

almis resource center
progress report 2004



connecting systems. delivering solutions. providing answers.

table of contents

Summary	3
ARC Overview	5
<i>Background</i>	5
<i>Purpose</i>	6
<i>Organization</i>	7
2004 in Review	9
<i>Products and Services</i>	9
<i>Capacity Building</i>	11
<i>Customer Satisfaction</i>	13
Future Directions	14
Appendix	15
<i>Definitions</i>	17
<i>Core Deliverables</i>	19
<i>NCSC Annual Report</i>	21



summary

Over the past year, the ALMIS Resource Center has continued to support the states in their efforts to implement and use the ALMIS Database to its full potential, specifically, in the area of interstate data sharing.

Being responsive and proactive in a demand-driven workforce information system, the ALMIS Resource Center has helped states obtain and disseminate the most comparable, localized, and quality labor market information available.

Following are highlights of the ALMIS Resource Center activities and accomplishments during 2004:

- Release of ALMIS Database Version 2.3 in September 2004.
- Issued RFP and awarded a new ALMIS Employer Database Contract in April 2004. The new Master Agreement is hosted by Iowa on behalf of states and ETA.
- Release of the first update of the ALMIS Employer Database by infoUSA in October 2004.
- The National Crosswalk Service Center experienced a 91 percent rise in the number of files downloaded to slightly more than 72,000.
- XML definitions for the ALMIS Database were developed.
- An ALMIS Database Training was held in Raleigh, North Carolina in June 2004.
- A new technical assistance system with a single point of contact for ALMIS Database questions was implemented.
- Content continued to be added to the ALMIS Resource Center website (www.almisdb.org). Usage of the website also continues to grow.
- E-newsletters and outreach activities included the release of three additional newsletters in 2004, development of an ALMIS Resource Center fact sheet, release of a 2003 annual progress report, and availability of ARC informational materials at conferences including the LMI Forum.
- A survey was conducted to ascertain ALMIS Database administrator issues, needs, and evaluate customer satisfaction in order to improve and enhance ALMIS Resource Center products and services for the upcoming year.



ARC overview

BACKGROUND

As the capacity to build sophisticated electronic Labor Market Information (LMI) support and delivery systems began to emerge during the early 1990s, many states recognized the benefits of such systems for both their own staff and their customers. The states also recognized the need for common data input formats and the value of multiple system interfaces tailored to a variety of customer needs. However, the early LMI systems used a product-specific, proprietary database format. These databases were optimized to support a single purpose application, required unique data input formats and did not readily support alternate interfaces or cross-state data sharing. Thus, states were left with the requirement of supporting several different databases and associated applications that contained the same data in multiple formats. The realization of the fact that such a process is neither efficient nor cost-effective became the driving force for the development of the ALMIS (America's Labor Market Information System) Database by the U.S. Department of Labor, Employment and Training Administration. The ALMIS Database originated from the need for a single, multi-purpose database structure to drive analytical and data display systems.

The ALMIS Database Maintenance Consortium was formed in 1997 in recognition of the fact that the database structure must be reviewed and updated as new data requirements evolve and new sources of data are identified. In addition to structural review, research, definition, development, and testing, the Consortium was charged with providing technical assistance and training to the states in implementation, maintenance and ongoing use of the ALMIS Database and related support tools.

Since its inception, the Consortium has experienced an expanding role in helping states to deliver consistent, comparable, and quality labor market information to their customers. Since 1999, the Consortium has acted as a fiscal agent for the activities of state representatives to the Workforce Information Council (WIC) and for designated projects sponsored by the WIC. Beginning in 2002, these responsibilities were shared with the State of Alaska and Ohio State University. Since July 1, 2000 the Consortium has served as the host of the National Crosswalk Service Center that provides a wide range of support to the Consortium as well as crosswalk files, data files, and support services to the states. A detailed annual report for the NCSC is included in the Appendix of this report. Beginning in April 2001, the membership and responsibilities of the ALMIS Database Consortium and the ALMIS Employer Database Consortium were merged. The combined consortium is responsible for the activities associated with the award and administration of a new master agreement through the host state, Iowa.

These additional responsibilities led to the realization that the Consortium's name no longer adequately described the full breadth of its role in the Workforce Information System. In 2003, the Consortium became the ALMIS Resource Center.



ARC overview

PURPOSE

The ALMIS Database originated from the need for a single, standardized, multi-purpose database structure to drive analytical and data display systems providing labor market and workforce information to a variety of customers. Originally, the ALMIS Database Maintenance Consortium was charged with providing technical assistance and training to the states in implementation, maintenance and ongoing use of the ALMIS Database and related support tools. The Consortium has experienced a dynamic and expanding role in helping states deliver consistent, comparable, and standardized quality labor market and workforce information to their customers.

The ALMIS Database structure is intended for use by states as a tool for the storage and dissemination of local, state and national workforce information. The structure is designed to be independent of both operating system and database application requirements and may be implemented in both the MS Windows and UNIX operating systems environments. The structure has been implemented and tested in both MS SQL Server and Oracle, as well as in several less sophisticated databases such as Microsoft Access and FoxPro. Though the structure design favors no specific database software, efforts have been made to avoid known issues with either MS SQL Server or Oracle. When populated and used in conjunction with an appropriately designed analysis and display application, the structure can support both client-server and Internet applications.

Under the State Workforce Information Core Products and Services grant, states have been allocated funds for the creation and maintenance of ALMIS core products. In return for receipt of these funds, states are required to produce certain core products being developed under the ALMIS initiative. One of those requirements involves implementation of the ALMIS Database, population of core elements and the update and maintenance of these elements. States are further encouraged to populate additional tables that are deemed useful for state and local customers.



ARC overview

ORGANIZATION

The ALMIS Resource Center is comprised of representatives from the U.S. Department of Labor, Employment and Training Administration, the National Crosswalk Service Center, and representatives from 15 states, including: North Carolina, Connecticut, Florida, Georgia, Illinois, Iowa, Maine, Massachusetts, Minnesota, Montana, Nebraska, Nevada, Oregon, South Carolina, and Wisconsin. Collaboration with the Workforce Information Council, the LMI Institute, the Bureau of Labor Statistics, and Federal/State workgroups, councils, and consortia also play a vital role in the continuing products and services offered by the ALMIS Resource Center.

