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ABSTRACT

This report summarizes the presentations of 35 professionals from diverse sectors of society working on different aspects of the digital divide. Various uses of technology have been supported over the past decade to improve outcomes for low-income groups. This session focused on the issue of technology sustainability in the face of increasing competition for long-term funding. It examined how technology investments were made lasting and valuable for communities, how technology investments were made profitable to companies who installed the platforms, and how to make technology access universal and sustainable. Participants identified key issues related to sustaining technology and proposed strategic responses. Barriers to sustainability included the escalating and overwhelming nature of the demand and redundancy of information on the Internet. Participants identified the significant lack of a unified national public policy agenda on universal access and sustainability, especially as related to low-income groups, noting inadequate standardization of research findings and lack of quantitative outcome measures for technology training, access, and programming in community-based organizations. Seven proposed strategic responses include crafting an appropriate national policy agenda, ensuring diversified and adequate funding streams, and ensuring consistent and continued information and resource sharing. (SM)

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SUSTAINING TECHNOLOGY IN LOW-INCOME NEIGHBORHOODS

A Consultative Session Convened
by the Annie E. Casey Foundation

January 24, 2002

The Brookings Institution, Washington, D.C.

Compiled by: Cinder Hypki, Consultant, March 2002

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ABOUT THE FOUNDATION

The Annie E. Casey Foundation is a private charitable organization dedicated to helping build better futures for disadvantaged children in the United States. It was established in 1948 by Jim Casey, one of the founders of United Parcel Service, and his siblings, who named the Foundation in honor of their mother. The primary mission of the Foundation is to foster public policies, human-service reforms, and community supports that more effectively meet the needs of today's vulnerable children and families. In pursuit of this goal, the Foundation makes grants that help states, cities, and neighborhoods fashion more innovative, cost-effective responses to these needs. For more information, visit the Foundation's website, www.aecf.org.

executive summary

The Annie E. Casey Foundation (AECF) convened a Consultative Session on Sustaining Technology on January 24, 2002, at the Brookings Institution in Washington, D.C., to tap the expertise of 35 people from diverse sectors of society working on different aspects of the digital divide. This term refers to the growing chasm in the United States between people who benefit from access to the Internet and other information technology and those who do not—a division along economic, racial and ethnic, and educational lines. Over the past decade of work to improve outcomes for low-income children, families, and communities, the Foundation supported a variety of uses of technology. A growing concern with the uncertain futures facing many promising efforts to bring technology to underserved and low-income communities prompted the Foundation to explore the issue of technology sustainability in the face of increasing competition for the long-term funding needed to support their continuance and growth.

A commitment to make significant strides in bridging the digital divide for low-income families brings with it the understanding that no single sector, industry, or organization alone can undertake the work of sustainability. The Foundation convened this session to better understand the trends, issues, and concerns among the different sectors that are involved in addressing the issue and to develop a clearer understanding of what role it can play to both sustain technology that supports its *Making Connections*' investments and that advances the field. These goals were accomplished during fruitful cross-sector discussions. Participants identified key issues related to sustaining technology and proposed strategic responses with a palpable sense of urgency, encouraging sectors to reach a consensus and to begin to act as quickly as possible.

ISSUES AND CHALLENGES OF SUSTAINABILITY

Three framing questions posed by participants helped shape the discussion about key aspects of sustainability:

- How are technology investments made lasting and valuable for communities? Tony Wilhelm, program director at the Benton Foundation, posed the overarching question of the day: How do we parlay the huge investment from the public and private sectors over the last decade into something that's lasting and of value for communities?
- How are technology investments made profitable to companies who install the platforms? Curtis White of Allied Communications reminded the group that profitability and market forces influence both access and sustainability issues, and that it must look at profitability of technology deployment in low-income communities or the digital divide will only continue to widen.
- How can technology access be made universal as well as sustainable? Many participants made the point that the issues of access and sustainability are too inextricably linked at this time to focus solely on sustainability. They encouraged AECF and their peers to shift their thinking about the needed resources, policy changes, capacity building, and research and evaluation that would make sustainable technology as universally accessible as possible.

IT-SPECIFIC BARRIERS TO SUSTAINABILITY

Two barriers to sustainability specific to information technology are:

- The escalating and overwhelming nature of the demand keeps raising the technology bar at such a rapid rate that it often exceeds the pace of reaction, requiring all sectors to attempt to keep apace with technology developments, rather than simply sustain them. As the technology bar rises, so the digital divide widens; it becomes impossible to separate infrastructure from sustainability.

- While the nature of the Internet phenomenon is empowering, it also leads to a tremendous redundancy of information that further escalates the need. This is overwhelming and confusing; it requires greater synthesis of resources and information.

RESOURCE ISSUES

Challenges to answering those questions were identified by guest speakers Barbara Langford and David Kass of The Finance Project who noted that: 1) There are few long-term and dedicated funding sources for sustaining technology able to support both capital development and ongoing operating costs. 2) The lack of agreement over which sector(s) should be responsible for supporting and sustaining IT initiatives has worked against decisive action by any one sector.

ISSUES OF SCALE

Strategic questions of scale included: Which particular investments in technology are appropriately planted in neighborhoods, which investments are appropriately planted in intermediary organizations that serve a city, and which investments can take advantage of even larger interlocking connections? How does that set of investments get made?

POLICY

Participants identified a woeful lack of a unified national public policy agenda on universal access to and sustainability of technology, especially as it relates to outcomes for low-income children, youth, families, and communities. For example, too few connections have been made between workforce development issues and access to or sustainability of technology—in part because the service providers, especially the community technology initiatives most in touch with low-income families, have been absent from policy decision-making arenas. Participants largely blamed funders in the

public and philanthropic sectors for not adequately exerting their influence to ensure them a seat at the table.

RESEARCH AND EVALUATION

Inadequate standardization of results and a lack of quantitative outcome measures for technology training, access, and programming plague many community-based organizations. Neither government nor the nonprofit sector have required sufficient accountability or adequate standards related to the technology programs they support. There is also insufficient research to guide decision-making on issues of scale related to investments in capacity building and training.

