

Massachusetts Program Year 2003 Workforce Information Grant Core Products Plan and Accomplishments

The Massachusetts Division of Unemployment Assistance (DUA), the designated Employment Statistics agency, is submitting the Program Year 2003 Workforce Information Grant. It has major roles in developing the Core Products and Services and ensuring that these are provided to customers Statewide and to all Career Centers and Local Workforce Investment Board staff, in consultation with and approval of the Massachusetts Workforce Investment Board and the Department of Workforce Development.

Massachusetts Employment Statistics System:

The Massachusetts Division of Unemployment Assistance (DUA) is responsible for the management of the statewide employment statistics system. The employment statistics system includes producing and disseminating core workforce and labor market information, products and services; providing customer assistance and training on the workforce and labor market information products; and conferring with key stakeholders to ensure continuous improvement in providing customers with the workforce and labor market information they need.

In July 2004, the Massachusetts legislature restructured the former Division of Employment and Training into two agencies for providing and delivering employment and training services. The Division of Unemployment Assistance is responsible for the Unemployment Insurance programs and the Labor Market Information programs. The Division of Career Services (DCS) manages services and programs related to Workforce Development, the Career Centers and the Workforce Training Fund. DCS coordinates the delivery of employment services to customers and the information on careers through the Career Centers.

The core workforce and labor market information includes collecting, producing, analyzing and disseminating data on employment by industry, jobs, wages, labor force, resident employment and unemployment levels and rates, numbers of workers displaced by permanent layoffs and plant closings, occupational employment and wages and projections of future industrial and occupational employment for the State and sub-state areas. Technical assistance and customer service in accessing and using the workforce and labor market data and products is provided to customers statewide and to all Career Centers and Local Workforce Investment Board staff. Dissemination of the workforce and labor market data and information is through the Internet @detma.org and through print copy of current reports. The majority of the data collection, analysis and dissemination of the core workforce and labor market information is produced through Massachusetts' Labor Market Information Cooperative Agreement with the Bureau of Labor Statistics and this reimbursable grant from the Employment and Training Administration.

Oversight of the employment statistics system is guided by two statewide advisory groups, a statewide Labor Market Information Advisory Committee within DUA and a Local Workforce Advisory Subcommittee within DCS, to provide key state and local stakeholders' direct participation in identifying, consulting on, defining and improving the employment statistics system. The Labor Market Information Advisory Committee works with employers, employer associations, professionals in the economics field, policy makers and analysts, researchers and partner agencies to shape and continuously improve the statewide system. The Local Workforce Advisory Subcommittee works with the local workforce investment boards, service delivery areas, Career Center staff and partner agency staff to define and continuously improve the products and services for local partners and customers needs. Committee functions include identifying workforce and labor market information needs, developing recommendations for continuous improvements, identifying gaps in data collection activities, providing advice on the

relevance of products, establishing statewide priorities for improving and developing programs and products, determining the most effective methods for disseminating workforce and labor market data and information, developing plans for addressing workforce issues and serving as a peer-review boards on major agency products.

**Core Products and Services Plan:
Populate and maintain the ALMIS Database.**

Plan: Massachusetts will continue to populate, update, and maintain the core ALMIS Database tables in version 2.2. The database tables will be populated monthly, quarterly or annually depending on the availability of the State and sub-state data and the web-based applications that provide the public real time access to Labor Market Information. Key customers include the general public seeking workforce and labor market information, policy makers, economists, economic developers, employers and job seekers. Estimated costs are \$45,000, \$30,000 for staff and \$15,000 to upgrade the server and software that hosts the ALMIS development database. DUA's Economic Research Department is responsible for this deliverable.

Accomplishments: All planned activities and deliverables were accomplished within budget and program year. All labor market and workforce information produced during PY2003 was published through the ALMIS Database version 2.2. Database tables were populated with the latest each monthly, quarterly and annual releases and additional tables using similar formats were developed for new applications. The server that supports the ALMIS Database for web use was upgraded along with software to ensure efficient operation of web applications.

Produce and disseminate long-term industry and occupational employment projections.