The ALMIS Resource Center is focused on five key areas:

ALMIS Database, a relational database structure designed as a tool for data storage and dissemination. It is a required state "core product" through the Workforce Information Grant.

Employer Database, a privately collected, acquired database that includes names, addresses, telephone numbers, and industry designations for over 10 million businesses throughout the country. The ALMIS Resource Center is responsible for the procurement and dissemination for the database to states for use in workforce development activities.

National Crosswalk Service Center, a national clearinghouse for state, local, and national data from standardized sources. The Center makes available a wide range of data files, eliminating the need for intensive state efforts in developing

content for some ALMIS Database tables. They also provide essential support for the Employment and Training Administration, CareerOneStop Consortium, and other users of occupational and training classification systems.

Development of XML Definitions, a project underway to incorporate eXtensible Markup Language (XML) into the ALMIS Database standard, promoting information sharing and systems interoperability. The result is more comprehensive data availability to better serve the information needs of businesses and individuals.

Capacity Building, ongoing technical assistance and training to the states for effective implementation, maintenance and use of the ALMIS Database and related resources.





2004 in review

PRODUCTS AND SERVICES

ALMIS Database

The Structure Subcommittee of the ALMIS Resource Center is primarily tasked with the development and maintenance of the ALMIS Database. Over the course of 2004, the Subcommittee accomplished the following:

- o Released ALMIS Database Version 2.3 in September 2004. The key elements of Version 2.3 that differ from previous versions include:
 - modification of the structure to accommodate the data contained in the new ALMIS Employer Database,
 - the inclusion of tables for storing summary level industry data and summary level mass layoff data,
 - the addition of non-standard tables related to occupational titles ("lay titles"), Quarterly Workforce Indicators, and Job Vacancy Survey data,
 - modification of the licensing tables, designed to increase the amount of information available and to clarify the relationships between licenses and applications,
 - and, the addition of new crosswalk tables.
- o Developed an LED table (Local Employment Dynamics) as a non-standard table.
- o Studied possibilities concerning a merger of existing projection tables.
- o Updated the data dictionary and the non-standard tables section of the NCSC web site.
- o Maintained the current list of core tables with the exception of the removal of the LICHIST and associated tables.

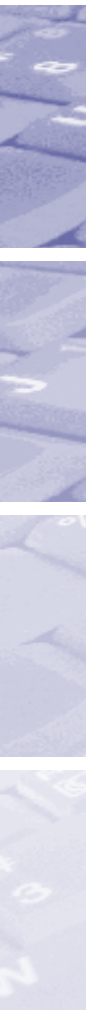
Current core tables as designated by the Employment and Training Administration are listed in the Appendix.

The Structure Subcommittee continued its commitment to improve communication and collaboration with other groups working on projects that are related to the enhancements, application and dissemination of labor market information. Such groups include, but are not limited to ETA, BLS, State/Federal Policy Councils, ETA Consortia, the LMI Institute, and the Workforce Information Council.

Employer Database

The ALMIS Employer Database Subcommittee of the ALMIS Resource Center was responsible for initiating the third party contracts and monitoring the appropriate dissemination and use of the database. During 2004, the Committee accomplished the following:

- o Signed a three-year contract with InfoUSA to provide the Employer Database.
- o Created a FAQ on the ARC website that responds to common questions concerning contract and license agreements.
- o Created a model sublicense agreement that states and territories can use with their One-stop Centers or other entities.



2004 in review

PRODUCTS AND SERVICES

National Crosswalk Service Center

The National Crosswalk Service Center (NCSC) provides a wide range of support to the ALMIS Resource Center as well as crosswalk files, data files and support services to the states. In addition, the NCSC provides services for a variety of other entities including the Career One-Stop project, the Employment and Training Administration, and other customers. A detailed report of NCSC's activities during the time period July 1, 2003 through June 30, 2004 can be found in the Appendix of this report. Select highlights from the report are as follows:

- Counts of files downloaded may present the best picture of the center's delivery of services. For the period covered by this report, the number of files downloaded rose by 91 percent to slightly more than 72,000.
- Over 6,600 *different* files were downloaded during the year.
- Although the bulk of product delivery occurs over the Internet, the NCSC continues to receive requests through e-mail and telephone calls. Such contact results in several hundred instances of custom products development, referral to existing products and website enhancements each year.

Activities included:

- Continued to provide support to the CareerOneStop project, ETA and other users via participation in meetings, and collection and maintenance of the ACINet licensing database.

- Developed and maintained Internet resources including development of draft and production Non-standard ALMIS Database data pages, created prototype of a database-driven website, developed infrastructure and continued maintenance of www.almisdb.org.
- Maintained and expanded center's collection of classification resources including O*NET page and database update, O*NET lay title file, career video file update and Department of Defense Crosswalk update.
- Continued the center's outreach by attending conferences including the Workforce Innovation conference and the Labor Market Information Forum.

XML Definitions

Development continued on a project to incorporate eXtensible Markup Language (XML) into the ALMIS Database standard thereby promoting information sharing and systems interoperability.

This project produces a standard set of XML definitions for the ALMIS Database, as well as a set of common activities associated with accessing information from the ALMIS Database. It provides for a standard way of querying and communicating with the ALMIS Database across states that is application independent.

The implementation of XML into the ALMIS Database standard provides states with a tool to help them realize the full potential of the ALMIS Database in terms of interstate data sharing.



2004 in review

CAPACITY BUILDING

ALMIS Database Training

Over the last 7 years, the ALMIS Resource Center has offered 11 classroom-training opportunities in the implementation and utilization of the ALMIS Database for both beginning and advanced ALMIS Database administrators. Furthermore, a national seminar was held in 2003 to provide database administrators an opportunity for meeting face-to-face and exchanging ideas, sharing best practices, networking, and learning about relevant issues and changes that will impact the ALMIS Database.

ALMIS Database training has evolved over time to reflect the changing needs of ALMIS Database administrators and the ALMIS Database. ALMIS Database training presents a significant challenge because of the diversity not only in systems and environments that are implemented in each state but also of the diversity in the staff doing the work. The spectrum of skills, knowledge, and abilities runs from the advanced database administrator residing in an IT department who doubles as the network/system administrator and webmaster to the research analyst in a state LMI shop who has been asked under the "other job duties as assigned" category to populate and maintain the ALMIS Database. Developing a comprehensive training that meets the goals of the ALMIS Resource Center in capacity building while meeting the individual needs of the ALMIS Database administrator can be quite a challenge at best.

