

Regional Workforce  
Partnership

# 2001 WORKFORCE

An Annual Report on Greater Philadelphia's Labor Market

## Responding to the Challenge



The Regional Workforce Partnership (RWP) is an initiative of The Reinvestment Fund (TRF), a \$100 million regional community development financial institution that uses capital and technical expertise to build wealth and create opportunity for low-wealth communities and low- and moderate-income individuals.

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**[www.trfund.com/RWP/publications.html](http://www.trfund.com/RWP/publications.html)**



**This report is dedicated to the memory and the inspiration of**

**The Reverend Dr. Leon H. Sullivan  
(1922-2001)**

**The “Lion of Zion”**

**who understood  
the powerful connection between  
workforce skills and economic opportunity**

The data and analysis in Sections II and III were prepared with the research and technical assistance of the Pennsylvania Economy League, Eastern Division (PEL)

The opinions, ideas and recommendations of this report are the responsibility of the Regional Workforce Partnership and The Reinvestment Fund

May 2001

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## WORKFORCE TRANSFORMATION

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If metropolitan areas do not invest in a knowledge infrastructure – world-class education, training and technology – companies will not have the skilled workers and cutting-edge tools necessary to create higher-paying jobs. If they do not solve pressing quality-of-life issues, they will not be attractive to knowledge workers. And if Industrial Age local governments do not transform themselves into Information Age governments, they will impede, rather than advance, growth. Simply put, metropolitan areas that meet the challenges of the New Economy will be the ones that succeed and see the incomes of their residents grow the most.<sup>1</sup>

Our theme this year is **Responding to the Challenge**, but it could have been **Workforce Transformation**. Just as a comprehensive neighborhood revitalization strategy may require a fresh analysis, regional workforce development needs a bold vision and a rejection of “business as usual” to stimulate investment and growth.

Although the multiple impediments to developing human resources are not limited to the city geography, the regional nature of our challenges does not alter the precariousness of the situation – either we address these problems or we become a second-class choice for businesses, families and the future workforce.

The major findings from *Workforce 2001* are not substantially different from a year ago, but through the Barometer of Future Regional Occupational Demand (BFROD) we have added important new details about the information technology and customer service occupations. We now know how crucial they are to economic development and individual opportunity.

In addition, there is an entirely new section on publicly funded workforce programs. This information attempts to describe the workforce development system. Unfortunately, it appears to be an undeveloped system, complemented by a disjointed collection of programs.

As a whole, the report paints the picture of a region rich with opportunity for transformation but without a coherent plan and the unified will to make it happen.

### MAJOR FINDINGS

- Greater Philadelphia has significant gaps in the demand and supply for labor in several key industries, and these shortages will worsen due to population projections, demographic trends, and a skills mismatch
- Customer service and information technology (IT) occupations are crucial in the new economy, providing good career opportunities and experiencing healthy growth rates over the next ten years
- Regional gaps in the supply of high-skilled information technology workers translate to opportunities for entry-level IT workers
- The federal and state governments are investing substantial resources in workforce development, but most programs remain driven by the categorical priorities of various constituencies and not by the needs of employers

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<sup>1</sup> From *The Metropolitan New Economy Index*, the Progressive Policy Institute, April 2001.

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- There is very limited information on the performance outcomes of the new Workforce Investment Act (WIA) system
- The commuting barriers between the city workforce and the suburban job market remain significant, but the Transportation Management Agencies (TMAs) and SEPTA are responding
- The challenges to effective welfare reform i.e., basic skills development, quality child care, transportation, low wages, few benefits, retention, and time limits, are still formidable
- Creative initiatives are being developed by private organizations, businesses, educational institutions and government to respond to the information technology needs of the region

## RECOMMENDATIONS

Although last year's report was favorably received it did not substantially influence the government's approach to addressing the needs of employers. On the other hand, the private sector responded by getting involved in many productive initiatives. But to meet our region's many challenges, *to transform the workforce*, the public sector needs to be a supportive and catalytic partner. To this end we recommend the following:

- 1) Business, education, government, and labor leaders should come together to unite the City, the suburban counties and the Commonwealth around a regional workforce transformation effort
- 2) Employers should invest more in upgrading their workforce and in supporting standards-driven workforce development initiatives with high performance outcomes
- 3) Filling existing job vacancies with skilled workers should be as important an economic development priority as attracting new jobs
- 4) A regional strategy should be developed to address the most serious future labor shortages expected in IT, health care, customer service, education and manufacturing

We dedicate this report to the Reverend Dr. Leon H. Sullivan because he understood the crucial importance of education and skill development. He also recognized that change requires leadership and partnership. Let us use his life's inspiration and his passion for reform to transform opportunity into success.

David W. Lacey  
 Chairman  
 Regional Workforce Partnership  
 Steering Committee

Fred Dedrick  
 President  
 Regional Workforce Partnership

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**Christopher Yurick**, Employment Manager, SPS Technologies

\* Member of Executive Committee

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## REGIONAL WORKFORCE PARTNERSHIP

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The following companies, organizations, educational institutions, community-based organizations and training providers have endorsed the strategic initiatives and/or are actively involved with implementing one of the initiatives:

ACTIV-eSolutions	Greater Philadelphia Urban Affairs Coalition	Philadelphia Workforce Investment Board
Access Technologies Group	Heidrick & Struggles	The Philadelphia Zoo
Allegheny Child Care Academy	High Tech High Charter School	PRWT ComServ Inc.
Appalachian Council	Home Care Associates	PECO Energy Company
Arbor, Inc.	ICT Group, Inc.	Pennsylvania Economy League
AssetTrade.com	Impact Services	PA Manufacturers' Association
AT&T	Independence Blue Cross	PNC Bank
Ballinger & Company	Institute for Scientific Information	Polaris Consulting
Bell Atlantic – PA Inc.	InterNetEx, Inc.	Port of Technology
Berean Institute	ITProfiler	Project HOME
Berwind Financial Group	JEVS	Prudential Insurance Company
BluePrint to End Homelessness	Lowe's	QVC Inc.
Bucks County Housing Group	Marriott	Reimbursement Technologies, Inc.
Campus Boulevard Corporation	Mayor's Commission on Info. Services	Resources for Human Development
CB Technologies	Mayor's Commission on Literacy	Right Management Consultants
Center for Literacy	Mellon PSFS	Ritz Carlton
CEO Resources, Inc.	Mentoring Partnerships, Inc.	SEPTA
Charming Shoppes	Metropolitan Career Center	Southco, Inc.
Chester County Intermediate Unit	Metropolitan Christian Council	Southern Homes
Child Care Matters	Micro EDS	SPS Technologies
CISCO Network Academy	Mid-Atlantic Employers' Assoc.	Sovereign Bank
CITE Business School	Montgomery County Community College	SCT Corporation
Community College of Philadelphia	Morgan Lewis & Bockius	Technitrol, Inc.
CLS/Health & Human Services Unit	New Age Industries	Technology Council Foundation for Future Employees
Community Women's Education Project	North Montco Technical Career Center	Temple University
CompuBase, Inc.	Nueva Esperanza	The Partnership TMA
Congreso de Latinos Unidos	OpenWorlds, Inc.	Thomas Jefferson University
CoreTech Consulting Group	The Partnership TMA	TL Ventures
Creative Staffing Solutions	PASS, Inc.	Transitional Work Corporation
CTN Solutions	PAPSA	University of Pennsylvania
Cybertech International	Pennjerdel Employee Benefits Association	UPMC Health System
Dechert Price & Rhoads	People's Emergency Center	Unisys
DCCSOS	PhAME	Universal Homes
Delaware County Community College	Philadelphia Academies, Inc.	United Way of SEPA
DoubleStar, Inc.	Philadelphia CDC	US Airways
Eastern Technology Council	Philadelphia Health Management Corporation	Verizon
Educational Data Services	Philadelphia OIC, Inc.	Wawa Inc.
ePhiladelphia	Philadelphia Gas Works	West Chester University
First Union National Bank	Philadelphia University	World Communications Charter
Greater Philadelphia Chamber of Commerce	Philadelphia Workforce Development Corporation	Women's Association for Women's Alternatives
Greater Philadelphia Federation of Settlements		WCRP
Greater Philadelphia First		WHYY

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## INTRODUCTION

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In May 2000, the **Regional Workforce Partnership** (RWP), in collaboration with the **Pennsylvania Economy League** (PEL, [www.peleast.org](http://www.peleast.org)), published an analysis of Greater Philadelphia's supply and demand for labor, entitled: *Workforce 2000: An Annual Report on Greater Philadelphia's Labor Market*. In a companion piece called *Workforce 2000: Regional Challenges and Strategic Initiatives*, RWP outlined a set of regional workforce challenges and offered a series of action-oriented interventions to address these challenges.

This year's report, *Workforce 2001*, presents both analysis (**Section I**) and data (**Sections II and III**) in one volume, with a particular emphasis on two important occupational clusters: customer service and information technology (IT). To better understand the character and importance of these two occupations, RWP and the Pennsylvania Economy League developed an analytical process called the **Barometer of Future Regional Occupational Demand (BFROD)**. Section II describes the major findings of the BFROD process.

Section I analyzes five major regional workforce challenges in the context of the labor market data from Section III and the BFROD findings in Section II. In particular it describes two initiatives RWP launched to respond to the challenges: the **Customer Service Training Collaborative (CSTC)** and the **Urban Information Technology Alliance**.

However, RWP was not alone in responding to these challenges. Many other organizations, both public and private, both government and non-profit, also took action to address important workforce issues. This report includes some examples of these responses. Space limitations prevented including more.

Finally, this year's report features a broad overview of the tax-supported workforce development system operated by the federal, state and local governments. It is included because it is a system rich in resources with the potential to both leverage additional private investments in human capital and the capacity to respond where a public subsidy may be required.



# SECTION I: CHALLENGE AND RESPONSE

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- How can the region significantly increase the supply of skilled workers to its strategic industries and to the growing sectors of the regional economy?
- How can the region increase the overall supply of labor with technical and work place success skills?
- How do we insure our taxes are being invested wisely to address the workforce development needs of the Philadelphia region?
- How can the region efficiently overcome the geographic mismatch between urban supply and suburban demand?
- How do we provide the highest quality early childhood education, accessible and affordable, to workers at different income levels?



## **THE CHALLENGE: How can the region significantly increase the supply of skilled workers to its strategic industries and to the growing sectors of the regional economy?**

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### **THE FACTS**

“Information technology and customer service are major factors underlying company competitiveness and industry growth in today’s economy” *Workforce 2001*, p. 23.

- Regional economic growth is constrained because of strong employer demand and a lack of supply in key occupational categories such as information technology, nursing, customer service workers and teaching
- Almost all entry level jobs now require both technical and work place success skills
- Most customer service jobs require some information technology skills and almost all jobs require customer service skills
- Demographic trends, a lack of immigration and continued skill shortages will eventually create very severe supply constraints in many important occupations

### **THE IMPORTANCE OF INFORMATION TECHNOLOGY**

A key characteristic of the new economy is the pervasive influence of information technology. According to the US Labor Department, 65% of all jobs in America use information technology. Almost every business, non-profit or government organization has invested to one degree or another in computers, software, networks, email and access to the internet. Microprocessors are ubiquitous in cars, cell phones, machine tools, appliances and toys. By the year 2010, more than 300 million people will have access to the internet. Despite the current stock market slump, the market penetration of information technology (IT) is substantial and permanent.

This explosion in the use of information technology has led to a shortage of skilled workers. In an April 2001 study, *When Can You Start? Building Better Information Technology Skills and Careers*, the Information Technology Association of America (ITAA) estimated U.S. IT jobs would grow in 2001 by 900,000 and that 400,000 of these jobs would go unfilled.

To compete for and retain companies with strong IT needs the Philadelphia region must be able to provide the skilled workforce needed by these employers. Moreover, it is important to acknowledge that most information technology jobs are not with core IT companies. According to the ITAA approximately 90% of the 10.2 million information technology jobs in the U.S. are with companies whose primary product or service is not IT.

### **THE RESPONSE**

#### **The Urban Information Technology Alliance (UrITA)**

Last year RWP and its parent organization, **The Reinvestment Fund (TRF)**, organized the Urban Information Technology Alliance (UrITA) to focus on the gap between the supply and demand for certain clusters of IT jobs (Figure 1). Since other organizations were working to increase the supply of college graduates entering IT, UrITA decided to concentrate on identifying IT career opportunities for community college and high school graduates.

With assistance from **Bob Keith**, the Managing Partner of TL Ventures and a member of the TRF Board, RWP successfully kicked off the Alliance in December 2000 with thirty business leaders who came together to support the initiative. Participants included representatives from Unisys, SCT, TL Ventures, Safeguard Scientifics, SEPTA, iMedium,

Figure 1: The Urban Information Technology Alliance (UrITA)

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**Lucy Baney**, CEO, Access Technologies  
**Thomas E. Bonney**, Chief Financial Officer, Akcelerant Holdings, Inc  
**Jim Burke**, Account Manager, Cisco Systems, Inc.  
**Donald Campbell**, CIO, United Way of SEPA  
**Karen Borda**, Chief Operating Officer, CB Technologies

**Ike Carpenter**, CEO, MicroEDS  
**John Carrow**, CIO, Unisys  
**John Cooper**, CEO, iMedium  
**Edward R. D'Alessio, Ph.D.** President, Technology Council Foundation for Future Employees  
**Linda DeJure**, Co-Head Private Capital, Berwind Financial Group

**Michael F. Eleey**, Senior Vice President, Communications Equity Assoc.  
**E. Steven Emanuel**, Chief Information Officer, AMTRAK  
**Jill Felix**, CEO, University City Science Center  
**Bruce Flamm**, Vice President & COO, WHYYY  
**Steve Goodman**, Partner, Morgan Lewis

**Harry Griendling**, President, DoubleStar  
**David Hendricks**, Director, Community Development, Verizon  
**Ryan Kaplan**, Chief Operating Officer, Odyssey Systems Corporation  
**Sam Katz**, CEO, Greater Philadelphia First  
**Bob Keith**, Managing Partner, TL Ventures

**Robert Kenig**, Senior Manager, Institute for Scientific Information  
**Joe Killackey**, Managing Director, DVCRF Ventures  
**Susan Knoble**, General Manager, Workforce Development, SCT Corporation  
**Kenneth L. Kring**, Partner in Charge, Heidrick & Struggles  
**David W. Lacey**, Vice President, Human Resources, Technitrol

**Rob McCord**, CEO, Eastern Technology Council  
**Ralph Menzano**, Chief Information Officer, SEPTA  
**Jim Minihan**, Senior Administrator, SCT Academy  
**David Moore**, CEO, CoreTech Consulting Group  
**Drew Morrisroe**, President, CTN Solutions

**Steve Mullin**, Senior VP & Principal, EConsult  
**Richard Nelsen**, CEO, OpenWorlds Inc.  
**David Notaware**, Director, Port of Technology  
**Jeremy Nowak**, President & CEO, The Reinvestment Fund  
**Michael Palladino**, Executive Director Networking, University of Pennsylvania

**Charlie Pizzi**, President and CEO, GP Chamber of Commerce  
**Linda Resnick**, President, CEO Resources  
**Tim Reese**, Former CEO, The Standing Stone Group  
**Gary A. Smith**, Partner, Morgan Lewis  
**Kirby Smith**, VP & Chief Information Officer, PRWT Services, Inc.

**Bill Stallkamp**, Fund Advisor, TL Ventures  
**Pam Strisofsky**, VP Finance and Administration, TL Ventures  
**David Thornburgh**, Executive Director, Pennsylvania Economy League  
**Bob Yayac**, VP Strategy, AssetTrade.com

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CoreTech, CB Technologies, Technitrol, Odyssey Systems, Morgan Lewis, CTN Solutions, AssetTrade.com, MicroEDS and DoubleStar. In addition to TRF, other sponsors in attendance were the Greater Philadelphia Chamber of Commerce, Greater Philadelphia First (GPF), the Eastern Technology Council and the Pennsylvania Economy League.

UrITA intends to add value to the supply and demand for the IT workforce by clearly defining entry-level job opportunities and the skills required to obtain these positions. The Alliance plans to significantly expand internship opportunities and raise the level of support for signature projects. The latter would be those programs incorporating a strong understanding of the IT needs of employers and using a curriculum that develops work place success skills and an understanding of business.

To move the Alliance ahead three committees were formed: Jobs & Skills, Internships, and Education and Training. The Jobs & Skills Committee, chaired by **Karen Borda**, the COO of CB Technologies, began by defining the universe of job possibilities at core and non-core IT companies for non-BA degree workers. In addition, the committee is preparing a draft of specific competencies required by these jobs as well as how to demonstrate proficiency in these skills. The Committee also intends to design and implement a communications plan to encourage students, incumbent workers and out-of-school youth to consider IT careers.

The Internship Committee, chaired by **Ralph Menzano**, the CIO of SEPTA, met throughout the winter and has already established standards for quality IT internships. The Committee also intends to develop a public education campaign that will increase the number of quality IT internships to 100 by next spring. The individuals participating in the organization and development of the Urban Information Technology Alliance (UrITA) are listed in Figure 1.

## OTHER RESPONSES

**Greater Philadelphia First (GPF)** has organized the Business/Academic Partnership for the Information Technology Workforce. The Partnership is a consortium of corporations formed to develop solutions to the region's growing need for skilled IT professionals. With four selected universities – **LaSalle, Temple, Villanova and West Chester** – the IT Partnership is pursuing curricular and instructional changes to achieve better-prepared and more highly skilled graduates. The Partnership is working with these universities to:

- Increase faculty and student awareness of the knowledge and skill requirements of knowledge-based companies
- Develop metrics and plans to achieve the desired outcomes
- Commit both sets of partners to joint implementation through a formalized agreement
- Implement the plans and evaluate the results.

**Philadelphia Academies Inc.** developed the Philadelphia School District's first IT Academy at Abraham Lincoln High School. Over 100 freshman and sophomores are taking an intensive curriculum introducing them to networking, web design and multi-media. This Academy has a first-rate governing board chaired by **Kirby Smith of PRWT** and includes representatives from SAP America, Sunoco, SCT, CTN Solutions, CEO Resources, and Trident Consulting. The Academies now operate in 12 different career areas at 19 different Philadelphia high schools including over 6,000 students.

The **School District of Philadelphia** supports 16 Cisco Academies with over 700 students in Philadelphia high schools. The Education for Employment division is working with Cisco, area companies and government leaders to find internship opportunities for its students.

The **Philadelphia High Tech High Charter School** will open in September 2001 for 100 students. This will be the first replication of the highly regarded **High Tech High in San Diego**.

The **Information Technology Action Group (ITAG) of Chester County** is an association of IT employers and educators working to increase the number of students considering a career in the information technology industry. They sponsor “Techies Day” and GETT, Girls Exploring Tomorrow’s Technology, an evening of activities for girls, teachers and counselors to help young women better understand IT career possibilities.

The **Metropolitan Career Center (MCC)** operates the Computer Technology Institute and offers training courses leading to good paying IT entry-level positions. Students can choose a curriculum of study leading to an A+ certification or a software track of courses aimed at placing graduates in help desk and entry level programming jobs. Over the past five years MCC has successfully placed 93% of its 179 graduates at wages averaging \$11.85 per hour.

Philadelphia City Council is considering setting aside \$2.5 million to fund Mayor Street’s proposed **New Economy Development Alliance**, to be chaired by **Judith Rodin**, President of the University of Pennsylvania.

## EMERGING CHALLENGES

### NURSING<sup>2</sup>

- ◆ Studies predict that by 2005 there will be a nationwide shortage of 500,000 RNs
- ◆ Enrollments in undergraduate nursing programs have declined by 17% since 1995
- ◆ 40% of all RNs will begin retiring in 10 years
- ◆ When a Montgomery County home for the elderly participated in an April 2001 job fair, they indicated there were 184 nursing positions available

### DIRECT-CARE HEALTH WORKERS<sup>3</sup>

- ◆ Eight out of every ten hours of paid care received by a long-term care client is provided by a “direct-care” paraprofessional i.e., a home health aide, a personal care attendant, or a certified nurse’s aide
- ◆ Forty states now report critical shortages of paraprofessionals and turnover rates between 40 and 100 percent annually
- ◆ 400 elderly Greater Philadelphia residents are on a waiting list to receive services from an in-home care aide<sup>4</sup>

### TEACHING<sup>5</sup>

- ◆ The School District of Philadelphia faces up to 800 teaching vacancies this fall
- ◆ Approximately 24% of elementary teachers and approximately 26% of secondary school teachers could be expected to retire in the next 12 to 15 years
- ◆ 22% of newly hired teachers typically leave the classroom within three years and 50% of newly hired teachers in urban areas exit in the same period
- ◆ In high-poverty urban and rural districts alone, more than 700,000 new teachers will be needed in the next 10 years.

<sup>2</sup> *Philadelphia Inquirer*, April 29, 2001, p. G1. Other sources include: the American Hospital Association and the American Organization of Nurse Executives.

<sup>3</sup> Dawson, Steven *Direct-Care Health Workers: The Unnecessary Crisis in Long Term Care*. National Clearinghouse on the Direct Care Workforce. May 2000.

<sup>4</sup> *Philadelphia Inquirer*, April 30, 2001, p. B1.

<sup>5</sup> Sources: National Center for Education Statistics, the *Baby Boom Echo Report*, 1998, Gerald, D. and Hussar, W., *Projections of Education Statistics to 2006*. Washington, DC: National Center for Education Statistics, U.S. Department of Education. NCES 96-661

## THE CHALLENGE: How can the region increase the overall supply of labor with critical, technical and work place success skills?

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### THE FACTS

“The region’s decline in the working-age population was mostly young people – between 1990 and 1999 the 16-35 year old population declined by 254,000 people. ...In 1990, the region’s 16-35 year old population was almost 1.9 million; by 1999, eight years later, this age cohort (now 24-43 years old) had a net decline of 68,000 people” *Workforce 2001*, p. 37.

- Pennsylvania’s population is static; the Philadelphia region grows more slowly than comparable areas, and the number of city residents continues to decline
- The City of Philadelphia has a relatively low workforce participation rate and demographic trends, over the next two decades, project significant declines in the number of workers in the prime working ages
- The region continues to educate more college students than it retains and the region is not attracting significant numbers of immigrants.

One of our region’s most difficult problems is the extent to which the supply of the region’s prime working-age population is declining. This situation is compounded by the concentration of poverty in the City of Philadelphia which effectively removes tens of thousands of individuals from the workforce due to an inadequate supply of quality child care, transportation barriers, chronic drug or alcohol abuse, and a criminal background.

However, the most important barrier remains lack of skills. For the Philadelphia region to succeed, every working age individual must be participating in the workforce to their maximum ability. At least for the present, the key issue is not the availability of jobs; it is the availability of skilled workers.

### The Importance of Customer Service Skills

Customer service skills, like information technology skills, are required in many of our region’s most important industries: hospitality, health care, business and financial services. But they are also essential in tens of thousands of other jobs in retail, banking, call centers, transportation and manufacturing.

