# **Annual Report**

# PY 2006 Workforce Information Core Products and Services Arizona Department of Economic Security Research Administration

# **Section A.** Accomplishments:

# 1. Continue to populate the Workforce Information Database (WID) with the state and local data.

Outcomes achieved relative to plan:

During PY2006, Research Administration (RA) continued to populate core data tables of the WID and continued to maintain the database. Data and related products were provided for public dissemination via Arizona's Workforce Informer. The Labor Market Information (LMI) customers were provided access to a full range of state and local labor market information in a timely and efficient manner. Updates to the WID occurred as scheduled by data type and periodicity of revision.

The Workforce Informer currently utilizes the WID version 2.3. An in-house database has been constructed to conform to WID version 2.4, with plans to migrate the web application to 2.4 when the web site vendor provides the necessary updates. During PY2006, RA populated the WID database with the required licensing files: 1) license.dbf; and 2) licauth.dbf. Arizona submitted licensing data through the National Crosswalk Service Center (NCSC) for inclusion on http://www.CareerInfoNet.org.

Research Administration continued to explore ways to (a) support multiple computer platforms to access a single WID database structure, and (b) link current/expanded business needs to, the WID structure.

Activity conformity to planned milestones:

Research Administration was in general conformity with planned milestones. No earlier planned milestones were compromised in PY2006.

Public Electronic Access to the WID Employer Database

Outcomes achieved relative to plan:

Research Administration was successful in providing the WID Employer Database via Arizona's Workforce Informer website. Updates of software and data were maintained and supported on a regular basis.

Activity conformity to planned milestones:

Research Administration was in general conformity with planned milestones. Research Administration established security agreements with the use of the Information USA CDs. As well, with the Department of Economic Security and other agencies, Research Administration continued to review and support related security agreements and support to ensure proper levels of use and security were provided with all Workforce Information and other data. Research Administration was in general conformity with all other planned milestones.

Expended: \$163,270 Requested: \$154,017 Variance: (\$9,253)

# Explanation of variance:

Diminishing federal funding support to meet the ongoing needs of this particular deliverable continue to present challenges for Research Administration. The WID proves a useful database, but Research Administration has been challenged with maintaining and developing this database to its greater and more efficient potential. The ability to maintain staffing with the multilevel skills and knowledge of efficiently managing and developing this database has become threatened by the recent funding trends.

Timing of upgrades to the WID structure planned for PY2006 will be carried forward into PY2007 based on evaluation of options.

# 2. Produce and Disseminate Industry and Occupational Employment Projections.

# A. Long-term industry employment projections

#### Outcomes achieved relative to plan:

State level North American Industry Classification System (NAICS) based industry forecasts were produced for 2004-2014. Research Administration utilized the Long-Term Industry Projections software developed by the Consortium. Research continued to serve as one of the beta test groups for new and revised versions of forecasting software developed by the Consortium. Research Administration also continued to develop SAS-based models to produce Long Term forecasts. These data products and information were provided to Arizona's Workforce Informer and the WID.

# Activity conformity to planned milestones:

Research Administration exceeded planned milestones and was able to produce and provide LT industry employment projections for 2004-2014. Operations were revised to include the establishment of a recurring production cycle every 6 months to coincide with the Occupational Employment Statistics (OES) production cycle that included updates to data for state and substate regional output. The OES production cycle of including updates every 6 months was later abandoned and is therefore no longer valid as the federal program aims to save money.

Research Administration has at times struggled when software updates occur, an experience shared with other consortium member states. There exists little advance notification and coordination/support to states regarding revisions.

# B. Long-term occupational employment projections

# Outcomes achieved relative to plan:

State level NAICS based occupational projection data were produced for 2004-2014 statewide, Phoenix Metropolitan Statistical Area (MSA) and Tucson MSA, and balance of state (rural region). These data products and information were provided to Arizona's Workforce Informer and WID.

#### Activity conformity to planned milestones:

Research Administration exceeded planned milestones and was able to produce and provide LT occupational employment projections for 2004-2014. Research Administration established a 6 month production cycle to coincide with the Occupation Employment Statistics (OES) production cycle where updates to data (new and revised) are made possible. However, despite the methodological adaptation, the OES production cycle of including updates every 6 months was later abandoned and is therefore no longer valid as the federal program aims to save money.

