As required in Training and Employment Guidance Letter No. 1-04 the following is a summary of Washington State’s accomplishments in PY 2004. It concisely summarizes accomplishments, the results of assessments of customer satisfaction with state’s workforce information products and services, and recommendations for improvement to workforce information and services.

A. Accomplishments:

1. Continue to populate the ALMIS Database with state data:

The outcomes achieved compared to planned outcomes and an analysis that explains the cause of any significant variance from the plan. Describe any actions required to improve outcomes.

Throughout the year, Washington State’s labor market and Economic Analysis Branch (LMEA) continued to populate and maintain all ALMIS database tables designated as core tables in accordance with guidelines issued by the ALMIS Database Consortium. In addition to the designated core tables, Washington also updated the occupational licensing information, including the LICENSE and LICAUTH tables.

Of the data updates, several required monthly updates and increasing number of geographies. The highlights included:

- Monthly updates of current industry estimates at county level
- Monthly updates to current labor force and unemployment rates by county
- Semi-annual updates of occupational wages for workforce areas
- Semi-annual updates of short and long-term occupational employment estimates for workforce areas
- Semi-annual updates of short and long term industry employment estimates for counties
- Semi-annual update of Employer Database
- Quarterly Updates of Census of Employment and Wage for counties
- Update of training programs, providers, and completers

Several other systematic and operational issues were also addressed. Specifically, these included:
• Parallel testing and transitioning to ALMIS 2.3 structure
• Integration of new NAICS based codes in various tables
• Definition of new geographies in several tables
• Transition to new development server environment

Access to the database was available through the Workforce Explorer, our main delivery system to our users. The backup procedures and hosting safeguards implemented allowed virtually uninterrupted access to this data throughout the year. The application recorded over 714,000 visitors throughout the year.

*The extent to which the activity has conformed to the planned milestones, including an explanation for the cause of any significant variance from schedule.*

All milestones were completed as expected. An additional milestone of working with other states on a pilot environment to promote access to other states data was also started. The pilot, ADAM (ALMIS Distributed access method) is to design web services to promote sharing of data to other local and state partners. Work will continue over the next few months on this new database function.

*Actual aggregate expenditures and an explanation for any significant variance from planned aggregate expenditures:*

*Planned expenditures: $141,961
Actual expenditures: $ 59,100*

Actual expenditures were below planned expenditures as the Branch was able to use other State resources for this work. Resources not spent in PY 2004 will be used in PY 2005 to support the continued development of the Workforce Explorer and the Branches ability to add more LED data and administrative records.

2. **Produce and disseminate industry and occupational employment projections:**

*The outcomes achieved compared to planned outcomes and an analysis that explains the cause of any significant variance from the plan. Describe any actions required to improve outcomes.*

In May 2005 LMEA produced and distributed industry and occupational employment projections for Washington State and 12 local Workforce Development Areas (WDA). A NAICS based historical industry employment time series from January 1990 to June 2004 was utilized for this project. This is one month ahead of scheduled date of delivery (in June). NAICS based staffing patterns were constructed using information from the Occupational Employment Statistics (OES) survey.

The standard software tools sponsored by the Projections Workgroup and Projections Managing Partnership have not been very useful to our state and have produced neither reliable industry projections nor occupational projections that satisfied our customer needs. A particular problem with these tools is that they are based on a “black box” approach that does not allow the level of flexibility we need to best serve our customers. Washington State uses the same methodology proposed by the Projections Workgroup and Managing
Partnership, but implements the methodology internally using E-Views software and the model developed by Global Insights Company, rather than consortium software tools.

Long-term projections for the 2002 to 2012 period and the short-term projections for the 2004Q2 to 2006Q2 period were produced for the state and all twelve sub-state (WDA) areas as required by ETA. In addition LMEA produced the five-year industry and occupation projections mandated by Washington State legislation. In the preparation of the occupational projections LMEA incorporated estimates of self-employment and used replacement rates from the Managing Partnership’s Micro Matrix software.

The LMEA branch populated the ALMIS database with both short term (2004Q2-2006Q2) and long term (2002-2012) industry and occupational projections and submitted the data for public dissemination following the procedures established by the Projections Workgroup and the Projections Managing Partnership. The short-term occupational projections, along with other variables, were used to produce the official occupational “demand” and “decline” list for training benefit purposes. They will also be published in the state’s annual report and the county profiles.

