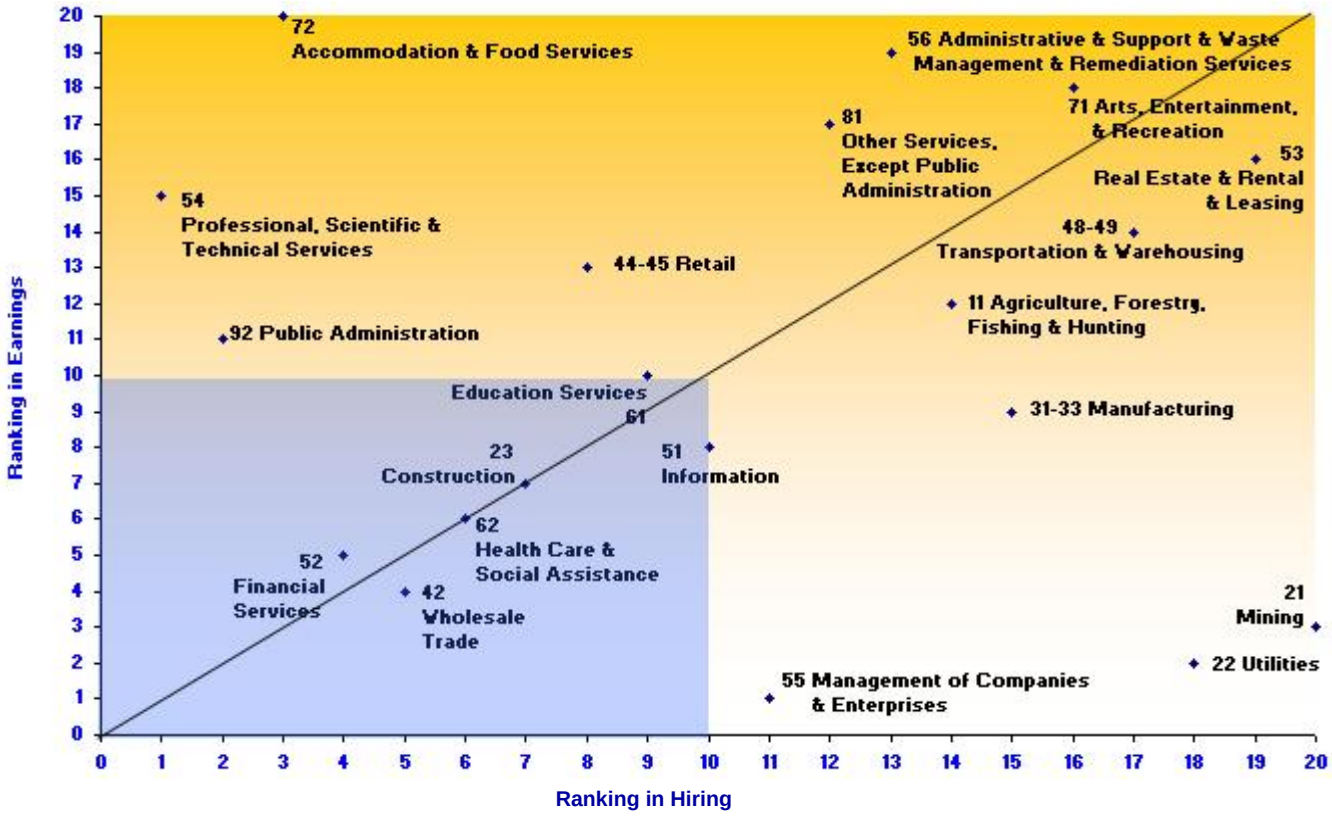
Citrus-Levy-Marion, Florida

January 2006

ONE STOP WORKFORCE CONNECTION
Employment solutions that work™

This profile uses Local Employment Dynamics (LED) data to illustrate whether worker hiring is occurring in high-paying industry sectors within the Citrus, Levy & Marion counties. Specifically, sectors are compared and ranked in both hiring and earnings strength using various measures, in order to show which sectors rank highly in both.

NAICS Sector Hiring and Earning Ranks



Source: The Jacob France Institute, 2005. Based on U.S. Census Bureau Local Employment Dynamics (LED) data for 2003 (4th quarter) and 2004 (1st, 2nd, & 3rd quarters).

This graph illustrates how the twenty NAICS (North American Industrial Classification System) sectors in the CLM area rank in both their hiring (x-axis) and earnings (y-axis) strength. The rankings in each category have been established by determining a "score" for both hiring activity and earnings strength, based, in turn, on an aggregate of a sector's rank in each of several measures. The data which were compared in order to arrive at these scores and rankings appear on Page 2.

The shaded area in the graph represents a "target zone". The sectors plotted in this area- Construction, Finance & Insurance, Health Care & Social Assistance, Wholesale Trade, Education Services and Information – are those which rank in the top half of both hiring activity and earnings strength. In addition, two sectors- Public Administration and Management of Companies & Enterprises- fall just outside the target zone, being one ranking slot removed in one measure and within the top half in the other. Half of all the sectors have rankings that are within three slots of each other in the respective categories. This is a positive indicator of a match between hiring and earnings activity. The diagonal line across the graph represent the "plane" along which sectors would fall if their hiring and earnings rankings matched.

Table 1 CLM Sector Hiring Rankings

NAICS Sector Code	Employment 2003/4* (Quarterly avg.)	Employment Rank	Stable Employment Growth (2001-2003/4*)	Stable Employment Growth Rank	Stable New Hires 2003/4*	Stable New Hires Rank	Stable New Hires Growth (2001-2003/4*)	Stable New Hires Growth Rank	Score
54	5,086	9	69.53%	1	2,429	8	116.88%	2	11
92	6,473	7	17.23%	8	3,142	7	173.22%	1	16
72	9,434	6	18.28%	7	6,075	3	8.99%	7	17
42	4,816	10	27.36%	3	1,923	10	24.31%	4	17
52	4,057	11	29.26%	2	1,865	12	45.02%	3	17
62	18,458	2	18.28%	6	7337	2	5.21%	10	18
23	9,749	5	11.16%	10	4,758	4	8.38%	8	22
44-45	20,924	1	9.18%	11	9,977	1	-3.31%	13	25
61	12,704	3	5.82%	12	2,204	9	22.17%	5	26
51	1,951	14	23.20%	4	712	17	9.88%	6	27
55	354	19	19.08%	5	133	19	5.56%	9	33
81	3,902	12	-0.10%	14	1,884	11	2.89%	11	36
56	6,094	8	-2.21%	16	4,026	5	-12.19%	16	37
11	3,198	13	16.59%	9	1,098	13	-6.95%	15	37
31-33	10,286	4	-3.39%	17	3,352	6	-35.76%	20	43
71	1,944	16	-0.20%	15	1,085	14	-3.64%	14	43
48-49	1,645	18	-3.42%	18	915	15	2.12%	12	45
22	1,950	15	3.60%	13	160	18	-13.98%	17	48
53	1,846	17	-9.06%	20	882	16	-15.19%	18	54
21	317	20	-6.38%	19	72	20	-23.40%	19	58

Table 2 CLM Sector Earnings Rankings

NAICS Sector Code	Employment Earnings 2003/4*	Employment Earnings Rank	Stable Employment Monthly Earnings 2003/4*	Stable Employment Earnings Rank	Growth in Stable Employment Monthly Earnings ('01-'03/'04*)	Growth in Stable Employment Earnings Rank	Stable New Hires Earnings 2003/4*	Stable New Hires Earnings Rank	Growth in Stable New Hires Earnings ('01-'03/'04*)	Growth in Stable New Hires Earnings Rank	Score
55	$3,280	2	$3,423	2	31.56%	1	$2,879	2	73.24%	1	6
22	$5,889	1	$6,010	1	11.52%	5	$3,835	1	21.48%	2	9
21	$2,715	7	$2,887	7	16.32%	2	$2,097	6	17.35%	5	20
52	$2,971	3	$3,209	3	9.96%	6	$2,278	4	8.90%	9	22
42	$2,879	4	$3,133	4	9.96%	7	$2,453	3	4.66%	12	26
62	$2,607	8	$2,803	8	7.84%	12	$2,113	5	17.85%	4	29
23	$2,307	13	$2,609	11	15.51%	3	$1,955	10	15.77%	7	31
51	$2,728	5	$2,976	6	12.12%	4	$1,796	12	1.38%	14	36
31-33	$2,597	9	$2,769	9	9.39%	8	$2,068	8	-6.90%	16	41
61	$2,474	10	$2,580	12	8.28%	10	$1,410	16	18.56%	3	41
92	$2,377	12	$2,471	13	4.99%	19	$2,087	7	16.27%	6	45
11	$1,902	15	$2,157	15	8.12%	11	$1,702	13	7.62%	10	49
44-45	$1,772	16	$1,952	16	9.39%	9	$1,274	19	9.05%	8	52
48-49	$2,427	11	$2,763	10	5.33%	18	$2,051	9	-8.10%	18	55
54	$2,726	6	$3,034	5	3.91%	20	$1,823	11	-22.52%	20	56
53	$1,937	14	$2,168	14	7.08%	14	$1,534	14	-9.16%	19	61
81	$1,687	17	$1,850	18	5.64%	15	$1,441	15	3.59%	13	61
71	$1,362	19	$1,566	19	5.60%	17	$1,399	17	4.77%	11	64
56	$1,668	18	$1,938	17	5.63%	16	$1,363	18	-7.97%	17	68
72	$985	20	$1,170	20	7.24%	13	$840	20	-2.21%	15	68

