

**TIIAP FY 1999**  
**Project Narrative**

Coastal Economic Development Corp.

Grant # 23-60-99025  
Public Services  
Bath, Maine

TIIAP APPLICATION  
COASTAL ECONOMIC DEVELOPMENT CORPORATION  
INTEGRATED COMMUNITY ACTION PROGRAM SYSTEM NETWORK  
EXECUTIVE SUMMARY

This is a project intended for the Public Services primary application area and Community Networking as a secondary application area. The goal is to provide low-income residents of rural counties in Maine with a comprehensive, seamless service system, coordinating the many vertical programs offered by the partner Community Action Agencies through use of a common intake, eligibility determination, risk assessment, case management, and database program (ICAPS), utilizing the State's wide area network. The ICAPS program was developed and piloted by Coastal Economic Development in collaboration with the Maine Department of Labor. The project will further develop ICAPS to include modules serving each of the partner agencies' programs. The project will fully field test and implement the ICAPS system, which is adaptable for use by other social service providers. The partnership itself will create a replicable model for collaboration between State governments and Community Action Agencies, which serve nearly every community in the nation. Client services, partnership model, ICAPS, and deployment technology will be evaluated. Three CAAs with 16 sites in nine rural Maine counties will be served. The project will utilize the State TCP/IP WAN, using a Progress/UNIX database, and Citrix thin client technology to provide online access to ICAPS at all offices of the partner agencies. The three private, non-profit, community-based CAA partners are the applicant, Coastal Economic Development; Western Maine Community Action; and the Aroostook Community Action Program. The Maine Department of Labor Office of Information Processing is the fourth partner, providing technical resources and expertise.

## PROJECT DEFINITION

### *Problem Definition:*

Families with low incomes experience a range of problems which are the causes and/or the results of their impoverishment. Community Action Agencies like CED, WMCA, and ACAP, assist these families to address and overcome these problems by providing a wide range of services and by coordinating the services of other area providers. Within each agency, however, each program has different eligibility and information requirements, depending on the funding source. This means that typical applicants who need to utilize multiple program resources to fully address their needs must meet with several different staff members, sometimes at different locations, to fill out multiple applications, a frustrating and time-consuming process. In addition, client's applying for one program may have needs for other services which may not be discovered or assessed in the intake process of the program for which they are applying. When clients move from one CAA service area to another, forms must be filled out again, and continuity of services is frequently lost. Multiple applications also mean that information on clients the agency is serving is dispersed on different forms in various program offices. This makes it difficult for agency staff to coordinate the comprehensive services that clients need, and for case managers to track their progress towards meeting self-sufficiency goals. Community Action Agencies, in order to manage and plan their programs also need cumulative information about the needs of low-income families in their service areas and about the effectiveness of the services they provide. Although agencies amass a wealth of data about their clients, the lack of a central database for housing and accessing this information makes accurately assessing the unique needs of low-income families in a service area difficult, and it hampers the planning, evaluation, and adjustment of services necessary to ensure that community needs are being served effectively.

### *Proposed Solution:*

Working in partnership with the Maine Department of Labor's Office of Information Processing, Coastal Economic Development (CED) has developed over the last two years a comprehensive, graphical user interface software program (ICAPS) to enable it to provide: a central intake for all departments; automated analysis tools, including, income calculation, program eligibility determination and family relationships; the ability to share common client information across programs within defined security settings; a comprehensive, automated assessment of client strengths, risks and needs; full case management referral, case-level notes, individual service and referral tracking and record keeping capabilities; automated assessment of incremental client progress within individual programs and assessment of cross-program progress towards the overall goal of family self-sufficiency; and automated cumulation, reporting, and analysis of client characteristics, incremental client progress, and program outcome data for use in community needs analysis and program planning. **Diagrams illustrating the ICAPS architecture and information flow, along with program screens, are provided on pages 3-10 of the Appendix.** The partnership among CED, Western Maine Community Action, and Aroostook Community Action Program will, working with the technical assistance of the Maine Department of Labor, expand the ICAPS program to include all vertical programs and implement the system throughout their offices and programs, using the State of Maine WAN. **Descriptions of the project partners are provided on pages 1 and 2 of the Appendix.**

**Outcomes:** Increased convenience and more efficient, effective service for clients; more accurate assessment of client strengths and needs; reduced staff time for intake, eligibility determination, assessment, and client tracking; more accurate tracking of service referrals and provision; more accurate tracking of client progress toward goals; faster and more accurate real time cumulation of client demographics and program service and outcome data; enhanced program reporting, community needs assessment, and service analysis and planning abilities; provision of more reliable data to current and potential funding sources; a fully user-tested, reliable, productive, flexible and scalable software and database program for social service agencies; a scalable network model for communication within and among social service agencies; a model for partnership among social service agencies and between these agencies and state government.

