The Changing Labor Force

Workforce Development Challenges and Opportunities for Georgia’s Governments

by Gary Roberts
Associate Professor
School of Urban Affairs and Public Policy
University of Memphis

Carl Vinson Institute of Government
The University of Georgia
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Are Georgia’s governments facing a “perfect storm” in human resources management? Perhaps. Demographic trends are creating a major human resource crisis: a substantial portion of Georgia’s public-sector workforce is nearing retirement and will soon need to be replaced. Moreover, economic and technological trends are making public-sector jobs more complex, but the educational system is not producing sufficient numbers of graduates with the knowledge and skills needed for many jobs. In addition, many younger members of today’s labor force find public-sector employment less attractive than other sectors, and it is difficult to interest them in working for government.

The confluence of these demographic, economic, technological, educational, and social trends is creating a potentially dangerous workforce situation for Georgia’s state and local governments. These governments need capable and energetic public-sector employees to carry out the important functions of government, but they may find it increasingly difficult to attract and retain the types of employees necessary for efficient and effective delivery of public services.

The makings of this “perfect storm” are described in this policy paper by Gary Roberts, Associate Professor and Coordinator of Graduate Studies in the Division of Public and Nonprofit Administration of the School of Urban Affairs and Public Policy at the University of Memphis. He identifies the human resource challenges facing Georgia’s governments, focusing on major trends affecting the public-sector labor market and the barriers that stand in the way of attracting and retaining a strong public-sector workforce. To highlight the human resource challenges facing Georgia’s governments, he identifies the public-sector positions for which the largest number of new employees will be needed in Georgia during the coming years.

Fortunately, the situation is not hopeless if governments respond creatively to meet the challenges and overcome the barriers. Toward that end, Roberts suggests administrative and legislative actions that governments should consider in response to the labor force challenges. Many of the possible responses reflect the experience of other states. Others have been suggested by public administration researchers. Although not all of the alternative actions are appropriate for all of Georgia’s governments, they should be considered carefully by policymakers and administrators.
This paper is part of the Public Policy Research Series published by the Carl Vinson Institute of Government. The purpose of this series is to present research on important policy problems and issues facing the state of Georgia and its local governments. This paper provides insights into an issue that Georgia’s governments will need to address for many years to come. We are pleased to offer this paper as part of our policy series.

James L. Ledbetter
Director
Carl Vinson Institute of Government

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Acknowledgments

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Executive Summary

Georgia’s state and local governments will find it increasingly difficult to recruit and hire an adequate number of qualified employees to fill important public-sector positions. The difficulties are—and will continue to be—caused on the one hand by societal trends and on the other by characteristics of public-sector jobs that interfere with efforts to attract, hire, and retain the types of employees needed to provide public services.

Societal Trends

Societal trends include demographic, educational, technological, and economic changes that create the need for Georgia’s governments to hire a large number of people to replace retiring employees and fill new positions at a time when the number of qualified applicants is likely to be inadequate. The demand for large numbers of replacement and new employees is being created by retirements (a substantial portion of the public-sector workforce is at or near retirement age) and growth in the number of public-sector jobs.

The problem of finding an adequate number of qualified employees to replace retiring employees and fill new jobs is caused by many factors, including the following:

- The labor force growth rate is slowing, reducing the number of new workers coming into the workforce.
- Many potential public-sector workers cannot be employed in the fastest-growing jobs because they lack the English language skills needed for the available positions or they do not have the skills, knowledge, or competencies required for complex jobs.

Fastest-Growing Public-Sector Occupations in Georgia

The fastest-growing public-sector occupations in Georgia are in education and public safety. The occupation that will have the greatest number of average annual openings (to fill new and vacant positions) is secondary school teacher. Other jobs on the list of fastest-growing public-sector occupations by average number of annual openings are elementary school teachers, child care workers, special education teachers, information system managers, social workers, bus drivers, police patrol officers, education administrators, and human resource managers. Six of these 10 fastest-growing public-sector positions require a minimum of a bachelor’s degree, and one requires a master’s degree.
Barriers to Attracting and Retraining Qualified Public-Sector Employees

The ability of Georgia’s governments to respond to societal trends is limited by barriers to effective action. These barriers include

- the unattractiveness of government careers that has been created largely by the low prestige of government employment and by staffing practices that are inefficient and occasionally archaic,
- the occupational stress associated with government employment and its deleterious effect on the quality of work-life (i.e., employees’ ability to balance both their job and personal life),
- compensation and benefits that often are not competitive with the private sector,
- inadequate public-sector investment in training and employment development, and
- generous retirement programs that provide incentives for public employees to retire at an earlier age than is common in the private sector.

Alternative Policies and Administrative Actions to Address Workforce Challenges

A combination of these societal changes and barriers to workforce development may have long-term adverse effects on Georgia’s public sector unless the state and local governments overcome them with wise workforce development policies and administrative actions. Georgia’s governments should consider a broad array of policies and administrative actions as they plan their workforce development strategy. Some alternatives have been pioneered in other state and local governments; others have been suggested by researchers. Not all of the alternative actions are appropriate for all governments in Georgia. Local policymakers and administrators should carefully sort through the options to identify those that are best for their jurisdictions.

This policy paper presents numerous alternative policy and administrative actions that Georgia’s governments might employ to improve workforce development. These alternatives are organized according to the barrier they are intended primarily to overcome:

**Barrier: The Unattractiveness of Government Careers**

- Partner with primary, secondary, and university-level educational institutions to improve knowledge levels regarding public-sector careers
- Streamline government recruiting processes
- Streamline and improve selection practices
Barrier: Quality of Work-Life
- Offer orientation sessions and mentor programs
- Develop a comprehensive worker-friendly benefits package
- Develop an effective performance management system

Barrier: Uncompetitive Compensation Policy
- Monitor compensation in local labor markets and respond as needed

Barrier: Inadequate Human Capital Development
- Undertake a comprehensive workforce planning and human capital development program
- Undertake a comprehensive training program linked to workforce planning
- Undertake state policy actions for workforce development

Barrier: Generous Retirement Programs
- Adopt innovations to provide incentives to employees in key positions to delay retirement

The key to an effective public-sector workforce development policy is extensive planning combined with a commitment to workplace excellence and lifelong learning. The traditional static training model is not well suited to the dynamic nature of today’s labor market. Furthermore, the competitive success of Georgia’s governments is highly dependent on their ability to attract and retain the labor force of the future. Georgia’s governments may therefore want to consider several of the policies and administrative actions suggested in this policy paper as they formulate their strategies for workforce development. Clearly, Georgia’s governments are facing serious challenges, but the adoption of some of the alternatives in this paper may better prepare employers for increasing levels of labor market competition.
Introduction

To do its job well, Georgia’s public sector needs a qualified, motivated, and well-trained workforce. The challenge of assembling and maintaining such a workforce has become difficult in recent years, and the difficulty will likely increase throughout this decade. This challenge is created in large part by demographic, educational, technological, and economic factors. Key elements of these factors are:

• **Demographic**: Reductions in the overall labor force growth rate, increases in the percentage of the workforce comprising minority and immigrant employees, and increases in the average age of the labor force.

• **Education**: Increases in educational requirements for 21st-century jobs, a decline in unskilled “living wage” jobs, and a mismatch between labor force skill requirements and the competency and ability levels produced by Georgia’s primary, secondary, and higher education systems.

• **Technology**: Increases in the need for information system competencies as more service delivery depends on information-based service-delivery processes; increased training associated with the need for these competencies.

• **Economic**: Increases in wage and benefit levels because of greater competition for qualified employees as labor force growth rates decline; increases in strains on government budgets as a result of the higher wage and benefit levels.

The challenge is made more difficult by barriers that interfere with effective government responses to these factors. The barriers include the unattractiveness of government careers (including the low prestige of government employment and inefficient staffing practices); the effect of occupational stress on quality of work-life (i.e., employees’ ability to balance both their job and personal life); uncompetitive compensation and benefits; inadequate human capital investment (e.g., training, employee development); and generous retirement programs.

This policy paper examines closely the workforce challenge facing governments in Georgia and throughout the United States. It begins by identifying macrolevel changes in the nation’s labor force and discussing their impacts on workforce development in Georgia’s government sector. The paper then analyzes the present Georgia labor market and projects its future over the next 10 years. It pays special attention to the changing demand in Georgia for “benchmark” positions, including teachers, police officers, and social workers.
The policy paper concludes by suggesting policies and administrative actions available to Georgia’s governments to help meet the challenge of building efficient and effective workforces. The alternative solutions are drawn from the experiences of other states and from researchers who have examined workforce development issues at the federal, state, and local level. Suggested solutions include educational system improvements and innovations such as public-private education and training partnerships, novel and creative recruitment and retention programs, employee development strategies, and marketing and public relations efforts.
Trends in the Public-Sector Workforce

The public-sector labor force in the United States is undergoing a metamorphosis in its composition, skill mix, and technology. These labor market changes are complicating the efforts of Georgia’s governments to recruit, train, and retain the high-quality employees essential for effective service delivery. The challenge was described in a passage in the first Volcker Commission report that is as applicable today as it was more than a decade ago:

Never have demands on the public service been so complex, so intense, and so difficult of solution. Technological and scientific advances mandate that government and its employers be at the forefront of scientific abilities and understanding. If government is unable either to attract new public servants or to retain critical members of its workforce the future is bleak. The debate must be about merit, not as it is known now, but as it could be—a term meaning high quality, accountability, pride and acceptance of change. (National Commission on the Public Service 1989, in National Academy of Public Administration 1999b, xi)

As with all markets, the labor market is affected by both supply and demand factors, and these factors are being influenced by forces that are creating significant changes. Government workforces are changing because of supply-side factors, including an aging labor force, increased labor force diversity and immigration, and changing labor force participation and growth rates. Moreover, labor demand factors are affecting government workforces. These demand factors are both quantitative (i.e., changes in the number of jobs) and qualitative (i.e., changes in types and the nature of jobs). The demand-side factors include changes in the distribution of jobs among economic sectors, increases in the educational requirements for jobs, increases in the use of contingent labor, changes in the nature of work due to technology, and a growing emphasis on increasing quality of life in the workplace.

Supply of Labor

The supply of labor is critically important for the public sector because it determines the quantity and quality of workers that are employed and the labor pool from which new hires for future workforces will be obtained. Labor supply will continue to be affected by the aging of the labor force, increased labor force diversity and immigration, and changing labor force participation and growth rates.
Aging of the Labor Force

The average age of workers in the government labor force in the United States and in Georgia is increasing, and many workers will be retiring in a few years. Nationally, the government labor force is considerably older than is the private sector’s: 44 percent of government employees are aged 45 years or older compared with 30 percent of employees working in the private sector. In the public sector, only 27 percent of employees are younger than 30 years old; in comparison, 43 percent of private-sector employees are younger than 30 (Smith 2000). In Georgia, 55 percent of state government employees are at least 40 years old, a percentage similar to that in other states (Young 2001).

With a large percentage of older employees, government organizations face the challenge of replacing much of the workforce in a competitive labor market. The situation is most urgent for the federal government, where 70 percent of federal executives will be eligible for retirement by 2005 and an estimated 45 percent of eligible employees are opting for early retirement (Ingraham, Selden, and Moynihan 2000; U.S. General Accounting Office 2001). The overall annual retirement rate in the federal government is estimated to be 2 percent, which—with proactive succession planning—is a manageable number (U.S. General Accounting Office 2001). However, the overall retirement rates can be deceiving, given each department’s unique age profile. For example, the annual retirement rates range from 7 percent in NASA to 29 percent in the Agency for International Development (U.S. General Accounting Office 2001).

The federal government’s replacement needs are exacerbated by low retention rates. One-third of the employees hired by the federal government in the early 1990s had left the federal service by 1998, further accentuating hiring pressures (Ingraham, Selden, and Moynihan 2000). The extent of the workforce-replacement challenge facing the public sector is reflected in Table 1, which lists the occupations in the United States that have the greatest replacement needs. Six of those 10 occupations are in the public sector (Governing State and Local Source Book 2002).

