

Information Processing

Five-Year Plan Highlights:

- ***Job growth will accelerate from 3.10% to 5.8% per year, generating 7000 incremental jobs in 5 years.***
- ***The “economic identity” of the Central California Region will expand to include excellence in information processing due to our superior training systems and streamlined processes for meeting industry’s needs.***

I. The Fresno Region Information Processing Sector

Unlike many of the other clusters targeted by the Regional Jobs Initiative that focus on specific industries, the “information processing” sector is an “occupational cluster”. Occupational clusters are defined as concentrations of interrelated occupations that share the same or similar training and skills but may cut across multiple industries.

Broadly defined, information processing occupations provide “back office” support to large organizations that have heavy information processing requirements, such as government, insurance, financial services, healthcare and wholesale trade. These functions encompass data processing and analysis, credit checking, database administration and payroll and billing services (please see Appendix for a complete depiction of the information processing occupational cluster). The Fresno region, with the IRS center, government agencies and healthcare centers, has a strong local end-user market on which to build the information processing cluster.

Because of the dispersed nature of information processing occupations, it is difficult to estimate the size of this economic opportunity. Although many information processing jobs are found in business services—especially companies that provide data processing services, personnel supply, and research services—a large share of these positions are also embedded in unrelated industries. According to the California Employment Development Department, there are a total of 18,200 information processing-related jobs, or “administrative support services and information” jobs, in the Fresno Metropolitan Statistical Area (i.e. Fresno and Madera Counties). The average wage of information processing jobs is \$25,700. Over the last ten years, the number of information processing jobs in the Fresno Region has grown at a compound growth rate of 3.10%.

Information processing occupations range from entry-level information clerks to mid-level computer programmer aides to higher-level management support workers. Wages, especially in the higher-level occupations, are competitive and exceed the region's average wage. The Employment Development Department projects significant growth in occupations such as systems analysts (54.1% projected growth), computer support specialists (43.6% projected growth), adjustment clerks (20% projected growth), bill collectors (23.9% projected growth), and medical records technicians (32.10% projected growth). Please see Appendix for additional occupational statistics.

Several trends provide the Fresno Region with an opportunity to expand its information processing capability and to serve both regional and national markets. First, as organizations in virtually all industries need to process a rapidly growing amount of information, data entry and information processing workers are required to help ensure this work is handled smoothly and efficiently. Fresno can capitalize on this trend by being the information-processing center for large corporations all over Central California. Second, many companies have reduced or even eliminated permanent in-house staff in favor of temporary-help and staffing services firms. These outsourced functions are moved to regions that have a well-trained workforce at affordable wages. Fresno is well-positioned to be the site selection for large information processing facilities like an EDS center. *In summary, the information processing cluster represents an exciting opportunity for the Fresno Region to develop eminence in an information technology-intensive industry with well paying jobs at entry, mid, and high levels and well defined career ladders.*

II. Assessment of Issues and Opportunities for the Information Processing Cluster

Industry leaders from the information processing cluster were convened on July 30th at the Regional Jobs Initiative planning session to discuss issues and opportunities affecting the expansion of the cluster in the Fresno Region. In addition to the industry leaders, representatives from Fresno State, City of Fresno, City of Clovis, Fresno Business Council, Fresno County Workforce Investment Board, Central California Society for Information Management, and several for-profit vocational training providers participated in the focus group. 75 different ideas were submitted by the industry leaders and key stakeholders, which can be categorized into three areas: (1) workforce development, (2) leadership development and (3) technology infrastructure.

- **Workforce Development:** As with other industries reviewed as a part of the RJI process, one of the largest barriers to growing the information processing cluster is the availability of a trained and ready workforce. It is difficult to access workers who are already prepared and trained to meet industry's needs. Furthermore, there is a lack of coordination among the

public and private workforce training providers. Employers need to be able to fill jobs quickly.

- ***Development of Industry Leadership***: A leadership body is needed for the information processing industry that can identify and articulate both workforce and operational standards for the cluster in the region. The newly launched Central California Society for Information Management is well positioned to provide such leadership and/or to serve as an umbrella for an information processing-specific leadership group.
- ***Technology Infrastructure***: High-speed, pervasive technology infrastructure is critically important to the information processing industry. Industry leaders would like a better understanding of the baseline inventory available in the region to not only help with the expansion of their business operations, but to also help facilitate the recruitment of other information processing entities to the Fresno Area.

