

Project Purpose

The Problem - As in communities throughout the nation, access to workforce development, housing, health, and human services in Indianapolis is often a fragmented, repetitive, and disappointing maze for both providers and consumers. Frontline workers tend to provide what is easily available as opposed to what is needed. Opportunities for effective interventions are lost because the constellation of services and eligibility requirements are opaque to workers. Administrators lack tools to document service needs, milestones, and accomplishments. While existing agency information systems (legacy systems) have been hard-won through extensive investments, these hold little collaboration and integration abilities. This contributes to the often frustrating and spotty nature of service delivery to the people who need it the most.

The Mayor of Indianapolis has pledged to make comprehensive, unified services a top priority and to ensure that providers and clients have access to the necessary tools, noting: *“We are in the age of advanced information technology, yet Indianapolis’ community, government, faith-based, and for-profit human service providers lack an online information, referral and tracking network. They are forced to use manual systems for keeping up to date on the hundreds of programs and millions of dollars available to families and children. We cannot afford to miss the opportunity to put resources to work for our families and children because of outdated systems.”*

To that end, planning began in 1998 and the Central Indiana Community Network was formed in January 2000, spearheaded by the Indianapolis Private Industry Council (IPIC). CICN is a collaboration of agencies in Central Indiana whose **vision** is *to create an automated, integrated, online human service network that will share client information and referrals for the purpose of helping families obtain better, faster, more informed services.*

Collectively, these agencies serve the 1.6 million residents of Central Indiana, where 41,220 people (5% of the 821,450 labor force) are unemployed, 15,000 are homeless each year, and 122,677 people live in poverty. Central Indiana includes eight counties: Marion, Hancock, Hendricks, Hamilton, Shelby, Boone, Morgan, and Johnson.

With local foundation funding, IPIC hired consultants to develop a CICN plan. CICN members concurred that their agencies would be unwilling to add yet another client management system to already existing and established systems. Thus, they recommended a network that allowed current/existing systems to communicate and share consumer data through a database warehouse that could combine, organize and track the fragmented consumer information at each agency.

The Proposed Solution - CICN will collect, update, collaborate, and share human service, housing, health, and workforce development data in a secure environment that is accessed through a common, easy to use, world wide web-style user interface. CICN leverages the best of today’s web browser-based and Internet technology, while maintaining a scalable and open architecture capable of using the innovations of tomorrow to facilitate the coordination of a unified inter-agency consumer service plan. CICN has the potential for defining the human services connectivity “standard” for Central Indiana, as well as other interested communities nationwide.

In November 2001, BitWise Solutions, Inc. was retained by IPIC to provide project management and implement CICN. A project charter was developed and functionality requirements were defined beyond the original plan. Work on the CICN platform itself began in March 2002.

During the Pilot Phase that will end by September 30, 2003, connections have been/will be completed **for five pilot** agencies:

1. Keys to Work (a workforce development agency with no case management system, therefore opting to use a built-in CICN system to track its 700 clients).
2. Horizon House (a homeless provider using nationally marketed Client Track, a case management system currently used by 23 local homeless providers and potentially as many as 86 agencies in Central Indiana).
3. Partners in Housing (a housing/community development agency also using Client Track).
4. Indianapolis Housing Agency (a public housing agency serving 10,000 residents with housing needs and using a custom case management system).
5. Goodwill Industries (a regional workforce development and human services agency using a custom case management system).

Already, partners have learned that many agencies do not have electronic case management systems at all; consequently CICN has developed a (previously unanticipated) built-in case management system for use by these agencies. This enhancement vastly increases the value added by CICN, allows substantial cost savings for agencies that would otherwise have to purchase a case management system, and increases the number of agencies that can benefit from CICN.

CICN system features include: client profile and demographics; address history; employment history; service/encounter history; referral to another agency; recording of referral outcome; messaging between agencies; and a basic case management tool (for agencies without one). *A demonstration of the CICN system is available at www.cicn.org and copies of screens from the demonstration are **appended**.*

Realistic Measurable Outcomes

The success of the CICN project can be measured against the following service objectives: ability to display program and benefit history at the individual level; ability to access a chronological history of services received across programs; ability to access on-line help function to support comprehensive screenings and referrals; ability to provide outcomes tracking with indicators and benchmarks of client progress; and ability to identify barriers to progress.