Plan: Massachusetts will complete and publish the 2000-2010 statewide industry and occupational projections. DUA will also produce the 2002-2012 statewide long-term industry and occupational projections using the methodology, software tools and guidelines developed by the Projections Consortium and the Projections Managing Partnership. Massachusetts will evaluate the SIC/NAICS conversion guidelines as developed by the Ohio and Harvey Goldstein studies to refine the state's historical NAICS time series data. Massachusetts will make every effort to attend the long-term industry projections training session and the MicroMatrix training session.

Once Massachusetts attends the training session and obtains a better understanding from BLS and Utah of the assumptions and problems associated with this projection round, DET will develop a detailed time table for producing industry projections and reviewing them. Nevertheless, some major milestones can be tentatively targeted as follows: In early March, DET will obtain the latest statewide macro forecasts from a variety of public and private organizations and evaluate them. Once the state's CES data are released with the latest benchmark, DET will load the state's industry employment time series data into the LTP system and commence the industry projections. In May, after the analysis of the response rates to the OES survey has been completed, DET will start the occupational projections.

Massachusetts long-term employment projections of job growth and replacement openings are used in both and private and public sectors. Recently the Massachusetts business community has become even more focused on employment projections, particularly those estimating the number of openings due to retirements and replacement needs. As retirements have become more widespread across more industries and areas, policy makers too have become more interested in DUA's projections of replacement needs. DUA will carefully evaluate the projected number of

replacement job openings, and may start using BLS replacement rates to develop a base line scenario replacement needs for selected industries and workforce boards.

When sub state OES survey data become available, the feasibility of doing sub state projections will commence. Due to widespread changes in both the economy and the data sets used to track those changes as well as less than desirable state and area specific OES data in key industries, it may only be possible to produce sub state projections on a limited basis. Another factor that may limit DUA from producing sub-state projections is the lack of up-to-date readily available sub state population projections. Massachusetts has had very slow labor force growth and large numbers of net-out migration in areas where many high-tech industries have been laying off. To reconcile these long-term demographic factors to long-term business demand will be very difficult given the lack of current sub state population projections and the fact that the BLS' US projections do not reflect the nature and the severity of this recession. Rather than produce sub state long-term projections at this point in time, DUA will use this time to build and analyze NAICS-based historical time series at the state and local level and determine which long-term projections models should be used for each NAICS industry.

Massachusetts' long-term employment projections are used in both the private and public sectors. Principal customers include career guidance counselors, job seekers, economic developers and educators, state and local workforce boards, chambers of commerce and local and national industry and trade associations. Estimated costs are \$50,700 for staff. DUA's Economic Analysis unit is responsible for this deliverable.

Accomplishments: Massachusetts completed and published the 2000-2010 statewide industry and occupational projections in January 2004. DUA updated the projections to reflect the nature and severity of the most recent US recession, curtailing growth in all IT industries and occupations. Massachusetts also conducted an extensive review of its job openings and replacements within healthcare, making sure was its projections were consistent with current job vacancy trends as reported by DUA's Job Vacancy Survey. Since health care and IT are primarily the state's two main engines of job growth, DUA felt that projections for these industries and occupations had to most accurately reflect the long-term impact of the business cycle on employment levels for 2000, a peak year of employment most occupations and industries.

Massachusetts commenced work on the 2002-2012 industry and occupational projections. Massachusetts attended the long-term industry projections training in Austin, Texas in February and obtained Ohio's SIC-NAICS conversion program. In March DUA converted its 1977-2000 in-house SIC based industry time series using Ohio's Access program. DUA also obtained and analyzed statewide macro forecasts of Massachusetts' population, labor force, income, employment, and unemployment from various public and private institutions. This pre projection big picture analysis will speed up the projections process once BLS recreates Massachusetts'. BLS had to recreate some Massachusetts longitudinal files as some files became corrupted.

Produce and Disseminate 2003-2005 Short-term Industry and Occupational Projections.