In our enhancements we used customer feedback which advised us to consider more factors for some key industry projections, rather than relying strictly on historical trend. We also used a step down approach to desegregation of major industry employment projections.

The extent to which the activity has conformed to the planned milestones, including an explanation for the cause of any significant variance from schedule.

All activities conformed to planned milestones. As indicated in our plan, work on the projections continued throughout the program year. Both the short-term and long-term projections were completed in the 4th quarter of PY 2004 and the results became available to the public, in electronic form, starting with May 2005.

Actual aggregate expenditures and an explanation for any significant variance from planned aggregate expenditures:

Planned expenditures: $109,277  
Actual expenditures: $ 87,420

Actual expenditures were below planned expenditures primarily because of staff turnover and lower pay for a new incumbent. In addition, other fund sources were used to support this activity. Resources not spent in PY 2004 will be used in PY 2005 for travel, training and pay increases for the new employee in the projections unit.

3. Provide occupational and career information for public use:

The outcomes achieved compared to planned outcomes and an analysis that explains the cause of any significant variance from the plan. Describe any actions required to improve outcomes.
PY-04 funding was used to produce and disseminate occupational and career information products, incorporating related information such as occupational projections, wages, benefits, and demand/decline occupations by Workforce Development Areas.

The occupational information came from the Occupational Employment Statistics (OES) data and the ETA funded industry and occupational projections programs, benefits surveys, and Job Vacancy Surveys (JVS). LMEA maintains links to the ETA-funded Occupational Information Network (O*Net) system as a primary source for information on occupational requirements including typical tasks, knowledge, skills, abilities, work activities and work context. The benefits survey and JVS were funded by other than ETA One-stop/LMI resources. Nearly all products were SOC-based and demand driven in consultation with intended customers (Annual Benefits Survey is strictly by industry classification).

This core product benefits from a high degree of financial leverage in Washington State. Fund sources that support similar products include:
1. The state UI re-employment services (CPP) program supports the provision of local labor market information for job-seekers;
2. State law (RCW 50.38) provides for specific labor market information products that enhance those associated with this grant. These state-mandated products are funded through the Unemployment Compensation penalties and interest fund, and allocated by the state legislature.
3. Other grants and contracts that help support these and similar activities include the ACRN grant from the state Workforce Training and Education Coordinating Board (WTECB). The WIA dislocated workers program supports the Washington State Job Vacancy and Benefits surveys, and the US Census Bureau, through the Local Employment Household Dynamics (LEHD) program also supports the products and customers targeted by this core product.

Occupational and career information products, which were supported in part through grant funds, and in part through other state and local fund sources, include, but are not limited to:

1. A marketing brochure linking occupational demand and wage information to required training levels. The brochure also provided information on how to link to the Workforce Explorer for more career planning tools. (Produced in December and June of each year.)
2. Occupational Outlooks for the state and each of the 12 WDAs which produced high demand occupations by training level. This product includes wage information. Delivered in summer 2005.
3. Published Job Vacancy Survey results for the late fall and late spring surveys. Spring survey results were published in June 2005. Fall survey results are scheduled to be published in Nov./Dec. 2005.
4. Published employee benefit survey on benefits offered to employees by industry, area, and firm size, (Scheduled to be published Nov. 2005).
5. A monthly targeted occupations report on the Workforce Explorer.
6. An annual report on the occupational outlook for the state and each of the 12 Workforce Development Areas, (for the state in spring, for areas beginning in December of 2004 and working through third calendar quarter of 2005).
7. Current unemployment insurance claimant information by county, occupation, and industry, (produced weekly and monthly)
To enhance our ability to work with the large databases that are necessary for preparing area level industry and occupation projections as well as develop occupational analysis products, one-stop funding (less than $5,000) was used to upgrade a number of software programs. LMEA also purchased a subscription to Global Insights Inc. for national inputs to the projections process.

The extent to which the activity has conformed to the planned milestones, including an explanation for the cause of any significant variance from schedule.

All planned milestones were completed successfully. Additional products, such as the Spanish language “Entry Points” publications are in the process of being developed in response to local needs. Good progress was also made in integrating the various job analysis and job search tools in the Workforce Explorer as indicated above.