The graying of the labor force is not solely a public-sector phenomenon. Labor force projections for 2020 indicate that the percentage of employees in the general labor force who are aged 55 and older will increase from 13 percent to 17 percent, the 25- to 54-age cohort will drop from 71 percent to 67 percent, and the 16- to 24-age cohort will increase slightly (16.1 percent to 16.5 percent) (Fullerton and Toossi 2001). The median age of the labor force is projected to increase in 2020 from 39.3 to 40.6.
Increasing Labor Force Diversity

As the labor force has aged, its racial and gender composition has been changing. The percentages of minorities and women in the labor force have been growing and will continue to do so. As a result of increasing numbers of minorities in the labor force, the percentage of whites in the workforce will decrease from 75 percent in 1996 to 73 percent in 2006 (Smith 2000).

Governments have a more diverse workforce than does the private sector, employing higher percentages of minority workers and women (Smith 2000). In Georgia, African Americans, who compose 23 percent of the state’s labor force, make up 40 percent of state employees. Women, who compose 47 percent of the state’s labor force, are 60 percent of state employees.

The changing demographic composition of the workforce is shown in Table 2, which compares the national distribution of workers by race, sex, and age in 2000 with the projected distribution in 2010. During this period, the portion of the labor force that is non-Hispanic whites will decline from 73.1 percent to 69.2 percent. At the same time, women will compose a larger portion of the labor force, increasing from 46.6 percent to 47.9 percent, and minorities will make up a larger percentage of the labor force (Fullerton and Toossi 2001).

Increased Immigration

Another major source of labor force diversification is immigration. According to projections, two-thirds of the increase in the U.S. population
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between 2000 and 2050 will consist of immigrants. The growing number of immigrants will change the labor pool and pose new challenges for public-sector hiring. More applicants who lack English proficiency and whose education and training backgrounds may not be sufficient will apply for public-sector jobs (U.S. Department of Labor 1999b). Because some public-sector occupations require U.S. citizenship, immigrants will not be eligible for certain jobs until they have obtained citizenship. Thus, for these jobs, there will be limited opportunity for immigrants to replace retiring public-sector workers.

Changing Labor Force Participation, Growth, and Mobility Rates

Two factors that will influence the future supply of labor are labor force participation rates (by gender, race, and age) and overall labor force growth rates. As shown in Table 3, participation rates by women are projected to increase by 2010 from 60.2 percent to 62.2 percent, whereas those for men are expected to decrease from 74.7 percent to 73.2 percent (Fullerton and Toossi 2001). From 2000 to 2010, the labor force participation rate of workers older than age 55 is projected to increase from 32.3 to 37.1 percent.

### Table 2. Civilian Labor Force Distribution, by Demographic Group

<table>
<thead>
<tr>
<th>Group</th>
<th>2000 (percent distribution)</th>
<th>2010 (percent distribution)</th>
<th>2000–2010 (percent change)</th>
<th>2000–2010 (percent annual growth rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (16 years and older)</td>
<td>100.0</td>
<td>100.0</td>
<td>12.0</td>
<td>1.1</td>
</tr>
<tr>
<td>16–24 years</td>
<td>16.1</td>
<td>16.5</td>
<td>14.8</td>
<td>1.4</td>
</tr>
<tr>
<td>25–54 years</td>
<td>71.0</td>
<td>66.6</td>
<td>5.0</td>
<td>.5</td>
</tr>
<tr>
<td>55 years and older</td>
<td>12.9</td>
<td>16.9</td>
<td>46.6</td>
<td>4.7</td>
</tr>
<tr>
<td>Men</td>
<td>53.4</td>
<td>52.1</td>
<td>9.3</td>
<td>.9</td>
</tr>
<tr>
<td>Women</td>
<td>46.6</td>
<td>47.9</td>
<td>15.1</td>
<td>1.4</td>
</tr>
<tr>
<td>White</td>
<td>83.5</td>
<td>81.2</td>
<td>8.9</td>
<td>.9</td>
</tr>
<tr>
<td>Black</td>
<td>11.8</td>
<td>12.7</td>
<td>20.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Asian and other</td>
<td>4.7</td>
<td>6.1</td>
<td>44.1</td>
<td>3.7</td>
</tr>
<tr>
<td>Hispanic origin</td>
<td>10.9</td>
<td>13.3</td>
<td>36.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Other than Hispanic</td>
<td>89.1</td>
<td>86.7</td>
<td>9.0</td>
<td>.9</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>73.1</td>
<td>69.2</td>
<td>6.0</td>
<td>.6</td>
</tr>
</tbody>
</table>

Even though the labor force participation rates of older Americans are increasing, the aging labor force presents the public sector with a variety of challenges. Clearly, the most serious challenge is replacing retiring employees. Efforts to meet this challenge are complicated by declines in labor force growth rates. Thus, the need for new and replacement hires is increasing as the growth in the supply of labor is slowing. The annual labor force growth rate decreased from 1.6 percent in 1980 to 1.1 percent per year in 2000 (Fullerton and Toossi 2001). The rate of increase was 14 percent between 1986 and 1996 compared with an estimated 11 percent growth rate between 1996 and 2006 (Smith 2000). The reduced workforce growth rates are more pronounced for key age cohorts. The 35- to 44-year-old age group, the principal cohort for management succession, has declined by 5.1 million workers (Fullerton and Toossi 2001).

The supply of labor is also influenced by labor mobility rates, which are increasing. When workers change jobs, potential problems are created for public employers who depend on a stable labor force. In the private sector, job churning (i.e., job creation and loss within a company and industry) enhances the volatility of the job market. For example, in Minneapolis, 12,242 computer manufacturing jobs were created and 8,000 were lost during the same year. Even though overall employment increased, individual employees changed jobs and employers (Hale 1999). In contrast to the private sector, the public sector has traditionally offered employees substantial job security, often in return for lower pay compared

<table>
<thead>
<tr>
<th>Group</th>
<th>2000 (percent participation)</th>
<th>2010 (percent participation)</th>
<th>2000–2010 (difference in participation rates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, 16 years and older</td>
<td>67.2</td>
<td>67.5</td>
<td>.3</td>
</tr>
<tr>
<td>16–24 years</td>
<td>65.9</td>
<td>66.5</td>
<td>.6</td>
</tr>
<tr>
<td>25–54 years</td>
<td>84.1</td>
<td>85.6</td>
<td>1.5</td>
</tr>
<tr>
<td>55 years and older</td>
<td>32.3</td>
<td>37.1</td>
<td>4.9</td>
</tr>
<tr>
<td>Men</td>
<td>74.7</td>
<td>73.2</td>
<td>−1.5</td>
</tr>
<tr>
<td>Women</td>
<td>60.2</td>
<td>62.2</td>
<td>2.0</td>
</tr>
<tr>
<td>White</td>
<td>67.4</td>
<td>67.6</td>
<td>.2</td>
</tr>
<tr>
<td>Black</td>
<td>65.8</td>
<td>67.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Asian and other</td>
<td>66.5</td>
<td>67.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Hispanic origin</td>
<td>68.6</td>
<td>69.0</td>
<td>.4</td>
</tr>
<tr>
<td>Other than Hispanic</td>
<td>67.0</td>
<td>67.3</td>
<td>.3</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>67.2</td>
<td>67.3</td>
<td>.1</td>
</tr>
</tbody>
</table>

with private-sector counterparts. However, today’s younger workers are more accustomed to job change, making it more difficult for the public sector to rely on job security as an effective incentive to attract and retain workers.

**Demand for Labor**

The public sector’s need for labor comes from the desire for services by citizens and decisions by elected officials to provide them (and levy taxes to pay for them.) For each government unit, the need for labor relates directly to the services provided by the government. The decision on services to be provided is heavily influenced by the number of residents and businesses served by the government and residents’ and businesses’ incomes, expectations, and willingness to pay for the services. Thus, to a large extent, changes in the public sector’s demand for labor are dependent on changes in demographics, wealth, and citizen preferences.

The public sector’s demand for labor cannot be measured only by the number of employees needed to carry out the work of governments but must include consideration of the characteristics of its workforce. These characteristics include increased educational levels required of the workforce, the use of contingent labor (i.e., nontraditional labor force), and technological and quality of life issues.

**The Growing Government Labor Force**

Total government employment in the United States was 20.6 million in April 2000, 15.7 percent of the 131.1 million total labor force. Of the 20.6 million employees, 2.9 million were federal employees, 4.7 million were state employees, and 13 million were local government employees (U.S. Department of Labor 2000). In addition to the 20.6 million employees working directly for government, another 11 million employees of non-profit organizations and 10 million private-sector employees were working for the government through contractual work.

In recent decades, state and local governments have been the engines of government employment growth, offsetting substantial declines in the federal workforce. From 1970 to 1998, the federal civilian labor force decreased by 11 percent (approximately 300,000 employees), reducing its total share of government employment from 22 percent in 1970 to 14 percent in 1998. During the same period, state and local government jobs increased by 1.5 million (“State and Local Government Jobs Increase in the 1990s” 1998).

During the 2000 to 2010 period, general state and local government employment is projected to increase by 808,000 employees (12.3 per-
Employment in state and local public education is expected to grow by 1.1 million employees (11.3 percent). By comparison, the federal government is expected to lose 154,000 jobs (−5.6 percent) (Berman 2001).

In Georgia, the projections for state and local government employment show higher growth rates than the national average. From 2000 to 2008, general state government employment is expected to grow by 17,320 jobs (a 23.4 percent increase) and general local government employment is projected to increase by 19,010 jobs (a 17.4 percent increase). More striking, jobs in public education are projected to increase by 82,860 (a 28.4 percent increase). Federal government employment in Georgia will decrease by 6,050 (−8.8 percent) (Georgia Department of Labor 2002).

**Increasing Educational Requirements**

The 21st-century labor force will be characterized by a need for increased educational levels among the workforce. Many of the jobs for which the public sector will be recruiting are professional positions (e.g., teachers, social workers, vocational counselors) that require college degrees. Competition for employees to fill these positions will increase. Table 4 shows that an increasing percentage of jobs will require at least an associate’s degree. By 2010, about 3 in 10 job openings will require an associate’s degree or higher. Jobs requiring additional education will pay more on average than jobs requiring only work-related training. The highest average salaries will be paid to positions requiring at least a bachelor’s degree.

Table 4, Education and Average Salary for Occupations

<table>
<thead>
<tr>
<th>Source of Education</th>
<th>2000 (percent)</th>
<th>2010 (percent)</th>
<th>Change (N in 1,000s)</th>
<th>Change (percent)</th>
<th>Jobs Open (N)</th>
<th>Percent Distribution</th>
<th>2000 Mean Annual Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (all occupations)</td>
<td>100.0</td>
<td>100.0</td>
<td>22,160</td>
<td>100.0</td>
<td>57,932</td>
<td>100.0</td>
<td>$33,089</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>20.7</td>
<td>21.8</td>
<td>6,484</td>
<td>29.3</td>
<td>12,130</td>
<td>20.9</td>
<td>$56,553</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>8.1</td>
<td>8.7</td>
<td>2,839</td>
<td>12.8</td>
<td>5,383</td>
<td>9.3</td>
<td>$35,701</td>
</tr>
<tr>
<td>Work-related training</td>
<td>71.3</td>
<td>69.5</td>
<td>12,837</td>
<td>57.9</td>
<td>40,419</td>
<td>69.8</td>
<td>$25,993</td>
</tr>
</tbody>
</table>

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is a result of job clustering in regions that are centers for specific industries (such as biotechnology) that require higher education levels.

The increasing need to fill positions requiring substantial education makes hiring more difficult. For example, a Minneapolis labor market study found that 80 percent of employers reported difficulties in filling openings due to a lack of skilled applicants (Hale 1999). Fifty-six percent of human resource and 77 percent of customer service managers reported serious basic skill deficits for high school graduates (Hale 1999). Nationally, the educational system generally manifests serious performance deficits in math and science—critical areas for international competitiveness—as well as great variability in educational achievement by race and income.

Increasing Use of Contingent Labor

One of the most significant labor market changes is the ascension of the nontraditional labor force (Bond, Galinsky, and Swanberg 1998; U.S. Department of Labor 1999a). Employers are embracing a variety of labor-cost reduction strategies, including outsourcing; using temporary, part-time, or leased employees; and supplementing paid with volunteer labor. Approximately 30 percent of the labor force works in the nontraditional employment sector (Smith 2000). The increased reliance on nontraditional employees poses complex management, employee motivation, and social equity questions. For example, are part-time employees exploited if they are not provided benefits (Roberts 2002)?