PROPOSED STRATEGIC RESPONSES TO ENSURE TECHNOLOGY SUSTAINABILITY

It is to the mutual benefit of all sectors—public, private, and non-profit—that local-, state-, and national-level collaboration both among and within sectors ensures:

- 1) The crafting of a national policy agenda on technology access and sustainability issues with the participation of all sectors, especially the nonprofit sector.
- 2) A unified voice calling for federal government responsibility to ensure the national infrastructure necessary for universal Internet access like broad band with particular emphasis given to public schools.
- 3) Diversified and adequate funding streams to support not only software and hardware, but also ongoing training, capacity building, leadership development, and technical assistance appropriate to the scale and needs of specific organizations.
- 4) Consistent and continued information and resource sharing at the local and regional levels to maximize resources like specialized technical expertise.

- 5) Standardized, outcomes-focused quantitative and qualitative data gathering that informs both funding decisions and sustainability planning, ensures program accountability, and contributes to local and national policy agendas based on experience and best practices.
- 6) Recognition of service providers' roles working as either locally responsive innovators or as regional or national producers and disseminators of best practices, which places responsibility for sustainability on each, commensurate with its role.
- 7) Continued development of overall community capacity to produce and honor its own knowledge and technology content for the enrichment of individuals and the community as a whole.

Section 1

THE CALL TO CONVENE THIS SESSION²

- The Annie E. Casey Foundation over the past decade has been committed to the development of economic opportunities for low-income children and families. Through this work it has developed a deep appreciation for the so-called "digital divide" and its implications for low-income children and families, particularly the barriers that it poses for access to employment within and outside of the technology field, and to family economic success in general. The Foundation believes that efforts to promote economic opportunity for low-income children, families, and communities will depend heavily on a collective ability to make significant strides in bridging the digital divide, and it is committed to doing so.
- To date, AECF has provided ongoing support to a range of efforts that enhance service delivery, promote system reform, bolster workforce development opportunities, and improve community engagement strategies by integrating and using technology. However, the Foundation is increasingly concerned that many promising efforts to bring technology to underserved and low-income communities face uncertain futures as the demand for long-term funding to support their continuance and growth increases and access to funds becomes more competitive. This is a concern that AECF believes cannot be tackled by any single sector, industry, or organization.

For this reason, the Foundation convened a diverse group of 35 people representing the public, private, and nonprofit sectors to join in working together to answer the following important questions:

- How might successful computer technology efforts in low-income communities best be supported over the long-term? That is, what might the most appropriate roles be for business, government, philanthropy, and academia in sustaining emerging efforts?

- To what extent might the Foundation assist in promoting revenue-generating strategies to address the digital divide?

- Is the Foundation building technology capacity in the appropriate places in low-income communities?
- Over the long term, who should assume responsibility for sustaining systems?
- What will happen to promising programs if this issue is not addressed?

To this end, the objectives of the Consultative Session were designed as follows:

- 1) To better understand the trends, issues, and concerns among the different sectors that are involved in addressing the issue of sustaining technology in low-income communities and family economic opportunity organizations and programs.

- 2) To develop a clearer understanding of the role that AECF can play to both sustain technology that supports its *Making Connections* investments and helps advance the field.

This report summarizes participants' views on the key issues involved in sustaining technology for both the Casey Foundation and the field as a whole, as well as possible strategic responses to these challenges that can be undertaken in the short and long term within the broad categories of research and evaluation, policy, resources, and capacity building.

Section 2

ISSUES AND CHALLENGES OF SUSTAINABILITY³

"Is our intent to sustain specific organizations? Or is it to enact full-scale systemic change in order to fundamentally change the way we educate children and families in this country? It will more than likely be a balance. You need the experience of effective organizations that have a valuable set of experiences serving communities in a real way [in order to] design effective system-wide policies. Access to sustainable technology will require shifts of enormous scope and scale in terms of resources and direction and energy, but it is crucial to grapple with these issues."

— Barbara Langford, *The Finance Project*

Barbara Langford and David Kass of The Finance Project helped to frame the day's discussion on sustaining technology. In sharing the key elements of a planning process for sustainability, Langford and Kass urged the group to look at technology programs and provider organizations with an eye toward eight components:

- a clear vision communicated in a compelling manner to galvanize all partners in the same direction over the long term;
- a results orientation focused on achieving goals and managing work efficiently that includes clarity about long-term results, accountability to funders and stakeholders, measuring progress, and monitoring for mid-course corrections;

- a strategic financing orientation with a range of funding options, both public and private, balancing long- and short-term sources;
- adaptability to changing conditions, including policy and political changes, and economic and demographic shifts;
- a broad base of community support in the form of collaboration and partnerships;
- key champions at both community and political levels to make needed policy changes, and changes in political systems;
- strong internal systems for effective and efficient financial and program management; and
- a sustainability plan that communicates to stakeholders how the organization will proceed and the range of resources to be used.

Thinking about sustainability requires a range of different resources including nonfinancial ones and most notably, a broad base of support within a community. Any given organization will not necessarily need all of the elements outlined above. However, in planning for sustainability, The Finance Project maintains that organizations as well as sectors must have clarity on the following three points:

- *What do you want to sustain?* Is it a program, a set of services, organizational capacity, national or local infrastructure? Training and support? Hardware and software? Partnerships or collaborative structures at the local or national level? All goals are valuable, relevant and important, but strategies to achieve them will be very different.

- *What are your sustainability goals?* Is it maintaining the current level of services? Scaling up to serve different clients? Who is responsible for managing and planning expansion? How do all players work together? Is the idea taking root in a community regardless of specific organizations?
- *What resources do you have to help you accomplish that goal?* Identify and map your assets. What are the barriers: political, technical, fiscal, or bureaucratic? What are viable strategies to achieve your goals? Organizational development, community mobilization, strategies for measuring results, financial strategies? All must be pursued simultaneously to be successful.

THE THREE OVERARCHING ISSUES FOR SUSTAINABILITY

- *How are technology investments made lasting and valuable?* Tony Wilhelm of the Benton Foundation asked the group to consider the question: How do we parlay the huge investment from the public and private sectors over the last decade into something that's lasting and of value for communities?
- *How are technology investments made profitable?* Profitability and market forces influence both access and sustainability issues. We must look at the profitability of technology deployment in low-income communities, or the digital divide will only continue to widen. If technology isn't profitable to companies who install the platforms, it will continue to be targeted solely to more affluent communities. We have to find the incentives to drive content providers and service providers into low-income communities or we'll have the same gap in technology that exists in banking.

