Labor Market and Career Information (LMCI) of the Texas Workforce Commission

Activity Status Report for the PY2004-5 Workforce Information Grant Texas LMCI Grant and Project Deliverables

Summary:

The Texas Workforce Commission/LMCI PY2004-05 program plan was very ambitious. There were 32 separate project activities proposed either for completion during the program year or to be initiated in that year. Some of these projects represent maintenance activities that have become signature capabilities for LMCI. Many others however, represent newly introduced ideas, concepts, data sets and software that we believe will better align our products with customer needs and enhance our ability to better explain the complexities of the Texas labor market.

This status report reviews each proposed project activity as it was originally presented in the PY2004-05 ETA LMI grant submission. The text chronicles milestones and progress to date, and notes areas where implementation has either exceeded or fallen short of expectations. We are reminded in the annual progress review that the ambitious nature of this program plan is mitigated by the fact that this is actually a three-year plan. While some activities were achieved in the first year of that three-year strategic timeline, others admittedly were prioritized for subsequent years. It is equally important to note that this ambitious plan is the result of significant data and dollar leverage with other entities. Staffing for the PY2004-05 ETA LMI grant equated to roughly 16.5 FTE across all program, technology and administrative positions.

Customer Satisfaction:

It is difficult to determine and quantify the degree to which each activity achieves total customer satisfaction. We provide use statistics for each major software product in this assessment, serving as one way to determine whether customers find our products useful. We have received very positive feedback from our LWDA contacts through our quarterly Employment Statistics Committee, as well as during our participation in conference events. It is no surprise that the customer feedback sections of the TRACER2 web tool, as well as for each individual online product, tend to center on specific technology or data use issues for that individual, rather than on the overall design, use and effectiveness of the tool on a routine basis.

If there is a most important lesson to be learned from our customers based on PY2004-05 feedback, it would be the need for greater outreach and marketing and even more training. Invariably, when a customer either takes the time individually or attends a training event and discovers the range of products and services offered through LMCI they are very impressed. Oft repeated comments such as "I wish I'd known you guys had this product" were the most common. Still other customers bemoan their own lack of background and familiarity with data concepts and extol us to conduct more frequent training sessions, beginning with elementary LMI concepts. Based on this feedback we intend to focus more heavily on outreach and training for PY2005-06.

1) Continue to populate the ALMIS Database with state data

1a. Update and maintain ALMIS database

▶ A description of the core product, service or other demand activity-The ALMIS database will continue to serve as a core set of data files from which we will design, display and disseminate the most frequently requested data items. The CDR/LMI merger makes it easier to put populate both demand and supply side variables in the ALMIS database. All tables designated as core tables in accordance with guidelines issued by the ALMIS Database Consortium will be populated and maintained. LMCI completed a study of occupational licensing in PY2004 and those data will remain in force until PY2006 for ALMIS purposes. Hardcopies of that study, Licensed Occupations and Apprenticeship Program Contacts 2004, are available through the LMCI office.

Staff assigned to work on the ALMIS Database activity will coordinate the ALMIS initiative in Texas with the ALMIS Database Consortium. In Texas, the ALMIS database is a critical data bucket for core data items but it is significantly augmented by the SOCRATES database. To maximize the use of both data structures LMCI staff will work to reduce any existing redundancies. In addition, we will take full advantage of the ALMIS Employer Database by formatting the Texas files and integrating them into the on-line SOCRATES, Texas Industry Profiles (TIP), and TRACER2 applications. We will also disseminate a copy of the full national CD ROM sets provided by InfoUSA to all Texas local workforce board areas (LWDA).

Project Status Effective September 1, 2005: All fields in the ALMIS database have remained current on a monthly basis with the most frequently requested data items being uploaded and displayed in TRACER2. Staff attended the national ALMIS consortium meeting in San Diego. The ALMIS employer database has been integrated into the Texas Industry Profiles and SOCRATES systems with appropriate recognition cited to InfoUSA. The InfoUSA CD ROM data sets were distributed to all LWDA Boards in the Fall 2004. We are eager to install the newly purchased LMI warehouse server, which houses the ALMIS database, to increase the file access times.

1b. TRACER2 maintenance, updates, enhancements. Produce narrative and graphic updates to coincide with monthly release date

▶ A description of the core product, service or other demand activity-TRACER2 will continue to be the primary on-line dissemination vehicle for the ALMIS database. Effective August 1, 2004 LMCI will host the TRACER2 program on internal LMI servers, thus saving money on external hosting. Those savings will be incorporated into the purchase of increase bandwidth for LMCI servers to accommodate the increased traffic brought on by our strategic integration with the new workintexas.com labor exchange system. TRACER2 will also continue to serve as the primary electronic dissemination medium for the monthly release of employment and unemployment data. We will use tools in TRACER2 to build graphs and tables to better communicate context of each monthly release.

Project Status Effective September 1, 2005: The data displayed within TRACER2 has

remained current on a monthly basis. The system is fully incorporated into the LMCI server environment. This has proven beneficial in a number of ways including reduced cost/man hours, and a system more flexible in meeting the demands of the department with the freedom to more creatively use our resources as needed. The web master and database manager are currently involved in planning sessions with on-going discussion for further refinement, additional data and content, and user tours during the next year.

The system is linked to many other TWC web based products, most notably the WorkInTexas application, which yields tremendous visitor traffic. From the period September 1, 2004 through September 1, 2005, TRACER2 had 728,029 unique visitors with an average of 2,016 per day. There were 1.38 million sessions or 3,789 per day and 6.95 million page views for an average 19,000 per day.

The TRACER2 software has undergone several structural transformations including the uploading of the 2002-2012 projections into a new section called *The Future*, new inquiry screens to view employer size class by Board and industry, and the inclusion of a *Resource Room* feature that links to many popular web sites, including a direct link to the TWC Eligible Training Provider System for accessing WIA eligible training provider information.

