

VISTAS
A Resource Center for The Visually Impaired

I. PROJECT PURPOSE

Need - The Internet is becoming an increasingly vital tool in our information society. According to the data presented in the August 2000 edition of *Falling Through the Net: Toward Digital Inclusion* (Appendix), the use of information technology is growing among most groups of Americans. Nonetheless, a digital divide still exists (with respect to Internet access and computer ownership) between those with those with disabilities, different levels of income and education, different racial and ethnic groups, old and young, and single and dual-parent families. Specifically, the report cites that persons with a disability are only half as likely to have access to the Internet as those without a disability: 21.6% compared to 42%. And while just under 25% of those without a disability have never used a personal computer, close to 60% of those with a disability fall into that category (Appendix, Executive Summary, page 2).

Target Population - In the 12-county northeast Georgia region (Figure 1), statistics indicate that of a population of at least 329,234 persons, over 60% are characterized as rural, the majority of which reside in small towns of 2500 people or less. In the Appendix, Table 1 data show that roughly 26% are minority (predominately African American); the median age is 32 years; at least 16% live below poverty with some counties as high as 22%! And only 30% have at least 12 years of education.. Another 30% of the population are estimated to have a disability, including almost 11% with work disability or mobility limitation, and close to 7% or over 22,000 with a visual impairment.

Goal - These regional data, therefore, reflect the national trend - that those persons with a disability have very limited access to the Internet or experience using a personal computer. The problem is compounded by the region's rural character and socioeconomic conditions. This means that this population has little likelihood of accessing the myriad of Internet-based information and resources to improve ones own quality of life. Consequently, the goal of the Institute for Community and Organizational Development, Inc. (ICOD) is to establish a regional Center for The Visually Impaired to help empower and promote the self-sufficiency of the target population through training, education, and advocacy. The Center will use a platform of high-bandwidth technology to deliver information and services to the end users, their families, and advocates. While the focus of the project will be on the visually-impaired, individuals with hearing, cognitive, and mobility impairments will served as well.

Objectives - The project will:

1. Use high-speed high-bandwidth technologies to provide universal information access for all (100%) participants, families, and advocates.
 - a. Maintain e-mail groups, a Listserv, and message board for end users, families, and supporters.
 - b. Maintain a web site that incorporates voice-enabled capability other assistive software.

2. Operate a network of community technology centers to provide access for visually-impaired participants, families, and persons with other disabilities, at least 80% of whom will exhibit the ability to use the technology to access and use information.

- a. Base the centers in facilities provided community action agencies.
- b. Establish voice-enabled interfaces and other assistive technologies

3. Provide an instructional and training program through which at least 80% of participants will exhibit an increased knowledge of the information presented.

- a. Conduct quarterly courses on Basic Typing Skills, Computer Literacy, Independent Living, Mobility, and Braille.
- b. Provide technology acquisition assistance to participants, families, and supporters

II. INNOVATION

High-bandwidth Technology Applied - One of the best examples of how high-bandwidth telecommunications may be used to serve persons with disabilities is currently being developed by The Shepherd Center, Inc. It is an Atlanta-based speciality hospital that serves people with disabilities resulting from impairments that affect the central nervous system. Initially funded by the TOPS Program in 1999, the Shepherd Center, in conjunction with Georgia Tech's Biomedical Interactive Technology Center and Mindspring Enterprises, is developing a Next Generation Internet network in the metro Atlanta area to link patients' homes and rehabilitation service providers. Among the 350-400 patients served annually, less than 60% are from communities within 50 miles of the Center. The remainder live even farther away often needing levels of support that very complex and beyond the ability of families and others.

Vistas - Similarly, VISTAS is viewed to hold tremendous potential for the visually-impaired specifically and for persons with other disabilities as well. The Internet already demonstrates the value of interconnected information resources in business, government, education, and medical applications. Therefore, advanced network capabilities, such as those available with the Next Generation Internet (NGI) can now provide significantly greater access to home and community settings. Technologies now exist to routinely support, voice, video, and data communications throughout. NGI technologies provide the bandwidth, security, quality of service, and network management capabilities that are needed to support a universal information access network.