Customer service positions are now primarily jobs that require specialized skills. As the BFROD analysis makes abundantly clear, most companies will not hire just anyone to be their front line contact with their customers. They want skilled problem solvers with great “people” skills. Customer service jobs may still be entry-level jobs, but they are by no means jobs for individuals without skills. For the Philadelphia region it is crucial that we respond to a growing need for customer service workers. The BFROD analysis projects growth rates of 2,200 jobs every year. This is a tremendous challenge and a great opportunity.

### THE RESPONSE

#### Customer Service Training Collaborative (CSTC)

The Regional Workforce Partnership (RWP) and The Reinvestment Fund (TRF) responded to this challenge by organizing an initiative to develop hundreds of new workers trained to the critical standards of customer service performance as defined by regional employers. The strategy was to implement a model skills-based training program and then scale it up through replication. In a few years, hundreds of newly skilled workers in the regional labor force would have a widespread economic development impact.

Working with the **National Retail Foundation** (NRF), RWP developed a local version of an NRF employee survey and asked employers to allow

customer service workers to participate. Based on these responses a technical report was prepared identifying the most important and most frequently used skill sets utilized by the best customer service workers. Using this report, RWP's other partner in the CSTC, the **Jewish Employment and Vocational Services (JEVS)** developed a six-week training curriculum incorporating ideas, materials and exercises used by regional employers. RWP then contracted with JEVS to develop a training program to provide and re-enforce these skills in its students.

With financial support from the **Annie E. Casey Foundation** and the **Philadelphia Workforce Development Corporation (WIA)** funding) the Customer Service Training Collaborative opened its doors to students in April 2001. The first six months of operation will be a "pilot program" to test the CSTC curriculum. Once evaluated, the CSTC will make the necessary adjustments to the program and the curriculum prior to doubling its size to 150 students. In the near future, RWP and TRF, as well as its partners, JEVS and NRF, will be looking to replicate CSTC to respond to the specialized needs of regional employers.

An important component of the CSTC is the **Employer Leadership Council**. This group of human resources professionals offers advice and support to the CSTC as well as providing information about their companies and opportunities for employment. At the time of this report the Council included the following representatives:

**C. Ronald Attaway**, Manager of Staffing & Support Services, PECO Energy Company

**Ken Baker**, Chief Executive Officer, New Age Industries

**Robert Breese**, President, Mid-Atlantic Employers' Association

**Vanessa Bryant**, Assistant Human Resources Director, Ritz Carlton

**Jerald Collins**, Senior Vice President, First Union Bank

**Robert Croner**, Senior Director of Human Resources, Independence Blue Cross

**Meg Daily**, Director of Personnel, Marriott Hotel

**Donna Dean**, Vice President, Sovereign Bank

**Marianne Edinger**, former Director, Quality Assurance, ICT Group

**Lori Feldman**, Vice President, Human Resources, Reimbursement Technologies

**Brett Felmey**, Senior Recruiting Consultant, USAirways

**Bob Gosser**, Program Manager, Greater Philadelphia Hotel Association

**Byron Hunter**, Vice President, Human Resources, Mellon Bank

**Nikki Kurland**, Manager, Human Resources, Charming Shoppes

**Lorriane McKenzie**, Employee Development Specialist, SEPTA

**Linda C. Mitchell**, Manager, Employee Selection and Placement, Thomas Jefferson University

**Rob Nicol**, Senior Director, Guest Relations & Employee Training, The Philadelphia Zoo

**Marlynn Orlando**, Executive Director, Pennjerdel Employee Benefits and Compensation Association (PEBA)

**Peggy A. Shane**, Human Resources Manager, Independence Blue Cross

**Bernie K. Smith**, Regional Human Resources Director, Lowe's

**Joyce Staepel**, Training and Development Manager, Wawa Inc.

**Fred Test**, Director of Human Resources, Prudential Life Insurance

## **THE CHALLENGE: How do we insure our taxes are being invested wisely to address the workforce development needs of the Philadelphia region?**

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### **THE FACTS**

- The federal government currently (FY01) invests approximately \$44 billion into workforce development programs.
- The Commonwealth of Pennsylvania budgeted \$1.2 billion in FY01 for workforce development programs spread out over five departments and more than 40 programs.
- The Philadelphia Workforce Development Corporation (PWDC) is the City of Philadelphia's fiscal agent for Workforce Investment Act (WIA) funding, the Welfare-to-Work program, and other workforce and welfare programs. In FY01, its budget was approximately \$80 million.
- The Philadelphia Workforce Investment Board (WIB) received \$22 million for WIA related activities in FY01.

### **THE RESPONSE**

#### **The Federal Government System**

When President Bill Clinton signed the **Workforce Investment Act** (WIA) in October 1998 he approved the reorganization of a significant portion of federal government support for workforce development. This was the fourth time since 1960 that the federal government tried to design a system to improve worker skills. WIA is the successor to JTPA (Job Training Partnership Act) which succeeded CETA (Comprehensive Employment and Training Act) which followed MDTA (Manpower Development & Training Act).

Although WIA has many similarities to past attempts at workforce system reform the overriding theme of this new legislation was employer involvement and customer choice. WIA mandated a

state and local system of Workforce Investment Boards (WIBS) with broad employer representation and oversight. Much of the country would be included in a Local Workforce Investment Area covered by one of these local boards and, it was assumed, employers would insure that there was a strategy in place for wisely investing WIA dollars.

However, WIA covers only a portion of federal funding for workforce development. Financial support for workforce development is spread over many departments including the Departments of Labor, Education, Housing and Urban Development, Health and Human Services, and Defense. See Figure 2 for a listing of many of these federal workforce programs.

#### *TANF*

A significant portion of Federal dollars for workforce training and job readiness for low income people comes to the states under the welfare reform legislation of 1996 – the Personal Responsibility and Work Opportunities Reconciliation Act – better known as the **TANF** legislation. Because of the significant decline in the welfare rolls in many states, including Pennsylvania, “surplus” TANF dollars are being used for a wide variety of work readiness, work opportunities, and job training programs. (Figure 3) Philadelphia also received approximately \$50 million over two years under the US DOL program called Welfare-to-Work (WtW) program. This program will not be continued by the federal government in FY02.

#### *H-1B Visa Skill Training Program*

This program relies on fees paid by companies who hire immigrants requiring an H-1B visa status. Congress recently increased the fee from \$500 to \$1,000 and increased the quota on these visas to 195,000 annually.

Figure 2: Summary of Major Federal Employment and Training Programs

In FY01, the federal government allocated approximately \$44 billion for workforce Development programs. For FY02, President George W. Bush proposed a budget that would increase the amount to over \$45 billion.

<i>Federal Workforce Development Programs Funding (in billions)</i>	<i>FY01 Enacted</i>	<i>FY02 Proposed</i>
WIA State Formula Grants	\$3.3	3.0
WIA Federal Programs	2.3	2.1
Senior Community Service Jobs	0.4	0.4
Unemployment Compensation	2.3	2.4
Employment Service/One Stop	0.8	0.8
Trade Act Adjustment Aid	0.4	0.4
Veterans Employment and Training	0.2	0.2
Vocational Education	1.2	1.2
Adult Education and Literacy	0.6	0.6
Vocational Rehab State Grants	2.4	2.5
Other Workforce Investments*	30.1	30.6
<i>*These include:</i>		
<i>Pell Grants to Students</i>	<i>8.8</i>	<i>9.8</i>
<i>TANF Welfare Reform State Grants</i>	<i>16.7</i>	<i>16.7</i>
<i>Child Care</i>	<i>4.6</i>	<i>4.9</i>

Source: National Governor's Association (NGA), April 20, 2001.

### The Commonwealth of Pennsylvania's Workforce Development System

Using a combination of state and federal funding streams the Commonwealth of Pennsylvania dedicated approximately \$1.2 billion dollars to workforce development in fiscal year 2000-01. This was a 47% increase over FY1999-00. 68% of these funds came from the federal government and 32% from the Commonwealth.

This workforce funding was spread over six agencies: Public Welfare, Labor and Industry, Education, Community and Economic Development, Corrections and Aging. About 50% of these funds, \$610 million, are the responsibility of the Department of Public Welfare (DPW). Labor and Industry (L&I) controls \$328 million and Education (DOE) handles \$197 million.

However, the totals for DPW are a little misleading. Of the \$610 million, more than \$442 million is allocated to one program, Child Care Works, which includes \$365 million from the Federal government.

In an effort to provide greater input from the private sector and increase coordination among the departments that run these programs, Governor Tom Ridge created the **Pennsylvania Human Resource Investment Council (HRIC)** in 1997. After the passage of the federal Workforce Investment Act, the HRIC became the **Team Pennsylvania Workforce Investment Board**. A listing of the members can be found at [www.paworkforce.state.pa.us](http://www.paworkforce.state.pa.us)

In this section we list the major programs in each department (Figure 3 - Figure 6).

Figure 3: Department of Public Welfare (DPW)

<i>Major Programs (in millions of dollars)</i>	<i>State Funds</i>	<i>Federal Funds</i>	<i>Total (FY01)</i>
Child Care Works	\$77.9	\$365.0	\$442.9
Education Leading to Employment	6.1	4.1	10.3
Joint Jobs Initiative	25.3	13.1	38.4
Paid Work Experience	0.0	15.9	15.9
RESET	15.3	16.3	31.6
Supported Work	6.5	3.0	9.5
Welfare-to-Work	7.3	34.1	41.4

Figure 4: Department of Labor and Industry (L&I)

<i>Major Programs (in millions of dollars)</i>	<i>State Funds</i>	<i>Federal Funds</i>	<i>Total (FY01)</i>
Employment Service	\$0.0	\$30.4	\$30.4
PennSERVE	0.0	14.0	14.0
Trade Adjustment Assistance	6.6	6.0	12.6
Vocational Rehabilitation	35.1	123.5	158.6
Workforce Investment Act	0.0	106.7	106.7

Figure 5: Department of Education (DOE)

<i>Major Programs (in millions of dollars)</i>	<i>State Funds</i>	<i>Federal Funds</i>	<i>Total (FY01)</i>
Adult Basic and Literacy Education (ABLE)	\$9.7	\$22.0	\$31.7
Community College Variable Stipends	26.8	0.0	26.8
New Technology Scholarship Program	16.5	0.0	16.5
Secondary Vocational Education	40.3	0.0	40.3
State Family Literacy Program	8.3	0.0	8.3
Vocational Education Program Improvement	0.0	36.4	36.4
Tech Prep	0.0	5.1	5.1
Vocational Education Equipment Grants	10.0	0.0	10.0

Figure 6: Department of Community and Economic Development (DCED)

<i>Major Programs (in millions of dollars)</i>	<i>State Funds</i>	<i>Federal Funds</i>	<i>Total (FY01)</i>
Community Services Block Grant	\$0.0	\$25.5	\$25.5
Customized Job Training	32.1	0.0	32.1
Neighborhood Assistance Program	18.0	0.0	18.0

Source: *Workforce Development: Major Education and Job Training Programs in the Commonwealth of Pennsylvania* Update for Fiscal Year 2000-2001. November 2000, Department of Labor and Industry, Center for Workforce Information and Analysis.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, often referred to as TANF (Temporary Assistance to Needy Families), revolutionized welfare funding programs. Since TANF strongly encouraged welfare recipients to find work immediately and required them to be working after 24 months on welfare many DPW programs are directed at getting people unsubsidized employment. Because of the rapid decline of Pennsylvania's welfare rolls and an unwillingness to invest heavily in job training programs, DPW has generated a large surplus of funds. In the Governor's FY02 budget proposal

DPW allocates much of this funding to a variety of new programs including a \$60 million low-income housing initiative and a \$750,000 pilot program aimed at helping welfare recipients pay for college tuition (Figure 3).

In Pennsylvania, the Department of Labor and Industry is responsible for the administration and operation of the WIA funding (Figure 4). This is important, as many aspects of the Team Pennsylvania CareerLink system depend upon the effective integration of the Employment Service into the operations side of the one-stops.

Many important workforce development programs are included within DOE (Figure 5). The ABLÉ funding stream supports thousands of literacy programs across the state. The variable stipends programs help pay some of the extra cost of providing technology programs at community colleges. The New Technology Scholarship Program includes support for the **SciTech Scholarships** and the **GI Bill for the New Economy**.

A major theme of the Governor's FY02 budget proposal is the **Brain Gain** initiative which proposes to allocate \$10 million for a "Stay and Invent the Future" marketing campaign to showcase Pennsylvania to its young people. One component of the program is the **Internship Corps**, which will connect college students to Pennsylvania companies.

Pennsylvania's **Customized Job Training Program** (CJT) is one of the state's most popular programs for the training of incumbent workers (Figure 6). In the last three years requests from employers for CJT assistance have far exceeded available funds. However, in his FY02 budget Governor Ridge has proposed increasing CJT funding by \$5.5 million to \$37.6 million. In April 2000 the Regional Workforce Partnership strongly urged DCED to support an increase in CJT funding to respond to the enormous number of companies seeking to train their workers.

CJT is attractive to companies because the firm can design the training program itself and may contract with whomever it wants to do the training. The program covers the actual cost of training and can be used for new hires and/or incumbent workers. The CJT application must come from a LEA, a local education agency, such as a community college, a proprietary school or an intermediate unit.

Another popular program, included under the CJT funding, is the WedNet program. This program

provides basic literacy and skills training to companies through the State System of Higher Education and Pennsylvania's Community Colleges.

### **Pennsylvania's Implementation of WIA**

To implement WIA, Pennsylvania has divided the state into 23 Local Workforce Investment Areas (LWIA) each of which is governed by a Workforce Investment Board (WIB). An essential piece of the WIA infrastructure is the so-called **One Stop**, or as it is called in Pennsylvania, the **Team PA CareerLink Center**. This is an office where a person seeking new or different employment can receive information, a set of tiered services and/or a referral. Each LWIA is required to operate at least one One Stop. However, the One Stop is not the place where one files a claim for Unemployment Compensation. This is now done over the phone.

#### *Services at the Team Pennsylvania CareerLink Centers*

CareerLink Centers provide three types of services: **core, intensive and training**. If after receiving core and intensive services an individual is unsuccessful at finding appropriate employment, the individual may qualify for a training voucher. These vouchers are called ITAs or Individual Training Accounts. In Pennsylvania they provide between \$90 and \$12,562 for education or training services (Figure 7).

Measuring performance is an important component of the Workforce Investment Act system. The key performance measures are job placement, retention after 180 days, wage at placement, wage gain, and certificate or degree obtained. Currently there is no data available to ascertain how many individuals are finding employment after receiving training financed by the ITAs. For the purposes of this report RWP was able to obtain a summary of the number of ITAs issued by each Local Workforce Investment Area (LWIA).



Figure 7: Survey by LWIA, Individual Training Accounts and On-the-Job Training (OJT) Contracts, As of March 31, 2001

LWIA	ITAs Issued Since 01/01/00	ITA Range of Amounts	OJT Contracts Issued During the Period Since 01/01/00
Allegheny County	71	\$500 - \$10,000	32
Westmoreland/Fayette	268	\$550 - \$8,000	8
Pittsburgh	35	Up to \$10,000	0
Southern Alleghenies	303	\$509 - \$10,000	30
Tri-County	242	\$1,930 - \$10,000	1
North Central	62	\$165 - \$7,500	18
Northern Tier	25	\$2,700 - \$4,000	1
West Central	100	\$2,935 - \$8,000	30
Southwest Corner	98	\$2,800 - \$8,000	24
Northwest	32	\$2,500 - \$7,500	60
Central PA	1	\$6,900	0
Southcentral	209	\$0 - \$6,709.25	15
Berks County	196	\$365 - \$6,000	10
Bucks County	41	\$3,600 - \$9,877	0
Chester County	144	\$2,668 - \$3,500	0
Delaware County	140	\$1,595 - \$6,000	0
Scranton/Lackawanna	107	\$450 - \$4,500	31
Luzerne/Schuylkill	428	\$275 - \$12,562	145
Lancaster County	28	\$3,600 - \$9,125	0
Lehigh Valley	75	\$675 - \$6,000	23
Montgomery County	36	\$406 - \$3,500	0
Philadelphia	949	\$3,654 - \$6,000	0
Pocono Counties	488	\$90 - \$5,000	27
<b>TOTAL</b>	<b>4,078</b>	<b>\$75 - \$12,965</b>	<b>455</b>

Source: Certification/Performance Management and Rapid Response Division, Bureau of Workforce Development, Department of Labor and Industry, Commonwealth of Pennsylvania, April 2001.

### *Team Pennsylvania CareerLink System*

An important component of the Commonwealth's workforce system is the internet-based listing of job openings. This enables job seekers to determine what positions are available and helps employers identify potential candidates. ([www.pacareerlink.state.pa.us](http://www.pacareerlink.state.pa.us)) The system can also assist individuals in making decisions about career planning and training. Figure 8 provides some data regarding the activity of the system.

### **The Regional Workforce Development System**

In Southeast Pennsylvania, each county – Bucks, Chester, Delaware, Montgomery and Philadelphia – is considered a local workforce investment area (LWIA) and therefore each county

appoints its own Workforce Investment Board (WIB). Although WIBs are required to include representatives from all the federal funding streams participating in the WIA system, the majority of the membership and the chair of the WIB must be from the private sector.

Each LWIA prepares a workforce development strategy and submits it to the state for approval. In addition, each WIB decides on the range of financial support to be provided by an ITA. As Figure 7 indicates this may range from \$1,595, in Delaware County to \$9,877, in Bucks County. Large variances may occur for many reasons including available funding, training priorities, cost of training, interest in serving more people with fewer dollars, skill level of applicants etc.

Figure 8: Statistics for the CareerLink, for the period  
1/1/00 to 12/31/00

Total # of Hits:	541,785,943
Total # of Page Views:	74,454,301
Total # of User Sessions:	2,191,810
Average # of Hits per day:	1,480,289
Total # of Registered Job Seekers:	148,818
Total # of Registered Employers:	4,881
Total # of Registered Job Seekers by county:	
Allegheny	11,424
Erie	8,970
Philadelphia	7,781
Westmoreland	6,807
Berks	6,711
Total # of Registered Employers by county:	
Allegheny	573
Montgomery	302
Westmoreland	275
Dauphin	236
Chester	233
Berks	191
Philadelphia	189
Out of State	183
Total # of Job Orders by county:	
Allegheny	7,042
Westmoreland	3,003
Montgomery	2,457
Chester	1,849
Erie	1,839
Berks	1,757
Lehigh	1,678

Source: [www.paworkforce.state.pa.us/careerlink/02\\_01\\_stats](http://www.paworkforce.state.pa.us/careerlink/02_01_stats).

Each WIB is required to operate at least one “One Stop” i.e., one Team Pennsylvania CareerLink. This is where job seekers can obtain core, intensive and training services. Everyone is eligible to receive core services. However, only a limited number of individuals will qualify to receive a training voucher, also known as an ITA – Individual Training Account. The locations of the CareerLinks in each of the counties of Southeast Pennsylvania are:

Bucks County:	1260 New Rodgers Rd. Bristol, PA 19007
Chester County:	250 E. Harmony St. Coatesville, PA 19320
Delaware County:	701 Crosby Street, Suite B Chester, PA 19013  Delaware County Comm. College Workforce Entry Center 901 South Media Line Rd. Media, PA 19063
Montgomery County:	1855 New Hope St. Norristown, PA 19401
Philadelphia County:	990 Spring Garden Street Philadelphia, PA 19123

Contact names, phone numbers, and email addresses may be obtained from [www.paworkforce.state.pa.us](http://www.paworkforce.state.pa.us)

## THE CHALLENGE: How can the region efficiently overcome the geographic mismatch between urban supply and suburban demand?

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### THE FACTS

“Slow growth is not likely to keep population from dispersing geographically. Counties that have been gaining population are expected to continue gaining population – Bucks, Chester, Montgomery, Burlington, and Gloucester Counties – and counties that have experienced little growth or lost population will continue along this course... Philadelphia will bear the brunt of population decline, though not as dramatic as in recent years... by 2010 the city is projected to decline by 3 percent and by 2025 by another 2 percent.” *Workforce 2001*, p. 39.

- Regional employment growth continues to be strongest outside city limits where labor markets have little, if any, access to entry level workers
- Lower-skilled workers have generally low mobility while suburban job growth markets lack efficient public transportation and affordable housing opportunities

### THE RESPONSE

**Transportation Management Associations** (TMA) are private sector-led organizations working with employers, municipalities, and other groups on transportation issues. TMAs focus on easing traffic congestion, improving air quality, increasing mobility, and improving access to work. Programs include vanpools, carpool development, subscription bus service, and shuttle and reverse commute transportation strategies

- **Bucks County TMA** ([www.buckscountytma.org](http://www.buckscountytma.org)) manages two employer shuttles, developed a third that was successfully spun-off to SEPTA, and led the development of the Doylestown DART which began service in April 2001. DART is a fixed route bus service that is expected to deliver 100

rides daily and help to ease congestion in Doylestown. BCTMA has also begun to develop two additional employer shuttles for Warminster and Levittown that are expected to be operational by the end of 2001

- The **Delaware County TMA** ([www.libertynet.org/~dctma](http://www.libertynet.org/~dctma)) developed the “QuickSilver Shuttle” initiative to bridge the gap for entry-level health care positions in the assisted living industry. In September of 1998 the QuickSilver I shuttle began service for Chester City employees and QuickSilver II serves Darby/Upper Darby and Media employees. Ridership has steadily increased from a last year’s average of 18 people/day to an average of 70 per day as of 3/30/01
- The **Partnership TMA** ([www.ptma-mc.org](http://www.ptma-mc.org)) coordinates a subscription bus service program that picks up eastern Montgomery County employees at specific locations with SEPTA connections (i.e. Broad and Olney) and transports them to their jobs. The results have been an increase of 70% in retention rates for participating companies and 75% ridership increases. The PTMA had also started a new program – “transportation links job fair” with the county CareerLink. The PTMA’s role in these programs is to incorporate transportation solutions as a vital link in accessing a good job
- The **TMA of Chester County** ([www.tmacc.org](http://www.tmacc.org)) operates SCCOOT and SCCOOT 2 service, connecting southern Chester County with employment centers, and the Phlyer bus service, which serves Phoenixville, Royersford, Exton and Great Valley
- The **Greater Valley Forge TMA** ([www.Gvftma.com](http://www.Gvftma.com)) in partnership with SEPTA, has received a Federal Transit Administration grant as part of the Jobs Access and Reverse

Commuter competitive grant application. The “Suburban Link” service will enable riders to access opportunities along the US Route 422 corridor that were previously not accessible. “Suburban Link” will connect with SEPTA at various locations, including the Gulph Mills Route 100 Station – Routes 95, 124, 125, the King of Prussia Transportation Center – Routes 99, 118, 123, 124, 125, 133, as well as connecting with the Route 99 in Phoenixville. The goal is to create an intermodal connector that will service areas not previously accessible by transit

**SEPTA** operates a number of important initiatives to improve accessibility of the workforce to regional jobs. New routes, expanded hours, targeted pass distribution, key service extensions and improved delivery of information have enhanced the usefulness of the regional public transportation network. A variety of route improvements were implemented as well.