* Refers to the most recent four quarters of data available.(4th quarter 2003 through 3rd quarter 2004)

Source: Local Employment Dynamics and The Jacob France Institute, 2005

The tables at left reveal all of the data used to establish the sectors rankings and positioning illustrated on Page 1. Each yellow column contains the data for a given sector and measure; each blue column indicates the rank according to the data that precedes it. The scores appearing in the green column represent the sum of the rankings in that table, with the lowest total representing the "best" score and the highest ranking. The data and rankings reflected in the orange columns are for illustrative purposes only, and were not factored into the determination of the rankings.

The definitions of each of the measures in the two tables appear below. All measures, whether totals or quarterly averages, represent the four quarters of the year(s) indicated, to minimize seasonal factors.

Employment 2003/4 (Quarterly avg.)- the number of workers employed by businesses at the beginning of the quarter, averaged for the four quarters of 2003:Q4-2004:Q3.

Stable Employment Growth (2001-2003/4)- 'Stable' Employment refers to the number of workers at the beginning of the quarter who have been employed by a particular business in at least three consecutive quarters. Growth is measured by comparing the quarterly averages for 2001 and 2003:Q4-2004:Q3.

Stable New Hires 2003/4- the number of newly hired workers that were now employed at a particular business in a third consecutive quarter; totaled for the four quarters of 2003:Q4-2004:Q3.

Stable New Hires Growth (2001-2003/4)- measures the difference between the four quarter totals of Stable New Hires between 2001 and 2003:Q4-2004:Q3.

Employment Monthly Earnings 2003/4- the average monthly earnings within a given quarter for workers; averaged for the four quarters of 2003:Q4-2004:Q3.

Stable Employment Monthly Earnings 2003/4- the average monthly earnings within a given quarter for workers who have been employed by a particular business in at least three consecutive quarters; averaged for the four quarters of 2003:Q4-2004:Q3.

Growth in Stable Employment Monthly Earnings ('01-'03/04)- measures the difference between the four quarter averages of Stable Employment Monthly Earnings in 2001 and 2003:Q4-2004:Q3.

Stable New Hire Earnings 2003/4- the average monthly earnings within a given quarter for newly hired workers that were now employed at a particular business in a third consecutive quarter; averaged for the four quarters of 2003:Q4-2004:Q3.

Growth in Stable New Hire Earnings 2003 ('01-'03/'04)- measures the difference between the four quarter averages of Stable New Hire Earnings in 2001 and 2003:Q4-2004:Q3.

This group of measures is intended to show a combination of 'point in time' and 'directional' values. The measures have not been weighted here, but could be according to how a data user might want to emphasize the importance of some measures versus others.

The tables provide valuable detail in addition to the information shown on the graph on Page 1. For example, while Retail Trade (Sector 44-45) is ranked 13th in earnings strength, Table 2 reveals how this overall position includes bottom rankings in the static measures, but much higher rankings in the growth measures. In fact, of the ten sectors that make of the bottom half of the Stable New Hires Earnings rankings, eight of them boasted a higher ranking in the Growth measure.

Similarly, the categories under the hiring measures can tell different parts of the story. Wholesale Trade (Sector 42) ranks third in the number Stable New Hires, but only twelfth in Stable New Hires Growth. On the positive side, Education Services (Sector 61) is among those whose rank in Stable New Hires is well exceeded by their rank in Stable New Hires Growth. Data users can examine the earnings performance of these sectors to see if that hiring growth is leading to opportunities for higher earnings in the future.

Guide to NAICS Sector Codes and Titles

11	Agriculture, Forestry, Fishing & Hunting
21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale
44-45	Retail Trade
48-49	Transportation & Warehousing
51	Information
52	Finance & Insurance
53	Real Estate & Rental & Leasing
54	Professional, Scientific, & Technical Services
55	Management of Companies & Entertainment
56	Administrative & Support & Waste Management & Remediation Services
61	Education Services
62	Health Care & Social Assistance
71	Arts, Entertainment & Food Service
72	Accommodation & Food Service
81	Other Services (expect public Administration)
92	Public Administration

The source of the data included in this Sector Hiring and Earning Profile is the Census Bureau Local Employment Dynamics (LED) program (http://lehd.dsd.census.gov).

The Florida Agency for Workforce Innovation, Labor Market Statistics and LED have joined forces to deliver the new **Quarterly Workforce Indicators (QWI) series**. No new information is collected. No surveys are conducted. No new employer or employee burden is involved. No confidentiality laws or principles are compromised.

The Jacob *france* Institute

University of Baltimore
Merrick School of Business
1420 N. Charles Street
Baltimore, Maryland 21201-5779
www.ubalt.edu/jfi
Telephone: (410) 837-4727
Fax: (410) 837-5814

This **Market-responsive Education and Employment Training System** (MEETS) Sector Hiring and Earning Profile was prepared by **The Jacob France Institute**, University of Baltimore. MEETS funding is received through the Office of Policy Development and Research, Employment and Training Administration, U.S. Department of Labor. Partners in the design and production of this draft were Florida Agency for Workforce Innovation, Labor Market Statistics, and the CLM Workforce Connection. The Jacob France Institute accepts sole responsibility for the accuracy of information, views expressed, conclusions reached and recommendations offered here. Comments are welcome and should be sent to the MEETS project manager, Jeff Gabriel at jgabriel@ubalt.edu.

Biotechnology Hiring in San Diego

Question: Can MEETS help the San Diego Workforce Partnership promote robust growth of local biotechnology employment?

Response: A customized MEETS Brief titled *Biotechnology Employment Opportunity: San Diego County, California*.

Answer: The MEETS Brief profiles the age and gender mix of local hiring concentrated in Scientific, Research and Development Services.

Conclusion: New information about the actual path and age/gender mix of hiring in this nascent growth sector is an important advance because biotechnology is not a NAICS-coded industry—the Census Bureau LED data have to be pieced together based on locally defined biotechnology sub-sectors.

BIOTECHNOLOGY EMPLOYMENT OPPORTUNITY

San Diego County, California

Market-responsive Education and Employment Training System

MEETS

Brief SDC.2005-1

June 2005

SAN DIEGO WORKFORCE PARTNERSHIP

CREATING WORKFORCE SOLUTIONS FOR THE SAN DIEGO REGION

Employment Development Department

LaborMarketInfo

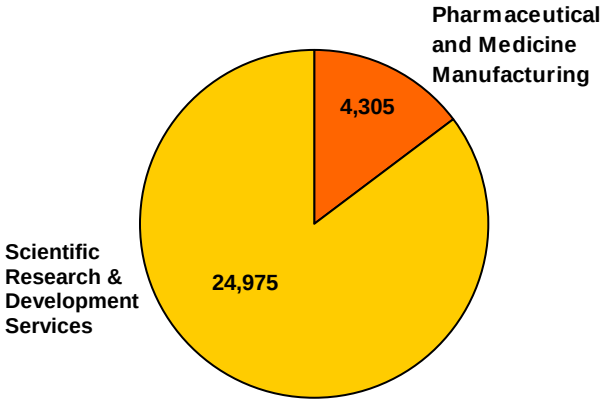
DID YOU KNOW?

- Two and a half percent of San Diego County employment is classified as biotechnology.
- Eighty-five percent of this biotechnology employment is in *Scientific Research and Development Services*.
- San Diego County biotechnology employers hired over 10,000 new employees in the most recent full year of data coverage, despite modest loss in the total number of biotechnology employees.
- Slightly over half of the new biotechnology employees are women, and fifty-one percent are between the ages of 25 and 44 years old.

This Brief introduces you to the source of the highlights presented above. Inside, you will find other new insights about biotechnology employment in San Diego County, California. You will also find suggested ways to use this new information for decision-making. A series of industry briefs like this are now available from MEETS.