Research Administration proceeded with updating software as revised versions of Long Term Industry Projections were received. Research Administration continues to express the frustration with updates occurring with little advance notification to states regarding revisions. Software idiosyncrasies and version/patch updates typically cause some disruptions and delays of output and stress limited production resources.

# C. Short-term industry employment projections

# Outcomes achieved relative to plan:

State and substate NAICS based industry level forecast data were produced for 2006-2008. These data products and information were produced every 6 months and provided to Arizona's Workforce Informer and WID. Arizona was successful in producing and distributing sub-state MSA and regional data.

#### Activity conformity to planned milestones:

Research Administration was successful in producing short-term industry employment projections using Short Term Industry Projections software in general conformity with planned milestones.

### D. Short-term occupational employment projections

## Outcomes achieved relative to plan:

State level NAICS based occupational projections data were produced for 2006-2008. These data products and information were provided to Arizona's Workforce Informer and WID. Additionally, Research Administration produced output for this period for regions: The Phoenix MSA, Tucson MSA, Flagstaff MSA, Prescott MSA, Yuma MSA, and the rural counties in three (3) clusters of Northeast, Southeast, and Western regions. These data products and information were provided to Arizona's Workforce Informer and the WID.

# Activity conformity to planned milestones:

Research Administration continued to struggle with the Micro-Matrix software in PY2006 as it related to updating revised versions of software. Again, there exists little advance notification to states regarding revisions and software idiosyncrasies and version/patch updates caused some minor disruptions and delays of output.

Expended: \$133,960 Requested: \$123,214 Variance: (\$ 10,746)

#### Explanation of variance:

Expenditures were slightly greater due to breaking out Workforce Investment Board (WIB) regions for the development of the recently developed Training and Education and Resource Model (TERM) report. The intention behind the effort is to provide Local Workforce Investment Boards (LWIB's) with information and data to provide improved support to Workforce Development regional planning, client triage and guidance, and support for grants.

# 3. Publish an Annual Economic Analysis Report for the Governor and the State Workforce Investment Board.

During PY2006 the Governor's Office established the Economic Research and Information Exchange Cabinet. One of the primary goals of this Cabinet was to identify various economic statistics data across several state agencies in Arizona and to find ways of amalgamating the diverse data into a quarterly report that would prove useful by the Governor's Office and participating agencies. The Governor's Office recognized that it needed to have timely access to much of the data collected by the various agencies to effectively evaluate the economy. One of the people selected to this Cabinet was the Economic Analysis and LMI manager for the Arizona Department of Economic Security, Research Administration. He was tasked to identify and share LMI data that would prove useful in the report. The Cabinet was successful in being able to identify and collect data across multiple agencies and to produce the report, "The Arizona Advantage."

#### The list of accomplishments of this Cabinet are:

- Improved data coordination and communications among agencies.
- Completed a master list of economic reports and publications maintained by all participating agencies: Department of Transportation, Department of Revenue, Department of Economic Security, Department of Commerce, Governor's Office of Strategic Planning and Budgeting (OSPB), Department of Housing, and Department of Tourism.
- Completed an Abstract on Arizona Tax Burden, a joint effort of the Department of Revenue, Department of Commerce, and OSPB, to be included in the Department of Commerce's 10-Year Plan.
- Created a quarterly report, The Arizona Advantage, with Arizona economic information updated on a quarterly basis and live links to various state and federal resources. The report is

maintained by the Department of Commerce and is available on the department's website (http://www.azcommerce.com/doclib/prop/state\_economic\_profile.pdf) and the state portal.

While Arizona was not able to produce an annual economic report for the Governor in PY2006, several significant contributions to create and support such a report was supported by LMI staff during the year. First, Arizona's LMI department contributed to reviewing data from state agencies and to producing an integrated report that will support this goal in PY2007. Secondly, further assisting this process, the Arizona's Governor's Office has also taken steps to transfer Research Administration from the Department of Economic Security to the Department of Commerce. This action supports the further integration of data and resources to support the production of such an annual report for the Governor's Office.

In support of an Annual Economic Analysis Report for the Governor and the SWIB, the Research Administration and Commerce staff has already begun to discuss and prepare for this report in 2008. To assist workforce development planning and reaching objectives within a dynamic economy, the recently developed TERM serves as an innovative planning tool designed to serve as the basis for identifying and reviewing performance measure targets used in workforce development programs, such as high demand jobs. Research Administration continued to devote resources toward further development of this useful planning tool in PY2006 by developing regional (WIB related) breakouts. Research Administration has continued to work to integrate this data into the planning phase of WIA and other programs in Arizona. The Department of Labor Regional Office has indicated they are eager to see this tool deployed in Arizona prior to supporting it in other states. Arizona's WIA program has decided to incorporate the TERM into the Local Workforce Investment Board plans in PY2007.