- How is technology access made universal as well as sustainable? Time and again, session participants returned to the question of access, and identified it as an issue that could not be separated at this point in time from that of sustainability, because the issue of universal access begs the question of sustainability goals.
- For example, Mel King of the Tent City Technology Corporation/MIT questioned whether energy expended across sectors would be better focused on ensuring that all young people across the country have access to technology to enhance their abilities to use information, create their own knowledge, and enable them to compete in the job market.

BARRIERS TO SUSTAINABILITY WITHIN AN IT CONTEXT

Two barriers to sustainability specific to information technology are:

- 1) The escalating and often overwhelming nature of the demand, which keeps raising the technology bar higher at such a rapid pace that it often exceeds the pace of reaction. This requires all sectors to keep abreast of technology developments, rather than simply sustain them. As the technology bar rises, so the digital divide widens. It becomes impossible to separate infrastructure from sustainability. It is difficult for community technology initiatives to stay on top of new IT developments.

- 2) Redundancy: While the nature of the Internet phenomenon is empowering, it also leads to a tremendous redundancy of information that further escalates the need. This is overwhelming and confusing; it requires greater synthesis of resources and information.

With the above questions as a useful context for the day's discussion, the key issues are discussed below within four broad categories: resources, public policy/advocacy, capacity building, and research and evaluation.

A. RESOURCE ISSUES: FUNDING/INFRASTRUCTURE

There are major resource issues on all levels, beginning with the broad context outlined by Langford and Kass:

- Few dedicated funding sources.
- Few long-term funding sources able to support both capital development and ongoing operating costs.
- Defining whether the public or private sectors should be responsible for supporting and sustaining information technology initiatives.

NATIONAL AND STATE LEVEL

- 1) *Systemic Funding Problem Nationwide: Creating a "Railroad Infrastructure"* We lack a national vision and agenda around technology in terms of both equal access and sustainability. Community technology initiatives have no one entity to connect to; there is no one voice to raise the issues. George Samuels of New Management Information Systems maintained that the government must realize the need to invest in putting an infrastructure in place, as it did with the railroad system or telecommunications to provide access to and sustain technology across the country. Without this, technology programs at the neighborhood level have no support for their infrastructure needs, and no vehicle to be heard on these issues. This is equally a policy issue.

- 2) *Philanthropic Funding Has "Hidden Costs"* The real costs of "donated" technology are misunderstood at the onset, and can hinder sustainability. An initial study being conducted by the Bill and Linda Gates Foundation shows that the costs far outweigh the cash value of donated software and hardware. Costs may be higher than the community technology initiative's capacity to raise funds, given its base of support, for sustainability.
- 3) *Schools: Potential Vehicles for Technology Access and Sustainability* Most public schools are technologically obsolete and are not teaching skills that businesses need. They could, however, be a vehicle for increasing access to technology across income levels and for focusing sustainability efforts so that technology curriculum is up to date with societal demand. Our society puts such a huge investment into technology for schools, with few real payoffs for students and their families.

LOCAL LEVEL

- 1) *The Long-Term Costs of Growing More Local Resources Must Be Taken Into Account; It Is Part of the Context of Funding for Sustaining Technology* Michael Barndt of the Nonprofit Center of Milwaukee urged participants to take into account major resource gaps in building just the base-level user groups in many neighborhoods like the *Making Connections* neighborhood in Milwaukee, for example. These gaps include lack of community schools, meeting places, gymnasiums, computer centers, etc. The groups working on these issues have major capacity development needs. How will neighborhoods like this one get their needs in these areas satisfied? Not even AECF money can do that. If the vision is for people

to live in neighborhoods with adequate community resources we have to look at this broader sustainability issue.

2) Lack of Diversified Funding Streams for CTI Technology Sustainability

- To avoid the vulnerability of a single funding stream, CTIs must have a long-term sustainability plan with diverse funding streams including foundations, government, earned income, user fees, and individual donations.
- Because the users of CTIs may not be able to carry financial costs, CTIs must capitalize on potential revenue streams connected with different clients.
- CTIs must be competitive and look at earned-income opportunities.
- The use of volunteers as cost-saving measure for CTIs should be balanced with paid staff, executive loan programs, students, Americorps and VISTA, "Share—a Tech" services, etc.
- CTIs should view foundation funding as part of sustainability even though foundations don't want CTIs to be dependent.
- CTIs must have a vision of themselves as viable business ventures.

3) Resource Challenges for Specific User Groups

- Rural programs are often overlooked.
- Literacy skills—or lack thereof—are a crucial factor in issues of technology and sustainability.

- Bilingual and multilingual communities and CTIs can face:

- greater costs due to the need for multiple versions of software and training material, and multiple class offerings;
- more complicated logistics for classes;
- the need for bilingual trainers; and
- fewer offerings and choices for nondominant language speakers.

- Children of color often lack adult role models of color in the technology field

B. PUBLIC POLICY ISSUES

Defining Responsibility

Defining whether the public or private sector should be responsible for supporting and sustaining information technology initiatives is a major challenge.

Systemic Funding Problem Nationwide: Creating a "Railroad Infrastructure"

As stated in the category "Funding" earlier, the lack of a national vision and agenda around technology in terms of both equal access and sustainability is also a major public policy issue that remains unresolved. Community technology initiatives have no one entity to connect to; there is no one voice to raise the issues on behalf of low-income communities. Policies that would promote building an infrastructure on the scale of the railroad transportation system are being relegated to dependence on the private telecommunications companies to do the "right thing." For example, wireless communications programs at the neighborhood level have no support for their infrastructure needs, and no vehicle to be heard on these issues.

Nonprofits Are an Empty Seat at the Policy Table

Nonprofits have not been included at the policy table, especially in discussions over broad band access; this will have an adverse affect on the digital divide. All sectors must work to ensure that they are included in the key policy discussions like this one. The philanthropic sector can and should play a larger role in ensuring that service providers, with the wealth of experience they bring with low-income families and communities, are at the table and being heard.

