
*Baltimore's
Workforce System
at Work*

A Report by the

**Baltimore Workforce
Investment Board
(BWIB)**

**Workforce System Effectiveness
Committee
(WSEC)**

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Executive Summary

Baltimore's local public workforce system assists employers in their search for workers, and helps job seekers prepare for, and find, their next job. This workforce system is made up of the connected activities of a large group of organizations, including several local and state government agencies, private and non-profit service-providers, community-based organizations, unions, and public and private education and training providers. The Baltimore Workforce Investment Board (BWIB) is the City's strategic planning and oversight entity for the workforce system, and its individual members are appointed by the Mayor. The BWIB has a private employer majority, and represents businesses, government agencies, non-profits, community-based organizations and unions. The BWIB seeks to build an integrated and responsive workforce development system that will position Baltimore as a city of choice for new and existing businesses.

The BWIB established its Workforce System Effectiveness Committee (WSEC) to ensure the system pursues continuous improvement that is grounded in research. This report, *Baltimore's Workforce System at Work*, is the first in a series of WSEC reports to the BWIB that will outline Baltimore's workforce system structure and activities, and provide analysis, results, and recommendations for improving that system. This report focuses on a key component of the system: the services provided through a One-Stop Career Center Network managed by the Mayor's Office of Employment Development (MOED) and primarily funded under the 1998 federal Workforce Investment Act (WIA). The WSEC plans to expand its focus to other parts of the larger workforce system in future reports.

The WSEC crafted this report to address the following questions:

- What is the workforce landscape in Baltimore?
- What is Baltimore's local public workforce system?
- What are the characteristics of job seekers served by the One-Stop Career Center Network?
- How effectively are job seeker customers being served?
- What are the characteristics of employers who hire One-Stop Career Center Network job seeker customers?
- How does the performance of the Baltimore system compare with that of other peer cities?
- What training works best and for whom?

These questions have been pursued through a WSEC work-plan of nine projects designed to produce actionable results and recommendations for improving Baltimore's workforce system. This report compiles results thus far from work in progress.

What is the workforce landscape in Baltimore?

In recent years, the unemployment rate in Baltimore has remained consistently almost double that of the Greater Baltimore metropolitan region and of the state.

- As with many metropolitan areas across the country, manufacturing in the City of Baltimore has declined. While manufacturing provided 20% of all jobs in 1970, by 2000

that had fallen to just 8%. Today, over a quarter of the City workforce is in health, education, and social services – a position second only to Boston out of all metropolitan areas. This means Baltimore is also well positioned for rapid growth and development in services industries like health care and medical technology, financial services, information technology, and biotechnology.

- Achieving successful growth in these services industries may only serve to polarize the local economy, unless these job opportunities can also be extended outwards to those with presently low skills. Employment in this new economy requires significantly higher educational attainment, and yet over one third of Baltimore's working population – more than 132,000 people – does not have the necessary qualifications to apply for almost half of the new jobs that will be created by 2010. Consequently, the local public workforce system will not be able to launch a large number of job seekers into upwardly-mobile opportunities simply through the acts of job matching and placement. The skills of job seekers will also have to be uplifted through training to help them compete for jobs in the new industries, and the limited number of higher-paying opportunities will have to be extended beyond the initial pockets of high growth and into broader clusters of economic activity.

What is Baltimore's local public workforce system?

- The key part of Baltimore's local public workforce system is the One-Stop Career Center Network managed by the Mayor's Office of Employment Development (MOED) and primarily funded under the 1998 federal Workforce Investment Act (WIA).
- Individual *job seekers* generally move through the One-Stop Career Center Network in a three-tier sequence:
 - *Core services*, where customers access job listings and other career information, computers, telephones, self-assessments, and other resources. These core services can be "self-service" requiring minimal staff assistance, or "staff assisted" involving more staff engagement.
 - *Intensive services*, where customers work with a case manager and receive in-depth assessments, job preparation, readiness and placement services.
 - *Training services*, where customers can access vouchers ("Individual Training Accounts") for training they select, or access training developed and supported by employers who guarantee employment to those who complete the training ("customized training").
- *Employers* access the system through Employ Baltimore, MOED's business services arm, and through the One-Stop Career Center Network. MOED offers employers assistance with outreach and recruitment, applicant prescreening, assessment, testing and referral services, as well as the resources to train new and existing employees, tax credit information, and human resources support.

What are the characteristics of job seekers served by the One-Stop Career Center Network?

