SOME CHARACTERISTICS THAT MAY AFFECT THE ABILITY OF PUBLIC GARDENS TO GENERATE OPERATING REVENUE

by

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# TABLE OF CONTENTS

LIST OF TABLES ........................................................................................................ vi
ABSTRACT ................................................................................................................ vii

Chapter
1. INTRODUCTION ................................................................................................. 1
   Discussion of other studies .................................................................................. 3
   Research factors .................................................................................................. 5
   Other significant variables .................................................................................. 8

2. HISTORY OF PHILANTHROPY AND LITERATURE SEARCH ..................... 9
   Background of philanthropy and nonprofit funding .......................................... 9
   Current government funding situation .............................................................. 12
   Breakdown of operational funding in public gardens ........................................ 12

3. RESEARCH METHODS ......................................................................................... 14
   Selection of participants .................................................................................... 14
   Gathering information ....................................................................................... 14
   Group analysis .................................................................................................... 15

4. RESULTS AND DISCUSSION ............................................................................ 16
   Ranking determination ...................................................................................... 16
   Group and outlier analysis ............................................................................... 18
   Outliers .............................................................................................................. 20
   Group one ......................................................................................................... 21
   Group two ......................................................................................................... 22
   Group three ...................................................................................................... 23
   Group four ....................................................................................................... 24
   Summary of groupings ..................................................................................... 26
   Chi-square analysis .......................................................................................... 26
   Results of chi-square contingency tables ....................................................... 28
   Relationship one ............................................................................................... 29
   Relationship two ............................................................................................... 31
   Relationship three ............................................................................................ 32
   Relationship four ............................................................................................. 33
   Summary of relationships ............................................................................... 34

5. CONCLUSION AND SUMMARY ...................................................................... 35
   Conclusions ....................................................................................................... 35
LIST OF TABLES

Table 2.1: Sources of nonprofit funding from individuals, foundations, and corporations listed by contribution amount and as a percent of total giving .................. 10

Table 2.2: Fund allocation in nonprofit organizations as categorized by Giving USA in amount and percent of total giving .................................................. 11

Table 2.3: Major sources of operating revenue in participating public gardens and the percent of the total operating budget ......................................................... 13

Table 4.1: Listing of gardens and age, membership composite, board involvement and collaboration ........................................................................................................ 19

Table 4.2: Chi-square table comparing age and collaboration .................................. 27

Table 4.3: Relationship between young and old gardens and the percent individual donations contribute to the total operating budget .............................................. 30

Table 4.4: Relationship between young and old gardens and the percent membership dues contribute to the total operating budget .............................................. 31

Table 4.5: Relationship between collaborative efforts and the percent membership dues contribute to the total operating budget .............................................. 32

Table 4.6: Relationship between collaborative efforts and the percent individual donations contribute to the total operating budget .............................................. 33
ABSTRACT

A public garden is an institution using living plant collections for public service through botany and horticulture having a diversity of forms, functions, purposes, services, and programs (Lighty, 1982). Every public garden must secure funding to cover annual operating expenses; therefore, the successful solicitation of these funds is important to the continued existence and growth of a garden. This research focuses on four factors that have an effect on the successful solicitation of operating revenue in public gardens. These factors are: age (date of incorporation), membership activity, board involvement, and collaboration.

Telephone interviews were conducted with twenty-six gardens responsible for raising over seventy percent of their annual operating budget from non-governmental sources. Some of these gardens mirror trends found in other nonprofit organizations, while others define new relationships.

After activity levels were determined for each factor, the results were tabulated statistically to define relationships among factors. The gardens that have similar qualities are grouped together. Group and outlier analyses have been developed and included in the results.

Relationships between the following factors emerged from chi-square contingency table comparisons: age and the percent membership dues contribute to the operating budget; collaboration and the percent membership dues contribute to the operating budget; age and the percent individual donations contribute to the operating budget; and collaboration and the percent individual donations contribute to the operating budget.
Chapter 1

INTRODUCTION

In most public gardens there are two major budget categories: operating and capital; or operating and restricted. Operating expenses include costs associated with day-to-day personnel, administrative, and maintenance activities, as well as preservation costs of buildings and other expenses needed for existing programs and projects. Capital expenses refer to construction costs associated with new buildings and equipment, endowments, and scholarship funds. (Lawson, 1986). This study focuses on operating revenue.