Plan: Massachusetts will develop statewide short-term forecasts for the 2003-2005 period by June 30, 2004 and compare these forecasts to other public and private sector forecasts developed for the state. DUA will also compare these forecasts to data obtained from the expanded and revised job vacancy survey (see description below). Once these analyses are complete and DUA can identify the factors that may cause differences in the long and short-term growth pattern of different occupations, DUA will consider populating the ALMIS database with 2003-2005 projections data. In 2003 and 2004 with the hosting of the Democratic National convention,

Massachusetts will experience a number of one-time short-term shocks in several industries. The extent to which these shocks can be isolated and solid historical time-series data can be obtained on a 2002 NAICS basis, will determine whether DUA populates the ALMIS database with these forecasts. Estimated costs are \$12,500 for staff. DUA's Economic Analysis unit is responsible for this deliverable.

Accomplishments: Given the struggling national labor market recovery during the 2003-2004 period and the fact that Massachusetts continues to lag U.S. growth, DUA has decided not to populate its ALMIS database with 2003-2005 short-term industry and occupational projections. Very often, Massachusetts' job vacancy survey provides a more detailed and more specific picture of current job openings within industries than any 2 year forecasts could capture. Massachusetts has chosen to direct more resources into the job vacancy program.

Provide occupational and career information for public use.

Plan: Massachusetts will develop and disseminate estimates of job vacancies by industry and occupation for seven economic development regions using the standard methodology developed by the JVS workgroup by March 2004. Based upon feedback from Massachusetts' major companies and high level policy makers within the governor's cabinet, Massachusetts' job vacancy survey will obtain information not only on current hiring trends, but also on businesses' future hiring trends six months from the survey's reference date. The survey will also obtain information about the education and training needs of companies' new hires. Within 4 months of mailing out the survey, DET will publish an executive summary, comparing and contrasting this survey's results with the 2nd quarter 2003 and 4th quarter 2003 job vacancy data. The sample size will be based on a 70-75 percent response rate. DUA will supplement the LMI grant funding with other appropriate funding. Estimated costs are \$50,000 for staff from this grant plus \$213,000 from Reed Act funds. DUA's Economic Analysis unit is responsible for this part of the deliverable.

Accomplishments: In March 2004 Massachusetts published and analyzed hiring trends within seven economic development regions by industry and occupation. To accomplish this Massachusetts surveyed over 8,000 companies, asking them to identify

1. how they expect their hiring activity to change over the next six months;
2. the number and types of positions they had opened;
3. their new hires' basic skill proficiencies in six areas--English, writing and communication, teamwork, technological expertise, management and problem solving;
4. the types of training institutions that adequately trained their new hires;
5. the training institutions the employers would use themselves to upgrade their new hires' skills. The 5 training institutions employers could choose from were: high school or vocational school; college or university; commercial training provider; in-house training and other training. Employers could choose as many skills and training institutions as were relevant to their organization.

Approximately 75 percent of the companies sampled during this quarter responded to the survey, enabling DUA to provide statistically reliable results. Moreover with the additional questions on business hiring expectations and business training needs, DUA has begun transforming the job vacancy survey into a more demand-driven labor market information vehicle that meets the needs of local businesses, educators, policy makers and job seekers. In the Spring of 2004 DUA launched a second regional job vacancy survey, sampling 6,500 companies.

Plan: During the year, DCS will disseminate customer-focused occupational and career information. Developed in cooperation with customers and other stakeholders, the career information will again be O*NET based. It will include occupational skill requirements, user-friendly descriptions, wages, and current and forecast employment by occupation. The Massachusetts Career Information System (MassCIS) will include this occupational information, plus links to America's Job Bank and to education and training venues. These venues include colleges and universities nationwide, as well as proprietary training schools throughout Massachusetts. DCS will develop the database of information on proprietary schools. MassCIS will be available on an Internet site free to all state residents. DCS will provide training and technical assistance for MassCIS. Brochures for parents, Career Center personnel, and others will also be prepared. DCS will monitor usage of the MassCIS web site, and obtain feedback on MassCIS customers through a survey of Career Centers, and focus groups with other user communities. Principal customers for these products include Career Center planners, counselors, and administrators, elementary and secondary school career counselors, job seekers, employers, libraries, and parents. MassCIS has a contract with intoCareers (University of Oregon) to use the national CIS program, and to host the MassCIS web site. Estimated costs are \$49,400 for the intoCareers contract from this grant plus \$35,000 from the MA Department of Education and \$150,000 for staff. DCS is responsible for this portion of the deliverable.