- Bus route extensions, expanded hours, and express service to meet shift workers and to serve employment opportunities at office and industrial sites in Northeast Philadelphia
- New bus route between Northeast Philadelphia and lower Bucks
- A new bus route between Darby and the Philadelphia Airport, increased frequency and hours of service for five bus routes, and additional early morning and late evening trains to accommodate shift changes serving the Philadelphia Airport Complex
- Circulator bus services in the Conshohocken business complex

- New, early morning R5 train serving reverse commuters destined for Paoli/Great Valley area
- An additional eight routes providing 24/7 service for those working second, third or irregular shifts. These targeted routes will address the needs of suburban employment sites offering second or third shift opportunities as well as providing improved cross-city services. This will be the first major expansion of “owl” service in recent history
- In addition, SEPTA has collaborated with employers and social service organizations to help welfare clients gain access to jobs. Welfare clients now account for more than 35,000 daily trips, representing 5% of SEPTA ridership.

The **Delaware Valley Regional Planning Commission** ([www.dvrpc.org](http://www.dvrpc.org)) launched its 2001 “Transportation Improvement Projects” with more than 500 programs totaling about \$3.8 billion identified for southeastern Pennsylvania, including \$1.8 billion in programs primarily addressing the highway system and \$2.0 billion of transit programs for SEPTA, Pottstown Urban Transit, and the Keystone Service. The NJ region will have 160 programs totaling about \$1 billion. It includes \$584 million of programs primarily addressing the highway system and \$422 million of transit programs for DRPA/PATCO and NJ TRANSIT.

In addition, DVRPC approved the “Job Access and Reverse Commute Program” totaling \$3 million for Pennsylvania and \$1.4 million for southern New Jersey. These programs will continue or expand existing projects that help low-wage workers travel to their jobs.

## **THE CHALLENGE: How do we provide the highest quality child care, accessible and affordable, to workers at different income levels?**

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### **THE FACTS**

“Affordable and available child care is one of the greatest barriers to getting and keeping jobs.”  
*Workforce 2001* p. 61.

- For many workers throughout the region, access to high quality and affordable child care remains the most significant barrier to long term attachment to employment
- Very low pay for child care workers hampers quality and is a major barrier to attracting and keeping well-educated child care teachers and well-trained aides

Caring for the children of working parents remains an important challenge for the Philadelphia region. Key issues include: quality of care, cost, hours of operation, safety, and teacher training.

Without a high quality system of accessible and affordable childcare, workers are not only prevented from taking the best job they can find, but opportunities to prepare children for learning are also lost. In addition, by under paying and under training child care workers, opportunities to provide good jobs with benefits are lost – jobs that will keep good teachers working with children. For example, there are 3,084 child care providers and approximately 75,994 regulated child care slots for children under 5 years of age in Southeast Pennsylvania but there is an estimated 68,900 children without access to a regulated child care opening.

### **THE RESPONSE**

**Delaware Valley Child Care Council**, in conjunction with SEPTA and other data providers, created a regional “*Kid’s Care Connections*” map utilizing Geographic Information Systems (GIS). The map identifies the locations of transit routes and 2,274 licensed child care centers. This will help

workers choose child care in conjunction with planning their daily commute. For a map call the DVCCC office at (215) 922-7526.

**Child Care Matters (CCM)**, a partnership of five organizations committed to improving the quality and availability of child care in the region, achieved a number of important changes, including

- Obtaining \$1.5 million in funding for the **T.E.A.C.H.** (Teacher Education and Compensation Helps) scholarship program, leading to 800 scholarships statewide for child care workers. CCM also helped expand the program from 13 to 46 participating counties throughout the Commonwealth
- Helping 13 providers in two low income Philadelphia neighborhoods earn accreditation through the National Association for the Education of Young Children (NAEYC) and the National Association of Family Child Care (NAFCC)
- Achieving quality improvements through training, mentoring, renovations, and/or purchase of equipment and supplies for child care programs in two low income Philadelphia neighborhoods serving 1,200 children
- Distributing cash supplements to 26 accredited providers in order to assure ongoing quality care and access to quality care for low income children
- Assisting **United Way of Southeastern Pennsylvania** in adopting the CCM-quality improvement model for 18 United Way-funded child care centers
- Establishing an active “**Business Engagement Committee**” of twenty-six business and civic

leaders to expand business' support for public policy improvements

- Securing GPF and the **Greater Philadelphia Chamber of Commerce (GPCC)** as co-sponsors of annual legislative briefing on child care issues
- Establishing with GPCC and Philadelphia Workforce Development Corporation opportunities for on-going employer and employee education about finding, choosing, and paying for quality child care. These efforts include posting **Employer Tool Kit for Implementing Work/Life Programs** on the Chamber's web site ([www.philachamber.com](http://www.philachamber.com))
- Establishing the **Hand in Hand Award** designed to raise awareness in the business community about the importance of quality child care. **SEI Investments** received the second annual award

In public policy, Child Care Matters collaborated with child care advocates around the state that yielded the following outcomes:

- Increased funding in the 2000-01 state budget for quality improvements including funds to support accreditation efforts, the establishment of a state operations enhancement program, and a \$2 million investment for a statewide health and safety fund to help child care programs meet licensing requirements
- Worked with other child care advocates to achieve a reduction in family co-payments while expanding eligibility under the state's subsidized child care program
- Secured increase to \$300,000 for the City of Philadelphia's **Child Care Health and Safety Fund** to meet unique licensing requirements
- Formed **QUEST** (Quality Education Through Salaries & Training) to address low salaries, high turnover, and child care programs
- Convinced state officials to improve procedures on child support cooperation requirements

## SECTION II:

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### THE BAROMETER OF FUTURE REGIONAL OCCUPATIONAL DEMAND FOR THE INFORMATION TECHNOLOGY AND CUSTOMER SERVICE CLUSTERS





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## HIGHLIGHTS FROM THE BFROD

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The Barometer of Future Regional Occupational Demand (BFROD) gauges employer demand in the Philadelphia region in two skills-based occupational clusters that cut across industries: information technology (IT) and customer service. The BFROD employs a unique approach to gauging employer demand. Typically, employment is presented by industry, with these figures including all occupations that are found within a particular industry (e.g., managers, sales people, support staff, maintenance workers). In the BFROD, IT and customer service occupations are separated out from industry employment estimates in order to arrive at a more accurate estimate and to understand the cross-cutting nature of these clusters. Furthermore, the BFROD also incorporates valuable insight provided by employers whose companies rely heavily on IT and customer service workers. Their feedback helped uncover the stories behind the employment estimates. Highlights of this research process include:

- **Information Technology and Customer Service are major factors underlying company competitiveness and industry growth.** IT has infiltrated business operations in every industry, to the point where no company can be in business today without it. Likewise, technological innovations have been the great equalizers in the business world, allowing customers to demand more and better services and, therefore, making customer service a major differentiator between competitors. Not surprisingly, in many instances these two critical skills sets have converged into hybrid positions, such as computer support specialists and information clerks.
- **Information Technology is an industry growth driver.** Strong growth in this cluster is projected over the next decade, particularly in IT Professional Services. This strong growth is partly attributed to increased outsourcing of IT functions as companies attempt to reign in the costs of IT worker turnover, salary inflation, and the fast-changing nature of information technology itself. If employers continue to demand high-skill sets from job applicants, the current homegrown supply of high-end IT workers (i.e., earned at least a 4-year degree in an IT related field) will be insufficient to meet this demand. Critical shortages of the supply of high-end workers, however, are translating into greater opportunities for lesser-skilled, entry-level, and even non-IT workers.
- **The customer service cluster is a large employment base dispersed across many industries.** As such, even the projected modest growth rates will result in significant job gains for this cluster. Furthermore, the high turnover rate characteristic of customer service jobs will result in significant employment opportunities. The workforce challenge will be finding workers with multiple-skill sets, including IT, to take on increasingly demanding customer service positions. This challenge is complicated by the fact that the customer service cluster lacks a defined supply pipeline of worker candidates.



# GENERAL FINDINGS FOR THE INFORMATION TECHNOLOGY AND CUSTOMER SERVICE CLUSTERS

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1. INFORMATION TECHNOLOGY AND CUSTOMER SERVICE ARE MAJOR FACTORS UNDERLYING COMPANY COMPETITIVENESS AND INDUSTRY GROWTH IN TODAY'S ECONOMY.

This on-going trend is borne out by the employment estimates and employer feedback obtained through the BFROD research process. (See Appendix A for a detailed explanation of methodology and data sources.) IT has infiltrated business operations in every industry, to the point where no company can be in business today without it. And the process of incorporating IT into business operations has only just begun, in spite of the recent market tumble and growing signs of an economic downturn. As pointed out by one IT official whose company provides software services to life science industries, many clinical trials in the pharmaceutical industry are still done on paper, a small example of the tremendous amount of IT transitioning that has yet to be done.

Taken from a different perspective, technological innovations have been the great equalizers in the business world, allowing customers to demand more and better services and, therefore, making customer service a major differentiator between competitors. This is perhaps most evident in the banking industry, where technological innovations such as ATMs and web-based applications have fundamentally altered service delivery and internal operations. Automated business operations are freeing up workers to focus more on solving customers' problems. In a customer service call center, for example, this means measuring success not by the number of calls taken or the length of "handling time," but rather whether the caller's question was addressed. According to one human resource official with a regional health insurance company, the great debate within companies today is – are customer service jobs still the entry-level jobs we tend to treat them as, or should they be regarded as positions "paramount" to company success?

2. INFORMATION TECHNOLOGY AND CUSTOMER SERVICE ARE MERGING INTO A NEW, HYBRID WORKER.

A common customer service job of the past was a receptionist or switchboard operator who was tasked with transferring calls to the right person or department. Today, this worker – now considered an information clerk or customer service representative – is equipped with a workstation, has access to IT systems (internally and via the Internet), and is expected to have proficient computer skills in order to use this technology. These front-line workers handle calls immediately and resolve customers' problems directly as part of companies' new "once and done" customer service policies.

On the IT side, traditional tasks such as writing code are being exported to other countries such as India and Ireland because of the critical shortage of IT workers in the US, hyper-mobility of the IT workforce, and subsequent inflation of IT salaries. Other traditional IT tasks are being phased out entirely because of technological innovation itself – web-site reservations and other examples of web-based self-service (also known as "source data entry"), for example, have eliminated the need for data entry keyers, a common entry-level IT job of the past. In place of these traditional IT jobs are new positions incorporating customer service skills, such as project leaders and computer support specialists.

3. ALL LEVELS OF THE WORKFORCE DEVELOPMENT SYSTEM – POLICY MAKING, PROGRAM DEVELOPMENT, AND SERVICE PROVISION – NEED TO REFLECT THE GROWING IMPORTANCE OF INFORMATION TECHNOLOGY AND CUSTOMER SERVICE AS CRITICAL SKILLS SETS.

While multiple skill sets are expected of most workers today, IT and customer service skills stand out as two that clearly cut across industries, and employers increasingly are expecting some degree of proficiency in each from workers at all levels.

# GREATER PHILADELPHIA'S INFORMATION TECHNOLOGY CLUSTER

## EMPLOYER DEMAND BY INDUSTRY AND OCCUPATION

1. THE INFORMATION TECHNOLOGY CLUSTER IS A DRIVER OF INDUSTRY GROWTH.

Growth in this occupational cluster is projected to outpace overall regional employment growth (4.6 percent versus 0.7 percent annual projected growth), as well as growth in almost every industry in the region (Figure 9). The strongest IT growth is projected in the services sector, which itself is the primary driver behind overall regional employment growth over the next 10 years. Clearly, IT occupational employment has become very dispersed across industries, a trend expected to continue as an estimated average of 3,200 jobs are added to company payrolls each year. Survey respondents generally agreed with growth estimates for total occupational employment, but were split on the accuracy of growth estimates for IT occupational employment.

2. IF THE INFORMATION TECHNOLOGY CLUSTER IS THE ENGINE DRIVING INDUSTRY GROWTH, THEN THE INDUSTRY MOST CLOSELY ASSOCIATED WITH THE IT CLUSTER – IT PROFESSIONAL SERVICES – IS THE ENGINE'S FUEL.

Not surprisingly, this industry not only is projected to have the strongest IT growth over the next 10 years, but also the strongest growth of any industry by far in the region at 7.8 percent. With 18,000 workers and one-third of all IT occupational employment, the IT Professional Services sector employs more IT workers than any other industry in the region, and this share is projected to increase to 51 percent to total jobs of 44,000 by 2008.

According to employer feedback from the industry panels, a primary factor behind growth in the IT Professional Service sector is and will continue to be outsourcing of IT functions by non-IT companies. With fast-changing technological

Figure 9: Current and Annual Projected Growth in Occupational Employment for the IT Cluster

	Total Occupational Employment			IT Occupational Employment		
	Current Employment <sup>1</sup>	Annual Projected Growth <sup>2</sup>		Current Employment <sup>1</sup>	Annual Projected Growth <sup>2</sup>	
		Percent Change	Net Gain <sup>3</sup>		Percent Change	Net Gain <sup>3</sup>
<b>All Industries</b>	<b>2,296,877</b>	<b>0.7%</b>	<b>17,640</b>	<b>56,127</b>	<b>4.6%</b>	<b>3,180</b>
Services	924,837	1.8%	17,980	32,438	6.6%	2,920
<i>IT Professional Services</i>	39,966	7.8%	4,510	18,344	9.3%	2,610
<i>Business Services</i>	142,996	1.6%	2,490	5,195	1.0%	50
<i>All Other Professional Services</i>	136,775	1.0%	1,370	4,879	2.7%	150
<i>Hospitals and Health Services</i>	253,550	1.9%	5,130	1,950	2.2%	50
<i>Educational Services</i>	176,880	1.1%	2,070	1,433	2.3%	40
<i>Social and Personal Services</i>	94,640	1.8%	1,900	313	2.5%	10
<i>All Other Services</i>	36,320	0.9%	330	192	1.7%	<10
<i>Hospitality</i>	43,710	0.4%	190	132	2.7%	<10
Finance, Insurance & Real Estate	165,070	0.4%	690	8,256	1.7%	160
Construction & Manufacturing	386,530	-0.6%	-2,300	5,434	0.3%	20
Government	196,260	-0.2%	-470	4,413	0.1%	<10
Wholesale Trade	130,690	0.3%	360	2,980	1.4%	50
Transportation, Utilities & Comms.	108,530	0.7%	760	1,759	1.8%	30
Retail Trade	384,960	0.2%	620	1,116	0.0%	<10

Source: PEL calculations based on industry employment data from the PA Department of Labor & Industry and industry-occupation matrix from the US Bureau of Labor Statistics. Note: Employment figures do not include self-employed workers. Industries listed in descending order of current IT occupational employment. 1 – 1998 estimate. 2 – Annual projections based on employment changes between 1998 and 2008. 3 – Figures rounded to nearest 50; sub-industry figures might not add up to totals due to round-off error.

innovations and difficulties hiring internally, companies have moved toward outsourcing IT functions and tasks that are not central to the business mission, including regularly occurring ones such as workstation setup and website maintenance. One of the fastest growing segments of the IT Professional Services sector are Application Service Providers or ASPs, which “web-enable” applications and deliver them to clients via the Internet. Companies have learned that when functions like these are handled internally, they face greater risks and higher costs (especially in terms of labor), too often at the expense of the core business mission.

3. PROJECTED GROWTH IS STRONGEST FOR TRADITIONAL HIGH-END IT OCCUPATIONS, WHILE DECLINES ARE PROJECTED FOR TRADITIONAL LOW-END IT OCCUPATIONS.

High-end IT occupations include systems analysts, database administrators, and computer engineers; low-end IT includes computer operators and data entry keyers (Figure 10). This divergence in growth between IT occupations by skill level underscores the dramatic changes being brought on by technological innovation itself, particularly for lower-end IT jobs that are being phased out entirely or merged with customer service functions.

Figure 10: Current and Annual Projected Growth in Employment for IT Occupations

	<i>Current Employment<sup>1</sup></i>	<i>Annual Projected Growth<sup>2</sup></i>	
		<i>Percent Change</i>	<i>Net Gain<sup>3</sup></i>
Comp. Programmers	13,383	2.4%	370
Systems Analysts	11,444	6.7%	1,050
Comp. Support Spec.	8,980	7.2%	900
Data Entry Keyers	8,580	-0.1%	-10
Computer Engineers	5,616	8.1%	670
Computer Operators	4,319	-3.4%	-130
Database Admin.	1,787	6.0%	140
All Other CS	1,917	8.0%	220

Source: PEL calculations based on industry employment data from the PA Department of Labor & Industry and industry-occupation matrix from the US Bureau of Labor Statistics. Note: Employment figures do not include self-employed workers. Occupations listed in descending order of current employment. 1 – 1998 estimate. 2 – Annual projections based on employment changes between 1998 and 2008. 3 – Figures rounded to nearest 50; sub-industry figures might not add up to totals due to round-off error.

4. CRITICAL SHORTAGES IN THE SUPPLY OF HIGH-END WORKERS, HOWEVER, ARE TRANSLATING INTO GREATER OPPORTUNITIES FOR LESSER-SKILLED, ENTRY-LEVEL, AND EVEN NON-IT WORKERS WITH EXPERIENCE, TECHNICAL APTITUDE, OR CUSTOMER SERVICE SKILLS.

One IT company has created several programmer associate positions that act as assistants to senior programmers. Individuals hired to fill the programmer associate position do not necessarily have to have a college degree, industry certification or even experience, only some degree of technical aptitude and the ability and willingness to learn. Programmer associates are the entry-level point of a career track within this company, an added incentive for the worker to stay and an effective worker retention strategy for the company. Other opportunities for entry-level or non-IT workers mentioned by panelists included: help desk support, desktop/workstation technicians, network engineering assistants, and systems testers.

ATTRACTING AND RETAINING IT WORKERS

1. IT WORKERS ARE EXTREMELY MOBILE GIVEN THE STRONG DEMAND FOR THEIR SKILLS AND THEIR PROPENSITY TO SEEK OUT CUTTING-EDGE TECHNOLOGIES AND COMPANIES.

According to one regional employer, IT workers are individually-minded professionals who are loyal to their careers more than employers. In tight market conditions, this segment of the workforce has become hyper-mobile, setting off bidding wars between companies and salary inflation. With the recent market downturn, however, employers are reporting lower turnover rates of IT workers than the past few years, though employee turnover and recruitment of qualified workers are still major problems for some employers. In terms of turnover-related vacancies, employers rated database administrators and computer programmers as being the biggest problems for their companies (Figure 11); no IT position stood out as being a major problem. Industry panelists reported turnover rates over the last year from zero to 25 percent.

Figure 11: Employer Ratings of Turnover-Related Vacancies in IT Positions

*Survey Question: "In my judgement, I expect turnover-related vacancies in this IT position to be...for my company in the coming year:" (Answers are on a scale of 1 to 5, where 1 is "not a problem" and 5 is "a major problem.")*

Computer Programmers	2.7
Database Administrators	2.7
Computer Engineers	2.5
Systems Analysts	2.5
Computer Support Specialists	2.3
All Other Computer Scientists	2.0
Computer Operators	1.8
Data Entry Keyers	1.7

Source: BFROD Employer Survey, April 2001

2. THE YEARLY SUPPLY OF "HOMEGROWN" IT WORKERS WILL NOT BE SUFFICIENT IF EMPLOYERS DEMAND HIGHER-LEVEL SKILLS SETS.

Regional institutions conferred 4,200 certificates/diplomas and degrees to students in computer and information sciences programs in the 1999-2000 school year (Figure 12). Taken as a whole, this supply of new IT workers is sufficient to meet regional employer demand if it continues into the future. However, whether or not demand is met will be determined by the skill sets companies need. Two-thirds of graduates from IT programs earned a certificate, diploma, or associate's degree, which are generally acknowledged to signify lower-end or entry-level skills. Students who earned a certificate in IT might also be existing workers who were upgrading their skills; if this is the case then the yearly supply of new IT workers is lower.

If employers are looking for workers with at least a 4-year degree, then the 1,400 degrees in IT programs conferred by regional colleges and universities will be insufficient to meet this demand. It should be noted that this estimate of supply rests

on the optimistic assumption that all students stay in the region upon graduation. Furthermore, the estimate of demand might be understated, as it only accounts for newly created jobs, not vacancies or unfilled openings.

Figure 12: Regional Supply of IT Workers (Certificates/Diplomas and Degrees Conferred by Regional Institutions, 1999-2000 School Year)

	Computer Info. Sciences	Computer Engineer.	Business/MIS	TOTAL
Certs./Dips.*	2,103		69	2,172
Associate's	476		156	632
Bachelor's	562	138	129	829
Master's	387	21	154	562
Doctorates	8			8
<b>TOTAL</b>	<b>3,536</b>	<b>159</b>	<b>508</b>	<b>4,203</b>
4-year degree or higher	957	159	283	1,399
% of Total for Field of Study	27%	100%	56%	33%

Source: PA Department of Education, NJ Commission on Higher Education. \*Data on certificates/diplomas for 1997-98, the most recent school year available. NJ data on diplomas/certificates not available. Certificates/diplomas do not include industry-sponsored programs.

3. EMPLOYERS ARE SEEKING CREATIVE WAYS TO ADDRESS THE CRITICAL SHORTAGE AND TURNOVER OF ESPECIALLY HIGH-END IT WORKERS.

An increasing number of employers are extending the IT career track downward, creating new positions for entry-level and non-IT workers with experience and/or strong customer service skills. Reaching back even further, they are offering internships, providing "boot camp" technical training, and conducting outreach to area high schools, colleges, and targeted populations that are underrepresented in the IT field, such as young girls and minorities.

## GREATER PHILADELPHIA'S CUSTOMER SERVICE CLUSTER

### EMPLOYER DEMAND BY INDUSTRY AND OCCUPATION

1. EVEN MODEST ANNUAL PROJECTED GROWTH WILL RESULT IN SIGNIFICANT JOB GAINS FOR THE CUSTOMER SERVICE CLUSTER.

The regional customer service employment base is very large, accounting for 20 percent of total occupational employment in the region. At the annual projected growth of 0.5 percent, some 22,000 new customer service jobs will be created over the next 10 years (an average of 2,200 per year), with most of this new employment dispersed across three primary industry sectors – Retail Trade; the Services sector; and, Finance, Insurance and Real Estate (Figure 14, next page). The greatest gainers are projected to be Retail Trade and Business Services (includes Personnel Supply Services), which traditionally have relied on customer service workers. Company shift toward customer service provision is evident in growth projections for the cluster occupations – for example, communications equipment operators are projected to decline, while information clerks (an IT/customer service hybrid) are projected to increase (Figure 13).