The purpose of this research is to determine whether the factors of age, membership activity, board involvement, and collaborations have an effect on the ability of a garden to raise operating revenue. Relationships between these factors are also investigated as they apply to research participants.

This study includes public gardens that are 501(c)(3) organizations that raise at least 70% of their annual operating revenue from non-government sources. Operating revenue in public gardens comes from a variety of sources including: membership dues, special events, admission charges, on-site restaurants, food service, gift shops, revenue from facility and site rental, educational programs, annual appeals, and investment earnings.

An important occurrence is taking place in the United States involving the competition for funding among nonprofit organizations. While the nonprofit arena expands daily, government funding is shrinking (Axelrod, 1994). The present situation is only becoming worse with no substantial increase in government funding in sight. Lester Salamon and Alan Abramson of Johns Hopkins University have analyzed the federal budget and determined that by the year 2002, federal support for nonprofits will decline
by 21% under the House plan and 17% under the Senate plan. Charitable contributions will have to increase 50% by the year 2002 to make up for the lost government support (Kaplan, 1996). As a result of shrinking government funding, organizations that once relied on this form of revenue are being forced to compete for contributions from corporations, foundations, and individuals.

This situation will affect all nonprofit organizations. Because government funding is shrinking, a strong constituency of active members and an involved board will be more important than ever in order to secure operational funding.

Every public garden must secure annual operating revenue. All gardens are faced with the challenge of securing these funds in order to continue to operate and expand. Funding to support operations can be difficult to raise, but is vital. Operating revenue is the bread and butter of most organizations (Broce, 1986). In the absence of a large endowment, unrestricted gifts for operating budgets must be raised (Skotheim, 1989). For these reasons, this research will be useful to many public gardens. Existing gardens seek information about other gardens in similar situations, and may benefit from the results of this study. This thesis studies several sources of operating revenue in public gardens, as well as the effect specific factors have on the ability of a public garden to secure operational funding, and finally the relationships between factors.

Results were compiled using both statistical methods and group analyses. The end product is both quantitative and qualitative. The quantitative information is useful in making comparisons between factors. Qualitative results were obtained by talking with administrators at selected public gardens. This type of information provides insight into the solicitation of operating revenue at different public gardens, and includes their opinions about the effect several factors have on the ability of their gardens to solicit operating revenue.
Discussion of other studies

Several other studies investigating fund raising at nonprofit organizations have been identified. There have been no studies involving public gardens which look at the specific factors that may affect the ability of a garden to raise operating revenue. There is a gap between research about nonprofits and research related specifically to public gardens. The following selections from literature reviews provide insight into the existing situation in nonprofit organizations.

The work of Robert Schram at NOVA Southeastern University is the basis for this research. Schram examined relationships between mission, size, age, location, staffing, use of counsel, people solicited, campaign chair people, size of goal, use of trusts, publications, and nonprofit type among nonprofit organizations involved in capital campaigns. This research focuses on the successful solicitation of operating revenue in public gardens, as opposed to capital campaign goal achievement in a variety of nonprofit organizations.

Robert Schram studied factors affecting capital campaigns in nonprofit organizations and determined that older organizations tend to exceed capital campaign goals (Schram, 1994). These studies all support the idea that age affects the ability of a nonprofit organization to raise operating revenue.

Several studies investigate the age of an organization in relation to fund raising. Irene McCormick at the University of Maryland determined that age has a significant effect on the ability of a college to raise private endowment gifts (McCormick, 1996). Algie Gatewood at North Carolina State University studied nonprofit educational foundations. The study focused on several variables, including the relationship between money raised and the characteristics of a community college foundation. The findings reveal that the year a foundation started affects the level of fund raising success (Gatewood, 1994).

Public gardens receive private support from a variety of sources. One aspect of this research investigates membership activity in relation to raising operating revenue in public gardens. Many public gardens and arboreta are membership organizations.
relying on large membership constituencies to serve as a base for much of their operating support (Bruner, 1995). This research presents the first investigation of membership activity in a selected group of public gardens. Membership directors in public gardens and other nonprofit organizations have determined that in addition to paying dues, members help support an organization through other cash or in-kind contributions such as word-of-mouth advertising, purchases on-site from restaurants and gift shops, and often through bequests. Members may increase their gifts over time, providing additional support to an organization.