Link between Sustainability of Technology and Sustainability of Jobs

Sustainability of technology and sustainability of jobs in workforce development are linked, yet policy implementers especially around the Workforce Investment Act need a greater understanding of the possibilities for sustainability.

C. CAPACITY-BUILDING ISSUES

There is a lack of capacity in many local organizations necessary for sustaining technology.

- Organizations that perform effectively often need capacity building in order to use technology. Foundations can play a huge role in investing in the capacity development of nonprofits, and assisting them in linking to resources within academia. This will help to realize a return on their investment.
- Funders need to require a continual improvement plan with an eye to increasing the quality of programs.
- A plan is needed to subsidize a talent pool that can continually enter organizations and hit the ground running to provide technical assistance and training.

There is currently a lack of investment in developing nonprofit leaders and other staff around issues of technology

- This includes leadership development, technical skill development, and technical assistance.

- There is a need to elevate the "professionalization" of the field and of the nonprofit sector. This includes creating a clear career track for people who work in the CTIs. There is now an online certificate program providing degree credit for those who will run nonprofit technology organizations.

• Some centers are successful because they have strong leaders who understand the potential of where the technology can go; they see how it can be used and how the environment is constantly changing. There is a need to consciously educate other leaders on this perspective.

Issues of Scale and Capacity Building

The broader national movement toward technology access and bridging the digital divide had a lot of nonprofits jumping on board that really hadn't thought through how technology fit with their mission. Thus computer labs may be in every youth center, but few have a trained IT professional to teach or run them. This phenomenon begs a series of questions related to scale. How do we deal with the weaker, undercapitalized groups? Should we focus sustainability of technology on organizations of scale even if it means smaller groups fall by wayside? Questions of scale should not push all small CTIs out of business, nor should it translate into technology costs being pushed down to small CBOs at the local level.

The need for all sectors to be more strategic in decision-making about issues of scale was a concern voiced by many participants. Strategic questions included: Which particular investments in technology are appropriately planted in neighborhoods, which investments are appropriately planted in intermediary organizations that serve a city, and which investments can take advantage of even larger interlocking connections? How do we make that set of investments?

- How can the small CTIs begin using the resources well? No matter how much money is put into a national-level technology support system, there will be small nonprofits that need support to do what they do best: serve very specific, difficult-to-reach populations. In these cases, "going to scale" should not be an expected aim. However, resources should be networked citywide according to scale. Nonprofits need to learn more about what others are doing to avoid reinventing the wheel. They should work more actively to pool resources and to collaborate to hire and perhaps share IT professionals as trainers among themselves.

D. RESEARCH/EVALUATION ISSUES

- Foundations and federal programs need to better articulate what success measures they want at the outset of technology programs, and provide strong incentives to ensure adequate monitoring of progress, to identify capacity-building needs, and ultimately, to make funding decisions.
 - Groups need to return to quantitative measurement focusing on the real impact on job acquisition and retention as a result of technology training.
 - Success measures must be market-driven.
 - Qualitative measurement will be even more important post-September 11th, as will articulating successes borne out by the data.
 - A future trend may be greater reliance on outside auditors.
- Inadequate Standardization of Results Plagues CTIs*
- Many nonprofits haven't been trained to document both qualitative and quantitative results well. Results and standardization of results pose a challenge for community

Groups: How do we help communities rise to industry standards, get certified, and show results, especially when they may be resistant to change? How can they be aided in seeing the benefits of what Langford and Kass referred to as a "results orientation"?

OTHER—SECTOR-SPECIFIC ISSUES

Cross-Sector

There is a lack of planning and integration of existing efforts among all sectors. A challenge is the absence of perceived need or desire to collaborate, leverage resources, and share with partners. Without this collaboration, there will continue to be polarization that inhibits technology development, access, and sustainability.

Public Sector

Separate agencies of the federal government are all focusing on technology. The public sector needs to look at how it could better integrate its efforts to serve regions across the country to have a greater impact. It must be willing to invest in developing the capacity of nonprofit staff and leaders.

Philanthropic Sector

Foundations need to better share their expertise and use their assets to leverage policy. They must be willing to invest in developing the capacity of nonprofit staff and leaders. Foundations need to look beyond their traditional aversion to possible nonprofit dependency and see themselves as committed partners in this issue over time.

Private Sector

The private sector does not yet fully realize the potential market in low-income communities that could be driven by the expressed needs of CBOs. How can the private sector design new systems at the grassroots level to help communities deliver their services based on what they need and not on sources of support?

Nonprofit Sector

Programs must be based on real needs assessments to avoid duplication of efforts and to point to potential partners who can assist in maximizing resources. Collaboration/information sharing related to technology happens too seldom at the grassroots level. Nonprofits must be viable and trusted partners, and viewed as a resource in their communities. They must be willing to collaborate with all community partners.

OTHER—OVERLOOKED ASSETS

CTIs' Vital Connection to the Community

- Connection to the community provides numerous overlooked assets:

—It permits an understanding of the culture of users in low-income communities.

—It allows more flexibility and can mean programs are more user-driven.

—It allows for the possibility of community volunteers as trainers and workforce role models.

—It can sometimes be the most important aspect of a technology program by creating a virtual and/or actual space where people can connect with each other and a sense of community.

—It may dictate that sustainability of some other aspect of a community center is more important than its technology component.

Section 3

STRATEGIC RESPONSES TO SUSTAINING TECHNOLOGY

IN A NUTSHELL: SEVEN KEY RESPONSES TO THE SUSTAINABILITY CHALLENGE

Of the many issues discussed and solutions proposed during the Session, which are detailed in the following pages, participants across sectors were clear about the need to move beyond discussion into action. Proposals for a strategic response can be summarized in the following statement:

It is to the mutual benefit of all sectors—public, philanthropic, private, and nonprofit—that local-, state-, and national-level collaboration both among and within sectors ensures:

- 1) The crafting of a national policy agenda on technology access and sustainability issues with the participation of all sectors, especially the nonprofit sector.
- 2) A unified voice calling for federal government responsibility to ensure the national infrastructure necessary for universal Internet access like broad band with particular emphasis given to public schools.
- 3) Diversified and adequate funding streams to support not only software and hardware, but also ongoing training, capacity building, leadership development, and technical assistance appropriate to the scale and needs of specific organizations.
- 4) Consistent and continued information and resource sharing at the local and regional levels to maximize resources like specialized expertise.