- Based on a study examining the flow of job seeker customers in the 18-month period from July 1, 2000 to December 31, 2001, 22,626 customers *entered* the One-Stop Career Center Network. Of the 21,361 adults served, 100% received core services. At the time of this study, of the 4,067 customers who were formally registered with WIA, 35% were at the point of receiving staff-assisted core services, 51% were receiving intensive services, and 14% were in training. Since this is a “snapshot” picture, individual customers may have moved into higher tiers later.
- Women slightly outnumbered men (52% vs. 48%), and the average age of customers was 34 years old. The vast majority (92%) was African-American. Almost three-quarters (73%) reported having a high school diploma/GED or better, but less than half of those who were tested scored at the 12th grade level in reading and math, one-third of adults scored below 9th grade in reading, and nearly two-thirds scored below 9th grade in math.
- Based on another study of the 3,384 customers who *left* the system in the 21-month period from October 1, 2000 through June 30, 2002, 62% received core staff-assisted services as their highest tier of service experienced in the system, 24% received intensive services and 14% received training.

How effectively are job seeker customers being served?

- From October 1, 2000 to June 30, 2002, MOED met or exceeded almost all the WIA performance standards set by the federal government. Standards include the percentage of job seekers placed in jobs, the percentage of those placed in jobs and remaining employed for six months, and the amount of wage gain by the customers in their new jobs.
- In general, workers who recently lost their jobs (dislocated workers), males, whites, individuals age 40 and over, and customers who completed job training, obtained jobs with higher wages than other groups (although such customers may also have been better off than others prior to receiving services). Nevertheless, this finding about who is a “successful” customer suggests other groups may need additional attention and resources to succeed at this level.

What are the characteristics of employers who hire One-Stop Career Center Network job seeker customers?

- In the 12-month period from July 1, 2001 through June 30, 2002, 2,231 employers were served by the One-Stop Career Center Network, and those employers hired 6,055 job seeker customers.
- The industry that hires the most adult workers through the One-Stop Career Center Network is employment services (i.e. temporary employment/staffing agencies), followed closely by health care, for a combined 28% of all placements. These industries, along with food service, retail trade, and government, represented more than half (53%) of all adult placements.

- A follow-up study of 2,628 former One-Stop Career Center Network job seeker customers and the 1,382 business affiliations of their first jobs after leaving the Network, in the 12-month period between July 2000 and June 2002, found that 29% of the first jobs were in businesses with fewer than 50 employees, while 37 percent were in businesses with more than 250 employees.
- There was no strong association between the percent of first jobs retained and employer size, but average earnings were higher for those former Network customers retained in larger businesses. There was a 25% percent difference in average quarterly earnings a year after first hire, between the smallest and largest business size categories.
- The retention rate in the Administrative and Support Services industry ranges between 21% and 24% among the four business size classes, which stands in sharp contrast with retention in hospitals (70%), education services (60%), and nursing and residential care services (48%), in the two largest business size categories.
- The results to the employer characteristics analysis are by no means clear-cut. Further research is necessary before conclusions can be drawn from these group findings about which individual employers might be targeted for job development and outreach activities.

How does the performance of the Baltimore system compare with that of other peer cities?

- Benchmarking the Baltimore system against a group of peer local workforce investment board areas in comparable cities shows Baltimore to be a high-performer in terms of the absolute number of people served and the number served relative to population size. The majority of people who leave the program do so at the core stage: this the WIA-mandated free and universally accessible level of services.
- Baltimore trains a smaller percentage of those served, and customers who enter training spend fewer days there than they do in the other LWIBs, but Baltimore still assists customers in obtaining credentials at a high rate, compared to the level in the other LWIBs. The balance of service emphasis across core, intensive and training is an important area for future discussion by the BWIB.

What training works best and for whom?

- Results from a cost-effectiveness analysis and a return on investment analysis on two samples of customers in Baltimore's customized training and Individual Training Account (ITA) funded training programs, show publicly-funded training to be a very good investment. "Customized training" is arranged collaboratively with employers in accordance with specific job requirements, while the "ITA" is like a voucher that the job seeker customer can use at any approved training provider. The research results are based on just two non-random samples of job seekers taking one of these types of training at a particular point in time, and do not show what would have happened to other comparable groups not receiving the same training. Nevertheless, they demonstrate and confirm that:

- training can be associated with wage gains for almost all types of customers, and that the gains can be highest for those who previously were the poorest;
- when comparing customer earnings in the four quarters before the start of their training to the four quarters after their exit from the program, customized training customers as a group experienced a wage gain of \$3.55 for every \$1 invested in their training, while the wage gain for ITA-funded customers was \$1.49; the two groups of customers combined experienced a wage gain of \$2.20 for every \$1 of training investment;
- when the broader monetary implications *from the point of view of the taxpayer* funding the local public workforce system are factored into a more comprehensive return on investment analysis (that is, including the changes from before to after training, in federal, state, and local taxes paid by customers, and in child care vouchers, food stamps and TANF/TCA received by customers) the results show that training investment pays for itself in the second year afterwards in the case of customized training, and in the third year afterwards in the case of ITA-funded training; hence job retention and progression support services to help customers stay attached to the labor market, in either their present or their next job, for at least this amount of time after training, are key to making good on the public's training investment.
- Maryland has a relatively low ability to receive federal training dollars because it is relatively better off than many other states in terms of those socio-economic variables taken into account by the federal WIA funding allocation formulae. Maryland also lags its state competitors in the absolute amount and relative level of state dollars devoted specifically to employer-focused labor training -- that is, the kinds of investments in job skills training made with public state funds and often routed through employers themselves. With constrained government budgets overall, significant supplementary funds are needed to reach the levels of training offered in other states and the scale required here.

