



Boston Cyberarts Program Evaluation and Economic Impact Analysis 2003

Prepared by the



**CENTER FOR POLICY ANALYSIS
UNIVERSITY OF MASSACHUSETTS DARTMOUTH**

September 2003

**UNIVERSITY OF MASSACHUSETTS DARTMOUTH
CENTER FOR POLICY ANALYSIS**

The University of Massachusetts Dartmouth Center for Policy Analysis was established in 1985 as a multidisciplinary research unit dedicated to the creation and dissemination of knowledge that facilitates economic, social, and political development. The Center for Policy Analysis aims to enhance the economic and social well-being of citizens by providing research, information, and technical assistance to government, business, non-profit, and educational agencies. The Center for Policy Analysis does not pursue a predetermined research agenda, but is a flexible research organization responding on a timely basis to problems and issues identified by client agencies.

Clyde W. Barrow, Ph.D., Political Science
Director

EXECUTIVE BOARD

David Borges, M.P.A., Public Administration
Senior Research Associate

Eric Bourgeois, Ph.D., Sociology
Senior Research Associate

Victor DeSantis, Ph.D., Political Science
Adjunct Research Associate

William Hogan, Ph.D., Economics
Senior Research Associate

Toby Huff, Ph.D., Sociology
Senior Research Associate

Susan Krumholz, J.D., Ph.D., Sociology
Senior Research Associate

Philip Melanson, Ph.D., Political Science
Senior Research Associate

Robin A. Robinson, Ph.D., Social Welfare
Senior Research Associate

Paul Vigeant, M.A., Public Administration
Adjunct Research Associate

Luther Wallin, M.R.P., Regional Planning
Senior Research Associate

EXECUTIVE STAFF

David Borges, M.P.A., Public Administration
Senior Research Associate

Nina Galipeau, B.A., Political Science
Research Associate

ADJUNCT RESEARCH ASSOCIATES

Victor DeSantis, Ph.D., Political Science
Bridgewater State College

Paul Vigeant, M.A., Public Administration
SouthCoast Development Partnership

Correspondence and inquiries should be addressed to: Center for Policy Analysis, University of Massachusetts Dartmouth, 285 Old Westport Road, North Dartmouth, Massachusetts 02747-2300 (telephone: 508-999-8943; fax: 508-999-8374).

Copyright © Center for Policy Analysis. All rights reserved. This document may not be reproduced in any form without prior written permission from the Center for Policy Analysis

Website address: www.umassd.edu/cfpa

The information and analysis in this report does not represent an official statement or view of the University of Massachusetts.

Economic Research Series No. 46

CONTENTS

Executive Summary	iii
1.00 Introduction	1
1.10 Boston Cyberarts	1
2.00 Boston Cyberarts Program Evaluation and Economic Impact - Methodology ...	3
3.00 Program Evaluation.....	4
3.10 Goal I: To successfully organize the Boston Cyberarts Festival, providing opportunities and audience for arts institutions and artists in the Festival.....	4
3.11 Attendance and Events.....	4
3.12 Festival Headquarters.....	4
3.13 Examples of Events	5
3.14 CyberArtCentral for Kids.....	6
3.15 Conferences	6
3.16 Measures of Customer Satisfaction.....	7
3.20 Goal II: To advance the image of Massachusetts as a national and international center for cyberarts, to the mutual economic benefit of local cyberartists, emerging and established high tech businesses, the tourist industry and cultural institutions.....	8
3.21 Benefits to Artists	8
3.22 Public Relations	8
3.23 Collaborations Between Art Organizations and High Tech.....	8
3.24 Partnerships	9
3.25 International Participation	9
3.26 Financial Opportunities.....	10
3.27 Conferences	10
3.28 Press Coverage.....	11
3.29 Foundation Support.....	11
3.30 Apropos	11
4.00 Economic Impact Analysis	13
4.10 Implan Econometric Modeling System.....	13
4.20 Economic Impacts	14
Appendix A - Survey Results and Survey Instrument	17
Appendix B - Press Bibliography.....	40
Appendix C - Cyberarts Participating Organizations and Survey Instrument	43

[This page left blank intentionally]

Executive Summary

The Boston Cyberarts Festival is the first and largest all-media cyberarts festival in the nation. The Festival includes over 300 visual and performing artists and explores how artists throughout the world are using computers to advance traditional artistic disciplines and create new interactive worlds. The events involve individual artists, established arts organizations, educators, and high-technology industry professionals and include exhibitions of visual arts, music, dance, and theatrical performances, film and video presentations, educational programs, and lecture/demonstrations and symposia.

The Center for Policy Analysis was retained by the Massachusetts Cultural Council to conduct a program evaluation and economic impact analysis of the Boston Cyberarts Festival. The 2003 Boston Cyberarts Festival was held from April 26 to May 11, 2003. Results of the analysis include:

Attendance and Programming

- The 2003 Cyberarts Festival included over 75 organizations and 100 programs with over 350 artists, humanists, and scientists. Many of these artists would not have the opportunity to share their work with the public or to build partnerships with cultural institutions if not for the Cyberarts Festival.
- Festival attendance has increased significantly since 1999, with this year's Festival attracting approximately 21,000 attendees. The total number of visitations to the Cyberarts venues is estimated to be 60,000.
- While the majority of Festival attendees were from Massachusetts, an estimated 10.0 percent were from other areas of the country and 2.0 percent were from other countries.
- In 2003, Boston Cyberarts organized its first ever CyberArtCentral for Kids. This collaborative space took place at Cloud Place on Boylston Street. Hundreds of kids and their parents came through the CyberArtCentral for Kids on the three weekends it was open during the Festival.
- The Festival hosted three national conferences, one held each weekend of the Festival. The conferences were as important to the Festival as the exhibitions and performances in that they attracted a large national and international audience and were a vehicle for the development critical dialogues about art and technology.

Survey Results

- A survey conducted at various Festival sites indicates that Festival attendees were pleased with the Cyberarts Festival and its events. For example, nearly all respondents (93.0%) rate the Festival as excellent (45.5%) or good (47.5%). Similarly, most respondents (95.3%) indicate that the events they attended were excellent (52.8%) or good (42.5%) and (97.6%) would recommend the Festival to their friends.
- Eighty-five percent of respondents (85.1%) indicated that they would attend the next Cyberarts Festival, while fifteen percent (14.9%) are unsure. No respondents indicated that they would not attend the next Cyberarts Festival.
- The survey of Cyberarts attendees included several questions about the Cyberarts website. Overall, respondents express high levels of satisfaction with the website. For example, almost three-quarters of respondents (72.7%) found that the website was helpful, while 20.8 percent indicated that the website was somewhat helpful. More than four-fifths of respondents (83.3%) indicate that the website was easy (54.1%) or somewhat easy (29.7%) to use. Respondents were most likely to use the webpage to find the schedule and location of events (77.0%) or to obtain other general information (67.6%).

Economic Impacts

- Total program expenditures for Boston Cyberarts from July 1, 2002 to June 30, 2003 are \$128,322. This figure includes project-related expenditures by state and local agencies including the Massachusetts Cultural Council, but does not include any in-kind contributions.
- Visitors to Cyberarts spent an estimated \$932,834. Most of this spending directly benefits the artists, cultural institutions, and high tech businesses involved in Cyberarts.
- A survey of the organizations involved in the Cyberarts Festival indicates that these organizations paid an estimated \$171,739 to artists for their work. Many of these artists would not have been able to take advantage of these financial opportunities if not for the Festival.
- The total direct expenditures for Cyberarts, which includes program expenditures, partner organization expenditures, and attendee spending is \$1,953,981.
- The IMPLAN model estimates that in FY 2003, Boston Cyberarts generated a total regional economic impact of \$2,588,854 and created an additional 32.4 full-time equivalent year-round jobs. The major employment impacts occurred in non-profit organizations, eating and drinking establishments, management and consulting, and hotels and lodging. Thus, the Boston Cyberarts Festival not only benefits the arts community, but also contributes to Boston's larger economic development strategy in the areas of tourism and professional services.

1.00 Introduction

The arts are an important contributor to national, state, and local economies. The Americans for the Arts estimates that the Nation's art industry generates \$134 billion annually in economic activity and supports 4.85 million full-time equivalent jobs (Americans for the Arts 2002). The \$134 billion total includes \$53.2 billion in spending by arts organizations and \$80.8 billion in event-related spending by arts audiences. The report estimates that spending by the non-profit arts industry increased by 45 percent from 1992 to 2000. Regionally, the New England Council estimates that 245,000 New Englanders, or 3.5% of the region's total workforce, are employed in the creative economy (The New England Council 2001). It also finds that the creative economy is responsible for generating \$6.6 billion in tourism, employs more workers than industries such as healthcare technology, computer equipment, and software, and is growing at twice the rate of New England's overall economy. In Massachusetts, the creative economy accounts for 3.5% of employment, or 116,299 jobs (The New England Council 2001).