- 5) Standardized, outcomes-focused quantitative and qualitative data gathering that informs both funding decisions and sustainability planning, ensures program accountability, and contributes to local and national policy agendas based on experience and best practices.
- 6) Recognition of service providers' roles working as either locally responsive innovators or as regional or national producers and disseminators of best practices, which places responsibility for sustainability on each, commensurate with its role.
- 7) Continued development of overall community capacity to produce and honor its own knowledge and technology content for the enrichment of individuals and the community as a whole.

THEMATIC SUMMARY OF STRATEGIC RESPONSES

The following is a thematic summary of strategic responses to the challenges and issues shared during the session. It includes the proposed policies and practices that participants suggested be promoted or adopted by the Annie E. Casey Foundation and/or others in the field to sustain emerging technologies that support economic opportunity for families in low-income communities. Participants designated their comments as belonging to one of five proposed categories: Capacity Building, Resources, Public Policy, Research and Evaluation, and Other.⁴ Themes were also designated according to those that participants felt were feasible in the short to medium term (marked with a), and those they felt were achievable only in the longer term (marked with a). Themes are also designated, where possible, as work

proposed specifically for the Annie E. Casey Foundation (AECF) versus the field as a whole (field) or both (AECF/field).

CAPACITY BUILDING

- Build the capacity of community technology initiatives to standardize and quantify the success of their programs. This will provide more accurate documentation of programs that are actually addressing community needs best and will lead to improved programs. (AECF)
- Promote greater integration of industry information into nonprofits. Sustainability must be based on industry standards. Programs must meet the needs of industry, and should mirror it. (AECF/field)

○ Promote "professionalization" of the field by supporting the organizational development of CTIs and the leadership development of their leadership and staff. Support capacity building emphasizing collaboration and coordination among providers and skill building for those working in CTIs. (AECF/field)

- Find and promote documented working models of the successful use of IT for issues like affordable housing, small business creation, or advocacy for livable wage jobs. (AECF/field)

☒ Promote and support a consortium that can address the IT needs of communities and families as part of a coordinated national vision.

- Fund some long-term technology-focused community change strategies that require all elements—including economic and workforce development—to come together to create a model. (AECF)
- ☒ Promote integration of all sectors including unions, CTIs, and CBOs. (AECF)
- Address the disconnect between CTIs and CBOs to maximize community infrastructure.

○ Promote programs enabling communities to produce the content of technology as a means for them to create their own knowledge. Develop a fellowship program to document those whose voices are not being heard. (AECF)

- Use truly independent consultants to eliminate community leaders who act as gatekeepers as the primary source of information in communities, thus ensuring documentation of community needs. This will lead to increased community capacity. (AECF)
- Keep the adult literacy issue linked to technology issues in the public eye. (AECF/field)

RESOURCES: FUNDING/INFRASTRUCTURE

- Define the term "digital divide" so that all are working with the same understanding of this multifaceted issue. The digital divide has many facets; the issue of computer technology skills development should be addressed simultaneously with the issue of a living wage. (AECF)
- Take the lead on convening people from the three "silos" of technology service organizations, policy, and community development organizations to develop proposals that either eliminate existing redundancies or create collaborations that eliminate these silos, or both. The goal would be to create comprehensive projects that utilize the expertise of all three silos, are nonredundant, and operate to scale. (AECF)
- ☒ On the demand side, offer planning grants to nurture collaboration and bring people together to identify good programs. Create a replication grant program to accelerate the diffusion of successful programs and promote peer-to-peer mentoring. (AECF/field)
- Provide or advocate for the funding of an infrastructure that includes networked systems and not simply stand-alone hardware. (AECF)

- Include higher education in the technology discussions. Use higher education as a resource for many pieces of the technology picture; a place for training, a source of students to assist with training, technical assistance with bilingual training, etc. (AECF/field)
- ☒ Advocate for and work toward computer and Internet access in every home. (AECF/field)

PUBLIC POLICY/ADVOCACY

- Aid nonprofit technology users to find a seat at the policy table. Policy must be developed with input from all types of nonprofit technology users. For example, most were absent when the Broad Band Internet Access Act was being debated, and it is now being developed without their input. We must tie together the issues of leveraging local and national resources and collaboration with ensuring the infrastructure needed for equal access to technology and its sustainability. (AECF/field)

- Begin to create a national public policy agenda for success, a single strategic policy that can be supported by all sectors, looking at the public policy that brought us to this point—it has been defined very broadly, but implemented very narrowly, adding to the digital divide. (AECF/field)

- Build the capacity of organizations on the ground to be players in the policy arena—a powerful national policy agenda must be backed by a powerful advocacy agenda. What AECF has to offer is the “power of place”: the ability to bring people together from within communities—CTIs and government leaders—to discuss how technology can be used and the issues pertinent to that place. These can then fold into a national agenda. (AECF)

- Launch a national public campaign to tell the story of how nonprofits are using technology to advance various causes. This marketing will help show the results of technology investments and enable us to justify to legislators why it's not enough to simply have

- a computer in every classroom, but rather what happened as a result of that. (AECF/field, but AECF could take the lead)

- Create an organizing platform to help support broad band Internet access legislation because this is an issue that will drive the level of technology usage in the future. One participant suggested that others support passage of the Broad Band Internet Access Bill of 2002. (AECF/field)

- Ensure universal access for all children in all schools across the country to computer technology and skill development that will facilitate their ability to be competitive. (AECF/field)

- Time is of the essence for access and sustainability policy issues! Perfection is the enemy of the good in this situation. There is a lot of redundancy between this Session and one convened by the Marino Institute a year ago.⁵ We must work to set the bar at effective collaboration and avoid redundancy. (AECF)

- Invest in and strengthen networking so that policy can be clearly communicated. (AECF)

RESEARCH AND EVALUATION

- Strengthen and develop evaluation models that include ways to collect hard data on outcomes and return on investment. (AECF/field)
- Promote standardization and develop benchmarks for quantifiable outcome measures that can show outcomes for the industry or sector and raise the bar for what are considered quality programs. (AECF/field)