To comply with the latest version (2.3) format of ALMIS, changes to Data, Administrative, Lookup and Crosswalk tables were needed. The ALMIS database has been updated to incorporate the 2.3 formats as it relates to the Employer, Industry (QCEW) and Projection suite tables providing added functionality to the overall TRACER2 site. The Geography, Sub Geography and NAICS tables have been updated to allow for the new MSA definitions and NAICS code changes.

Major changes were done to facilitate data and content loading and updating. The entire procedure for information release dates has been substantially streamlined and redundant tasks eliminated (this procedure used to take several days of uploading and proof reading, now it is completed within just a few hours with both fewer mistakes and man hours). This included the creation of a "mirror site" that allows the administrators to pre-load data during the release week for early review/proofreading.

The look and feel of TRACER2 has been modified as well. The Left navigation bar has been reduced, resulting in a more intuitive format containing links to permit the user access to all other LMCI automation products (such as Texas Industry Profiles), as well as a *Resource Room* page. The *Resource Room* page lists information/links available, broken out by topics such as Current Economic Trends, Economic Indices and Indicators, Industrial Information, and Job Search/Career Information. The home page of TRACER2 has been changed dramatically. It now contains direct links to the Monthly TWC Press Release, Texas Labor Market Review, as well as snapshots of current unemployment, CPI, and MLS data.

In addition to functional changes, additions were made to the content available in TRACER2. We loaded the 2002-2012 Projections and Industry Occupation matrix tables

and also a created "The Future" page allowing users to download Excel projection files. We also added national QCEW industry information to the ALMIS database for those doing ratio-based industry analysis. To assist those unfamiliar with the geography of Texas and her substate regions we added a geography section with maps of MSAs, WDAs and counties.

2) Produce and disseminate industry and occupational employment projections

2a. Complete 2002-2012 long-term projections.

► A description of the core product, service or other demand activity-The 2002-2012 projections will be produced during the program year. Long-term projections have become a staple in the LMCI product cupboard. They are instrumental in identifying occupations in demand and are used by the boards to identify targeted occupations for establishing training programs.

LMCI will work on producing long-term industry and occupational projections for Texas and its 28 sub-state areas for a time period of 2002 to 2012. The projections will be based on NAICS and SOC coding structures. State projections will be submitted in accordance with the instructions to be issued by the Projections Consortium.

Employment projections will be disseminated via the LMCI web page, end-user applications such as TRACER2, SOCRATES, Texas Industry Profiles and via e-mail in electronic format, on request. Employment projections will be included in the ALMIS Database so customers can retrieve the information through the TRACER2 web application. LMCI staff will submit the projections data for public dissemination following the procedures established by the Projections Workgroup and the Projections Managing Partnership. The LMCI lead projections staff will participate in the national micro-matrix projections workgroup as a means to keep Texas at the forefront of national methodological developments.

Employment projections will also be available in hardcopy, including a narrative analysis, tables with rankings, and a description of the methodology. Employment projections will be available on the ACINet (ETA web site) and the state projections web page. Employment projections will be available in SOCRATES, a web tool for local boards to produce target occupations, in both tabular and graphical display formats. The employment projections publication will include the longterm projections, a narrative analysis of significant trends predicted for the projections period or noteworthy deviations from the 2000-2010 projections, and a description of the methodology.

Work will continue in the production of short-term occupational forecasts for Texas and its substate areas with an emphasis on six to eighteen months forecast horizons. Thus we will focus on the 2004-2006 horizon. Staff will review and assess short-term projections internally and distribute on a limited trial basis to ascertain the intuitive relationship between forecasts and indigenous regional wisdom. If pilot review projects are successful, short-term forecasts will be integrated into the LMCI web presence. The forecasts are based on the NAICS and SOC coding structures and will be generated using the national projections software package.

Project Status Effective September 1, 2005: The 2002-2012 long-term employment

projections for Texas and the 28 LWDAs were completed in April 2004. Copies were sent to each LWDA Board director. A section called *The Future* was built into TRACER where users can view and download the projections for any LWDA. Detailed Excel spreadsheets were constructed for each LWDA that included the Top 25 occupations by fastest growing, most jobs and greatest number of annual average job openings, all combined with the 2004 occupational wage and the education and training requirements for each. In addition, a set of nine (9) PowerPoint bar charts was developed for each LWDA that includes top 15 industries and occupations by various job growth criteria. These are available in TRACER and a set was sent to each LWDA.

After our dedicated short-term projections economist left LMCI, that position was not replaced. Remaining projections staff have spent limited time resurrecting the short-term projections product. Review of our early outputs was not encouraging and most of our projections staff capabilities were invested in our long-term projections.

2b. Integrate projections into all LMCI software applications

A description of the core product, service or other demand activity-The projections program has many outputs, all of which are critical to the veracity of LMCI information systems and our ability to address customer needs. Thus, although we will produce a hardcopy publication detailing our 2002-2012 projections, the primary delivery vehicle for the projections will be our automated systems. The actual projections will be incorporated into the TRACER2 and SOCRATES systems, as well as integrated into the iOSCAR and SOCRATES occupational profiles modules. The projections and the industry-occupation matrix will be integrated into the Texas Industry Profiles system in various places, not the least of which will be the Labor Availability Estimator.

Project Status Effective September 1, 2005: The new 2012 projections have been implemented in every existing LMCI software application. As described in project 2a. above, downloadable database and chart files are available through TRACER2. The Labor Availability Estimator (LAE) module in Texas Industry Profiles has been updated with the new projections, as well as new wage data, applicants by occupation and formal education graduates. Master data tables by industry and occupation that include wages, education and training requirements and other characteristics have been built to address specific inquiries.