Massachusetts' exceptional cultural offerings contribute to the competitive strength of the state's economy by serving as a tourist attraction and by creating a high quality of life for citizens. In many cases, the arts are leading the revitalization of decaying downtown areas while contributing to an area's quality life by improving neighborhoods. Additionally, a vibrant arts community can help a region to attract and retain educated and skilled workers (Florida 2000).

The cultural industry in Massachusetts provides direct employment and income-producing activities to thousands of the state's residents, yet cultural assets are frequently overlooked in designing state and community economic development strategies. Consequently, the Massachusetts Cultural Council (MCC) implemented a Cultural Economic Development (CED) Program as a means of fostering and promoting the use of culture as a tool for economic development. The CED program promotes this goal by funding local projects throughout Massachusetts that have the capacity to stimulate additional economic activity, including new job creation, new business formation, and additional sales in cultural and arts-related businesses. The local programs funded by the MCC will be increasingly required to document their performance in terms of process (program implementation) and outputs (economic impacts, leveraged funds, visibility, etc.).

1.10 Boston Cyberarts

The Boston Cyberarts Festival was launched in 1999 with a start-up grant from the Massachusetts Cultural Council's Cultural Economic Development (CED) program. The Festival is organized by Boston Cyberarts, Inc., a non-profit 501(c)(3) arts organization created to foster, develop and present a wide spectrum of media arts, including electronic and digital experimental arts programming. In addition to the MCC, Boston Cyberarts, Inc. is funded by the National Endowment for the Arts, The Boston Foundation, The LEF Foundation, WB56 Family First Fund - a fund of The Robert R. McCormick Tribune Foundation, The Boston Cultural Council - a municipal agency supported by the MCC, and many generous individuals.

The Boston Cyberarts Festival is the first and largest all-media cyberarts festival in the nation. The Festival includes over 300 visual and performing artists and explores how artists throughout the world are using computers to advance traditional artistic disciplines and create new interactive worlds. The events involve individual artists, established arts organizations, educators, and high-technology industry professionals and include exhibitions of visual arts, music, dance, and theatrical performances, film and video presentations, educational programs, and lecture/demonstrations and symposia. These events take place at more than seventy-five locations in and around Boston, including theatres, museums, galleries, artists' studios, educational institutions, and other public spaces. Besides these traditional physical locations, a key component of the Festival is a companion website to encourage participation from outside New England.

2.00 Boston Cyberarts Program Evaluation and Economic Impact - Methodology

The Center for Policy Analysis was retained by the Massachusetts Cultural Council to conduct a program evaluation and economic impact analysis of the Boston Cyberarts Festival. The program's economic impact is being measured using the following data:

- **Expenditures by Boston Cyberarts, Inc.** This data was provided by Boston Cyberarts, Inc.
- **Expenditures by participating organizations.** Expenditure data from the participating organizations was obtained through a survey that was mailed to each of the organizations.¹ This data only includes expenditures that are specifically dedicated to Cyberarts Festival activities.
- **Expenditures by Cyberarts attendees.** Expenditure data from Cyberarts attendees was obtained from surveys that were completed at various events. Attendees completed the survey on-site or returned the surveys at a later time using the business reply envelope provided with each survey. Respondents were also able to fill out the survey on-line. A total of 126 surveys were completed.²

The estimated total annual economic impact of the Cyberarts Festival was calculated using the IMPLAN econometrics modeling system, which has been in use since 1979 and is currently used by over 500 private consulting firms, university research centers, and government agencies.

This report also provides a program evaluation of the Cyberarts Festival to gauge the program's success in meeting defined goals and objectives. The goals of Boston Cyberarts are:

Goal I:

To successfully organize the Boston Cyberarts Festival, providing opportunities and audience for arts institutions and artists in the Festival.

Goal II:

To advance the image of Massachusetts as a national and international center for cyberarts, to the mutual economic benefit of local cyberartists, emerging and established high tech businesses, the tourist industry and cultural institutions.

¹ See Appendix C for the list of organizations and the survey instrument.

² A copy of the survey and the survey results are included in Appendix A.

3.00 Program Evaluation

The program evaluation assesses the implementation of the Boston Cyberarts Festival in terms of the goals established in its grant application with the Massachusetts Cultural Council. Boston Cyberarts, Inc. established two major goals in its grant application:

Goal I:

To successfully organize the Boston Cyberarts Festival, providing opportunities and audience for arts institutions and artists in the Festival.

Goal II:

To advance the image of Massachusetts as a national and international center for cyberarts, to the mutual economic benefit of local cyberartists, emerging and established high tech businesses, the tourist industry and cultural institutions.

3.10 Goal I: To successfully organize the Boston Cyberarts Festival, providing opportunities and audience for arts institutions and artists in the Festival.

Activities in meeting this Goal include:

3.11 Attendance and Contributors

The Boston Cyberarts Festival was held from April 26 to May 11, 2003. The Festival has expanded since its inception in 1999 and now includes over 75 organizations and 100 programs with over 350 contributing artists, humanists, and scientists. Festival attendance has increased significantly since 1999, with this year's Festival attracting approximately 21,000 attendees.³ The total number of visitations to the Cyberarts venues is estimated to be 60,000. While the majority of Festival attendees were from Massachusetts, an estimated 10.0 percent were from other areas of the country and 2.0 percent were from other countries.

3.12 Festival Headquarters

Festival-goers seeking information about the 2003 Boston Cyberarts Festival were able to choose from three convenient CyberArtCentral headquarters in Boston and Cambridge. Visitors to the CyberArtCentrals were able to pick up a Festival catalog, obtain more detailed information about events and exhibitions from Cyberarts representatives, view online galleries and other sites, and to purchase CyberPass discount cards, t-shirts, and other Festival items. Each

³ This number represents unique visitors. Since many attendees visited more than one site, the total number of visits to Cyberarts venues was approximately 60,000. These numbers do not include visits to the Cyberarts website, which is a central component of the Festival.

location hosted its own exhibitions and activities, including one site designated specifically for children and youth.

The three CyberArtCentral sites were:

- **Art Interactive** in Cambridge hosted “Origins,” an exhibit of installations that illustrate the connections between early and contemporary electronic art and visual instruments. “Origins” featured the work of several pioneering electronic video artists. Demonstrations and performances also took place at the gallery.
- **Copley Society of Art** in Boston’s Back Bay devoted this year’s “Manifest,” the Society’s regular biennial exhibition for emerging artists, to digital two- and three-dimensional art. The exhibition showcased a variety of work, including digital photography, printmaking, sculpture, and more.
- **Cloud Place** in the Back Bay was the site of the first CyberArtCentral for youth. The exhibition showcased cyberart projects created by young people at community art centers, community technology centers, and schools throughout the Boston area, and included digital stories and films, kinetic sculpture, original music, prints created with digital imaging technologies, and Boston Cyberarts’ award-winning web-based Faces of Tomorrow self portraiture project.

3.13 Examples of Events

Music continues to be a major draw for the Festival. The gala opening event of the Festival was the sold out performance and North American premiere of Toy Symphony, a collaboration between Boston Cyberarts, the Media Lab at MIT and the Boston Modern Orchestra Project. Toy Symphony is an integrated approach to music education and creativity based on new inventions by renowned composer Tod Machover. It begins with a series of workshops for youth. In Boston, workshops occurred between February and April in five inner-city neighborhoods, the Children's Museum, and the MIT Media Lab. A special pre-event featuring music composed by local children using Hyperscore took place in April at Club Passim in Harvard Square. The culminating concert included a full orchestra of professional musicians playing traditional instruments with electronic enhancements, the PALS Children's Chorus, local youth using Music Toys, and a celebrated hyper-soloist, Cora Venus Lunny, from Ireland.

Other musical events included the Brandeis Electro Acoustic Music Marathon, fourteen hours of electronic music from around the world, a Boston Musica Viva concert of music and media, the American Composers Forum concert at Berklee and a concert by Ellen Band and David Lee Meyers presented by the Institute of Contemporary Art and the Boston Creative Music Alliance.

There were forty exhibitions of visual arts and new media throughout the city as well as other events extending from Portland Maine to Providence Rhode Island, and Wellfleet to Worcester Massachusetts. Some of the highlights were the DeCordova's exhibition of the Tissue Culture and Art projects, Pig's Wings, the result of Tissue Culture and Art project's year-long artists in residency at the Tissue Engineering and Organ Fabrication Laboratory at Massachusetts General Hospital. This was one of three projects that the DeCordova organized. The New Arts Center hosted an exhibition of new robotic sculpture curated by Dana Moser. Brown University presented numerous virtual artworks on their virtual reality CAVE. MIT's List Visual Art Center organized an exhibition of Internet based animations for their Media Wall, one of three exhibitions they included in the Festival. Art Interactive presented "Origins" which traced the path from early analog new media pioneers like Nam June Paik and Steina Valsulka to contemporary digital new media. Both the Swiss Consulate and the Goethe Institut brought important artists from their respective countries to exhibit and lecture.

Many New England and internationally known digital visual artists performed solo shows during the Festival. These artists included Robert Arnold, Hisham Bizri, Harriet Casden-Silver, Beth Galston, Jun Nguyen-Hatsushiba, Kelly Heaton, Dorothy Simpson Krause, Andrew Neumann, Bill Seaman, David Small, and Bill Viola.