## **EVALUATION**

### ***Evaluation Questions:***

- Has the Integrated Community Action Program System (ICAPS) provided increased convenience, efficiency and improved customer service for partnership clients?
- Has the ICAPS improved client assessment accuracy?
- Has the ICAPS reduced client processing staff time?
- Does the ICAPS provide more accurate client tracking?
- Does the ICAPS provide enhanced program reporting capacity?
- Has the ICAPS addressed the common problem of providing a holistic approach to customer service in the context of the delivery of multiple, vertical programs?
- Does the interconnectivity between State government and community-based programs increase and improve customer service for partnership clients?
- Are benefits to the community-based programs derived through the use of a system that is compatible with the State's WAN architecture both in technology and policy terms?
- How "user friendly" is the ICAPS design to provide system behavior that is user-configurable to meet the specific goals and preferences of the partner community-based agencies?
- Does the ICAPS demonstrate a suitable model for other social service agencies?
- Does the partnership demonstrate a suitable model for other social service agencies and government departments?

### ***Evaluation Strategy:***

Pre- and post-ICAPS use surveys will be developed and administered to selected agency intake staff workers and family development case managers in each of the partnering agencies. Questions regarding pre-ICAPS processes and procedures addressing the areas mentioned in the above "Evaluation Questions" section will be included to measure system components before introduction of the ICAPS. After an appropriate period of on-line usage of the ICAPS, a post-ICAPS survey covering the same topics will be administered to measure changes in the objective areas. An assessment of the information system design before and after the introduction of the ICAPS will be conducted in all partnering agencies. A satisfaction-range-based format will be used to survey management.

***Data Collection:***

Several of the topics referred to in the preceding “Evaluation Questions” section cover areas that can be quantitatively measured. For the average client, the number of interviews required, number of locations required to visit, number of forms filled out, amount of time spent, repeat visits, number of reporting errors, etc. will be included in and evaluated using the pre- and post-ICAPS surveys. Qualitative analysis will be employed in other client satisfaction areas with assessment using standard customer service satisfaction survey components. For topics addressing model transferability issues, interviews with partnering agency management will be conducted.

***Data Analysis:***

With the application of pre- and post-ICAPS survey instruments to measure the quantitative elements described above, simple comparisons can be made to analyze the differences which are apparent. Increased performance will be associated with common sense indicators, such as decreased waiting times, less interviews required, fewer forms filled out, etc. plotted against comparable levels of benefits received. Qualitative assessment will provide analysis of movement within ranges of satisfaction for the topic areas identified.

***Evaluator:***

Evaluation activities will be administered by the Maine Health Information Center (MHIC) located in Manchester, Maine. Principal contact will be Vaikko P. Allen, Sr., MBA. The MHIC has been in operation for over 23 years and has conducted numerous research and evaluation studies. Mr. Allen has previously evaluated a successful TIIAP funded project in 1995-1997. **See Appendix, pages 11 and 12.**

***Budget:***

Adequate release time will be provided partnering agency staff and management to participate in surveys and interviews necessary to fulfill the above described evaluation plan. Contracted amount for Maine Health Information Center services will be \$38,000, @ \$500/day for 76 days.

**SIGNIFICANCE**

***Innovation***

- Public-Private Partnership

This project will be a unique collaboration among three private, non-profit, community-based, rural Community Action Agencies, CED, WMCA, and ACAP, and a major State agency, the Maine Department of Labor. The project will utilize the technical expertise and resources of MDOL and the State WAN to further develop and fully deploy a comprehensive intake, assessment, and case management system that will provide improved, coordinated assistance to low-income families and an integrated information, reporting and planning capability for the agencies and the State.

- Cross-program information sharing and seamless service delivery

As contractors for the provision of various State departments’ services, community action agencies are perfectly positioned to overcome the organizational barriers which preclude State government from operating seamlessly from the service recipient’s point of view. A community action agency may be viewed as a microcosm of State government and may serve as a “proof of concept” of coordinated service delivery. ICAPS enables the community action agency to

overcome the vertical program delivery structure imposed by its funding sources and to focus on the service recipient's needs independent of program structure and regulatory guidelines.

- On-line communication across wide area network

A wide area network infrastructure links physically separate offices within community action agency and between community action agencies and the State. At the present time, CAP offices are connected by 56 KBPS DDSII

- "Thin client" technology

A MS-Windows 4.0 server running MS Terminal Server and Citrix MetaFrame provides access from remote sites while minimizing wide area network traffic and optimizing security and performance. This configuration requires minimal resources at the PC level, leverages computing power of the server, provides a secure environment, and simplifies application maintenance and remote administration.