2c. Update industry-occupation matrix for Texas projections and Interactive industry-occupation matrix module in Texas Industry Profiles

▶ A description of the core product, service or other demand activity-The matrix is a critical tool for translating industry demand into occupational impacts. The matrix is especially useful for economic developers as it allows local workforce boards to identify likely occupational employment needs based strictly on the knowledge of the type of product or industry of the employer prospect. Armed with an understanding of the likely occupational needs, a local board can identify the level of available labor supply in the region, propose customized training around those occupations, actively recruit qualified applicants and thus use the leverage of the

workforce system to assist in the deal closing side of economic development.

Project Status Effective September 1, 2005: The new 2012 industry-occupation matrix has been exported from the projections micro-matrix system and reconfigured to be integrated into the Texas Industry Profiles Interactive Industry-Occupation ("what-if") Matrix tool. In addition customized matrices for each Texas LWDA have been constructed as an integral step in creating SOC-based occupational location quotients.

2d. Pursue emerging and evolving occupations research activities

▶ A description of the core product, service or other demand activity-Emerging and evolving occupations (EEO) research is an important contribution to the understanding of Texas labor markets. LMCI staff will prepare at least one funding proposal to the TWC Workforce Division to support EEO research on occupations affected by the Governors six industry clusters. Staff will seek out and reply to other funding opportunities as they are identified. In the meantime, staff will collect pertinent information on EEO research activities as conducted by other parties and seek to integrate pertinent findings into related LMCI publications; not the least of which will be the 2002-2012 projections.

Project Status Effective September 1, 2005: Very little emerging and evolving occupations (E&EO) research was ultimately conducted in PY2004. Staff participated in numerous meetings regarding E&EO in the clusters arena but ultimately no new work product resulted. As planned, LMCI staff prepared and submitted a proposal to conduct said research, but the TWC Workforce Division did not fund that proposal. The introductory paragraphs of that proposal were as follows:

Emerging and Significantly Evolving Occupations Research Applied Investigation for Technology-Driven Career Opportunities in Texas

Unsolicited Recommendation by the Labor Market and Career Information Department in Partnership with the Workforce Development Division's Program Policy and Development Department Submitted July 28, 2005

Project Overview

Ever changing technology continuously impacts the workplace and alters business practices. Indeed, some emerging technologies can disrupt entire segments of the economy, fundamentally altering the market opportunities of some industries and rendering some occupations wholy obsolete. Unfortunately, the emergence of new technologies and the rapid evolution of existing ones does not follow set schedules. Events of significant importance to employers and jobseekers alike are apt to happen at anytime. Unless someone is paying constant attention to information channels outside the conventional channels of labor market information (e.g., the Bureau of Labor Statistics and the U.S. Department of Commerce), these events can blindside business leaders, educators and program planners. Therefore, ongoing applied research on emerging and significantly evolving occupations is vitally important to strategic and operational planning for economic development, workforce preparation, public education and post-secondary education.

This project proposal is integral to the Agency's commitment to understand and respond effectively to forces that constantly reshape the labor market and, thereby, the need for newer skill sets in the labor force.

- The study of emerging technologies (along with the study of trends in regulation/deregulation, human resource management theory, and trade policy) is essential to refining industry and occupational employment projections that are integral to strategic workforce planning, because the research identifies emerging trends.
- By posting the results of the research electronically and continuously updating it, the proposed project will help Texas firms become employers of choice by planning strategically for the adoption of new technology to keep them competitive in a global economy, while minimizing downtime and gaps in production as well as reducing employee turnover costs during technology transitions.
- In identifying emerging occupational employment demands, posting them electronically and updating them constantly, the proposed project also will help jobseekers make informed career choices to secure and retain high skill/high wage jobs.

3) Provide occupational and career information products for public use

3a. Update Texas iOSCAR.org to O*NET version 5.0, update projections and wage data

▶ A description of the core product, service or other demand activity-The Texas iOSCAR product was the first end user product in the nation to embrace the O*NET database. We believe the iOSCAR product continues to have value as an online skills transferability system and we will work to keep the content current and enhance various features as practicable. To remain leading edge we must make modifications in that system to upgrade to the new O*NET version 5.0 and update, at a minimum, the primary LMI to include 2004 occupational wage data and the 2002-2012 projections.

Project Status Effective September 1, 2005: The iOSCAR package is updated to O*NET 6.0. Several aspects of the system had to be reprogrammed to accommodate its movement to a new server environment. The projections, staffing patterns and wage data have not been updated as of this report but this should be accomplished by the end of November 2005.

3b. Update and enhance Texas CARES version 7.0

▶ A description of the core product, service or other demand activity-As discussed in the proposal introduction, the Texas CARES initiative is a flagship product in our efforts to provide occupational and career information to our students and out of school youth. Over the past several years the Texas CARES install base has grown sufficiently that it has become a self-sustaining product based on license revenues. Thus, limited ETA dollars will be invested in the product as program income funds are leveraged to support the over 3,500 CARES customers statewide. However, LMCI in-service trainers will promote the availability of, and train in the

use of, Texas CARES. Other staff will assist in updating the many databases within CARES, including but not limited to the employers contact data files, wages, projections, cost of living and related data in the Reality Check budget calculator, and college and other postsecondary education files.

Project Status Effective September 1, 2005: The Grad Plan module was upgraded and included in Texas CARES, as was the new Reality Check budget calculator. Work has yet to begin on a Texas CARES update as the new version will be built as an Internet-based program. Despite several months of posting, we have been unable to fill the job for a CARES programmer. The job posting has been pulled and is being rewritten to hopefully facilitate a better match.