In the final quarter of PY2006, Research Administration LMI staff was asked to provide support to the Governor's P-20 project by developing a 20-year forecast of jobs. In support of the request, Research Administration's LMI staff not only produced an occupational 20-year forecast, they produced a 20-year TERM regional report to assist with improved workforce development planning and guidance to the Governor's P-20 educational goals. The effort provided significant support to the project in that the TERM provided data and information about the high-demand job groups in 2025 and the training and education resources needed to support those jobs. While this particular report and support doesn't necessarily qualify for providing the Governor and SWIB with an economic analysis report of the recent period, it served to assist both in clarifying the challenges in the future and developing a plan to support the P-20 goals of the state and local areas. It is notable to point out that the data produced and provided by LMI staff were in regional and state format to meet the needs of the request.

Expended: \$ 122,193 Requested: \$ 92,410 Variance: (\$ 29,782)

# Explanation of variance:

Research Administration has been working with Commerce, Department of Economic Security and other agency staff to support the integration of data to comprise high-level reports and analysis to meet the needs of the Governor and agency executives. In supporting the needs, a great deal of discussion and exchange was applied in PY2006 toward developing databases and applications to support analysis and reports.

# 4. Post Products, Information, and Reports on the Internet.

#### Outcomes achieved relative to plan:

Data and related products were provided to the public via Arizona's Workforce Informer website. The WID data core files were updated to the database as data became available and all LMI products and articles were provided to the website. Since the deployment of Arizona's Workforce Informer, Research Administration has continued to expand data and products to the website and to develop new features to enhance the website.

# Enhancements to the website during the PY2006 were:

- Updated version of Workforce Informer was tested and implemented to work compatibly with WID 2.3.
- For the Workforce Investment Act, Rapid Response program; developed the ability to publish interactive Geographical Information System maps on the Internet/intranet.
- A multi-user spatial database was developed for GIS data management.
- QCEW program data was used for creating sample GIS applications.
- Website was modified to support LMI Teleconferencing by including schedules and supportive information for attendees, such as training material, maps and directions, etc.
- Expanded website to include TERM related sub-state data.
- To aid access and ease of use, PDF files were added to many files on the website as an additional format option.
- Included database of licensing requirements for Arizona occupations.
- Included charts and graphs for earlier provided tables for LMI customers.
- Included and expanded Unemployment Insurance graphs and data tables. This data represents new economic indicators as several years worth of validation, programming and documentation came to fruition as state data was presented to Arizona's Workforce Informer that reveals the demographics of the insured unemployed.

Research Administration staff were sent to Geographical Information System (GIS) training and development seminars and related conferences. Two LMI staff are trained in GIS analysis and one technical support staff was trained for server-side GIS technological applications.

Efforts in PY2006 also continued in the development/testing of GIS applications in Research Administration, especially since the Bureau Labor Statistics (BLS) program has been coding Quarterly Census of Employment and Wages (QCEW) data and census data has been resourced for eventual GIS applications. Research Administration aims to leverage efforts of BLS and

Census in providing GIS applications/products to LMI users and discussed possible options with other stakeholders.

# Activity conformity to planned milestones:

Updating and revising products and data to the website to support the public's efficient access was in general conformity with planned milestones.

Expended: \$ 152,672 Requested: \$ 123,214 Variance: (\$ 29,782)

#### Explanation of variance:

Research Administration experienced all the challenges that came with further developing products tools to support to the SWIB and LWIB during an era of declining federal support.

# 5. Partner and Consult on a Continuing Basis with Workforce Investment Boards.

Research Administration continued to provide support to the LWIBs by concentrating on further development of the TERM reports by WIB region, where possible. Further support was provided in working with Workforce Information Act and local areas to provide training and website related support for Workforce Development planning and grant writing with local data.

Research Administration also began work several years ago to provide the Local Economic Dynamics (LED) data for Arizona. During PY2006, data files were exchanged and reviewed and tested, but it was not possible to complete the entire exchange, review, and testing to have the database in place during PY2006. Plans are to have completed the testing and to begin testing in PY2007, which will ultimately provide a great deal more community-based data to the LWIBs.