Recommendations about future opportunities:

The empirical findings support the following three broad strategic areas as most promising for future workforce development in Baltimore:

(1) Vigorously pursue the build-out of high-growth target industries into broader sector/cluster-based development:

Having identified and designated industries for which the local area is likely to have a competitive advantage – the list of “target” or “high-growth opportunity” industries -- the Board should now assist Baltimore with the next stages of cluster growth, including:

- alignment of economic development efforts, resources, initiatives, and infrastructure in support of these target industries to maximize their opportunity for local growth: this effort includes fostering development of local consortia (like the Healthcare Coalition, and the Bioscience Initiative), human resources networks, and regional skills alliances;
- identification of other industries it makes sense to encourage locally because of their strong linkages to those already on the initial target list; this effort involves mapping the supply chains of the target industries – for example, the laboratory equipment manufacturers and suppliers used by the biotechnology firms and healthcare

organizations – and then encouraging growth of those suppliers locally; in this way, the growth opportunities offered by the initial target industries (which are often technology-based and offer rapid growth in only a few high-level occupations) can be extended to a wider set of linked activities; these can create opportunities for low-skilled/low-income and median skill workers with the assistance of targeted public incentives, the creation of career ladders and support services by workforce intermediaries, sector-based training, and focused barrier removal for specific groups.

(2) Greatly increase skills training and enhance its effectiveness:

The Board could take the initiative and advocate for reallocation of public funds towards training, and for development of a plan to raise a large alternate source of funds for training to be implemented when state fiscal conditions permit. Such funds should be used to:

- provide more customized training, especially within the targeted growth industries and their surrounding clusters;
- provide more basic skills and workplace literacy training to overcome the bottleneck faced by many low-income/low-skilled job seekers trying to bridge into cluster occupations yet lacking the foundation to do so;
- develop better links to the school system, including further development of career-related curricula, more employer engagement in school and curricula planning, and more school-to-work opportunities;
- link training provision to the results of an occupational forecasting system: incentives could be provided to providers of the kinds of training that equips job seekers for skill shortage areas and for occupations likely to be in high future demand, as identified by the forecasting system;
- pursue more creative approaches to making full use of the policy flexibility and program choice options available within federally-funded services, to offer more training;

The other strategic choices that could increase the cost-effectiveness of training even further (if feasible, given freedom of individual customer choice and favorable federal and state regulations) are to:

- choose less expensive training providers rather than more expensive ones, in the cases of comparable training with similar types of customers and similar levels of provider outcomes;
- ensure that training participants and employers receive all available supports (such as food stamps, earned income tax credits, etc);
- time the present income supports provided to job seekers through the welfare system to coincide better with the training activities arranged by the workforce system: this alignment may require changes in state or federal policy;
- advocate for policy changes that increase welfare recipient participation in training.

(3) Institute a modern local performance measurement system:

MOED's One-Stop Career Center Network greatly exceeds federal performance standards for virtually every customer group, service location, and quarterly time-period. Yet only part of the federal performance measurement system is directly relevant to the Board's strategic management needs. Developing and instituting a balanced-scorecard system, with closer to real-time measures related to the Board's own strategic objectives, would better demonstrate the workforce system's value, would provide a more useful tool for oversight and continuous improvement, and would bring meaningful life to reporting. It could also help align the activities in other parts of the larger workforce system with that of the main MOED One-Stop Career Center Network, in pursuit of the Board's strategic objectives. Any new performance measurement system should:

- capture and display the critical information the Board needs to fulfill its oversight role: measures should be clearly defined and understandable, and data collected on the measures should be timely, accurate, and consistent;
- show progress towards local strategic goals set for the workforce system by the Board;
- be designed and implemented for performance support and continuous improvement, rather than compliance and federal reporting;
- promote alignment among different partners, levels, units, and staff.

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Introduction

This is the first in a series of reports prepared by the Baltimore Workforce Investment Board's "Workforce System Effectiveness Committee" (WSEC). The goals of this *Baltimore's Workforce System at Work* report are to:

- provide information and analysis charting the local public workforce system's progress;
- be a primer for existing, new, and potential BWIB members on the role of evaluation and performance support in the local public workforce system;
- empower BWIB members with an understanding of workforce system issues, strategies, operations and tools, such that they can see the leverage points at which they can make strategic decisions that will have positive impact;
- provide a complete system overview for individual players to see their own positions and functions within the larger scheme.