3.14 CyberArtCentral for Kids

Boston Cyberarts organized its first ever CyberArtCentral for Kids. This collaborative space took place at Cloud Place on Bolyston Street opposite the Boston Public Library, courtesy of the Cloud Foundation. Jennifer Audley, Boston Cyberarts' Youth Director, brought together all the art, technology and youth programming from around the city. Some of the participating groups included the Computer Clubhouse, Somerville Community Access Television and SAY Media, Gibbs College, Build-It-Yourself and the BNN Multimedia Center's DigitalArt Youth Program (DAY). In addition, Boston Cyberarts presented its own award winning Faces of Tomorrow project. Hundreds of kids and their parents came through the CyberArtCentral for Kids on the three weekends it was open during the Festival.

3.15 Conferences

The 2003 Festival hosted three national conferences, one held each weekend of the Festival. The Conferences helped to attract a larger national and international audience and to develop critical dialogues about art and technology. The conferences were as important to the festival as the exhibitions and performances. The Digital Art In Public Space conference attracted speakers and an audience from around the country and was the impetus for siting eight works of public digital art throughout Boston and Cambridge.

The Visual Improvisation Symposium also brought artists from around the country to lecture and perform on video as a performance medium, including Steina Vasulka, founder of the Kitchen in New York. The eNarratives conference brought Electronic Literature experts to Boston and culminated in a free public panel discussion on all aspects of electronic literature at the Boston Public Library.

3.16 Measures of Customer Satisfaction – Attendee Survey

A survey conducted at various Festival sites indicates that Festival attendees were satisfied with the Cyberarts Festival and its events. For example, nearly all respondents (93.0%) rate the Festival as excellent (45.5%) or good (47.5%).⁴ Similarly, most respondents (95.3%) indicate that the events they attended were excellent (52.8%) or good (42.5%) and (97.6%) would recommend the Festival to their friends. Eighty-five percent of respondents (85.1%) indicated that they would attend the next Cyberarts Festival, while fifteen percent (14.9%) are unsure. No respondents indicated that they would not attend the next Cyberarts Festival.

3.17 Cyberarts Website

In addition to the traditional physical locations, a key component of the Cyberarts Festival is a companion website to encourage participation from outside New England. The website contained general information about the Festival as well as a schedule and event locations and the names of participating artists. The webpage also included Faces of Tomorrow, a web-based project, which invited youth to submit self images in the form of photos, digital images, drawings, and combinations of media.

Another important feature of the website is Apropos, a web-based service that helps digital artists find exhibitors for their work, and vice versa. Artists who have projects to propose, and institutions that can provide exhibition opportunities, are able to post their ideas directly to the Apropos. Apropos is discussed in more detail in Section 3.30.

A survey of Cyberarts attendees included several questions about the Cyberarts website. Overall, respondents express high levels of satisfaction with the website. For example, almost three-quarters of respondents (72.7%) found that the website was helpful, while 20.8 percent indicated that the website was somewhat helpful. More than four-fifths of respondents (83.3%) indicate that the website was easy (54.1%) or somewhat easy (29.7%) to use. Respondents were most likely to use the webpage to find the schedule and location of events (77.0%) or to obtain other general information (67.6%).

⁴ Results of the survey are included in Appendix A.

3.20 Goal II: To advance the image of Massachusetts as a national and international center for cyberarts, to the mutual economic benefit of local cyberartists, emerging and established high tech businesses, the tourist industry and cultural institutions.

In addition to providing a public celebration of the cyberarts, a goal of the Cyberarts Festival is to benefit the community by establishing new partnerships between the artists, cultural institutions, tourist-related organizations and businesses, and the high tech industry. This has happened in many ways.

3.21 Benefits to Artists

There are numerous artists who have found exhibition and performance opportunities where none existed before the Festival. The number of exhibition and performance opportunities from the first three Festivals for cyberartists is many times the total number for the last decade before 1999. The 2003 Festival included over 75 organizations and 100 programs with over 350 artists, humanists, and scientists. Many of these artists would not have the opportunity to share their work with the public or to build partnerships with cultural institutions if not for the Cyberarts Festival.

3.22 Public Relations

Many institutions have started using the success of the Festival in their own public relations. For example, the Massachusetts College of Art in a promotional description about its Studio for Interrelated Media (SIM) program in the October 2001 Artbyte Magazine ended with this statement; "...and Boston's prominence as a hub of high technology art ensure that cutting edge artists, theorists and educators compliment the creative environment." This statement would not have been made prior to the first festival.

3.23 Collaborations Between Art Organizations and the High Tech Industry

In the spring 1999, the Attleboro Museum requested technical support from Texas Instruments, which maintains a factory in Attleboro, for their exhibition e-lections @ Attleboro. Texas Instruments provided three video projectors, two Gateway Computers with 3D modeling upgrades and Internet linkage including a web cam and speakers. Don Rolph, an engineer with Texas Instruments, came to set up the equipment and caught the excitement of the project and additionally sent over a construction crew to build wall mounts for the projectors. One of the artists, Remo Campopiano from New York, then designed a brand new website for the museum. The museum approached the North Attleboro Electric Company who gave the museum free high-end business Internet service until the end of 1999 and Texas Instruments invited the Museum Director to sit in on an in-house workshop on web publishing to help learn to work the system. During the exhibit, Rolph came in every other day to do technical trouble shooting and kept the sophisticated exhibition running. As a result, Rolph was invited to join the board of the Museum and accepted. This

was the first time that the company and the Museum had established linkage and as a result the Museum has one of their “Community Galleries” in the Texas Instruments factory.

Boston Cyberarts also has a special relationship with the host of the various parts of its web sites. Different companies host different sections of the web site. The three pro bono web sites are the events calendar hosted by SkyBuilders, Inc., the HyperArtSpace online gallery hosted by Mathworks, and the Apropos Artist proposal Database is hosted by CAGE, a web design and visual arts organization in the Netherlands.

Numerous artists have taken advantage of the new Z Corporation's new Rapid Prototyping service bureau that has been providing low cost (and many times no cost) output for digital sculptors from around the Commonwealth. This was set up when the Boston Cyberarts Festival organized the Mind Into Matter exhibition at the Computer Museum in 1999.

On May 4, 2003 Boston Globe business reporter D. C. Dennison wrote an article entitled “Start-up Ideas Straddle World of Art, Technology”. It discussed two companies, Smart Worlds and SkyBuilders, who were using projects in the 2003 Boston Cyberarts Festival to experiment with their start-up technologies by using them in an art context. Smart Worlds designed wireless GPS technologies for PDAs and SkyBuilders builds web-based databases.

3.24 Partnerships

Many partnerships between institutions grew out of the Festival. For example, classes from the Massachusetts College of Art have created virtual reality sculpture for the famed Spirited Ruins VR site of the Boston University Computer Graphics Lab. Student and faculty artists were invited to design webart components for the virtual reality space as well as real space sculptural counterparts that interact with the VR objects.

The collaboration between the Boston Modern Orchestra Project and the Media Lab resulted in two major concerts of the Toy Symphony, first the North American premiere at the Boston Cyberarts Festival and then in New York

3.25 International Participation

The 2003 Cyberarts Festival expanded its international attendance through the participation of two artists from overseas in the Digital Art in Public Space (DAPS) conference. The Goethe Institut hosted an exhibition and performance by Berkan Karpat, a Turkish born public artist living in Munich. He spoke at the DAPS conference and exhibited his On a Ship to Mars multimedia installation at the Goethe Institut. In addition, Emerson College hosted Emil Hrvatin, an artist who performed his Miss Mobile cell phone performance and spoke at DAPS.

The Swiss House for Advanced Research and Education (SHARE) hosted an exhibition and panel discussion with Christophe Guinard of the Swiss architectural group fabric (www.fabric.ch). The DeCordova Museum exhibited the Tissue Culture and Art project from Perth Australia. The Boston Modern Orchestra Project and the Media Lab sponsored Irish violinist, Cora Venus Lunny to perform in the Toy Symphony both in Boston and New York. The Brandeis Electro Acoustic Music Marathon continued its international look at electronic music. Among the performers during the 14-hour event were Marco Capelli and Lucia Bova from Italy, Thierry Miroglio and Ancuza Aprodu from France, and Valerio Sannicandro from Germany. Finally Boston Musica Viva performed the music of the German composer Hans Eisler to a documentary by Netherlandish filmmaker Joris Ivens and another composition by Netherlandish composer Louis Andriessen in their Film, Videos and Music performance.

3.26 Financial Opportunities

A survey of the organizations involved in the Cyberarts Festival indicates that an estimated \$171,739 was paid to artists for their work. Many of these artists would not have been able to take advantage of these financial opportunities if not for the Festival.