The ALMIS Database training offered in Raleigh, North Carolina in June 2004, included the latest developed curriculum designed to address needs of both new administrators and those with some experience. The modules included in the two-and-one-half day were:

ALMIS Database Overview	Data Loading
Hot Topics: Employer Database and ARC Web Site	Data Transformation
ALMIS Database Structure	Data Validation and Security
Data Collection	Data Extraction
SQL Primer	Data Sharing

No tuition was charged for this training as funds came from the ALMIS Resource Center. The training was attended by 14 individuals.

Evaluations gathered from participants in the training were used to assess the curriculum as well as the delivery of the class and will be used to improve subsequent classes.

2004 in review

CAPACITY BUILDING

Individual Assistance

The ALMIS Resource Center is responsible for technical support and outreach in the installation, population and maintenance of the ALMIS Database. Improvements in 2004 via the redesigned "Help Desk" page on the ALMIS Resource Center Web site (www.almisdb.org) gave users multiple options for finding the technical solution they were looking for whether it be by phone, email, in person, or online. The ARC also provided a single point of contact to serve as the central source for states to obtain technical support and guidance. The support staff made themselves available to all ALMIS Database users and continues to provide information and assistance in securing necessary information for users.

Website

Since 2003, the ARC has provided a technical website (www.almisdb.org) with links to relevant websites in order to assure ease of access to data files, technical information and a variety of training and support materials.

Enhancements in 2004 included development of a site map, development of an Employer Database section, and a new system for handling DBA questions and answers. Use of the website continues to grow.

A website management team comprised of members of the ALMIS Resource Center held monthly conference calls to identify content development and revisions as a means of keeping the site up-to-date and relevant for users. The National Crosswalk Service Center is responsible for implementation of website changes.

E-newsletter and Outreach

As a means to promote communication among users and provide information, the ARC has released 10 e-newsletters since 2003, to an ever-growing number of subscribers including ALMIS Database administrators, LMI Directors, and other workforce professionals. Archived PDF versions of the newsletters are available on the ARC website and can be searched by issue or by keyword. Interested individuals can sign-up to receive the e-newsletter at www.almisdb.org.

Additional outreach activities have included release of a 2003 Annual Progress Report, development and dissemination of ALMIS Resource Center fact sheets, and availability of ARC informational materials and e-newsletter sign-up sheets at conferences including the LMI Forum (October 2004).



2004 in review

CUSTOMER SATISFACTION

In February 2005, ALMIS Database administrators were surveyed in order to collect information on critical issues, software usage, and implementation of the ALMIS Database in state information delivery systems. The survey was also used as a tool to assess customer satisfaction on the products and services offered by the ALMIS Resource Center. Following are results from the customer satisfaction portion of the survey:

ARC e-newsletter satisfaction

50% Very Satisfied
35% Satisfied
15% Neutral

ARC website (www.almisdb.org) satisfaction

40% Very Satisfied
55% Satisfied
5% Neutral

ARC website navigability

95% Very Satisfied
5% Satisfied

How has the ALMIS Resource Center helped you as an ALMIS Database Administrator over the last 12 months?

"I have used the state application links [on www.almisdb.org] to see what everyone else is doing."

"Answered many questions concerning the Employer Database."

"Provided news and information concerning ALMIS Database version updates and contacts."

"Database structure hints."

"The website [www.almisdb.org] is a great source for help and new information."

"I have went to a training and it has greatly helped me to learn structure."

"The website has kept me informed on the Employer Database changes, plus all other announcement and changes to the database are in one location."

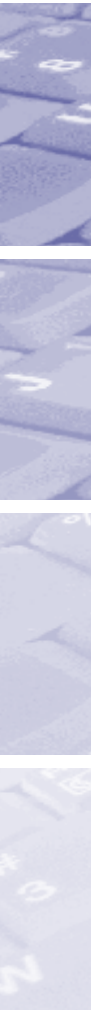
"Finding out where to get data."

"The training manual available from the website has been helpful as well as the links to other states pages. It has given me a good idea of how things should be set up."

"Meeting highlights are useful."

"Links to questions [Help Desk on www.almisdb.org] - answer to questions or to resources."

"Provided updates to the database structure and supplied the new data for the GEOG table."



future directions

The ALMIS Resource Center is planning many activities as part of their continuing support of state efforts to use the ALMIS Database. The ARC will provide the states with a mechanism to exchange information on issues related to implementation of the ALMIS Database such as cost of development, staffing and interagency cooperative agreements for data exchange. National Crosswalk Service Center activities are addressed in the Appendix of this report. ALMIS Resource Center activities will include:

- 1) Continue identification of the core ALMIS Database elements that must be populated by states in order to satisfy product requirements under the ETA State Workforce Information Core Products and Services grant.
- 2) Continue to coordinate the maintenance and update of ALMIS Database table structures and common files. This entails evaluating the current structure in light of evolving data requirements and the identification of new data sources, examining change requests, establishing criteria for prioritizing submitted changes, revising existing tables and adding new tables.
- 3) Provide training for state staff in the population and maintenance of the ALMIS Database. Current training for new users will be updated.
- 4) Serve as the central point of contact for information related to the ongoing development of the ALMIS Database. The ARC Education and Communication Subcommittee will continue to produce presentation materials designed to explain, develop understanding, and promote the use of the ALMIS Database. The ARC will also continue to publish a newsletter

focusing on database changes, frequently asked questions, upcoming training and highlighting state activities.

- 5) Provide technical support and guidance in the installation, population and maintenance of the ALMIS Database. The ARC will maintain a technical website with appropriate links to other informational websites.
- 6) Coordinate and collaborate with other groups working on projects that are related to the enhancement, application and dissemination of labor market information. Such groups include, but are not limited to, ETA, BLS, State/Federal Policy Councils, ETA Consortia, the LMI Institute and the Workforce Information Council.
- 7) Monitor ALMIS Employer Database contract activity in accordance with the terms of the master agreement. Also, provide support to states regarding appropriate interpretation of the terms of the agreement.
- 8) Continue development and implementation of XML Definitions, Query Library and the XML Standard.



appendix





appendix

DEFINITION OF TERMS

ALMIS – America's Labor Market Information System – A dynamic system that produces quality and standardized labor market information and tools in a wide variety of media and formats to job seekers, employers and the workforce development community. ALMIS results from collaborative efforts between and among the states, the Employment and Training Administration, the Bureau of Labor Statistics, and the Workforce Information Council.