This report will be informative to...

...*employers* wanting to know how and where they can find job candidates with the skills needed,

...*leaders or staff of workforce services-providing agencies,*

...existing or potential members of the *Baltimore Workforce Investment Board,*

...*City of Baltimore taxpayers* interested in knowing how Baltimore government is providing services and improving the workforce system.

The report begins with the workforce landscape in Baltimore. Present employment conditions are summarized and future employment projections are presented. Common threads appearing in recent reports are synthesized, to set the scene for the BWIB's work.

We begin section two with the role and mission of the Baltimore Workforce Investment Board (BWIB), and the studies being undertaken by the Workforce System Effectiveness Committee to provide information and analysis the Board can use to link strategic goals and system performance. These studies focus on a key component of the system: the services provided through the One-Stop Career Center Network managed by the Mayor's Office of Employment Development (MOED) and primarily funded under the 1998 federal Workforce Investment Act (WIA). This Network is the main hub for workforce activities in Baltimore and is the part of the system for which the most consistent, frequent, verified data is available. There are many other parts to the wider workforce system – such as human and social services agencies, the school system, special entities like the Empowerment Zone, and non-profit community groups -- which

also play significant roles. The WSEC plans to expand its focus to other parts of the larger workforce system in future reports.

The structure of the One-Stop Career Center Network system and its services are outlined, and results given from studies of client flow, cohort outcomes, and hiring employer characteristics. We put Baltimore's achievements in peer perspective through benchmarking its outcomes alongside a group of 15 other comparable industrial areas. We also present the results from cost-effectiveness analysis and return on investment analysis on two types of training offered to customers by the local public workforce system.

In section three we step from findings about the current situation, to future opportunities. We review what is on the horizon in terms of possible strategies and initiatives, modern performance measurement systems, and cluster/sector-based approaches to workforce development. Finally, we give the employer's perspective on how the private sector can be more engaged in the system in the future.

Each section begins with a statement about why it is important for the system, and concludes with a summary of what we have learned from it, and the recommendations for future action that its findings support. Appendices at the end of the report contain the more detailed information, including a glossary of acronyms in Appendix I for those unfamiliar with workforce terminology.

1. Backdrop: the workforce landscape in Baltimore

In this section, we present the summary employment picture and future projections for Baltimore, along with common threads from the major reports and studies done on the state of the Baltimore economy and its workforce in the last few years.

Why is this section important? We start from “where we are now”. We do not want to replicate past studies, but instead synthesize their findings and use them to seek out future opportunities.

1.1 Baltimore's current employment situation

A few key socio-economic statistics from the 2000 Census summarize Baltimore's population and employment situation.¹ Baltimore is still the nation's 17th largest city out of over 270 metropolitan areas, but between 1980 and 2000, its resident population declined by 17% while the surrounding suburban population grew by 35%. Few new immigrants arrived to compensate for this population loss, and since the number of married couples declined and the 25-34 age segment of the population dropped by one-third, Baltimore's population is “aging” rapidly. Middle and upper-income households (earning \$34,000 to \$81,000) also declined in number more here than in other cities, leaving Baltimore also statistically poorer: median household income declined by over 7% in the 1990s. In 2000, nearly 40% of families with children were living below the poverty line, and one in five children lived in a family with no working parent.

The changing economy has played a large role in the population, employment and income equation. As in many large cities across the country, manufacturing has declined in Baltimore: in 1970 that sector provided 20% of all jobs, compared to just 8% in 2000. Manufacturing jobs once enabled high school graduates, or those with even less education, to earn sufficient wages and benefits to care for their families. Today, over a quarter of the workforce is in health, education, and social services – the second highest share only to Boston among 23 major cities studied in a recent Brookings report. This shift to a new services economy brings new and significant growth opportunities and high-skilled, high-paying jobs, but it also risks polarizing the economy unless those opportunities can be extended to those with below-median skill levels.