Figure 13: Current and Annual Projected Growth in Employment for Customer Service Occupations

	Current Employment <sup>1</sup>	Annual Projected Growth <sup>2</sup>	
		Percent Change	Net Gain <sup>3</sup>
Marketing & Sales	249,593	0.6%	1,630
Food Preps. & Servs.	136,742	0.1%	210
Information Clerks	32,674	2.0%	700
Personal Services	17,118	1.3%	230
Bank Tellers	10,933	-1.3%	-130
Comms. Equip. Ops.	4,723	-3.1%	-130

Source: PEL calculations based on industry employment data from the PA Department of Labor & Industry and industry-occupation matrix from the US Bureau of Labor Statistics. Note: Employment figures do not include self-employed workers. Occupations listed in descending order of current employment. 1 – 1998 estimate. 2 – Annual projections based on employment changes between 1998 and 2008. 3 – Figures rounded to nearest 50; sub-industry figures might not add up to totals due to round-off error.

2. CHANGING DEMOGRAPHICS WILL CONTRIBUTE TO GROWTH IN CUSTOMER SERVICE EMPLOYMENT.

Strong customer service growth projected for IT Professional Services is likely a reflection of the fact that this is projected to be the fastest growing industry overall in the region. Customer service employment growth in Social and Personal Services and Hospitals and Health Services, however, is more likely tied to major changes in demographics – aging baby-boomers and the out-migration of young people from the Philadelphia region. As the remaining population gets older, the need for personal service workers, such as hairstylists and recreation attendants, will greatly increase.

3. CUSTOMER SERVICE WORKERS ARE BEING CROSS-TRAINED IN MULTIPLE SKILL SETS.

The typical claims reviewer in an insurance company today, for example, must be well-versed in company policy, computer systems, and customer service in order to implement companies' once-and-done policies. Likewise, today's hotel maids are trained in customer service. One panelist described a new worker to the hotel industry – the "at-your-service" agent whose job is to not only man the phones at the front desk, but also address the hotel caller's question or request directly.

This trend is in great part driven by the costs of high turnover in customer service positions. Cross-training and multi-tasking help bring employees' hours to full-time status so they can qualify for benefits, an effective retention strategy for employers. One hotel official described a database of employees' skills that employees use to pick up shifts in other departments; the system was created by the company in order to facilitate multi-tasking and reduce turnover costs. Increasingly, customer service workers are required to be more generalists than specialists, especially as the nature of the work shifts from seasonal to permanent status.

Figure 14: Current and Annual Projected Growth in Occupational Employment for the Customer Service Cluster

	Total Occupational Employment			Customer Service Occupational Employment		
	Current Employment <sup>1</sup>	Annual Projected Growth <sup>2</sup>		Current Employment <sup>1</sup>	Annual Projected Growth <sup>2</sup>	
		Percent Change	Net Gain <sup>3</sup>		Percent Change	Net Gain <sup>3</sup>
<b>All Industries</b>	<b>2,296,877</b>	<b>0.7%</b>	<b>17,640</b>	<b>454,696</b>	<b>0.5%</b>	<b>2,220</b>
Retail Trade	384,960	0.2%	620	247,735	0.3%	790
<i>All Other Retail</i>	266,980	0.0%	80	149,127	0.3%	450
<i>Eating and Drinking Places</i>	117,980	0.4%	540	98,608	0.3%	340
Services	924,837	1.8%	17,980	103,508	1.2%	1,330
<i>Social and Personal Services</i>	94,640	1.8%	1,900	21,316	1.4%	320
<i>Hospitals and Health Services</i>	253,550	1.9%	5,130	20,169	0.7%	150
<i>Business Services</i>	142,996	1.6%	2,490	15,902	2.8%	500
<i>Hospitality</i>	43,710	0.4%	190	14,917	-0.1%	-10
<i>All Other Professional Services</i>	136,775	1.0%	1,370	13,386	0.8%	120
<i>Educational Services</i>	176,880	1.1%	2,070	8,172	-0.6%	-50
<i>All Other Services</i>	36,320	0.9%	330	6,357	0.7%	50
<i>IT Professional Services</i>	39,966	7.8%	4,510	3,289	6.0%	260
Finance, Insurance & Real Estate	165,070	0.4%	690	38,193	0.4%	160
Wholesale Trade	130,690	0.3%	360	32,555	0.0%	0
Construction & Manufacturing	386,530	-0.6%	-2,300	14,805	-0.6%	-80
Transportation, Utilities & Comms.	108,530	0.7%	760	12,342	0.5%	60
Government	196,260	-0.2%	-470	5,558	-0.5%	-30

Source: PEL calculations based on industry employment data from the PA Department of Labor & Industry and industry-occupation matrix from the US Bureau of Labor Statistics. Note: Employment figures do not include self-employed workers. 1 – 1998 estimate. 2 – Annual projections based on employment changes between 1998 and 2008. 3 – Figures rounded to nearest 50; sub-industry figures might not add up to totals due to round-off error.

## ATTRACTING AND RETAINING CUSTOMER SERVICE WORKERS

### 1. TODAY'S MORE DEMANDING CUSTOMER SERVICE JOBS CAN BE DIFFICULT TO FILL AND KEEP FILLED.

According to industry panelists, the very nature of customer service jobs leads to an abundance of vacancies – these positions can be very demanding and highly stressful (or boring), they tend to be low-paying, and they do not always fit into a career track. Tight labor market conditions, especially in the region's suburban communities, have forced employers to tap into segments of the population who previously they would not have considered. In one case, the Russian immigrant population is being targeted by a human resource official at a life insurance company, even though the company takes on the cost of providing language training. Turnover rates reported by industry panelists ranged from 15 to 40 percent.

Bank teller openings are notoriously difficult to staff, according to one industry panelist and confirmed by the employer survey (Figure 15). Bank tellers are the main providers of customer service in banks, yet they also are expected to sell additional financial services and have advanced math skills to settle up at the end of the day. The positions are relatively low-paying (\$8.50 per hour is considered a competitive wage) and fewer part-time opportunities are available. Furthermore, the position no longer has the appeal of a career track entry point, especially for college graduates, which greatly diminishes the candidate pool. The stress of being a bank teller is perhaps summed up by this observation of the industry panelist – tellers tend not to jump from bank to bank, but rather move into a supervisory position or leave the banking industry altogether.



Figure 15: Employer Ratings of Turnover-Related Vacancies in Customer Service Positions

*Survey Question: "In my judgement, I expect turnover-related vacancies in this CS position to be...for my company in the coming year." (Answers are on a scale of 1 to 5, where 1 is "not a problem" and 5 is "a major problem.")*

Food Preparers and Servers	3.1
Bank Tellers	2.9
Information Clerks	2.6
Marketing & Sales	2.6
Personal Services	2.6
Comms. Equipment Operators	2.3

Source: BFROD Employer Survey, April 2001

## 2. UNLIKE IT, THE CUSTOMER SERVICE CLUSTER LACKS A CLEAR WORKER SUPPLY PIPELINE.

Most customer service jobs do not require a formal education beyond a high school degree. Because of this, the "pipeline" for prospective workers is diffused among high school students and graduates, workers new to or re-entering the labor market, and workers who are in transition. With the enactment of welfare reform, customer service occupations such as hotel workers have been targeted for "quick attachment." However, as customer service becomes more essential to companies' core missions, the educational and skill

requirements for customer service positions are likely to increase.

## 3. EMPLOYERS' CHALLENGE IN ATTRACTING AND RETAINING CUSTOMER SERVICE WORKERS BOILS DOWN TO ADDRESSING THE UNSTABLE NATURE OF WORKER TENURE.

As customer service becomes paramount to company competitiveness, employers are seeking ways to address employee needs and concerns, especially in the first few months of service. For example, family services such as emergency child care centers and "school's out" programs provide employees with a safety net in juggling their work and home responsibilities. Public transit services that give city residents access to suburban jobs, such as the Horsham Breeze, expand the labor pool for suburban employers and are reported to have high ridership rates. Finally, employers are finding that reaching out to area high schools and exposing students to the work place through internships begins the process of developing an appreciation for what companies expect of their workers.



# SECTION III

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## THE REGIONAL LABOR MARKET



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## GREATER PHILADELPHIA'S WORKFORCE SUPPLY

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Greater Philadelphia's greatest workforce asset is its size. With a population of 5.1 million and a labor force of 2.5 million, the region is able to provide employers with a workforce possessing a wide array of skills, experience, and cultural backgrounds. However, changing demographics – the region is getting older and the population base is becoming more dispersed – are creating shortages of labor in key segments and areas. Projections of slow population growth into the future suggest challenges in both attracting young, skilled workers and getting workers to a more geographically dispersed set of employers. Highlights of this section include:

- **Low unemployment.** While Greater Philadelphia's labor force participation rate is slightly lower than the nation's, employment rates remain at an all-time high even with the market tumble and growing signs of an economic slow-down.
- **Slowly growing workforce.** Today's favorable employment conditions, however, belie the strong demographic trends that are shaping our current and future workforce. One concern is the base of our workforce, the region's population, which has grown slowly in recent years. Low foreign immigration and negative net domestic immigration are significant factors in the region's slow growth.
- **Spreading region.** Slow growth has not meant little activity. The population has become increasingly dispersed throughout the region as people have left the city of Philadelphia and older suburban communities for newer, more affluent exurban neighborhoods. From a workforce standpoint, this population dispersion means employers have to draw workers from a larger geographic area.
- **Aging population.** Of equal concern to slow population growth is our aging population. The region's population of 16-35 year olds has declined in recent years, while the older population is the only age group projected to experience significant growth well into the 21<sup>st</sup> century. These trends are partly attributable to differences in generation size and longer life expectancies, but they also suggest that young people are not coming to or staying in the region. From a workforce standpoint, an aging population translates into fewer people of working-age (in spite of being a large region) and slower natural growth (i.e., births).
- **Steady supply of young entrants into labor force.** Each year potential workers are introduced to the region's labor force, including tens of thousands of graduates from the region's high schools, colleges, universities, and other post-secondary training programs. The influx of the welfare population into the workforce also presents an interesting opportunity for the region in this time of tight labor market conditions.
- **Above-average concentration of educated and skilled residents.** The region has a greater share of residents who earned at least a bachelor's degree compared to the nation, as well as a greater share who earned a high school diploma – strong indicators of an educated and skilled workforce. Comparatively high concentrations of educated and skilled workers is reflected in the region's strong base of professional and managerial occupations.



## POPULATION AND GEOGRAPHIC DISPERSION

Fundamental characteristics of the population – its size, demographics, and geographic dispersion – figure greatly into companies’ location and expansion decisions.

- One of Greater Philadelphia’s greatest competitive advantages is its sheer size. The 9-county region is the 4th largest metropolitan area in the country with 5.1 million people; Philadelphia, the largest county in the region, has a population of 1.52 million and is the 5th largest city in the US (Figure 16).
- The region’s population growth in the 1990s was relatively slow, a trend continuing from the 70s and 80s. Between 1990 and 2000, the combined 9-county residential population grew 3.6 percent or 179,000 people (Figure 17). (By contrast, the US grew 13.1 percent over the same period.) This lackluster growth, which took place during a period of unprecedented economic expansion in the US and during two administrations of a very popular mayor in Philadelphia, is largely attributed to comparatively low foreign immigration rates (see Foreign Immigration, p. 43) and negative domestic migration as the country’s population generally shifted from the Northeast to the South and West.
- Little growth, however, has not meant little activity. The population continues to shift outward as residents leave Philadelphia and older suburban communities for other suburban communities, many of them newly developed, comparatively affluent exurbs. However, the net loss of 69,000 residents in counties with declining populations (Philadelphia and Salem) was more than offset by the 248,000 net gain of the growing suburban counties.
- With fewer employed residents in relation to the entire population (43 out of 100),

Philadelphia’s employed residents carry a greater burden in supporting the city (Figure 18, next page). In the other counties of the region there were more employed residents in relation to the total population.

Figure 16: Population by County, 2000

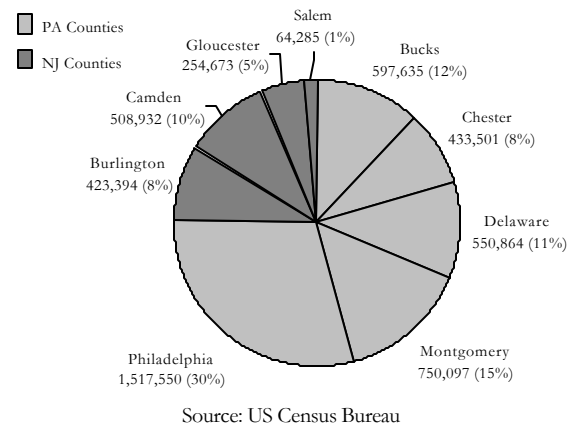


Figure 17: Population Growth by County, 1990-2000

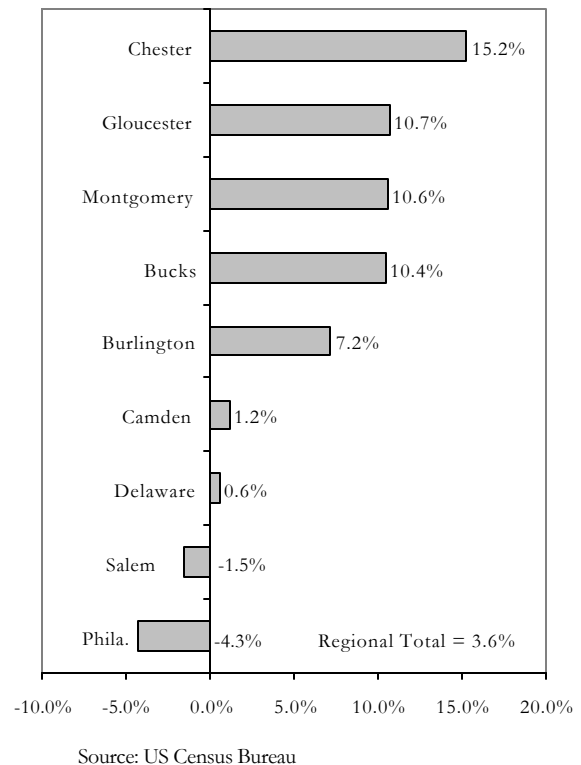


Figure 18: Ratio of Employed Resident Population to Total Population by County, 1999

	<i>Total Population</i>	<i>Employed Resident Population</i>	<i>Employed/ Population</i>
Bucks	594,047	314,800	.53
Chester	430,001	227,100	.53
Delaware	541,502	269,100	.50
Montgomery	724,087	388,500	.54
Philadelphia	1,417,601	602,600	.43
Burlington	424,510	217,500	.51
Camden	503,093	248,200	.49
Gloucester	250,492	125,400	.50
Salem	64,534	30,600	.47

Source: US Census Bureau, PA Department of Labor & Industry, NJ Department of Labor. Note: This measure is calculated for 1999, the most recent year for which data on the employed resident population is currently available.

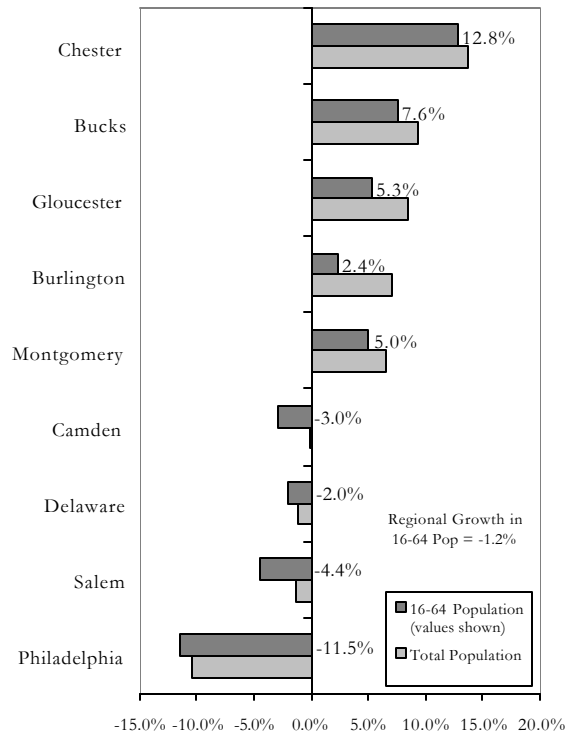


## WORKING-AGE POPULATION

In the broadest sense, the workforce can be thought of as the adult population age 16 years and older. From the standpoint of workforce development, a more practical definition of the working-age population might be individuals between ages 16 and 64.

- Between 1990 and 1999, the region's 16-64 population declined by -1.2 percent or 37,100 people (Figure 19). Philadelphia's working-age population declined by 11.5 percent, or 114,800 16-64 year olds.
- Growing suburban counties (Bucks, Chester, Montgomery, Burlington, and Gloucester Counties) did gain significant numbers of working-age people, but their combined net gain of 96,000 did not offset the net loss of counties with a declining 16-64 population (Philadelphia, Delaware, Camden, and Salem Counties), which was 133,100.
- The region's decline in the working-age population was mostly young people – between 1990 and 1999 the 16-35 year old population declined by 254,000 people, compared to a net gain of 217,000 people between 36 and 64 years old. In 1990, the region's 16-35 year old population was almost 1.6 million; by 1999, eight years later, this age cohort (now 24 to 43 years old) had a net decline of 68,000 people.
- A shrinking working-age population is of equal if not greater concern than slow population growth. Fewer young people in the region means a small labor force in spite of our large population and less replenishment of the population through natural growth (i.e., births). The net loss of young people from the region is also a troubling indicator of the region's economic offerings.

Figure 19: Total vs. 16-64 Population Growth, 1990-1999



Source: US Census Bureau

## LABOR FORCE PARTICIPATION

Adults who choose to look for and are available for employment comprise the region's labor force.

- Labor Force.** More than 2.5 million people who live in the region make up the labor force of employed (full- and part-time workers) and unemployed workers (Figure 20). A very high percentage of the labor force was employed in 1999 (95.9 percent).
- Unemployment.** The region's 1999 unemployment rate (percentage of people looking and available for work but not employed) was slightly lower than that of the nation – 4.1 percent across all 9 counties compared to 4.2 percent for the nation (Figure 21). However, there was a fairly wide range in the unemployment rate between counties – from a low of 2.6 percent in Chester County to a high of 6.0 percent in Philadelphia. More than a third (38,300) of the region's unemployed lived in Philadelphia.
- Not in the Labor Force.** In 1999, 33.3 percent of the adult population residing in the region did not participate in the labor force. This percentage was somewhat higher than the national percentage of 32.9 percent. If the region's labor force participation rate was that of the nation, about 14,000 more people would be participating in the labor force as either an employed or unemployed (but available and looking) worker.

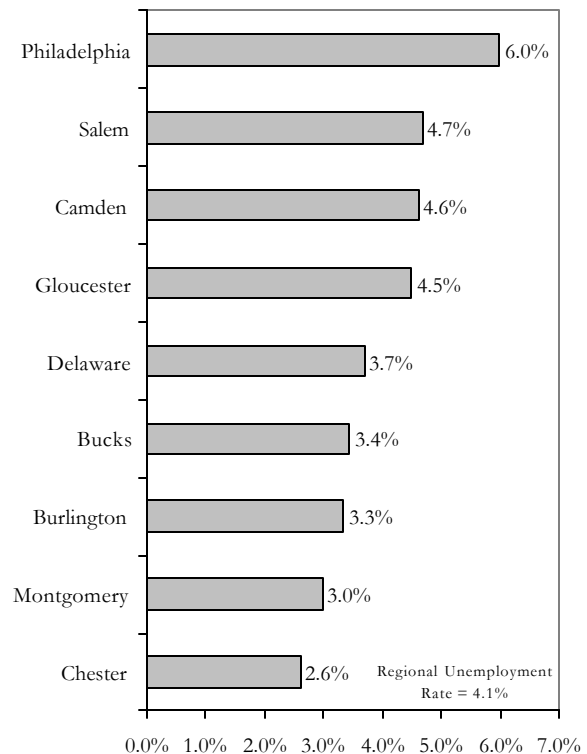
The 1.26 million people in the region who chose not to participate in the labor force in 1999 did so for many reasons – they may have been college students, stay-at-home parents or caretakers, high school students, or retirees. However, not having a job for some of these people was a chronic problem, meaning they had not recently looked for or held a job or maybe they had never held a job.

Figure 20: Regional Labor Force Participation and Employment Rates, 1999

	Population	Percent of Total
<b>Non-institutional, civilian population (16 years +)*</b>	<b>3,790,515</b>	
In Labor Force:	2,528,600	66.7%
<i>Employed</i>	2,423,800	95.9%
<i>Unemployed</i>	104,700	4.1%
Not in Labor Force	1,261,915	33.3%

Source: US Census Bureau, PA Department of Labor & Industry, NJ Department of Labor. \*Figure adjusted to exclude individuals living in nursing homes, hospitals, and prisons. Note: The sum of "Employed" and "Unemployed" do not equal "In Labor Force" due to round-off error.

Figure 21: Unemployment Rate by County, 1999



Source: PA Department of Labor & Industry, NJ Department of Labor

## POPULATION PROJECTIONS

Future changes in the population and workforce will be greatly influenced by the aging of the baby boomers and longer life expectancies. As this large generation moves out of the workforce and into its retirement years, the region's workforce will be comprised of a smaller share of the population.

- The 8-county region (all counties except Salem County, NJ) is projected to continue along a course of slow population growth – 10 years from now the region's residential population is expected to be bigger by only 3.2 percent and by 2025 only 9.4 percent.
- Slow growth is not likely to keep the population from dispersing geographically. Counties that have been gaining population are expected to continue gaining – Bucks, Chester, Montgomery, Burlington, and Gloucester Counties – and counties that have experienced little growth or lost population will continue along this course – Delaware, Philadelphia, and Camden Counties. Philadelphia will bear the brunt of population decline, though not as dramatic as in recent years – by 2010 the city is projected to decline by 3 percent and by 2025 by another 2 percent.
- Shifts are also projected for the age of the region's population, particularly the elderly population. After 10 years, the population 65 and older is projected to grow by 6.6 percent, but 25 years from now its projected growth is 52.5 percent. While the 15-64 population will experience modest growth, by 2025 it will make up a smaller share of the region's overall population.

Figure 22: Short- and Long-Term Regional Population Projections by Age Group and County

	<i>Projected Percent Change</i>	
	<i>2000-2010</i>	<i>2000-2025</i>
<b>Total Metro Area</b>	<b>3.2%</b>	<b>9.4%</b>
0-14 years	-3.6%	-0.4%
15-34 years	1.3%	5.1%
35-64 years	7.1%	2.7%
65 and older	6.6%	52.5%
Bucks	9.6%	23.4%
Chester	11.1%	26.0%
Delaware	-0.5%	-1.6%
Montgomery	6.4%	14.2%
Philadelphia	-3.0%	-2.0%
Burlington	7.0%	19.9%
Camden	0.4%	0.6%
Gloucester	9.8%	27.7%
Salem	n/a	n/a

Source: Delaware Valley Regional Planning Commission, April 2000.

