

**Cleveland Housing Network**  
Cleveland, OH

Bringing Information Technology Home,  
an online system to build capacity for successful homeownership  
and financial strength among underserved low-income families

## 1. Project Purpose

**PROBLEM:** Low-income families have been largely excluded from the emerging technologies of the Internet and the mainstream US economy. The racial and socio-economic characteristics of this divide are particularly acute in Cleveland, Ohio where African-American and low-income Clevelanders lag far behind both national and Midwest averages in access to computer training, Internet connectivity and home computer ownership. At the same time, Cleveland's low-income families, frequently without sufficient financial literacy skills, are squandering scarce resources by becoming increasingly dependent on predatory and fringe financial services such as payday lenders, check cashing institutions and equity-seeking (predatory) lenders.

Since 1981, the Cleveland Housing Network (CHN) has developed quality, affordable housing to create sound, economically vibrant communities in Cleveland's inner-city neighborhoods, with a special emphasis on providing homeownership opportunities for low-income families. CHN's nationally-acclaimed Lease Purchase program offers poor families, who might otherwise never have a chance to own a home, the promise of titled homeownership after 15 years of responsible residency. Lease Purchase families are 82% female-headed households, 79% African-American and 84% earn less than \$25,000 per year. As these families approach the end of their lease term and prepare to purchase their home they face critical challenges including insufficient access to mainstream financial institutions, inadequate employment and career development opportunities, and poor financial literacy skills.

**SOLUTION:** To address the pressing need to build financial strength among low-income families and capacity for lasting homeownership, CHN is strategically leveraging longstanding relationships with a diverse coalition of partners to create the Bringing (I)nformation (T)echnology (IT) Home initiative. This capacity-building toolbox of hardware, software, training, data access and interactive web-based applications will foster financial literacy for (initially 200) low-income families working toward homeownership and self-sufficiency. Participants will receive hands-on, individualized computer and Internet training purposefully designed in a manner and format that is both useful and appropriate to their skill level. After training, Bringing IT Home (BIH) provides an in-home desktop PC (project pays half/families pay half through a **Digital Access Revolving Loan Fund**), free Internet access and unique technical and supportive services from **Digital Connectors**, high-achieving inner-city high school students acting as helpdesk technicians who make in-home visits. BIH then provides low-income families with powerful interactive tools (in both English and Spanish) to actively shape their own economic destiny:

- On-line **banking & money management with the take action capability to connect to mainstream financial services** (checking and savings accounts) including monthly computer loan payments, direct deposit (providing down payment savings) and direct deposit rent payment,
- On-line **financial literacy counseling with personalized financial coaches/mentors** to seek advice as either financial opportunities or problems arise,
- A customized, local website (**The Cleveland Beehive**) with on-line resources including healthcare, career counseling, family resources and a continuously updated **job placement tool**,
- On-line, **interactive capacity building curriculum** in homeownership counseling, and home maintenance skills (basic classes conducted at the Technology Center, advanced instruction provided on-line through the project's web-based **Virtual Schoolhouse**),

- An on-line interactive link to the City of Cleveland's ***Building and Housing Code violation*** system through the project's ***Neighborhood Builder*** –, including the on-line capability to apply for ***home improvement permits***.
- Creation of a ***digital community*** among BIH participants that provides opportunities to build ***best practices***, share experiences and information, ask questions, participate in the CHN's Resident Advisory Council and connect with fellow program families through web-based Instant Communicator software.

**OUTCOMES:** Preliminary benefits of BIH are demonstrably increased technology skills; opportunity cost savings by using on-line banking services (avoiding check cashing fees regularly charged by fringe lenders of \$20/check); savings in time and travel by reducing in-person financial transactions; improved financial and employment conditions through in-person and on-line education and consultation; improved housing conditions through a powerful access to community-based monitoring; improved communication and information sharing among Lease Purchase families; powerful access to local government and mainstream financial services among Lease Purchase families, including CBOs dedicated to financial literacy. Long-term outcomes of BIH are financial literacy, lasting financial stability including successful homeownership, and the development of a culture of technology use among low-income Clevelanders.