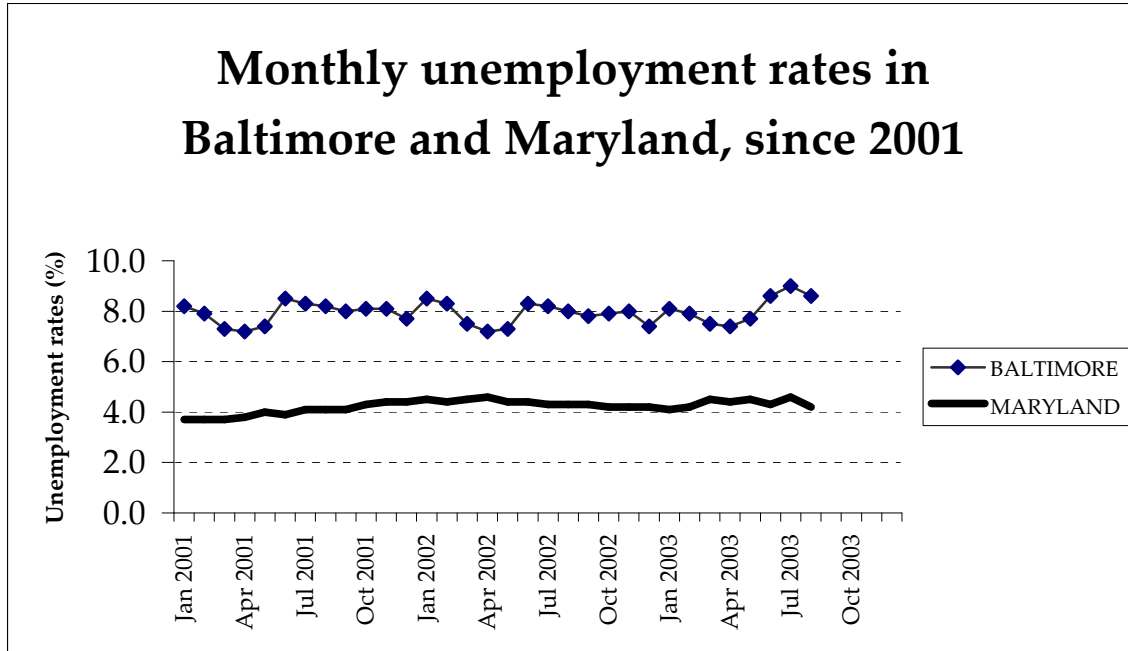
These new industries require significantly higher educational attainment, the level of which is, unfortunately, lower in Baltimore than in many other cities. This situation is especially pronounced ethnically: one-third of whites in the City have a college degree, whereas only 10% of black adults do. In addition, these new industries, and other existing service industries, tend to pay less for low-skill workers than manufacturing does, making it difficult for such workers to support families and move out of poverty.

Thus, while there have been pockets of renaissance associated with dynamic new industries, the unemployment rate in the City of Baltimore has remained consistently almost double that for the Greater Baltimore metropolitan region and for the state as a whole (*see chart*). Unemployment was over 8% for more than half of the 32 months between January 2001 and August 2003. Baltimore's unemployment is also more prone to cyclical swings than the state as a whole, and it exhibited five reversals as it ranged from a low of 7.2% through a high of 9.0% over that period. This amounts to swings of several thousand people -- and potential customers for the workforce system -- on a monthly basis.

As of December 2003, the latest month for which Maryland local unemployment statistics are available, the city's unemployment rate was 7.8%, which is the highest of the 18 metropolitan

¹ *Baltimore in Focus: A Profile from Census 2000*, Brookings Institution, Center on Urban and Metropolitan Policy, DC.

LWIBs we compare Baltimore with in Section 2.7. It is also higher than the 4.7% for the Greater Baltimore metropolitan region as a whole. In Baltimore at the close of 2003, some 22,761 individuals out of a total civilian labor force of 293,285 people were without a job and actively seeking one.²



In sum, Baltimore is well-positioned for rapid growth and development in service industries like health care and medical technology, financial services, information technology, and biotechnology. As with other urban areas, though, Baltimore also faces interrelated challenges with its workforce, including low literacy rates, a struggling school system, a high local concentration of the state's welfare caseload, high rates of substance abuse, and a large number of ex-offenders returning to the city.

At the same time, there are multiple signs of progress in strengthening Baltimore's workforce. *The city school system is the only major urban school system in the nation that has experienced academic gains for the past five years.* First and second graders now perform *above* national norms, and the dropout rate has been reduced. A citywide initiative to support ex-offenders in successfully transitioning back into the community has yielded new programs and policies, galvanized the involvement of more than one hundred member organizations and agencies, and attracted national media attention. A focus on substance abuse treatment has yielded more treatment slots. One of the city's key assets – the strength and diversity of fourteen area colleges and universities – is likely to play a key role in the sustained development and competitive advantage of new high-growth and high-tech industries in Baltimore.

Clearly, much has been achieved here, and much remains to do.

² *Labor Force Estimates by WIA*, Office of Labor Market Analysis and Information, Maryland Dept. of Labor, Licensing and Regulation, <http://www.dllr.state.md.us/lmi/laborforcewia/wiacity.htm>

1.2 What do other recent studies say about the workforce landscape?

The nine recent reports and studies contributing to our understanding of the workforce challenges and opportunities facing the city are shown in chronological order in the sidebar below. (Their more detailed individual findings and recommendations are given in Appendix A.)