Initial, pilot testing and external evaluation of the system will be completed by September 2003. Already the system is beginning to demonstrate its feasibility and utility for pilot agencies. TOP funding is requested for Phase II “last mile” connectivity to new users (at least 20 anchor and 14 affiliate agencies), end-user training and support, marketing, dissemination and evaluation, to ensure that the system is marketable/replicable for a wide array of potential users nationwide.

When the system is complete, families with diverse needs will have electronically coordinated access to a comprehensive array of services: emergency assistance, quality affordable child care, remedial education, health care, substance abuse treatment, social services, assessments, case management, legal counseling, mental health services, domestic violence assistance, housing

assistance, work-based employer-centered job training, transportation assistance, job readiness, placement and retention services, recreational/cultural activities, and nutrition programs.

A team from Indiana University School of Social Work will evaluate the project and assist in disseminating findings. Specific outcomes/benefits from the CICN project can be anticipated for three principle cohorts of stakeholders: consumers, workers, and administrators.

For **consumers**, a secure shared web environment should: result in more responsive customer service; reduce travel to multiple intake sites and reduce waiting time; promote one-stop access to multiple services via screens and referrals; eliminate the demeaning retelling of personal stories and repeated information; promote faster service plan development and assistance. For **professionals**, the ability to exchange data with other agencies and colleagues should produce: more efficient use of time (less time collecting data and more time with clients); better understanding of regional resources and services within the community; overall improvements in benefit counseling and case management; a community-wide referral tool, and the ability to follow client progress and identify barriers. For **administrators**, the CICN system should: promote better service coordination; reduce costs from unnecessary service duplication; preserve legacy systems and minimize future investments; capture timely information on consumer and worker outcomes; facilitate comprehensive region-wide planning and resource allocation; and provide cost effective access to automated case management where none exists.

Innovation

Nothing of this scale had ever been attempted in the human service infrastructure of Central Indiana – or nationally. Consequently, a significant portion of the planning process was devoted to best practices research; planners completed extensive reviews of 25 similar efforts around the nation. The projects most similar to CICN are in Atlanta, New Jersey, and Massachusetts, but none parallels CICN's technical approach and none includes the diversity of practitioners and client groups that CICN offers.

Research completed by BitWise and IU evaluators in April 2003 confirms that the most similar system is Pathways in Atlanta, a web-based collaboration among homeless serving agencies. But CICN is significantly different in that it is not 100% web-based and does not assume that participating agencies will discard their existing case management systems, change their workflow, alter reporting methods or retrain staff. CICN differs also in that it transcends homeless serving agencies to include a wider array of agencies spanning the entire human service system.

CICN is innovative in using a web driven warehouse that captures data from legacy systems rather than replacing them. It will transform the relationships among participating agencies and improve services for thousands of disadvantaged people and displaced workers annually in Central Indiana.

Community Involvement

Partnerships and Steps to Involve the Community - CICN has entailed broad community participation since its inception. Preliminary discussions about a CICN began in 1998 and 1999. Then in CY 2000, at the urging of the Mayor's Office and with planning grants from the Central

Indiana Community Foundation, local stakeholders convened an Advisory Council, developed a 138-page Technical Blueprint, and began to refine implementation plans and funding strategies.

The planning process documented the needs of clients, front-line workers/users, and agency administrators through focus groups, customer interviews, best practices research, an IT inventory, and confidentiality research. Interviews with clients/consumers confirmed that 94% would allow agencies to share information about them if it would improve the quality of services received. CICN next raised funding from local sources including the Lilly Endowment, Nina Mason Pulliam Trust, Indianapolis Foundation, United Way Technology Fund, City of Indianapolis, Joyce Foundation, Ameritech/SBC, IPIC and BitWise to begin the pilot phase of the project.

The **CICN Advisory Council** will oversee implementation of the CICN project during the grant period. Participants include: Indianapolis Private Industry Council (managing/fiscal agent), BitWise Solutions (project manager /developer), NPower Indiana (user training/ support), Indiana University School of Social Work (evaluator), City of Indianapolis, Indianapolis Housing Agency, Domestic Violence Network, Salvation Army, Community Centers of Indianapolis, United Way of Central Indiana, Coalition of Homelessness Intervention and Prevention, Information and Referral Network, Goodwill Industries of Central Indiana, Central Indiana Community Foundation, Keys to Work Inc., Indiana Family and Social Services Administration, front-line case workers and clients.