In recognition of this potential, the Institute for Community and Organizational Development, Inc. (ICOD) proposes to develop a NGI network to support the operation of VISTAS, a Center for the Visually Impaired. This effort will be in conjunction with the Georgia Department of Labor, Northeast Georgia Regional Development Commission, Action, Inc. , the Georgia Association of Community Action Agencies, the Georgia Family Resource Coordinators Association, and the School of Social Work (University of Georgia). The network will feature a *voice-enabled interface*, a central database

in a secure client/server arrangement, using standard Internet protocols to coordinate and distribute remote communications, education, training, and monitoring applications. The database will store and update information about end-users and providers. It will store information about equipment configurations at each site in order to facilitate remote network management. This approach will also reduce the cost for distribution and maintenance of software because upgrades only need to be made on the server.

III. DIFFUSION POTENTIAL

Replication - The project has many features that enable its adaption or replication by other communities. As was cited in the August 2000 publication of 'Falling Through The Net', this project's target population mirror the national profile. The population is mostly rural with a substantial percentage of persons living below poverty level and/or with a disability, with limited access to the Internet and/or to the use of a computer. Therefore, universal information access is the common goal across the United States and beyond!

The proposed project is unique but highly adaptable because most Americans already have telephone access- a key link to Next Generation Internet technology. NGI does not require access to a personal computer, thereby easily bringing high-bandwidth service delivery within reach of the poor and work-disabled.

The project has many potential cost-effective features: most states, many communities, and a number of higher education institutions can choose to acquire and/or dedicate high-bandwidth servers to customizes its services and information for the visually impaired and other disabled citizens - homebound and institutionalized! Use of high capacity servers also ensures very expenditures on next-generation software.

Specifically, the project will have the capacity to(a) attract the support of high-tech enterprises., (b) extend services directly to remote rural communities, © increase access to technology for rural-based end users, families, and advocates, (d) demonstrate the effectiveness of technology to education and information dissemination.

Dissemination - Plans for information dissemination include (1) establishing an interactive Website that features (a) methods for establishing a similar project, (b) on-line courses for participants, families, and practitioners, and © on-line discussion groups on related topics; (2) establishing an e-mail group comprised of clients, their families, and practitioners, to deliver monthly news releases and updates on services, training, events, and products; (3) subscribe the project to listservs dedicated to disability issues, human services, education, and assistive technology; (4) conduct a on-going series of workshops that target staff of partner agencies and other human service entities; (5) make presentations

during conferences of professional and advocacy groups; and (6) submit articles to publications dedicated to assistive technology and visually impairments, and other disabilities.

IV. PROJECT FEASIBILITY

Technical Approach - Participants, their families, and providers will have access to the network control devices, and exchange information with the central server through a voice-enabled Web-browser interface. The project will use advanced browser tools to create a scalable interactive medium for sending and receiving fax, e-mail and voice mail messages, and gaining Internet access via telephone and PC modalities! Persons normally limited by visual or other disabling conditions, will have a new and user-friendly interface to access Internet-based information and services - even without the personal computer, from the comfort of home or any other remote location!

Table 2 on page shows how a network of Computer Technology Centers, linked via the server, will be housed in 10 Community Resource Centers currently operated by Action, Inc. (a community action agency) in its 10-county northeast Georgia service area. Participants and others residing in remote rural areas will have access to nearby free to computer technology for personal use, micro-enterprise, academic support, etc. . The PC's will feature voice-enabled browsers as well as other assistive technologies to accommodate a broad range of disabled persons. Hyperlinks will be established to Workforce Development resources provided by the Georgia Department of Labor and other state and federal agencies. Encryption and authentication procedures will be used to ensure secure and private access to the network. A home page on the site will be accessible to the general public, but database activities and assistive applications will be limited to authorized users.