Actual aggregate expenditures and an explanation for any significant variance from planned aggregate expenditures:

Planned expenditures: $57,313
Actual expenditures: $14,300

Actual expenditures were below planned expenditures as some of this work was supported by other state resources. Additional expenditures will be incurred as products, such as the “Entry Points” publication, are completed, printed and distributed.

4. Ensure that workforce information and support required by state and local Workforce Investment Boards are provided:

The outcomes achieved compared to planned outcomes and an analysis that explains the cause of any significant variance from the plan. Describe any actions required to improve outcomes.

The web based Workforce Explorer LMI delivery system, in combination with the out-stationed and central office economists, provided local area support to Washington State’s Workforce Development Councils (WDC) and other data users. Area economists gave periodic economic briefings to the WDC members in order to keep them current on changes in local labor market conditions. As requested by the local WDCs, these economists worked with local planners and program administrators to identify their needs and to provide the necessary information. Their main responsibility was to know the local labor market and to be able to speak, write, and answer questions about it.

Since each area has its own distinct way of achieving its employment and workforce development goals, LMEA did not have a blanket strategy for meeting local LMI needs. What it did was to provide the out-stationed economists with general guidelines in their job descriptions for serving local needs. During the past year, each Regional Labor Economist performed this task in response to WDC requests and the needs that each of them was able to identify. This included preparing special local reports, assisting individuals with information on the Workforce Explorer, giving presentations, writing county profiles,
interpreting the employment situation, and providing technical assistance to other researchers.

One of the cooperative efforts of LMEA and the WDCs during this reporting period was the updating and maintenance of the occupational “Demand and Decline” list. LMEA created that list using factors such as the population of the occupation, the expected growth rate and the occupational unemployment rate. Then it was reviewed, adjusted, and approved by the WDCs. As economic conditions changed affecting occupational demand, the LMEA economists and WDC staff worked together to update that list to reflect current occupational demand and supply conditions. The WDC staff is responsible for changes to that list but they are generally reluctant to do so without substantiating data from the regional economists. The “Demand and Decline” list of occupations is used in all WorkSource Service Centers to administer the state’s Training Benefits Program and it is maintained on an LMEA server.

LMEA produced two other customer driven products during this reporting period. One was the “Job Vacancy Survey,” published in June 2005. The survey produced information, which combined with the short-term occupational projections, and provided the WDCs with more insight into the occupational employment situation than they have had before. The other product was the “Benefits Survey” report. Completed at the end of 2004 and published in March 2005, it provided useful information both to employers as well as job seekers. An additional demand-driven product has been the Spanish language version of our occupational outlook information for distribution in central Washington where there is a large Spanish population with Limited English Proficiency (LEP).

The extent to which the activity has conformed to the planned milestones, including an explanation for the cause of any significant variance from schedule.

All planned milestones were completed to some extent. However, the service provided in each Workforce Development Area was not consistent and depended in part on the marketing skills and efforts of the local economists. LMEA has made significant progress in building closer working relationships with the state Workforce Investment Board and the Workforce Development Councils. LMEA has been making an increasing number of presentations to WDC staff and local affiliates and on June 10, 2005 put on its first, and very successful, televised Economic Symposium in Spokane.

Actual aggregate expenditures and an explanation for any significant variance from planned aggregate expenditures:

Planned expenditures: $137,968
Actual expenditures: $ 56,500

Actual expenditures were below plan primarily because PY 2003 funds were available for some of this work. Resources not spent in PY 2004 will be used in PY 2005 to conduct more in-depth research for local planning needs, and for travel and training to upgrade economist skills.

5. Maintain and enhance electronic state workforce information delivery systems:
The outcomes achieved compared to planned outcomes and an analysis that explains the cause of any significant variance from the plan. Describe any actions required to improve outcomes.

Washington State continued to improve its premier Internet site, the Workforce Explorer, with added functionality and usability throughout the year. Three major upgrades to the website were released throughout the year. The major improvements include:

- comprehensive reorganization of the site
- implementation of an article rating system
- enhanced occupational search tool that utilizes the O*NET alternative titles data tables.

The reorganization of the site was based on a comprehensive collection of customer feedback on a needs based approach. We met with each of our core customer groups, including, jobseekers, students, businesses, researchers, and workforce system representatives, to help identify and validate what needs they have, and how they are worded and grouped logically together. We provided several mockups throughout the process, and met individually and in groups with users to watch them work through specified scenarios.