The percentage of public employees who have part-time or temporary jobs is increasing. Nationwide, 15.4 percent of the local government labor force is working part time (McMenamin 2000). In Georgia, the percentage of state government employees in temporary positions grew from 7 percent in 1979 to 20 percent in 2000 (Young 2001).

For employers, the benefits of part-time workers include lower wage and benefit expenditures, staffing and service-delivery flexibility, and more extended screening opportunities (International Labor Organization 1997; Paul and Townsend 1998; Roberts 2002). The benefits for employees include flexible schedules to balance work and family, more time to explore other career options, and the opportunity to generate income while searching for a full-time job and to gain work experience (International Labor Organization 1997; Paul and Townsend 1998; Roberts 2002). With the aging of the labor force, part-time employment in the form of a phased-in retirement program may help state and local governments retain older employees, thereby reducing the loss of institutional memory and spreading out replacement demands.
Technology and Jobs

Competitive success in a knowledge-based economy requires the integration of technology and information. Regions with a skilled workforce and a solid technology infrastructure have an economic advantage over other regions, as evidenced by their higher growth rates (Hale 1999).

Major structural changes in the economic system are altering the parameters of conventional economic theory. The fundamental nature of work has been altered by the advent of the information age and the computerized integration of product- and service-delivery processes. In response, organizations in all sectors are reengineering their work processes to realize the benefits of computerization, decentralized organizational structures, and real-time customer-driven service delivery (Popovich 1998).

This integration of technology and information changes the nature of many local government occupations. Examples of this effect are found in law enforcement, where employees now use handheld computers, geographic information system (GIS) crime analysis, Web-based education and training, and e-mail communication systems in their jobs.

Technology affects employment through the labor substitution effect in which labor-saving technological advancements reduce the demand for labor (Addison, Fox, and Ruhm 2000). For example, in waste management, one-person refuse collection crews are replacing two-person crews. In the clerical field, the demand for secretaries has declined because of the widespread use of personal computers. This labor substitution effect occurs in a variety of local government occupations and functional work areas and is partially offset by employment increases in the various categories of information technology jobs (Addison, Fox, and Ruhm 2000). (No central database, however, clearly links technological change to local government employment levels.)

The preferred means of incorporating technological changes and their impact on labor demand is through the needs assessment process. The key is to forecast labor demand by occupation in conjunction with the present and future influence of technological change on the knowledge, skills, and abilities required for individual jobs (Gupta 1999).

Changes and trends in the labor market are affecting—and will continue to affect—state and local governments throughout the nation. Because of the large structural changes in the labor force, state and local workforce development policies will take on ever-increasing levels of importance.
Public-Sector Labor Force Needs

The public sector has an aging labor force, and massive retirements are anticipated in the next decade. At the same time these retirements are taking place, state and local governments will need to add new employees to provide additional services. Thus, an important challenge in coming years will be for state and local governments to hire many employees both to replace retiring employees and to fill newly created jobs.

Government Employment

As has been noted previously, in April 2000, governments in the United States employed a total of 20.6 million persons, including 2.9 million federal employees, 4.7 million state government employees, and 13 million local government employees (U.S. Department of Labor 2000). In the past decade, the federal government has been losing jobs, but state and local governments have been adding them. In Georgia, the Department of Labor (2002) has projected substantial increases in public employment in public education, general local government, and state government.

Table 5 shows the projected employment growth rates by industry in the United States and Georgia. As this table indicates, government employment growth rates in the U.S. and Georgia are projected to be less than most sectors of the economy. However, the growth rate of the government sector in Georgia is expected to be substantially greater than the government growth rate nationally.

Table 5. U.S. and Georgia Industry Employment Growth Rates, Percent Change

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>9.2</td>
<td>13.00</td>
</tr>
<tr>
<td>Mining</td>
<td>−10.1</td>
<td>.01</td>
</tr>
<tr>
<td>Construction</td>
<td>12.3</td>
<td>18.70</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.1</td>
<td>1.50</td>
</tr>
<tr>
<td>Transportation, communications, and utilities</td>
<td>17.9</td>
<td>27.40</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>11.0</td>
<td>16.10</td>
</tr>
<tr>
<td>Retail trade</td>
<td>13.2</td>
<td>22.70</td>
</tr>
<tr>
<td>Finance, insurance, and real estate</td>
<td>9.1</td>
<td>10.00</td>
</tr>
<tr>
<td>Services</td>
<td>32.7</td>
<td>39.20</td>
</tr>
<tr>
<td>Government</td>
<td>8.5</td>
<td>12.00</td>
</tr>
</tbody>
</table>

Sources: Berman (2001); Georgia Merit System (2001).
It should be noted that Georgia’s local governments apparently are not overstaffed compared with local governments in other states. In terms of relative staffing levels, Georgia local government employment levels are below U.S. and southern regional averages as measured by staffing rates per 10,000 population (440 employees per 10,000 population in Georgia, 467 nationally, and 466 in the South).

**Occupational Analysis**

This section presents an analysis of 35 occupations that are in demand by state and local governments. Some professional jobs such as accountants and information systems managers are occupations found in the private and nonprofit sectors as well as the public sector. Others are purely governmental in nature (e.g., law enforcement and the courts). Table 6 lists the occupations included in the study conducted by the Utah Department of Labor in 2002. See Appendix A for an in-depth analysis of these occupations.

**Table 6. List of Evaluated Public-Sector Occupations**

<table>
<thead>
<tr>
<th>Courts</th>
<th>Law Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Court clerks</td>
<td>Correctional officers</td>
</tr>
<tr>
<td>Court reporters, medical transcriptionists, and stenographers</td>
<td>Detectives and criminal investigators</td>
</tr>
<tr>
<td></td>
<td>Dispatchers, police, fire, and ambulance</td>
</tr>
<tr>
<td></td>
<td>Police and detective supervisors</td>
</tr>
<tr>
<td></td>
<td>Police patrol officers</td>
</tr>
<tr>
<td></td>
<td>Sheriffs and deputy sheriffs</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Bus drivers, school</td>
<td></td>
</tr>
<tr>
<td>Crossing guards</td>
<td></td>
</tr>
<tr>
<td>Education administrators (includes preschool, elementary, secondary, and postsecondary)</td>
<td></td>
</tr>
<tr>
<td>Education, vocational, and school counselors</td>
<td></td>
</tr>
<tr>
<td>Teachers, elementary school</td>
<td></td>
</tr>
<tr>
<td>Teachers, kindergarten</td>
<td></td>
</tr>
<tr>
<td>Teachers, secondary school</td>
<td></td>
</tr>
<tr>
<td>Teachers, special education</td>
<td></td>
</tr>
<tr>
<td>Teachers and instructors, vocational education and training (includes middle, secondary, and postsecondary)</td>
<td></td>
</tr>
<tr>
<td>EMS</td>
<td></td>
</tr>
<tr>
<td>Ambulance drivers and attendants (except EMTs)</td>
<td></td>
</tr>
<tr>
<td>Emergency medical technicians and paramedics</td>
<td></td>
</tr>
<tr>
<td>Fire</td>
<td></td>
</tr>
<tr>
<td>Fire fighting and prevention supervisors</td>
<td></td>
</tr>
<tr>
<td>Fire inspection occupations</td>
<td></td>
</tr>
<tr>
<td>Fire fighters</td>
<td></td>
</tr>
</tbody>
</table>

**Management**

- Budget analysts
- Human resource managers
- Information system managers
- Management analysts

**Professions**

- Civil engineers
- Librarians
- Urban and regional planners

**Public Works**

- Bus and truck mechanics and diesel engine specialists
- Bus drivers (transit and intercity)
- Construction and building inspectors
- Highway maintenance workers

**Social Services**

- Child care workers
- Social workers
Table 7 lists the 10 fastest-growing public-sector occupations in Georgia and the United States as projected by the Utah Department of Labor (2002). Eight of the 10 occupations are the same for Georgia and the United States. The list is dominated by public safety and education jobs. Georgia’s rate of growth for the 10 fastest-growing occupations exceeds that of the United States as a whole.

Table 8 shows the occupations that are projected to generate the greatest number of new public-sector jobs from 1998 to 2008 (Utah Department of Labor 2002). In Georgia, five of the occupations that are expected to generate the most new public-sector jobs are in education.

**Table 7.** The 10 Fastest-Growing Public-Sector Occupations in Georgia and the United States, 1998 to 2008, by Percent Increase

<table>
<thead>
<tr>
<th>Georgia Occupations</th>
<th>Percent Increase</th>
<th>U.S. Occupations</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance driver</td>
<td>52</td>
<td>Correctional officers</td>
<td>39</td>
</tr>
<tr>
<td>Special education teacher</td>
<td>49</td>
<td>Social workers</td>
<td>36</td>
</tr>
<tr>
<td>Social workers</td>
<td>48</td>
<td>Ambulance driver</td>
<td>35</td>
</tr>
<tr>
<td>Information system managers</td>
<td>42</td>
<td>Sheriffs and deputy sheriffs</td>
<td>34</td>
</tr>
<tr>
<td>Sheriffs and deputy sheriffs</td>
<td>41</td>
<td>Special education teacher</td>
<td>34</td>
</tr>
<tr>
<td>Police patrol officers</td>
<td>40</td>
<td>Emergency medical technicians</td>
<td>32</td>
</tr>
<tr>
<td>Emergency medical technicians</td>
<td>39</td>
<td>Police patrol officers</td>
<td>32</td>
</tr>
<tr>
<td>Management analysts</td>
<td>36</td>
<td>Management analysts</td>
<td>29</td>
</tr>
<tr>
<td>Vocational education teachers</td>
<td>36</td>
<td>Child care workers</td>
<td>26</td>
</tr>
<tr>
<td>Secondary school teachers</td>
<td>36</td>
<td>Vocational education teachers</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: Utah Department of Labor (2002).

**Table 8.** The 10 Fastest-Growing Public-Sector Occupations in Georgia and the United States, 1998 to 2008, by Number of New Jobs

<table>
<thead>
<tr>
<th>Georgia Occupations</th>
<th>(N)</th>
<th>U.S. Occupations</th>
<th>(N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary school teachers</td>
<td>10,950</td>
<td>Secondary school teachers</td>
<td>322,300</td>
</tr>
<tr>
<td>Elementary school teachers</td>
<td>10,100</td>
<td>Child care workers</td>
<td>233,900</td>
</tr>
<tr>
<td>Special education teachers</td>
<td>7,500</td>
<td>Social workers</td>
<td>216,800</td>
</tr>
<tr>
<td>Child care workers</td>
<td>7,250</td>
<td>Elementary school teachers</td>
<td>204,750</td>
</tr>
<tr>
<td>Social workers</td>
<td>6,200</td>
<td>Correctional officers</td>
<td>148,350</td>
</tr>
<tr>
<td>Information systems managers</td>
<td>6,100</td>
<td>Information systems managers</td>
<td>141,750</td>
</tr>
<tr>
<td>School bus drivers</td>
<td>4,450</td>
<td>Police patrol officers</td>
<td>140,800</td>
</tr>
<tr>
<td>Police patrol officers</td>
<td>3,950</td>
<td>Special education teachers</td>
<td>137,450</td>
</tr>
<tr>
<td>Education administrators</td>
<td>2,700</td>
<td>Management analysts</td>
<td>90,450</td>
</tr>
<tr>
<td>Human resources managers</td>
<td>2,220</td>
<td>School bus drivers</td>
<td>76,350</td>
</tr>
</tbody>
</table>

Source: Utah Department of Labor (2002).
In comparison, in the United States, only four such occupations are in education. In both Georgia and the United States, the occupation that will add the most new jobs is secondary school teacher.

Another measure of labor demand is the number of average annual openings, which includes both newly created jobs and existing jobs that need to be filled. Projections by the Utah Department of Labor (2002) of average annual openings in Georgia and the United States are shown in Table 9. The most annual job openings in Georgia and the United States will be for secondary and elementary school teachers.

Table 10 shows the projected average annual replacement rates for public-sector positions with the highest replacement rates (Utah Department of Labor 2002). Higher replacement rates increase staffing costs and result in loss of institutional capacity and memory. The striking aspect of this analysis is that 5 of the 10 occupations with the highest replacement rates in Georgia and 7 of 10 in the United States are in the public safety area. The highest replacement rate in Georgia is for ambulance drivers; in the United States, corrections officers. Optimal replacement rates vary by occupation, but rates over 5 percent present significant human resource challenges because of the high training costs and the shortage of applicants in law enforcement and teaching occupations (Avue Technologies 2000).