- Graphical User Interface

A standard MS-Windows interface provides the same "look and feel" as other desktop applications, creating a simpler environment for ICAPS users. The client/server environment provides for a seamless user interface even though the system interacts with various databases within the community action agency and State government.

### ***Model Project***

- Model for partnership between State government infrastructure and community-based programs;
- Model for interconnectivity between State government and community-based programs;
- Addresses common problem of holistic approach to customer service in the context of multiple, vertical program delivery structure;
- Table-driven design – system behavior is user-configurable to meet specific agency's goals and preferences

## **PROJECT FEASIBILITY**

### ***Technical Approach:***

- Open systems / Interoperability: The system uses Intel-based architecture that is compatible with existing State government systems, including operating systems, network architecture, database, and programming language.
- The system was developed using tools recognized as State standards.
- The system is compatible with the State's WAN architecture, both in technology and policy terms.
- "Thin client" / Scalability means that the addition of new remote offices or agencies does not increase system complexity and may be accomplished with minimal infrastructure modifications at the remote site.
- The maintenance of the system is ensured through the commitment of a large State agency and linkages with State systems. Regular upgrades and other system maintenance and administration tasks are required by the connection of ICAPS to these systems.
- **A full description of the technical approach is provided in the Appendix on pages 13-18.**

***Applicant Qualifications:***

Senior staff of the Maine Department of Labor, Office of Information Processing will provide technical expertise for the project. **Fuller descriptions of their qualifications along with those of other key project staff are included in the Appendix on pages 19-21:**

Steven C. Campana, Information Processing Director, Maine DOL. Directs a staff of 54 employees for the Office of Information Processing within the Department of Labor. The four components of Information Processing are Application Development (Small Systems), Application Development (Large Systems), Network Services, and Operations

Catherine Squires, Systems Group Manager, Maine Department of Labor. Manages group of twelve application developers, specializing in large-scale, client-server, distributed, relational database systems. This group is responsible for all State and Federal reporting requirements for the Bureau of Employment Services, the Bureau of Rehabilitation Services, and the Bureau of Labor Standards within the Department of Labor statewide infrastructure.

Sheldon Bird, Systems Software Section Supervisor, Maine DOL. Manages group of eleven systems support specialists, supporting over 1,000 users in 35 offices statewide. Responsibilities include networks, some fifty UNIX and NT servers, help desk, open systems research and design, email, and client/server infrastructure, since 1991.

***Budget, Implementation Schedule, and Timeline:***

Project Budget	Federal	Match
Personnel	\$177,858	\$823,528
Fringe	64,876	225,168
Contractual	30,000	8,000
Other	0	280,785
Supplies	0	3,750
Travel	1,524	17,991
Equipment	140,126	100,976
Indirect	28,098	155,391
<b>TOTAL</b>	<b>\$442,474</b>	<b>\$1,615,589</b>

**A project implementation schedule timeline is provided on page 22 of the Appendix.**

***Sustainability:***

Ongoing expenses beyond the term of the TIIAP funding will include support for continuing program software development, hardware repair and upgrades, network line costs, and end user support. The participating agencies will include funding for these anticipated costs in the annual budgets for each program that uses the ICAPS software and network.

**COMMUNITY INVOLVEMENT**

***Partnerships:***

This project is a partnership among three Community Action Agencies and the Maine Department of Labor Office of Information Processing.

- Coastal Economic Development (CED), a Community Action Agency serving five rural counties in mid-coast Maine is the lead agency in this project. CED has previously

contracted with Maine DOL to develop initial versions of the ICAPS case management software which CED has deployed during the past year on a pilot basis. CED will deploy the ICAPS system in each of its offices, using the State WAN.

- the Maine Department of Labor Office of Information Processing will provide additional software development to extend ICAPS to all the programs which the CAAs offer, and it will provide software support and access to and maintenance of the system through the State WAN.
- Western Maine Community Action (WMCA) provides services in three rural western Maine counties, and it will deploy the ICAPS system in each of its offices, using the State WAN.
- Aroostook Community Action Program (ACAP) serves rural Aroostook County in northern Maine, and it will deploy the ICAPS system in each of its offices, using the State WAN.

CED and MDOL have collaborated over the past two years to develop and initially deploy the ICAPS system. The three Community Action Agencies work cooperatively to provide and coordinate similar services in their delivery areas. **Letters of commitment from the partners are appended to this application following directly after the Project Narrative.**

***Support for End Users:***

Support for end users will be provided by staff of the MDOL Office of Information Processing, the CED Network Administrator, the WMCA Information Systems Coordinator, and the ACAP Special Projects Manager. **This support will be coordinated through the ICAPS Policy Group and the ICAPS Technical Advisory Group, described on page 23 and 24 of the Appendix.** End user support will consist of further development of ICAPS modules to accommodate additional services, software updates and fixes, help desk support, and hardware and network maintenance. Training for end users will be provided by the MDOL OIP Systems Group Manager and specially trained key personnel in each user agency.