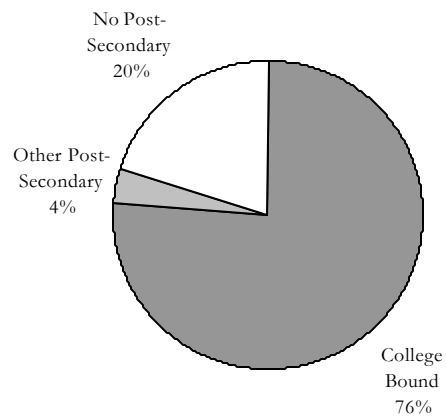
# YOUTH

While the region as a whole has not experienced much population growth in recent years, the number of young people (15 years and younger) grew between 1990 and 1999. Whether or not they graduate from high school and what they do after high school has great bearing on the region's workforce supply.

- According to figures released by the PA and NJ Departments of Education, 334,000 students in the 9-county metro area were enrolled in secondary schools (normally grades 7-12 for public schools and grades 9-12 for private and nonpublic schools) in the 1998-99 school year. Of this figure, 290,000 secondary students were enrolled in public schools.
- High School Graduates.** At the end of the 1998-99 school year, 50,600 students graduated from high school. Of these graduates, 20 percent said they did not plan on pursuing a post-secondary activity (college or other), representing an immediate source of potential workers for area employers (Figure 23).
- College-Bound Graduates.** Seventy-six percent of high school graduates said they intended to go to college and another 4 percent planned on pursuing some other post-secondary training. Of the college-bound graduates from Pennsylvania high schools, 78 percent or 23,600 stayed in-state for their college education, while 22 percent left for schools outside the state. All college-bound students, whether they stay in the region for school or not, represent a future pool of candidates for job opportunities in the region; ties to and familiarity with the region might be a strong drawback upon graduation from college. However, the risk is young people will not return if they find better opportunities elsewhere.
- High School Dropouts.** Not all high school students completed the 1998-99 school year –

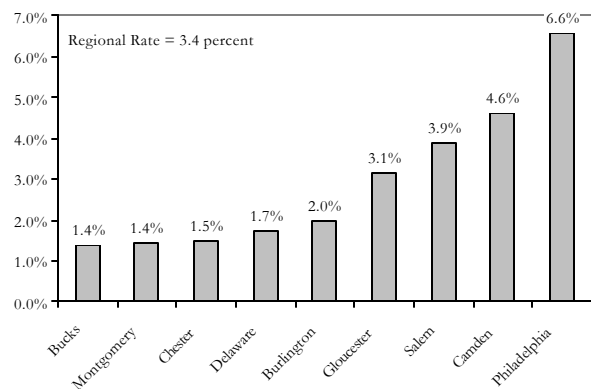
10,000 or 3.4 percent of high school students in public schools throughout the 9-county region dropped out of high school (Figure 24); 5,900 of these students dropped out of Philadelphia high schools (drop-out rate of 6.6 percent). No data is collected on the workforce status of the students once they drop out of high school.

Figure 23: Destination of Regional High-School Graduates, 1998-99 School Year



Source: PA and NJ Departments of Education

Figure 24: Public High-School Drop-Out Rate\* by County, 1998-99 School Year



Source: PA and NJ Departments of Education. \*The high school drop-out rate is the percentage of students who were enrolled at the beginning of the 1998-99 school year but did not complete the year. It does not reflect the in-between year activity of students throughout their high school education (e.g., a student completes one year but does not enroll the following year).

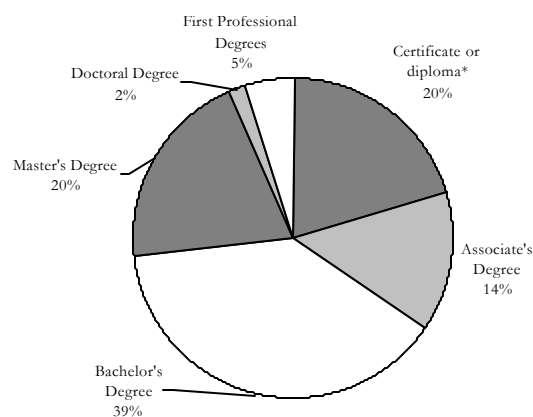
## GRADUATES OF POST-SECONDARY PROGRAMS

The system of post-secondary institutions throughout the 9 counties of the region represents an important pipeline of new, educated and skilled workers into the labor force. The system helps train young people and existing workers seeking to upgrade skills. Just as important, the system draws people to the area, particularly young people who might consider staying after graduation. The substantial number of people graduating from post-secondary institutions each year is a key competitive strength.

- In the 1999-2000 academic year, regional educational institutions produced more than 54,600 graduates of various programs and degree types. Two-thirds of these graduates earned a 4-year Bachelor's degree or higher (Figure 25). The top ten programs accounted for about 40,200 or 74 percent of all graduates from post-secondary programs (Figure 26).
- The region has a high graduation rate of students in health-related and business-related programs – in the 1999-2000 academic year almost 20,000 degrees and certificates were awarded to students in these programs, accounting for 35 percent of all degrees and certificates awarded that year. The fact that health-related and business-related programs are the top two ranking programs is likely a reflection of the region's historic economic strength in these industries; however, they do not necessarily represent the strongest employment growth prospects.
- Graduates from computer and information sciences programs were ranked fourth in the 1999-2000 academic year (3,500). The vast majority of these graduates earned certificates from their programs, not degrees. The lower graduation rate from degree-granting programs in computer and information sciences reflects the dominance of liberal arts degree-granting institutions in the region.

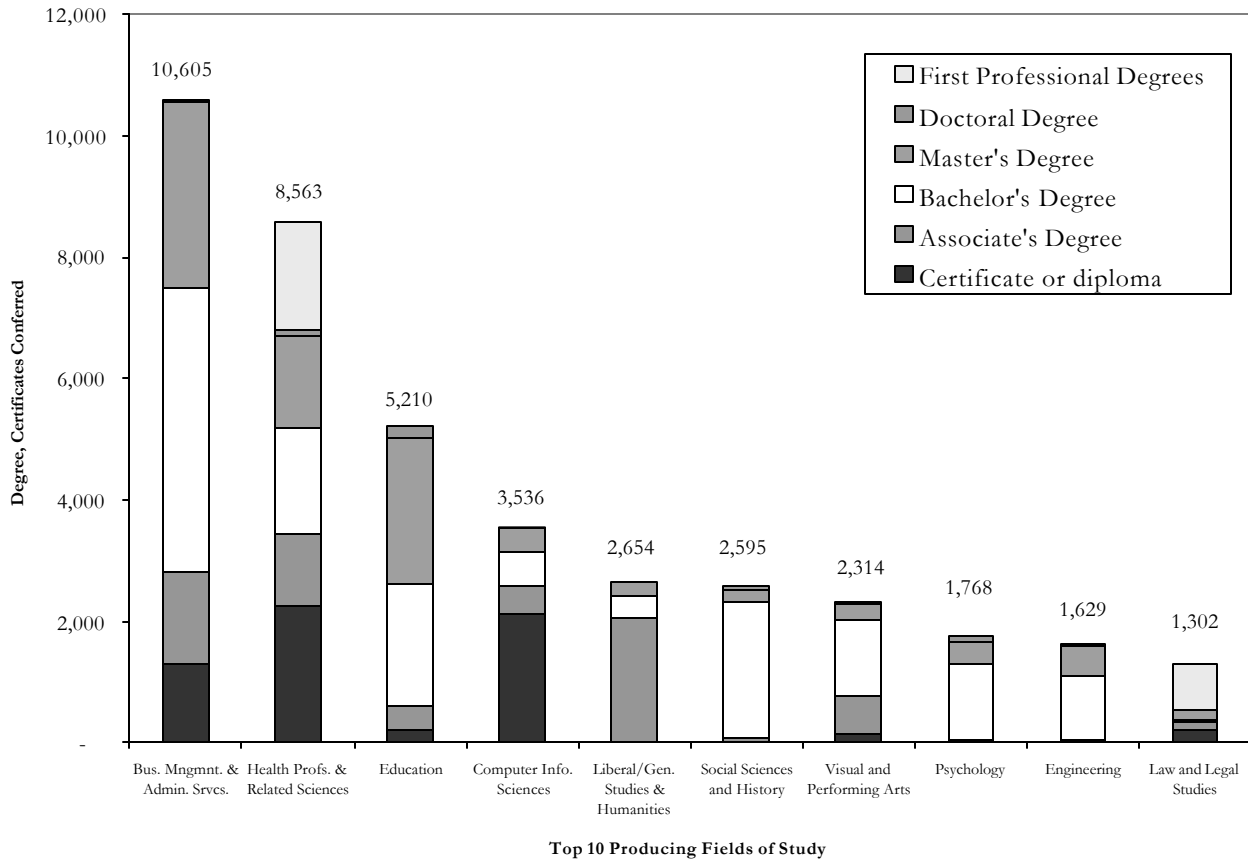
- The number of graduates from liberal arts programs (2,700 graduates), all from degree-granting programs, can be considered a regional strength. Students with a broad-based, multidisciplinary background tend to have writing and communication skills, which are valued as much as technical skills by some employers. Given the fast-changing economy where technical skills quickly become outdated and even obsolete, some employers have indicated their preference for hiring college graduates with broad-based backgrounds and conducting technical skills training themselves. When social sciences and history (2,600 graduates) and psychology (1,800 graduates) programs are added to liberal arts programs, broad-based program graduates increase to 7,000, most of them earning Associate's and Bachelor's Degrees.

Figure 25: Regional Post-Secondary Graduates by Degree/Certificate Type, 1999-2000 Academic Year



Source: PA Department of Education, NJ Commission on Higher Education. \*Data on certificates/diplomas for 1997-98, the most recent school year available. NJ data on diplomas/certificates not available.

Figure 26: Regional Post-Secondary Graduates of Top 10 Fields by Degree/Certificate Type, 1999-2000 Academic Year



Source: PA Department of Education, NJ Commission on Higher Education

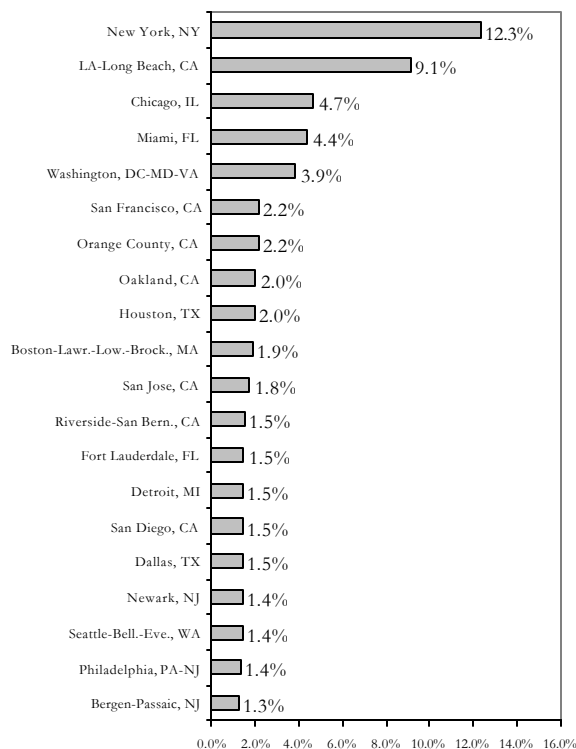
## FOREIGN IMMIGRATION

Immigrants represent a vital source of new workers into the region's workforce supply, especially in the context of slow population growth and negative domestic migration. In many regions foreign immigration has been *the* driving factor in population growth.

- Comparatively fewer immigrants come to the Philadelphia region – in fiscal year 1998, 9,200 immigrants were admitted to the region, about 1.4 percent of all immigrants admitted to the US that year (Figure 27). The Greater Philadelphia region was ranked 19th of all metropolitan areas in foreign immigration.
- The region is not a traditional point of entry for immigrants coming to the US, unlike New York, Washington, DC, Los Angeles, and Texas, and its comparatively low share of admitted immigrants reflects that. If the region's share of immigration were equal to its share of the country's population, about 2,900 more immigrants would have come to Greater Philadelphia in 1998.
- Even though regional immigration rates are low, the immigrant population that chooses to come to the Philadelphia region appears to be more diverse than the overall immigrant population admitted to the US (Figure 28). In 1998, the largest group that came to the region was from India, representing 10.7 percent. This top-ranking group was small compared to the largest group admitted to the US (Mexicans, 19.9 percent of all admitted immigrants to the US).
- Furthermore, much of the region's immigrant population is coming from countries with higher educational attainment rates, such as India, the Ukraine, and Russia. From this figure we might infer that many are coming to the region for employment opportunities, perhaps as a result of employer recruitment. Given that the region is not a traditional point of entry for

immigrants to the US, the immigrant population that does come to the region might be viewed as a favorable sign of the region's economic offerings in terms of employment opportunities.

Figure 27: Percentage of Legal Immigration to US by Metro Area of Destination, FY1998



Source: US Immigration & Naturalization Service

Figure 28: Top 10 Immigrant Groups by Origin for Region (vs. US), FY1998

Immigrant Groups by Origin	Region Total	Percent of Total Phila.	US
1) India	987	10.7%	5.5%
2) China	741	8.1%	5.6%
3) Korea	449	4.9%	2.2%
4) Vietnam	434	4.7%	2.7%
5) Mexico	379	4.1%	19.9%
6) Ukraine	357	3.9%	1.1%
7) Jamaica	343	3.7%	2.3%
8) Philippines	266	2.9%	5.2%
9) Russia	260	2.8%	1.7%
10) United Kingdom	228	2.5%	1.4%

Source: US Immigration & Naturalization Service

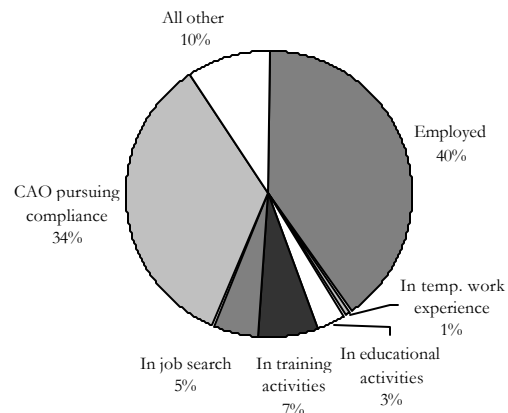
## WELFARE POPULATION

In Pennsylvania, most adult welfare recipients are required to participate in some type of work activity. This activity at a minimum is a self-directed employment search. After 24 months the state requires adults to be in a work-related activity (e.g., job, subsidized unemployment, unpaid community service, job search) in order to qualify for cash assistance.

- As of December 2000, 35,500 adult heads of household (there is an estimated average of two children per household) were receiving cash assistance in the 5 counties of Southeastern Pennsylvania (Figure 30, next page). Most of these adults were in Philadelphia (32,000); in fact, Philadelphians represented 52 percent of all adults in the state receiving cash assistance at that time.
- Of these 35,500 adults on cash assistance, 53 percent were required to be engaged in some type of work-related activity: 40 percent of these were employed, 5 percent were searching for a job, 3 percent were in an education program, 7 percent were in training, and 34 percent were being pursued by the local welfare office for “compliance.” (Figure 29) Of the 35,500 adults, 11,300 had reached the 24-month period and were required to be in a work-related activity for a minimum of 20 hours per week, unless temporarily exempted. Of the 11,300 adults, only half were employed but not earning enough to leave welfare. The fact that the employed adults were still receiving cash assistance suggests they are laboring in jobs that do not provide family-sustaining wages. The question remains: Are there enough jobs in the region to absorb this influx of workers? Conversely, do these adults have skills to obtain jobs that provide family-sustaining wages?
- The net decline in the number of adults receiving cash assistance in the region was 6,100 between December 1999 and December 2000;

many of these adults had been required to be in a work activity. Whether adults are leaving the system because they obtain employment with livable wages or they are leaving due to frustration with the new work requirements is not clear from the data. The Pennsylvania Department of Public Welfare does not track the status of adults once they stop receiving cash assistance (e.g., employment status, job retention, wage levels, job types).

Figure 29: Status of Regional Adult Welfare Population Required to be in Work Activity, as of December 2000



Source: PA Department of Public Welfare. Note: Data is for five Pennsylvania counties of the Philadelphia region only (Bucks, Chester, Delaware, Montgomery, and Philadelphia).

- According to the most recent DPW estimates (March 2001, not shown in table), 4,100 adults in Southeastern Pennsylvania who currently receive cash assistance will reach their five-year limit on March 3, 2002 and therefore will become ineligible for federally-funded cash assistance benefits; this number will increase to almost 9,100 between March and June of 2002. Not surprisingly, almost all these adults reside in the city of Philadelphia. (Note from DPW: “These adults will reach five years only if they remain continuously eligible over the next 12 to 16 months. In fact, these numbers have been declining approximately five percent each month.”) Federal law requires that cash assistance be cut off for recipients after five



years, unless the state exercises its option to exempt 20 percent of the caseload. If the state opts to exempt part of the caseload, this decision would affect the 4,100 adults in

Southeastern Pennsylvania who are soon to become ineligible for federally-funded cash assistance. The state has not yet made this determination.

Figure 30: Welfare Reform as Applied to Adult Population in Region

	<i>December, 1999</i>				<i>December, 2000</i>			
	<i>All TANF Caseload</i>		<i>Post-24 Month Caseload</i>		<i>All TANF Caseload</i>		<i>Post-24 Month Caseload</i>	
<b>Adult heads of household receiving cash assistance</b>	<b>41,678</b>		<b>22,759</b>		<b>35,549</b>		<b>20,440</b>	
Work activity required:	25,943	62%	14,466	64%	18,977	53%	11,255	55%
<i>Individuals employed<sup>1</sup></i>	8,669	33%	6,475	45%	7,605	40%	5,838	52%
<i>Individuals in temp. work exp.</i>	265	1%	361	2%	184	1%	326	3%
<i>Individuals in educational activities</i>	698	3%	97	1%	647	3%	74	1%
<i>Individuals in training activities</i>	1,516	6%	960	7%	1,263	7%	705	6%
<i>Individuals in job search<sup>2</sup></i>	1,593	6%	225	2%	995	5%	158	1%
<i>CAO pursuing compliance</i>	11,183	43%	5,261	36%	6,407	34%	3,129	28%
<i>All other<sup>3</sup></i>	2,019	8%	1,087	8%	1,802	9%	1,025	9%
Good cause claims	872	2%	669	3%	831	2%	552	3%
Exemptions	12,460	30%	6,828	30%	11,919	34%	6,704	33%
Conciliations/Pending appeal	819	2%	525	2%	1,661	5%	1,132	6%
Sanctions	1,584	4%	271	1%	2,161	6%	797	4%

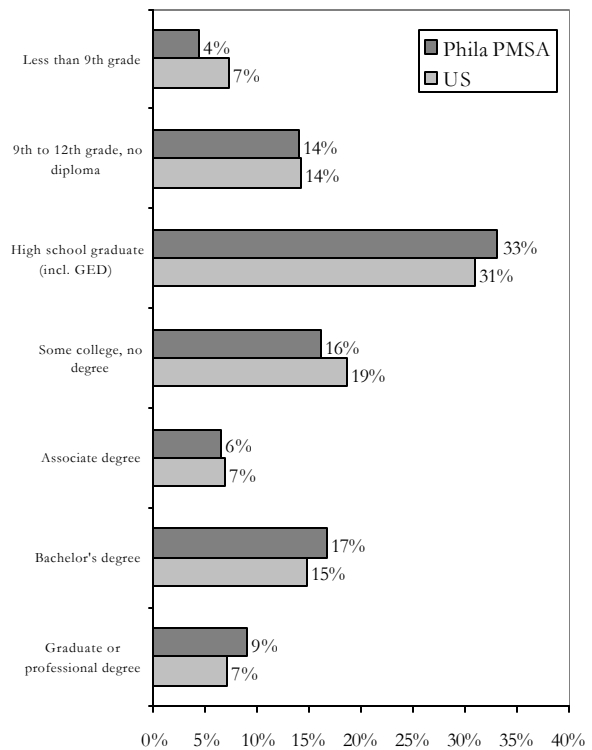
Source: PA Department of Public Welfare. Note: Data is for five Pennsylvania counties of the Philadelphia region only (Bucks, Chester, Delaware, Montgomery, and Philadelphia). Figures may not add up to total due to round-off error. 1-Includes individuals who are self-employed. 2-Individuals are either in an initial job search or an on-going job search. 3-Includes "non-exempt, non-willful, non-compliant" and "individuals referred to contractor awaiting activity."

## EDUCATION AND SKILLS

Worker quality is a key ingredient for productivity. To a great extent, worker quality is determined by the education and skills attained by residents of the 9-county metro area, whether through the formal education system or on-the-job. Worker quality from a skill standpoint also can be inferred from the types of occupations regional that workers fill.

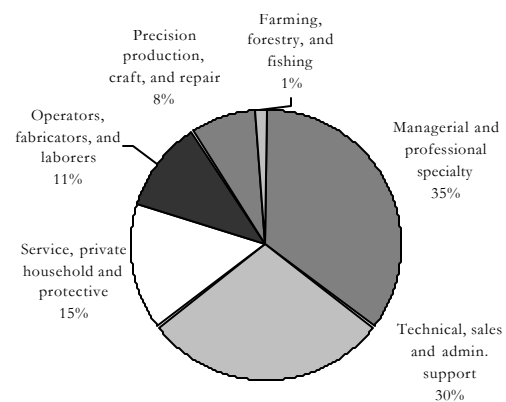
- About one-third of the resident population in 2000 had obtained formal educational training from a post-secondary, degree-granting institution (Figure 31); in fact, the region had a greater share of college graduates, particularly graduates from 4-year degree programs and graduate and professional programs, than the nation overall. Two-thirds of the population did not have a post-secondary degree, and 24 percent had not earned a high school diploma; however, a greater share of residents earned a high school degree than the nation overall.
- The majority of regional residents in 2000 filled occupations that did not directly involve a production or extraction process – 35 percent had managerial and professional specialty occupations, 30 percent had technical, sales, and administrative support occupations, and 15 percent had service positions (Figure 32). Occupations involving direct physical activity (operators and laborers; production and repair; and, farming and fishing) accounted for 20 percent of occupations held by regional residents.

Figure 31: Regional Education Attainment, 2000



Source: US Census Bureau, Current Population Survey. Note: Education attainment is reported for the population age 15 and older.

Figure 32: Occupation of Regional Population, 2000



Source: US Census Bureau, Current Population Survey. Note: Occupation is reported for the population age 15 and older.