BLS – Bureau of Labor Statistics – The Bureau of Labor Statistics (BLS) is the principal fact-finding agency for the federal government in the broad field of labor economics and statistics.

CES – Current Employment Statistics – A monthly survey of non-farm business establishments used to collect wage and salary employment, worker hours, and payroll by industry and area.

DBA – Database Administrator – A person responsible for the operation and maintenance of a database and/or database application. The database administrator monitors its use in order to customize it to meet the needs of the community of users. There may be more than one DBA per site.

ETA – as part of the U.S. Department of Labor, the Employment and Training Administration (ETA) administers federal government job training and worker dislocation programs, federal grants to states for public employment service programs, and unemployment insurance benefits. These services are primarily provided through state and local workforce development systems.

LAUS – Local Area Unemployment Statistics – A Bureau of Labor Statistics state/federal program that produces monthly and annual employment, unemployment, and labor force data for Census regions and divisions, states, counties, metropolitan areas, and many cities, by place of residence.

LMI – Labor Market Information – The body of information that deals with the functioning of labor markets and the determination of the demand for and supply of labor. It includes, but is not limited to, such key factors as changes in the level and/or composition of economic activity, the population, employment and unemployment, income and earnings, wage rates, and fringe benefits.

NAICS – North American Industry Classification System – The successor to the SIC system; this system of classifying business establishments is used by the United States, Canada, and Mexico.

NCSC – National Crosswalk Service Center – National service center specializing in occupational and training program classifications, their relationships to each other, and to related data. Delivers variety of services in support of the ALMIS Database project.

OES – Occupational Employment Statistics – A Bureau of Labor Statistics state/federal program that produces employment and wage estimates for over 700 occupations. These are estimates of the number of people employed in certain occupations, and estimates of the wages paid to them. Self-employed persons are not included in the estimates. These estimates are available for the nation as a

appendix

whole, for individual states, and for metropolitan areas; national occupational estimates for specific industries are also available.

QCEW – Quarterly Census of Employment and Wages—A Federal/State cooperative program that collects and compiles employment and wage data for workers covered by state unemployment insurance laws and federal civilian workers covered by UCFE. State Employment Security Agencies collect and compile quarterly UI contribution reports that are submitted by all employers. These data are maintained in the state in micro and macro data forms and are also sent to BLS.

SOC – Standard Occupational Classification – This system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupation(s) requiring similar job duties, skills, education, or experience.

SQL – Structured Query Language – SQL is a standard interactive and programming language for retrieving information from and updating a database. Although SQL is both an ANSI and an ISO standard, many database products support SQL with proprietary extensions to the standard language.

WIC – Workforce Information Council – The Secretary of Labor, through the Bureau of Labor Statistics, works with the Employment and Training Administration, as well as

other federal agencies and state employment statistics agency representatives elected by their peers. Collectively known as the Workforce Information Council, this group works together to plan, guide, and oversee the nationwide workforce information system.

XML – eXtensible Markup Language – Extensible Markup Language (XML) is a simple, flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere. XML is a trademark of the World Wide Web Consortium.

appendix

CORE DELIVERABLES

Core Tables

As recommended by the ALMIS Resource Center, the Employment and Training Administration has designated the following tables to be the core ALMIS Database deliverables under the State Workforce Information Core Products and Services grant:

Data Tables

CES
EMPDB
INCOME
INDPRJ*
INDUSTRY
IOMATRIX*
LABFORCE
LICAUTH**
LICENSE**
OCCPRJ*
OESWAGE*
POPULATN

Crosswalk Tables

LICXOCC**
MATXNAIC
MATXSOC

Admin Tables

INDCODES***
OCCCODES***

Lookup Tables

ADDRESSY
ANNSLFLG
AREATYPE
BENCHMARK
CESCODE
CREDITCD
EMPSZFLG
EMPSZRNG
GEOCODE
GEOG
GROWCODE
INCOMTYP
INCSOURC
INDDIR
INDSUB
INDTYPES
LEVELTYP
LICNUMTY
LOCSTAT
OCCDIR
OCCSUB
OCCTYPES
OWNERSHP
PERIOD
PERIODID
PERIODTY
POPSOURC
PRPBSTAT
RATETYPE
STATTYPE
STFIPSTB
URLTOPIC
WEBFLAG

ETA specified that states are required to implement the most current version of the data-base.

* Database Administrator may opt to populate the IOMATRIX data table OR both the INDPRJ and OCCPRJ data tables since the IOMATRIX data table contains much the same content as the other two tables.

** Tables to be furnished to the National Crosswalk Service Center for inclusion in America's Career InfoNet. Contact Steve Rosenow of the NCSC if you have questions.

*** Must populate additional lookup tables.

appendix

CORE DELIVERABLES

ALMIS Resource Center/ALMIS Database-related excerpts from U.S. Department of Labor, Employment and Training Administration, Training and Employment Guidance Letter 1-04, July 2, 2004

State Workforce Agency Deliverables (PY 2004)

- 1) *Continue to populate the ALMIS Database with state data.*

The ALMIS Database provides states with a common structure for storing information in a single database in each state. The database is intended to serve as the cornerstone for information delivery, labor market research and product development. Using the same version of the database in all states is important for providing interstate access to workforce information. Therefore, states are required to implement and maintain the most current version of the ALMIS Database and populate all tables designated as core tables in accordance with guidelines issued by the ALMIS Resource Center. Database content must be updated timely in order to be as current as the state's most recent publications and data releases. Information and technical support will be provided on ARC's website at: <http://www.almisdb.org>.

States are required to populate the database with the following licensing files: license.dbf and licauth.dbf. Licensing data must be updated every two years. States are required to submit licensing data through the National Crosswalk Service Center (NCSC) for inclusion on the America's Career InfoNet (ACINet) site. The licensed occupations information on Career InfoNet has been recoded from OES to the O*NET/SOC taxonomy. The NCSC will assist states in recoding their files to O*NET/SOC for submittal to ACINet, if necessary. States may access information and support through the NCSC Web site at <http://www.xwalkcenter.org> or by calling 515-242-5034.