## 2. Innovation

BIH literally “brings home” technology to low-income families, enabling them to build the capacity for lasting financial security and successful homeownership through two significant innovations: 1) the delivery of advanced interactive technologies with exceptional technical support services, and 2) the development of unique and diverse partnerships between local and national organizations, directly benefiting and improving the lives of low income Clevelanders most marginalized from the mainstream economy and the transformational power of the Internet.

Since simple access to computers and the Internet is not nearly enough, BIH provides carefully tailored training so that end users can maximize BIH applications. Initially, all participants undergo an assessment of fundamental math, reading and language skills to ensure they meet baseline literacy qualifications. Qualified participants then begin computer training consisting of basic computer skills, Internet and e-mail acclimation (including the establishment of a personal e-mail account), and Microsoft Word. The curricula for both the assessment and the training are designed in a format and manner understandable and appropriate to the low-income learner. (To ensure no one is left behind, students who fail to pass either component will be redirected for more training). Basic training will take place at CHN's Community Training & Technology Center (See Appendix 14). CHN's Director of Family Services and Community Technology will be responsible for overseeing staff conducting the baseline training, and for coordinating trainers and staff conducting the computer training programs.

Convenient computer access is simply essential to successfully integrate technology into the daily lives of low-income people. Thus, once participants are educated and prepared through comprehensive training, they will have access to an affordable desktop PC (and free Internet access) in the comfort of their Lease Purchase home. Desktop PCs will be available to families through the ***Digital Access Revolving Loan Fund***, which provides half the cost of the computer to families free of charge, while the other half is affordably financed by the family, with on-line loan repayment. BIH also provides an innovative solution to the challenge of effective follow-up supportive services and easily accessible help for the project's first-time users. Through the ***Digital Connectors*** program, a unique partnership with an inner-city Cleveland high

school, CHN will recruit and hire high-achieving students interested in emerging technologies. A comprehensive learning and employment opportunity, these students will be trained in computer maintenance, leadership development (including an opportunity professional “shadowing” experiences at local technology companies) and public speaking. These Digital Connectors will be dispatched to BIH families to provide tech support such as assisting with the initial installation and set up of in-home equipment, orientation, and follow up in-home consultations to help participants use the tools and maximize the integration of technology in their lives. CHN’s Technical Support Manager will coordinate and supervise this program component, and the Network Operations Coordinator will provide additional support services directly to families.

Once provided with the requisite technology, skills and support services, users will be fully equipped to interact with BIH’s innovative educational and capacity building tools to foster financial self-sufficiency, build healthy neighborhoods and break down barriers to full participation in the mainstream economy. Most significantly, BIH offers the establishment of banking via the Internet with mainstream financial services (checking, savings, Individual Development Accounts) that will provide participants with the on-line capability for money management, bill payment, direct deposit (providing a down-payment savings mechanism) and monthly computer loan payments. Saving money and resources by avoiding fringe lending services such as check cashing institutions, payday lenders and, ultimately, predatory lenders, this interactive application cultivates relationships between the low-income user and mainstream financial industry. Furthermore, it provides users with boundless future opportunities to utilize their newfound financial and technological savvy for applications such as on-line rental payments to CHN and direct paycheck deposit. To help users develop a sound financial strategy, on-line volunteer financial mentors will provide initial financial plan consultation and will be available, on-line, for advice as financial problems and/or opportunities arise.

The ***Cleveland Beehive*** will allow low-income participants to access and obtain information about a wide range of local resources essential to economic mobility and overall well being such as local healthcare information and family resources necessary to raise the user’s standard of living. BIH also provides access to a local and continuously updated job board, and capacity building courses in financial literacy and homeownership counseling. The Neighborhood Builder tool is provided to offer participants the ability to solve neighborhood problems through on-line monitoring and reporting of building and housing code violations, as well as apply for home improvement permits, via the Internet. BIH creates an innovative digital community among Lease Purchaser families that includes homeowner skills/maintenance curriculum (including the development of best practices), applications to broaden the reach of CHN’s resident-run Resident Advisory Council, and ***Instant Communicator Software*** with live chat capability. BIH will create a genuine culture of use among participants so that they begin to instinctively turn to technology to gather and use important information about family finances, employment, public services, healthcare and education resources, and services provided by CHN. To maximize participation in the program, all of BIH’s tools will be available in both English and Spanish. CHN’s IT Director, working with the Web Programming Coordinator, is responsible for managing and coordinating BIH’s specific web-based applications.