***Privacy:*** Network privacy is guaranteed by strict State of Maine access policies, secure firewall, and other technology. Access within agencies to information in the ICAPS system is controlled by key administrative staff. **A thorough description of system security is provided in the Appendix on page 25.**

## **REDUCING DISPARITIES**

***Description and documentation of the disparities:***

The areas served by the Community Action partners in this project all serve rural districts of the State of Maine. Western Maine Community Action provides its services to low income people living in a tri-county region roughly the size of the state of Connecticut. Distance and time are barriers for a population that is 85% rural and lacks adequate transportation infrastructure. Aroostook County, encompassing 6,543 square miles (an area larger than the states of Connecticut and Rhode Island combined), is Maine's northernmost county and the largest county east of the Mississippi. Even in somewhat more densely populated areas along the coast, such as Sagadahoc County in CED's service area, clients must travel long distances to obtain services. For example, to apply for AFDC, Food Stamps or other programs provided by the Maine Department of Human Services, an applicant may need to travel to Rockland or Augusta, a round trip of as much as 130 miles in a region with virtually no public transportation. **A demographic profile and map of the areas to be served by the are included in the Appendix on pages 26 and 27.**

***Strategies for overcoming barriers to access:***

The ICAPS system will allow the three agencies to streamline service delivery to customers, providing eligibility determination and most services at all offices, and it offers the potential to link information about programs to remote areas of our service areas. For example, home visitors and case managers will be able to do program intake for all programs when they visit rurally isolated families by using a laptop modem connection to the ICAPS system. In any given year, the Aroostook County Action Program administers 40 to 50 contracts providing health and human services to citizens of Aroostook County. Because of the vastness of the County and the number of services available through ACAP, using a central intake process will greatly enhance customer service and provide easier accessibility for those seeking services. For example, a client presenting at ACAP's Fort Kent office (53 miles north of ACAP's main offices) requesting heating assistance could also complete an initial assessment of needs for other human services. Once the heating application is completed, client information including income, number in household, etc., could be utilized to make a preliminary determination of other services available to the client, not only through ACAP, but with other human service providers in the County. Appropriate referrals, appointments and follow-up meetings could be scheduled as a result of this one intake session.

**DOCUMENTATION AND DISSEMINATION**

***Documentation Plan:***

The ICAPS Project documentation plan includes gathering both quantitative and qualitative information. The documentation will be used by project partners in the ongoing planning and implementation process, by the third party evaluator to measure and assess both process and outcome measures, and in the development of information for dissemination to interested parties. The information from the ICAPS Policy Group and the Technical Design Advisory Group will provide essential qualitative information for use in the Process Evaluation component of the project. Meeting reports of both the ICAPS Policy Group and the Technical Design Advisory Group will be maintained following a pre-determined format (see Project Implementation Partnership Coordination). The information documented will include: attendees, system-wide problem identification/issues to be addressed, system-wide problems/issues resolved, agency-specific problem identification/issues to be addressed, agency-specific problems/issues resolved, lessons learned, decisions, and recommendations for changes. The Policy Group will also be responsible for documenting discussions and decisions about private/public partnership issues and policy questions as they arise. The information gathered through the decision-making and implementation processes will be included in a quarterly report and provided to the project evaluator.

Quantitative documentation will include data and reports generated through the ICAPS system to measure improved accuracy of client assessment, reduced processing time, more accurate client tracking, and enhance program reporting. In addition, pre- and post-ICAPS use surveys will be developed and administered to selected agency intake staff workers and family development case managers in each of the partnering agencies. Questions regarding pre-ICAPS processes and procedures addressing the areas mentioned in the above "Evaluation Questions" section will be included to measure system components before and after the introduction of the ICAPS.

***Information Dissemination Plan:***

Information from the ICAPS project will be disseminated throughout the project to project partners for use in planning. At the culmination of the project, CED will take the lead in disseminating information at state, regional, and national professional conferences. Specifically, presentations will be made at the National Association of Community Action Agencies and the Maine Association of Community Action Agencies annual conferences. The results of the project will also be shared with the Steering Committee of the Governor's Initiative on Integrated Case Management; a two year old project initiated by Maine Governor Angus King to pilot integrated service delivery between and among Maine's Departments of Human Services, Labor, Education, Public Safety, Mental Health, and Corrections and private non-profit human service agencies.