Board members are selected for many reasons. Borenstein believes all board members are expected to use their networking capabilities and personal resources to support fund-raising efforts. This means being actively involved in identifying and cultivating prospects for fund raising purposes (Borenstein, 1996). There have been several studies related to board involvement in fund raising efforts. Alma Collier at George Washington University examined the effectiveness of fund raising activities at private colleges and universities. Her study determined that active participation of the governing board of an institution is effective in helping the organization achieve fund raising goals (Collier, 1996). McCormick at the University of Maryland studied capital campaigns in community colleges, and identified leadership and participation from members of the board of trustees as two factors contributing to the success of a capital campaign (McCormick, 1996).

Collaborations represent uncharted waters for many nonprofit organizations, including public gardens. In the future, collaborative efforts between arts and educational groups will increase as corporations and foundations direct their support to developing new audiences (Kropf, 1997). Gatewood investigated community college foundations, and determined the extent to which a partnership exists among the community, a college, and the college foundations may be used to evaluate the success of community college fund-raising activities (Gatewood, 1994). This type of collaboration is specific to a
community college, but overall collaborations are gaining popularity, and are becoming a trend for nonprofit organizations.

Although these studies do not involve public gardens, they provide insight into trends found in other nonprofit organizations. Most public gardens are nonprofits, and share the same nonprofit philosophies of public service and education; therefore the same trends may also be observed in gardens. This research is based on a selected group of public gardens and provides insight into the way these specific nonprofit organizations fit into the overall picture.

**Research factors**

Many factors may affect the ability of a public garden to raise operating revenue, included are age, membership activity, board involvement, and collaborations. The previous section provides insight into the effect that these factors may have on fundraising efforts at other nonprofit organizations. This section will explain the significance of each factor in relation to public gardens.

Public gardens included in this research revealed that several factors, including: age, active members, strong board involvement, and collaborative efforts affect the ability of the public gardens to solicit operating revenue. For the purpose of this research, age refers to the date of incorporation. Active members provide financial support to the garden either through annual appeals or other unrestricted donations. Revenue generated through membership dues may support operations or special restricted projects. Board involvement focuses on the willingness of board members to support the garden financially through personal contributions, and participation in fund-raising committees, special events, and the solicitation of other donors. Collaborations include involvement with for-profit or nonprofit organizations in an effort to raise operating revenue.

In a 1995 issue of the *Chronicle of Philanthropy*, David Mathews explains that donors are attracted to "effective, formal and established organizations that offer
innovative ways to solve their community’s social and economic problems” (Proctor, 1996). In most cases, older organizations are the most established in their community. These organizations have better records of service and past success. As compared to younger organizations, many times constituencies are more established and better defined, and have developed numerous support bases (Dove, 1988).

Opinions varied among telephone survey participants as to whether age has a positive or negative affect on the ability of a garden to solicit operating revenue. Reasons cited include those expressed by Dove, above, as well as ideas about board and staff experience, community involvement and understanding, programming, building endowment funds, growth, and the need to redefine an organization to donors as a garden ages. These ideas are elaborated upon in chapters four and five.

Annually, individual donations account for over eighty cents of every philanthropic dollar. For this reason, membership programs in public gardens may generate needed support. Factors that affect individual giving include increases or decreases in the value of personal income and stocks, tax policies, commitment to and confidence in gift-supported institutions, inflation rates, and unemployment figures (Kaplan, 1996). Membership programs provide benefits for participants, while other donors may receive no direct, tangible benefit for their contribution.

Membership programs provide ways to raise unrestricted funds, to develop constituencies, and to expand audiences. For these reasons, many public gardens rely on members in order to survive. Membership provides the opportunity to develop an intimate relationship between select groups of individuals and organizations. This environment can then foster major contributions.