- Support research that will promote greater integration of industry technology solutions and information into nonprofits. (AECF/field)
- Identify and promote working models already documented as to how IT has been used for issues like increasing affordable housing or creating small businesses or livable wage jobs. (AECF)

- Promote access to better and more timely data on the digital divide and on specific groups impacted by it. For example, it is largely unknown that Hispanic women in business are one of the fastest growing sectors. (AECF)
- It was suggested that foundations should consider the development of a standard accountability tool. One participant referenced a local example of an "Individual Service Strategy" that was created for each individual served, used to measure their needs and progress, and thus to quantify outcomes and begin building accountability of programs. Those who fund technology programs should promote high standards. (AECF/field)
- Conduct a survey of CTIs using The Finance Project's Sustainability Assessment tool to document the sustainability issue. (AECF)

OTHER PROPOSED STRATEGIC RESPONSES

Collaboration is Key to Sustainability

Greater collaboration among all sectors is needed to advance the goals of equal access and sustainability. Collaboration [among CTCs and CBOs] must be organic, regionally focused, and meet real identified needs of the community. Groups in one geographic area should collaborate, pool resources, and decide which group will specialize in certain areas, so they can draw on each others' resources rather than competing for funding for comprehensive technology programs. This collaboration will be motivated by need. The philanthropic sector should help develop collaborations, even though it is time-consuming to bring solutions to scale, to share best practices and technology.

Consider All Costs

The philanthropic community must research, understand, and communicate all costs—including the hidden costs—to donors of technology grants. Similarly, sustainability must be factored in at the onset of the planning process.

Adaptability is Key to Sustainability

Adaptability in the face of changing conditions and the constant rising of the technology bar is a prerequisite for doing this work in all sectors.

Scale: An Evolutionary Approach to Sustainability

CTIs need to be very clear about whether they aim to work locally or to work at scale. Every group should not try to do both. There are some innovative community-based programs that do not have the capacity to work at a higher level or scale. What they do best within their communities is to foment innovative practices and vitality. They have unique assets, like the ability to recruit, track, and motivate volunteers, and to draw strength from their relationship to their immediate community. For them, sustainability should be based on that relationship. Intermediary or large organizations can realize economies of scale. They have a real responsibility to produce best practices and disseminate them. Funders should hold them accountable to make the case for what those economies are and why they are the organizations to deliver them. Those who can go to scale successfully should get funded to do so.

Prepare for the Long Haul

All sectors need to continue their work and take a long-range perspective on the discussion. Langford and Kass encouraged the group to bear in mind the long-term nature of this process, and to target resources strategically, including and especially staff resources. Others urged staying the course and being in the struggle with low-income communities for the long haul. We must remember that the long-term goal is promoting equity in neighborhoods, and that we must integrate technology into that, rather than the other way around.

Content

The issue of content must never be far from the issue of sustainability. Although too often ignored, the quality of programs and content should be key factors in what gets sustained. Specifically, technology should focus on creativity and enabling and empowering people to become producers of knowledge and information rather than simply consumers of others' information. Programs also need to help people understand the significance of technology in their lives and the lives of their children. Lastly, we need to keep asking the question: How do newly emerging technologies affect content?

appendix a

PARTICIPANT INTRODUCTIONS, ORGANIZATIONAL AFFILIATIONS, AND FOCUS OF WORK RELATIVE TO THE DIGITAL DIVIDE

Participants were asked to introduce themselves and their organization and to outline how the organization is working to address digital divide issues. In addition, participants had the option of addressing one of the following questions:

- What project(s) aimed at addressing the digital divide are you (or your organization) working on that would be of interest to this group?
- What is the most promising recent development that you are aware of related to sustaining digital divide projects?
- In your opinion, what is the biggest challenge to the long-term viability of efforts targeted to addressing the digital divide?

**Richard Akeroyd, Executive Director,
Bill and Melinda Gates Foundation.**

The Gates Foundation has three current programs: 1) The U.S. Public Library Program brings technology and Internet connectivity to 12,000 public libraries. 2) A program integrating technology, public access, and wireless connectivity into Native American communities in the Four Corners area (CO, NM, UT, AZ). 3) A program in Washington state assisting CBOs in using technology to meet the needs of their clientele. The Gates Foundation has three areas of interest: 1) The library program's sustainability issues have shown the need to understand at the outset of a project how sustainability issues will affect it throughout. A "sustainability kit" is under development and due out in the spring of 2002. 2) There is a need to create an online community of libraries and nonprofits providing public access to communities via a web-based public access portal. A Request for Proposals on this is currently out. 3) The Native American communities project has shown the need to determine actual and hidden costs of hardware and software donations to the donors; a paper is due out in June 2002.

END NOTES

¹*Making Connections* is part of the Annie E. Casey Foundation's Neighborhood Transformation/Family Development (NT/FD) place-based strategy for improving outcomes for children and families in low-income neighborhoods. Information about NT/FD can be viewed at the Foundation's website, www.aecf.org.

²Text has been condensed.

³This summary of proceedings has been condensed from participant comments and does not represent an opinion of the Annie E. Casey Foundation. Every good faith effort has been made to capture the intent of participants. Direct quotes appear only in quotation marks.

⁴Suggestions have been grouped and condensed where possible.

⁵The Marino Institute publication based on their online discussion in 2001 similar to this Consultative Session is entitled *The Digital Divide: From Access to Outcomes* and can be accessed at their website.

**Michael Barndt, Data Center Coordinator,
Nonprofit Center of Milwaukee.**

The Nonprofit Center is an association of nonprofits providing various aspects of capacity building to regional nonprofits in Southeastern Wisconsin. It is evaluating the capacity of nonprofits to use technology. A key issue is how nonprofits deliver services and how they work together; and the need to help increase their technology capacity. The Data Center is a clearinghouse for data used for planning and local action, and it is a Learning Partner in AECF's *Making Connections* initiative. It is grappling with several technology issues: How does emerging community information get used? How to enable a two-way flow of information, especially for that coming from the community? How to increase the skills of local leadership in using data, GIS, and other means of analyzing data? The effort to increase quantity of information is often shortened by the degree to which we've developed the capacity to use information. We need to be empowering the grassroots to be part of this work.

Daniel Ben-Horin, President, CompuMentor (Tech Soup).