The manager of LMI continued to meet every LWIB request for economic presentations and supported all areas requesting LMI training of LWIBs. This was further supported with meeting the training and planning needs of all LWIBs and Workforce Development related programs. Training of LMI data and of especially planning was elevated to great importance with the development of the TERM report. During PY2006, the aim was especially important to provide program and agency leadership with the awareness and training of TERM. This effort proved effective, since the WIA program has initiated the requirement of using TERM data in Workforce Development planning to support meeting performance targets.

Additional support from Research Administration came in the way of supporting explanations of allocation methods and in participating in a special study to review Arizona's allocation methodologies with respect to other states. Detailed explanations were presented in several meetings, questions and answers discussions held, and all requests were met to satisfy the needs of the special study and of the WIA program and LWIBs.

Expended: \$ 84,120 Requested: \$ 61,607 Variance: (\$ 22,513)

# Explanation of variance:

Expenditures exceeded allocations due to successive years of diminishing federal funding to support meeting the demand of local needs. While Research Administration has employed new methods to exchange with local WIBs and Directors, such as training via teleconferences, the necessary interaction with and support of the local areas will continue to be an increasing challenge.

## 6. Conduct Special Studies and Economic Analyses.

Research Administration continued to further develop of the Training and Education Resource Model (TERM)—cited by DOL in PY2005 as a "Promising Practice". Regional breakouts of the data were developed during PY2006, which avails the LWIBs the use of this data for Workforce Development planning in early CY2008 and for any other possible application, such as writing for Workforce Innovation in Regional Economic Development (WIRED) initiative and other grants, and in local client-oriented triage and guidance support.

With the importance of supporting performance and review in all levels of government, especially with the federal guidance in Workforce Development, planning support (data and information) has become a more critical emphasis in developing a plan to achieve goals. Prospective applications for use of the TERM are to assist with Workforce Development Planning and Performance Measure review, field office guidance and triage support in the Department of Economic Security, Department of Education, Department of Corrections, and the community colleges.

In PY2006, Research Administration leveraged funds through the Arizona Department of Education Career and Technical Education (CTE) by producing customized Labor Market Information reports for use in CTE's training program decisions.

Research Administration partnered with the Arizona Career Resource Network (AzCRN) to provide LMI data for the Arizona Career Information System, a computerized career exploration tool at use in high schools, junior high schools, One Stop Career Centers, and social service agencies throughout the state of Arizona. Also in conjunction with AzCRN, RA provided data on high growth occupations in Arizona for a printed career guide, *Arizona Career and Education Guide*. This publication was distributed to schools and social service agencies throughout the state

In PY2006, Research Administration continued to expand the dissemination of Unemployment Insurance (UI) data at the state level. Demographic details by claim type and claimant cohorts were further provided to Arizona's Workforce Informer and the manager of LMI began elevating the awareness and utility of this data to the leadership of agencies, academics, and policy-

makers. This data provided great insight about the magnitude of the economic weakness and distress of workers and businesses affected by the economic slowdown. Current plans in LMI are to collect, organize, and provide substate data. Much of the PY2006 activities were to prepare the data for release to the public via Arizona's Workforce Informer. PY2006 will most likely further evolve this process into developing analysis and reports for the Governor, SWIB, and LWIBs.

Research Administration also provided support to the state and LWIBs in preparing for and reviewing WIRED grant options.

# Training activities:

Research Administration continued to provide customized LMI training to serve four targeted groups. Presentations were provided upon request to businesses and workforce development groups.

# Several additional Arizona LMI publications/products:

- \* Growing and Declining Industries by county from QCEW data Updates produced each quarter for each county region.
- \* Employer Size Distributions by county from QCEW data Updates were produced each quarter for each county region.
- \* Detailed Unemployment Insurance Claims and Claimant data After several years of detailed work; a substantive amount of the data, referred to as Characteristics of the Insured Unemployed, was introduced inPY2006 to Arizona's Workforce Informer website. This data provides demographic detail of the insured unemployed

#### Other activities with presentations/discussions/support:

Governor's Office of Strategic Planning and Budget -- Monthly

Joint Legislative Budget Committee's Financial Advisory Committee -- Quarterly

Department of Commerce Economic Research Advisory Committee - Quarterly (or when scheduled)

Arizona's Business Education Advisory Council – Quarterly

Arizona Governor's Office, Economic Research Information Exchange Cabinet -- Monthly

LWIB and Directors -- as requested

Workforce Development programs -- as requested

### Activity conformity to planned milestones:

Research Administration was in general conformity to planned milestones.