Table 11 provides data on the 10 highest-paying public-sector jobs (Utah Department of Labor 2002). Information services manager is the highest-paying occupation both in Georgia and the United States. Eight of the highest-paying public-sector jobs require a bachelor's degree or higher.

<table>
<thead>
<tr>
<th>Georgia Occupations</th>
<th>(N)</th>
<th>U.S. Occupations</th>
<th>(N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary school teachers</td>
<td>2,060</td>
<td>Secondary school teachers</td>
<td>77,770</td>
</tr>
<tr>
<td>Elementary school teachers</td>
<td>1,960</td>
<td>Elementary school teachers</td>
<td>60,990</td>
</tr>
<tr>
<td>Child care workers</td>
<td>950</td>
<td>Child care workers</td>
<td>32,130</td>
</tr>
<tr>
<td>Special education teachers</td>
<td>880</td>
<td>Social workers</td>
<td>32,130</td>
</tr>
<tr>
<td>Information system managers</td>
<td>860</td>
<td>Police patrol officers</td>
<td>25,950</td>
</tr>
<tr>
<td>Social workers</td>
<td>790</td>
<td>Correctional officers</td>
<td>25,340</td>
</tr>
<tr>
<td>Bus drivers</td>
<td>770</td>
<td>Information system managers</td>
<td>19,890</td>
</tr>
<tr>
<td>Police patrol officers</td>
<td>660</td>
<td>Special education teachers</td>
<td>17,170</td>
</tr>
<tr>
<td>Education administrators</td>
<td>530</td>
<td>Education administrators</td>
<td>17,040</td>
</tr>
<tr>
<td>Human resource managers</td>
<td>380</td>
<td>School bus drivers</td>
<td>15,420</td>
</tr>
</tbody>
</table>

Source: Utah Department of Labor (2002).
The Georgia public-sector occupational profile is characterized by jobs requiring higher-than-average education levels. Four of the 10 highest-paying jobs that require a master’s degree are exclusively public-sector occupations (social workers, vocational and education counselors, urban and regional planners, and statisticians). Another study (Thurmond 2002b) found that 5 of the 11 highest-paying jobs in Georgia that require a bachelor’s degree are also primarily public-sector occupations.

The bottom line for Georgia governments is higher employment growth and replacement needs compared with neighboring states. These trends place a premium on staffing and recruitment policies.

### Table 10. Average Yearly Job Replacement Rates in Georgia and the United States, 1998 to 2008, by Percent

<table>
<thead>
<tr>
<th>Georgia Occupations</th>
<th>Percent</th>
<th>U.S. Occupations</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance drivers</td>
<td>5.93</td>
<td>Correctional officers</td>
<td>5.54</td>
</tr>
<tr>
<td>Secondary school teachers</td>
<td>5.80</td>
<td>Police patrol officers</td>
<td>5.03</td>
</tr>
<tr>
<td>Police patrol officers</td>
<td>5.53</td>
<td>Information services manager</td>
<td>5.01</td>
</tr>
<tr>
<td>Emergency medical technicians</td>
<td>5.30</td>
<td>Secondary school teachers</td>
<td>4.90</td>
</tr>
<tr>
<td>Vocational education teachers</td>
<td>5.09</td>
<td>Emergency medical technicians</td>
<td>4.87</td>
</tr>
<tr>
<td>Detectives and criminal investigators</td>
<td>4.94</td>
<td>Detectives and criminal investigators</td>
<td>4.31</td>
</tr>
<tr>
<td>Information systems managers</td>
<td>4.93</td>
<td>Vocational education teachers</td>
<td>4.25</td>
</tr>
<tr>
<td>Special education teachers</td>
<td>4.81</td>
<td>Fire fighting and prevention officers</td>
<td>4.18</td>
</tr>
<tr>
<td>Education administrators</td>
<td>4.61</td>
<td>Ambulance drivers</td>
<td>4.08</td>
</tr>
<tr>
<td>Police and detective supervisors</td>
<td>4.51</td>
<td>Fire inspection</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Source: Utah Department of Labor (2002).

### Table 11. Mean Annual Salaries for the Highest-Paying Public-Sector Jobs in Georgia and the United States, 2000

<table>
<thead>
<tr>
<th>Georgia Occupations</th>
<th>Salary</th>
<th>U.S. Occupations</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information services manager</td>
<td>$83,510</td>
<td>Information services manager</td>
<td>$80,250</td>
</tr>
<tr>
<td>Education administrators</td>
<td>$60,957</td>
<td>Human resource managers</td>
<td>$63,420</td>
</tr>
<tr>
<td>Human resource managers</td>
<td>$60,220</td>
<td>Management analysts</td>
<td>$60,350</td>
</tr>
<tr>
<td>Management analysts</td>
<td>$57,180</td>
<td>Civil engineers</td>
<td>$58,380</td>
</tr>
<tr>
<td>Civil engineers</td>
<td>$55,640</td>
<td>Police and detective supervisors</td>
<td>$57,900</td>
</tr>
<tr>
<td>Librarians</td>
<td>$47,460</td>
<td>Education administrators</td>
<td>$56,680</td>
</tr>
<tr>
<td>Police and detective supervisors</td>
<td>$47,030</td>
<td>Fire fighting and prevention officers</td>
<td>$52,990</td>
</tr>
<tr>
<td>Vocational education teachers</td>
<td>$47,010</td>
<td>Budget analysts</td>
<td>$51,080</td>
</tr>
<tr>
<td>Court reporters</td>
<td>$46,500</td>
<td>Detectives and criminal investigators</td>
<td>$49,830</td>
</tr>
<tr>
<td>Budget analysts</td>
<td>$45,980</td>
<td>Urban and regional planners</td>
<td>$48,590</td>
</tr>
</tbody>
</table>

The severity of the challenge facing Georgia’s governments is reflected in Table 12 (Utah Department of Labor 2002). Georgia’s public-sector occupations have higher-than-average replacement and overall growth rates than the United States and the southern states for almost every occupation. However, Georgia’s salaries are above the U.S. mean for only six occupations. This situation may make it difficult for Georgia’s governments to recruit and import workers from other high-wage states. Georgia does better when compared with only the South: the mean annual salary in Georgia is higher for 21 occupations compared with other southern states.

The absence of salary comparability puts additional pressure on Georgia’s government staffing functions. A recent study (Thurmond 2002a) showed that state and local government salaries did not keep pace with other Georgia industries during the 1990s. During the decade, overall wage levels increased by 54 percent in Georgia. In comparison, local government wages grew by 42 percent and state government wages increased 31 percent. As government salaries lag behind those in other sectors, governments have more difficulty retaining their employees and recruiting new ones.

Table 12. Replacement Rate and Mean Salary Comparison of Public-Sector Occupations

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Georgia Occupations with Higher-Than-Average Jobs with Above-Average Mean Annual Salary (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Replacement Rates (N)</td>
</tr>
<tr>
<td>United States</td>
<td>33</td>
</tr>
<tr>
<td>Southern states</td>
<td>34</td>
</tr>
</tbody>
</table>

*Source: Utah Department of Labor (2002).*
Barriers to Workforce Stability and Effectiveness in the Public Sector

Governments in Georgia and elsewhere face difficulty hiring people to replace retiring employees and to fill new positions. Governments need to address these problems aggressively to ensure that the labor force is stable and that it can effectively carry out its responsibilities. Some positions will be especially hard to fill in adequate numbers. Many of these positions are in education and law enforcement. For example, in 2000, the Los Angeles Police Department was understaffed by 700 officers and could hire only 20 of the 100 officers per month required to fill the vacancies (Avue Technologies 2000). Labor force projections indicate that school districts will need to hire 2 million teachers nationally by 2010 (Schemo 2002).

There are severe labor shortages in key occupations in both the private and public sectors, including nursing and most information technology occupations. For example, Georgia has a deficit of 2,000 registered nurses, with new license applications down from 6,300 in 1996 to 5,300 in 2000 (Miller 2001). Georgia is in the lower 20 percent of states in registered nurse staffing levels (Miller 2001). Factors that contribute to problems in recruiting and retaining nurses include higher patient loads, forced overtime, less employee support, and an aging nursing workforce (only 10 percent are under age 30) (Miller 2001).

This section points out problems that inhibit the ability of state and local governments to respond to the need to recruit and hire substantial numbers of employees in the near future. They include educational inadequacies (too few people have the education needed to fill many government occupations, especially those requiring higher education); the unattractiveness of government careers because of low prestige and inefficient staffing patterns; lack of competitive compensation and benefits; inadequate human capital investment; and generous retirement benefits that accelerate retirement.

Educational Inadequacies

Many of the public-sector jobs that need to be filled in the next decade require more than on-the-job training. Educational positions (i.e., school teachers and administrators) require college degrees, as do social worker, human resource management, and information manager positions. The other fastest-growing public-sector jobs are best filled with persons who have at least completed high school (e.g., police patrol officers). The pool
of potential applications for public-sector positions is greatly reduced by 
the need for education. Many potential employees either lack the 
educational credentials or, if they have the credentials, the basic skills needed 
to carry out the jobs. If applicants lack basic skills or educational achieve-
ment credentials, employers will either have to import workers or bear 
higher training costs.

Low education levels among prospective employees may be an in-
creasingly difficult barrier to hiring people to fill new jobs or replace re-
tiring employees in Georgia government. Although Georgia has a public-
sector employment growth rate that is substantially above the national 
average, its educational attainment levels are slightly below national av-
erages.

Table 13 compares Georgia and the United States on selected edu-
cation characteristics (U.S. Census Bureau 2002). Two key findings are 
that (1) approximately 82 percent of the U.S. population has a high school 
education or higher compared with 78 percent in Georgia and (2) nation-
ally, 25 percent of the population has a college degree compared with 23 
percent of the population in Georgia. Georgia is also well below regional 
and national averages in the percentage of the total population attend-
ing college (3 percent in Georgia, 4.1 percent nationally, and 4 percent 
in the South) (Governing State and Local Source Book 2002).

Other educational warning signs include high school dropout rates 
and college enrollment and attendance rates.

Georgia ranks in the bottom half of southern states in high school 
completion rates at 83.5 percent (seventh out of 11 states providing sta-

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>United States (percent)</th>
<th>Georgia (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9th grade</td>
<td>6.9</td>
<td>7.6</td>
</tr>
<tr>
<td>9th–12th (no diploma)</td>
<td>11.5</td>
<td>15.0</td>
</tr>
<tr>
<td>High school graduate</td>
<td>29.5</td>
<td>29.6</td>
</tr>
<tr>
<td>Some college (no degree)</td>
<td>20.5</td>
<td>19.3</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>6.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>16.1</td>
<td>15.3</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>9.0</td>
<td>7.8</td>
</tr>
<tr>
<td>High school or higher</td>
<td>81.6</td>
<td>77.5</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>25.1</td>
<td>23.2</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau (2002).
Georgia’s Changing Labor Force

Statistics) and next to last in dropout rates at 7.4 percent (of the seven states that provided statistics, Georgia ranks sixth) (U.S. Department of Education 2002). Georgia is also below the U.S. average for completion rates (85.7 percent) (U.S. Department of Education 2002).

Concerning college enrollment, approximately 24 percent of Georgia’s 18 to 24 year olds enroll in college compared with the southern regional average of 31 percent—a significant difference. Degree completion rates, however, are slightly above regional averages (19 percent in Georgia, 17 percent in the South) (The National Center for Public Policy and Higher Education 2002). The college attendance rate for older students is another marker of human capital investment. Georgia’s rate of 2.1 percent is the lowest in the southern region (3.1 percent average) and one of the lowest in the country (The National Center for Public and Higher Education 2002).

Unattractiveness of Government Careers

The effectiveness of government staffing efforts is influenced by the overall prestige of government careers and confidence in the efficacy of government in general. The level of public confidence in government and societal institutions has declined to alarming levels (Ingraham, Selden, and Moynihan 2000). Opinion polls find low levels of confidence in state, local, and federal governments and their employees (Council for Excellence in Government 1999). This lack of confidence is exacerbated by attacks by the media and politicians on government and public employees (Ingraham, Selden, and Moynihan 2000). As a result, the prestige and attractiveness of government service is reduced, thereby increasing recruitment and retention difficulties. For example, only 43 percent of 18 to 29 year olds say they would be very or fairly likely to consider a job in government (Council for Excellence in Government 1999).