Now that the basic building and population of the ALMIS Database has been accomplished in all states, a major emphasis in states should be the full utilization of this resource in meeting national, state, and local customer information needs. At the national level, the focus will be on providing tools to states to help them realize the full potential of the ALMIS Database and related resources. More information will be forthcoming from the ALMIS Resource Center.

New and more effective methods are being developed for providing staff training and information updates. Many materials will be provided electronically, and on-site training requiring staff travel will be kept to a minimum. It is important that all states take advantage of the resources and training opportunities provided. Funds may be used for any costs required to implement and maintain the database, including staff training.

- 2) *Produce and disseminate industry and occupational employment projections.*

States are required to populate the ALMIS Database with the statewide 2004-2006 short-term and 2002-2012 long-term projections data and submit the data for public dissemination following the procedures established by the Projections Workgroup and the Projections Managing Partnership.

- 5) *Maintain and enhance electronic state workforce information delivery systems.*

Funds are provided to support continued improvement and deployment of publicly accessible state workforce information delivery systems. Grantees are required to provide electronic public access to the information in the state's ALMIS Database through Internet applications. States are encouraged to develop applications and systems that facilitate customer access to information across multiple states and for interstate labor market areas.

appendix

national crosswalk service center

Annual Activity Report

July 1, 2003—June 30, 2004



***The center's mission** is to maximize the effective and efficient use of occupational information by providing specialized occupational tools (files, reports, software) and technical assistance to users and producers of occupational information.*

appendix

The center's mission is to maximize the effective and efficient use of occupational information by providing specialized occupational tools (files, reports, software) and technical assistance to users and producers of occupational information.

Background

In the early 1980s, the National Occupational Information Coordinating Committee (NOICC – now defunct) recognized the value of establishing a national service center to provide technical assistance in the use of occupational and training classifications and related data. This center, the National Crosswalk Service Center was established in Iowa in April 1983. The Employment and Training Administration of the Department of Labor has furnished funding for operation of the center since July 1997.

This document is the latest in a series of annual reports on that center's activities (visit http://www.xwalkcenter.org/xw_repo.html for reports for selected earlier years). Funding flows from the Employment and Training Administration through the ALMIS Resource Center (ARC, formerly the ALMIS Database Maintenance Consortium). State ALMIS Database administrators are now a major customer group for the NCSC.

Objectives

The Employment and Training Administration, through a grant to the ALMIS Resource Center, desires to make a variety of products and services available to the State Employment Security Agencies and other customers. Through this grant for operation of the National Crosswalk Service Center, ETA expects to realize the following objectives:

- 1) Work with ALMIS Resource Center members to establish a single point of contact for technical support to assist the states in their development of the ALMIS Database.
- 2) Provide a conduit for information and data into and out of the Workforce Information System.
- 3) Provide a one-stop resource for classification and crosswalk resources.
- 4) More fully exploit Internet communication to share files, ideas, feedback, etc. among producers and users of occupational, training and economic information.

appendix

NCSC Utilization

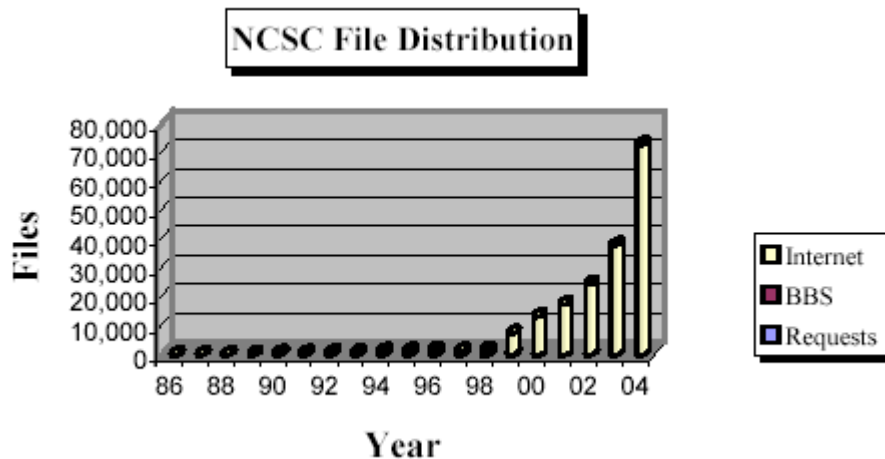
A significant portion of NCSC resources is devoted to product development. This frequently involves downloading data files developed by federal agencies, and reformatting them for use in the ALMIS Database or other application. The NCSC creates relatively little original file content. Rather, federal agencies furnish most of the raw material for the resources distributed by the NCSC.

Ultimately, file distribution, rather than file development, is the best and most quantifiable measure of the level of service provided by the center. The NCSC has adopted two measures of the center's utilization by its customers: files downloaded and user requests. The former measure indicates the volume of products supplied; the latter provides something of a measure of the number of customers served. Both measures indicate significant annual increases during the period covered by this report.

File Downloads

Early in the center's history, tracking of products delivered to customers was relatively simple. Each request, received via mail or telephone, was recorded, and the resulting shipment or other service was recorded. When the center started operating a dial-up electronic bulletin board system in 1989, staff could easily analyze product delivery through the service's usage logs. **The primary delivery of NCSC products and services now occurs over the Internet.**

Counts of files downloaded may present the best picture of the center's delivery of services. This count has risen steadily since the center started delivering files through its Internet FTP server in late 1997. **For the period covered by this report, the number of files downloaded rose by 91 percent to slightly more than 72,000.**



appendix

In response to customer feedback, in April 2001 the NCSC changed its server configuration to make the downloadable files both more visible and more accessible. The files on the center's FTP server are also available through the World Wide Web protocol (http). NCSC staff had received a number of messages indicating that some customers could not connect to the FTP server. This inability to connect could have several causes, ranging from their own browser settings to security set up by their host agency or Internet Service Provider. Adding the http protocol made the server's files available to virtually everyone who couldn't connect to the FTP service.