Most public gardens participating in this study reveal that membership is an important aspect of their operating revenue plan. In public gardens, members provide needed operating revenue and support by generating community interest, word-of-mouth advertising, and by participating in educational programs and special events.
Public gardens, like other nonprofit organizations, have governing boards that are responsible for safeguarding and managing resources while being accountable to the community. The board should aid the executive director in the planning process, determine policy, secure leadership, and generate funding (Krupanski, 1998). Boards are responsible for the ultimate fiscal and financial well-being of the garden.

An ideal board is made up of skilled, dedicated individuals who are actively involved in the organization and community, and who are committed to the mission of the organization (Mellon Bank, 1995). This group of individuals should be composed of active leaders of diverse backgrounds who are able to work individually and as a team, always on behalf of the organization (Ingram, 1988).

Public gardens participating in this research share the idea that board expectations and responsibilities should be established in the beginning, and that board involvement is vital for the successful solicitation of operating revenue. Board development requires a significant investment of time and effort by all involved. The manner in which the executive director cultivates and communicates with a board will be reflected in board performance (National Center for Nonprofit Boards, 1988).

Throughout the nonprofit sector, collaboration between organizations are becoming more common. Examples of collaboration among nonprofit organizations can be found as can projects involving nonprofit and for-profit businesses. Specific examples of collaboration include nonprofit organizations sharing the same office building, public-private arts partnerships, cultural and recreational tax initiatives, and challenge grants issued by foundations to support nonprofit organizations. (Nonprofit National News, 1997).

Collaboration seems to be a growing trend in nonprofit organizations, and public gardens are no exception. Some urban gardens such as the Atlanta Botanic Garden in Atlanta, Georgia are part of umbrella nonprofit or cultural groups. This research investigates collaborative proposals being initiated in an effort to secure operating revenue. Public gardens have been involved in this type of collaboration with other area
nonprofit educational and cultural organizations, with city park and recreation offices, local businesses, and corporations.

**Other significant variables**

In addition to the four factors investigated in this research, there are many other factors that may affect fund-raising efforts in nonprofit organizations. These general factors include: the caliber and geographical spread of a constituency, range of giving programs, previous fund raising success, quality of programming, impact of services, location of the organization, human factors related to urgency, and emotional appeals (Dove, 1988).

In addition to the factors affecting all nonprofit organizations, public gardens specifically cite publicity, public understanding, fund-raising methods, competition with other nonprofits, weather, location, overall health of the economy, and quality of board and staff members as affecting the successful solicitation of operating revenue.

This introduction and justification supports the usefulness and necessity of this research. The following chapters will focus on nonprofit operational funding sources, research methods, relationships between factors, and group analyses.
Chapter 2
HISTORY OF PHILANTHROPY AND LITERATURE SEARCH

Background of philanthropy and nonprofit funding

America is the most philanthropic nation on earth (Lawson, 1996). Robert L. Payton wrote: “the philanthropic tradition . . . is older than democracy, older than Christianity, and older than higher education. It gives form and purpose to personal and social life that cannot be provided by the self-interest of economic enterprise or required by the mandate of political institutions.” (Morsberger, 1995). Wealthy donors may see philanthropy as an “obligation that is part of their privileged position,” but not all donors are wealthy” (Demo, 1996).

Philanthropy is something that has become part of the American culture. Many of the most generous philanthropists in the United States are purposely reinvesting in the nation that made them rich (Lawson, 1996). On a global scale, people are voluntarily organizing to form private nonprofit organizations to pursue viable objectives. (Salamon, 1994).

In the United States, private nonprofit organizations do not pay state and federal income taxes, and are given the categorization 501(c)(3) under provisions of the Internal Revenue Code (Schram, 1994).

At the time this research was completed, there were over 575,000 501(c)(3) organizations in the United States (Morsberger, 1995). In 1995, total giving to nonprofit organizations reached $143.84 billion. Major donor groups include individuals, foundations, and corporations. The following chart depicts these donor groups, their total contribution in billions of dollars, and their contribution as a percentage of total giving (Kaplan, 1996).
Table 2.1: Sources of nonprofit funding from individuals, foundations, and corporations listed by contribution amount and as a percent of total giving.