In addition, the total direct economic impact of Boston Cyberarts, which includes program expenditures, partner organization expenditures, and attendee spending is \$1,953,981. Visitors to Cyberarts spent an estimated \$932,834. Most of this spending directly benefits the artists, cultural institutions, and high tech businesses involved in Cyberarts.⁵

3.27 Conferences

As noted in Section 3.15, the 2003 Festival hosted three national conferences, one held each weekend of the Festival. The conferences were as important to the Festival as the exhibitions and performances in that they attracted a large national and international audience and were a vehicle for the development critical dialogues about art and technology.

⁵ The economic impact of Cyberarts is explained in more detail in Section 4.00.

3.28 Press Coverage

The 2003 Cyberarts Festival was covered extensively in both the local and national press, which helped to bring attention to Massachusetts' as a center for the cyberarts. Local press included the Boston Globe (17 articles), the Boston Herald (10 articles), the Lowell Sun (2 articles), the Boston Phoenix (3 articles), Art New England (2 articles) among others. Non-local press included coverage in the New York Times (2 articles) and foreign publication such as the German newspapers *Abendzeitung* and *Suddeutsche Zeitung*. The Cyberarts Festival was also cited in art- and entertainment-related publications such as *New England Entertainment Digest*, and *Public Art Review*.⁶

3.29 Foundation Support

Massachusetts' image as a major cyberarts player is evident in the financial support the Festival receives from major organizations. For example, Boston Cyberarts was the recipient of two major grants that funded programming in the 2003 Boston Cyberarts Festival: a \$20,000 grant from the National Endowment for the Arts and a \$30,000 grant from The Boston Foundation. This is the first time the NEA has funded Boston Cyberarts. The grant came under the agency's Creativity/Multidisciplinary program and was used to fund several specific Festival events.

The Boston Foundation is one of the oldest and largest community foundations in the country and an important supporter of Boston Cyberarts. The Foundation was a major funder of the Festival's Community Sites program in 2001, which brought cyberarts programming to community groups in Dorchester, Roxbury, and the South End. The current grant, one of five being made to arts groups at this time, was be used for institution-building and programs aimed at cultural economic development. These grants show that both the NEA and The Boston Foundation recognize that the partnership of art and technology can provide not only interesting creative possibilities but also an invaluable boost to regional economic development.

Additionally, the LEF Foundation made an important financial contribution to the Festival. Their grant of \$28,000 for the Digital Art in Public Space conference allowed Cyberarts to not only hold the conference but helped Boston Cyberarts, Inc. leverage the siting of the eight public art projects in Boston and Cambridge that received a very positive response.

3.30 Apropos

In 2003, Boston Cyberarts launched an enhanced and expanded version of Apropos, a web-based service that helps digital artists find exhibitors for their work, and vice versa. Originally developed as a resource to identify events for the biennial Boston Cyberarts Festival, the site is now being envisioned as an

⁶ A complete bibliography is included in Appendix B.

ongoing service to curators and artists from around the world who are interested in art and technology. Artists who have projects to propose and institutions that can provide exhibition opportunities are able to post their ideas directly to the Apropos through a password-protected interface. Users can then search the listed offerings by art form, keyword, or geographic area to find a suitable match. At this point there are 139 projects submitted by 85 artists from 22 countries around the world as well as 15 calls for entries. The projects include two-dimensional works, sculpture, web-based art, video, and performing arts such as music and dance. In addition, several organizations have posted requests for proposals or calls for entries on the site.

4.00 Economic Impact Analysis

4.10 Implan Econometric Modeling System

Economic impacts measure the importance of an economic activity primarily in terms of the employment and personal (labor) income generated by that activity. Economic impacts consist of direct impacts, indirect impacts, and induced impacts. *Direct impacts* are the economic activities that take place directly on-site. In the case of Boston Cyberarts, examples of direct impacts include art sales, miscellaneous retail sales, and restaurant sales. Thus, direct impacts are an immediate consequence of art-related economic activity.

Indirect impacts derive primarily from off-site economic activities that are attributable to the Boston Cyberarts project. These economic activities occur mainly as a result of *non-payroll local expenditures* by the project. Local expenditures include a range of operating expenses such as printing, maintenance, and transportation. Indirect impacts differ from direct impacts insofar as they originate entirely off-site, although the indirect impacts would not have occurred in the absence of the Boston Cyberarts project. *Induced impacts* are the multiplier effects of the direct and indirect impacts created by successive rounds of spending by employees and proprietors. *Total impacts* are the sum of the direct, indirect, and induced impacts.

The indirect and induced economic impacts of Boston Cyberarts are specified using IMPLAN (IMpact Analysis for PLANing), which is an econometric modeling system developed by applied economists at the University of Minnesota and the U.S. Forest Service. The IMPLAN modeling system has been in use since 1979 and is currently used by over 500 private consulting firms, university research centers, and government agencies. The IMPLAN modeling system uses input-output analysis to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of a change in one or several economic activities to predict its effect on a specific state, regional, or local economy (impact analysis).

IMPLAN's Regional Economic Accounts and the Social Accounting Matrices are used to construct local, county, or state-level multipliers specific to a target economic area. Multipliers describe the response of an economy to a change in demand or production. The multipliers allow economic impact analysis to move from a descriptive input-outputs model to a predictive model. Each industry that produces goods or services generates demand for other goods and services and this demand is multiplied through a particular economy until it dissipates through "leakage" to economies outside the specified area. Thus, multipliers calculate the response of the targeted economic area to a change in demand or production.

4.20 Economic Impacts

Total program expenditures were \$128,322 for Boston Cyberarts from July 1, 2002 to June 30, 2003 (see Table 1). This figure includes project-related expenditures by state and local agencies including the Massachusetts Cultural Council, but does not include any in-kind contributions. The total direct expenditures for Cyberarts, which includes program expenditures, partner organization expenditures, and attendee spending was \$1,953,981 (see Table 1).

Table 1
Total Cyberarts Expenditures

Type	Expenditure
Boston Cyberarts, Inc. Expenditures	
Payroll	\$49,820
Professional Services	\$35,622
General Overhead & Operating Expenses	\$16,736
Artists Fees/Honorarium	\$9,100
Travel & Accommodations	\$8,222
Accounting	\$3,725
Miscellaneous Expenses	\$5,097
Boston Cyberarts, Inc. Subtotal:	\$128,322
Partner Organization Exp.⁷	
Staff Expenses	\$489,003
Payment to Artists	\$171,739
Other	\$42,206
Advertising	\$36,092
Equipment	\$34,615
Supplies	\$27,089
Rental/Lease	\$19,359
Contract Services	\$28,451
Publications	\$14,985
Postage	\$13,590
Travel	\$14,097
Telephone	\$1,599
Partner Organization Subtotal:	\$892,825
Attendee Spending⁸	
On-Site Spending	\$183,591
Off-Site Spending	
Food/Drinks	\$317,566
Hotel/Lodging	\$244,770
Transportation	\$93,972
Miscellaneous Retail	\$60,141
Admission	\$17,254
Other	\$15,540
Attendee Spending Subtotal:	\$932,834
Grand Total:	\$1,953,981

⁷ Data was obtained from a mail survey of the organizations participating in Boston Cyberarts.

⁸ Data obtained from patron surveys administered at various Cyberarts events.

The IMPLAN model estimates that in FY 2003, Boston Cyberarts generated a total regional economic impact of \$2,588,854 and created an additional 32.4 full-time equivalent year-round jobs⁹ (see Table 2 and Table 3).

Table 2
Total Economic Impacts from Boston Cyberarts

	Direct	Indirect	Induced	Total
FY 2003	\$1,953,981	\$358,155	\$276,719	\$2,588,854

Table 3
Total Employment Impacts from Boston Cyberarts

	Direct	Indirect	Induced	Total
FY 2003	26.6	3.1	2.7	32.4

The major employment impacts occurred in non-profit organizations, eating and drinking establishments, management and consulting, and hotels and lodging. Thus, the Boston Cyberarts Festival not only benefits the arts community, but also contributes to Boston's larger economic development strategy in the areas of tourism and professional services.

⁹ The jobs created are annualized FTEs, that is, they represent year long employment, not simply jobs for the three weeks of the Festival.

[This page left blank intentionally]

Appendix A – Survey Results and Survey Instrument

Surveys were distributed to Cyberarts attendees at various events. Respondents completed the surveys on-site or returned the surveys at a later time using the business reply envelope that was provided with each survey or by email. Respondents were also able to fill out and submit the survey on-line. A total of 126 surveys were completed. The results of the survey follow.

1.00 DEMOGRAPHICS

1.10 **Sex:** More than half of respondents are female (58.5%).

	Frequency	Percent
male	51	41.5
female	72	58.5

1.20 **Age:** Half of respondents are between the ages of 26 and 44, while only 11.5 percent are above age 55.

	Frequency	Percent
< 18	1	.8
18 to 25	16	13.1
26 to 34	28	23.2
35 to 44	32	26.6
45 to 54	30	25.0
55 to 64	8	6.6
65 +	6	4.9

1.30 Where did you live?

Thirty-one percent of respondents are from Boston. Thirty-four respondents (10.0%) are from other states while five (2.0%) are from another country.