III. Recommended Action Plan

Initiative # 4: Establish an “Information Processing Industry Partnership” in collaboration with the Central California Society for Information Management.

Similar to the other cluster initiatives identified in the RJI plan, this comprehensive recommendation is to launch an industry-driven initiative aimed at establishing broad recognition of the Fresno Region as a center of excellence in information processing industries and occupations by improving the quality of the regional labor supply in information processing occupations and putting a clearinghouse in place to better connect industry with needed physical, training, technical, and workforce infrastructure. Implementation of the recommendation will be driven by an industry partnership comprised of all interested information processing entities in the region and supported by the appropriate authorities and agencies. The initial activities of the ***Information Processing Industry Partnership*** would include, but not be limited to, the following:

A. Serving as the “Industry Advisory Board” of the Information Processing Academy in the Proposed Central California Center for Workforce Development.

The Information Processing Academy of the Central California Center for Workforce Development, discussed in the Workforce Development and Workforce Readiness section of this report, would establish its training performance standards and design its curriculum based on the guidance provided by the Industry Advisory Board. The Industry Advisory Board will be responsible for providing the following support to the Information Processing Academy:

- Articulation of industry “workforce readiness” standards and basic skills requirements for entry level jobs;

- Partnering with the Information Processing Academy to provide continuing education for incumbent workers in the industry;
- Providing a perpetual 5-year forecast of workforce and skill needs;
- Providing internships and mentoring for new entrants into the information processing field; and
- Providing faculty, equipment, and other resources, as needed.

B. Convene focus and discussion groups of comparable information processing businesses (for example, calls centers and third party administrators) to (1) identify equivalent job categories, skills required, wage levels, and projected growth and (2) potential areas of collaboration that might benefit each group of comparable businesses.

C. Developing a comprehensive, web-based clearinghouse of resources most needed by the Information Processing industry.

Working with the Central California Society for Information Management and the Fresno County Workforce Investment Board, information processing industry leadership will undertake the development of a web-based clearinghouse of industry resources. The effort will involve cataloging and developing databases of information in three main categories:

- ***Information Technology Training Capacity and Career Ladders in the Fresno Region:*** This section of the web clearinghouse will catalog all of the available training programs for IT-related occupations in the region offered by both for-profit, private vocational training programs, as well as public education systems. The training programs will be cataloged according to the specific career ladders for information technology and information processing-related jobs in the Region. Both degree/certificate-granting and non-degree/certificate granting programs will be included. Length of program, application processes and deadlines, fees, space availability, training objectives, and occupations targeted by each training program will be included in the database. The primary purpose of this section of the web clearinghouse will be to promote careers in information technology by making training resources readily and easily accessible to the labor force. It will also serve as a simple, one-stop source of information for incumbent employees in the industry looking to upgrade their skills.
- ***Baseline Inventory of Technology Infrastructure Available in the Fresno Region:*** To make easy the expansion of information processing businesses in the Region and to better attract outside entities, a baseline inventory of available technology infrastructure will be provided on the web clearinghouse. Envisioned as a GIS-based system, businesses will be able to enter address-specific

information into the site and quickly determine what infrastructure is already in place to meet their needs, contact information for all vendors providing service to that area and general cost information for services.

- ***Clearinghouse of Information Technology Jobs:*** This section of the web clearinghouse is envisioned as the “Monster.com” for Fresno Area information technology jobs and will help the information processing industry more quickly gain access to local, qualified job applicants. It will also raise the profile of the information technology industry in the Region, retain local talent and help change the “employment identity” of the Fresno Area.

D. Working with incumbent service providers and community organizations to continually ensure the competitiveness of technology infrastructure in the region for residential and commercial users, including the advancement of “pilot projects” in the Region.

Since high-speed, pervasive technology infrastructure is critically important to the information processing cluster, the industry will work collaboratively with other community organizations to help ensure the adoption of available high-speed Internet services and to promote innovative pilot projects in order to constantly upgrade and advance the Fresno Area’s infrastructure. The Information Processing Industry Partnership will advocate for and “push the envelope” of available services in the region.