CompuMentor recruits computer "geekies" as volunteer mentors to nonprofits. Their current effort is a national technology portal, TechSoup, which aggregates, presents, and markets nonprofit technology information. The organization sees a lack of planning and integration of existing efforts, and deems it essential to create solutions to scale, and determine needed collaborations.

**Norm Brown, Program Manager, Rural Development,
Office of Community Development, U.S. Dept. of Agriculture and a
Fellow in Mississippi Representative Bennie Thompson's office.**

The Enterprise Community/Empowerment Zone Initiative is now a congressional initiative; there are new EZ's in Maine and Texas. The Office of Community Development administers the rural side of the initiative and HUD administers the urban side. The office provides strategic business planning for the future of EZ communities.

**Delia Carmen, Senior Research Associate,
The Annie E. Casey Foundation.**

Delia Carmen is a Senior Research Associate in the Annie E. Casey Foundation's Measurement, Evaluation, and Advocacy group and takes the lead for the Foundation on identifying, supporting, and integrating best practices for the use of technology in enriching the lives of children and families.

Beverly Divers-White, Vice President, Foundation for the Mid-South.

The Foundation for the Mid-South conducts philanthropy in Arkansas, Missouri, and Louisiana, giving grants to communities in the areas of education, economic development, and families and children. It assists African-American churches in linking with others to do work in these three areas. Technology issues of access and infrastructure are as germane as the sustainability issue in the Deep South. In working with unemployed and underemployed youth and adults, the challenges for nonprofits in the Deep South lie in accessing funds from government and the philanthropic community. Another important issue is helping K-12 rural schools to access e-rate funds for installing technology in public schools.

**Lammot duPont, Senior Program Officer,
Technology Opportunities Program, U.S. Department of Commerce.**

The program plays two roles: it provides funding to demonstration projects using technology and it serves as a clearinghouse of information on best practices.

Elizabeth Echols, President, Op-Net.

Op-Net addresses the digital divide by training low-income youth in the San Francisco Bay area with technical and soft skills, and providing direct placement and internships. To date, 130 youth have been trained, showing success in recruitment and placement.

**Phaedra Ellis-Lamkins, Executive Director,
Working Partnerships, USA.**

Working Partnerships is developing a model program training people in the IT sector and bringing technology into their homes. It is creating a group of people who can self-organize, who can be tracked, and whose success can be evaluated by increasing wages, reemployment and health care indicators. They partner with industry and labor unions, and community colleges as well as with local and state Workforce Investment Boards to leverage their resources. The organization feels its work must happen within a policy framework.

Judith Escalona, Executive Director, PR Projects, Inc.

PR Projects, Inc. is a nonprofit media organization with a website (PR.com) devoted to Puerto Rico and the Puerto Rican diaspora. It provides content on Puerto Rico via an intergenerational oral history project that trains youth to collect oral histories on videotape and put them on the web. It sees technology as a tool for consciousness-raising to help people create their own "content" that is then shared on the web—transforming how people think about themselves, their history and identity. PR Projects is also creating a database at Hunter College. The project also put Nuyorican Cinema online, an art gallery, a community announcements board, and "Timelines" which teaches Puerto Rican history. Its key issue is looking at the ways that new technologies affect content.

Felipe Floresca, Consultant, The Annie E. Casey Foundation.

Felipe M. Floresca is presently serving as a private consultant specializing in public policy and government affairs. Among his clients are the Annie E. Casey Foundation, National Economic Development & Law Center (NNSP Ford Foundation Project), and Charles D. Smith Foundation. Most recently, Felipe served in the Clinton administration as Chief of Staff for Policy at the United States Department of Labor and also as a Senior Advisor to the Assistant Secretary, Employment & Training. He was a member of several White House Domestic Policy Council working groups.

Vicki Fulton, AOL Time Warner Foundation

The Foundation invests in projects promoting digital opportunity and bridging the digital divide, attempting to achieve an environment where anyone can take advantage of the emerging technologies. It helps civil society to develop "collaborators" to get funding and support for their work, to advance policy, and to do research. It sees the biggest challenge to the work as developing local leadership and local collaboration.

B. Keith Fulton, Vice President, AOL Time Warner Foundation.

Not present during introductions.

Michael Gaines, President and CEO,

Maryland Center for Arts and Technology.

The Maryland Center for Arts and Technology (MCAT) is a nonprofit that provides specialized and customized training to develop a technologically skilled workforce. It identifies innovative training methods for youth, dislocated workers, and others to prepare them for jobs in health care, financial services, information technology, and manufacturing. By identifying industries and jobs available, it is both customer driven and market driven. MCAT partnered with Hewlett Packard in the Digital Village program to develop a long-term plan to create the infrastructure to provide solutions to the digital divide in the areas of education, workforce and economic development, community and housing development, and public policy and infrastructure. The organization is interested in the policy issues involved in providing access.

John Gray, representing Martina Hone, Power Up.

Power Up is a youth development organization that has created a network of over 300 CTC after-school programs around the country, providing seed grants for technology and support. Groups match these grants to provide the infrastructure. The technology piece is a portal for kids. Mr. Gray's key issue is the notion that infrastructure cannot be separated from sustainability because the digital divide bar keeps rising, it is not possible to simply sustain what exists or it will quickly be outdated.

Tracy Gray, Vice President, Youth Services, Marino Institute.

The Marino Institute has an emphasis on youth development programs. In 1998, it started a Youth Development Collaborative. It set up an incubator to look at how CBO's use technology—the goal is to create four state-of-the-art networked learning centers in CBOs. This requires developing their organizational capacity to ensure sustainability. The institute also developed an 18-month staff development training process, now used throughout the region. It captured lessons learned in a Youth Learn website. The pilot is complete, and they are now in the implementation phase. Marino produced a guide for teachers on how to use technology effectively with children.

Tony Hall, Consultant, The Annie E. Casey Foundation.

Tony Hall works as an independent technical assistance provider and management consultant with a focus on community and economic development. Tony moved into the community and economic development arena after 12 years in the private sector as a software developer and designer. Some of his more recent projects include helping establish citywide data warehouses that provide access to neighborhood-level data; working with communities to help neighborhood residents collect and assess data about their communities; and helping build and sustain local capacity for self-evaluation.