3c. Create Spanish language version of iOSCAR

▶ A description of the core product, service or other demand activity-The iOSCAR skills transferability system has been a popular online product. However, increasingly as the demographics of the Texas become more oriented toward Hispanics, we have had customer requests for a Spanish language version. Prior attempts to do so were thwarted by the inordinate cost associated with translating O*NET. However, in PY2003-04 the DOL completed the O*NET Spanish translation and shared it with the states. Subsequently, LMCI introduced the new Spanish O*NET into iOSCAR but this action completed only half the job. For PY2004-05 LMCI will engage a Spanish language translator to work with iOSCAR programmers to translate instruction and report screens to finalize a comprehensive Spanish language version of iOSCAR.

Project Status Effective September 1, 2005: The Spanish O*NET data dictionary has been incorporated into the Spanish iOSCAR, however the screen directions and user interface has yet to be translated. Current plans call for a contract translator to be brought onboard for a one-week period to work directly with the LMCI staff programmer to complete this task.

4) Ensure that workforce information and support required by state and local workforce investment boards are provided

4a. SOCRATES maintenance, updates, enhancements

▶ A description of the core product, service or other demand activity-In the introductory section of this proposal SOCRATES was offered up as a system foundation initiative. SOCRATES is much more than a software product—it is a system that connects the local workforce planning and occupational targeting process with appropriate data from multiple sources, techniques of regional labor market analysis and user training. SOCRATES offers multiple modules and functionalities, ranging from the automated regional targeting process to occupational and county narrative profiles, to interactive shift-share analysis.

For PY2004-05 LMCI staff will enhance the County Narrative Profiles (CNP) module by adding a new section on health-related socio-demographic data. We will also introduce new graph features within the CNP report to augment the narrative text and statistical tables. Staff will also

experiment with a new module tentatively referred to as "OCCUVAL" which will combine statistical filtering of occupational data with GIS-based thematic mapping of O*NET-based KSA data for LWDAs within Texas.

Project Status Effective September 1, 2005: SOCRATES has received several updates and upgrades. Most of the data variables in the County Narrative Profiles module have been updated. Numerous links have been embedded throughout the narrative which allow the reader to directly access the original source web site (where applicable) to view longer time series, get more extensive source explanations, etc. The Health Statistics component of CNP has been beefed up considerably.

The proposed OCCUVAL module has been written but it is in testing mode and not currently available on the SOCRATES web site. We are testing these data against the new occupational location quotients to assess their correlation. We updated all Industrial Evaluation Model variables including:

- *TWC Openings January 2004 to present
- *Local New Hires by Industry 2003-2004
- *Industry Coefficients of Specialization, 2004, 1st quarter
- *Local Exiters from Workforce Training Obtaining Work 2002-03
- *Regional Occupational Wages estimates 2004, 3rd quarter

Although SOCRATES is not primarily designed as an end-user system for the general population, use statistics for SOCRATES are still impressive. Between September 2004 and September 2005 there were 24,093 user sessions, 70,646 page views and 15,016 unique visitors. This averages 65.8 sessions and 193 page views per day and 41.2 unique daily visitors.

4b. Complete Texas Industry Profiles, including updates to all modules. Upgrades will include adapting system modules to address the Governors cluster initiative

▶ A description of the core product, service or other demand activity- The Texas Industry Profiles system consists of eight major modules and thirty functionalities, each with unique data sets and features. It is being designed to support Texas economic development activities by assisting local planners to analyze their regional economies and demonstrate workforce strengths. Each module provides automated tools of regional analysis and includes multiple reports designed to assist in economic development from a perspective of comparative advantage and growing local business.

Project Status Effective September 1, 2005: If PY2004-05 could be categorized by one initiative would be the creation and distribution of Texas Industry Profiles. This on-line economic development tool kit has been released in piecemeal fashion as each new module or function is completed. Notably introduced during the program year was the Dashboard Indicators program that reports monthly activity by industry on new hires, job openings and applicants, and claimants. A robust GIS tool was also rolled out that allows for spatial mapping of employers associated with the Governors clusters, coupled with various layers including training institutions, TWC network offices, and child care providers. The

Regional Location Quotient module was completed and the Governor's cluster reports and related industry crosswalks were all populated within Texas Industry Profiles. Data updates of the Labor Availability Estimator were completed, including the training provider files with counts of graduates by program, the 2012 projections and updated wage panel.

We began keeping use statistics on Texas Industry Profiles in January 2005. From January through September 2005, TIP had 34,810 user sessions, 114,486 page views and 20,243 unique visitors. This equates to 142 sessions per day, 469 page views per day, 15,482 hits per day and 83 new visitors each day.

4c. Conduct automated follow-up on 2002-2003 workforce program exiters, create final report and display on-line

▶ A description of the core product, service or other demand activity- Automated Student and Adult Learner Follow-up (ASALFS)--Using automated record linkage techniques, LMCI staff follow-up on over 2 million exiting students and workforce program customers to determine their employment and continuing education outcomes. These data are used for federal program compliance reporting but, most importantly, they are the basis for continuous program improvement for local workforce and education service providers. Understanding former participant outcomes gives WIA program planners an opportunity to see how their labor market plan aligned with actual worker post-exit employment outcomes. It also offers teachers and school administrators an opportunity to review curriculum and program offerings based on successful student outcomes.

Project Status Effective September 1, 2005: This was the first year of the revamped administrative model for Automated Follow-up activities. Seed record data were extracted on the PY2003 exit cohorts from the respective education and workforce programs and record linkage, data analysis and reporting functions were split between TWC/LMCI and the THECB. This new model was designed to stay within FERPA data release concerns but still, ostensibly, address the annual reporting requirements of SB271. The TWC portion of this report is complete and is in the Agency review process prior to release. New for the PY2004-05 report are four three-year longitudinal studies. Comparable reports for the education community have not been completed, largely due to staff turnover problems. The THECB is aware of the issue and is working to process the data and prepare the necessary reports. When completed, these reports will be placed on-line through the LMCI web page along side the workforce program reports.