City/Town	Frequency
Boston	101
Cambridge	46
Somerville	28
Brookline	14
Lexington	11
Arlington	9
Waltham	8
Newton	7
Needham	4
Carlisle	3
Lincoln	3
Medford	3
Acton	2
Haverhill	2
Malden	2
Amesbury	1
Ashburnham	1
Belmont	1
Braintree	1
Brockton	1
Burlington	1
Canton	1
Carver	1
Cohasset	1
Dracut	1
Framingham	1
Groton	1
Hanover	1
Hingham	1
Holliston	1
Hull	1
Lawrence	1
Lowell	1
Lynn	1

Middleton	1
Milton	1
N. Andover	1
Nantucket	1
Plymouth	1
Quincy	1
Rowley	1
Revere	1
Saugus	1
Scituate	1
Seekonk	1
Shrewsbury	1
Southborough	1
Upton	1
Walpole	1
Wayland	1
Wellfleet	1
Westborough	1
Westford	1
Westwood	1
Weymouth	1
Williamstown	1
Winchester	1
Other States:	
New Hampshire	8
New York	8
Other U.S.	8
Maine	5
Connecticut	3
Providence, RI	2
Out of Country:	5

1.40 EDUCATION

1.41 Are you a student?

More than eighty percent of respondents (81.7%) are not students.

	Frequency	Percent
yes	22	18.3
no	98	81.7

Respondents who are students attend the following institutions:

	Frequency	Percent
AIB	1	.8
Argentina	1	.8
Boston University	2	1.6
Clark University	1	.8
D.G. High	1	.8
Harvard	1	.8
Lesley University	1	.8
Masaryk University	2	1.6
Mass College of Art	2	1.6
MIT	3	2.4
School of the Museum of Fine Arts	1	.8
Tufts University	1	.8
UMass Boston	1	.8
Wheaton College	1	.8

1.42 What is your highest level of education?

Nearly ninety percent (88.7%) of respondents have a Bachelor’s degree or higher, while 54.8 percent of respondents hold a Master’s degree or higher.

	Frequency	Percent
< high school	1	0.8%
high school diploma only	9	7.3%
2 year college	4	3.2%
4 year college	42	33.9%
Master’s or higher	68	54.8%

2.00 EMPLOYMENT AND INCOME

2.10 In which field are you employed?

The highest number of respondents marked “other” for their field of employment (see list below). Fine arts/crafts (20.2%), education (15.1%), and high tech (10.1%) were also popular responses.

Field	Frequency	Percent
“other”	29	24.4
fine arts/crafts	24	20.2
education	18	15.1
high tech	13	10.9
student	7	5.9
healthcare	5	4.2
retired	5	4.2
graphic arts	4	3.4
web publishing	3	2.5
advertising	3	2.5
social services	2	1.7
financial services	2	1.7
legal service	2	1.7
construction	1	.8
food/hospitality	1	.8

“Other” fields in which respondents are employed are:

- administration
- printing
- museum director
- news media
- environmental
- urban planning
- film
- art administration
- government
- communications
- marketing
- customer service
- mother
- non-profit admin.
- non-profit arts
- non-profit/ philanthropy
- none
- own recording studio
- real estate
- science research
- social service
- software

2.20 Income

Respondents represent a wide range of income levels. Almost half of the respondents (49.1%) have income levels above \$50,000, while about twenty percent of the respondents (20.7%) earn less than \$20,000. Many of these are students.

	Frequency	Percent
< \$20,000	24	20.7
\$20 to \$35,000	21	18.1
\$36 to \$49,000	14	12.1
\$50 to \$75,000	27	23.3
\$76 to \$100,000	15	12.9
> \$100,000	15	12.9

3.00 ATTENDANCE AT ART/MUSIC EVENTS

3.10 How many times per year do you attend arts, music, or dance performances?

A majority of respondents (63.1%) attend 10 or more arts, music, or dance performances a year.

	Frequency	Percent
1 to 3	13	10.7
4 to 6	20	16.4
7 to 9	12	9.8
10+	77	63.1

4.00 SPENDING

4.10 Did you spend any money at Cyberarts attractions or events?

More than seventy percent of respondents (71.2%) did not spend any money at Cyberarts attractions or events.

	Frequency	Percent
yes	34	28.8
no	84	71.2

4.20 If yes, how much did you spend?

Of those respondents who spent money at the Cyberarts attractions or events, 32.4 percent spent less than \$25 and the majority spent less than fifty dollars.

	Frequency	Percent
< \$25	10	32.4
\$25 - \$50	16	51.6
\$51 - \$100	2	1.6
> \$100	3	9.6

4.30 Did you spend any money at surrounding establishments as a result of attending the Cyberarts Festival?

Sixty-seven percent of the respondents (67.2%) spent money at surrounding establishments as a result of attending the Cyberarts Festival.

	Frequency	Valid Percent
yes	80	67.2
no	39	32.8

4.40 If yes, approximately how much at each of the following?

The highest number of respondents spent money on food/drinks and transportation. However, on average the most money was spent on hotel/lodging.

	Frequency	Average Spent
Food/Drinks	71	\$54.79
Transportation	52	\$21.67
Miscellaneous retail	22	\$37.27
Admission	10	\$20.80
Hotel/Lodging	9	\$328.33
Other	4	\$46.25

5.00 BOSTON CYBERARTS FESTIVAL

5.10 Before you arrived, were you aware that the exhibition you attended was part of the Boston Cyberarts Festival?

Almost ninety percent of respondents (87.8%) were aware that the exhibit they attended was part of the Cyberarts Festival.

	Frequency	Valid Percent
yes	108	87.8
no	15	12.2

5.20 How did you first hear about Cyberarts?

Forty percent of respondents (40.8%) first heard about Cyberarts from a friend. More than a quarter of respondents (27.2%) marked “other” (see list below), while a smaller percentage first heard about the Festival through its website (9.7%).

	Frequency	Percent
friend	42	40.8
“other”	28	27.2
Website	10	9.7
Can't Remember	6	5.8
Phoenix	3	2.9
Arts Media	3	2.9
Globe	2	1.9
Poster	2	1.9
ArtByte	1	1.0
Art NE	1	1.0
Mass High Tech	1	1.0
WBUR	1	1.0
WGBH	1	1.0
NY Times	1	1.0
Museums Boston	1	1.0
Total	103	100.0

“Other” includes:

Aers@MIT
 Beacon Hill Times
 BMOP mailing (2)
 Boston Metro
 Brain conference
 build-it-yourself
 Cambridge Chronicle

colleague
 E5 Narrative
 Conference
 email list (3)
 former participant
 funded it
 George Fifiel

Internet discussion
 MIT
 personal contact
 previous festival
 school
 toy symphony website
 word of mouth (2)

5.30 What other ways did you see or hear about Boston Cyberarts Festival?

Respondents were asked what other ways they heard about the Cyberarts Festival. Respondents were able to make more than one choice. Most of the respondents heard about the festival through the festival website (31.7%), the Boston Globe (30.2%), and/or a friend/relative (30.2%).

	Number	Percent
Festival Website	40	31.7
Boston Globe	38	30.2
Friend/Relative	38	30.2
Phoenix	25	19.8
Poster	21	16.7
Flyer	15	11.9
Other	12	9.5
Art New England	12	9.5
Arts Media	12	9.5
Museums Boston	10	7.9
WBUR	8	6.3
Boston Herald	5	4.0
Stuff	5	4.0
WGBH TV	4	3.2
NY Times	4	3.2
can't remember	4	3.2
WFNX Radio	3	2.4
TAB	2	1.6
Mass High Tech	1	0.8

“Other” includes:

- | | |
|-----------------------|------------|
| Art Interactive | email |
| Boston Metro | List Serve |
| contributing artist | on the Web |
| e-mail/mailings lists | Zeitgeist |
| e for volunteers | |

5.40 How many Boston Cyberarts Festival events/exhibits did you attend?

The majority of respondents attended only one or two events (67.0%). However, almost two-thirds of respondents (64.5%) planned to attend additional events after they completed filling out the survey (see Section 5.60). Thus, the actual number of events attended is likely much higher.

# Events	Frequency	Percent
1.00	38	36.9
2.00	31	30.1
3.00	12	11.7
4.00	7	6.8
5.00	4	3.9
6.00	4	3.9
8.00	2	1.9
9.00	2	1.9
11.00	1	1.0
15.00	1	1.0
30.00	1	1.0

5.50 What events did you attend?

Respondents attended a wide array of the Festival’s events. Toy Symphony, Art Interactive, and Copley Society were the most popular events attended. The table below lists those events that were attended by more than one respondents.