CICN was designed with **end users** in mind. Because it does not replace current case management systems, it does not require extensive retraining, changes in workflow or reporting. The system is simple to use, requiring only a few hours of training. Plans for outreach/marketing, user group meetings, an electronic feedback loop, helpline, and user training are described in other sections.

Evaluation

Evaluators - Indiana University School of Social Work will evaluate the project. Dr. Robert Vernon and Dr. Philip Ouellette will lead the evaluation team, with support from graduate and undergraduate students. Dr. Vernon holds a research doctorate in Urban, Technological and Environmental Planning from the University of Michigan. Dr. Ouellette holds a research doctorate in Educational Psychology. Members of the independent evaluation team will participate on the project Advisory Council, providing continuous feedback to staff and leaders.

Key Evaluation Questions:

Three key questions are possible at this juncture in the project:

1. How effective is the CICN system at integrating human, social, and work development delivery systems in Indianapolis?
2. Does a technology based integrated system of care enhance consumer perceptions about access to needed services and improved client outcomes?
3. What are the necessary community linkages, agency roles, and processes for creating a technology based integrated system of care for clients in need in Indianapolis? What obstacles have to be overcome?

Strategy, Data Collection and Data Analysis - Questions one and two are outcomes-based and require summative evaluation strategies. For example, question one addresses CICN system effectiveness. This can be assessed through questionnaires and interviews with administrators, workers, and consumers about improvements in travel times, eligibility resolutions, and case closure rates. Data from professionals can be gathered largely online while consumer-based information will require interviews. Consumer perceptions about system benefits, question two, can be assessed through face-to-face questionnaires and interviews. When possible, a control group of similar consumers who receive services in a non-CICN environment will be evaluated in order to make comparative analyses possible. Alternatively, available data from non-CICN cases will be examined to compare case closure rates and other measures of program success. Question three addresses planning and dissemination issues. This part of the evaluation can be undertaken through interviews with key personnel responsible for critical tasks within the agencies.

The proposed CICN system is being implemented in five phases: conceptual design (complete), system design (complete), system development (nearing completion), system deployment, and system support. Evaluation of remaining phases is outlined below:

Phase:	Evaluation Tasks	Methods	Milestones
System Development	Questions and measures refined and prioritized by all stakeholders.	Online and face to face focus groups.	Initial data collection plans in place for all stakeholders: Measurable outcome questions tested for reliability and validity.
System Deployment	Initial and ongoing gathering of data.	Online and face to face gathering of data.	Data analysis plans in place: Data collected from project and controls, entered into databases, initial analyses.
System Support	Data analysis	Quantitative and qualitative methods.	Completion and dissemination of project report.

Both qualitative and quantitative methodologies will be used. Quantitative analysis will be predominantly descriptive and qualitative analysis will largely be interpretive. When appropriate, electronic assists such as web-mediated and listserv-mediated methods for gathering data will be implemented. Interim and final reports will be completed annually.

Protection of Human Subjects

The project will be thoroughly reviewed by and subject to the approval of the Indiana University Institutional Review Board regarding the treatment and rights of human subjects.

Dissemination/Diffusion Potential

Dissemination of the evaluation report will take place through traditional and non-traditional channels. This may include web-based distribution plus conference presentations, journal articles, and other approaches to assure that the results will be shared with the industry in a timely way.

The need to coordinate workforce development, housing, health and other human services within communities is universal. The CICN approach is cost effective, convenient for users, and easy to replicate, because it enables participating agencies to continue using their current legacy case management systems while also drawing upon an electronic warehouse of shared information; agencies lacking case management systems will be given access to a built-in CICN system. The CICN approach minimizes the expense to agencies, minimizes inconvenience for workers, and maximizes benefits to consumers. It is particularly suitable for communities whose human service providers currently use a variety of electronic case management systems.