Beyond the in-home PCs, BIH provides multiple, citywide points of access for families and the public. Initial assessment and the basic training classes for all participants will take place at CHN’s centrally located Community Training & Technology Center (CTTC). The CTTC addresses the special needs and challenges of serving a low-income population through its location in the epicenter of an extremely underserved area, its flexible hours of operation and childcare services, and the staff’s extreme sensitivity to the inhibitions and barriers low-income users must overcome to effectively integrate technology into their lives. As participants advance beyond the basic coursework, higher-level financial literacy and homeowner training

classes will be directly available at the ***Virtual Schoolhouse***, providing on-line and advanced, self-guided courses. BIH also directly benefits and improves the lives of low-income Clevelanders striving for long-term financial stability by using technology to connect unique and diverse partners, acting to strengthen and develop new and existing cross-organizational relationships. Locally, BIH provides an opportunity for CHN to partner with Cleveland Saves, a non-profit program dedicated to training low-income families how to save. Cleveland State University will provide professional evaluation services to BIH so that the tools can be continuously refined to best meet the needs of the user and the program. BIH provides the Neighborhood Builder to increase the economic strength of the end user's community through access to the on-line building and housing code system, and the web-based permitting process, established through CHN's partnership with the City of Cleveland. KeyBank, in addition to a large financial contribution, will work with CHN to design banking products carefully tailored to foster financial literacy among users. On a national level, BIH initiates CHN's partnership with One Economy, a non-profit founded on the belief that low-income people can build assets and raise their standard of living if they have greater access to information and to vehicles that enable them to turn that information into assets and wealth. These partnerships are further explored in Section 5, Community Involvement and Appendix 15.

BIH ***builds upon the successes of previous TOP grantees***. Similar to the Digital Bridge Foundation's commitment to provide free computers, broadband access and extensive training to low-income families who are trying to improve their education and economic status, BIH provides extensive training to low-income families striving for financial stability. However, BIH provides only half the value of the computer free of charge to the user, strategically utilizing a revolving loan fund in accordance with CHN's overarching philosophy of providing a "hand-up" rather than a "handout," and to make funding for PCs available to future participants. Similarly, free (vs. Digital Bridge's broadband) access will be provided to BIH end users based on expected user levels and an economical allocation of program resources. Like the Minneapolis Neighborhood Information System, BIH builds community resources by allowing residents to access and report on violations assessed against neighboring properties through the City of Cleveland's on-line housing and building code database. BIH participants who are on the verge of purchasing their homes, by this time financially prepared and technologically confident, will be directed to national on-line real estate systems (such as the National Council of La Raza, also available in both English and Spanish) and local mainstream lenders, thus protecting against the potential abuses of predatory mortgage lenders.

### 3. Diffusion Potential

BIH builds financial strength among low-income families by shifting basic habits and attitudes from using money orders and check cashing institutions, to opening accounts with mainstream lenders. Predatory and fringe lending such as payday lenders and check cashing institutions, disproportionately impact low-income families and threaten the economic stability of their communities. (See Appendix 16). According to the National Consumer Law Center, vulnerable families who cannot access mainstream forms of credit have been targets of abusive home lending that has "exploded" in recent years. In January, the *Cleveland Plain Dealer* reported that Cleveland is "one of the seven worst predatory-lending trouble spots in the nation." Last month, Alan Greenspan stated that in order "to stem the occurrence of abusive, and at times illegal, lending practices, regulators, consumer advocates and policymakers all agree that consumer education is essential to combating predatory lending." The National Community Reinvestment Corporation reports that "financial literacy is at the very core of healthy families and communities and that the development of assets, large or small, is the very first step in the dynamic process of introducing a person to the financial mainstream, increasing family stability, encouraging better consumer habits, and eventually increasing an individual's stake in the health and wealth of a community." By utilizing carefully designed and easily

accessible on-line tools to address financial literacy, BIH will increase financial strength and create lasting economic stability for Cleveland's low-income families. This innovative use of the Internet to deliver customized, local, and interactive financial capacity building tools to families, who are both trained and most in need of services, is a ground-breaking approach to building financial capacity among populations most marginalized from the mainstream economy.