Event	Frequency
Toy Symphony	20
Art Interactive	15
Copley Society	13
Cloud Place	8
Conference	8
Goethe Institute	8
De Cordova	6
Opening Night	6
Origins	6
Digital Art Conference	5
Newton Art Center	5
Brandeis Electronic Music Marathon	5
MIT	5
Hotel @ MIT	5
Info@blah	4
Boston Musica Viva	4
Visual Improv Symposium	4
Mills Gallery	4
AZD/DZA	3
Fort Point	3
Collision	3
Bernard Toale Gallery	3
BPL	2
BU	2
Cave	2
MassArt	2
Library talk	2
Bakalar Galleries	2
Mobius Exhibit	2
ICA/Vitabreurs	2
Museum of Science	2
Rotenburg Gallery	2
E5 Narrative	2
Invisible Ideas	2
Tech Art	2

5.60 Do you plan to attend any other events?

The majority of survey respondents (64.5%) planned to attend additional events after they completed filling out the survey. Thus, attendance numbers at various events are likely much higher.

	Frequency	Percent
Yes	60	64.5
No	33	35.5

5.70 If yes, how many other events do you plan to attend?

	Frequency	Percent
1	14	28.0
2	15	30.0
3	12	24.0
4	2	4.0
5	3	6.0
6	2	4.0
10	1	2.0
15	1	2.0

6.00 SPONSORS

6.10 Were you aware of the Festival’s sponsors?

Seventy percent (70.6) of survey respondents were not aware of the Festival’s sponsors.

	Frequency	Percent
Yes	32	29.4
No	77	70.6

6.20 If you are aware of the Festival’s sponsors, please list them here:

Sponsors	Frequency
Boston Phoenix	15
MIT Hotel	7
NEFA	4
Mass. Cultural Council	3
Goethe Institute	2
BU	2
SEGA	2
WFNX	2
Hotel G	1
LEF Foundation	1
MIT Media Lab	1
TECA	1
Ascil Japan	1
Boston Museums	1
CEF Foundation	1
City Arts	1
LPF	1
WBUR	1
Boston Foundation	1
MIT	1
Boston Cultural Agenda	1
Howard	1

7.00 WEBSITE

7.10 Did you visit the website?

More than sixty percent of respondents (64.3%) visited the Cyberarts website.

	Frequency	Percent
yes	74	64.3
no	41	35.7

7.20 How did you find the website?

About thirty percent of the respondents (29.6%) followed a link to the website, while more than a quarter of the respondents (26.8%).

	Frequency	Percent
followed link	21	29.6
search engine	19	26.8
Saw URL in festival materials	15	21.1
other	13	18.3
Saw URL in newspaper	3	4.2

“Other” responses include:

- email alerts
- email from a friend
- flyer
- friend
- G. Fifield
- I made the website
- knew from past festivals (2)
- knew the URL already (2)
- mother
- Toy Symphony

7.30 Was the website easy to use?

More than half of the survey respondents (54.1%) indicate that the website was easy to use.

	Frequency	Percent
yes	40	54.1
no	12	16.2
somewhat	22	29.7

7.40 Was the website helpful?

Almost three-quarters of respondents (72.2%) indicate that the website was a helpful resource.

	Frequency	Percent
yes	52	72.2
no	5	6.9
somewhat	15	20.8

7.50 What did you use the website for?

Respondents primarily used the website to find the schedule and location of events (45.2%) and to obtain general information (39.7%).

	Frequency	Percent
Schedule & location of events	57	45.2
Obtain general info	50	39.7
Visited online gallery	16	12.7
Apropos	8	6.3
Faces of Tomorrow	4	3.2

Note: Respondents could choose more than one answer

What other information would you like on website?

- better articles on artists and exhibits, i.e. more detail, photos, etc.
- better detail of DAPS conference schedule
- calendar (2 responses)
- calendar, more in depth coverage of the events, background info on cyberarts
- clear schedule, easy to find date, easier to use calendar
- clearer access to main conference events
- easier interface, less redundant info
- easy to find time schedule, detailed info
- how to participate in the venue at the next festival
- incompatible with some older computers
- links to all artists own pages
- links to other festivals
- location of events
- more detailed programs
- more info on the events themselves i.e. pics
- more technical info
- needs more structure and interactivity, too confusing
- other events going on at the same time that affect parking or route
- some articles about the intersection of art, science, and technology (aka Stephen Wilson)

8.00 RATE THE FESTIVAL

8.10a. Rate the events that you attended

	Frequency	Percent
excellent	56	52.8
good	45	42.5
fair	5	4.7
poor	0	0.0

8.10b. Rate awareness of Festival events

	Frequency	Percent
excellent	23	22.3
good	35	34.0
fair	29	28.2
poor	16	15.5

8.10c. Rate availability of Festival info/materials

	Frequency	Percent
excellent	39	39.8
good	36	36.7
fair	16	16.3
poor	7	7.1

8.10d. Rate usefulness of Festival info/materials

	Frequency	Percent
excellent	31	34.4
good	34	37.8
fair	20	22.2
poor	5	5.6

8.10e. Rate overall Festival promotion/publicity

	Frequency	Percent
excellent	17	17.3
good	44	44.9
fair	25	25.5
poor	12	12.2

8.10f. Rate festival website overall

	Frequency	Percent
excellent	17	23.9
good	37	52.1
fair	8	11.3
poor	9	12.7

8.10g. Rate Website Online gallery

	Frequency	Percent
excellent	11	27.5
good	20	50.0
fair	6	15.0
poor	3	7.5

8.10h. Rate Apropos

	Frequency	Percent
excellent	8	34.8
good	8	34.8
fair	5	21.7
poor	2	8.7

8.10i. Rate Faces of Tomorrow

	Frequency	Percent
excellent	6	31.6
good	7	36.8
fair	4	21.1
poor	2	10.5

8.10j. Rate website schedule/locations

	Frequency	Percent
excellent	17	27.4
good	30	48.4
fair	10	16.1
poor	5	8.1

8.10k. Rate Festival overall

	Frequency	Percent
excellent	45	45.5
good	47	47.5
fair	7	7.1

8.20 Would you like to receive info on upcoming Cyberarts events?

Almost seventy percent of survey respondents (69.1) would like to receive info on upcoming Cyberarts events. See end of survey for a list of email or mailing addresses.

	Frequency	Percent
yes	67	69.1
no	30	30.9

8.30 Would you recommend Festival to friends?

Nearly all respondents (97.6%) would recommend the Festival to friends.

	Frequency	Percent
yes	111	97.6
no	3	2.6

8.40 Why wouldn't you recommend the Festival to friends?

- a bit nebulous, most of the artists were not ground-breaking
- friends would not be interested
- I don't have any

8.50 How can we make next Festival better?

See comments at end of survey.

8.60 Would you attend next Festival?

Eighty-five percent of respondents (85.1%) would attend the next Cyberarts Festival, while fifteen percent (14.9%) are unsure. No respondents indicated that they would not attend the next Cyberarts Festival.

	Frequency	Percent
yes	97	85.1
no	0	0.0
don't know	17	14.9

How can we make next Festival better?

- a "pull-out" map showing event locations (accessibility by T) and their proximity to each other, a conference/symposium like ArtSciin NYC
- advertise
- announce pieces in between performances at exhibits
- apply more selection/editing to ensure more consistent level of quality, condense in time and space, make it more of an international event, rather than a local event
- banners on roadway and/or at least on participating galleries
- better advertising
- better directions
- better publicity
- better publicity outside of university setting, tie in with existing venues
- more user friendly events listings, faster website
- improve website
- bigger/ more venues
- bring it past Mass Ave. into more of the neighborhoods, have more concentrated sites
- clearer, simplified website, more theoretical presentations to accompany hands-on projects by artists
- do a simple, easy to read, no frills website, no bells or whistles, have a live person available during work hours reachable by phone
- don't [waste] the BMOP's talents on Tod Machover's bad compositions
- folders with timetable, artist index, city plan events
- get info out earlier, have better headquarters, Copley this year did not uphold the job
- improve the website, publicize a little more
- include artists of color (black&latino)
- informational workshops on new technology, include Indy Media and projects with interesting content and innovative technology
- involve the scholarly community more
- maps
- more active activities for active kids
- more advertising

- more interactive events
- more beat bug work
- more critical video review
- more events
- more interactive stuff
- more outside of Boston
- more publicity and coverage, more info on website
- make flyers that can be mailed with a calendar of events on it. They could stick it on the fridge and remind themselves to go!
- more selective programming and better descriptions of events so that viewers with limited time don't feel overwhelmed
- more technology, more concept involved that reflects cyber
- more, more, more
- More/better public arts, more non-university-related music events
- print catalog by date
- provide more info on exhibition labels
- publicize better
- substitute Sam Adams for Rolling Rock
- try harder to involve artists that aren't looking for recognition, but are blazing their own paths
- website could have been more user friendly
- work on the website

Boston Cyberarts Festival Survey Instrument

Please help us make the next Boston Cyberarts Festival better by filling out this survey. Or if you prefer, you can fill out the survey online at www.bostoncyberarts.org/survey.