The server database will include disability-specific health and wellness information addressing end-users' specialized needs. This information will be used to deliver, over the network, interactive, multi-media instruction and support to participants, families, and others. Content will be derived from a variety of academic, governmental, and professional entities.

Long-term, Vistas will become a high-performing project that leads to greater self-sufficiency among its participants because (a) it will help promote the capacity of participants, their families, and advocates, (b) its operation will be easily adaptable to emerging technologies ,(c) it will promote broad-based public-private collaboration, and (d) it will be a key source of continuous improvement for practitioners at all levels of society.

Applicant Qualifications - With respect to *project management* , Dr. Robert E. Harrison would be the project director. He would be responsible for all staffing, management, and coordination of the entire operation of the project. He brings over 15 years of administrative experience as former director of three Federal TRIO Programs for the University of Georgia that served the same northeast Georgia region population identified in this proposal! Therefore, his previously established working relationships

with various regional entity representatives would expedite project implementation. Dr. Harrison has also played a significant role in helping to establish a Community Technology Centers project based in Clarke County (Athens). His experience in this area would be invaluable in building a regional network of centers with assistive technology as part of the VISTAS project. (See resume in Appendix)

Other staff positions will be (a) Assistant Director - key functions will be advocacy and coordination of participant services and Social Work Interns, (b) Administrative Assistant - key functions will be fiscal, data, and records management.

Contractual needs will be (a) Instructional Coordinator - key functions will be course design, teaching, and coordination of interns; (b) Technology Coordinator - key functions will be responsibility for procurement and overall planning, designing, and implementation of all technology operations; © Training Coordinator - key functions will be responsibility for the development and delivery of all on-site and outreach training activities -statewide and beyond.

(See Organizational Chart on page 7 and job descriptions in the Appendix)

Budget - All budget categories will be needed to properly fund all areas of operation, i.e., personnel, equipment, software, training, etc. Funds will be needed for project administration, service delivery, and to acquire requisite hardware and software. First-year expenditures will be the largest in order to procure equipment and related items. Second and Third-year will see a significant drop in costs.

Implementation Plan - On page 6, a 3-year plan is presented. Various milestones are outlined on a quarterly basis. This approach will allow for sufficient operational flexibility in lieu of unanticipated developments once the project is underway.

Sustainability - The project will have sufficient viability because the computer technology center network will be housed in partner facilities through the 12-county region. The number of interns and other matching (in-kind) personnel from partner organizations are expected to expand as the project develops. *Economically*, on-going administrative costs are expected to be addressed through strategies that include but not limited to:

- (a) contracting with state Vocational Rehabilitation to be a service provider
- (b) providing services on a sliding fee scale
- © grant solicitations from public and private entities
- (d) negotiating with partner or other agencies for office space on a free or shared basis in exchange for project services to the extent possible.

IMPLEMENTATION WORKPLAN

	ACTIVITIES	QTR 1	QTR 2	QTR 3	QTR 4
YEAR 1	Staffing	!			
	Orientation	!			
	Office Space	!			
	Equipment procurement/Installation	!	!		
	Central Server Operational		!		
	Computer Tech Center Network Operational			!	
	Client Intake Initiated		!	!	!
	Instructional Plan Initiated		!		
	Training Outreach Initiated			!	
	Public Relations Initiated		!		
	Formative Evaluation Begins			!	
	First Year Assessment				!
YEAR 2	Client Intake	!	!	!	!
	Instructional Activities	!	!	!	!
	Training Activities	!	!	!	!
	Technology Operations	!	!	!	!
	Formative Assessment	!	!	!	!
	Second Year Assessment				!
YEAR 3	Client Intake	!	!	!	!
	Instructional Activities	!	!	!	!
	Training Activities	!	!	!	!

	ACTIVITIES	QTR 1	QTR 2	QTR 3	QTR 4
	Formative Assessment	!	!	!	!
	Final Project Evaluation				!