Seven of 10 citizens in a recent national survey expressed their opinion that federal government employees are primarily motivated by job security, generous benefits, and earning a paycheck—not the intrinsic values of helping people and making a difference often associated with public service (Light 2002). Almost half of the survey respondents said that federal government employees are not doing their jobs well; 56 percent stated that the biggest problem is inefficient operations (Light 2002). Thus, the public’s confidence in government is low, resulting in negative attitudes toward government as a career.

Another major impediment to attracting public-sector workers is the confusing and inefficient government staffing process. Studies indicate that young workers view government negatively because of the burden-
some time-in-grade requirements, a perceived inability to make a difference in a large bureaucracy, low pay, and a convoluted application process. Young workers want flexibility, responsibility, and job significance (Standeford 2001). They aspire to make an immediate contribution, are less patient, and are less willing to delegate. They seek autonomy, clear goals, deadlines, immediate feedback, rewards, and frequent performance reviews. They tolerate more risk in compensation (i.e., a greater acceptance of variable compensation) and desire to achieve work-life balance (Wiant 1999). Given these perspectives, the staffing process must adapt to shifting circumstances, with the focus on staffing the work, not the job (Wiant 1999).

Quality of Work-Life Issues Related to Occupational Stress

Another major factor complicating government staffing efforts is high levels of occupational stress. Heavy workloads contribute to high turnover in law enforcement, nursing, social work, and education (Galinsky, Kim, and Bond 2001). Studies indicate that many employees report being overworked and overwhelmed, with not enough time to reflect, which leads to acute and chronic stress (Galinsky, Kim, and Bond 2000). The dysfunctional impact of high stress is found in survey results that indicate stressed employees are more likely to look for new jobs (National Academy of Public Administration 2000c).

Employees become disenchanted when performance expectations and accountability standards are elevated without an accompanying increase in supportive workplace practices. Research by the National Academy of Public Administration (2000c) has shown that downsizing does not always decrease costs. In fact, it may increase costs by elevating work stress. Downsized organizations frequently impose heavy workloads on employees to compensate for reduced staffing levels, thereby engendering work stress that reduces productivity. The end results are higher turnover, eroded intellectual capital, skill imbalance, and increased human resource costs such as training, overtime, and the use of contingent workers (National Academy of Public Administration 2000c).

Uncompetitive Compensation and Benefits

Wage and benefit comparability is an important principle underlying the government staffing function. Government salaries are not fully competitive for some types of jobs, especially in the managerial and executive sectors (Belman and Heywood 1996). Georgia’s government wage levels are below national and regional averages for many occupations.
In the past, the traditional government “psychological employment contract” entailed an agreement whereby the government provided secure and steady work, reasonable hours, satisfactory wages, attractive core benefits (e.g., health care and pension), and the intrinsic satisfaction of serving the public in lieu of the private sector’s higher compensation, rapid advancement opportunities, generous perks, and innovative work-life benefits (such as flexi-place and child care) (Roberts 2001). This compact is being eroded by government reinvention efforts that attenuate job security and work stability for employees who still lack work-life benefits (Kettl 1998; Roberts 2001).

Public-sector compensation approaches are becoming more diversified, reflecting the changing nature of work (Risher and Fay 1997). The emphasis on individual performance appraisal and merit pay is being supplemented or supplanted by group and organization-based compensation systems such as gainsharing (U.S. Department of Labor 1996). Given higher rates of job mobility and nontraditional employment relationships (such as contract, temporary, and part-time employment), there is an even greater need for benefits (especially pensions and health care) to be transferable (Ingraham, Selden, and Moynihan 2000). Pension and benefits transferability reduces barriers to labor mobility, thereby increasing the number and quality of applicants for government jobs.

**Inadequate Human Capital Investment**

A clear consensus is emerging that public-sector organizational success will depend on increasing human capital development as well as cultivating a high-performance culture, developing strong political and agency leadership, partnering with unions, and cooperating with other governments (Ingraham, Selden, and Moynihan 2000). The appropriate amount of human capital investment is a major labor market and larger public policy issue. Is labor a cost of production to be minimized or a valued asset essential to the long-term success of an organization? Clearly, public and nonprofit organizations are labor intensive, with a substantial percentage of expenditures devoted to wages and benefits (Lee and Johnson 1998). As such, effective program management entails efficiently and effectively deploying labor resources with a concurrent investment in employee training.

Survey data clearly indicate, however, that employees are not satisfied with the level of training they receive (Green 2001). Recent data indicate that government spending on training is below recommendations (1.7 percent of total budget versus the preferred 3 percent) and lower than most private-sector industry classifications (Van Buren and Erskine 2002).
The human capital perspective views employees as essential to organizational success (Klingner and Nalbandian 1998). The organization must systematically provide the knowledge, skills, and abilities for long-term employee effectiveness. A major tool in human capital investment is the use of individual employee development plans to ensure the rational allocation of scarce training dollars (Viscasillas 1999).

An increase in training expenditures to 3 percent of the personnel budget would facilitate more effective individual employee development plans to ensure that workers receive the training and education needed to maintain present and future job competencies.

The human capital approach advocates an employee-employer training partnership to upgrade the job-related competencies and the critical thinking skills associated with information-age jobs (Ingraham, Selden, and Moynihan 2000). One researcher has suggested that public organizations need to increase current training expenditures to 3 percent of the personnel budget (Popovich 1998). This increase would facilitate more effective individual employee development plans to ensure that workers receive the training and education needed to maintain present and future job competencies (Klingner and Nalbandian 1998).

Another weakness of current training efforts is that most training expenditures are to develop job-specific rather than general skills. Employers are reluctant to expend funds to develop transferable general skills that may benefit another employer (Hale 1999). Larger organizations possess an advantage in this area, given the range of skills, jobs, and advancement opportunities. Research has shown that 90 percent of training expenditures are made by 1 percent of the firms. Larger firms are able to spread out costs and recoup the investment, given greater horizontal and lateral advancement opportunities (Hale 1999).

Research clearly demonstrates the value of training, with higher rates of return associated with greater training expenditures. Eight of 10 workers rate training as a very important factor in retention decisions, and only 12 percent of employees who rate their training as excellent desire to leave within a year compared with 41 percent desiring to leave organizations in which training opportunities are poor (Hale 1999). One study concluded that a balance of technical and interpersonal skills training on customer service, conflict resolution, and teamwork reduced turnover from 41 percent to 12 percent, saving a company of 1,000 employees $14.5 million in turnover costs (Olesen 1999).

Labor policy researchers are calling for a more balanced government employment policy that supplements training programs for the unemployed with investment in incumbent employees to enhance job skills and prevent job loss (Hale 1999). Employee training deficits are especially pronounced for small and medium-sized employers (Hale 1999). Part of
the problem is associated with their reluctance to provide training for general skills (e.g., communication, leadership). Because these skills are transferable, most small employers are concerned that employees will leave for better-paying jobs before their investment in training improves productivity. Thus, they are reluctant to invest in this type of training, contributing to an underinvestment in lower-skilled employees across all employment sectors (Osterman 2001).

**Generous Retirement Programs**

A final factor that puts pressure on government staffing efforts is generous retirement programs (U.S. General Accounting Office 2001). Many governments provide fixed-benefit retirement plans that permit employees to collect benefits after 25 years of service upon reaching age 55. Although these plans retain older workers, they contribute to early retirements. Moreover, governments are utilizing early retirement programs to reduce labor costs but are frequently unprepared for the higher-than-anticipated numbers of employees that opt for the plan.

The first part of this policy paper discussed the many challenges facing governments as they develop their workforces. Among the challenges are the needs to replace many employees as they retire and to fill newly created jobs. These workforce needs are complicated by changes in supply factors (i.e., the educational and other characteristics of the workforce available to fill jobs) and demand factors (i.e., the number and types of jobs to be filled and the educational and skill requirements for those jobs). This section has described barriers facing governments in Georgia as they seek to create stable and effective workforces in the near future. These barriers need to be overcome as governments seek to attract and retain employees who can provide the level and quality of services demanded by citizens. The next section presents some of the ways in which Georgia’s governments can overcome these barriers.
Suggested Policies and Administrative Actions

Georgia’s state and local governments have a broad array of policies and administrative actions that they should consider as they seek to overcome the barriers to developing the best workforce possible. Some of these alternatives reflect the experience of other states; others have been suggested by public administration researchers. Although not all of these alternatives will be appropriate for Georgia, they should be carefully considered by policymakers and administrators.

Of course, education is a key element of workforce preparation, and the previous section discussed how Georgia is lagging in high school completion rates and in the percentage of the population attending college. The danger exists that jobs requiring more education will be increasingly difficult to fill in the future, when the demand for qualified employees may exceed the supply, especially in expanding job sectors. Therefore, efforts by state government and local school districts to improve education throughout the state are key to developing the needed workforce of the future. However, education reform is a broad topic beyond the scope of this policy paper. Instead, the focus is on policies to address the other barriers to workforce stability and effectiveness.

Overcoming the Unattractiveness of Government Careers

Because of its low prestige and public service staffing practices that are complex, inflexible, and occasionally complicated, government employment is often not viewed by younger people as an attractive career option. To overcome this perception, educating this important audience regarding public-sector careers could be accomplished by partnering with primary-, secondary-, and university-level educational institutions. Moreover, government recruiting processes and selection practices should be streamlined.

Partner with Primary, Secondary, and University-Level Educational Institutions to Improve Knowledge Levels Regarding Public-Sector Careers

One way to influence societal attitudes toward government is for Georgia’s public employers to form partnerships with schools to provide relevant information on career opportunities in the public sector and ensure that curricula reflect current and future labor force knowledge and
skill requirements. These initiatives would promote general awareness of and student interest in public-sector careers. Even if students do not enter public service, the experience could help dispel negative stereotypes of public-sector employment and increase overall societal support regarding the utility and desirability of public-sector careers. The main goal is to influence attitudes toward government in the formative years.

The experiences of other states have shown that these programs do not always work well. The main weakness of current programs is that most students participate in career awareness programs, but only a small subset is involved in work-based learning, which directly exposes students to public-sector careers (Hale 1999). Also, trust between public employers and educators is lacking, and career counseling is often poor because of a shortage of counselors and a paucity of current occupational information. To improve secondary school counseling systems, state education departments can employ the following strategies (Hale 1999): use Internet-based systems to provide the latest information on public-sector careers and labor market trends (e.g., openings, pay levels, etc.); increase funding for counseling programs in schools; develop cooperative and internship programs for public-service careers; and develop a public safety magnet program to enable interested students to gain educational exposure in conjunction with direct work experience.

At the higher education level, partnership activities have two major objectives. The first is to develop programs that directly prepare students for government careers. The second is to use the resources of higher education to provide in-service human capital development programs for public employees. Key administrative and policy alternatives include developing customized employer training partnerships with higher education systems (Hale 1999). Higher education formulas could be changed to target areas of greater public-sector occupational growth needs (e.g., teaching, law enforcement, corrections, and social work).

Furthermore, customized majors or minors could be developed for specific high-demand public-sector occupations. The use of certified training programs (such as the Certified Public Manager Program) that may be used for college credit could be expanded. Flexible class scheduling systems geared to working adults, not the traditional 18- to 22-year-old model, could be provided. The prestige and funding of two-year colleges might also be enhanced: many well-paying public-sector jobs do not require four-year degrees. Moreover, 44 percent of students who start college will not graduate, and 18 percent end up in jobs that do not require a college background (Hale 1999).
Streamline Government Recruiting Processes

Process innovations in recruiting have five major goals: (1) reduce applicant obstacles (e.g., the time it takes to complete the application process, the amount of documentation, etc.); (2) increase applicant satisfaction with the recruitment process; (3) increase the number and quality of candidates; (4) improve administrative efficiency (i.e., cost, documentation); and (5) make more timely hiring decisions. The innovations are too numerous to discuss in great detail but are summarized in Table 14 (Roberts 2002). Most of these innovations could be implemented by Georgia local governments with the approval of local legislative bodies.