Martina Hone, Vice President of Public Policy, Power Up.

See description under John Gray.

Alicia Jones, President, Youth Links/Internet Workforce Development, Inc.

Youth Links is an IT workforce development training program for the most at-risk youth and their families. It has partnered with Columbia University to develop and implement research on "learning helplessness syndrome"—a social psychological malady that manifests in hopelessness and deviance—and its impact on low-income communities. The program has an 85 percent success rate in reengaging youth. The challenge the organization sees is an absence of need or desire to collaborate and share with partners.

David Kass, Program Manager, The Finance Project.

See description under Barbara Langford.

Mei King, Director, Tent City Technology Corporation/MIT.

The South End Technology Center at Tent City, is a CTC in a housing development in Boston. The city has 30 CTCs with support from the Timothy Smith Foundation to support hardware sustainability for 20 years. They are working to get all of these centers working, organized, and jointly seeking resources for staff support and staff development to ensure a consistency of capacity. They will also link to the library system. A project called HIP HUG is partnering with a for-profit corporation developing an online web-based tutoring and mentoring program. It pays youth to develop content for this program to ensure relevancy to their peers. Technology should focus on creativity and enabling people to become producers of knowledge and information rather than simply consumers of other's information. It should enable people to tell their stories via broadcasting.

Josh Kirschbaum, Program Associate, Policy Link.

Policy Link is a policy advocacy organization dedicated to building a new generation of economic and social policy for community building. It lifts up local practice to build policy. It sees a current lack of technology capacity on the part of CBOs—"the organizational divide." Policy Link is looking at issues of access, capacity building, and quality content, to keep the focus on community building rather than the technology itself. It is working with LISC in California to develop strategies to enhance affordable housing and community building through a GIS application and indicators for community building.

Barbara Langford, Program Manager, The Finance Project.

The Finance Project is a nonprofit policy research, technical assistance, and information organization created to help improve results for children, families, and communities. It provides technical assistance to policymakers, community leaders, and program developers on financing and sustaining community initiatives. It also manages a clearinghouse on the digital divide.

Elsa Macias, Director, Tomas Rivera Policy Institute.

The institute is a think tank for colleges that conducts policy research in several areas including IT. It focuses on access to technology, e-commerce, literature review specific to Latinos, and evaluation of four TOP programs. The challenge they see is that collaboration and information sharing seldom happen at the grassroots level.

Melissa Magallanes, Program Manager, SEEDCO.

SEEDCO is a national community development intermediary working in economic and workforce development and affordable housing. Its Community Technology Initiative funded by the Ford Foundation has three thrusts: 1) A survey looking at the role of IT access and impact on the organizational mission of 350 CDCs; 2) A case study of 5 university/community partnerships; and 3) An AmeriCorps Digital Divide Project.

Doug Paterson, National League of Cities.

NLC conducts federal-level lobbying and policymaking on e-rate, universal service, and universal access issues. Its Youth Education and Families Institute brings nonprofits, government agencies, and others together to collaborate on youth, education, and family-related issues. It sponsors team-building conferences, targeting communities that are concentrating on these issues.

Archie Prioleau, President, DC Link & Learn.

The Washington D.C. Technology Center is now a HUD Best Practices model that has evolved into a self-sufficiency center combining economic development and education. It is creating a national model to determine how to take the project to scale. It is currently developing a 25-acre campus, building a new high school and college, and providing internships. Link & Learn is building businesses to support its educational component; it has a contract to build kiosks for the District as an entrepreneurial skill-building project.

Gail Robinson, Coordinator of the Service Learning Program, American Association of Community Colleges.

The Association represents 1,200 community colleges in the United States. One project trains IT workers—both displaced workers and returning workers. A service learning project applies concepts learned in the classroom.

George Samuels, CEO, New Management Information Systems.

New Management Information Systems (NMIS) provides expertise in information technology. The company sees the need for solid technology expert advice, and strategic planning on a national level for viable infrastructure to bring technology to the homes of families and organizations. It provides assistance to CBOs for innovative solutions in technology.

Charles Smith, Executive Director, Charles D. Smith, Jr. Foundation.

The Charles Smith Educational Center goal is to sustain community through technology, health, wellness, and community development. Mr. Smith is also CEO of New Media Technology that has developed a tracking system and database for children in youth centers. It is developing a video, audio, and text information portal requiring only a high-speed Internet connection.

Tony Streit, Administrative Director and Co-Founder, Street Level Youth.

Mr. Streit is a board member of CTCNet, an affiliation of 600 CTCs around the country. Street Level Youth is a youth media arts organization in Chicago providing youth with access to technology in order to produce their own work. The issues they identified are: 1) Sustainability should focus on developing the capacity of people rather than organizations. Organizations are only as strong as the people who run them and there is a need to help develop capacity 2) How we design new systems at the grassroots level to help communities deliver their services based on what they need and not on funding.

Curtis White, President, Allied Communications, Inc.

Sustainability is a threshold issue for Allied. The company works with Fannie Mae to implement the Smart Homes Initiative nationwide. It provides local, long distance, broad band transport, telemedicine, distance education, and banking for the un-banked in underserved communities. The key issue is the need to look at the profitability of technology deployment in low-income communities, or the digital divide will only continue to widen. If technology isn't profitable to companies who install the platforms, it will continue to be targeted solely to more affluent communities. We have to find the incentives to drive content providers and service providers into low-income communities or we'll have the same gap in technology that exists in banking.

Tony Wilhelm, Ph.D., Vice President for Programs, Benton Foundation.

Mr. Wilhelm is the originator of the Digital Divide Network, Chair of the Transatlantic Teens and Technology Roundtable Steering Committee, and author of the book *Democracy in the Digital Age*. The key issue is how to parlay the huge investment from the public and private sectors over the last decade into something that's lasting and of value to communities.

Lee Wood, Program Manager, Appalachian Center for Economic Networks.

The center is a small nonprofit helping to develop technology capacity for youth via youth entrepreneurial programs in seven local rural high schools. It will soon have a Power Up lab, and wants to link communities, schools, and businesses together. It currently provides workforce development classes in three labs: transferable technology skills, soft skills, and job search assistance.

appendix b

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