Focusing on the nationwide need to build financial literacy, homeownership and community value among America's most underserved populations, BIH is an ***ideal program to replicate across the country***. The greatest cost to replicate the program is the creation of local content, and devoting the time needed to successfully implement the initiative. Leveraging relationships between low-income families and mainstream financial services, locating Internet access and increasing the rate of homeownership are common elements in the work of local community development corporations. BIH's partnerships with national organizations specifically dedicated to the technological and economic challenges of low-income families, like One Economy and Cleveland Saves (which has become the model for the national America Saves program), provides dedicated and accessible resources for future projects.

Information about BIH will be provided through one of the many conduits that currently exists between CHN and our residents: a monthly newsletter, in-office information board (many families pay rent at CHN's offices), regular property management home visits, family development consultations, information at member neighborhood CDCs, Resident Advisory Council and block club meetings. To disseminate information about BIH beyond our community, CHN will capitalize on our longstanding relationships with local and national (public and private) housing and family development agencies, as well as with BIH partners the Enterprise Foundation, One Economy and America Saves; CHN will actively seek opportunities to share information, (including posting case studies on-line), and the ongoing progress of the project with a wider audience.

#### 4. Project Feasibility

Since 1982, more than 1,800 low-income families (nearly 6,000 people) have found stable, decent, affordable housing and the opportunity of homeownership through CHN's nationally modeled Lease Purchase program. (See Appendix 17) Operating from the tenet that bricks and mortar are not nearly enough, CHN offers carefully designed programs to move the most marginalized families from welfare to work and, eventually, homeownership. (See Appendix 18). In 1999, to further its core mission of improving the quality of life in Cleveland's neighborhoods, CHN developed Technology Link 2000 to successfully create and integrate web-based technology business systems that have increased the capacity and reach of Cleveland's community based organizations. (See Appendix 19). Now, CHN is poised to integrate its success in technology with and its nationally acclaimed community development programs to directly benefit low-income Clevelanders. BIH is a unique product of CHN's synthesis of our core operations: innovative affordable housing programs; technology expertise and experience developing interactive, web-based tools; close, long-term relationships with more than 1,900 low income Lease Purchase families in need of homeownership and financial literacy counseling; and strong, productive partnerships with CBOs. (See Appendix 20)

BIH utilizes CHN's existing digital network infrastructure to deliver state-of-the-art content and services to computer-educated low-income Clevelanders working toward financial stability. Based on CHN's previous experience with technology, both internally and for T2K, CHN has devised a thoroughly planned ***technical approach***. Careful evaluation of new web site traffic expected to be generated by the project (and our

interface with One Economy's Beehive site), has called for the existing fractional T-1 line to be upgraded from 768K to a full 1.44MB/Sec, thus ensuring all data packets travel adequately from their source to destination. In order to provide sufficient bandwidth, CHN will accept traffic through an in-lace Cisco router, and a Sun Sloaris Ultra SPARC server running Solstice Firewall I software. CHN maintains three redundant IBM and Hewlett Packard Internet servers running Windows 2000 IIS 5.0. Privacy of users will be protected by 128-bit SSL encryption. Server side authentication and certificate authentication has been issued to CHN through Verisign Inc., a national certificate issuer. This broadband network currently delivers a full office suite of business tools developed by CHN for T2K. Software and hardware specifications have been designed to ensure safe, secure and adequate data transfer for an unlimited number of members. These servers will host BIH and, as each application will require the creation of additional databases, will play a key role in overall systems operation. Traffic and usage statistics of all applications will be recorded daily by WebTrends software developed by NetIQ Corporation. CHN currently hosts and maintains a large family of web-enabled database applications and is fluent in Java Script, HTML, Adobe Photoshop, Active Server, CGI and Pearl Scripting, Shockwave Flash, and Real Player Video Producer for creating video streams. In examining **Technical Alternatives**, the decision to utilize free Internet access in the home, rather than DSL or cable modem, was based upon the projected level of user interface, and the strategic and economic allocation of both program and (low income) family resources. CHN has built the expertise to develop content and customized database applications of this nature through our unique hands-on experience with families, and our extensive software development background. The software created for our previous technology projects continues to uphold the highest standards and compatibility. The new investment in hardware and useful software for BIH will utilize existing and **interoperable** infrastructure and framework to effectively and efficiently deliver all the project's applications. CHN's IT Director and Web Programming Coordinator shall oversee all technology development (See Appendix 21).