U.S. Department of Labor
Employment & Training Administration

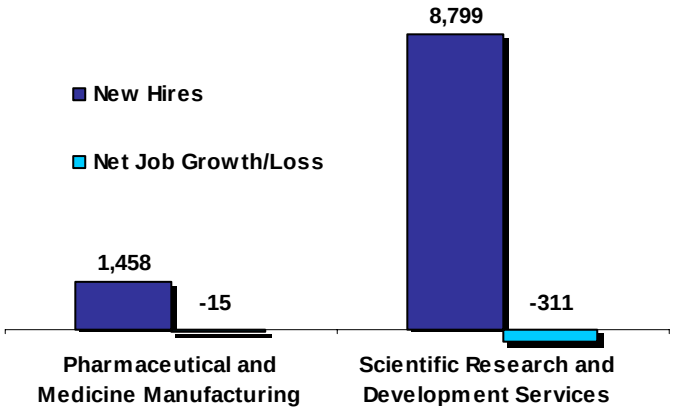
San Diego County, California: Biotechnology Employment Highlights



U.S Census Bureau Local Employment Dynamics (LED) Data for 3rd Quarter 2003

EMPLOYMENT AFFLIATIONS WITHIN BIOTECHNOLOGY

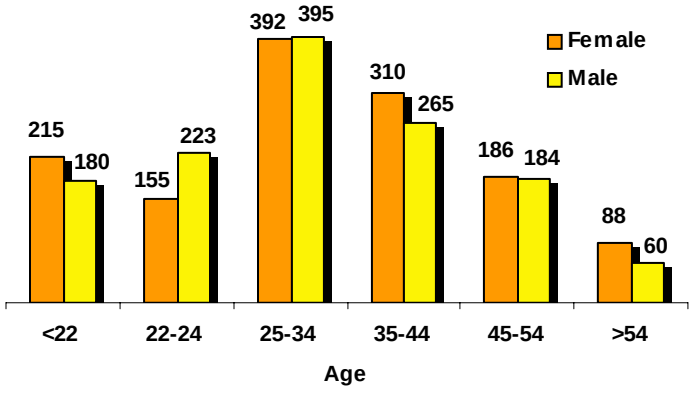
Eighty-five percent of San Diego County Biotechnology employment is in Scientific Research & Development Services Industry Group, which is dominated (89% nationally) by R&D in the Physical, Engineering, & Life Sciences. Pharmaceutical & Medicine Manufacturing, including Medicinal & Botanical, Pharmaceutical Preparation, In-Vitro Diagnostic Substances, and Biological (except Diagnostic) Products, accounts for the remaining 15% of biotechnology employment.



LED Data for 4th Quarter 2002–3rd Quarter 2003

ANNUAL HIRES AND NET GROWTH/LOSS WITHIN BIOTECHNOLOGY

San Diego County's Biotechnology hiring patterns virtually mirror employment, with 86% of new hires occurring in Scientific Research & Development Services. While both industry groups experienced modest net job growth during the year, those figures are far exceeded in each case by their number of new hires. Pharmaceutical & Medicine Manufacturing and Scientific R&D Services each showed significant hiring activity despite overall job loss.



LED Data for 3rd Quarter 2003

QUARTERLY HIRES WITHIN BIOTECHNOLOGY BY GENDER AND AGE

Just over half of new hires in San Diego County's biotechnology industry are between 25 and 44 years old. While men outnumber women among new hires between the ages of 22-34, across all age groups, 51% of biotechnology new hires are women. In biotechnology industry groups (not shown here), women also represent a slight majority of new hires in Scientific R&D Services, with men claiming a slight edge in Scientific & Pharmaceutical Manufacturing. Further variation in the gender and age mix occurs at the occupational level.

Occupational Title	May 2003 Employment	Average Hourly Wage
Biological Technicians	1,400	$18.08
Team Assemblers	480	$10.51
Marketing Managers	310	$49.56
Executive Secretaries & Admin. Assistants	1,120	$20.70
Computer Software Engineer, Applications	600	$40.40
Biochemists & Biophysicists	510	$32.78
Medical Scientists, Except Epidemiologists	1,270	$35.09

BIOTECHNOLOGY OCCUPATIONAL STATISTICS*

These metro area statistics highlight two facets of biotechnology employment: 1) Some occupations in biotechnology are not found in this industry alone, such as computer software engineers; and 2) occupational earnings vary widely. The highlights chosen for this page are

*Source for Occupational Statistics: California Employment Development Department (EDD), Labor Market Information Division (LMID)

WHAT ARE BIOTECHNOLOGY JOBS?

The Census Bureau Local Employment Dynamics (LED) program QWI statistics presented in this brief use the North American Industry Classification System's (NAICS) coding of biotechnology industry sub-sectors. Dependent upon the NAICS definitions, the biotechnology industry includes establishments which produce pharmaceutical and medicine goods and which support industry research and development. These areas are combined at the industry group level to form a "customized" definition of biotechnology. This speaks to the specialized nature of this industry.

Occupational information is not in the LED data. Biotechnology occupations fall into various groups, including: scientific professionals such as biochemists and biophysicists, workers associated more with the manufacturing processes (e.g., technicians and team assemblers), and other types of work performed in the biotechnology industry (e.g., marketing, administrative support, and computer software applications).

Data users should contact the California Employment Development Department, Labor Market Information Division (LMID), for assistance in combining industry and occupational information to answer questions.

EXAMPLES OF HOW TO USE THE NEW LED QWI INFORMATION

- Think about why there are so many new hires in biotechnology even during a period of overall job loss. This will help to separate high turnover jobs from more stables opportunities. While high-turnover jobs may be appropriate destinations for some jobs seekers, most strategic decisions focus on stable opportunities with potential for continued learning and earning growth.
- Think about the gender disparities within the biotechnology industry groups and decide what your conclusion means for the individual and program management decision-making.
- Align the age group breakout of new hires activity in biotechnology with current or targeted program demographics and decide whether and what additional information is needed before making strategic management counseling decisions.

USEFUL WEB LINKS

California **labor market information:** http://www.labormarketinfo.edd.ca.gov

BLS occupational employment statistics *Technical Notes*: http://www.bls.gov/oes/current/oes_tec.htm

BLS occupational employment projections methods: http://www.bls.gov/emp/home.htm

BLS National Industry-Occupation Employment Matrix information:
http://www.bls.gov/emp/nioem/empioan.htm

Standard occupational classification *user guide*: http://www.bls.gov/soc/socguide.htm

NAICS Codes and Titles: http://www.census.gov/epcd/naics02/

Sources of the data included in this Brief are:

- The California Employment Development Department (EDD), Labor Market Information Division (LMID) (http://www.labormarketinfo.edd.ca.gov)
- The Census Bureau Local Employment Dynamics (LED) program (http://lehd.dsd.census.gov)

EDD and LED have joined forces to deliver the new **Quarterly Workforce Indicators (QWI) series**. No new information is collected. No surveys are conducted. No new employer or employee burden is involved. No confidentiality laws or principles are compromised.

What is new here?

- Reliable local employment and new hire indicators by age group and gender.
- Updates with no more than a one-year lag in availability.
- More descriptive detail thanks to adoption of a new disclosure-proofing approach that continues to protect business and work anonymity.

Remaining challenges include:

- Awareness that *new* means *unfamiliar*. Some commitment to learning is needed to fully realize the potential from new indicators and decision-making uses.
- Understanding the value of the new indicators, even though they can not answer all questions.

Why now, and not before?

- Seven years, 1998-2004, were needed to successfully complete the organizational, legal, staffing and technical steps to transition from start-up though pilot testing to production and release.
- Continuing advances in data processing capacity and efficiency allow commitment to a production schedule that was impossible to imagine earlier.
- The workforce development community understands that sustained reinvention is urgent to become and remain viable in the open world economy.

The Jacob *france* Institute

University of Baltimore
Merrick School of Business
1420 N. Charles Street
Baltimore, Maryland 21201-5779
www.ubalt.edu/jfi
Telephone: (410) 837-4727
Fax: (410) 837-5814

This **Market-responsive Education and Employment Training System** (MEETS) Brief was prepared by **The Jacob France Institute**, University of Baltimore. MEETS funding is received through the Office of Policy Development and Research, Employment and Training Administration, U.S. Department of Labor. Partners in the design and production of this draft were the California Employment Development Department (EDD), the Labor Market Information Division (LMID), and the San Diego Workforce Partnership. The Jacob France Institute accepts sole responsibility for the accuracy of information, views expressed, conclusions reached and recommendations offered here. Comments are welcome and should be sent to the MEETS project manager, Jeff Gabriel at jgabriel@ubalt.edu

Summer Youth Hiring in the Pike's Peak Region

Question: Can MEETS help the Pike's Peak Workforce Center to focus recruitment of summer job opportunities to direct local youths toward promising careers in growth industries?