4d. Participate and provide integrated reports on Texas workforce dynamics through the ExCensus/LED initiative and the BLS Business Employment Dynamics programs

▶ A description of the core product, service or other demand activity—
The nation's LMI system is at a crossroads of providing several new types of data that are superior in describing the dynamics of the state and regional economies. Texas will remain on the forefront of these new programs. There are four major components on which Texas will

focus. LMCI staff will continue to use the Quarterly Census of Employment and Wages to assess employment changes across all industries in the Texas economy. The new Business Employment Dynamics (BED) system will allow us to explore dynamics among firms within an industry, such as differences in employment patterns between contracting and expanding employer groups. Moreover, in our coordination with North Carolina, we will investigate our ability to identify successor-predecessor employers for purposes of examining new business formation and firm birth and deaths in Texas. The Census LED program will allow us to explore employment fluctuations and new hire activity within firms by cross-referencing employment change by age, gender and related variables. Texas will pay to participate in the ExCensus LED mapping project as additional pilot state. This project provides an exceptional means to spatially identify Texas and substate commute sheds and labor sheds based on LED origin and destination data.

Lastly, the new workintexas.com system is generating micro transactions data on job postings, job openings and applicants. These data, aggregated by region and industry sector within the Dashboard Indicators module of Texas Industry Profiles, will allow us to view the volume of transactions within detailed industries. Collectively, these data sets will help state and regional Board staff gain a superior understanding of labor market hiring patterns and allow them to better target employer outreach and job training activities.

Project Status Effective September 1, 2005: This has been another major area of emphasis for LMCI during the PY. This project activity encompasses our attempts to reach beyond traditional BLS defined employment data sets to better describe the dynamics of the Texas labor market. We have actively worked with BLS to promote their proposed Business Employment Dynamics (BED) program, including explaining how these data are potentially valuable in the WIA program planning process. LMCI staff use several of the BED concept charts in public presentations as a means to discuss the degree of churn in the labor market.

We continue as active participants in the Census LED program, routinely preparing and sending the necessary data sets to the Census Bureau. LMCI staff have prepared a users guide for Texas LED data but the release of that guide has been delayed pending the inclusion of a new section on the LED GIS Mapping program. LMCI contracted with Census to be one of thirteen pilot states in the LED Mapping project. The first public release for the LED Mapping software will occur late in November 2005, but already the Beta version has demonstrated some invaluable tools to assess the spatial dispersion of where people live and work. Maps from the Beta version were uniquely useful in assessing the impacts of Hurricane Rita in Texas, demonstrating where persons whose job sites were affected by the hurricane actually lived.

Finally, staff continue to receive new data sets from the workintexas.com staff as we explore the connections between the labor market as a whole and the degree to which the Texas Workforce Network touches individual stakeholders in the labor market. In addition to the routine monthly data transmissions on job postings and applicants by industry which are listed in the Dashboard Indicators Module of Texas Industry Profiles, LMCI staff are now receiving data on job posting, opening and applicant transactions by occupation (O*NET code). While these data still must be analyzed to determine the

differences between transactions and unique applicant and posting activity, when this is done we will begin to migrate those data to the Dashboard Indicators Module. In addition, in November 2005 we should start receiving placement data by industry; the result of a collaborative effort between LMCI, workintexas.com and TWIST staff. Once these data have been validated, they too will be migrated into the Dashboard Indicators.

4e. Continue our investment in GIS related activities including thematic mapping of various workforce data elements, development of an on-line GIS child care provider system, additional geocoding of various workforce data elements and full-scale roll-out of on-line GIS engine associated with Texas Industry Profiles

▶ A description of the core product, service or other demand activity-LMCI has tentatively explored GIS data delivery over the past two years. Most of these efforts have led to various forms of thematic mapping using desktop GIS tools. For PY2004-05 LMCI will continue to serve as the primary producer of GIS based thematic maps within the TWC, displaying various employment and unemployment data elements in addition to a wide array of data items submitted by various customers within the Texas Workforce Commission.

In addition to the desktop mapping services, LMCI will engage significant efforts to bring up online GIS capabilities. The online MapInfo GIS software engine was procured using funds from another grant to develop the Texas Industry Profiles system. The first turnkey GIS application will be in the area of childcare facilities; with complete GIS display options of user-selected sorts of various types of child care facilities and characteristics. Subsequent applications will include the thematic display of the InfoUSA employer contacts database, the mapping of the Governors industry clusters, and an application that displays all Texas training institutions, including all public, proprietary and career colleges. In the case of training providers, sort options will identify those that are listed as eligible training providers for purposes of WIA training.

Lastly, LMCI staff will provide technical support for the new *SitesOnTexas.com* site selection tool procured through the TWC Employer Initiatives department. This online GIS tool, which offers largely demographic data, will assist Boards and regional economic development staff in developing a strong understanding of their area's demographic composition and comparative advantages relative to other regions in Texas and across the country.

Project Status Effective September 1, 2005: As mentioned previously, the GIS Clusters module in Texas Industry Profiles represents a landmark accomplishment and notable addition to our ability to display statistical data. The GIS clusters module became fully operational in August 2005. It accomplishes all planned functions, including the ability to map employers from the InfoUSA database by cluster and sector, create radius reports, export the maps and add various map layers—including child care providers, education and training institutions, Texas Network offices and the path of Hurricane Rita.

The LMCI Deputy Director served as joint project officer for the Sites On Texas GIS tool. This popular program has been very useful in determining small area demographics and providing comparisons of various demographic variables across multiple geographies.

In addition, LMCI staff continued to produce thematic maps, upon request, for many internal TWC customers. The procurement of a large plotter has enhanced our ability to produce boardroom-sized maps. This capability was also useful in assessing the impacts of the recent hurricane.