Recent studies reviewed

(see Appendix A)

1. Job Opportunities Task Force "jobs gap" study (1999)
2. Jobs for the Future "alignment" study (November 1999)
3. *State of the Workforce Report, 2001*, by Towson-RESI and GWIB
4. *BWIB Strategic Plan for 2002* (December 2001)
5. *The Mayor's Economic Growth Strategy for Baltimore City* (July 2002)
6. *Baltimore Bioscience Initiative* report by the BWIB Bioscience Coalition (August 2002)
7. *Good Jobs First* report (September 2002)
8. *Baltimore's Choice* report by the Job Opportunities Task Force (2002)
9. MOED's *PY 01 Industry Analyses* report (April 2003)
10. Job Opportunities Task Force's *Connecting Low-Income Families to Good Jobs* (January 2004)

Below we focus on themes highlighted in these reports that are common to several studies (and which may be indicative of persistent and widespread structural problems), and also those themes that are "cross-cutting" in the sense they involve multiple realms of activity – unemployment, literacy, K-12 education. These require *system-wide* solutions, rather than quick individual program "fixes".

Many of the findings in these reports were specific to their authoring group's particular focus or interest. Nevertheless, several common and cross-cutting themes emerge, and many of the recommendations in these studies are taking hold, as will be seen later in this report.

1. ***All these studies confirm, either directly or implicitly, that "workforce development" and "economic development" are synonymous.*** Labor and capital are indispensable partners to each other in value creation. *Employees need jobs* to raise families, sustain living standards, avoid economic hardship, or move out of poverty. *Employers need labor with appropriate skills* in order to take advantage of rapidly shifting opportunities and new technologies to boost firm productivity and remain competitive. *Communities, regions, and governments need both:* competitive profitable employers are necessary to provide livable wages for employees, who, in circulating their disposable income, support a range of services industries and the taxbase necessary for providing the public goods and services that yield quality of life.
2. ***"Economic development" is not about "growth" alone.*** Development projects have by nature to be focused and limited, in order to create the comparative economic advantages that launch and sustain them. Many can be very profitable when judged on their own narrow bottom line. But this approach can also mean that economic development becomes a series of piecemeal individual projects that are short-term or concentrated in their impact. The whole portfolio of multiple individual projects and initiatives needs to be strategically aligned, if the city is to achieve "development", as opposed to just "growth". This fuller economic development would be characterized by the creation and

institutionalization of a deeper set of systemic capabilities and reusable inner resources, which would allow the city to outlast the inevitable rise and fall of individual projects, firms, and industries, and help it be resilient enough to transition into whatever "next economy" comes along.

3. ***Skills are central to all these discussions.*** Employers need labor with the skills relevant to the job they need done. Job seekers need skills to compete for increasingly sophisticated or technical jobs. Hence, the information people receive about skills in high or future demand, the way that occupational skill requirements are articulated within defined career ladders extending across whole industry sectors, and the relative ease or difficulty people have in accessing training and acquiring those skills, are all key parts of the discussion. Jobs are necessary, but alone they are not enough: lifelong opportunities for skill upgrades are the key to sustained improvement.
4. ***The "skills treadmill" may be accelerating away from us in the "next economy".*** Baltimore has a dynamic that applies to many older northeastern metropolitan areas, but which may be more pronounced here: simply put, forty years ago the major local employer was Bethlehem Steel, but today it is Johns Hopkins University and Hospital. The workforce landscape has shifted from one in which it was possible just a generation ago to get a relatively high-earning blue-collar job and benefits without even a high school diploma, to one where occupational certifications and post-secondary education or training are now minimal requirements in the new faster-growing, better-paying occupations.

Nationally, occupations requiring a post-secondary vocational award or an academic degree accounted for 29% of all jobs in 2000, but will account for 42% of all job growth from 2000 to 2010. Yet Census figures show over 37% of Baltimore's population aged 25 and over – more than 132,000 people – do not have such qualifications.³ The marketing message being disseminated by the state economic development apparatus is one of Maryland having the "number one ranked workforce in the nation". Unfortunately, Baltimore's population has a disproportionately high share of individuals with low skills and educational attainment, at just the time when there are likely to be exciting new developments and job opportunities in technology-based industries.