Much of BIH is **self-sustainable after the initial grant award**. Most of the pivotal partners with significant investments in the project, such as Cleveland Saves, One Economy, the City of Cleveland and mainstream financial lenders (KeyBank, National City Bank) are fundamentally serving their principle missions and entrepreneurally extending the reach of their business operations. Similarly, the goal of financial literacy and successful homeownership among Lease Purchase families, as well as many of the project's objectives (on-line rental payments, e-mail, online database interaction, and live chat requests to CHN) will continue as a normal course of CHN's business. BIH is designed to provide training to CHN staff so that baseline assessments for participants may be conducted on an ongoing basis. While the Community Training & Technology Center will continue to be available, CHN will garner resources to continue to make the remaining services (cost of training, update course materials and in-home PCs through the Digital Access Revolving Loan fund) available to target populations most in need.

## 5. Community Involvement

To maximize the impact of BIH, CHN has assembled a group of prominent and diverse partners dedicated to assisting Clevelanders most in need achieve lasting financial security. These partners include Cleveland Saves, One Economy, KeyBank, National City Bank, the City of Cleveland, East Technical High School, Cleveland State University and The Enterprise Foundation. (See Appendix 15). CHN is partnering with Cleveland Saves, a non-profit social marketing initiative that is itself a result of a joint partnership between Consumer Credit Counseling Services and Working for Empowerment through Community Organizing. Cleveland Saves trains low and moderate income Cleveland residents to save more effectively, and to place a higher value on savings. Cleveland Saves has also inspired leaders in other cities to organize their own savings campaigns directed at lower-income households, serving as the pilot and model in the

creation of an emerging national program, America Saves. Cleveland Saves will enroll BIH families as Savers and provide financial advisors to serve as coaches to assess and consult with participants. (See Appendix 11) BIH participants themselves can foster economically strong communities by interacting with the web-based Neighborhood Builder to directly interface with Cleveland City Hall. BIH's strategic partnership with the City of Cleveland builds upon the City's long standing commitment to invest in the quality of life in its inner-city neighborhoods. The City will provide residents with access to, and the ability to report on, code violations cited on individual properties (and subsequent progress reports) as well as the ability to quickly apply for certain home improvement permits (such as installing a fence) over the web. (See Appendix 6)

On a national level, BIH inaugurates Cleveland's partnership with One Economy and its Beehive website. One Economy is a non-profit founded on the belief that low-income people can build assets and raise their standard of living if they have greater access to information, and to vehicles that enable them to turn that information into assets and wealth. Cleveland will become a **Digital City** for One Economy's Beehive website (the 3<sup>rd</sup> Digital City in the nation), which will provide expert consultation in the creation of meaningful local content that is customized to the needs of Cleveland's low-income user. This partnership will create local content and modular web-based components that interconnect with One Economy's national portal based in Washington, DC. CHN's partnership with One Economy demonstrates true interoperability between systems, maximizing the use of relevant content through interconnected and efficiently built networks. (See Appendix 10)