Response: A customized MEETS report titled *Summer Youth Hiring Profile: Pike's Peak, Colorado*.

Answer: Four graphs highlight opportunities and challenges confronting local job developers—many youth hires occur in industries that have been overlooked as recruitment targets.

Conclusion: This new information motivates commitment to a win-win marketing strategy for employment of youth in the area. The business community and youth advocacy organizations are now challenged to increase the exposure of local youths to a broad range of career exploration.

The Jacob France Institute
UNIVERSITY OF BALTIMORE

MEETS

SUMMER YOUTH HIRING PROFILE

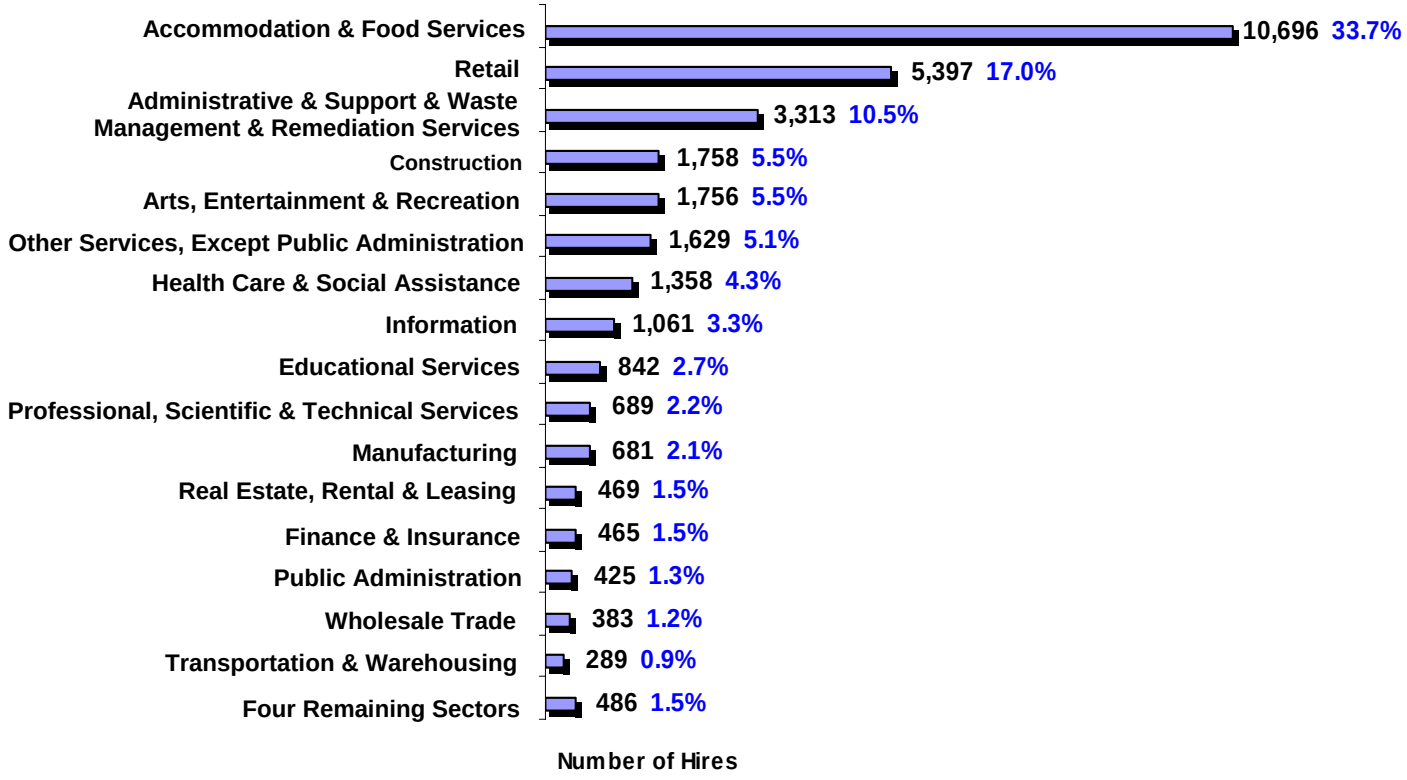
Pike's Peak, Colorado

August 2005

PIKES PEAK WORKFORCE CENTER

This profile uses Local Employment Dynamics (LED) data to highlight some of the hiring patterns and sector trends associated with youth summer employment. Although LED does not track "summer" as such, the profile uses 2nd and 3rd quarter data to approximate hiring activity for the summer period. The data selected show several looks at the hiring of youth (age 14-21), including hiring by sector, sector hiring by age sub-group, and annual trends in the hiring of youth.

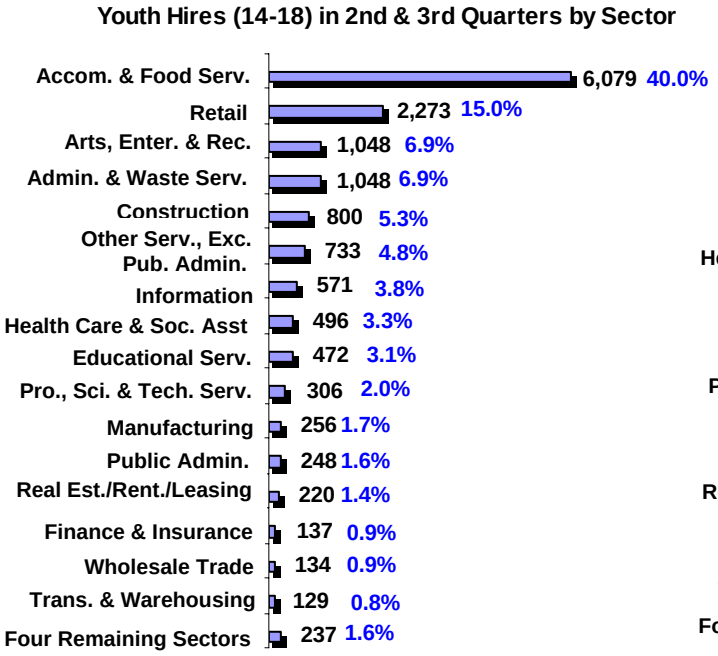
Youth (14-21) Hires in 2nd and 3rd quarters by Sector

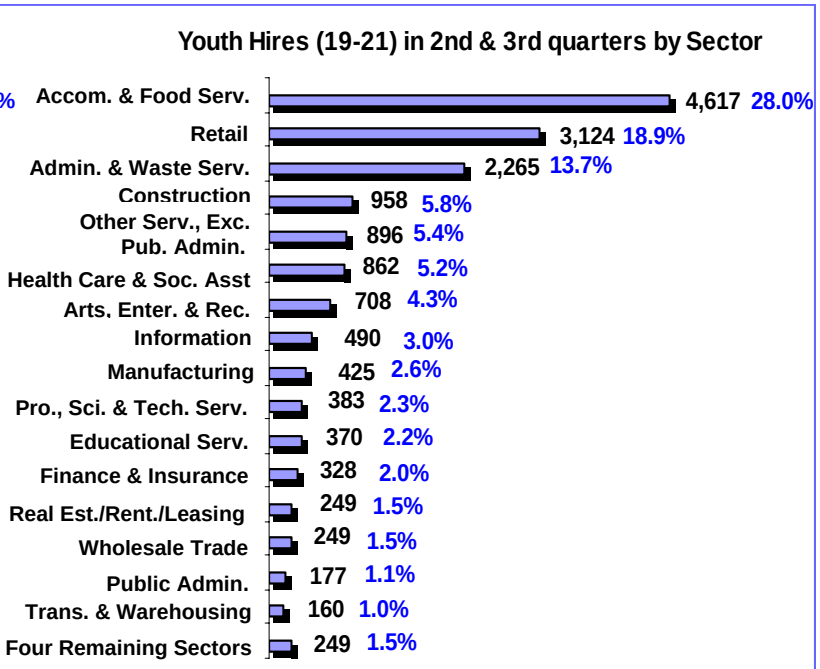


Source: U.S Census Bureau Local Employment Dynamics (LED) Data from 2nd and 3rd quarters, 2003

Youth hiring in this period has been dominated by only a few sectors. Over one-third of youth hired during the 2nd and 3rd quarters in 2003 were hired in Accommodation & Food Services. When combined with Retail, these two sectors accounted for more than half of all youth hires (51%). Other youth hires were spread widely over the other sectors. Only one other sector- Administrative & Support & Remediation & Waste Services- claimed more than ten percent of youth hires. Further, nearly half of the sectors (nine of twenty) accounted for less than one and a half percent of hires each; five of which each had less than one percent.