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Provide an employer name and address list accessible by the public.

Plan: Massachusetts provides public access to the ALMIS Employer Database through MASS STATS, a web-based information delivery system, and through each of the Career Centers and Local Workforce Investment Area resource rooms. Sixty additional annual subscriptions of the ALMIS employer directory are purchased and distributed to each of the Local Workforce Investment Boards, the Career Centers and their support offices and program coordinators for employment services for veterans. Training, technical assistance and customer support on using and accessing the ALMIS Employer Database is also provided. Key customers are the local workforce development staff, job seekers, employment counselors, job developers and planners. Estimated costs are \$14,940 for the additional annual subscriptions. DUA is responsible for this deliverable.

Accomplishments: All planned activities were accomplished below budget. The change in the national contract substantially reduced annual subscription costs. The budgeted funds were redirected to support a shortfall in Job Vacancy Survey costs.

Provide information and support to Workforce Investment Boards (WIBs) and produce other state information products and services.

Plan: DUA will develop semi annual labor market information profiles for both the state and the 16 Workforce Investment Board (WIB) regions. The first profiles will be published in February 2004. By participating in an interagency work group that includes strong WIB participation, DUA will be better equipped to formulate the design and data components for regional workforce development profiles that meet customer needs. DUA will also consult with key members of the State Workforce Investment Board (SWIB) to ascertain which key indicators of labor market demand and supply are needed to develop the capacity of regions to use current labor market and labor force data for planning, analysis, and policy development purposes. By providing access to relevant and easy to understand labor market information, workforce development officials will be able to build the capacity of their regions to analyze, interpret, and use labor market data on an ongoing basis. In addition to the WIBs, these profiles will serve the needs of key customers including workforce development agencies and partners, jobseekers, employers and policy makers. Estimated costs are \$93,900 for staff. DUA's Economic Analysis unit is responsible for this deliverable.

Accomplishments: DUA published a set of labor market information profiles for the state and each of the 16 WIB regions in February 2004. DUA participated in an interagency work group that included strong WIB participation. As a result of feedback from this group and individual consultation with WIB members, DUA was able to better formulate the design and data components of the profiles to meet customer demand. DUA has been able to utilize these profiles in developing customized workshops that meet local customer needs. The profiles met with positive customer response.

Improve and deploy electronic State workforce information delivery systems.

Plan: During PY2003 Massachusetts will continue the delivery of workforce and labor market information via the Internet through MASSSTATS, the Massachusetts version of WEBSARAS. DUA will continue to pursue and install when available the newer version of WEBSARAS from North Carolina that incorporates NAICS CES and ES-202 data. DUA will also review and assess the labor market information delivery systems available on the market for enhancing web access to workforce and labor market information. The systems may need to be enhanced for current technology and query capacity to meet MA customer needs. An additional system will be identified by the end of PY2003 for implementation in PY2004. Customers include the public, policy makers, economists, researchers, economic developers, employers, job seekers and state and local workforce development agencies. Estimated costs are \$255,000, \$40,000 for staff, \$200,000 for system development/procurement and \$15,000 for servers and software. DUA's Economic Research Department is responsible for this deliverable.

Accomplishments: The new version of WebSARAS for MA that supports NAICS and seasonally adjusted estimates was developed and tested. Several new web query applications were developed for providing customers direct access to municipal information through linkages from the state's website. The applications were developed based on customer needs and implemented

with annual benchmark revisions. During PY2003 the LMI web pages and MassStats had 2.26 million hits.

A review of the two most popular labor market and workforce information delivery tools was undertaken. Customers from Career Centers participated along with workforce information staff in a review of the two systems and provided their recommendations and suggestions. Following the reviews, several system shortfalls were identified for MA customers. At the same time the system shortfalls were identified, federal support and funding for PY2004 workforce information core products and services was in doubt. Consensus was reached to defer the purchase of a new application and carryover funding to ensure core products and services could be provided through the first quarter of PY2004. Approximately \$35,000 of the funding budgeted for this project was used to support the Job Vacancy Surveys.