Baltimore is well-positioned for rapid growth in health care and medical technology, in financial services, in IT and internet applications businesses, in regional headquarters offices, and in biotechnology. This is an astounding opportunity-set that most northeastern cities would envy. Yet achieving success in these industries may only serve to further polarize the local economy, unless the opportunities can also be extended to those with presently low skills. ***Equipping low-skill residents with the advanced technological skills required to compete in this next economy, at sufficient scale, may well be Baltimore's greatest future challenge.***

It is noteworthy that nearly all of these studies were prepared before, or use data from before, 9/11 and the recent recession. These economic events have considerably changed the landscape within which the local public workforce system has to operate, and the resources it is given to do its job. Almost overnight, we have shifted from the most optimistic high-growth/low-unemployment period in over forty years, to a situation of public budget deficits and high unemployment. We may be justified in hoping the recent economic situation is a temporary "blip" and that prosperity will return, but the Congressional Budget Office prediction is that the federal government – the main funder of the local public workforce system – will not return to a

³ Based on Census 2000 SF4 data, from Cynthia Taeuber, U.S. Bureau of the Census.

surplus in this decade at least, and maybe not until 2014. This “blip” may therefore turn out to be a very extended one, and public systems – and public expectations -- may have to adjust to this new reality, rather than hope they can hold their breath with past practices long enough for it to go away. Fortunately, many initiatives currently underway in Baltimore and described later in this report, are attempting to pioneer such necessary adjustments.

1.3 Baltimore's future employment situation

A local public workforce system not only matches job seekers with employers for today's opportunities, but it also helps prepare the workforce of tomorrow. Given the need to focus scarce training dollars on preparing people with the occupational skills that will be in demand once they graduate, and given the length of time necessary for such preparation, the system needs to be able to forecast in advance what those job opportunities will be – that is, both the industries where future openings will occur and the types of occupational skills that will be needed.

“I don't skate to where the puck is right now. I skate to where it's going to be.”
-Wayne Gretzky

LWIBs around the country use several different methods to forecast future employment growth and occupational demand (*see sidebar*). Each method has its advantages and disadvantages, and these are laid out in Appendix B. Most LWIB's use a combination of methods, including a solid

Methods of forecasting

1. Statistical models
2. Employer surveys
3. Focus groups
4. Business group/trade association surveys
5. Expert panel brainstorming

base of statistics leavened with local business insight. One such system it seems worth investigating further for possible adoption here is that from Florida, which establishes an official state list of high-wage/high-demand occupations, and then feeds back incentives to educational institutions providing courses leading to qualifications in those occupations ⁴ (*see Appendix B*).

We next review national and city projections of growth in different occupations, beginning with the national economy, as that largely drives the possibilities for local areas.

1.3.1 National employment projections

The main conventional source of information about potential future employment growth is the U.S. Bureau of Labor Statistics (BLS), which applies statistical forecasting models to results from very large national surveys of employers. The BLS generates ten-year projections of *absolute* and *relative* growth, both by *industry* and by *occupation*. The most recent set of national forecasts were issued in November 2001, for projected change up to 2010.⁵ (More details of these projections are provided in Appendix B). The “top ten” list of occupations expected by BLS to have the largest relative growth by 2010 are shown in the sidebar below.

⁴ *Workforce Estimating Conference: Summary of the February 27th, 2003, meeting*, John Nideau, Florida Dept. of Education, http://www.state.fl.us/edr/conferences/workforce/wec_summary03-27-03.pdf

⁵ “Industry output and employment projections to 2010”, by Berman J, *Monthly Labor Review*, November 2001, pp39-56; “Occupational Employment Projections to 2010”, by Hecker D, *Monthly Labor Review*, November 2001, pp57-84.

The largest relative increases in U.S. employment between 2000 and 2010 are forecast to be in these occupations:

OCCUPATION	GROWTH	TRAINING
1. COMPUTER S/WARE ENGINEERS, APPLICNS:	100%	Bachelor's degree
2. COMPUTER SUPPORT SPECIALISTS:	97%	Associate degree
3. COMPUTER S/WARE ENGINEERS, SYSTEMS:	90%	Bachelor's degree
4. NETWORK & COMP. SYSTEMS ADMINISTRATORS:	82%	Bachelor's degree
5. NETWORK SYSTEMS & DATA COMMS. ANALYSTS:	77%	Bachelor's degree
6. DESKTOP PUBLISHERS:	67%	Post-sec voc award
7. DATABASE ADMINISTRATORS:	66%	Bachelor's degree
8. PERSONAL & HOME CARE AIDES:	62%	Short-term OJT
9. COMPUTER SYSTEMS ANALYSTS:	60%	Bachelor's degree
10. MEDICAL ASSISTANTS:	57%	Moderate-term OJT

Source: BLS.

The overall *national* picture emerging from these and other BLS projections is that the landscape of future opportunities for local public workforce systems seeking to move large numbers of customers into better-paying opportunities will be a difficult one. The bulk of national job growth numerically is forecast to appear in lower-level service occupations that do not pay well. While there are some other rapidly growing occupations offering opportunities for better wages (such as those above) these will largely be in technical professional occupations requiring significantly more training preparation, and they will not appear in as large numbers as the lower-level group.