The NCSC also maintains a Google™ search of its web site. Since the files on the FTP server are also available through the web protocol and are included in the NCSC Internet domain, this search also searches their content. (NOTE: Search engines must examine the content of the server's files in order to include them in the general Internet search results. The NCSC removed over 75,000 instances of file access by the Google and Inktomi search agents from the logs before usage was analyzed. Had these entries not been removed, the count of files downloaded would have been that much greater.)

Over 6,600 different files were downloaded during the year. Some highlights:

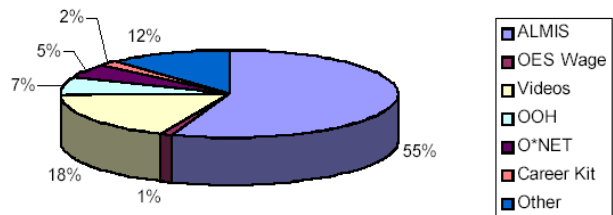
Number of user sessions	24,494
Number of unique Internet addresses	10,727
Number of files downloaded/viewed	72,790
Bytes downloaded	67,959,736,165

Downloads by subject area

An analysis of the types of files downloaded by NCSC customers indicates that, while the center's support for the ALMIS Database accounts for a majority of the files downloaded, there is still significant demand for other type of files. For example, while OES wage files are formatted for use with the ALMIS Database, the data are also available in a more generic format suitable for downloading for use outside the database.

The distribution in the graph below relates to the 72,790 file downloads during the year. Over 6,600 distinct files were downloaded during the period. Over 6,300 of these files were downloaded ten or fewer times. A listing of the individual files with a significant number of downloads is included in Appendix A.

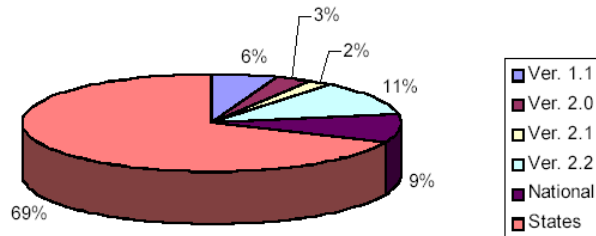
File Download Types (03-04)



Since support for the ALMIS Database is a significant activity, a look at the types of ALMIS Database files downloaded highlights the areas in which the center should concentrate its efforts. The total downloads of ALMIS Database related files more than doubled from the previous year.

appendix

ALMIS Downloads -- by Type



Although the majority of files downloaded are state-specific data files, the distribution of downloads by ALMIS Database version is significant. The number of files related to each version of the database rose from the previous year. However, the portion of downloads related to the most recent database version (2.2) dropped slightly while the portions for earlier database versions all rose. These changes may reflect the discovery of the ALMIS Database files by those outside the ALMIS Database community. Downloads of state-specific data files also point to that conclusion. For example, 228 Alaska-specific files were downloaded during the year. (See Appendix B for counts of downloads of state-specific files.) Fewer than ten files were updated during the period; most of the downloads appear to have been done by someone other than the ALMIS Database administrator for Alaska.

An analysis of visits from other countries also indicates use of files from outside the ALMIS Database community. During the period covered by this report, the server was visited by users from 129 countries (a list of visits by country can be found in Appendix C). About 15 percent of all visits were from outside the United States. Users have been referred to the NCSC server by the French, German, Canadian, British, Australian and other versions of the Google search site. Not all of these visits resulted in file downloads, but they do indicate the increasingly international reach of the internet.

User Requests

As was stated, tracking customer requests is relatively easy when a service has a limited product range and few delivery options. That was the case during the early years of the NCSC, when mailing products to them filled customer requests. This was complicated somewhat in 1989 when the center began operating a dial-up electronic bulletin board system. These systems were popular for several years, and their use paralleled the current use of the Internet in many ways. Tracking customer requests was still relatively simple, since individual dial-up sessions, including

ALMIS Database File Downloads by Database Version

Database Version	2002-03 Downloads	Percent	2003-04 Downloads	Percent	Percent Change
1.1	1,659	24.3	2,286	25.7	37.8
2.0	657	9.6	1,199	13.5	82.5
2.1	508	7.5	923	10.4	81.7
2.2	3,991	58.6	4,480	50.4	12.3
Total	6,815	100.0	8,888	100.0	30.4

appendix

user names, and file downloads were tracked in the system's log. The introduction of the center's Internet server in late 1997 made tracking more problematic. Files were delivered to mostly anonymous users, and tracking individual sessions through the server's logs is more difficult. Nonetheless, it's worthwhile to attempt to estimate the number of user requests as one measure of the center's level of activity.

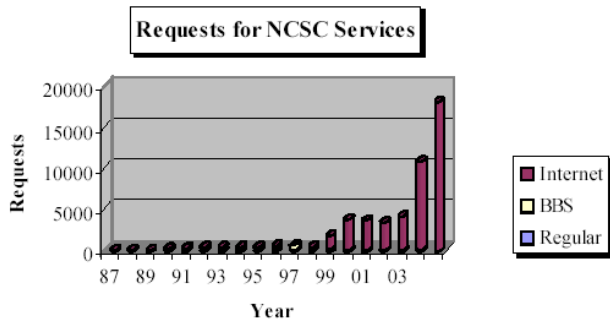
For the purpose of this analysis, all files over 4 KB in size downloaded or viewed from a single internet address in one day was considered a request. This is analogous to earlier request counts in which a single request could have included multiple printed reports or files on tape or diskette. It's important to acknowledge some degree of imprecision in these estimates, since the analysis depends on combining the server's HTTP and FTP services' logs and analyzing the resulting 46 MB file. Although this imprecision does exist, consistency over the years in the definitions and analysis used, and awareness of factors, such as file views by search engines, should allow for an accurate portrait of both trends and levels of service.

While the general trend in the number of requests is upward, it doesn't closely parallel the number of files downloaded.

The estimated number of requests exhibited little change between 1999 and 2002, and then exhibited significant increases the next two years.

Although the bulk of product delivery occurs over the Internet, the NCSC continues to receive requests through email and telephone calls. Such contact results in several hundred instances of custom product development, referral to existing products and web site enhancements each year. Custom products developed in response to requests are documented and made available to all customers. While the anonymous nature of the act of downloading files from the NCSC's Internet server makes it difficult to identify the center's customers, a sampling of the companies, organizations and individuals who have requested information from the center illustrates the types of organizations that utilize the center's services.