A. General Information

1. Zipcode: _____
2. Sex: Male Female
3. Age: _____
4. Are you a student? yes no
If yes, where? _____
5. What is the highest level of education that you completed?
 - less than high school
 - high school
 - 2-year college/technical/associate's degree
 - 4-year college degree
 - Master's or higher

6. What field are you employed in?

- | | |
|---|---|
| <input type="checkbox"/> high tech | <input type="checkbox"/> financial services |
| <input type="checkbox"/> healthcare | <input type="checkbox"/> food service/hospitality |
| <input type="checkbox"/> social service | <input type="checkbox"/> advertising/PR |
| <input type="checkbox"/> fine arts/crafts | <input type="checkbox"/> legal services |
| <input type="checkbox"/> education | <input type="checkbox"/> TV/radio |
| <input type="checkbox"/> publishing | <input type="checkbox"/> construction |
| <input type="checkbox"/> graphic arts | <input type="checkbox"/> retail |
| <input type="checkbox"/> student | <input type="checkbox"/> retired |
| <input type="checkbox"/> other _____ | |

7. What is your income level?

- | | |
|--------------------------------------|-----------------------------------|
| <input type="radio"/> under \$20,000 | <input type="radio"/> \$20-35,000 |
| <input type="radio"/> \$36-49,000 | <input type="radio"/> \$50-75,000 |
| <input type="radio"/> \$76-100,000 | <input type="radio"/> \$100,000+ |

8. How many times per year do you attend performing or visual arts events or exhibitions?

- 1-3 times 4-6 times 7-9 times
 10 or more times

B. Spending

9. Did you spend any money at Cyberarts attractions or events? yes no

If yes, approximately how much?

\$ _____

10. Did you spend any money at surrounding establishments as a result of attending the Cyberarts Festival?

yes no

11. If yes, approximately how much at each of the following?

Admission (not including Cyberarts Festival events) \$ _____

Miscellaneous retail (e.g., souvenirs,

T-shirts) \$ _____

Transportation (parking, gas, tolls, taxi, public trans.) \$ _____

Food/Drinks \$ _____

Hotel/Lodging \$ _____

Other \$ _____

C. Boston Cyberarts Festival

12. Before you arrived, were you aware that the exhibition you attended was part of the Boston Cyberarts Festival?

yes no

If no, please skip down to question #15

13. If yes, how did you *first* hear about Boston Cyberarts Festival? (please check only one)

- | | |
|--|---|
| <input type="checkbox"/> Friend/relative | <input type="checkbox"/> Boston Globe |
| <input type="checkbox"/> NY Times | <input type="checkbox"/> Boston Herald |
| <input type="checkbox"/> TAB | <input type="checkbox"/> Phoenix |
| <input type="checkbox"/> Mass High Tech | <input type="checkbox"/> Art New England |
| <input type="checkbox"/> Stuff @ Night | <input type="checkbox"/> WGBH-TV |
| <input type="checkbox"/> Poster | <input type="checkbox"/> WFNX 101.7FM |
| <input type="checkbox"/> Flyer | <input type="checkbox"/> Festival website |
| <input type="checkbox"/> WBUR | <input type="checkbox"/> Arts Media |
| <input type="checkbox"/> Museums Boston | <input type="checkbox"/> Can't remember |
| <input type="checkbox"/> Other _____ | |

14. What other ways did you see or hear about Boston Cyberarts Festival? (please check all that apply)

- Friend/relative
- NY Times
- TAB
- Mass High Tech
- Stuff @ Night
- Poster
- Flyer
- WBUR
- Museums Boston
- Other _____
- Boston Globe
- Boston Herald
- Phoenix
- Art New England
- WGBH-TV
- WFNX 101.7FM
- Festival website
- Arts Media
- Can't remember

15. How many Boston Cyberarts Festival events/exhibits did you attend? _____ please list them:

16. Do you plan to attend any other events? *
yes * no

17. How many other events do you plan to attend? _____

D. Sponsors

18. Were you aware of the Festival's sponsors? * yes * no

If yes, please list those you were aware of:

E. Cyberarts Website

19. Did you visit the Boston Cyberarts Festival website? * yes * no

20. How did you find the website?

- followed a link
- search engine
- saw URL on Festival materials
- saw URL in a newspaper article
- other _____

21. Was the website easy to use?

- * yes * no * somewhat

22. Was the website a helpful resource for information?

- * yes * no * somewhat

23. How did you use the website? (check all that apply)

- To obtain general Festival information
- Visited the Online Gallery
- For schedule and location of events
- Apropos artists database
- Faces of Tomorrow project

24. What other information would you like to see on the website?

F. Rate the Festival

25. Please rate the following: (A=excellent; B=good; C=fair; D=poor)

- ___ The events you attended
- ___ Your awareness level of Festival events
- ___ Availability of Festival info and materials
- ___ Usefulness of Festival info and materials
- ___ Overall Festival promotion/publicity
- ___ Festival website overall
- ___ Website's Online Gallery
- ___ Apropos artists database (on website)
- ___ Faces of Tomorrow project (on website)
- ___ Website schedule of events/locations

26. Please rate the Boston Cyberarts Festival overall (A=excellent; B=good; C=fair; D=poor) _____

27. Would you like to receive info on upcoming Cyberarts events?

- * yes * no

If yes, please give us your email or mail address (please print clearly)

28. Would you recommend the Boston Cyberarts Festival to your friends?

★ yes ★ no

If no, why not?

29. How can we make the next Boston Cyberarts Festival better?

30. Would you attend the next Boston Cyberarts Festival?

★ yes ★ no ★ don't know

Appendix B – Press Bibliography

Bibliography of press for Boston Cyberarts Festival 2003

- Lowell Sun:** July 6, 2003: “The way art works”: Michael Pigeon
- Lowell Sun:** June 19, 2003: “Cyberart reveals soul of new machines”: John Greenwald
- Public Art Review:** Spring-Summer 2003: p. 49: Publications listing
- Art New England:** April-May 2003: p. 7, 70: “Art Interactive: A new organization dedicated to participatory art”: George Fifield
- Art New England:** April-May 2003: p.42: “Lillian Immig Gallery: The New Renaissance”
- Museums Boston:** Volume 7, number 1: Spring 2003: 2 covers and pp. 51-53 “Welcome to Cybercity, USA”: S. Ehrlich
- Stuff @ night:** May 13-26, 2003: “Boston Cyberarts Festival at Hotel MIT” photo
- The Boston Globe:** May 13, 2003: “Musica Viva explores sound, images”: Richard Buell
- The Weekly Dig:** May 13, 2003: “CoN:StrucT:UreS by Andrew Neumann at The Brush Art Gallery”: Anne Weeks
- Boston Sunday Herald:** May 11, 2003: “Move melodies score big at festival”: T.J. Medrek
- The Sun:** May 10, 2003: “Artists on the edge: Lowell galleries host exhibits that stretch the boundaries of expression”: Kathleen Deely
- The New York Times:** May 9, 2003: “Where does internet art belong?”: Matthew Mirapaul
- The Boston Globe:** May 8, 2003: Calendar Choice
- The Boston Globe:** May 7, 2003: “Marathon man”: Michael Saunders
- Boston Herald:** May 6, 2003: “Art, technology interface well at ‘info@blah’”: Stephanie Schorow
- The New York Times:** May 5, 2003: “Computer-Driven Fantasy at the Financial Center”: Matthew Mirapaul
- Mass High Tech:** May 5, 2003: “Kids’ artwork goes into the Digital Studio”
- Boston Sunday Globe:** May 4, 2003: “Start-up ideas straddle worlds of art, technology”: D.C. Denison
- The Boston Globe:** May 3, 2003: “Family Datebook”: June W. Wulff
- Boston Herald:** May 3, 2003: “Eclectic events set for weekend”: Tenley Woodman
- The Boston Globe:** May 2, 2003: “Taming technology’s overload with artful systems”: Cate McQuaid
- The Boston Phoenix:** May 2, 2003: “Child’s play: Tod Machover’s Toy Symphony”: Lloyd Schwartz
- www.wired.com:** 5/2/03 “Boston Festival Blends Art, Tech”: Mark Beard

South End News: May 1, 2003: “Berklee Contemporary Ensemble performs work by local composer at Boston Cyberarts Festival 2003”

The Boston Globe: May 1, 2003: “River run, craft shows, cyberjazz”

Somerville Journal: May 1, 2003: “Teen works featured at CyberArts”

Weekly Dig: April 30-May 7, 2003: “Boston Cyberarts Festival”: Andrew Miller

The Boston Globe: April 29, 2003: “Zzzzz”: Jim Sullivan

The Boston Globe: April 29, 2003: “Art comes alive (yikes!)”

Panorama: April 28-May 11, 2003: “Digital Dreams”: A.A.

Boston Herald: April 28, 2003: “BMOP and pals boldly explore Machover’s classical visions”: Keith Powers

The Boston Globe: April 28, 2003: “Toy’ brings joy of music to life”: Richard Dyer

The Boston Globe: April 28, 2003: “Tech meets art”: Scott Kirsner

Boston Sunday Herald: April 27, 2003: “Medium trumps message in ‘info@blah’”: Mary Sherman

Boston Herald: April 26, 2003: “Wired for the arts”: Tenley Woodman

The Boston Globe: April 25, 2003: “Wired for Art”: Cate McQuaid

Boston Herald: April 25, 2003: “High-tech works come of age”: Joanne Silver

Boston Tab: April 25, 2003: “Cyberartists work on computer canvas: Cyberarts Festival fuses technology and art”: Josh B. Wardrop

Abendzeitung: April 25, 2003: “Transatlantisches Tramkollektiv”

The Boston Globe: April 24, 2003: “Toying with music: MIT’s Tod Machover creates instruments so children can contribute to his symphony”: Richard Dyer

Cambridge Chronicle: April 23, 2003: “In the beginning...”