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## GREATER PHILADELPHIA'S WORKFORCE DEMAND

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The region's growing economy has increased the demand for workers at almost all skill and experience levels, as evidenced by low unemployment and growing wages. However, it remains relatively difficult to gauge unmet demand – employer surveys are sporadic and often county-specific, rather than regional. Anecdotal evidence suggests that there is an increasing need for workers with technical skills in all industries, and that employers are often forced to provide that training themselves. If employers are unable to meet unmet demand, there must be concern that new growth will occur in other regions. Highlights of this section include:

- **Employment growth continues, but at low comparative rates.** Overall, regional employment growth in employment and wages continued, however at rates comparatively lower than other regions. According to the Federal Reserve Bank of Philadelphia, growth of the Philadelphia suburbs lagged behind that of most other metropolitan areas. Construction and the services sector experienced the strongest growth in the late 1990s, the former due to favorable economic conditions and the latter due to continued fundamental changes in the region's economy.
- **A regional economy.** Like population, the region's employment has become more dispersed among the nine counties. While Philadelphia still represents the region's central employment base, most employment growth in the region's industries and clusters took place in growing suburban counties, specifically Chester, Montgomery, and Burlington Counties. More regional workers are commuting from suburb to suburb and city to suburb than ever before.
- **Continuing suburban and service sector growth.** Workforce demand as measured by employment growth is projected to continue along a similar course of growth into the next century. The continuing transition to a service-based economy and the incorporation of technology into business operations will likely drive employment growth – significant employment gains are projected for the service sector, building on an already large base in the region. Growing suburban counties are expected to continue capturing most employment growth, resulting in employment that is even more dispersed throughout the region.



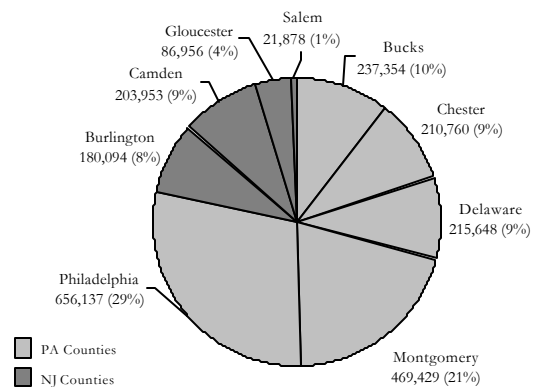
## EMPLOYMENT AND GEOGRAPHIC DISPERSION

In the absence of regular, detailed surveys, employer demand for workers can be inferred from employment levels, growth, and projections. Employer demand stems from new jobs created over time, as well as vacancies due to employee turnover and unfilled job openings.

- In 1999, private and public sector employers provided 2.28 million full- and part-time jobs in Greater Philadelphia. (Note: Employment figures represent the number of jobs in the nine-county metro area, not the number of people who are working; a person holding two jobs, for instance, would be counted twice in an employment figure. Furthermore, employment is based on the location of the employer, not the residence of the worker. Refer to labor force participation for the number of regional residents who are employed.)
- Employment was predominantly located in the Pennsylvania counties, which accounted for 78 percent of regional employment in 1999 (Figure 33). Philadelphia continued to have the greatest share of jobs in the region (29 percent), though employers in Montgomery County, with 21 percent of the region's employment, also contributed strongly to the employment base.
- Between 1990 and 1999, the region's private sector employment grew by 7.2 percent or a net gain of 133,000 jobs (Figure 34). Job growth over this period was mainly limited to Chester, Gloucester, Burlington, Bucks, and Montgomery Counties; job losses were recorded in Camden, Philadelphia, and Salem Counties.
- While regional employment growth in the 1990s reflected the generally favorable economic conditions of that decade, the region's economic performance lagged behind most other regions. According to the Federal Reserve Bank of Philadelphia, the Philadelphia region ranked 42<sup>nd</sup> out of 50 metropolitan areas in terms of

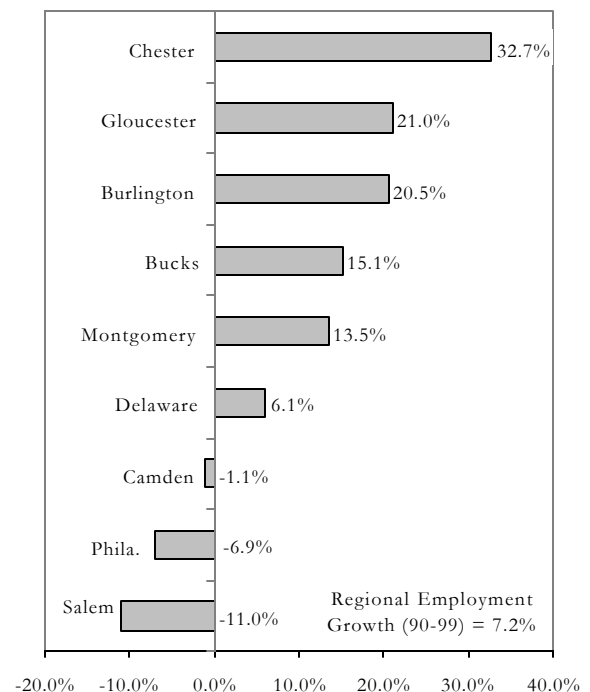
job growth during the expansion of the 1990s. Furthermore, the region's lackluster performance was not solely to blame on job losses in the city of Philadelphia – employment growth in the region's suburbs ranked only 32<sup>nd</sup> out of 41 metropolitan suburban components.

Figure 33: Total Employment by County, 1999



Source: PA Dept. of Labor & Industry, NJ Dept. of Labor

Figure 34: Private Sector Employment Growth by County, 1990-1999



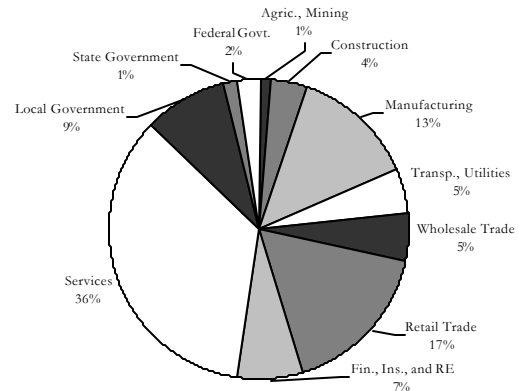
Source: PA Dept. of Labor & Industry, NJ Dept. of Labor

## INDUSTRY EMPLOYMENT

Workforce demand as measured by employment can be viewed through the lens of the standard industry classification system.

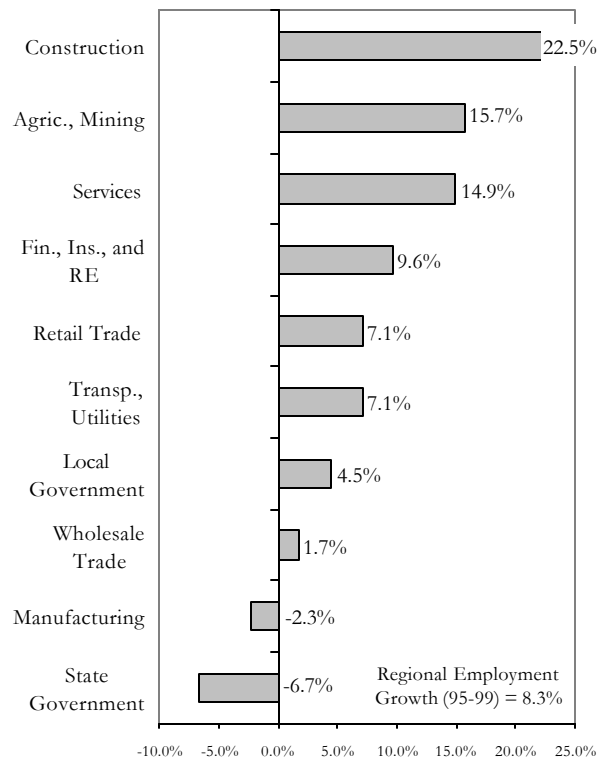
- The region's industry employment grew by 8.3 percent, a net gain of 171,000 jobs between 1995 and 1999. The employment base of the nine-county metro area is a diverse mix of industries (Figure 35), though one-third (36 percent) of employment is in the service sector. The next largest sector is retail (17 percent) followed by manufacturing (13 percent). Smaller industrial groupings include: local government (9 percent); finance, insurance and real estate (7 percent); transportation and public utilities (5 percent); and construction (4 percent).
- The strongest employment growth between 1995 and 1999 in the region was in the construction industry (22.5 percent or 17,000 net new jobs), a likely reflection of the robust economy throughout the nation in the late 1990s (Figure 36). The services industry also continued to grow (14.9 percent or almost 102,000 net new jobs), reinforcing the core role this industry plays in the employment base.
- The vast majority of companies in the region have a small employment base – according to the 1998 County Business Patterns, 73 percent of companies have fewer than 10 employees, and 24 percent have between 10 and 99 employees. Only three percent of companies in the region have more than 100 employees.

Figure 35: Industry Employment by Major Division, 1999



Source: PA Department of Labor & Industry, NJ Department of Labor

Figure 36: Growth in Industry Employment by Major Division, 1995-1999



Source: PA Department of Labor & Industry, NJ Department of Labor. Note: Total regional employment growth does not include employment for the federal government.

## INDUSTRY EMPLOYMENT PROJECTIONS

Employment levels will grow and contract as the region's economy continues to transition from manufacturing-based to technology-driven and service-based. Inevitable changes in economic cycles will also have an effect on future employment demand.

- The combined eight-county region (all counties except Salem, NJ) is expected to experience modest growth of 15.2 percent (or 388,000 net new jobs) in employment over the 25-year period (2000-2025), according to the Delaware Valley Regional Planning Commission's most recent employment projections (Figure 37).
- Employment growth is projected to be strongest in suburban counties that are currently growing, particularly Bucks, Chester, Burlington, and Gloucester. Montgomery County, which has an increasing share of the region's employment base, is projected to have somewhat slower growth. No county is expected to have employment losses; however, Philadelphia will remain relatively unchanged with 6.9 percent employment growth spread out over the 25-year period.
- Employment growth between 2000 and 2025 is projected to be strongest at the region's base industry – service sector employment is projected increase by 31.2 percent or a net gain of 285,000 jobs. By 2025 service sector employment is expected to be 1.2 million jobs or 41 percent of all employment, compared to 36 percent of all employment in 2000.
- Significant employment growth of 23.4 percent is also projected for the finance, insurance, and real estate industry, although this industry would make up only about nine percent of 2025 employment in the region.
- Manufacturing is expected to continue declining over the next decade. By 2025 employment is

projected to decrease by 6.7 percent or a net loss of 21,000 jobs. Negligible growth in construction employment of 1.8 percent reflects how this industry goes up and down with regional economic cycles.

Figure 37: Regional Employment Projections by Industry Grouping and County, 2000-2025

	2000	2025	Percent Change
<b>Total Metro Area</b>	<b>2,554,960</b>	<b>2,942,560</b>	<b>15.2%</b>
Agric. & Mining	32,900	34,730	5.6%
Construction	115,160	117,190	1.8%
Manufacturing	315,090	293,980	-6.7%
Trans., Comm., Util.	114,190	129,110	13.1%
Wholesale Trade	138,070	157,200	13.9%
Retail Trade	415,900	431,950	3.9%
Fin., Insur., & RE	203,170	250,630	23.4%
Services	914,630	1,119,910	31.2%
Federal	86,190	84,940	-1.5%
State & Local Govt.	219,660	242,920	10.6%
Bucks	272,000	338,000	24.3%
Chester	230,000	289,000	25.7%
Delaware	236,000	270,000	14.4%
Montgomery	491,000	568,000	15.7%
Philadelphia	786,000	840,000	6.9%
Burlington	207,000	251,000	21.3%
Camden	232,000	264,000	13.8%
Gloucester	100,000	123,000	23.0%
Salem	n/a	n/a	n/a

Source: Delaware Valley Regional Planning Commission, April 2000

## AVERAGE ANNUAL WAGES

Beyond the sheer number of jobs is the quality of workforce demand. To some this can be assessed by looking at growth in workers' wages – any growth in wages beyond inflation could be a proxy for the quality of workforce demand.

- Industry wages for Greater Philadelphia grew by 9.1 percent between 1995 and 1999 (Figure 38: Industry wages measured for the private sector and state and local government.) This growth rate was slightly faster than inflation in Greater Philadelphia over the same period (8.6 percent), likely indicating strength of employer demand.
- Wage growth well above inflation in Chester and Montgomery counties reflects their robust economies in recent years. Strong wage growth was also recorded in Salem County, though large fluctuations such as this are to be expected for the region's smallest county. Delaware, Camden, and Gloucester Counties all had wage growth that was slower than inflation, possibly due to a lack of strong employment centers (aside from centers such as the Philadelphia Airport in Delaware County). Philadelphia was in the middle of the pack, though its wage growth did not outpace inflation.
- Between 1995 and 1999, wages for all major industry divisions, except local and state government, grew at a rate faster than inflation. Even manufacturing, which had employment decline during this period, experienced better than average wage growth. The construction industry had the strongest wage growth of 34 percent; finance, insurance, and real estate had the highest annual wages in 1999 (\$57,800).

Figure 38: Regional Average Annual Wages by Industry Grouping and County, 1995-1999

	1995*	1999	Percent Change
Total Metro Area*	\$34,023	\$37,126	9.1%
Agriculture & Mining	\$22,646	\$27,795	22.7%
Construction	\$38,826	\$52,023	34.0%
Manufacturing	\$44,425	\$48,654	9.5%
Trans., Comm., & Util.	\$39,068	\$46,686	19.5%
Wholesale Trade	\$43,248	\$48,482	12.9%
Retail Trade	\$17,570	\$20,061	14.2%
Fin., Insur., & RE	\$44,265	\$57,819	30.6%
Services	\$32,430	\$40,238	24.1%
Local	\$35,865	\$38,731	8.0%
State	\$40,079	\$40,450	0.9%
Federal	n/a	35,754	n/a
Bucks	\$30,146	\$32,970	9.4%
Chester	\$36,487	\$40,920	12.1%
Delaware	\$32,891	\$34,775	5.7%
Montgomery	\$36,122	\$41,127	13.9%
Philadelphia	\$35,492	\$37,629	6.0%
Burlington	\$32,631	\$35,634	9.2%
Camden	\$32,017	\$33,637	5.1%
Gloucester	\$29,346	\$30,984	5.6%
Salem	\$27,230	\$37,445	37.5%

Source: PA Department of Labor & Industry, NJ Department of Labor. \*1995 figures adjusted for inflation to reflect 1998 dollars. Note: Figures for the Total Metro Area (1995, 1999, percent change) do not include the federal government due to a break in the data-collection series in 1995. However, regional average annual wages for the federal government are reported for 1999 as a separate figure.

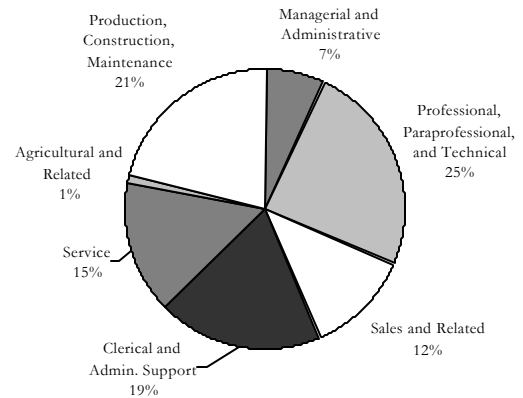


## OCCUPATIONAL EMPLOYMENT

Occupational employment in the nine-county region gives some sense of workers' skill levels and the environment in which they complete their work assignments. Quality of workforce demand might also be inferred from the source through which workers obtain the skills they use in their jobs, whether it was formal schooling or on-the-job-training.

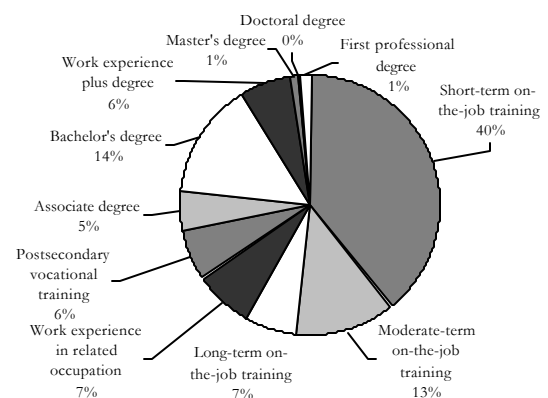
- In 1998, the region's occupational employment was 2.2 million. While workers held a broad range of occupations in 1998, to a limited extent these occupational divisions can be grouped by work environment (Figure 39). Twenty-two percent of the region's occupations were involved in direct production or extraction processes (e.g., production, construction, agriculture, fishing). The remaining 78 percent of the region's occupational employment were in a variety of settings – offices, retail venues, and on-the-road sales calls, among other work environments.
- The Bureau of Labor Statistics has identified the most likely source of training for all occupations. Using this information, occupational employment can be re-sorted to show the most significant source from which workers obtained their training in order to fulfill their job responsibilities (Figure 40). According to this re-sorting, the most significant source of training for workers filling 60 percent of occupations in the region was on-the-job training; for 40 percent of occupational employment the most significant source of training was only short-term on-the-job training. The most significant source of training for the remaining one-third of workers was through the formal system – either a vocational/technical program or a degree-granting institution.

Figure 39: Regional Occupational Employment by Major Division, 1998



Source: US Bureau of Labor Statistics

Figure 40: Regional Occupational Employment by Most Significant Source of Training, 1998



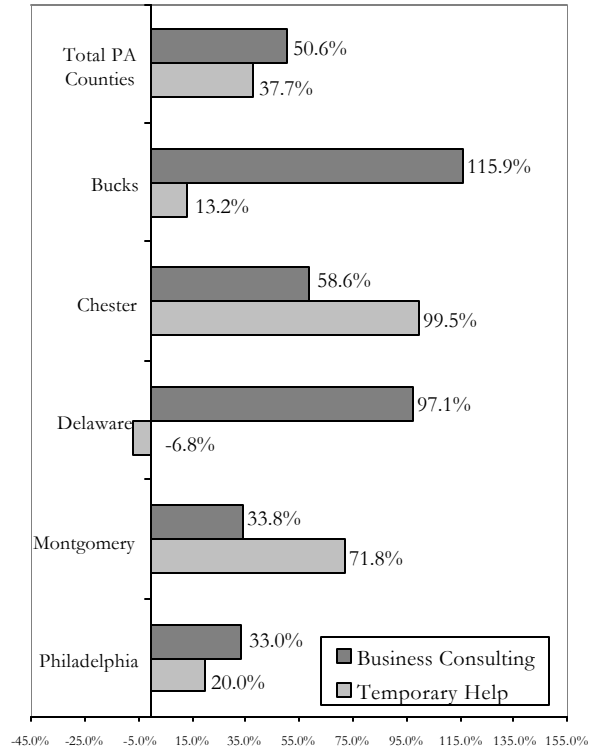
Source: US Bureau of Labor Statistics

## ALTERNATIVE WORK ARRANGEMENTS

A widely accepted belief is that our national economy over the past two decades has begun to see a shift away from the lifetime, full-time employee to a variety of alternative temporary work arrangements. These arrangements include independent contractors, on-call workers, employees of temporary help agency workers, or workers hired out by contract firms.

- Although there is no national or regional data set that fully captures these changes in work arrangements, one measure that can be used to examine a small portion of this changing dynamic is regional employment growth in temporary help firms and business consulting firms (Figure 41). From 1995 to 1999, the five Southeastern Pennsylvania counties saw a tremendous amount of growth in these firms, with the exception of temporary help firms in Delaware County. Employment growth in these types of firms far outpaced regional employment growth for all industry (see Industry Employment section). While some of this growth was attributable to a robust economy, most likely some of it also was attributable to an increasing reliance on temporary employees and outsourcing.

Figure 41: Employment Growth in Temporary Help and Business Consulting Firms, 1995-999



Source: PA Department of Labor & Industry

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## GREATER PHILADELPHIA'S WORKFORCE GAPS

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There are many positive aspects to Greater Philadelphia's workforce – on the supply side, a large and diverse worker pool; on the demand side, strong growth in employment and wages in recent years. Yet, quantitative and anecdotal evidence seem to suggest that there are gaps between supply and demand. These gaps are not necessarily unique to this region, but part of trends influencing the workforce market nation-wide. In some cases, workforce gaps are absolute shortages of workers, while in other cases the gap results from a lack of preparedness for work. There also is growing evidence that gaps are resulting from the region's spatial development. Highlights of this section include:

- **Technical skills.** There appears to be a regional shortage of workers with technical skills, reflective of an absolute, nation-wide shortage. In Greater Philadelphia, home-grown talent does not appear to be sufficient to meet growing employer demand for information technology workers. Anecdotal evidence suggests there is a shortage of manufacturing workers with technical skills, even though the manufacturing industry continues to lose jobs.
- **Worker readiness.** The work readiness of job candidates, even basic skill levels, is of growing concern to regional employers. There is significant disparity in the skill levels of students in Philadelphia schools and suburban schools in the region. Philadelphia students had lower test scores and SAT scores as well as fewer computers per student as compared to their suburban counterparts. Limited data from employer surveys suggests that a lower quality candidate pool in the region also appears to be keeping employers from filling vacant jobs.
- **Spatial barriers to work.** For many workers, there are barriers to work aside from differences in skill or educational attainment levels. These barriers are spatial in nature and include transportation issues, child care, and housing. While all workers are affected by spatial barriers, especially as employment becomes more dispersed throughout the region, low-income workers lack the means to overcome them. As unemployment levels hit all-time lows in suburban communities, the ability of lower-income workers to reach suburban employment opportunities is likely to grow in importance.



## TECHNICAL SKILLS

### INFORMATION TECHNOLOGY

The gap between the number of available information technology workers and the number of open information technology positions is growing nation-wide. One study projected that the nation will need an average of 95,000 additional computer scientists per year until 2005. Yet, the supply of graduates is not keeping pace with demand – in 1994 only 24,553 students in the country graduated with a bachelor’s degree in computer and information sciences, a figure that was down 40 percent from 1986. According to the Information Technology Association of America (ITAA), the most recent estimate of the U.S. IT workforce is 10.4 million. ITAA estimates that companies hope to hire an additional 900,000 workers this year, though 425,000 of these positions are expected to go unfilled because of a continued lack of applicants with the requisite technical and non-technical skills.

In the Philadelphia region, the gap between the supply of new IT workers and the projected net gain in IT jobs is apparent. According to the Barometer of Future Regional Occupational Demand (BFROD) for the Information Technology Cluster, IT occupational employment is projected to grow by 3,200 jobs on average each year over the next decade (see Section II, Figure 9). Furthermore, according to employer feedback obtained through the BFROD research process, many of these jobs are for workers with at least a 4-year degree and preferably experience. However, critical shortages in the supply of high-end workers are translating into greater opportunities for lesser-skilled, entry-level and non-IT workers with experience, technical training, or customer service skills.

On the new worker supply side, regional institutions conferred 4,200 certificates/diplomas and degrees to students in computer and information sciences programs in the 1999-2000 school year (Figure 42). Taken as a whole, this supply of new IT workers is sufficient to meet

regional employer demand if it continues into the future. However, whether or not demand is met will be determined by the skills needed by companies. Two-thirds of graduates from IT programs earned a certificate, diploma, or associate’s degree, which are generally acknowledged to signify lower-end or entry-level skills. Students who earned a certificate in IT might also be existing workers who were upgrading their skills; if this is the case then the yearly supply of new IT workers is lower.