Through BIH, CHN's financial partners will extend their commitment to an even greater number of low-income Clevelanders. KeyBank is committing \$150,000 to BIH, will provide volunteer financial coaches and has donated the building for the Community Training and Technology Center. (See Appendix 7). KeyBank will also make available on-line banking services that have been specifically tailored to the needs of low-income (and typically first-time) mainstream bank customer; services include reduced cost accounts, and triggers that warn of potential overdrafts. Another local lender, National City Bank, also has a strong history of investing in technology to benefit Cleveland's inner-city neighborhoods. In 1999, National City contributed significant funding to CHN's T2K project, as well as serving on the T2K project team charged with coordinating technology development throughout Cleveland's community development industry. The well-regarded success of T2K has inspired National City to again commit both a significant financial contribution to BIH, as well as serving as an on-line banking partner to BIH participants. (See Appendix 8). To continually refine, improve and measure the impact of BIH on its users, CHN has partnered with Cleveland State University (CSU) to provide professional evaluation. CSU currently serves as the evaluator for CHN's T2K project. CHN staff will direct BIH participants now equipped with the proper skills, to other available and significant community resources. For example, Cuyahoga Community College's Unified Technology will make an on-line local based job bank available to assist participants with career development and employment opportunities. Currently serving about 15,000 area residents each year, the Unified Technology Center houses an extensive library, a computer resources laboratory loaded with resume and career interest software, an "e-opportunities" job match database and search equipment including telephones, fax machines, computers and printers to help area residents find well-paying jobs.

The **demonstrated need** for the project is based on supporting the long-term financial stability and successful homeownership of low-income Cleveland families, a founding premise critical to the creation of CHN's Lease Purchase program 20 years ago. In recent years, CHN staff has become an increasingly important resource in building the financial health of our families as they follow federally mandated welfare to work requirements. As a result, the guiding principle behind BIH - financial stability for low-income Lease

Purchase residents - has evolved into a CHN organizational mandate. The design and mission of the Lease Purchase program dictates that annually, beginning in 2003, a yearly average of 100 families reaching their 15<sup>th</sup> year in the program will have the opportunity to purchase their homes for about one-third of its fair market value. Since the purchase price of their home will be significantly less than its market value, these families are at-risk of becoming ready targets for the abusive practices of predatory lenders that prey on inner-city communities. Consequently, CHN has renewed its commitment to effectively educate Lease Purchase buyers in financial literacy, preparing them for long-term stability and successful homeownership. CHN's significant experience and respected capability to successfully use the Internet to build capacity in Cleveland's community development industry has crystallized CHN's commitment to leverage emerging technologies to better serve Lease Purchase families.

## 6. Evaluation

The key to a successful *evaluation strategy* for BIH is to develop available and quantifiable outcome measures that will capture the basic impact of the project in the lives of participants. Rigorous, credible, accurate and culturally sensitive program evaluation correlates directly to continuous refinement and improvement of the project, its continued funding and sustainability, and its replication in other communities. CHN is partnering with Cleveland State University to conduct evaluations of the impact of the BIH Program in the lives of low-income participants. This evaluation will study and track the progress of clients over time using key indicators such as: the rate of homeownership; the level of homeownership knowledge, financial skills and management; overall financial status (job placement, retention & advancement, job skills development, wage increases); and knowledge of, access to and utilization of community and self-help services. (See Appendix 22) The evaluation will be conducted using a reflexive, one-group, pretest-posttest design. With this design, the target group is measured before the initiation of the program, and again after the program is completed (in this case, after years one, two, and three). The pretest/posttest differences are then examined and any improvement is attributed to the impact of the program.

The essential justification for the use of reflexive controls (where the target group of the program serves as its own control) is that it is reasonable to believe that the target group will remain identical in relevant ways (use of information technology) before and after the program. This method is perfectly appropriate for BIH, since the use of a more sophisticated design would likely result in evaluation "overkill", and a waste of scarce resources. Because of the isolated nature of this technology to the population, BIH provides a unique opportunity to measure the potential build-up of IT skills and usage over time. Sample outcome measures have already been developed and are contained in the Memorandum of Understanding. (See Appendices 23 and 24). All data collection tools will be designed by the Cleveland State *Evaluator* (currently serving as Evaluator for CHN's T2K project, but not otherwise associated with the work of CHN), while the actual data collection will be conducted by the Technical Operations Manager, Digital Connectors, Computer Technology and Training Center staff and CHN Family Development staff. The CHN IT Director will be responsible for working with the Evaluator to establish benchmarks and create reporting tools. The CHN IT Director will present evaluation results, on a quarterly basis, to the BIH team. The *data analysis* will be conducted by the Evaluator on an annual basis.