#### Outcomes achieved relative to plan:

Outcomes achieved relative to the plan were as expected with much of the PY2006 activity devoted to the identification of meaningful data, acquisition and organization of new data, and to establishing a production process of dissemination of this data, information, and reports.

Activity conformity to planned milestones:

Expended: \$ 95,003 Requested: \$ 61,607 Variance: (\$ 33,397)

# Explanation of variance:

Once again, successive years of decline in federal funding have resulted in expenses exceeding annual allocations.

#### **Section B. Customer Satisfaction Assessment:**

The methods used for collecting customer satisfaction information and for interpreting the collected information in PY2006 were as follows:

- Customer survey form provided to Arizona's Workforce Informer web site to collect comments.
- Customer survey form provided at LMI presentations and training sessions.
- Arizona Workforce Informer web site application (WebTrends) provides comprehensive and summary reports on most requested/downloaded LMI products and data, etc.
- Telephone and in-person feedback provided by LMI customers.
- All survey and website data collected was tabulated, statistically analyzed and summarized for identification of improvements.

#### **Section B comments:**

The methods used to consult with customers include numerous meetings and consultations in person, via phone and email with the LMI manager, feedback forms at all presentations, a feedback form on the website, a webmaster email address posted on the website, as well as posted phone numbers for customers to talk with the workforce analysts.

To provide the customers in the rural areas with more regional data, Research Administration divided the balance of state data into three geographic clusters and produced occupation projections and wage data for those areas. In response to customer requests, publications ranking the top 25, 50, and 100 fast growth, most openings, and highest pay occupations and industries have been produced and more are in the works. Publications which combine the occupation forecast data, wage data, and education requirement data have been produced in different formats for customer use. Training sessions and presentations are made available to customers to assist in the understanding and use of the occupation and industry data.

In response to customer requests, the search feature on the website has been significantly improved. Additionally, an alphabetical list of all products and publications page is available for the customer to readily see what website products are available. Many items on this list are found under more than one relevant category based on some of the different names by which the users have requested the product in the past. Telephone and email contact information is prominently displayed for users if they need assistance in their search.

Additional activities to be undertaken to add customer value include improvements to the online tools that access the database and inclusion of more geographic breakouts of the data wherever possible. Working in conjunction with the website contractor, the online tools will be configured to allow a user to view all of the drill down data selection choices they have made and go back to any step and make new selections.

# Section C. Recommendations for Improvements or Changes to the Suite of Core Products:

Recommendations based on accomplishments— Core products:

- Industry and occupational employment projections have been aligned with production cycles of data collection sources.
- Software (consortium-produced) used in production output should be documented and
  communication regarding updates well coordinated to front-line user groups in states.
  Additionally, the output format required of states to provide ETA (at the federal level)
  should be well communicated to the states and within the capacity of the software to
  produce.

Recommendations based on customer satisfaction assessment findings— As expressed by LMI customers, of key importance are the following:

- Accurate data and information
- Local data and information
- Timeliness of data and information
- Training should be provided and targeted for specific type of users

Recommendations based on consultation with customers—

Resulting from direct feedback from LMI customers, Research Administration developed/enacted:

- Improved ease of use by providing more details of products on website via links.
- Redesigned and reformatted Arizona Workforce tables products to make them easier to read and more consistent with other products.
- Added several new PDF file format products for user ease of access.
- Provided several new tables and graphs of price indexes (CPI, PPI, and ECI).
- Provided history file for Motor Vehicle Department data.
- Compiled database of licensing requirements for Arizona occupations.
- Developed TERM reports and data for WIB regions.
- Developed and provided OES clusters by region to minimize.
- Combined data file (occupation projections, wages, and training requirements combined in one file for ease of reference).

- Applying for government jobs update.
- Employers only page.
- Direct link to JobCentral.com.
- Glossary Page.
- Additional local data and information.
- Additional training and outreach targeted to specific customer groups.
- Related web sites.

# **Section C comments:**

Customers often asked for data at geographic regions, especially WIB regions. Research Administration will continue to produce data at lower levels of geography for the rural areas as the data allows, especially at the WIB level. Several new developments were made and provided to the LWIBs during PY2006.