4f. Produce LWDA regional profiles for inclusion in TRACER

▶ A description of the core product, service or other demand activity-Each month LMCI staff produce economic profiles for each Texas workforce area. Profiles cover monthly changes in employment, labor force and unemployment, as well as UI claims activity, and selected employer and occupational wage data. These regional profiles are uploaded monthly into TRACER2.

Project Status Effective September 1, 2005: Profiles have been completed on a monthly basis through September 2005 for Workforce Development Board regions and Metropolitan Areas.

4g. Produce Industry Profile Snapshots for inclusion in Texas Industry Profiles TRACER

▶ A description of the core product, service or other demand activity-Each quarter, corresponding with the release of the QCEW industry employment release, LMCI staff produce industry specific profiles for each three digit NAICS industry. Snapshots cover changes in employment, average weekly wages and number of firms, as well as size class by industry and the names of the largest employers. These industry profile snapshots will be uploaded quarterly into Texas Industry Profiles.com.

Project Status Effective September 1, 2005: Industry Profiles have been prepared quarterly for over 70 detailed industries and can be accessed through both TRACER2 and Texas Industry Profiles. Where once these Industry Profiles required several weeks of intensive staff work, today the reports are generated electronically through a series of automated processes in which the primary staff role is quality control.

4h. Pursue collaborative arrangements to conduct a Texas statewide benefits survey

▶ A description of the core product, service or other demand activity- LMCI staff will continue to investigate cost effective approaches to collect health care and related benefits data for a wide range of occupations and regions within the state of Texas. Options to be considered include (1) subcontract arrangements with a university or other survey business to conduct independent data collection or, (2) collaboration with an existing entity already engaged in benefits data collection. Entities such as the Texas Association of Business will be contacted for discussion.

Project Status Effective September 1, 2005: On-going conversations have been held with Nebraska, as the lead state in the OES based benefits survey consortium, regarding the feasibility of Texas's adoption of their benefits survey methodology. To date, no substantive project proposals or data collection efforts have been completed.

4i. Produce the Texas Labor Market Review monthly newsletter as the primary hardcopy delivery vehicle for basic state and regional labor market data

▶ A description of the core product, service or other demand activity-LMCI staff will continue to produce a monthly hardcopy newsletter. The Texas Labor Market Review (TLMR) is the monthly LMI newsletter that has become synonymous with release of the most current aggregate area employment, unemployment, labor force and industry employment statistics. Despite the fact that most of the same LMI is now released in electronic medium, there remain expectations by a large audience that a hardcopy newsletter will be sent monthly to the 7,000 plus recipients on our current mailing list.

Project Status Effective September 1, 2005: The Texas Labor Market Review (TLMR) has been produced monthly on time and without fail each month of the contract period. Timeliness has been increased and printing costs have been reduced now that the publication is both printed and mailed using a contract print services vendor.

4j. Produce the

▶ A description of the core product, service or other demand activity-LMCI staff will produce a quarterly hardcopy monograph which highlights statewide and county employment by industry, employer counts and taxable wages paid based on the Quarterly Census of Employment and Wages.

Project Status Effective September 1, 2005: The Texas Quarterly Census of Employment and Wages (QCEW) hardcopy publication has been produced quarterly on time and without fail each quarter of the contract period. Printing costs have been reduced now that the publication is printed using a contract print services vendor.

4k. Produce special research reports on applied labor market topics

A description of the core product, service or other demand activity-The new LMCI department created an Applied Research unit whose mission is to identify current workforce issues and labor market phenomena and provide value-added analysis, information and discussion to aid workforce professionals and policy-makers in effecting appropriate policy response. One such research monograph for PY2004-05 will be on the topic of helping employers pursue strategies of becoming *Employers of Choice* to aid in worker recruitment and retention. Another monograph will be a primer on industry clusters and strategies for identifying and operationalizing cluster activity relative to regional economic development. Staff will reinvigorate the *Beyond the Numbers* series format as a vehicle for research publication.

Project Status Effective September 1, 2005: In September 2004, LMCI published a Beyond the Numbers research article entitled, "Employers of Choice: Strategies for Worker Recruitment and Retention". The article discussed the potential for an emerging work force shortage and offered suggestions for employers to improve their worker retention and recruitment strategies by creating a workplace environment conducive to productivity. A second, three-part, monograph deals with economic development strategies and industry

clusters. The initial draft, tentatively titled, Getting Down to Business: Using the Clusters Concept in Strategic Planning at the Regional Level is complete and it is being reviewed and edited by multiple colleagues.

The majority of the research writings for PY2004-05 were in the Use Scenarios associated with the various modules of Texas Industry Profiles. Notably, each of the major variables in the Dashboard Indicators tool has been documented with sample scenarios, data strengths and limitations, and workforce development applications for LWDA staff and employers alike. Similarly, three technical assistance guides were written that address the use of economic base, and particularly location quotient analysis in economic development. These technical assistance papers are: 1) What To Do with All This Data? The Role of Economic Base Analysis in Regional Economic Development, 2) Pursuing an Industry Cluster Approach to Economic Development: What That Means, Why it Matters and How it Impacts Workforce Development Policy, and 3) The Basics of Regional Location Quotients. All three of these guides are downloadable from the Regional Location Quotient module in TIP.

Lastly, LMCI staff have made significant contributions to various technical assistance guides and Workforce Development (WD) Letters regarding the industry and occupational targeting process and the use of labor market information. Most recently LMCI staff served as major contributors to a labor market concept glossary and a targeting concept paper, both of which will be distributed by the TWC Workforce Division.

4l. Secure and analyze non-traditional data sets to augment existing information resources

▶ A description of the core product, service or other demand activity-A major criticism of the old model of LMI shops is that they tend to be internally focused, relying on those data items produced in-house, largely through BLS Fed-State Cooperative program. While these core data items are critical there are gaps that must be addressed if the state LMI system is to be responsive to the needs of employers and economic development professionals.