A sampling of the customers who requested information from the NCSC through e-mail during the period covered by this report are:



appendix

Work Statement Activity

Support the ALMIS Resource Center

- Attended ALMIS Resource Center meetings in August (Portland ME), November (Atlanta) and April (Tampa). At each meeting, staff presented updates on the center's activities and worked with all subcommittees but primarily with the Education and Communication and Database Structure subcommittees, and with other groups as needed.
- Developed content, files, and other materials for the Applied ALMIS Database training class. Participated in delivery of material at the class in Raleigh. (June)
- Made presentation on NCSC resources for ALMIS Database administrators at the ALMIS Database Seminar in Atlanta. (November)
- Maintained ALMIS Database administrator communication list. (July-June)
- Prepared an annual report detailing NCSC activities and an analysis of trends in usage by customers. Report was distributed to the ALMIS Resource Center, ETA and published on the NCSC web site. (October)
- Downloaded and provided comprehensive CES table developed by BLS. (December, February, March, April, June)
- Downloaded, formatted and provided monthly updates to the content of the CPI table. (July-June) Updated prototype content for URL table containing web addresses for state LMI pages. (July-December)
- Provided national Covered Employment and Wages (ES-202) data for 2001 formatted for use in the ALMIS Database, along with a compatible NAICCODE table developed in cooperation with the ALMIS Resource Center. (November)
- Downloaded, reformatted and provided 2002 OES wage data. (December)
- Updated a variety of non-Department of Labor ALMIS tables:
 - Census population estimates. (September, December, April)
 - Bureau of Economic Analysis personal income estimates. (January, May)
 - Department of Defense military separations file. (April)
 - Census income estimates. (December)

Support state staff in their efforts to populate and manage the ALMIS Database

- Updated ALMIS Database Update Calendar web pages. (September, October, November, December, March, April, June)
- Downloaded, formatted and provided monthly updates of national data for the CES and LABFORCE tables. (July-June)

appendix

Provide support to the Career OneStop Project, ETA and other users

- Attended Career OneStop meeting in New Orleans. (January)
- Attended ACINet work group meeting in Alexandria VA. (May)
- Updated licensing database provided to ETA Career InfoNet contractor. (September, February, June)
- Worked with individual states on content of their licensing files. (July-two states, August-one state, October-two states, December-one state, January-one state, February-two states, March-three states, April-three states, June-one state)
- Participated in licensing database meeting with ETA and ACINet contractor in New Orleans. (January)

Develop and maintain the Internet resources necessary to carry out the other tasks

- Distributed ALMIS Resource Center Newsletter. (February, March, July)
- Major update of the ALMIS Database Update Calendar page. (May)
- Created mockup of a redesigned NCSC website. (February, March, April, May)
- Developed draft (May, June) and production (June) Non-standard ALMIS Database data pages.
- Developed web page for distribution of

ALMIS Database SQL Server build scripts and Internet database application for accepting requests for access to the page. (September, October)

- Created prototype of a database driven website. (August, September, October)
- Created prototype for www.almisdb.org website. (January, February, March, April)
- Developed infrastructure and website for www.almisdb.org. (May, June)

Maintain and expand center's collection of classification resources

- O*NET page and database updates. (August, November)
- O*NET lay title file. (September, April)
- Career video file update. (November)
- Department of Defense Crosswalk update. (March)

Continue the center's outreach by attending conferences

- Attended Workforce Innovation conference in Washington DC (July) and provided volunteer services for the conference in general and the Career OneStop display.
- Attended Labor Market Information Forum in St. Louis. (October)

appendix

National Crosswalk Service Center Annual Report
Appendix A
Files with Significant Downloads, 2003-2004

File Name	Downloads/ Views
/download/xwalks/xwalk01.pdf	1,323
/almis/whatsnew.txt	710
/download/career.kit/dotxonet.dbf	551
/download/military/motd2002.pdf	498
/almis/ver22/txt/lookup/moscode.txt	496
/almis/national/ces22.dbf	403
/download/video/01/00-0000.01.mpg	399
/download/onet51/datadictionary5_1.pdf	398
/download/onet40/moconet.doc	395
/download/onet51/onet51ac.zip	391
/download/soccip00/soccip00.zip	384
/almis/ver11/txt/lookup/moscode.txt	373
/almis/national/readme.txt	342
/almis/ver22/almis2-2_release.zip	326
/download/video/filelist.txt	284
/download/soc2000/soc00ac.zip	283
/almis/national/labfor22.dbf	251
/download/onet31/metadata6.doc	250
/download/onet40/onet40ac.zip	242
/almis/ver22/txt/admin/occcodes.txt	240
/almis/ver11/txt/lookup/siccode.txt	237
/whatsnew.txt	230
/download/xwalks/mocnetac.zip	226
/almis/ver11/txt/lookup/cipcode.txt	221
/download/onet40/datadictionary4_0.pdf	219
/almis/ver22/almis2-2_addendum.zip	218
/almis/nonstd/cescode.txt	215
/download/onet40/supfile.zip	211
/almis/national/cpi2122.dbf	209
/almis/nonstd/socxwalk.doc	201
/download/onet31/raisonet.zip	193
/almis/ver22/txt/lookup/naic1997.txt	189
/download/soc2000/socoes00.xls	187
/almis/ver22/txt/admin/indcodes.txt	182
/download/xwalks/moconet.doc	182
/almis/ver11/txt/lookup/dotcode.txt	180
/download/career.kit/dotsoc00.dbf	170
/almis/miscellaneous/almissource.doc	157
/download/onet51/addendum.pdf	154

appendix

National Crosswalk Service Center Annual Report
Appendix B
ALMIS Database
Downloads of State-specific Data Files