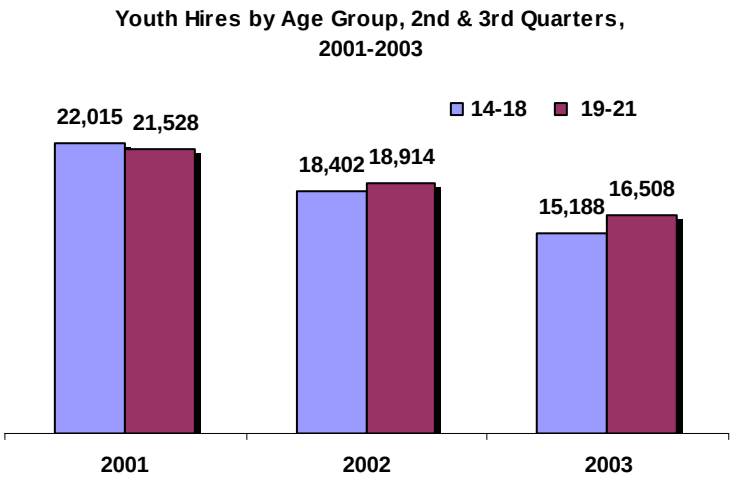
The lopsided nature of the hiring patterns of youth in the 2nd and 3rd quarters highlights the prevalence of hospitality in the local economy, and raises a challenge to examine outreach strategies with businesses that are hiring fewer youth.





2005 LED Data for 2nd and 3rd quarters, 2003

In breaking down youth hiring further by age, the same two sectors dominate hiring for both 14-18 year olds (55%) and 19-21 year olds (47%). For the latter group, however, the Administration & Support & Remediation & Waste Services sector is twice as prevalent as for 14-18 year olds. Overall, these three sectors combine for a similar total proportion of hires for each age group, although the distribution among those sectors varies greatly. Across the remaining sectors, older and younger youth show similar lines of distribution, with different placements of the sector titles. That younger youth rely more heavily on a single sector like Accommodation & Food Services is not surprising. However, the balance of the data seem to indicate a distribution of employment opportunity for 14-18 year olds that is comparable to the 19-21 year olds.



2005 LED Data for 2nd and 3rd quarters, 2001-2003

That the annual trend shows a steady decline in the total number of youth hired during the 2nd and 3rd quarters (27% total between 2001-03) supports the commonly held belief that youth employment opportunities are decreasing. The data seems to indicate that younger youth are particularly affected. Hiring for 14-18 year olds has decreased 31% during the period shown, while 19-21 year olds have experienced a 23% decrease over the same period. The younger age group also accounted for 51% of youth hires in 2001, but slipped to 48% in 2003.

This Market-responsive Education and Employment Training System (MEETS) profile was prepared by The Jacob France Institute, University of Baltimore, MEETS Project Manager Jeff Gabriel, jgabriel@ubalt.edu, 410-837-5276.

Healthcare Hiring in Silicon Valley

Question: Can MEETS help training providers in the North (Silicon) Valley Workforce Area be more responsive to urgent staffing needs voiced by deliverers of professional healthcare services?

Response: A customized MEETS Brief titled *Healthcare Employment Opportunity: North Valley (NOVA) Workforce Area, California*.

Answer: Local education and training providers now know that healthcare hiring has been concentrated in two healthcare sub-sectors and among women ages 35-54. This new information supports refined student/trainee recruitment strategies.

Conclusion: New revealed differences in sub-sector hiring/employment ratios and demographics support refined marketing and counseling practices by local healthcare training providers—a demand-responsive investment in skill development and renewal.

HEALTHCARE EMPLOYMENT OPPORTUNITY

North Valley (NOVA) Workforce Area, California

Palo Alto, Los Altos, Mountain View, Cupertino, Sunnyvale, Santa Clara & Milpitas

Market-responsive Education and Employment Training System

MEETS

Brief NOVAC.2005-1

June 2005

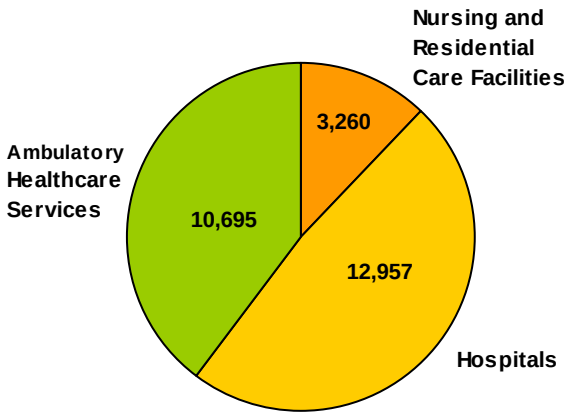
DID YOU KNOW?

- Seven percent of NOVA employment is classified as healthcare.
- Forty percent of this healthcare employment is in *Ambulatory Healthcare Services*.
- NOVA healthcare employers hired over 10,000 new employees in the most recent full year of data coverage, despite modest growth in the total number of healthcare employees.
- Three out of four new healthcare employees are women, and two-thirds are between the ages of 35 and 54 years old.

This Brief introduces you to the source of the highlights presented above. Inside, you will find other new insights about healthcare employment in the North Valley Workforce Area, California. You will also find suggested ways to use this new information for decision-making. A series of industry briefs like this are now available from MEETS.

U.S. Department of Labor
Employment & Training Administration

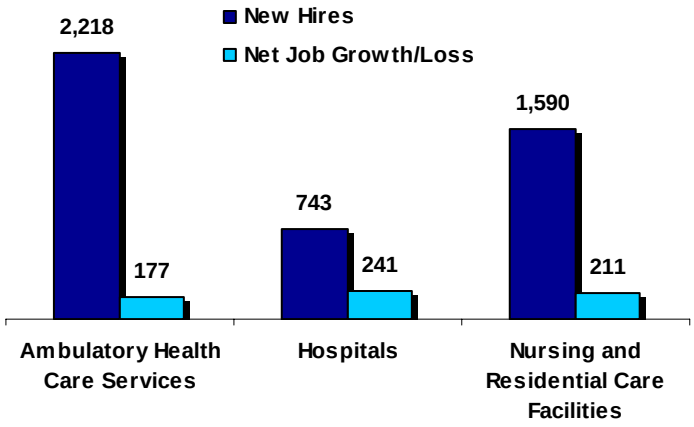
North Valley (NOVA) Workforce Area, California: Healthcare Employment Highlights



U.S Census Bureau Local Employment Dynamics (LED) Data for 3rd Quarter 2003

EMPLOYMENT AFFLIATIONS WITHIN HEALTHCARE

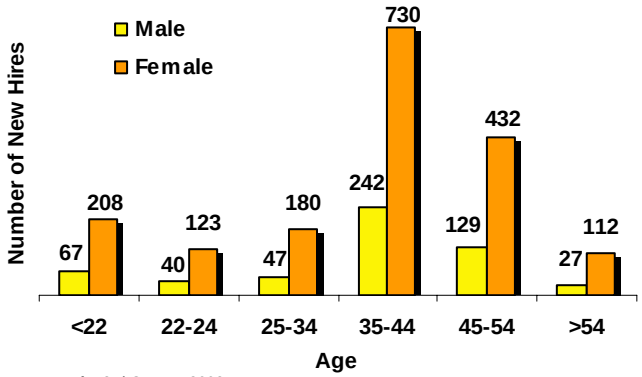
Forty-eight percent of NOVA healthcare employment is in Hospitals, with 40% distributed among physician, dentist, chiropractor, optometrist, and mental health professional offices, physical and occupational speech therapists, outpatient care facilities, home healthcare and medical diagnostic laboratories—all included in the Ambulatory Healthcare Services sub-sector. The remaining 12% are employed in Nursing & Residential Care Facilities.



LED Data for 4th Quarter 2002–3rd Quarter 2003

ANNUAL HIRES AND NET GROWTH/LOSS WITHIN HEALTHCARE

Fifty-four percent of NOVA healthcare new hires in the year shown were in Ambulatory Healthcare Services, well ahead of Hospitals (29%), the largest sub-sector by employment. Ambulatory Healthcare Services also claimed the highest ratio of new hires to employment net growth or loss, at 16:1, with the other two sub-sectors both showing a ratio of less than 7:1. This ratio was nearly 10:1 for the healthcare industry as a whole.



LED Data for 3rd Quarter 2003

QUARTERLY HIRES WITHIN HEALTHCARE BY GENDER AND AGE

Nearly two-thirds of new hires in NOVA's healthcare industry are between 35 and 54 years old. Across all age groups, women represent three out of four new hires in healthcare. Gender and age mix varies among the healthcare sub-sectors (not shown here), and even more so at the occupational level.