E. Work with the Economic Development Corporation Serving Fresno County to recruit additional information processing industry to the Fresno Region.

IV. One Year Implementation Plan

A. One Year Goals

- Establish the Information Processing Industry Partnership as a “working group” of the Central California Society for Information Management by November 30, 2003.
- Establish partnership with the Fresno County Workforce Investment Board to jointly pursue implementation of the action plan.
- Convene discussion and focus groups of as many comparable businesses as possible (call centers, third party administrators, and other comparable businesses to be identified)
- Launch the Information Processing Industry Partnership with 85% of the back office/call center operations (both governmental and private) in the Region participating.

- Complete the planning and project scoping for the web clearinghouse by January 31, 2004.
- Complete fundraising to build the web clearinghouse by July 31, 2004.
- Complete and populate the comprehensive web clearinghouse by December 31, 2004.
- Meet average job creation projections established by the Regional Jobs Initiative (i.e. approximately 1200 new jobs).

B. Next Steps

- Circulate the draft action plan to industry leaders and major stakeholders for further input.
 - Timeline: Solicit final feedback by September 30, 2003.
 - *Responsibility: RJI Leadership*
- Establish initial industry champions and leadership group.
 - Timeline: Recruit industry leadership group and convene initial meeting by November 30, 2003.
 - *Responsibility: RJI Leadership*
- Appoint industry members to serve on the Information Processing Academy Industry Advisory Board.
 - Timeline: November 30, 2003.
 - *Responsibility: Industry Leadership*
- Organize the industry leadership group into three subcommittees according to the three main categories of the web clearinghouse. Develop the specifications of each component of the web clearinghouse, including financial requirements.
 - Timeline: November 30, 2003 – January 31, 2004.
 - *Responsibility: Industry Leadership Group*
- Develop and execute fundraising plan for the web clearinghouse.
 - Timeline: Complete fundraising by July 31, 2004.
 - *Responsibility: Industry Leadership Group, Office of Community and Economic Development at Fresno State*
- Oversee development of clearinghouse and launch site.
 - Timeline: December 31, 2004.
 - *Responsibility: Industry Leadership Group.*

V. Job Creation Expectations from this Initiative:

The expected result of this initiative is to increase the region's annual compound growth rate in information processing jobs from 3.10% in the period 1992-2002 to 5.8% in the period 2004-2008. For the Fresno MSA, this would result in 3,000

additional direct jobs over the five-year period, 2004-2008. Using a conservative multiplier effect of 1.33 on these direct jobs, an additional 3,990 jobs would be created.

Projected Y-E 2003 Information Processing Employment:	18,800
Historical annual compound growth rate:	3.10%
Extrapolated New Jobs, Y-E 2008	3,100
Target annual compound growth rate	5.8%
Incremental Direct Jobs, Y-E 2008	3,000
Total Information Processing Jobs, Y-E 2008	24,900
5-year growth in Information Processing jobs:	32.5%
Incremental Indirect Jobs (1.33 multiplier)	4,000
 Total RJI generated incremental jobs: 3000 + 4000 =	 7,000

VI. Principal Resource Requirements

- Technology-friendly industrial parks such as the Clovis Research and Technology Park, as well as infill office space with upgraded technical capacity to accommodate the projected job growth (see physical infrastructure section).
- Gigabit Internet connectivity (see Technology Infrastructure section).
- Information Processing Academy (see Workforce Readiness and Development section) and coordination of training providers.
- Streamlining processes and paperwork when hiring through government programs and for tax and other incentives; full-scale e-government initiative (see Customer Service section).
- Marketing and communications support to promote the web clearinghouse and to promote the Fresno Region in order to attract more information processing businesses.
- Funding for development of web clearinghouse (approximately \$100,000 by July 31, 2004).

VII. Initiative Champions

- Lynne Bowness, City of Fresno
- Brenda Cahn
- Central California Society for Information Management
- Cynthia Downing, Professional Exchange Services Corporation
- Mike Dozier, City of Clovis
- Ian Mearns

- Prudence Zalewski, Lance-Kashian & Co.
- Others to be determined