State	Files	State	Files
Alaska	228	Montana	186
Alabama	294	North Carolina	174
Arkansas	258	North Dakota	166
Arizona	276	Nebraska	114
California	192	New Hampshire	177
Colorado	197	New Jersey	233
Connecticut	184	New Mexico	158
D.C.	212	Nevada	107
Delaware	146	New York	183
Florida	227	Ohio	102
Georgia	174	Oklahoma	198
Hawaii	184	Oregon	125
Iowa	192	Pennsylvania	134
Idaho	173	Rhode Island	152
Illinois	177	South Carolina	200
Indiana	190	South Dakota	78
Kansas	145	Tennessee	141
Kentucky	96	Texas	151
Louisiana	182	Utah	139
Massachusetts	280	Virginia	162
Maryland	232	Vermont	157
Maine	183	Washington	117
Michigan	336	Wisconsin	144
Minnesota	129	West Virginia	134
Missouri	134	Wyoming	125
Mississippi	191		

appendix

National Crosswalk Service Center Annual Report
Appendix C
NCSC Internet Server
Visits by Country

Rank	Country	Visits	% of Visits
1	United States	55,612	83.3
2	France	4,900	7.3
3	N/A	1,070	1.6
4	Canada	543	0.8
5	Germany	430	0.6
6	United Kingdom	377	0.6
7	Japan	218	0.3
8	China	206	0.3
9	Puerto Rico	200	0.3
10	Netherlands	192	0.3
11	Italy	181	0.3
12	Taiwan, Province of China	151	0.2
13	India	137	0.2
14	Korea, Republic of	135	0.2
15	Sweden	116	0.2
16	Czech Republic	106	0.2
17	Australia	105	0.2
18	Iran, Islamic Republic of	98	0.1
19	Spain	89	0.1
20	Philippines	84	0.1
21	Poland	72	0.1
22	Saudi Arabia	71	0.1
23	Belgium	71	0.1
24	Malaysia	61	0.1
25	Brazil	59	0.1
26	United Arab Emirates	58	0.1
27	Israel	57	0.1
28	Hong Kong	55	0.1
29	Romania	53	0.1
30	Turkey	53	0.1
31	Mexico	50	0.1
32	Russian Federation	50	0.1
33	Singapore	48	0.1
34	Estonia	45	0.1
35	Egypt	43	0.1
36	Portugal	42	0.1
37	Indonesia	41	0.1
38	Finland	37	0.1
39	Switzerland	33	0.0
40	South Africa	32	0.0

Rank	Country	Visits	% of Visits
41	Thailand	29	0.0
42	Greece	29	0.0
43	Pakistan	27	0.0
44	Austria	26	0.0
45	Norway	26	0.0
46	Ireland	25	0.0
47	New Zealand	25	0.0
48	Hungary	25	0.0
49	Lithuania	25	0.0
50	Satellite Provider	25	0.0
51	Bulgaria	24	0.0
52	Denmark	24	0.0
53	Argentina	20	0.0
54	Peru	20	0.0
55	Ukraine	19	0.0
56	Chile	17	0.0
57	Kuwait	14	0.0
58	Slovakia	13	0.0
59	Yugoslavia	13	0.0
60	Jordan	13	0.0
61	Slovenia	12	0.0
62	Vietnam	11	0.0
63	Nigeria	11	0.0
64	Colombia	11	0.0
65	Latvia	10	0.0
66	Algeria	10	0.0
67	Palestinian Territory, Occupied	10	0.0
68	Uruguay	10	0.0
69	Ethiopia	9	0.0
70	Lebanon	9	0.0
71	Guatemala	8	0.0
72	Syrian Arab Republic	8	0.0
73	Croatia	8	0.0
74	Morocco	8	0.0
75	Bahrain	8	0.0
76	Bosnia and Herzegovina	8	0.0
77	Bangladesh	8	0.0
78	Sri Lanka	8	0.0
79	Tunisia	7	0.0

appendix

National Crosswalk Service Center Annual Report
Appendix C
NCSC Internet Server
Visits by Country

Rank	Country	Visits	% of Visits
80	Oman	7	0.0
81	Guam	6	0.0
82	Trinidad and Tobago	6	0.0
83	Azerbaijan	5	0.0
84	Venezuela	5	0.0
85	Panama	5	0.0
86	Cyprus	5	0.0
87	Libyan Arab Jamahiriya	5	0.0
88	Nepal	4	0.0
89	Cuba	4	0.0
90	Luxembourg	4	0.0
91	Belarus	4	0.0
92	Qatar	4	0.0
93	Iceland	4	0.0
94	Senegal	3	0.0
95	Cameroon	3	0.0
96	Ecuador	3	0.0
97	Mauritius	3	0.0
98	Malta	3	0.0
99	Saint Lucia	3	0.0
100	Bahamas	3	0.0
101	Europe	2	0.0
102	Costa Rica	2	0.0
103	Kenya	2	0.0
104	Northern Mariana Islands	2	0.0
105	Jamaica	2	0.0
106	Guyana	2	0.0
107	Tanzania, United Republic of	2	0.0
108	Yemen	2	0.0
109	Ghana	2	0.0
110	Moldova, Republic of	2	0.0

Rank	Country	Visits	% of Visits
111	Dominican Republic	2	0.0
112	Andorra	1	0.0
113	Georgia	1	0.0
114	Faroe Islands	1	0.0
115	New Caledonia	1	0.0
116	Kazakhstan	1	0.0
117	El Salvador	1	0.0
118	Cote D'Ivoire	1	0.0
119	Burkina Faso	1	0.0
120	Netherlands Antilles	1	0.0
121	Malawi	1	0.0
122	Haiti	1	0.0
123	Macao	1	0.0
124	Mongolia	1	0.0
125	Botswana	1	0.0
126	Benin	1	0.0
127	Barbados	1	0.0
128	Tajikistan	1	0.0
129	Macedonia, the Former Republic of Yugoslav	1	0.0
	Total(s)	66,723	N/A

ALMIS RESOURCE CENTER MEMBERS

*Connecticut Department of Labor
Florida Agency for Workforce Innovation
Georgia Department of Labor
Illinois Department of Employment Security
Iowa Workforce Development
Massachusetts Division of Employment and Training
Minnesota Department of Economic Security
Montana Department of Labor and Industry
Nebraska Workforce Development
Nevada Department of Employment, Rehabilitation, and Training
Employment Security Commission of North Carolina (lead)
Oregon Employment Department
South Carolina Employment Security Commission
Wisconsin Department of Workforce Development*

With assistance from:
*National Crosswalk Service Center
LMI Training Institute*

ARC ALMIS
Resource
Center

c/o Employment Security Commission
of North Carolina
700 Wade Ave
Raleigh, NC 27611

www.almisdb.org
Email: almis@ncmail.net