The reorganization also helped us to:

- Become more aware of customer needs
- Transition website architecture to a needs based organization
- Provide targeted linkages to tools and resources that best meet specific user needs
- Establish connections with various users and stakeholders
- Learn the importance of user testing
- Identify and provide better access to key information across customer groups

The reorganization of the website helped identify and improve access to key information needs identified by customers. It did not, however, address the issue of how well the information met their needs once they found it. To get a better handle on this, we have implemented an article rating system. Here, users can rate an article on how well it met their needs. The “user statistics” feature also categorizes articles as most viewed, most emailed, highest rated,…consistent with internet delivery standards. This feature has been in place for about 6 months, and we are now just beginning to analyze the information.

The extent to which the activity has conformed to the planned milestones, including an explanation for the cause of any significant variance from schedule.

All milestones were accomplished. Three feedback collection mechanisms were implemented (comprehensive user survey, article rating, identify agency liaisons to assist in needs identification) were utilized throughout the year. There were over 714,000 visits logged into the site over the year. Enhancements are now being driven, prioritized, and validated by customer input and testing along the way.

Actual aggregate expenditures and an explanation for any significant variance from planned aggregate expenditures
Expenditures up to June 30, 2005 were below plan. However, in our PY 2004 plan we expected to spend most of these funds during the July through September 2005 period.

**6. Support state workforce information training activities:**

The outcomes achieved compared to planned outcomes and an analysis that explains the cause of any significant variance from the plan. Describe any actions required to improve outcomes.

Washington State conducted 44 training sessions attended by over 3,050 participants. Attendees ranged from all of our customer groups, including businesses, career planners, researchers, policy makers, and workforce system professionals.

We also conducted two economic symposiums targeted toward state and regional economic issues. Both were well attended by workforce professionals, as well as local and state policy planners.

Two publications developed for teaching how to apply labor market information to students and jobseekers were also updated and distributed. “Entry Points”, which utilizes an education/experience zone made available through the O*NET database was updated and 11,500 were distributed, and additional 1,500 accessed online. The other key training publication, “Jobs for the Sidewalk Economist”, was also updated. It had a distribution of over 10,000 copies and over 2,100 were accessed online through the website.

Training “snippets”, small segments that explain how to use tools and information, have not been completely developed. Software has been purchased, and storylines have been developed for six snippets. It is expected that these training snippets will be available online through our website by December, 2005.

The extent to which the activity has conformed to the planned milestones, including an explanation for the cause of any significant variance from schedule.

All milestones were met, except the “snippet” creation which is approximately three months behind schedule.

**Actual aggregate expenditures and an explanation for any significant variance from planned aggregate expenditures:**

*Planned expenditures: $63,255*

*Actual expenditures: $ 0*

None of the planned funding for this deliverable was expended during PY 2004. Training activities were supported by other funding sources through June 30, 2005. This funding will be used during the July through September 2005 period to complete the “snippets,” conduct training, and distribute training products.
B. Customer Satisfaction Assessment:

Throughout the program year, LMEA collected information on customer satisfaction with LMI data provided electronically, in printed form and personally by individual LMEA staff members. This was done by means of survey forms, electronic responses, and in-person contacts. Survey forms were mainly used at training sessions and to solicit feedback from printed material clients. Evaluation forms to determine the value of the material and the effectiveness of the delivery were used at presentations. Summaries of customer feedback were overwhelmingly positive, almost always ranking between 4 and 5 on a scale where 1 represented “poor” and 5 represented “excellent.” In addition, clients have identified areas where we do need to improve. Throughout the year we also collected individual client feedback expressing appreciation for our products and services.

Customer satisfaction with the Workforce Explorer

The main distribution channel for the industry and occupational employment projections, as well as most of LMEA products, was the Workforce Explorer. It provided a count of “visits” and an opportunity for clients to indicate their level of satisfaction with the information at over 1,150 sites. The results, which are not scientific, change daily. But they indicate what information is being accessed the most.

General satisfaction – WDC survey & satisfaction

In June 2005 LMEA conducted a survey of WDC Directors to assess their satisfaction with branch products, the electronic delivery system, and the service provided by LMEA staff. Not everyone responded. However, those who did were generally quite satisfied with our products and services. In our largest WDA the one additional request was for more time from our regional labor economist assigned to that area. In follow up to that survey, field visits were made to additional local councils by the LMEA director, chief economist, and the area LMI program manager. Favorable reports were received from everyone who was interviewed.