If employers are looking for workers with at least a 4-year degree, then the 1,400 degrees in IT programs conferred by regional colleges and universities will be insufficient to meet this demand. It should be noted that this estimate of supply rests on the optimistic assumption that all students stay in the region upon graduation. Furthermore, the estimate of demand might be understated, as it only accounts for newly created jobs, not vacancies or unfilled openings.

Figure 42: Regional Supply of IT Workers (Certificates/Diplomas and Degrees Conferred by Regional Institutions, 1999-2000 School Year)

	<i>Computer Info. Sciences</i>	<i>Computer Engineer.</i>	<i>Business- MIS</i>	<i>TOTAL</i>
<b>TOTAL</b>	<b>3,536</b>	<b>159</b>	<b>508</b>	<b>4,203</b>
Certs./Dips.*	2,103		69	2,172
Associate’s	476		156	632
Bachelor’s	562	138	129	829
Master’s	387	21	154	562
Doctorates	8			8
4-year degree or higher	957	159	283	1,399
% of Total for Field of Study	27%	100%	56%	33%

Source: PA Department of Education, NJ Commission on Higher Education. \*Data on certificates/diplomas for 1997-98, the most recent school year available. NJ data on diplomas/certificates not available. Certificates/diplomas do not include industry-sponsored programs.

## MANUFACTURING

There also appears to be a national crisis in finding able, qualified candidates to work in manufacturing. In a 1997 national survey of manufacturers, one quarter responded that more than 75 percent of all potential job candidates were unqualified. Apparently, the worker skill deficiency has become so severe that 21 percent of surveyed companies had postponed or decided not to add new lines of business. A 1999 follow-up survey reported that 83 percent of manufacturer respondents were having extreme difficulties finding and retaining employees.

In Greater Philadelphia, the manufacturing sector experienced a net loss of 7,200 jobs between 1995 and 1999, about 1,800 each year on average. On the supply side, the region graduated 1,900 students from programs that would qualify them for manufacturing positions – engineering, engineering-related technologies, and precision production trades (Figure 43). These figures would suggest that if a gap does exist between supply and demand, it is not as critical as the gap for IT workers.

Figure 43: Regional Supply of Technical Workers (Certificates/Diplomas and Degrees Conferred by Regional Institutions, 1999-2000 School Year)

	<i>Engineer.</i>	<i>Eng.- Related Tech.</i>	<i>Precision Product.</i>	<i>TOTAL</i>
<b>TOTAL</b>	<b>1,629</b>	<b>198</b>	<b>91</b>	<b>1,918</b>
Certs./Dips.*		25	55	80
Associate's	36	150	36	222
Bachelor's	1,073	4		1,077
Master's	471	19		490
Doctorates	49			49
4-year degree or higher	1,593	23	0	1,616
% of Total for Field of Study	98%	12%	0%	84%

Source: PA Department of Education, NJ Commission on Higher Education. \*Data on certificates/diplomas for 1997-98, the most recent school year available. NJ data on diplomas/certificates not available. Certificates/diplomas do not include industry-sponsored program.

Conversely, while employment decline in manufacturing could be interpreted as diminishing employer demand, anecdotal evidence suggests that demand is growing for workers who have technical skills that are applicable to the manufacturing process. It is likely that if a significant gap between regional employer demand and supply does exist, it is related to the technical worker shortage.

## SURVEY OF CHESTER COUNTY EMPLOYERS

Some data does exist on employer demand for technical workers in Chester County, which has experienced strong employment growth in recent years. In a survey of roughly 300 Chester County employers representing a wide array of size, total sales, and industries, more than three-fourths reported that they need employees with “higher skills” (Figure 44). Almost half reported that “computer software skills” will be the skills set in greatest demand over the next 3 to 5 years; 40 percent cited “computer systems” as the skills set with the greatest employer demand. However, these employers also reported increasing demand for workers with non-technical skills, such as problem solving and communication skills.

Figure 44: Chester County Employer Survey

<i>Skills in greatest demand over next 3-5 years</i>	<i>Responded “yes”</i>
Computer software .....	48.0%
Problem solving .....	43.5%
Computer systems .....	42.0%
Interpersonal relational skills .....	42.0%
Written communication .....	40.0%

Source: Chester County Development Council, 1999 Workforce Development Survey

## WORKER READINESS

Much of the preparation young people receive for work is in elementary and high schools, where they are equipped with basic skills in math and reading and introduced to work ethics and behavioral skills. In today's technology-driven work environment, many employers now also expect workers, including people in entry-level positions, to have some degree of computer proficiency coming out of school.

### TEST SCORES

Scores on the Pennsylvania System of School Assessment (PSSA) test, which is administered to 11th graders in Greater Philadelphia, indicate great disparity in the skills of young people in Philadelphia versus suburban schools (Figure 45). In 1999, average PSSA test scores in math and reading of Philadelphia 11th graders (1118 and 1142, respectively) were considerably lower than those of Pennsylvania suburban schools, all of which had averages close to 1300 and above. (The possible range of scores was between 1000 and 1600; the state-wide average scores for math and reading were 1300). In the three New Jersey Counties (Salem not included), 11th graders, who are administered the High School Proficiency Test (HSPT), had average passing test scores in math, reading, and writing in 1999 (Figure 46). (A passing score was 300.)

Figure 45: PSSA Test Scores for PA 11<sup>th</sup> Graders, 1999

	<i>Math</i>	<i>Reading</i>
Bucks	1362	1352
Chester	1352	1333
Delaware	1299	1298
Montgomery	1383	1379
Philadelphia	1137	1135
Avg. for 5 PA counties	1276	1268
PA state-wide avg.	1300	1300

Source: PA Department of Education

A similar city/suburban disparity is evident for college-bound students in the 8-county metro area. While the region's average 1999 SAT score of 995 was lower than national average of 1016,

Philadelphia's average SAT score of 841 was by far the lowest in the region (Figure 47). With the exception of Delaware County, all counties in the region had scores equal to or higher than the national average. As an overall measure of student quality, SAT scores are probably an overestimate since only students who intend to go to college are required to take the SATs. In addition, Philadelphia had a lower proportion of students who took the SAT than suburban counties, which makes the city's average SAT score of even greater concern.

Figure 46: HSPT Scores for NJ 11<sup>th</sup> Graders, 1999

	<i>Math</i>	<i>Reading</i>	<i>Writing</i>
Burlington	400	383	371
Camden	396	372	367
Gloucester	403	381	368
Salem	n/a	n/a	n/a
Avg. for 3 NJ counties	399	378	369
NJ state-wide avg.	392	371	361

Source: NJ Department of Education

Improving SATs scores and therefore graduates' chances of attending college should be an important regional goal. As pointed out recently by the Federal Reserve Bank of Philadelphia, in a region with little population growth such as this one, raising the educational attainment of regional residents is one of the only ways to improve overall economic performance.

Figure 47: SAT Scores by County, 1999

	<i>Math</i>	<i>Verbal</i>	<i>Combined</i>
Bucks	508	516	1024
Chester	524	526	1049
Delaware	490	499	989
Montgomery	521	527	1048
Philadelphia	420	421	841
Burlington	523	514	1037
Camden	525	517	1043
Gloucester	508	505	1012
Salem	n/a	n/a	n/a
Regional average	496	498	995

Source: PA and NJ Departments of Education

Educational reforms such as the opening of charter schools are attempting to provide better K-12 opportunities for regional students (Figure 48). In fact, the themes adopted by the region's charters schools are often directly related to critical skill sets for the work place.

Figure 48: Regional and State Charter Schools

	<i>No. Currently Operating</i>	<i>Total Student Enroll. 2000-01</i>	<i>No. Approved, Not Operating</i>	<i>Projected Enroll. Of Opening Schools</i>
Phila. Cty.	34	13,759	6	1,430
Phila. Region	43	16,676	10	3,980
PA State	65	20,941	16	5,370

Source: PA Department of Education, Office of Educational Initiatives

### TECHNOLOGY IN SCHOOLS

As computer proficiency has become part of the basic skills set required in many positions, high schools in the 8-county region have begun investing in new computer equipment and teacher training in computers. Like test scores, there appears to be significant disparity between the city and suburban counties in terms of technology in schools – in 1999, the average number of students per computer was 7.0 in Philadelphia, compared to 5.5 and fewer for the other counties of the region (Figure 49).

Figure 49: Students Per Computer by County, 1999

	<i>Students/Computer</i>		<i>Students/Computer</i>
Bucks	5.3	Burlington	5.5
Chester	4.5	Camden	4.6
Delaware	5.0	Gloucester	4.9
Montgomery	4.8	Salem	n/a
Philadelphia	7.0		

Source: *The Philadelphia Inquirer*, 1999 Report on the Schools

### DVRPC EMPLOYER SURVEY

In 1999 the Delaware Valley Regional Planning Commission conducted a survey that focused on entry-level hiring of 150 companies with 100 or more employees (Figure 50). Employers were asked about basic skills training that entry-level workers would need prior to employment; most reported that entry-level requirements now go beyond basic math and reading skills to include communication,

professional demeanor, and organization skills. On a scale of 1 to 7 (1 being “extremely easy,” 7 being “extremely difficult”) 58 percent of respondents reported a 5 or higher in terms of difficulty in finding qualified candidates for entry-level positions. The vast majority of respondents (76 percent) attributed this difficulty to an unqualified labor supply.

Figure 50: DVRPC Employer Survey

<i>Basic skills entry-level workers are expected to have prior to employment:</i>	<i>% who felt 40% or more of entry-level jobs needed these skills:</i>
Communication.....	76%
Professional demeanor.....	76%
Organization.....	70%
Writing.....	63%
Math.....	50%
Computers.....	49%

Source: DVRPC, 1999 Regional Employer Survey

### CHESTER COUNTY EMPLOYER SURVEY

In Chester County's employer survey, 77 percent said they recruit employees straight out of high school; of this group, 63 percent rated high school recruits' work readiness as average or above. Eighty-three percent said they recruit from college; 94 percent of this group rated the work readiness of college recruits as average or above. Sixty-four percent reported that they were displeased with employees' general skill levels, particularly basic skills in math, reading, customer relations, and interpersonal relations (Figure 51).

Figure 51: Chester County Employer Survey

<i>Skills lacking in most candidates age 21 and older</i>	<i>% responding "yes"</i>
Problem solving.....	26%
Written communication.....	23%
Interpersonal relational skills.....	20%
<i>Skills lacking in most candidates age 18-21</i>	<i>% responding "yes"</i>
Interpersonal relational skills.....	28%
Written communication.....	23%
Basic math.....	17%
Customer relations/service.....	16%



## SPATIAL BARRIERS TO WORK

In recent years, employment growth for the most part has taken place outside the central business district and in the suburban counties of the region. While suburban workers have been able to fill many of the growing number of positions in suburban companies, tight labor markets and all-time low unemployment rates in the suburban counties are forcing employers to look to city workers to fill positions, including entry-level or lower-skilled positions. Yet, many city residents who could fill these positions face serious obstacles in reaching employment opportunities in increasingly far-flung suburban locations. Some of these obstacles are less related to skills and education and more to spatial considerations.

### CAR OWNERSHIP

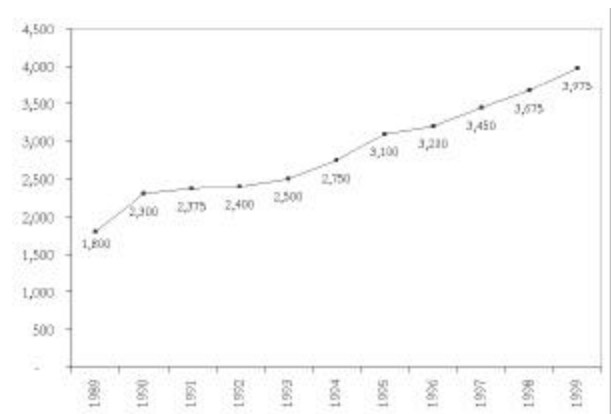
A 1998 study estimated the cost of owning a vehicle in Philadelphia. The study found that for a low wage-earning Philadelphia resident (i.e., \$6 per hour during a 30-hour work week), the cost of owning a car would use up 11 percent of the resident's income. This figure might underestimate car ownership costs since it does not take into account costs imposed by highway congestion and longer commuting distances.

### PUBLIC TRANSIT

Transit provided by SEPTA, the region's transit authority, is comprised of a network of mostly fixed, centrally-focused transportation lines (i.e., regional rail lines and radial surface transit routes). This system was an effective use of resources when more of the region's employment base was located in Philadelphia. However, city residents who are now trying to reach suburban jobs are often faced with long, expensive commutes, assuming the location is even reachable by public transit. Suburban residents have even less choice in reaching suburban jobs via public transit because fewer suburb to suburb routes exist. SEPTA has made significant progress in expanding service to suburban employment

locations using bus routes, such as Routes 124 and 125, which run from Philadelphia to the King of Prussia Mall (Figure 52). However, expanding suburban service is largely dependent on subsidization by suburban employers and counties.

Figure 52: Annual Weekday Ridership, Routes 124 and 125 (Philadelphia and King of Prussia Bus Service)

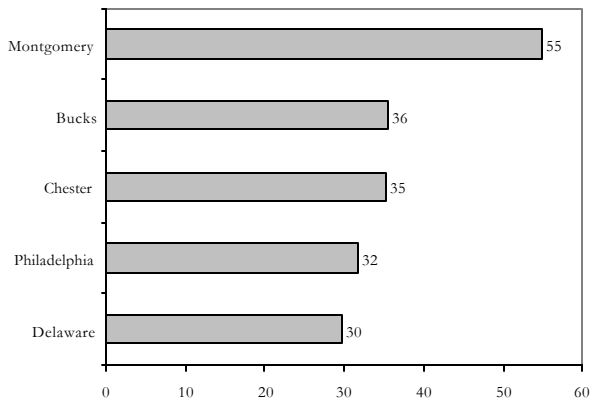


Source: SEPTA

### CHILD CARE

Affordable and available child care is one of the greatest barriers to getting and keeping jobs. Most people regardless of economic status prefer that the care of their child or children be close to home, as opposed to their place of work. A recent study found that child care availability varies to some extent across the five Southeastern Pennsylvania counties – Montgomery County has a very high number of slots per 100 children (55), while the other Pennsylvania counties of the region had 30 to 37 slots per 100 children (Figure 53). This survey did not include data on the affordability of these child care slots. As the travel distance continues to increase for many workers, and as workers are increasingly required to work all hours of the day, not just the normal 8-5 workday, child care arrangements will have to become that much more flexible and affordable in order to ensure workers can stay in jobs.

Figure 53: Number of Child Care Slots per 100 Children by County



Source: Philadelphia Citizens for Children and Youth

Another major concern for workers is the quality of available child care. According to information compiled by the Philadelphia Citizens for Children and Youth (PCCY) in 1999, the annual turnover rate among child care teachers is 31% and among teacher's aides it is 51%. A major reason for this high turnover is low wages. Child Care teachers make about one-third what kindergarten and elementary school teachers earn. A recent report by the Pennsylvania Legislative Budget and Finance Committee shows that average salaries for child care workers in center-based programs range from \$5.86 for an aide to \$8.49 for a teacher.

## HOUSING

In recent years, much of the region's employment growth has occurred in newly developed, relatively affluent suburban communities. In many of these communities, strong employment growth has coincided with the development of mostly higher-end residential housing. This construction of higher-end, owner-occupied housing is likely limiting the affordability of housing near growing employment opportunities in the region, particularly for lower-skilled, lower-income workers. On the flip side, suburban employers are less able to draw on a diverse workforce, especially as the supply of labor residing in the suburbs tightens.

A study recently completed by the National Low Income Housing Coalition sheds light on the question of affordable housing in the region. According to NLIHC, the 2001 fair market rent for a two-bedroom rental unit in Greater Philadelphia is \$755 per month; for an extremely low income family (i.e., earning 30 percent of the 2000 area median income), however, monthly rent of \$458 or less is considered affordable. Low-income residents are not the only workers facing serious barriers to employment because of housing costs – the NLIHC study estimates that 44 percent of renter households in the region are unable to afford the fair market rent for a two-bedroom unit. The NLIHC study does not distinguish between housing costs in the city versus the suburbs.

# APPENDICES

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## APPENDIX A: METHODOLOGY AND DATA SOURCES FOR THE BAROMETER OF FUTURE REGIONAL OCCUPATIONAL DEMAND

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The purpose of the Barometer of Future Regional Occupational Demand (BFROD) is to gauge employer demand in the Philadelphia region in two skills-based occupational clusters that cut across industries: information technology (IT) and customer service. The BFROD employs a unique approach to gauging employer demand. Typically, employment is presented by industry, with these figures including all occupations that are found within a particular industry (e.g., managers, sales people, support staff, maintenance workers). In the BFROD, IT and customer service occupations are separated out from industry employment estimates in order to arrive at a more accurate estimate and to understand the cross-cutting nature of these clusters. Furthermore, the BFROD also incorporates valuable insight provided by employers whose companies rely heavily on IT and customer service workers.

The BFROD combines employment statistics with insight from regional industry officials whose companies rely heavily on IT and/or customer service workers. The specific components of the research approach were:

- **Data Analysis.** Occupational employment (current and projected out 10 years) was estimated for both clusters. Two data sets were used to estimate annual projected growth over the 10-year period, for industries overall and for their IT and customer service components: 1) regional industry employment projections released by the Pennsylvania Department of Labor and Industry, and 2) the industry-occupation matrix released by the US Bureau of Labor Statistics. Specifically, the distribution of occupations across industries (as estimated by the BLS industry-occupation matrix) was applied to the regional industry employment data set. Both data sets use 1998 employment

estimates as the base year and project out to 2008. See Figure 54 for the occupations that make up both clusters; see Figure 55 (end of this section) for the sectors that make up each industry grouping.

Figure 54: Occupations in the Information Technology and Customer Service Cluster

Information Technology Cluster
Systems Analysts
Database Administrators
Computer Engineers
Computer Programmers
All Other Computer Scientists
Computer Support Specialists
Computer Operators
Data Entry Keyers
Customer Service Cluster
Marketing & Sales
Information Clerks
Bank Tellers
Communications Equipment Operators
Food Preparers and Servers
Personal Services:
Excl. Personal Care & Home Health Aides
Incl. Taxi Drivers and Chauffeurs

Source: Occupational titles taken from the US Bureau of Labor Statistic's Industry-Occupation Matrix

- **Employer Survey.** A survey presenting the employment estimates was administered to approximately 220 employers in the region (160 surveys on the IT cluster, 60 surveys on the customer service cluster). Survey respondents were asked to react to the estimates, based on their company and industry experience: were these estimates too high, too low, or accurate? ("Don't know" and "no answer" were also options.) Respondents were also asked questions regarding turnover-related vacancies. The overall response rate for the survey was 18 percent.

- **Industry Panels.** Additional feedback on the employment estimates was solicited through four industry panels, two for each cluster. Participants were asked questions similar to those on the survey, as well as questions on challenges to attracting and retaining workers. Twelve industry officials representing 11 companies and 7 industries participated in the panel discussions.

Note: Estimates of the IT workforce calculated as part of the BFROD are likely to differ from other publicly-available estimates of the IT workforce. In general, the BFROD estimate of the region's IT workforce is likely to be an underestimate for several reasons. First, BFROD regional employment estimates do not include self-employed workers. The data used for the BFROD analysis is part of the ES202 series, which is collected from all establishments that are subject to unemployment compensation laws; these laws do not apply to self-employed workers and therefore self-employed

workers are not reflected in regional employment estimates. This issue is more likely affecting regional estimates of the IT occupational cluster (as opposed to the customer service cluster) given the large number of IT workers who work on a contractual basis.

Second, the federal government classification system of IT occupations is generally considered to be narrow in scope as well as biased toward high-end IT occupations. Other attempts to classify the IT occupations cast a much wider net and are a better reflection of the pervasiveness of IT functions in today's work place. The Northwest Center for Emerging Technologies, for instance, classifies the IT "taxonomy" into eight groupings: database development and administration; programming and software engineering; network design and administration; technical support; web development and administration; digital media; enterprise systems analysis and integration; and, technical writing.

Figure 55: BFRD Industry Groupings

Construction and Manufacturing	Research and testing services
Chemical and Drugs Manufacturing	
Chemicals and allied products	
All Other Manufacturing	Business Services <sup>3</sup>
General building contractors	Personnel supply services
Heavy construction, except building	All Other Business Services
Special trade contractors	Mailing, reproduction, and stenographic services
Lumber and wood products	Services to buildings
Furniture and fixtures	Miscellaneous equipment rental and leasing
Stone, clay, and glass products	Miscellaneous business services
Primary metal industries	Credit reporting and collection
Fabricated metal products	Accounting, auditing, and bookkeeping
Industrial machinery and equipment	
Electronic and other electrical equipment	Hospitality <sup>1</sup>
Transportation equipment	Amusement and recreation services
Instruments and related products	Hotels and other lodging places
Miscellaneous manufacturing industries	Museums and botanical and zoological gardens
Food and kindred products	
Textile mill products	Hospitals and Health Services
Apparel and other textile products	Offices of physicians including osteopaths
Paper and allied products	Offices and clinics of dentists
Printing and publishing	Offices of other health practitioners
Petroleum and coal products	Nursing and personal care facilities
Rubber and miscellaneous plastics products	Hospitals, public and private
Leather and leather products	Medical and dental laboratories
	Home health care services
Transportation, Utilities & Communications	Health and allied services, Not Elsewhere Classified
Railroad transportation	
Local and interurban passenger transit	Education, public and private <sup>2</sup>
Trucking and warehousing	
Water transportation	Social & Personal Services
Transportation by air	Social services
Pipelines, except natural gas	Personal services
Transportation services	
Communications	All Other Services, Not Elsewhere Classified
Electric, gas, and sanitary services	Auto repair, services, and parking
	Miscellaneous repair services
Retail Trade	Motion pictures
Eating and drinking places <sup>1</sup>	Services, Not Elsewhere Classified
All Other Retail	
Building materials and garden supplies	Government
General merchandise stores	Federal government
Food stores	State govt., except education and hospitals
Automotive dealers and service stations	Local govt., except education and hospitals
Apparel and accessory stores	U.S. Postal Service
Furniture and home furnishings stores	
Miscellaneous retail stores	Source: Industry classifications based on the Standard Industry Classifications (SIC) system used by the Federal Government.
Wholesale Trade	
Finance, Insurance & Real Estate	Note: Several of the industry groupings listed above differ slightly from common SIC groupings and from the economic clusters presented in Greater Philadelphia First's (GPF) Regional Economic Benchmarks report, 1999. To avoid confusion, these differences are being noted:
Banks	1 – Eating & Drinking Places is included as part of the Hospitality Cluster in the GPF Benchmarks report, but in this analysis it is listed separately from Hospitality.
Depository institutions	2 – The Professional Services Cluster in GPF Benchmarks includes Educational Services and Manufacturing Admin. and auxiliary
All Other FIRE	3 – In this analysis, Computer & Data Processing Services (SIC 737) is considered part of Professional Services, though under the SIC system it is listed under the Business Services sector.
Nondepository institutions	
Security and commodity brokers	
Insurance carriers	
Insurance agents, brokers, and service	
Real estate	
Holding and other investment offices	
Professional Services <sup>2</sup>	
IT Professional Services	
Computer and data processing services	
All Other Professional Services	
Advertising	
Legal services	
Engineering and architectural services	
Membership organizations	
Management and public relations	

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## APPENDIX B: METHODOLOGY AND DATA SOURCES FOR THE REGIONAL LABOR MARKET

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Throughout the region, the Greater Philadelphia region is defined as the 9-county Primary Metropolitan Statistical Area (PMSA) – Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties in Pennsylvania, and Burlington, Camden, Gloucester, Salem Counties in New Jersey. All data and measures in this report are based on the Philadelphia, PA-NJ PMSA unless otherwise indicated.