Support state workforce information training activities.

Plan: LMI 101, a training course designed for counselors with input from the WIBS, will be enhanced and offered to Career Center and Workforce Area counselors and staff in the fall of 2002 and the spring of 2003. Two introductory training sessions on the utilization of labor market information for program planning, job development, placement and career counseling will be provided. Upon requests, workshops focusing on the use of LMI data for specific regions and data specific users will be provided throughout the year. Principal customers are WIBs, Career Centers and workforce development service providers. Estimated costs are \$55,800 for staff.

Accomplishments: Four LMI-101 training sessions were delivered to Career Center and Workforce Area staff, two in October and November 2003 and two in March 2004. Based on customer feedback, the LMI 101 training courses were expanded and enhanced to meet more individualized and specific customer needs. Two of the training sessions were geared to the needs of counselors and two to job developers. In addition, special localized workshops were given to address specific Career Centers and WIB needs.

Consultation and Customer Satisfaction Assessment.

Plan: To improve and evaluate the materials and communication modes used in DUAs Labor Market Information Workshops (LMI 101) for Career Counselors and Job Specialists, DUA will conduct two focus groups in May 2004. Each group will consist of approximately 12 persons who had attended a LMI 101 workshop in the past. The group will probe the following: 1) Does the time frame as it currently exists allow for effective assimilation of the information? 2) Would the use of computers to do "hands on" web searching improve the retention and use of the information presented? 3) Are the printed handouts useful as well as informative? 3) Identify the most effective presentation materials. 4) Identify the least effective presentation materials. These open-ended questions will afford participants a forum to offer suggestions and critiques. It will also provide DET with ideas on how to design a new follow-up survey to identify which elements of the LMI workshop are most useful in the day to day interaction between the participant and his/her customer. Additionally it will investigate the extent to which the recipient feels empowered with extended knowledge of labor market surveys and career choice aides. This survey will provide quantitative data to be used in the evaluations as required by the One Stop LMI grant from the Employment and Training Administration. By June 2004, DUA will offer visitors to the detma.org LMI website will be offered the opportunity to respond to a brief satisfaction survey which will be used to assess access to information, timeliness of information and gather information needs that are not currently available. To ensure the products and services from this grant are in line with Local Workforce Board and Career Center customers needs, DCS

will gather information and feedback from Career Centers and Local Workforce Boards through a series of special meetings. Estimated costs are \$5,800 for staff. DUA and DCS share the responsibility for this deliverable.

Accomplishments: DUA held two focus groups, one in Boston on April 23, 2004 with nine participants and one in Marlborough on April 28, 2004 with ten participants. Responses were recorded both manually and electronically, thereby providing recordings of the participant's stated insights into the effectiveness of the training they received. A final 21 page report was produced in May 2004. The focus groups were designed to answer the basic research question, "Can the presentations and printed materials be made more useful and informative for the workshop participants?" The focus groups achieved their goal of documenting comments from those attending and providing qualitative information regarding the dissemination of labor market information through the LMI-101 workshop. All of the participants agreed as to the value of the services provided by the LMI-101 workshop. Their highest praise was for the presenters, followed by the vast amount of information available. They were in agreement regarding the need for more follow-up and the possibility of adding some new workshops.

In June 2004 a web based customer satisfaction survey was developed and implemented on the agency's labor market and workforce information pages. Early survey results have resulted in several improvements to the web applications.

Estimated Costs for PY2003: The estimated costs for the core products is \$806,606 of which \$488,700 is for direct staff, \$294,340 is for direct NPS and \$23,566 is estimated for AS&T.

PY2003 Expenditures: During PY2003, Massachusetts spent \$405,796 of the \$806,606 received in grant funds. This includes \$50,000 to support deficits in the Job Vacancy Survey budgets. Carryover funds will support the continuation of the core products and services into PY2004.