IPIC/BitWise have developed a marketing plan to recruit local users and to disseminate information about CICN to a national audience of potential users. Extensive information already is available and will be further disseminated as follows:

- BitWise Solutions is using a web-based collaborative management tool called Bravelo™ (www.bravelo.bitwisesolutions.com) to track the CICN project and to communicate with managers, users, stakeholders, and funders.
- A monthly newsletter highlights progress and keeps the community informed about key developments relating to CICN.
- A website www.cicn.org will be complete before September 2003 so that visitors can “see” a demonstration of the system and learn how to participate.
- The CICN web site will be linked to other websites for greater outreach.
- CICN updates will be published in Information and Referral Network Electronic Newsletters with a link to the CICN demonstration site.
- Testimonials from CICN users will be documented on the CICN website.
- CICN marketing materials (hard copies) and a marketing campaign are being developed for local and national use.
- A CICN policies and procedures manual is under development and will be posted on Bravelo and the CICN website. (attached)
- Evaluation findings will be posted on the Bravelo system and CICN website.
- Evaluators and project staff will travel to national conferences/workshops (4 trips per year) to present CICN to communities potentially interested in replication.

*Already CICN partners have begun discussing CICN replication with another city (**Charlotte North Carolina**). In addition, because of CICN’s use of Visual Studio.NET and XML Web Services, **Microsoft Corporation** has expressed interest in submitting CICN for review as a case study by its Visual Studio.NET Product Group. Their letters are appended.*

Project Feasibility

Technical Approach

Establishment of the CICN system calls for an Internet browser-based, product neutral solution that allows legacy systems currently in use to communicate, collect, and share consumer data over a secured connection to the Internet via an encrypted web browser. The approaches previously considered and rejected entailed achieving agreement among participants to purchase, convert to, and use one common system. The CICN approach minimizes the expense to agencies, minimizes inconvenience for workers, and maximizes benefits to consumers. It is not intended to be a full client management system replacing existing systems; rather it is a tool allowing these systems to function together on a larger community-wide level. CICN is intended to allow organizations to share basic information concerning clients, assist in reducing duplication of services, allow for region-wide reporting, and result in more responsive customer service. During the pilot phase, systems were built to link five agencies thereby demonstrating project feasibility. Because some agencies have no electronic case management systems, CICN has added an optional case management feature not anticipated prior to pilot testing. CICN can be viewed at www.cicn.org.

The **technical architecture** for CICN includes the following features: enables participating organizations to use their existing PC/desktop platforms to the greatest degree possible; provides access to CICN through any Internet Service Provider; leverages the open architecture features offered by today’s leading technology firms; offers scalability to allow for growth not only in the

IPIC Proposal to TOP for CICN

number of participating organizations but also in the ability to add more functionality, features, and shared data; provides for a multi-tiered secure environment. **Appendix B** includes further information on the business, functional, and technical requirements driving the CICN architecture.

Project Implementation - CICN proposes to add at least 20 anchor and 14+ affiliated agencies over the next three years: at least ten (10) anchors in year one, five (5) in year two and five (5) in year three. Examples of “anchor” agencies and links that will add value to the system and enhance CICN marketability to other service sectors include:

Homeless agencies: 23 members of the Coalition for Homelessness Intervention and Prevention (CHIP) now using **Client Track**, plus 23 who are scheduled to start using Client Track soon and eventually all 86 CHIP members may link to CICN.

Community Centers of Indianapolis: 14 independently operated multi service centers providing an array of benefits ranging from employment assistance to child care, after school, food pantries, senior services and more. CCI agencies will use the **nationally marketed Social Solutions** case management system for their link to CICN.

Domestic Violence Network: 20 member agencies are developing a custom case management system and intend to use CICN on a read only basis (ensuring the safety of their clients) to check shelter bed availability, other services, and referrals.

Township Trustees: about 70 trustees in the region provide general emergency assistance and “poor relief” to low income and displaced persons; linking their discretionary benefit packages to other public/non-profit benefits will help bridge a traditionally isolated function.

Salvation Army: the largest provider of services to the homeless in Central Indiana, using its own case management system and committed to using CICN.

Information & Referral Network: The only comprehensive I&R provider in Central Indiana, receiving 50,000 calls per year and accredited by the Alliance of Information & Referral Systems will be linked to CICN.

Indiana Family and Social Services Administration (FSSA) and Indiana Office of Workforce Development have developed the **Help Indiana** system. A linkage to this system will enable CICN users to screen eligibility status for clients using public benefits such as unemployment, Medicaid, health care, food stamps, child care, TANF, housing, mental health, aged/disabled services, and more.