Occupational Title	May 2003 Employment	Average Hourly Wage
Registered Nurses	10,830	$36.96
Dental Hygienists	990	$45.20
EMTs & Paramedics	770	$16.26
Licensed Practical & Licensed Vocational Nurses	1,450	$22.60
Radiologic Technologists & Techs.	600	$28.24
Medical Assistants	2,530	$16.39
Receptionists & Info. Clerks	1,770	$14.78
All Other Health Profs. & Techs.	1,190	$24.21
Nursing Aides, Orderlies, & Attend.	3,850	$14.00

*Source for above Occupational Statistics: California Employment Development Department (EDD), Labor Market Information Division (LMID)

HEALTHCARE OCCUPATIONAL STATISTICS*

These metro area statistics highlight two facets of healthcare employment: 1) Some occupations in the healthcare industry are not found in this industry alone; such as Receptionists & Information Clerks, and 2) occupational earnings vary widely. The highlights chosen for this page are intended to guide

WHAT ARE HEALTHCARE JOBS?

The Census Bureau Local Employment Dynamics (LED) program QWI statistics presented in this brief use the North American Industry Classification System's (NAICS) coding of healthcare industry sub-sectors. Dependent upon the NAICS definitions, the healthcare industry includes establishments providing medical and related healthcare services delivered by trained professionals. Familiar healthcare industry group titles include Offices of Physicians, Outpatient Care Centers, General Medical and Surgical Hospitals, and Nursing Care Faculties.

Occupational information is not included in the LED data. Healthcare occupations fall into three groups—healthcare practitioner and technical occupations, healthcare support occupations (e.g., practitioner assistants, aides and equipment preparers), and other types of work performed in healthcare establishments (e.g., receptionist, cashier, security personnel and housekeeping staff.)

Data users should contact the the California Employment Development Department, Labor Market Information Division (LMID), for assistance in combining industry and occupational information to answer questions.

EXAMPLES OF HOW TO USE THE NEW LED QWI INFORMATION

- Think about why there is a 10 to 1 ratio of new hires to new jobs in healthcare. This will help to separate high turnover jobs from more stable opportunities. While high-turnover jobs may be appropriate destinations for some job seekers, most strategic decisions focus on stable opportunities with potential for continued learning and earnings growth.
- Narrow the scope of further inquires about promising occupations within the industry group by selecting four-digit NAICS industry group codes within healthcare.
- Think about the gender disparities within the healthcare industry groups and decide what your conclusion means for individual and program management decision-making.
- Align the age group breakout of new hires activity in healthcare with current or targeted program demographics and decide whether and what additional information is needed before making strategic management and counseling decisions.

USEFUL WEB LINKS

California **labor market information:** http://www.labormarketinfo.edd.ca.gov

BLS occupational employment statistics *Technical Notes*: http://www.bls.gov/oes/current/oes_tec.htm

BLS occupational employment projections methods: http://www.bls.gov/emp/home.htm

BLS National Industry-Occupation Employment Matrix information:
http://www.bls.gov/emp/nioem/empioan.htm

Standard occupational classification *user guide*: http://www.bls.gov/soc/socguide.htm

NAICS Codes and Titles: http://www.census.gov/epcd/naics02/

Sources of the data included in this Brief are:

- The California Employment Development Department (EDD), Labor Market Information Division (LMID) (http://www.labormarketinfo.edd.ca.gov)
- The Census Bureau Local Employment Dynamics (LED) program (http://lehd.dsd.census.gov)

EDD and LED have joined forces to deliver the new **Quarterly Workforce Indicators (QWI) series**. No new information is collected. No surveys are conducted. No new employer or employee burden is involved. No confidentiality laws or principles are compromised.

What is new here?

- Reliable local employment and new hire indicators by age group and gender.
- Updates with no more than a one-year lag in availability.
- More descriptive detail thanks to adoption of a new disclosure-proofing approach that continues to protect business and work anonymity.

Remaining challenges include:

- Awareness that *new* means *unfamiliar*. Some commitment to learning is needed to fully realize the potential from new indicators and decision-making uses.
- Understanding the value of the new indicators, even though they can not answer all questions.

Why now, and not before?

- Seven years, 1998-2004, were needed to successfully complete the organizational, legal, staffing and technical steps to transition from start-up though pilot testing to production and release.
- Continuing advances in data processing capacity and efficiency allow commitment to a production schedule that was impossible to imagine earlier.
- The workforce development community understands that sustained reinvention is urgent to become and remain viable in the open world economy.

The Jacob *france* Institute

University of Baltimore
Merrick School of Business
1420 N. Charles Street
Baltimore, Maryland 21201-5779
www.ubalt.edu/jfi
Telephone: (410) 837-4727
Fax: (410) 837-5814

This **Market-responsive Education and Employment Training System** (MEETS) Brief was prepared by **The Jacob France Institute**, University of Baltimore. MEETS funding is received through the Office of Policy Development and Research, Employment and Training Administration, U.S. Department of Labor. Partners in the design and production of this draft were the California Employment Development Department (EDD), Labor Market Information Division (LMID), and the North Valley Job Training Consortium (NOVA). The Jacob France Institute accepts sole responsibility for the accuracy of information, views expressed, conclusions reached and recommendations offered here. Comments are welcome and should be sent to the MEETS project manager, Jeff Gabriel at jgabriel@ubalt.edu

Industry-specific Retention of Hires in Pasco & Hernando Counties

Question: Can MEETS help the Pasco-Hernando Jobs & Education Partnership Regional Board, Inc. understand sub-sector and age group differences in retention of new employees within the local healthcare industry?

Response: A customized MEETS document titled *Industry Retention Profile, Pasco-Hernando, Florida*.

Answer: The profile shows important differences in sub-sector retention rates within the two-county healthcare industry. Some of these differences reflect the age/gender mix of sub-sector employment.

Conclusion: Healthcare is a growth industry in this region. Targeted attention to new hire retention challenges is one tactic to reduce the gap between employer needs and the pool of qualified candidates for employment. The new age/gender information combined with paired information about hiring and retention of hires is a major step forward in designing effective retention improvement strategies.

The Jacob France Institute
UNIVERSITY OF BALTIMORE

MEETS

INDUSTRY RETENTION PROFILE

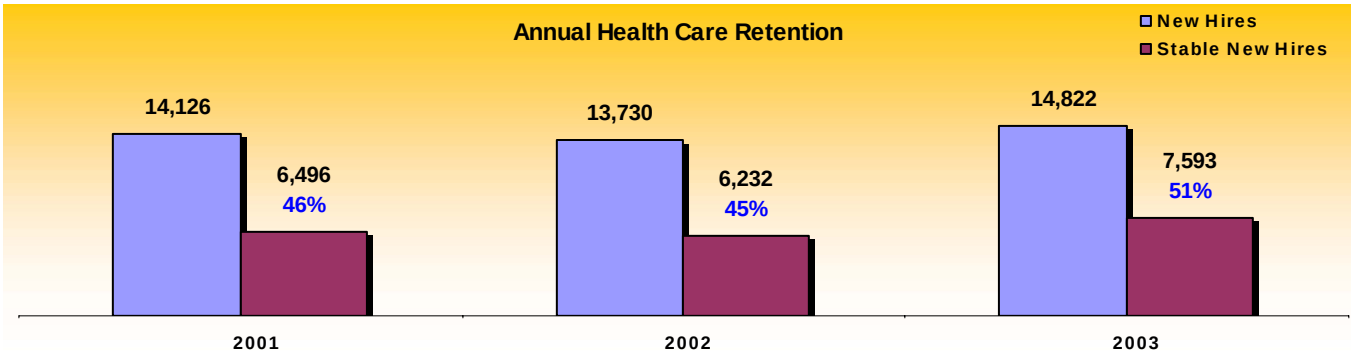
Pasco Hernando, Florida

November 2005

Pasco Hernando Jobs & Education Partnership Regional Board, Inc.

This profile uses Local Employment Dynamics (LED) data to examine worker retention in the health care industry in Pasco and Hernando Counties, Florida. Specifically, it compares the number of new hires in health care to the number that are continuing to work for their employer at least three months later. Comparisons include both annual and quarterly trends, as well as trends in employer type and worker age groups at the state and local level.