Suddeutsche Zeitung: April 23, 2003: “Aktion in Verbindung mit dem Boston CyberArts-Festival: Synchronisation von Traumen”

www.publicbroadcasting.net/wbur: 4/22/03 “Beauty and the Gizmo”: Margaret Weigel

Boston Sunday Globe: April 20, 2003: “Creative Construction”

Boston Sunday Herald: April 20, 2003: Sunday to Sunday listing

The Boston Globe Magazine: April 20, 2003: “Making Music Easier”: Gareth Cook

www.metrowestdaily.com: 4/20/03 “Cyberarts Festival showcases union of technology and art”: Josh B. Wardrop

Patriot Ledger: April 19, 2003: “Cyberarts Festival version 3.0”

The Boston Phoenix: April 18, 2003: “Computer-generated: The return of the Cyberarts Festival”: Randi Hopkins

Arlington Advocate: April 17, 2003: “Exhibit features digital prints”

Improper Bostonian: April 16-29, 2003: “Art: When Worlds Collide”

Newton Tab: April 16, 2003: “Educator’s Evening at New Art Center”

In Munchen: April 16, 2003: “Spacig: Traumerle”

Mass High Tech: April 14-20, 2003: “Boston interactive studio to host CyberArts Festival”: Elizabeth Dinan

Panorama, Volume 52, Number 24: April 14-27, 2003: “Painting with Pixels” photo

San Antonio Express-News: April 13, 2003: “Boston”

Hingham Journal: April 10, 2003: “TechArt Exhibit at Art Center”

The Boston Globe: April 4, 2003: “In Groton, a garden of haunting, hypnotic luminance”: Cate McQuaid

Cambridge Chronicle: April 2, 2003: “Cyberarts for cyberfans”

Public Art Review: April 2003

Boston: April 2003: “On The Town”

Where Boston: April 2003: “Hot Tips This Month: The best things to do and see in the Hub of the Universe”: Sandra Giardi

New England Entertainment Digest: April 2003: “Organizations Team Up for 2003 Boston Cyberarts Festival”

Light: April 2003: “Downloading the 2003 Boston Cyberarts Festival”: Chris Railey

Boston Sunday Herald: March 30, 2003: “MIT team helps kids compose symphonies”: Azell Murphy Cavaan

Boston Sunday Globe: March 30, 2003: Go! Ahead listing

Boston Phoenix: March 28-April 3, 2003: “Group hug: Anxiety healing, McDonald’s, and more”: Randi Hopkins

Antiques & The Arts Weekly: March 28, 2003: “‘info@blah: Overload and Organization’ on view at Boston Center for the Arts”

Boston Herald: March 27, 2003: “New cultural group plans to set arts scene on ‘Fire’”: Mary Jo Palumbo

Boston Phoenix: January 2-January 9, 2003: “Yes: The Cambridge ‘Y’ raises its curtains again, and more”

Appendix C – Cyberarts Participating Organizations and Survey Instrument

Organization	Sponsored Event	Type of Event
American Composers Forum, BCF	Sonic Circuits X	Performance
Arlington Center for the Arts	Digital Prints from Singer Collection	Exhibit
Art Institute of Boston	Art Is Everywhere	Web
Art Interactive	Origins	Exhibit
Art Interactive	Aspect Magazine Premier Issue Party	Talk
Artists Foundation	Three Solo Shows	Exhibit
Berklee Contemporary Ensemble	Berklee Contemporary Ensemble	Performance
Bernard Toale Gallery	Hisham Bizri: Vertices	Exhibit
Boston Modern Orchestra Project	Toy Symphony	Performance
Boston Musica Viva	Film, Videos and Live Music	Performance
Boston Public Library	eNarrative 5 Public talk	Conference
Boston University Art Gallery	Transcodex	Exhibit
Boston University SCV Lab	Terpsichore's Haunt	Exhibit
Brandeis University	Brandeis BEAMS	Performance
Brodigan Gallery, Groton	Luminous Garden	Exhibit
Brown University	Works from the Cave	Exhibit
Bruce Hanson aka Projectorguy	Wounds	Public
Brush Art Gallery	CoN:StrucT:UreS	Exhibit
Build It Yourself	Mechanical Garden Show	Youth
Cloud Foundation	Youth Cyberart Central	CyberCentral
Copley Society of Boston	Manifest	Exhibit
Danforth Museum of Art	Dorothy Simpson Krause: Body + Soul	Exhibit
Davis Museum, Wellesley College	The Space Between:Artists Engaging...	Exhibit
DeCordova Museum	Pig Wings Project/Photonic Evolution/Red Dice	Exhibit
Eastgate Systems	eNarrative 5	Conference
Emerson College	Little New Media Exhibition	Exhibit
Emerson College	Miss Mobile	Performance
Emmanuel College	New Renaissance Part 2	Exhibit
Essex Art Center	Taking Liberties	Exhibit
Fort Point Artist Community Gallery	A2DD2A	Exhibit
Gallery @ Green Street	Cyber Lounge	Screening
Gallery NAGA	Holograms and Cyborgs	Exhibit
Gibbs College	Gibbs Welcomes Cyberarts	Youth
Goethe Institute	Berkan Karpat	Exhibit
Harvard University Art Museums	Digital Art in Public Spaces	Conference
Hotel @ MIT	Selected New Media Works	Exhibit
Howard Yezerski Gallery	Kelly Heaton: Dead Pelt	Exhibit
ICA	Museum You Want	Web
ICA/MIT Media Lab	Artifacts of the Presence Era	Web
In our Voices Through Our Eyes	Art of Digital Storytelling	Youth
Institute Of Contemporary Art	Ellen Band and David Lee Myers	Performance
Isabella Stewart Gardner	A Centennial Project	Public
Isabella Stewart Gardner	Madam I'm Adam	Web
ISPACE Design Collaborative	WOTS/Illuminated Words	Public
James Buckhouse	Tap	Public
Judi Rotenberg Gallery	Illuminated Manuscript and Talmud	Exhibit
Maine College of Art	New Media	Web
Mass Audubon Wellfleet Sanctuary	Landscape Mosaics	Exhibit
MassArt, SIM	Altered Time, Altered Space	Exhibit
Mills Gallery/BCA	info@blah	Exhibit
Miranda July/Harrel Fletcher	Learning To Love You Better	Public
MIT List Visual Arts Center	Salon d'Arte Digitalia	Exhibit
MIT List Visual Arts Center	Influence, Anxiety and Gratitude	Exhibit
MIT Media Lab	Toy Symphony	Youth
MIT Museum and Atat	Collision 5	Exhibit
Mobius	The Book Reconsidered	Exhibit
Museum of Science	Comp Club Exhibition	Exhibit
Nature and Inquiry Artists group	Invisible Ideas	Public
New Art Center	The Ballad of Wires and Hands	Exhibit
New Center for Arts and Culture	The Book Reconsidered	Exhibit
New England School of Photography	Sacred Spaces	Exhibit

Boston Cyberarts Festival Participating Organization Survey Instrument

Please complete this form to the best of your ability. You can also attach a detailed budget if available. The data that you provide will be aggregated with other participating organizations and will not be reported separately or shared with any other parties.

I. Organization Name _____

II. Cyberarts Attendance

Please list the total attendance at your venue that is directly related to the Cyberarts Festival

III. Please provide the itemized expenditures by your organization that are directly related to the Cyberarts Festival (estimate if necessary).

A. Staff Expenses:

Total Organizational Payroll (including full-time & part-time staff) \$ _____

B. Payments to Artists

Payments to Local Artists \$ _____

Payment to Non-Local Artists \$ _____

C. Overhead and Operating Expenses:

Advertising \$ _____

Contract Services (including accounting, banking and legal) \$ _____

Supplies and Materials \$ _____

Postage \$ _____

Publications \$ _____

Telephone \$ _____

Travel Costs \$ _____

Other (please specify) \$ _____

D. Facility Expenses:

Rent/Lease \$ _____

Equipment \$ _____

E. In-Kind

Please provide an estimate of in-kind contributions that your organization received that are directly related to Boston Cyberarts. \$ _____

F. Employment

Employee Hours

What is the total number of employee hours spent directly working on the Cyberarts Festival? _____

Volunteer Hours

What is the total number of volunteer hours spent directly working on the Cyberarts Festival? _____

**Thanks for taking the time to fill out this survey.
We appreciate your feedback!**

Please mail or fax (508-999-8374) your completed survey by to:

Center for Policy Analysis
University of Massachusetts - Dartmouth
285 Old Westport Road
North Dartmouth, MA 02747-2300

or you can email the survey to:

dborges@umassd.edu