Health Agencies: CICN is in discussion stages with InteCare, a coalition of community mental health centers in Central Indiana, Noble Centers, and ICARE Connect, a system linking hospitals, all subject to HIPAA. It will include Medicaid data via the FSSA link.

Faith-Based and other **non-profit agencies** with and without existing case management systems.

Workforce Development Agencies: IPIC will promote use of CICN for the 30 agencies it funds through the Workforce Investment Act and Youth Employment Development Network.

*By the end of the three year period, the system will be built up to the point that its value will be clear to other potential users in Central Indiana and nationwide. Connections will have been built to **nationally prominent case management systems** such as Client Track and Social Solutions, so the cost of replicating a CICN-like network in other communities will be marginal.*

To ensure the widespread use of CICN, IPIC, Bitwise, Domestic Violence Network (ethics and confidentiality training) and NPower (an agency dedicated to bringing technology to non profits) will provide **support/training for end users** through outreach/marketing, user group meetings,

an electronic feedback loop, training, and helpline. Trainers will develop curriculum/materials early in the grant period and will conduct user training continuously. NPower will provide “help desk” support. A Users Group formed during the pilot phase will be expanded with a point person from each user agency to provide continuous feedback to system managers and the product vendor. An electronic feedback loop allows users to communicate problems, possible enhancements and testimonials.

During the 36-month grant period CICN will connect a core group of anchor and affiliate agencies to the system, refine connections, complete upgrades/system enhancements/links, support users, maintain the system, evaluate effectiveness, identify best practices/lessons learned, and market the system to other local agencies and to communities nationwide. **A detailed timetable is appended.**

Applicant Qualifications/Staff

The Indianapolis Private Industry Council (IPIC) has served as managing agency throughout the CICN planning and pilot phases, hiring contractors, serving as fiscal agent, and coordinating the CICN Advisory Council. IPIC coordinates employment and training services for Central Indiana as the Workforce Investment Board under the federal Workforce Investment Act. IPIC will continue to contract with consultants: BitWise Solutions Inc. to build last mile connectivity, refine/enhance the system, and market the system; NPower to assist BitWise and DVN with user training and support; and Indiana University School of Social Work to evaluate the project. Details on capabilities are provided in **Appendix A.**

Protecting Privacy and Security - The Advisory Council completed a thorough review of privacy rights and restrictions on disclosure for participating agencies, including government-funded assistance programs, industry-wide regulation, statutory privileges, professional practice acts, and ethical codes. Comprehensive privacy policies and procedures have been developed (including client consent/waiver forms, agency MOUs and site administrator designation) to protect information about agencies that use the system and their clients. These policies describe: what personally identifiable information will be collected; who will collect the information; how the information is used; security procedures in place to protect this information; compliance with HIPAA. Each agency has the opportunity to specify with whom and what data they are willing to share. Security precautions include: data transferred via SSL, data encryption, multi-tiered secure environment, and compliance with stringent HIPAA privacy rules. CICN project managers plan to audit agency compliance with confidentiality and user information requirements on a monthly basis.

Sustainability - While grant support is needed to build the system to the point that CICN can demonstrate its utility to potential users, the long-term sustainability plan assumes that new users can be added cost effectively and that participating agencies will contribute to the costs. Ongoing costs will be small compared to start-up; most of these costs will be borne by participating agencies within their internal IT budgets. During the first year, the grant partners will develop a user fee system to help support ongoing costs. User fees will be implemented in Year Two, once the added value of the CICN system has been demonstrated. A sliding fee scale is under consideration to fairly assess participants in proportion to their use of the system; rates may depend on the agency’s budget, number of clients, and extent to which the agency is a provider and/or consumer of information. System beneficiaries and local funders/foundations also will be approached to contribute to ongoing costs. Expansion and replication will be less costly than

start-up because connections will already be built to several major case management systems used nationwide.

Project Budget

Partners request a total of \$675,000 in federal funding over 36 months with \$676,990 in match. Federal funding will decline over time from \$307,064 in Year One to \$189,072 in Year Two and \$178,864 in Year Three, at which time the project should be self-sustaining. Costs for requested federal funding are allocated as follows: 17% management/indirect; 64% technical; 7% training/user support; 12% evaluation/dissemination/marketing. Budget details and narrative are appended.