### WORKFORCE SUPPLY

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Note: All supply measures are residence-based (i.e., where people in the region live).

#### POPULATION AND GEOGRAPHIC DISPERSION

The geographic dispersion of the region is measured using the 1990 and 2000 Census figures. The ratio of the employed resident population to the total population is based on population and employment estimates for 1999, currently the most recent year for which resident-based employment data is available.

#### WORKING-AGE POPULATION

The working-age population is defined as the region's 16-year and older adult population. The data for this measure are estimates of the 1999 regional population by age, which are based on the 1990 census figure issued by the U.S. Census Bureau. Population is inclusive in this measure (i.e., includes institutional and non-civilian population). Data from the 2000 census on the region's population by age was not available by the time of publication of this report.

#### LABOR FORCE PARTICIPATION

This table is based on data obtained from the U.S. Census Bureau, the Pennsylvania Department of Labor & Industry, and the New Jersey Department of Labor. At the national level, labor force participation is the percentage of the 16+ non-institutional population that is looking and available for work. National data from the Census Bureau was

used to estimate the 16+ non-institutional civilian population for the counties of the region in order to make comparisons with national labor force participation. (County population figures issued by the Census Bureau are for the entire population, institutional and non-civilian.) Unemployment rates were obtained from the Pennsylvania Department of Labor & Industry as well as the New Jersey Department of Labor. The unemployment rate is the percentage of people in the labor force who are unemployed. The unemployment rate, therefore, does not include individuals who are not in the labor force (i.e., not looking or not available for work).

#### POPULATION PROJECTIONS

Population projections for 8 counties in the region were released by the Delaware Valley Regional Planning Commission (DVRPC) in April 2000 – all counties except Salem County, which is not part of DVRPC's service area. (DVRPC includes Mercer County in its definition of the metropolitan area. In order to maintain continuity with other data sets in this report, data for Mercer County has been excluded.)

Projections are from base year 1997 estimates (based on 1990 census figures) to year 2025, in 5-year increments. Figures include projections by age, grouped in 5-year increments. Only growth figures are presented in this section given that the 2000 figure is an estimate based on the 1990 Census, not the figure issued as part of the 2000 Census. Note from DVRPC: "The City of Philadelphia has challenged the results of the 1990 Census, contending that the final count of 1,585,577 did not include at least 60,000 residents. Therefore, DVRPC adjusted the 1990 Census figure to correct for the



estimated undercount. All forecasts presented in this report use the adjusted number as the [base] data point.”

## YOUTH

All figures are based on data for the 1998-99 school year; data comes from the Pennsylvania and New Jersey Departments of Education. Secondary schools are normally considered 7-12 for public schools and 9-12 for private and nonpublic schools. Secondary enrollment figures are based on attendance as recorded in October of 1998. Enrollment figures include public, private, and non-public secondary schools in Pennsylvania and public secondary schools in New Jersey; they do not include enrollment for private and non-public secondary schools in New Jersey, whose enrollment figures are not collected or released by the state. Total public school enrollment is based on enrollment as recorded at the conclusion of the 1998-99 school year.

Graduation figures include all secondary schools in the region except private and non-public schools in New Jersey. With respect to the destination of high school graduates, comprehensive data is available for graduates of Pennsylvania high school students in the region; New Jersey data, which is self-reported, does not account for all high school graduates. With respect to the destination of college-bound high school students, these figures are only available for graduates of Pennsylvania high schools (i.e., attending a school in state versus outside of the state).

The high school drop-out rate is the percentage of students who were enrolled at the beginning of the 1998-99 school year but did not complete the year. It does not reflect the in-between year activity of students throughout their high school education (e.g., a student who completes one year but does not enroll the following year). High school drop-out figures are for public schools only – neither Pennsylvania nor New Jersey collects data on high school drop-outs from private or non-public

schools. For both these reasons, data on high-school drop-outs are likely underestimates.

## GRADUATES OF POST-SECONDARY PROGRAMS

This data was obtained from the Pennsylvania Department of Education and the New Jersey Commission on Higher Education. It includes graduates from degree-granting institutions in Pennsylvania and New Jersey as well as graduates from proprietary schools in Pennsylvania. Graduation statistics are not available for New Jersey proprietary schools. Data on certificates/diplomas conferred by Pennsylvania proprietary programs are for 1997-98, the most recent year available; these figures do not include industry-sponsored certifications (e.g., Cisco, Microsoft). For a complete list of the different programs that make up each field of study, refer to <http://nces.ed.gov/Ipeds/>.

Notes: 1) The state of New Jersey no longer reports *campus-level* figures on degrees conferred for two major NJ institutions in the Philadelphia PMSA – Rutgers University at Camden, and the University of Medicine and Dentistry – Camden and Stratford Campuses. For this reason, total estimates of degrees conferred by regional institutions are slightly lower than reported last year. 2) Data on degrees conferred by regional institutions presented in this report differ slightly from those presented in the Pennsylvania Economy League’s *Greater Philadelphia’s Knowledge Industry: Leveraging the Region’s Colleges and Universities in the New Economy*. In the Knowledge Industry report, the region is defined as the 14-county, PA-NJ-DE-MD Consolidated Metropolitan Statistical Area (CMSA); in this report, the regional definition is the 9-county, PA-NJ PMSA.

## FOREIGN IMMIGRATION

Data was obtained from the U.S. Immigration and Naturalization Service. Note: The top ten immigrant groups listed by origin are not a complete count of all immigrants who came to the region (or the US) in 1998.

## WELFARE POPULATION

These figures were obtained from the Pennsylvania Department of Public Welfare. They represent only adults who are subject to work activity requirements in order to receive cash assistance (as opposed to the number of families or budgets in which an adult is subject to work activity requirements). Note that there may be more than one adult in a family who is subject to work activity requirements. This figure does not include families who are receiving cash assistance solely because of a child, such as guardians or caretakers of foster children, because they are not subject to the state's work activity requirements. Data reported is for both December of 1999 and 2000. Currently, figures on the New Jersey adult welfare population are not available to the general public.

## EDUCATION AND SKILLS

This data was obtained from the 2000 Current Population Survey, administered by the US Census Bureau. Both measures are reported for the region's population age 15 and older.

## **WORKFORCE DEMAND**

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Note: All demand measures are establishment-based (i.e., where people are employed).

## EMPLOYMENT AND GEOGRAPHIC DISPERSION

Employment data used throughout this report is part of the ES202 series, which is collected from all establishments that are subject to state unemployment compensation laws. Employment and wage data on these establishments is collected and made available by the Pennsylvania Department of Labor & Industry and the New Jersey Department of Labor. The ES202 series does not include sole proprietors, family workers, and some foreign workers because they are not subject to unemployment compensation laws; it also does not include agriculture workers, armed forces workers, elected officials, some railroad workers, some

domestic workers, student workers, and some non-profit workers. (Where possible, government figures are added in to private sector employment in this report.)

The ES202 series was used because data from this series is believed to more accurately capture the actual place of employment (as opposed to attributing employment to the location of an establishment's headquarters). Also, industry classification in this data set is believed to be more up-to-date than other employment statistics. Note: Employment figures for 1990 are for private sector establishments only (government figures for New Jersey are not available). Employment represents the number of jobs in the region, not the number of people employed. (See labor force participation for the number of people employed.)

## INDUSTRY EMPLOYMENT

The employment data for 1995 and 1999 is part of the ES202 series, as described under Employment and Geographic Dispersion above. Note that growth rates in this section do not include federal government employment (although total 1999 employment does include federal government jobs); the 1995 figure for federal government employment is not comparable to the 1999 figure because of a break in the collection series. Note that this year's report does not include employment calculations for the five Greater Philadelphia First Economic Clusters (Professional Services, Data-Intensive Services, Manufacturing, Hospitality, and Health Care Services and Products).

## INDUSTRY EMPLOYMENT PROJECTIONS

Industry employment projections for 8 counties in the region were provided by the Delaware Valley Regional Planning Commission (DVRPC) – all counties except Salem County, which is not part of DVRPC's service area. (DVRPC includes Mercer County in its definition of the metropolitan area. In order to maintain continuity with other data sets in this report, data for Mercer County has been excluded.) Projections are from base year 1997 to

year 2025, in 5-year increments, and include county-level projections using standard industry classifications.

#### AVERAGE ANNUAL WAGES

Data on average annual wages for 1995 and 1999 are part of the ES202 series data, as described under Employment and Geographic Dispersion above. Wages are adjusted for inflation (1999 dollars).

#### OCCUPATIONAL EMPLOYMENT

Data was obtained from the Bureau of Labor Statistics' Occupational Employment Statistics (OES) program; this data is only available at the MSA level. Occupational employment is based on a survey that covers full-time and part-time wage and salary workers in nonfarm industries; the survey does not cover the self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers. OES data is not comparable to industry employment figures because of differences in collection methodology. BLS has determined the most significant source of training for all occupations. (For a definition of these categories, refer to the BLS publication Occupational Projections and Training Data, 1998-99 Edition.) The region's occupation employment is re-sorted to represent the most significant source from which workers who fill occupations are obtaining their training. The figures are not meant to indicate that employees with a higher skill level are not currently working in jobs that have a lower minimum skill standard, and vice versa. Rather, they are intended to provide a rough sketch of the skill attainment level associated with the region's occupational employment.

#### ALTERNATIVE WORK ARRANGEMENTS

Data used to calculate this measure is part of the ES202 series, as described under Employment and Geographic Dispersion above. Data at the three-digit level are not available for NJ counties for 1999; therefore, the measure is presented only for the five

PA counties of Southeastern Pennsylvania. The SIC codes used in this measure are 736 and 874.

## WORKFORCE GAPS

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#### TECHNICAL SKILLS

The nation-wide shortage of IT workers was documented by the US Department of Commerce, Office of Technology Policy, in its 1997 publication *America's New Deficit: The Shortage of Information Technology Workers*. The most recent estimates of the national IT workforce were issued by the Information Technology Association of America in its report *When Can You Start? Building Better Information Technology Skills and Careers*, released in April of 2001. The nation-wide gap in manufacturing workers with technical skills was documented by the National Association of Manufacturers in its Survey of the American Manufacturing Workforce (1997, 1999). IT occupational employment and supply estimates are based on the analysis completed for the Barometer of Future Regional Occupational Demand (BFROD). See the previous section for a description of methodology and data sources.

The Chester County Employment Survey was conducted by the Chester County Development Corporation (CCDC) in 1999. The survey, officially called *A Needs Assessment of the Chester County Workforce*, is based on responses from 191 employers in Chester County. The survey is part of a larger CCDC effort – the Workforce Development Partners of Chester County – whose mission is to increase “collaboration, communication, coordination, cooperation, and commitment among workforce development providers within the county.”

#### WORKER READINESS

Test scores for 11th graders in 8 counties of the region (Pennsylvania System of School Assessment or PSSA test scores for Pennsylvania students and High School Proficiency Test or HSPT scores for New Jersey students) were obtained from the annual

*Philadelphia Inquirer: 1999 Report Card on the Schools* and the Pennsylvania and New Jersey Departments of Education. The Report Card does not include data for Salem County schools. Figures for each county and for the region overall are weighted averages based on the number of students in every school that reported test scores. The following percentages of schools reported their respective SAT scores in each of the eight counties for which data is available: Bucks (79%), Chester (80%), Delaware (79%), Montgomery (87%), Philadelphia (76%), Burlington (95%), Camden (88%), Gloucester (100%). Technical schools and many private schools did not release their SAT scores; private schools are not required to take the PSSA 11th grade test in Pennsylvania. Data on New Jersey private schools also was not available. Data on the average number of students per computer was obtained from the *Philadelphia Inquirer: 1999 Report Card on the Schools* as well. Data on regional and state charter schools was obtained from two reports released by the Pennsylvania Department of Education, Office of Educational Initiatives (4/6/01): *Pennsylvania Charter Schools 2000-2001 Grouped by County* and *Pennsylvania Charter Schools Approved But Not Operating 2000-2001 Grouped by County*.

The DVRPC Employer Survey was conducted in 1999 by the Delaware Valley Regional Planning Commission. The survey's 150 respondents represent employers in a variety of industries, all employing 100 people or more. Survey questions focused on employers' entry-level hiring. See Technical Skills on page 71 for details on the Chester County Employer Survey.

#### SPATIAL BARRIERS TO WORK

Car ownership costs were obtained from a study completed by the National Conference of State Legislators (Legisbrief, August/September, Vol. 6, No. 32). Data on child care slots was provided by the Philadelphia Citizens for Children and Youth. The data was originally collected by the Pennsylvania Department of Public Welfare. The numbers represent the maximum number of slots at each child care facility and not necessarily the number of slots that have actually been taken or left open. Slots were estimated in cases where the maximum number of slots was not available (i.e., family care facilities). Data on housing costs was obtained from a study completed by the National Low Income Housing Coalition ([www.nlihc.org](http://www.nlihc.org)).

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## APPENDIX C: BIOGRAPHY OF REV. DR. LEON H. SULLIVAN

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### The Reverend Dr. Leon H. Sullivan

*"If Ye Have Faith as a Grain of Mustard Seed"*  
*Matthew 17:20 (KJV)*

*"There is only one man in the world, his name is All Men; there is only one woman in the world, her name is All Women; there is only one child in the world, and the Child's name is All Children." Carl Sandburg*

The Reverend Dr. Leon Howard Sullivan was born on October 16, 1922, to Charles and Helen Sullivan in Washington Court, in an alley in Charleston, West Virginia. He was educated at Garnett High School, West Virginia State University, Columbia University and Union Theological Seminary.

Although he was a champion among humanity, and walked with kings, Reverend Dr. Leon Sullivan chose to walk humbly, through the world, effecting change through his universal and timeless message of overcoming poverty and societal barriers through peace, reconciliation and trust in God Almighty. His genuine compassion and love of mankind was felt by people of all walks of life. Throughout his journey, he needed only two - God as his pilot and Grace, his beloved wife, as his copilot. Although his ministry would begin at the age of nineteen, his actual quest for equal rights for all persons would begin at the age of 10 years old. He was told by a man standing behind a Coca-Cola machine, that he was not permitted to sit down at a Charleston, West Virginia lunch counter because of the color of his skin. "Black boy, stand on your feet. You can't sit down here," the man said. For the remainder of this life, the Reverend Dr. Sullivan would indeed "Stand Up." He would "Stand Up" for justice. "Stand Up" for equal rights. "Stand Up" for equality of jobs. "Stand Up" for the poor, the sick and the vulnerable. "Stand Up" for people everywhere in the world who are victimized.

Reverend Dr. Leon Sullivan was unrivaled by few men in the 20<sup>th</sup> century. During his lifetime, Reverend Dr. Leon Sullivan impacted millions of people throughout the world, but particularly throughout the United States and on the Continent of Africa, by advocating self-help principles of empowerment and community development and of self-reliance. Under the mentorship of A. Phillip Randolph, who led the premier March on Washington movement that undergirded the quest for equal rights for minorities, particularly Blacks, the Reverend Dr. Sullivan as noted in his book *Moving Mountains*, "How to organize...how to mobilize." In the late 1950's and early 1960's, Reverend Dr. Sullivan initiated a successful "Selective Patronage" operation in Philadelphia to boycott companies that did not offer employment opportunities to black men and women. Later, the Reverend Martin Luther King, Jr. would adopt the highly successful Selective Patronage program and transform it into the Operation Breadbasket program.

As job opportunities began to open up, the Reverend Dr. Sullivan realized that a trained workforce did not exist to fill them. In 1964 as a response to these newly opened opportunities, he founded the OIC, a skills training

program providing training and retraining a massive scale. The OIC, which was devised to train people of all races, and gender, spread quickly across the country. In 1969, OIC International was formed mostly in Africa, but in Europe, Central America and Asia as well. Currently, there are 46 active centers in 17 countries around the world. He also founded the Progress Investment Associates (PIA), and the Zion Nonprofit Charitable Trust (ZNCT). ZNCT was established to fund housing, shopping, human services, educational and other nonprofit ventures for inner city dwellers. Zion Gardens, apartment complex, constructed in 1965, Progress Plaza, a two million dollar shopping center, built in 1968, and the Progress Human Services Center, built in 1987, are just a few examples of the ventures undertaken by PIA and ZNCT. The Reverend Dr. Sullivan also established inner-city retirement and assisted living complexes in Philadelphia and other cities throughout the United States, named Opportunities Towers.

A man who ascended far beyond his contemporaries, like an eagle soaring above his flock, the Reverend Dr. Sullivan, like no other contemporary of this time, and in the vein of the great abolitionist, Frederick Douglas, was successful at transcending the pervasive divisiveness of race that has plagued this nation. He was successful in establishing a format for a dialogue that would set the stage for the economic and civil freedom of the masses of people around the world. It is because of his unswerving faith in a merciful God that he was able, as the first Black member on the board of General Motors Corporation, to secure the support of the Board members to back him in the development of the unprecedented Sullivan Principles, a code of conduct written in 1977, for American businesses operating in South Africa. The set of ethical guidelines convinced the General Motors Corporation and other corporations to pull out of South Africa, until apartheid came to demise in 1994. Illustrative of the way Reverend Dr. Sullivan lived his life, the

A man who  
ascended far  
beyond his  
contemporaries

Principles forced the powerful elite to readdress the disparity that exists between the wealthy and impoverished. President Nelson Mandela, in a speech which followed the end of apartheid recognized Reverend Dr. Sullivan not only as a friend but as a man who stood alone, who stood only on his undying faith in God, on his faith that a free South Africa would emerge from the ashes of despair.

Most of all, the Reverend Dr. Sullivan was a Black, Baptist preacher. In his late teens, Reverend Dr. Leon Sullivan as the pastor of two churches in West Virginia before going on to pursue his education and ministry in New York. This led to serving at Abyssinian Church, pastored by the late Reverend Adam Clayton Powell, Jr., and later a church in South Orange New Jersey, before being called in 1950 to Zion Baptist Church in Philadelphia. Known as the "Lion of Zion," he served there until 1988 and during his 38 years at Zion, the congregation grew from 600 to 6,000 people. Zion Baptist Church was the base for his eventual work in job training and community development. He never tired of ministering to his congregation and knew hundreds of members by name. His empathy and his unique ability to address problems as if they were his own, made many of the congregants feel as though they knew him as a close, personal friend. Later, upon retiring to Phoenix, Arizona, when the Reverend Dr. Sullivan undertook the African American-American Summits, and unprecedented effort to lay the groundwork for an economic bridge between America and Africa upon which African-Americans and friends of Africa would freely travel back and forth, many of his former members would join him there in support of his undertaking.

Not content to place his thumbprint on the lives of thousands of people of every race and hue in the United States, the Reverend Dr. Sullivan was determined to provide a model of self-help and empowerment to the people of Africa. In June, 1988, Reverend Dr. Sullivan became pastor Emeritus in order to focus, on the work of the Opportunities Industrialization Centers International and to expand the work of the International Foundation for Education and Self-Help (IFESH), which he founded in 1983, IFESH is a non-profit organization based in

Phoenix, Arizona, which has been successful in training over 100,000 skilled workers, 100,000 newly developed farmers and five million people in literacy tied to health education. IFESH a responsible for the Teachers for Africa Program, SOS (school supplies for African children), the International Fellows Program, Debt for Development, the Best and Brightest Bankers, Schools for Africa, and the African-African American Summits, first convened in 1991. The Foundation has impacted millions of people, particularly its most vulnerable populations, through its philosophy of self-empowerment at the grassroots level. The Foundation was most recently, as a result of the Reverend Dr. Sullivan's Firm commitment to address the AIDS epidemic, begun work in Africa to bring technical training and health care awareness to regions afflicted by the epidemic.

Throughout the late 1990's, the Reverend Dr. Sullivan brought world and business leaders together to expand the successful Sullivan Principles into the Global Sullivan Principles of Corporate Social Responsibility. In November, 1999, at a special meeting at the UN, the Reverend Dr. Sullivan and Secretary General Kofi Annan formally announced these new Principles before world and business leaders. The Global Sullivan Principles will advance the cause of human rights and economic and social justice not only in Africa but everywhere in the Post-Cold War World where there is the need for the advancement of human rights.

Although Reverend Dr. Leon Sullivan's work on earth is truly monumental for its scope and for its prophetic vision of a world united, it shines most brightly because it is the work of a man who never forgot and tirelessly to instill in others, simplicity, honesty and forthrightness. What he treasured most in life, aside from his beloved family, were the hills of West Virginia where he modestly formulated as a boy his own ideas of justice and equality.

The Reverend Dr. Sullivan has published several books over the 45 years, including *America is Theirs, Build Brother Build, Philosophy of a Giant, Alternatives to Despair*, and in 1998, *Moving Mountains*. These books contain his life story, his sermons, accomplishments and philosophies, and his dreams for the future.

During a commemorative service in Charleston, West Virginia during which he was honored with a downtown street named after him in August, 2000, the Reverend Dr. Sullivan recalled that on that same street - now known as Leon Sullivan Way - as a child, he observed how Blacks walked on one side of the street and Whites walked on the other side. Fittingly, in his own life, the Reverend Dr. Sullivan ultimately helped to mend those gaps by recognizing that when people's hearts are moved, they can indeed "Move Mountains." As he enjoyed recounting in his own sermons in Philadelphia, Pennsylvania, it is not the color of the balloon that helps it to rise, but rather its character. In conversation with his seven beloved young grandchildren, each of whom loved "Granddad" dearly, he would often repeat the refrain, "Do not worry about how others view you, but how you assess yourself. Therein lies your future."

The Reverend Dr. Sullivan has been the recipient of many commendations throughout his life, including the Presidential Medal of Freedom awarded by President George Bush in 1992, in 1999 the Notre Dame Award, awarded to persons who have achieved international recognition for the contribution of the welfare of humanity, the Eleanor Roosevelt Human Rights Award presented by President Clinton in 1999, the NAACP Spingarn Award, the Kappa Alpha Psi Laurel Wreath and more than fifty doctoral degrees. However, ultimately The Reverend Dr. Sullivan preferred to be known as that tall West Virginia boy with high water pants, who one day stood up a lunch counter for himself. That same boy would one day help to lead, by example, the nation and the world into a yet unseen Promised Land.

A man of courage, a servant of the people, a man of God, the Reverend Dr. Leon Howard Sullivan gave his life for others. Now, he has finally found rest and peace beyond the River in God's vineyards.

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## APPENDIX D: ACKNOWLEDGEMENTS

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