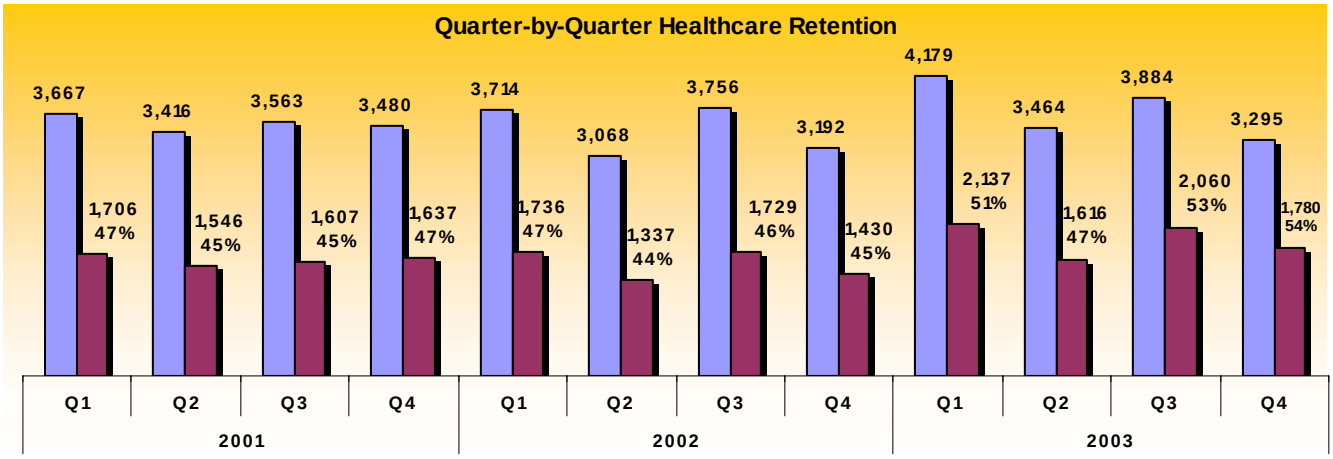
Figure 1



Source: U.S. Census Bureau Local Employment Dynamics (LED) program data from 2005.

Stable New Hires represent the number of *New Hires* that are employed at the same business in three consecutive quarters, indicating employment of at least a "full quarter" or a minimum of three months. Figure 1 shows both the numbers of these two groups and the percentage of New Hires that went on to achieve *Stable* status. Although this percentage was fairly constant in 2001 and 2002, the retention rate increased noticeably in 2003. Further, the increase occurred in the year that had the highest number of New Hires.

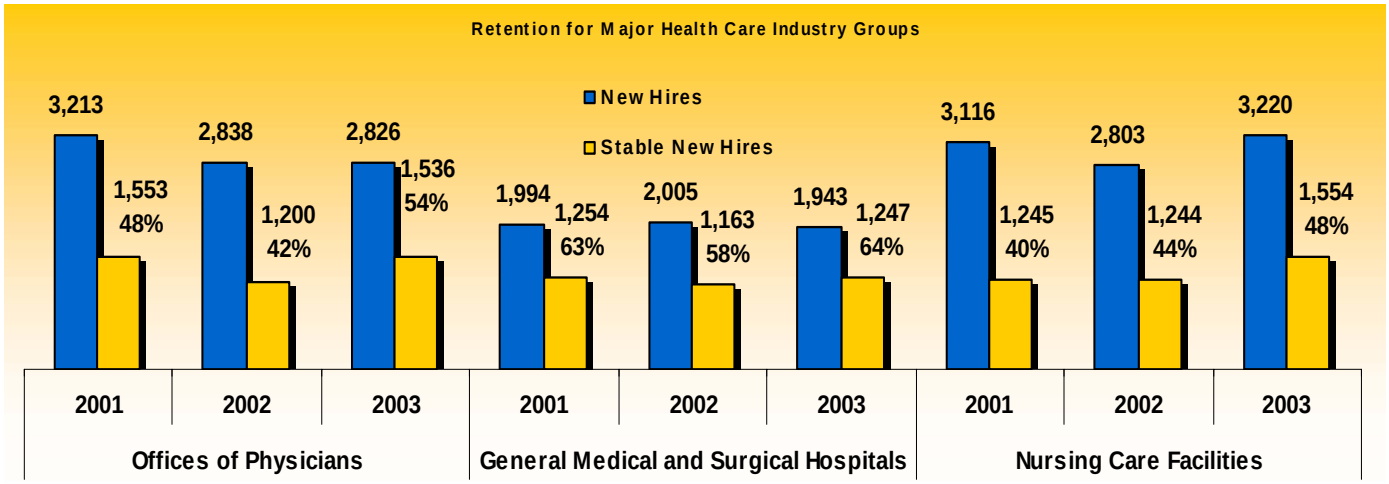
Figure 2



Source: LED program data, 2005.

In Figure 2, the comparison of New Hires to Stable New Hires is shown quarter to quarter. It reveals that the increased retention in 2003 was not the result of one particularly strong quarter, but rather a more persistent change in the quarterly trend. In 2001 and 2002, the highest retention rate for any single quarter was 47%. However, this same figure was the *lowest* rate for any quarter in 2003. Three of the four quarters of 2003 showed a retention rate of over fifty percent, including the two quarters that experienced the highest number of New Hires of all the quarters shown.

Figure 3



Source: LED program data, 2005.

Figure 3 shows retention trends for three major industry groups within health care. All three of the industry groups shown experienced their highest retention rates in 2003. For Offices of Physicians and General Medical Surgical Hospitals in 2003, their significant increases in retention from 2002 came in spite of sharp decreases in that year from 2001. However, Nursing Care Facilities showed a steady increase from year to year, having an increasing impact on the overall sector performance. Its highest percentage of Stable New Hires came in 2003, when it had the highest number of New Hires of any of the three industry groups in the three years shown. That number also elevated Nursing Care Facilities to being the largest health care industry group in terms of hiring (approximately 14% higher than Offices of Physicians).

Figure 4

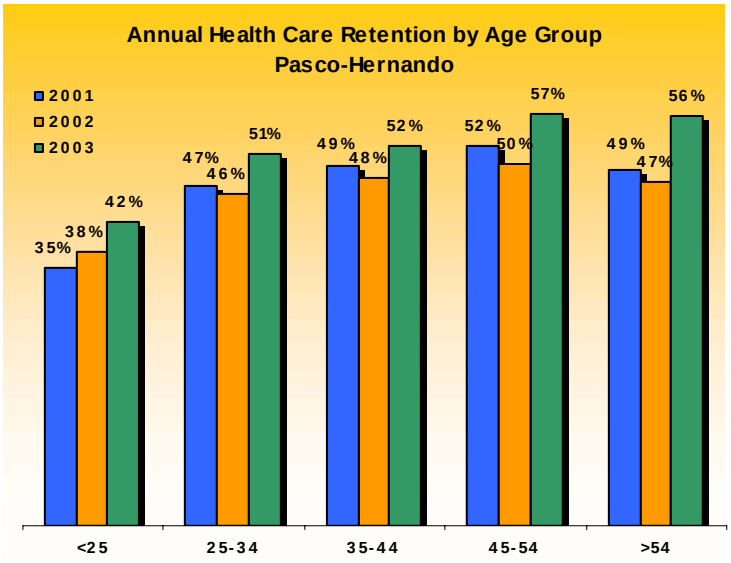
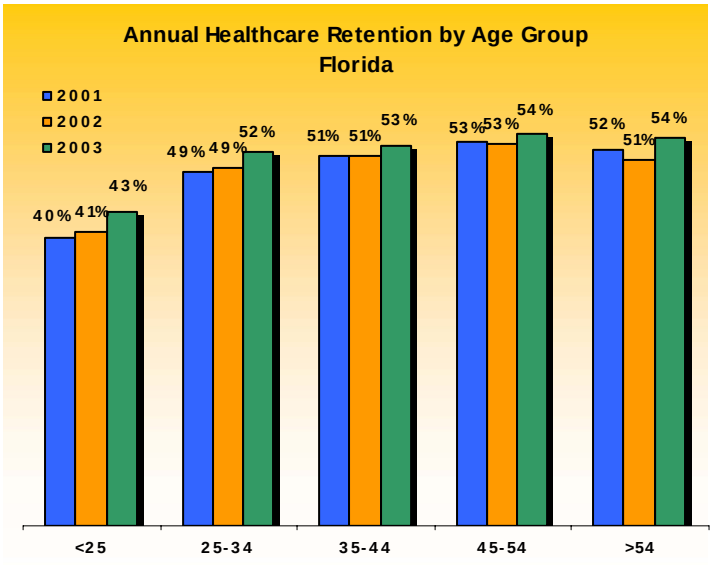


Figure 5



Source: LED program data, 2005.