LMCI will continue to venture down the path of integrating non-traditional data sets with those available through the ALMIS database and Fed-State Cooperative programs. We will again partner with the Texas Department of Public Safety to acquire drivers' license data to explore worker age and place of residence in connection with new hire activity.

We will also acquire total requirements and employment multipliers for all 4 digit NAICS industries in Texas from the Bureau of Economic Analysis to assist communities in their assessment of potential payroll and employment impacts of business expansion or relocation.

We will purchase sales volume data for Texas counties and detailed industries from Global Insights to assist in the identification of regional industry clusters based on sales activity and not just employment. We will also purchase data from Global Insights on the upstream and downstream supplier networks for Texas clusters. These data demonstrate to whom core cluster industries sell and from whom they tend to purchase intermediate products. By better understanding industry supply chains Texas economic developers can engage in more focused

recruitment efforts and develop strategies for targeted indigenous expansion.

Lastly, LMCI will explore the acquisition of an IMPLAN input-output model customized for the state of Texas. Prior versions of the proprietary IMPLAN model were SIC-based and thus did not match the increasing collection of NAICS based data sets. However, the IMPLAN vendor is promoting a new version of the model which is NAICS based and potentially very valuable in assisting LMCI answer questions regarding impacts of firm recruitment, retention and worker dislocation.

Project Status Effective September 1, 2005: As mentioned in a prior section, LMCI has been eager to expand our data horizons. Not surprising, some of these ventures have been more successful than others. The previously negotiated data sharing agreement with the Texas Department of Public Safety was terminated due to a legislatively mandated change in their data sharing policy. The limitations that now accompany such data sharing with the TDPS generally preclude any immediate initiative. Staff also explored the procurement of an IMPLAN model for Texas. While we remain committed to acquiring this potentially valuable tool for PY2005-06, we did not do so in PY2004-05.

LMCI did acquire industry multiplier data from the Bureau of Economic Analysis. In fact, we were able to secure three different types of multipliers; one for revenue or sales data, an employment multiplier and a personal income multiplier; all customized for Texas. These data have been used to address customer questions that regard economic impact; notably associated with the federal military base closing experience.

We also purchased from Global Insights 2003 sales volume data for Texas counties and detailed industries. The sales data have provided a very interesting perspective on potential regional growth industries, especially based on the notion that economic development should be based on product output, with job creation occurring through derived demand for the product. We will purchase these same data for 2004 to begin to develop time series to document this phenomenon.

5) Maintain and enhance electronic state workforce information delivery systems

5a. Update and maintain the WIN interactive wage display system and maintain the texaswages.com web presence

▶ A description of the core product, service or other demand activity-The Wage Information Network (WIN) software acquired from North Carolina has proven to be an exceptional vehicle for interactively disseminating OES occupational wage data. Staff will bring the hosting of this system in-house from the current third party subcontractor and continue to update with each new panel of OES wage data. In addition, staff will revisit the current computer programming of the system and seek to make both display and processing functions more efficient and transparent.

Project Status Effective September 1, 2005: The WIN software was brought in-house and revised to improve the logic and add more intuitive search features. The software is now hosted on LMCI servers and can be found under the URL www.texaswages.com, with links

from TRACER2 and Texas Industry Profiles. OES wage data has been kept current, with the second panel of 2004 now in the system and the first panel of 2005 scheduled to be uploaded in late November 2005.

This occupational wage data inquiry tool has proven to be one of our most popular products. Between September 2004 and September 2005 there were 24,454 user sessions, 28,949 page views and 17,532 unique visitors. This averages 66.8 sessions and 79.1 page views per day and 64 unique daily visitors.

5b. Develop software application that allows for side-by-side examination and inquiry of occupational wage data by Texas LWDA

▶ A description of the core product, service or other demand activity-The WIN system allows for pure interactivity for finding occupational wage data. However, within the Texas Workforce Network it is often useful to see how the wages paid for a given occupational compares with wages paid in another region. It is useful to know which region pays the highest or lowest wage for persons in a given occupation. This side-by-side comparison functionality can be automated and put online. LMCI staff will create an online application that allows users to conduct comparison analysis across LWDA regions and within the SOC occupational hierarchy.

Project Status Effective September 1, 2005: The side-by-side occupational wage data display tool is complete but it has not yet been introduced to the public. The staff member who worked on this project resigned his position just after completing the beta version and we have not yet finished the testing needed. We will update the wage data and complete testing by the end of the 2005 calendar year.

5c. Create a single LMCI web portal that will allow users to find all our various software applications in a single location

▶ A description of the core product, service or other demand activity-The merger of LMI and CDR created both synergies and confusions. Customers accustomed to working with one group or the other are slowly understanding that we are now one operation. Both former departments had web-based applications which had been developed for specific purposes. They also had various web hosting arrangements. This project will support the creation of a single web portal from which to access all LMCI software applications. In addition, LMCI programmers will create multiple ways to navigate among the applications including, but not limited to, scenario based tutorials, Frequently Asked Questions (FAQ), and text-based search engines. Finally, a postcard or bookmark or other marketing tool will be designed, printed and widely disseminated to promote the new site.

Project Status Effective September 1, 2005: The new LMCI web portal is complete and was launched to the public at the end of October 2005. Presently the site can be found by entering the old CDR web address, but staff is in the process of acquiring a new URL that reflects the organizational unity of the new portal (www.lmci.state.tx.us). The portal provides direct access to all LMCI online software products and contact information for all LMCI staff functions. As importantly, we have created a GoogleTM-like inquiry section in

which users can enter keywords relating to LMI topics and be presented with a variety of tools and data sets that correspond to the inquiry, regardless of which LMCI product offers that information. An introductory keyword dictionary was implemented for roll-out that is being updated regularly.