1.3.2 Local employment projections

For the City of Baltimore, projections are made by the state's Office of Labor Market Analysis and Information (OLMAI) in the Maryland Department of Labor, Licensing, and Regulation (DLLR). It produces more detailed forecasts than at the national level, incorporating demographic data about present job-holders to produce data on "openings". These numbers will differ from the growth numbers produced by simply subtracting one static employment total from another. They have the advantage of reflecting the more dynamic reality of employment, involving separations, retirements, and openings, factored in with growth, at the individual occupation level.

The top 25 of these "occupations of opportunity" in Baltimore for 2000 through 2010 are shown ranked by numbers of total openings in the table below. Of the 40,300 total openings expected from this list, one quarter will be in the top four occupations: registered nurses, cashiers, office clerks and food preparation workers. The top 10 account for just over half the projected openings. Unfortunately, the national picture implications appear also to hold true for Baltimore in this table. The majority of all openings here will be in lower level service industries paying below the median for all occupations. Only two occupations in the top ten list of openings here – registered nurses and graduate teaching assistants -- require any post-secondary education and training, and only four in the top 25 require an occupational license.

The Top 25 "Occupations of Opportunity" in Baltimore, 2000-2010							
RANK	OCCUPATIONAL TITLE	EMPLOY-MENT		EMPLOY-MENT CHANGE		OPENINGS	
		2000	2010	no.	%	REP-LACE-MENT	TOT
1	Registered Nurses	8,640	10,060	1,420	16.4%	1,820	3,240
2	Cashiers	6,560	6,050	-510	-7.8%	2,980	2,980
3	Office Clerks, General	10,690	10,670	-20	-0.2%	2,060	2,060
4	Food Preparation Workers	4,420	4,690	260	6.1%	1,710	1,970
5	General and Operations Managers	11,140	11,100	-40	-0.4%	1,910	1,910
6	Secretaries, Except Legal, Medical, and Executive	10,720	9,550	-1,170	-10.9%	1,840	1,840
7	Laborers and Freight, Stock, and Material Movers, Hand	5,460	4,960	-500	-9.2%	1,830	1,830
8	Retail Salespersons	4,610	3,630	-990	-21.3%	1,790	1,790
9	Graduate Teaching Assistants	4,170	4,790	620	14.9%	1,150	1,770
10	Executive Secretaries and Administrative Assistants	9,360	9,470	110	1.2%	1,610	1,720
11	Maids and Housekeeping Cleaners	4,650	5,220	570	12.3%	1,040	1,610
12	Stock Clerks and Order Fillers	4,450	3,750	-710	-15.7%	1,590	1,590
13	Customer Service Representatives	8,910	9,690	770	8.8%	760	1,530
14	Child Care Workers	2,140	2,720	590	27.1%	930	1,520
15	Social and Human Service Assistants	4,000	4,860	860	21.5%	600	1,460
16	Security Guards	3,730	4,150	420	11.3%	1,020	1,440
17	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	7,290	7,360	70	1.0%	1,340	1,420
18	Nursing Aides, Orderlies, and Attendants	4,280	5,040	760	17.8%	560	1,320
19	Computer Support Specialists	1,820	2,960	1,140	62.6%	80	1,220
20	Waiters and Waitresses	2,090	2,110	20	1.0%	1,180	1,190
21	Medical Assistants	1,620	2,230	610	37.7%	430	1,040
22	Elementary School Teachers, Except Special Education	3,850	3,980	130	3.4%	880	1,010
23	Administrative Services Managers	5,940	5,940	0	0.0%	970	970
24	Combined Food Preparation and Serving Workers, Including Fast Food	1,360	1,500	140	10.3%	830	970
25	Medical and Health Services Managers	2,520	2,980	470	18.3%	450	920

Source: MD DLLR OLMAI

What have we learned from this section, and what recommendations do the findings support?

1. Baltimore's unemployment rate is higher and more unstable than the rest of the state's. It is also higher than that of the surrounding metro area.
2. The raw material for making this situation better – the skill level of the workforce and the pattern of future job opportunities – are not by themselves converging to remedy it. With

the kinds of occupations being forecast to provide the bulk of job growth, it will be difficult for the local public workforce system to launch a large number of job seekers into upwardly-mobile opportunities simply through the acts of matching and placement. To close the gap between skills and opportunities, the skills of job seekers will have to be uplifted through training to help them compete for jobs in the new service industries, and the limited number of higher-paying opportunities will have to be extended beyond the initial pockets of high growth in new service industries and out into broader groups of industries. Students will need to be better prepared earlier in the school system to equip them for the career opportunities of the future.

3. The relative instability of the present time suggests that the present local reliance on statistical forecasting of future employment could be profitably supplemented with knowledgeable business leaders' input on a more formal and regular basis. Ways of feeding the findings back into system operations and educational budgeting could also be examined.