ORGANIZATIONAL CHART

V. COMMUNITY INVOLVEMENT

Partnerships - The partnership itself is unique. (a) Vistas will make extensive use of faculty technical assistance and interns (intake and case management) referred from the University of Georgia's School of Social Work. (b) The Georgia Department of Labor and Northeast Ga Regional Development Commission will be able to expand on-going workforce development initiatives regionally and throughout the state. © The provision of staff training and information will help increase the organizational capacity of agency and community-based partners that include: Action, Inc., the Ga Community Action Association, Lions Clubs, Georgia Council for The Blind, and the National Family for The Advancement of Minorities With Disabilities.

A Partnership Profile, located on page 8, lists the partners, an estimated value of their commitment, and the areas of significance to the proposed project. Note that in some instances, partners could not develop a dollar estimate. However, they did specify, to the extent possible - given the type of organization, etc. - the kind of support pledged to making the project successful.(Letters of commitment are located in the Appendix)

An Advisory Board will be formed from representatives of each partner organization, in addition to other persons with various disabilities and expertise in assistive technology and disability.

Support for end users - The idea for VISTAS grew out of the real-life experience of a prospective Advisory Board Member who lost her sight to a degenerative eye disease well into her 40's. However within the last 5 years, this person has earned a Bachelors and Masters Degree in Social Work ! Other parties involved in the development of this proposal is a recently retired professor of Social Work, the Executive Director of a national organization promoting support for minorities with disabilities, an experienced Technology Services Coordinator, and the proposed director of VISTAS.

Out of this collaboration, the creation of an extension referral network of public and private agencies was deemed absolutely essential to heightening the target population's awareness of VISTAS and its resources. Thus, the service delivery plan and support for End Users will include:

- (a) Recruitment via referrals and walk-ins
- (b) Intake
- © Needs Assessment
- (d) Development of an Individual Educational Plan
- (e) Course and Training Enrollment -based on needs
- (f) Referral to other supportive entities as needed.

NOTE: Case files will be maintained on all participants. Additionally, all participants will be eligible to retake any course and training as often as is needed - recognizing the likelihood of variance in experiences, education, disability, etc.

PARTNERSHIPS AND CONTRIBUTIONS TO PROJECT

PARTNER S	In-kind Estimate	Facilities	Technical Assistanc e	Resource s	Recruitmen t/ Referral	Public Relations
Action, Inc.	\$13,080	!		!	!	!
Ga Dept of Labor	75,000		!	!		!
Ga Family Service Coord Association	10,000				!	!
Nat Fam for The Advan of Min With Dis	15,000		!		!	!
Athens Heritage Lions Club	15,600		!		!	!
Ga Comm Action Assoc	25,000				!	!
Multi-cultural Coalition on Disability and Diversity	10,000		!		!	!
UGA Sch of Social Work			!		!	!
GA Council For The Blind	\$15,600		!		!	!
NE Ga Regional Dev Commission			!	!	!	!

VI. EVALUATION

Evaluator - A formal evaluation will be conducted by a team from University of Georgia's School of Social Work. The team will assess the project's effectiveness in using high-bandwidth technologies to empower and promote the self-sufficiency of persons with visual impairments. The evaluation will examine end-users satisfaction in two areas:

Evaluation Questions - (1) Do voice-enabled interfaces help increase Internet access and computer use among visually impaired persons and those with other disabilities; (2) Can assistive technology help increase computer skill development for workforce development?

Evaluation Strategy - Formative evaluation will be conducted on in the following ways: (a) pre-post assessment of all computer training activities conducted at the Central Office, (b) a weekly assessment (via documentation) of use at each site in the computer center network, (3) monthly assessment of traffic through the Central Server' interface, and (4) quarterly assessment (via telephone) of participant's satisfaction with voice-enabled Internet access.

Data Collection - All data will be compiled a reported generated that will chart (a) number of participants, (b) use of site frequency , (c)degree of satisfaction with the technology, (d) purpose for which the technology is used, and (e) degree of satisfaction with instructors, and the instruction or training received. Reports will be distributed to all partner agencies; presented and analyzed in Advisory Board and Staff Meetings to assess project effectiveness or the need for adjustments in operation and services.