The speed, accuracy, and cost-effectiveness of filling job vacancies can be increased by automated job analysis, classification, and job req-

Table 14. Local Government Recruitment Innovations

<table>
<thead>
<tr>
<th>Internal recruiting (Trice 1998)</th>
<th>Internal recruiting focused on older employees (Sullivan and Duplaga 1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasing or temporary employees (Smith 2000)</td>
<td>Consortium recruiting (Smith 2000)</td>
</tr>
<tr>
<td>Outstanding scholars programs (National Academy of Public Administration 1999b)</td>
<td>Noncompetitive bilingual hiring provisions (National Academy of Public Administration 1999b)</td>
</tr>
<tr>
<td>Internal merit promotion; move from clerical to technical position, target women and minorities (National Academy of Public Administration 1999b)</td>
<td>Grant programs</td>
</tr>
<tr>
<td>Summer jobs and co-ops</td>
<td>Campus media relations</td>
</tr>
<tr>
<td>Year-round campus relation programs (National Academy of Public Administration 2000b)</td>
<td>Clear performance standards for recruitment and staffing process, including customer satisfaction measures</td>
</tr>
</tbody>
</table>

Source: Roberts (2002).
uisitioning systems. More comprehensive job searches are possible through continuous recruitment, one-stop employment shops, Web-based recruiting, and résumé databases. Service learning efforts and school partnerships enhance employer name recognition and applicant organizational knowledge and provide early recruiting opportunities. Employee referral and hiring bonuses can increase the number of high-quality applicants. Involving line employees as recruiters enhances organizational credibility, and involving family and friends in organizational activities enhances brand-name recognition and employer reputation. Internal recruiting is a valuable source of in-house talent for hard-to-fill vacancies. Forming a regional labor pool or consortium is a very effective strategy for filling vacancies in areas of applicant scarcity. Utilizing temporary or contract employment is a rational strategy for accomplishing tasks that are limited in scope or duration. Outstanding scholar programs and noncompetitive bilingual hiring provisions offer expedited hiring opportunities for high-need areas.

Organizations strive for “brand name” recognition. In the public sector, realizing such recognition entails educating potential recruits about the organization, its mission, quality of work life, and advancement opportunities. Maintaining close relationships with local high schools and universities pays significant dividends, including a more diverse and qualified applicant pool (Hale 1999).

Streamline and Improve Selection Practices

The development of an effective public-sector employee selection process is impeded by several barriers, including a lack of knowledge of or familiarity with effective practices, legal liability concerns (e.g., employing discriminatory general intelligence tests), resource constraints (e.g., inability to afford assessment centers), inadequate training and expertise, and lack of confidence in the job relatedness of the practice (Terpstra and Rozell 1997).

Recent reforms in government selection practices have focused on three areas: (1) addressing external regulatory barriers, (2) overcoming internal regulatory barriers, and (3) identifying and overcoming process-related problems. Table 15 summarizes recent government selection policy and process innovations (Roberts 2002). As was the case with recruiting initiatives, the following selection policy changes could typically be approved by local legislative bodies.

The list of policy innovations is headed by the delegation of examining and hiring authority to line agencies. Although this approach has great potential, Kettl (1998) concluded that the overall effectiveness of
delegation attempts is unclear. Second on the list is expanding the candidate pool, which improves the flexibility of traditional selection instruments, such as civil service tests, that typically limit the final list of job candidates to the top scorers and fail to provide a complete picture of candidate qualifications. For example, Maricopa County, Arizona, groups candidates according to ratings (“exceptional,” “meets standards,” and “meets minimum standards”) and submits the entire roster for potential employment interviews (Trice 1999b). The major drawback is the potential for abuse based on nonperformance factors.

Another innovation is accelerated hiring, which is critical for labor shortage occupations such as teachers, information technology workers, and engineers. Cumbersome and time-consuming selection processes impose costs on highly qualified applicants, given the multiplicity of their options (Sullivan 1999; National Academy of Public Administration 1999b). Research indicates that early offers are more likely to be accepted and that faster hiring decisions exert no influence on candidate job success (assuming the preexisting validity of selection devices) (Sullivan 1999; Rynes 1993). As a result, several communities have implemented provisional same-day hiring (Trice 1999b). Wisconsin’s Critical Recruitment Program, for example, allows state agencies to hire highly qualified applicants within 24 hours in areas of shortage and within 30 days in noncritical areas (Lavigna 1996). The federal government permits expedited hiring of can-

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**Table 15. Local Government Policy and Process-Related Selection Innovations**

<table>
<thead>
<tr>
<th>Policy Innovations</th>
<th>Process-Oriented Innovations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delegation of examining and hiring authority to line agencies</td>
<td>Résumé screening</td>
</tr>
<tr>
<td>Expansion of candidate pool by abandoning the rule-of-threema</td>
<td>Computerized job applications</td>
</tr>
<tr>
<td>Acceleration of hiring by permitting provisional appointments</td>
<td>Remote screening and interviewing (video, phone, computer)</td>
</tr>
<tr>
<td>Permitting employees to accept a second job in hard-to-fill areas</td>
<td>Computerized testing</td>
</tr>
<tr>
<td>Using remote hiring</td>
<td>Walk-in testing services</td>
</tr>
<tr>
<td>Permitting hiring of retired employees</td>
<td>Concurrent applicant processing (complete all screening</td>
</tr>
<tr>
<td>Using volunteers</td>
<td>tasks up front)</td>
</tr>
<tr>
<td>Permitting buyouts to correct skill imbalances and reshape the workforce (National Commission on the Public Service 2003)</td>
<td></td>
</tr>
</tbody>
</table>

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* Selection committee or human resources officer recommends three candidates to the executive making the hiring decisions.

Source: Roberts (2002).
candidates with a grade point average of 3.0 or better (U.S. Office of Personnel Management 2000b). The City of Hampton, Virginia, has re-engineered its entire screening process by employing a team-based approach that invests in accelerated candidate processing by concurrently performing most administrative functions (Greene 1999). The goal is to screen unqualified candidates early in the process and identify attractive candidates for fast-track hiring decisions (Greene 1999).

Even with accelerated hiring and recruitment incentives, the pool of qualified candidates is frequently insufficient. Another strategy for increasing the applicant pool is remote hiring. For example, the City of Lansing, Michigan, hired a wastewater treatment officer from New Mexico without an in-person interview by utilizing interactive video technology (Treadway 1999). Thus, human resource policies and procedures need to permit temporary hiring as well as other innovative practices such as allowing employees working in areas of labor scarcity to accept a second job (U.S. Office of Personnel Management 2000a).

Given the difficulty in filling vacancies with traditional applicants, public-sector organizations may be forced to use retired employees or volunteers for selected functions. Retirees may be reemployed part or full time for limited durations; volunteers are usually part time. However, the integration of retired and volunteer employees will entail the development of specialized staffing procedures and supervisory performance management competencies (see Brudney 1998).

Another option is the judicious use of employee buyouts to facilitate human capital development. Selective buyouts can preclude obstacles to employee development and promotion (National Commission on the Public Service 2003).

The process-related innovations strive to reduce administrative costs and could be implemented by local government administrators. Many government organizations use résumés to prescreen candidates, thereby reducing applicant burdens and administrative costs associated with entering and storing data on unqualified applicants (Trice 1999a). If applications are required by law, a computerized job application process can reduce administrative costs (Trice 1999a).

The future of recruitment and selection practices is connected to the technological innovations afforded by the computer, including Web-based recruitment and selection. As with the other selection process initiatives, Web-based systems could be implemented by agency administrators. The first element is a website that posts vacancies detailing information on job opportunities.
requirements as well as organizational and community information (“Expert Tips on Recruiting via the Internet” 2000). The second element is a résumé or online job application process for initial screening (Trice 1999a). If the candidate meets the initial standards, follow-up testing or interviews are scheduled, with the option of remote testing or interviewing (Smith 2000). The screening process should provide candidates with feedback on their employment prospects so that informed self-selection can take place (“Expert Tips on Recruiting via the Internet” 2000).

Wisconsin has developed one-stop employment shops where a candidate can meet with a counselor to determine for which jobs the candidate is qualified, complete an application, and take the relevant computerized tests (Lavigna 1996). With computerization and remote interviewing, the cost-effective geographic recruitment area expands greatly (Treadway 1999).

Web-based recruiting enables an organization to review candidate websites or actively recruit qualified nonapplicants through tactics such as employee referral or by scanning listservs, news groups, professional organizations, and chat rooms (“Expert Tips on Recruiting via the Internet” 2000). A liability associated with Web-based recruiting is the increase in the number of applicants (Avue Technologies 2000). Web-based computer programs that electronically screen résumés and applications (i.e., “rule-wizards”) can reduce the number of applicants. A complicating factor is the initial absence of affirmative action data for résumés. One means of overcoming that limitation is to have a supplemental secure webpage containing affirmative action data that is transmitted with the résumé. In order not to discriminate against applicants without computer skills or access, recruitment using traditional methods would still need to remain in force. Over time, as a greater percentage of the population becomes computer literate and accessibility increases, the need to maintain a dual system will diminish.

The computerized application process enables candidates to be informed at each stage, thereby reducing a potential source of dissatisfaction, and could be integrated with an automated applicant tracking system (“Expert Tips on Recruiting via the Internet” 2000; Smith 2000). Ideally, a Web-based recruiting system would be networked with an overall human resource management information system that serves as the foundation for personnel-related activities such as the generation of individual employee development plans, training needs assessment, compensation, and other staffing functions (e.g., job analysis and classification). Additional ideas are in Appendix B.
Overcoming Quality of Work-Life Barriers

Another barrier to attracting and retaining government employees is occupational stress. Many government employees report that they are overworked and overwhelmed. Occupational stress may be reduced or overcome by offering orientation sessions and mentor programs and developing a comprehensive worker-friendly benefits package and an effective performance management system.

Offer Orientation Sessions and Mentor Programs

The benefits of an effective selection process are lost when employee turnover is high. The cost of replacing the average managerial employee can exceed $10,000, not counting the value of the loss of institutional memory and productivity (Tratt 2000). A sophisticated employee retention program must include effective employee orientation and mentor programs (Cromer 2003).

Orientation programs are important instruments for bonding employees to the organization and promoting the acculturation process (“New Employee Orientation Programs Key to Starting Employees Off Right” 2000; Wanous 1993). For example, the orientation program at Corning Glass increased retention by 69 percent while reducing the time to reach full productivity by two months (“New Employee Orientation Programs Key to Starting Employees Off Right” 2000). The keys to effective orientation programs include (1) active participation by managers and line employees, (2) the identification of stressors associated with workplace problems, (3) providing desirable role models, and (4) offering specific guidance and practice on coping and problem-solving strategies for overcoming job difficulties and stress (Wanous 1993). Another useful strategy is to assign a mentor to new employees to provide additional guidance and feedback (Smith 2000; Cromer 2003). Both of these strategies could be implemented by local government administrators.

Develop a Comprehensive Worker-Friendly Benefits Package

Many core public-sector occupations have high levels of intrinsic work stress, including public safety, education, and social service jobs. The employee benefits package is an important tool for stress reduction, especially worker-friendly benefits such as flexible schedules, child care, and telecommuting (Roberts 2001).

Government workers customarily receive generous benefits packages that include defined benefit pensions, low-cost health insurance, and ample paid time off (for sick leave, vacation, holidays), thereby providing workers with a high degree of job security (Moulder and Hall 1995;
Roberts 2001). Private-sector organizations and the federal government are increasingly providing a complex array of worker-friendly benefits and programs designed to restore the balance between work and personal time (Bond, Galinsky, and Swanberg 1998; Durst 1999; Newman and Matthews 1999; Roberts 2001).

Many organizations are pursuing work-life balance for purely utilitarian motives such as cost reduction and productivity increases (Mawhinney 1999). Others are guided by normative values that focus on quality of the workplace and family life, gender equity, employee justice, promotion of civic capital, and child welfare (Newman and Matthews 1999). In either case, employers in both the public and private sectors are providing worker-friendly benefits to remain competitive, given the increased importance employees attach to benefits such as elder and child care.