Unsolicited customer feedback

LMEA frequently gets feedback from clients who have received an LMI product or have been given an LMI presentation. Such notes of appreciation are retained in a three-ring binder as an additional indication that what LMEA does has value and is appreciated by the public. The vast majority of the feedback this year has been very positive. However, we have received some comments from clients indicating that they are having difficulty finding the information they know is on our Workforce Explorer. To assist them we operate a “Labor Market Information Center” with a statewide “800” number and we continue to solicit input on how best to present the ever increasing quantity of information. As indicated earlier, in PY 2004 the Workforce Explorer was redesigned based on a comprehensive collection of customer feedback from core customer groups, including, jobseekers, students, businesses, researchers, and workforce system representatives.

Staff observations on the need for training and marketing
During the past year, the LMEA trainer, while giving training, has also been gathering feedback from LMEA field staff, WorkSource Service Centers, contractors, employers, training institutions, and job seekers. Her observations indicate that while LMEA and other providers supply terrific economic data to anyone seeking it, still a relatively few people are aware of its potential. Her impressions are from contacts with professional staff that cut across agency lines, geographic areas, and professional expertise.

- Most employment counselors across the public and private sectors are unaware of the new O*Net job coding taxonomy; once they view it, they quickly grasp its application in preparing resumes, job applications, interviewing and marketing job applicants.
- Most employers are also unaware of the new O*Net job coding taxonomy; once they view it, they can see its application in developing job descriptions, compensation matrices, and interviewing questions.
- Public agencies are struggling to package training programs appropriate for the labor market when employers are creating job titles that are unique to their businesses.
- Telecenter staff and others within Employment Security have not received training in O*Net job coding and continue to use the old Dictionary of Occupational Titles, last updated in 1991.
- All of the traditional labor market information now uses O*Net job coding taxonomy.

Her findings indicated that we have made little progress in training LMI data users in the use of O*Net job coding taxonomy. In PY 2005, LMEA will continue to work to improve training and marketing efforts in this area. However, the solution to this problem will take more than the efforts of just LMEA.

C. Recommendations for Improvement or Changes to the Suite of Core Products.

Washington State’s proposals for improving projections software

1. LMEA has been exploring an interesting idea of introducing economic indicators into Long-term projections software. The idea could possibly be used for testing alternative development strategies. For example, what are the possible strategies for achieving employment growth in our state? However, the ex-post testing supports our previous year’s concern regarding the use of shares and dummy variables to convert the historical SIC time series to NAICS for years prior to 1990. The error introduced (even in a test 5 years back) is very large and would overcome any positive improvement to the model. The nationally recognized “Global Insights” model uses a shorter employment time series, even though they use a much longer historical time series for other variables.

We used the following enhancements for the models with time series back to January 1990:

1. Use quarterly time series instead of annual data (the Global Insights model produces 10 year forecasts based upon quarterly data);
2. Use stability controls and inter-industry relation restrictions for projected numbers.

We had good results from such enhancements and can provide the specific methodology on request.

- As a full three-year cycle of OES surveys became available we created reliable staffing patterns for the state and 12 Workforce Development Areas. We combined statistical analyses of initial sample responses, with staffing patterns created by
BLS. Evaluation of the results demonstrated a very significant advantage of such an approach over just straight use of the staffing pattern from the EDS system. Such an approach enabled us to produce verifiable results for policy analysis, explain our methodology, and be able to satisfy customer requests involving impact analyses. The specifics of our approach to statistical evaluations and the compiling of staffing patterns based on initials samples are also available upon request.

- MicroMatrix calculations of openings due to replacement are based on base-year employment. This did not work for us. It undermined the occupational projections as it resulted in a major part of job opening being based on national ratios and not related to growth trends or other projections results. We still used national ratios as the basis for calculating annual opening due to replacement, but applied them to projected results on compounded bases.

The following hypothetical example is to explain our concern.

Let’s assume that in the 10 year projections we have 2 occupations with the same base year employment of 100, replacement rate 5% and projected employment of 10 for one occupation and 200 for the other. According to calculations in MicroMatrix, the average annual number of openings due to replacement for both occupations will be the same and equal to 5. Such results do not pass the common sense test. If we assume constant growth rate and apply replacement rates on compound annual basis, the average annual number due to replacement for the first occupation will be about 2.2, while in the second instance it would be about 7.