Figure 4 illustrates how health care workers in all age groups in Pasco-Hernando experienced increased retention in 2003, with the highest increases occurring among workers 45 and over. Figure 5 shows the same data, but for the entire state of Florida. As with Pasco-Hernando, retention of new hires in health care seems to increase with the age group. However, in Florida, the retention rates for 2001 and 2002 are consistently higher across all age groups than in Pasco-Hernando. The rates for 2003, meanwhile, are much closer between the state and this local area across age groups. Florida did not experience the same degree of increased retention in 2003 as Pasco-Hernando, suggesting that the increase was a result of local factors, rather than a reflection of dynamics at the state level.

This Market-responsive Education and Employment Training System (MEETS) profile was prepared by The Jacob France Institute, University of Baltimore, MEETS Project Manager Jeff Gabriel, jgabriel@ubalt.edu, 410-837-5276.

The Continuing Importance of Manufacturing in Boone & Winnebago Counties

Question: Can MEETS help the Boone-Winnebago Workforce Investment Board understand whether and how manufacturing continues to offer attractive job opportunities?

Response: A customized MEETS document titled *Manufacturing Impact Profile: Boone-Winnebago, Illinois*.

Answer: Manufacturing ranks first in total annual payroll and employment, and second in both average monthly earnings of retained new hires and incumbent employees (many of whom are expected to retire soon).

Conclusion: This new information is a starting point to define local 'advanced' manufacturing sub-sectors. These sub-sectors reveal pockets of local hiring strength. Further drill-downs show the age/gender mix of recent hiring and separations in these sub-sectors. This gives education and training providers a basis for targeted recruitment, particularly among populations that are currently underrepresented in manufacturing employment.

The Jacob France Institute
UNIVERSITY OF BALTIMORE

MEETS

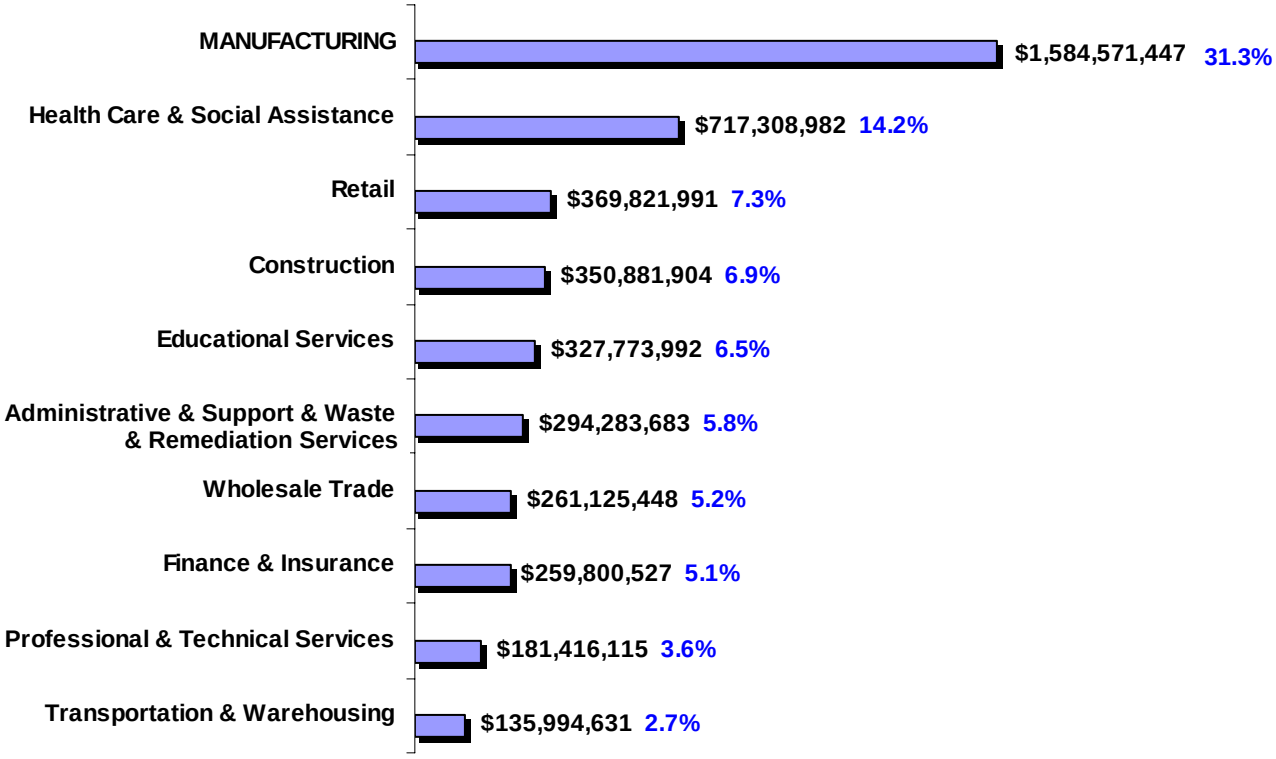
MANUFACTURING IMPACT PROFILE

Boone-Winnebago, Illinois

August 2005

This profile uses Local Employment Dynamics (LED) data to highlight the continued impact of Manufacturing in the local economy of Boone and Winnebago counties. Impact is defined here in terms of how Manufacturing compares to other major sectors by various measures. Specifically, Manufacturing will be ranked against other sectors by total payroll, overall employment, and the earnings of employees and new hires.

Top Sectors in Annual Total Payroll

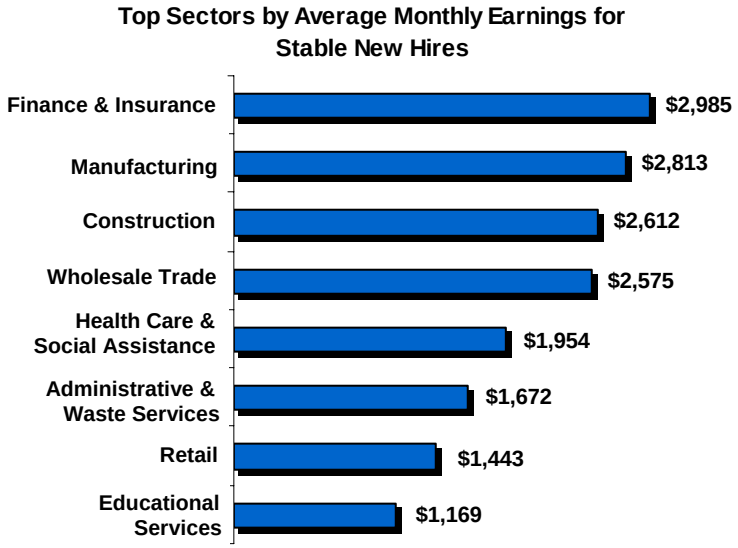


Percentages represent sector payroll total versus combined total for all sectors, including ten sectors not shown. The ten sectors shown represent 89% of the total payroll for all twenty sectors combined.
Source: U.S. Census Bureau Local Employment Dynamics (LED) Data for 2003.

Among the top ten sectors, the percentage of total payroll is spread widely, with the top two standing out. Health Care & Social Assistance claims nearly twice the payroll of the next highest sector, Retail. Manufacturing, in turn, proceeds to more than double that figure with a total payroll that accounts for nearly a third of the payroll for *all* sectors combined. The earnings, in addition to the number of workers, are significant here, as Manufacturing's share of total payroll is significantly higher than its share of total employment (see next graphic).

Percentages represent sector employment total versus combined total for all sectors.
LED Data for 2003. Figures represent quarterly averages.

In comparing employment figures among sectors, some similarities are revealed. The top ten sectors in each list are similar, with eight sectors appearing in both. The distribution of employment among these sectors tends to be more even than that of the more top-heavy payroll list. However, Manufacturing shows the highest proportion of employment, as well as payroll, with more than one in five of the total number of workers reported by LED data.



LED Data for 2003.

* *Stable Employees* refers to all employees who have been employed at a business in three consecutive quarters. *Stable New Hires* refers to newly hired workers who were employed at businesses in three consecutive quarters.

These graphs show the rankings, based on several average earnings measures, of sectors that represent at least 5% of payroll total for all sectors (see page 1). Manufacturing ranks second only to Finance & Insurance in both measures. As indicated by previous graphics, however, Manufacturing claims shares of payroll and employment that are over five times that of the top earnings sector, Finance & Insurance.

This Market-responsive Education and Employment Training System (MEETS) profile was prepared by The Jacob France Institute, University of Baltimore, MEETS Project Manager Jeff Gabriel, jgabriel@ubalt.edu, 410-837-5276.

The Jacob *france* Institute

University *of* Baltimore
1420 N. Charles Street
Baltimore, Maryland 21201-5749
www.ubalt.edu/jfi
(410) 837-4727 Fax: (410) 837-5814

MEETS Project Manager
Jeffrey Gabriel
(410)837-5276
jgabriel@ubalt.edu
www.ubalt.edu/jfi/meets