Most governments have competitive traditional benefits packages (health, pension, life insurance, etc.). It is in the category of work-life benefits that private-sector organizations demonstrate leadership in accommodating employee needs relative to work, family, and personal time (U.S. Office of Personnel Management 2000a; Tratt 2000; Roberts 2001). The importance of worker-friendly benefits is reflected in survey results. For example, 60 percent of employees reported that the ability to balance work and family is of great importance in job choice (Tratt 2000). Seventy percent of the employees reported that the availability of work-life benefits was a major factor in employee retention and increased employee productivity (Tratt 2000). A Sears study found that for every 5 percent increase in employee satisfaction, customer satisfaction increased by 1.3 percent and sales, by .05 percent (Tratt 2000).

Hence, the availability of work-life benefits can have a very significant impact on recruitment and retention. Recent studies indicate that the rate of adoption of most work-life benefits is significantly lower in local government, a major competitive disadvantage (Roberts 2001). The barriers to providing work-life benefits in government include their cost, a lack of expertise/knowledge in developing and administering programs, and perceptions regarding the necessity of such benefits and public resistance to such programs (Roberts 2001). Proposed solutions include regional benefits consortia and efforts to reduce benefit costs, knowledge dissemination programs to increase awareness of work-life benefits programs, and technical assistance in developing benefits programs and conducting needs assessments (Roberts 2001). These practices will require a combination of local, regional, and state government action.
Table 16 shows the percentage of sampled governments that provide worker-friendly benefits (Roberts 2001). According to this table, local governments rarely offer child and elder care programs or telecommuting. To attract and retain employees, governments need to develop a targeted and flexible benefits packet (Roberts 2001). To put together such a package, they need to track changes in employee characteristics to determine the benefits they want.

**Develop an Effective Performance Management System**

A key factor in employee retention is an effective performance management system. An organization that rewards high-performing employees reduces the likelihood of undesirable turnover (i.e., losing talented employees) and increases the likelihood of desirable separations (by poor performers, dissatisfied employees, etc.). Also, an organization that allocates its resources based accurately and fairly on performance will engender positive employee attitudes, behaviors, and performance outcomes.

<table>
<thead>
<tr>
<th>Benefit</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpaid family leave</td>
<td>328</td>
<td>91.6</td>
</tr>
<tr>
<td>Employee assistance programs</td>
<td>280</td>
<td>78.2</td>
</tr>
<tr>
<td>Comp-time program</td>
<td>262</td>
<td>73.2</td>
</tr>
<tr>
<td>College tuition remission</td>
<td>233</td>
<td>65.1</td>
</tr>
<tr>
<td>Paid family leave</td>
<td>221</td>
<td>61.7</td>
</tr>
<tr>
<td>Wellness programs</td>
<td>211</td>
<td>58.9</td>
</tr>
<tr>
<td>Flexible cafeteria plans</td>
<td>206</td>
<td>57.5</td>
</tr>
<tr>
<td>Flextime</td>
<td>146</td>
<td>40.8</td>
</tr>
<tr>
<td>Personal day plan</td>
<td>138</td>
<td>38.5</td>
</tr>
<tr>
<td>Compressed work week</td>
<td>137</td>
<td>38.3</td>
</tr>
<tr>
<td>Paid time off donor program</td>
<td>136</td>
<td>38.0</td>
</tr>
<tr>
<td>Job sharing</td>
<td>65</td>
<td>18.2</td>
</tr>
<tr>
<td>Flexi-place</td>
<td>36</td>
<td>10.1</td>
</tr>
<tr>
<td>Domestic partner plans</td>
<td>28</td>
<td>7.8</td>
</tr>
<tr>
<td>Child care referral service</td>
<td>27</td>
<td>7.5</td>
</tr>
<tr>
<td>Elder care benefits</td>
<td>26</td>
<td>7.3</td>
</tr>
<tr>
<td>Emergency child care</td>
<td>24</td>
<td>6.7</td>
</tr>
<tr>
<td>Elder care referral service</td>
<td>21</td>
<td>5.9</td>
</tr>
<tr>
<td>Subsidized off-site child care</td>
<td>10</td>
<td>2.8</td>
</tr>
<tr>
<td>On-site child care</td>
<td>8</td>
<td>2.2</td>
</tr>
</tbody>
</table>

A holistic performance management system integrates organizational mission and goals within each level of the organization. According to the National Academy of Public Administration (1999a), key characteristics of an effective performance management system include factors such as performance planning, with an emphasis on linking individual performance to strategic goals and objectives, clear and measurable goals, and employee participation in establishing performance elements and standards. Also, coaching helps employees improve their performance. Typically, coaching is most effective during discussions about progress (both formal and informal) and when giving feedback about good and bad performance.

In addition to providing rewards to reiterate the message about what the organization considers important, management can encourage employees to identify with the mission and work results. It should be emphasized that performance management is a core business process driven by top managers. Although it requires time and energy to make performance management systems work properly, managers do little that is more important than ensuring high-level performance from their employees. Similarly, accountability measures can be implemented to ensure that managers accomplish their performance management responsibilities effectively. For example, managers could be rated on their effectiveness in managing the performance appraisal process. Human resource departments could monitor performance management systems and provide feedback to management (National Academy of Public Administration 1999a, xi).

The importance of performance management is illustrated in recent research on employee retention. A Gallup study found that quality of supervision and associated performance management skills had the greatest influence on employee retention, productivity, profit, and customer service (Tobias 2002).  

The benefits of an effective performance management system will resonate throughout the entire organization. The effectiveness of the performance management system is accentuated when it is linked to a performance-based budgeting process (Popovich 1998). When human resource and financial decisions are linked on clear and specific performance measures, the decision-making process is made more rational. A performance measurement system could be implemented by administrative personnel in consultation with local elected bodies.

**Overcoming Uncompetitive Compensation Policy**

The external equity of compensation plays an important role in employee job choice and retention. However, Georgia’s state and local government
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salaries lag behind those of other key sectors of the economy. Uncompetetive salaries, when combined with unsatisfactory quality of work life, make it more difficult for state and local governments to build quality workforces. Georgia’s governments should therefore monitor compensation levels in their respective labor markets.

The federal government faces especially acute problems in maintaining compensation comparability with the private sector because of its nationwide presence and high percentage of professional and managerial employees. In 1990 the Federal Pay Comparability Act was passed to address growing external pay inequity. Among the provisions of the act and other recommendations that may be instructive to Georgia’s governments are recruitment and retention bonuses of up to 25 percent for hard-to-fill positions (U.S. Office of Personnel Management 1999), flexible salary schedules permitting a starting salary above the minimum and permanent salary differentials for hard-to-fill positions (U.S. Office of Personnel Management 2000a, U.S. Office of Personnel Management 2000b), relocation assistance to reimburse moving expenses and housing allowances (U.S. Office of Personnel Management 2000a; U.S. Office of Personnel Management 1999; Trice 1998), broadband classification systems that improve compensation flexibility (National Academy of Public Administration 2000b), and merit-based variable pay plans (e.g., bonuses, merit pay) (National Academy of Public Administration 2000b).

The pay initiatives can have negative spillover impacts, however. For example, the Dallas, Texas, School District instituted a signing bonus of $4,500 and raised starting salaries to $37,000 for teachers, in addition to providing a laptop and a $250 supply stipend for each teacher. The end result was an exodus of Oklahoma teachers to Texas, exacerbating that state’s teacher shortage (Schemo 2002).

Addressing Inadequate Human Capital Development

Public-sector organizations, including Georgia’s governments, tend to invest too few resources in measures to attract and maintain the best workforce possible. According to the human capital perspective, employees are essential to organizational success, and investments in human capital contribute to efficient and effective organizations. The following types of actions could help to develop human capital in Georgia’s public-sector organizations: a comprehensive workforce planning and human capital development program, a comprehensive training program linked to workforce planning, and state policy actions for local governments.
Comprehensive Workforce Planning and Human Capital Development Program

The single most important tool in the workforce development process is workforce planning. Without a proactive approach to planning for present and future labor needs, Georgia’s governments are vulnerable to changing labor market conditions. Workforce planning links staffing with mission accomplishment, increases knowledge of internal and external labor demand and supply changes (i.e., reduces labor market uncertainty), enhances adaptation to evolving human capital development needs, reduces high training and replacement costs, and facilitates organizational receptivity to changing worker needs (National Academy of Public Administration 2000a). There are numerous workforce planning models (IPMA 2002). The Georgia Merit System workforce planning model is nationally recognized and can serve as a guide for Georgia local government efforts (see “Steps in the State of Georgia’s Workforce Planning Process”). Workforce planning can generally be instituted by local government executive action.

The literature identifies several factors essential for the success of workforce planning (National Academy of Public Administration 1999a; National Commission on the Public Service 2003). These factors include management support (i.e., a clear commitment and success in linking workforce planning to the strategic plans and accountability measures); a chief human capital officer in each jurisdiction; human resource department support and expertise; direct employee involvement through surveys, focus groups, interviews, and committee assignments; linkage to financial and budget data; valid, readily available workforce planning data (e.g., turnover, absenteeism, employee characteristics); marketing the plan through meetings, brochures, and websites; and regular communication on organizational progress in achieving goals. Workforce planning links global external and internal labor supply and demand issues. Human capital planning addresses the microlevel training needs of the workforce in greater detail.

Comprehensive Training Program Linked to Workforce Planning

A powerful recruitment incentive is the provision of employee training. Employers that enhance the present and future human capital of their employees will realize a powerful advantage in the competition for talent (U.S. Office of Personnel Management 1999; Bailey 1998; Trice 1998). Best practice recommendations for employee training include the following (Klingner and Nalbandian 1998; National Academy of Public Administration 1999a):

- Carry out regular job analysis to update job descriptions, which are the foundation for other human resource processes
| Step 1 | Conduct Strategic and Technology Planning |
The workforce plan should be consistent with the agency’s strategic plan and information technology plan. It is an integral component of the overall strategic plan, linking workforce issues to strategic objectives and budgets.

| Step 2 | Assess Workforce Planning Readiness |
Assess resources, capabilities, and cultural acceptance of and commitment to workforce planning.

| Step 3 | Assess Business and Staffing Outlook |
Clarify the impact of environmental influences upon the functional activities and workforce segments of the agency. Project growth or decline in employee headcount.

| Step 4 | Assess Diversity and Turnover Outlook |
Identify and profile characteristics of current and former employees in terms of ethnicity, age, tenure, and gender in relation to job function, jobs, pay, and FLMA status. Compare with relevant labor, customer, and population bases. Examine turnover and projected retirements.

| Step 5 | Identify Outcome Priorities |
Target segments of the workforce for subsequent steps in workforce planning based on opportunities and risks associated with strategic, workforce, cost, diversity, and change factors.

| Step 6 | Identify Needed Competencies |
Identify and profile the competency characteristics needed in the future by the targeted segments of the workforce to achieve desired outcomes and accomplish organizational objectives.

| Step 7 | Identify Current Competencies |
Identify the extent to which the targeted workforce segments possess the competencies and characteristics needed in the future.

| Step 8 | Analyze Competency Gaps |
Compare the competency profiles identified in Steps 6 and 7. Identify differences between the competencies of the current workforce and those desired in the future workforce.

| Step 9 | Integrate Workforce Strategies |
Select and integrate strategies to acquire, develop, and retain an effective workforce based on expected cost-benefit. Align workforce strategies such as recruitment, selection, compensation, training, performance management, succession planning, diversity, telework, retention, and safety to closely identified diversity, competency, and staffing gaps in support of strategic, workforce, and technology goals.

| Step 10 | Evaluate Workforce Planning and Strategies |
Evaluate the workforce planning process and the impact of the implemented workforce strategies upon desired outcomes and results associated with strategic goals and objectives, costs and benefits, workforce strategies, diversity, and change factors. Systematically review and adjust the workforce planning process. Modify or adjust the workforce profiles, strategies, and practices to ensure the validity, cost-benefit, and/or return on investment.

• Develop a human resource management information system (i.e., an integrated human resource management system that matches employee skills with job needs)
• Develop organizational and individual learning accounts that dedicate fixed sums for employee training and development
• Implement individual employee development plans to identify present skill and accomplishment levels, future skill levels, performance gaps, and an educational action plan for each employee
• Develop and implement a succession planning process to identify present and future management leadership needs and gaps
• Create training programs based on needs assessment in conjunction with rigorous evaluation focusing on key outcomes (e.g., improved job knowledge, learning and performance linked to workforce planning)
• Develop a comprehensive human capital measurement system that measures workforce education levels; spending and investments in training, education, and development; workforce competence; and employee job satisfaction and quality of work-life assessments (National Academy of Public Administration 1999a).