6) Support state workforce information training activities

6a. Provide multiple training options including support for LMCI software products, BSU/LMI training, career orientation curriculum, LMI 101, and the state of job creation in the Texas economy, and staff display booths at various conference events

▶ A description of the core product, service or other demand activity- One of the strengths of the LMCI department has been our product innovation and ability to provide a wide range of hardcopy and electronic information products. Unfortunately, in a state the size of Texas, it is difficult to ensure that potential customers are aware of these products and how to use them within the appropriate context. Thus, in PY2004-05 we will revisit our outreach effort in terms of the type of training we provide, the customers to whom we offer training, our training and workshop materials, and in-house staff training so that outreach personnel are well-equipped to work with external customers.

LMCI staff plan to conduct roughly 100 workshops and presentations during PY2004-05. Despite what seems like an already significant outreach effort, LMCI staff will pay additional attention to marketing the availability of our products and providing training to a variety of customer groups on how to use them effectively. New and more effective methods will be developed for providing staff training and information updates, including online tutorials and the crafting of "user scenarios" for every module in our automated products. We will continue to take advantage of the many customer conferences and events as vehicles to reach out to those respective audiences. For every invitation to provide a display booth we will inquire as to opportunities to be on the formal agenda as well. We will focus on as much "hands on" training as possible, especially where the training venue can be a computer lab, to maximize customer exposure to our stable of automated products.

Project Status Effective September 1, 2005: LMCI staff conducted a total of 71 workshops and presentations during the program year. Staff turnover and personnel reassignment necessary to complete the 2012 projections limited the number of LMI 101 training sessions offered. We conducted 27 Career Orientation training workshops and provided career exploration materials to over 700 career investigation teachers.

As mentioned previously, the user scenarios for all modules in Texas Industry Profiles were completed.

6b. Participate in WIA plan review process by reviewing the Board labor market plans

▶ A description of the core product, service or other demand activity-Local workforce boards are required to submit annual plans or, at a minimum, annual plan amendments, which must include an updated labor market analysis. LMCI staff will participate in the process of setting labor

market plan guidelines and will serve as subject matter experts (SME) in the review of Board plans to ensure compliance with the guidelines and reasonableness of labor market plan submissions.

Project Status Effective September 1, 2005: The TWC Workforce Division embarked on a new strategy for PY2004-05 in the area of identifying demand industries and occupations. With a stronger emphasis on the identification of transferable skills and regional clusters, the local boards were offered an increased level of flexibility relative to how they described their regional labor market. For the first time in several years the Boards were not required to use the SOCRATES Targeting Module for their final narrative reports. LMCI staff were consistently engaged by Workforce staff throughout the conceptualization of this new process and asked to provide technical guidance in both targeting and the use of LMI. In the end, the free form nature of the LMI plan submissions precluded LMCI staff from participating in the final plan review process.

6c. Provide live consultive services to answer data questions from workforce board and One Stop staff as well as TWC officials and the general public

▶ A description of the core product, service or other demand activity-LMCI staff will provide on-going technical assistance to address the myriad and varied questions received form internal and external customers. This technical assistance will take many forms, including answering telephone data requests, addressing e-mail and related electronic communiqués, and developing data sets, reports, charts, and thematic maps as requested by the private sector, TWC management, local Board staff, individuals and other workforce system stakeholders.

Project Status Effective September 1, 2005: Despite the many online tools providing direct access to LMI, the most significant function our LMCI ETA staff serve is answering questions and providing customized data to internal and external customers. For PY2004-05 LMCI staff answered and filled 3,038 inquiries from outside customers. In addition to LMI questions, staff operating our toll-free career information hotline filled 13,237 inquiries for career and college information.

6d. Produce on-line tutorials of *Texas Job Hunters Guide*, *Succeed At Work* and *Your Next Job* as part of a WIA Reemployment Grant initiative

▶ A description of the core product, service or other demand activity- Using funds from another DOL grant, LMCI will create three online tutorials based on existing LMCI publications. The project will be largely a subcontract arrangement that will involve simplifying the language of three LMCI publications (*Texas Job Hunters Guide, Succeed At Work and Your Next Job*) and also translating them into the Spanish language. The simplified publications will then be automated within a learning management system (LMS) environment to allow users to read and learn online.

Project Status Effective September 1, 2005: This project is underway. An RFP process was undertaken and a contractor, XDesign Group, has been selected. A timeline with milestones has been finalized and work is progressing. The project includes three major

deliverables; 1) distill the most significant content from the three publications and recompose the monographs at a lower reading level, 2) translate all monographs into Spanish, and 3) migrate all monographs into an interactive learning management system environment. All deliverables are scheduled to be completed by June 30, 2006.

6e. In-service training for LMCI staff in areas related to computer system languages, Internet protocols and applications

A description of the core product, service or other demand activity-In this world where knowledge is expanding exponentially it is important to provide training for our own LMCI staff. This is particularly true in the technical areas where staff need to maintain current knowledge in new computer languages, online tools and available third-party utilities to improve the quality of IT applications. This is also true as well of emerging trends in the global economy and the business workplace where staff need to maintain current knowledge if they are to serve as SMEs in a technical assistance role. LMCI management will endeavor to maintain a knowledgeable and technically competent staff through capacity building efforts such as formal education and training opportunities.

Project Status Effective September 1, 2005: Several LMCI staff have attended workshops and seminars to upgrade their knowledge base. A staff member attended the San Diego ALMIS training conference, another staff member attended a MapInfo GIS programming conference, three staff have attended .NET programming classes, and two staff attended the Visual Studio for .NET new release conference. Each of these events has resulted in increased staff knowledge that has manifested itself in improved LMCI automated tools.