Effective human capital planning requires a strong human resource management capacity to succeed. Many smaller local governments lack the expertise and capacity for comprehensive planning, but adoption of as many of the recommended tools as possible will improve workforce development policies.

State Policy Actions for Workforce Development

In addition to management and policy actions that local governments can take for themselves, the State of Georgia should consider adopting the best-practice workforce development policies that other states have adopted for their local governments. The policies identified here are taken from the Minnesota Citizens League’s report on workforce training (Hale 1999), Berry’s (1998) work on Ohio regional labor force development, and the Report of the National Commission on the Public Service (2003).

The state could provide examples of best-practice human capital development and training programs that have been initiated at the state level and in other local governments by establishing an intergovernmental council of human capital officers. Given the decentralized nature of workforce training and development, many states lack a capacity to distribute information on workforce development. Moreover, state funding for incumbent employee skill development could be increased through tax increment financing (TIF). For example, the State of Iowa funds
training programs through TIF and training tax credits for public-sector employees in high-demand areas (e.g., teaching, law enforcement).

In terms of education, higher education institutions could be provided with more incentives, flexibility, and accountability for meeting state and local government labor force needs. For example, universities could be allowed to offer degree programs online or offsite in underserved areas. Moreover, online learning opportunities for local government employees could be increased (Hale 1999).

The State of Georgia could provide local governments with CD-ROM or online access to training programs. Many types of generalized training programs could be shared across levels of government. The link between secondary education and the public-sector workforce could be strengthened through preparation programs. This initiative would involve developing a recommended set of foundational skills, increasing employer involvement in school-to-work programs, conducting annual professional development seminars with school career specialists and vocational guidance counselors, and creating job profile and skills assessment.

Georgia’s governments will need to collaborate at a higher level if they are to withstand the competitive pressures of the 21st-century labor market. In terms of public-private collaboration, technical training initiatives could be developed that respond to occupational needs and skill requirements identified by public employers. Local government employers should be involved in state and regional public-private workforce development partnerships that are employer driven to address five challenges: (1) reduce the number of new workers with basic skill deficiencies, (2) eliminate barriers to employment, (3) upgrade worker skills to enhance upward mobility, (4) create a supply of skilled workers, and (5) develop workforce skills to support growth in new and emerging industries.

Several efforts can be made in terms of regional cooperation. The provision of multiple information sources in regional workforce planning is important. Such information would include occupational forecasts, regional surveys of employers (i.e., skill needs), inventories of job training programs, and benchmarking site visits. Creating a regional network of one-stop job training and employment service centers could provide training and job placement services for public, private, and nonprofit organizations. Regional labor market information services might include an online regional directory of training sources and resources, a quarterly newsletter on progress, and a report on the state of the workforce.
Local governments would benefit from a shared and collaborative approach to employee development. The effectiveness of public-sector training programs could be improved by evaluating employer-defined competencies and performance standards using a statewide and regional benchmarking system on training program effectiveness. Sample performance standards include lower interview-to-hire ratios, higher pass rates on employment tests, reduced turnover rates, fewer skill shortage reports, and higher placement and retention rates for training programs. Governments in general might benefit from a statewide and regional approach to recruitment, selection, employee benefits, and training partnerships with other local governments, state agencies, and nonprofit organizations.

Finally, a state and regional workforce innovations fund could be established. Programs might include reverse commute programs, welfare-to-work pilots, and employee migration programs. A regional advocacy group would promote and protect regional labor training and development programs (Berry 1998).

**Addressing Problems Caused by Generous Retirement Programs**

Given the graying of the labor force, one way to reduce the labor shortage is delaying employee retirement. For example, employees might be induced to accept fewer work hours instead of stopping their work altogether. A phased-in retirement program would allow employees to gradually reduce working hours. Such a program would allow the organization to reduce salary expenditures while retaining valued employees (Roberts 2001).

Another example of a retirement-delaying initiative is a program in Maine that permits employees to retire with full benefits and then to be rehired for the same job. Through this program, the state can save $20,000 to $30,000 per employee, given that health insurance and benefits are funded separately when a military retiree works for another government agency (“Maine Rehires Its Retirees,” 2002).

Another option is for local governments to retrain employees who retire early. For example, a police officer who retires at age 55 could be retrained in the information technology area. Organizations and employees benefit from retaining skilled and motivated employees who can transfer expertise from one area to the other (Harris 2001).
Conclusion

This policy paper has provided an overview of some difficult challenges facing Georgia’s governments in the development of their workforces. It has pointed out the key problems related to labor market supply and discussed how the supply of well-qualified employees—especially for several high-demand positions—may not be sufficient to meet demand.

Some occupational sectors will need more employees than others to replace retiring employees and to fill newly created positions. Most of these positions require education beyond the high school level. The need for large numbers of more educated employees is a warning sign for Georgia’s governments because a smaller percentage of the state’s high school students are graduating compared with the national average. Compared with other states in the South, Georgia has fewer college-age students attending college. In addition, increases in the salaries of Georgia’s governments have not kept pace with those in the private sector, making it more difficult for them to compete for employees to fill many positions.

In addition to potential educational and salary problems, Georgia’s governments face several other barriers in the quest to develop good workforces. These barriers include the unattractiveness of government careers (including inefficient staffing practices and the low prestige associated with government employment), quality of work-life issues related to occupational stress, uncompetitive compensation and benefits, inadequate human capital investment (e.g., training, employee development), and generous retirement programs.

The key to an effective public-sector workforce development policy is planning and more planning in conjunction with a commitment to workplace excellence and life-long learning. The traditional static training model is ill suited to the dynamic nature of today’s labor market. Furthermore, the competitive success of Georgia’s governments is highly dependent on their ability to attract and retain the labor force of the future. Georgia’s governments may therefore want to consider and investigate several of the policies and administrative actions recommended in this policy paper as they formulate their strategies for workforce development. Clearly, governments in Georgia are facing serious challenges, but the adoption of some of the recommendations in this report may better prepare employers for increasing levels of labor market competition.
Note

1. The poll found that employee retention is positively correlated with “yes” answers to the following questions:
   
   1) Does the employee know what is expected?
   2) Does the supervisor ensure that materials and equipment are available?
   3) Does the employee perform his or her best everyday?
   4) In the last seven days, has the employee received praise for good work?
   5) Does the supervisor care for the employee?
   6) Does the supervisor encourage the employee’s development?
   7) Does the opinion of the employee count?
   8) Does the mission/purpose make the employee feel that his or her job is important?
   9) Are the employee’s coworkers committed to quality work?
  10) Does the employee have a best friend at work?
  11) Are there discussions on the employee’s long-term progress?
  12) Are there opportunities for the employee to learn and grow?
References


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Appendix A: Data Tables

Go to http://www.cviog.uga.edu/pprs/paper-workforce-a.pdf to view the data tables.
Appendix B: Case Study Examples of Workforce Staffing Problems and Solutions

Law Enforcement and Corrections Problems

1. Salary Compression
   Patrol officers reject promotional opportunities because they will not be paid overtime and will have to work weekend and night shifts (Rashbaum 2001).

   There is a disincentive for promotion to the chief level because of salary compression for lower-ranking officers (Rashbaum 2001).

2. Low Pay and Corruption
   Low pay is a disincentive to police recruitment efforts in favorable economic times. (Rashbaum 2001).

   Attrition is exacerbated by low pay in conjunction with corruption and charges of police brutality in major cities such as New York, Miami, and Los Angeles (Rashbaum 2001).

3. Lack of Pension Portability and Moving Expenses for Police Chiefs
   Most municipalities offer less relocation assistance for police chiefs than private businesses typically do, and retirement benefits are not portable (Rashbaum 2001).

4. Increased Public Scrutiny
   Applicants for police chief jobs are deterred by public review of the candidate’s job history and personal finances (Rashbaum 2001).

Law Enforcement and Corrections Solutions

1. Compressed Work Schedules
   All Tacoma, Washington, police officers work on Thursday to enable officers to receive six days off in a row (from Friday through Wednesday) on a rotating basis (Meyers 2001).

   Los Angeles instituted a three-day workweek with 12-hour shifts to reduce officer stress and increase family time (Meyers 2001). Critics assailed the plan because it would limit the number of days that officers would be available in court (McGreevy 2001).

   The Kentucky State Reformatory instituted a three-day workweek while providing room and board to facilitate long-distance commuting from rural communities (Belluck 2001).

2. Web-based Recruiting
   Jefferson County (Louisville) police are able to apply for patrol officer jobs using the Internet (Tangonan 2001).
3. **Innovative Recruiting Strategies**

The Indiana State Police painted an Indianapolis city bus to resemble a patrol car, listing a contact number for information on law enforcement careers (Tangonan 2001).

The Jefferson County (Louisville) Police Department uses employee teams to generate innovative recruitment strategies (Tangonan 2001). To attract younger applicants, some departments are reducing the age of employment eligibility and offering signing bonuses (Tangonan 2001). Louisville recruiters visit college and military installations and utilize church and nonprofit organizations to encourage minority applicants (Tangonan 2001).

Some states are reducing the minimum age for correction officers to 18 to increase applicant pools. Critics charge that most 18 year olds are not mature enough to work in a prison (Belluck 2001).

Other prisons offer signing bonuses, provide savings bonds for applicant referrals, grant commuting assistance, advertise on television and the Internet, and recruit at military bases and plant closings (Belluck 2001).

4. **Compensation Innovations**

All Kentucky police officers receive a $3,000 increment in pay for completing a program at an accredited recruit academy (Tangonan 2001).

Texas recruits part-time corrections officers from the ranks of college students or police officers and pays overtime to increase salaries (Belluck 2001).

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### Teaching Staffing Problems

1. **Shortage of Substitute Teachers**

   To address a shortage of substitute teachers, school districts are raising wages and lowering qualifications (Elizabeth 2001).

2. **Unlicenced Teachers**

   To prevent the employment of low-ability teachers, Chicago is asking applicants to release information on the number of times it took them to pass teacher certification tests (Stricherz 2001). A large percentage of aspiring Pennsylvania math and science teachers (one-third to one-half) failed state teaching certification tests. To address the shortage of teachers in these subjects, proposals have been made to reduce passing scores. Approximately 4,000 Pennsylvania teachers were issued emergency teaching permits pending their completion of certification tests (Elizabeth and Bull 2002).

3. **Low Salaries**

   The impact of low salaries is accentuated by difficult working conditions, the aging teaching labor force, and increased enrollments (Sack 2001). States are competing with each other by providing signing bonuses and housing assistance (Rossi and Grossman 2002).
4. Large Class Sizes, Discipline Problems, and Minimal Decision-Making Input

Teacher recruitment and retention is made more difficult in urban schools (such as those in Chicago and New Orleans) by discipline problems, large class sizes, low student motivation, and minimal influence from teachers regarding decision making (Rossi and Grossman 2002; Viadero 2002).

Teaching Staffing Solutions

1. Attract More College Graduates to Substitute Teaching

Allegheny County (Pittsburgh) is using a grant-funded program to train graduate students with no teaching background for substitute teacher positions (Elizabeth 2001).

2. Raise Teaching Salaries

Most states are increasing teacher pay through performance-based merit pay, cash bonuses, and increased base pay (Blair 2001). The main criticism of this approach is that there is an absence of clear performance measures and an objective performance appraisal process (Blair 2001). Utah, for example, is paying a $20,000 one-time bonus to teachers who are willing to make a four-year commitment (Blair 2001).

3. Emphasize International Recruitment

Georgia school districts are recruiting internationally and offering hiring bonuses of up to $11,000 (Sack 2001).

4. Encourage Outside Entry for Educational Administrators

Chicago schools are experimenting with a lateral entry program for school principals. Qualified professionals from nonteaching backgrounds are trained to assume principal positions. The program consists of a 13-month training period, a six-week summer course, and a one-year residency. Each participant receives a $45,000 stipend and pledges to remain with the school system for three years (Mendieta 2001).

5. Focus on Improving the Overall Quality of Work-Life

Salary adjustments alone will not solve teacher recruitment and retention problems. Other policy changes include enhanced investment in professional development, improved mentoring programs, better working conditions, and increased administrative support and influence over school policy and curricula (Blair 2001; Viadero 2002).