<table>
<thead>
<tr>
<th>Donor Group</th>
<th>Contribution in Billions of Dollars</th>
<th>% of Total Giving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>$126.00</td>
<td>87.6%</td>
</tr>
<tr>
<td>Foundations</td>
<td>$10.44</td>
<td>7.3%</td>
</tr>
<tr>
<td>Corporations</td>
<td>$7.40</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

As compared to all donor groups, individuals have always been the most generous. Individual giving represents over eighty cents of every philanthropic dollar contributed annually. Included in individual giving are bequests that totaled 9.77 billion dollars, 6.8% of total giving in 1995 (Kaplan, 1996).

There are more than 38,807 foundations in the United States. Over 65% of all foundation gifts come from 2% of the foundations that have assets of $50 million or more. Each year private foundations are required to make gifts equal to 5% of their assets (Kaplan, 1996). As foundation investments perform well, total assets will increase requiring them to donate more funds to nonprofit organizations. The majority of foundation assets are invested in the stock market. When the market performs well, foundation assets grow, as do their contributions to nonprofit organizations.

Corporate giving is guided by several priorities, such as enhancing public image, fostering employee loyalty, and strengthening ties with customers through marketing and public relation efforts. Many businesses want to contribute to society while maintaining a positive relationship with employees (Kaplan, 1996). Often, making a donation to a nonprofit organization can satisfy these priorities, creating a win-win situation.

The chart on the next page represents nonprofit recipient organizations as categorized by Giving USA a fund-raising resource published annually by the American Association of Fund Raising Counsel. Giving USA includes all nonprofit organizations. Information is broken down into sources and uses of contributions on a national and international scale. Categories have been developed and serve as a reference point when
determining the allocation of philanthropic dollars in the United States. Categories under sources of contributions include giving by: individuals, bequests, foundations, and corporations. Uses of contribution categories include giving to religion, education, health, human services, arts, culture, and humanities, gifts to foundations, public/society benefit, environment/wildlife, and international affairs. Figures for total giving to each category in dollar amount, and as a percentage of total contributions are included.

Table 2.2: Fund allocation in nonprofit organizations as categorized by Giving USA in amount and percent of total funding

<table>
<thead>
<tr>
<th>Organizational Category</th>
<th>Funding in Billions of Dollars</th>
<th>% of Total Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>$63.45</td>
<td>44.1%</td>
</tr>
<tr>
<td>Education</td>
<td>$17.94</td>
<td>12.5%</td>
</tr>
<tr>
<td>Health</td>
<td>$12.59</td>
<td>8.8%</td>
</tr>
<tr>
<td>Human Services</td>
<td>$11.70</td>
<td>8.1%</td>
</tr>
<tr>
<td>Arts, Culture, and Humanities</td>
<td>$9.96</td>
<td>6.9%</td>
</tr>
<tr>
<td>Unallocated Gifts</td>
<td>$7.64</td>
<td>5.3%</td>
</tr>
<tr>
<td>Gifts to Foundations</td>
<td>$7.43</td>
<td>5.2%</td>
</tr>
<tr>
<td>Public/Society Benefit</td>
<td>$7.10</td>
<td>4.9%</td>
</tr>
<tr>
<td>Environment/Wildlife</td>
<td>$3.98</td>
<td>2.8%</td>
</tr>
<tr>
<td>International Affairs</td>
<td>$2.06</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

There is no category for public gardens and arboreta. Giving USA includes botanic and horticultural activities in the environmental/wildlife field. Public garden funding may fall within several categories depending upon the project. Here lies one of the challenges and blessings of the diversity of public gardens and arboreta (Proctor, 1996). With different missions and programs, these organizations may be eligible for funding under education, health, arts, culture and humanities, environment/wildlife, or public/society benefit.

Public gardens face many of the same challenges confronted by other nonprofit organizations. Factors that affect the solicitation of operational funding in public gardens may also have an important effect on other organizations.
Current government funding situation

Because of the growing number of nonprofit organizations, all are facing competition for private dollars. Government funding is shrinking, and the situation will only become worse. In March 1996, President Clinton emphasized the reality that government funding is decreasing, and the private sector will have to step up and assume more responsibility in order to meet the basic needs of citizens (Kaplan, 1996).

The decline and in some cases cessation of government funding urges nonprofits to strengthen existing operational fund-raising programs, and develop new options. During the fiscal years 1992-1994, nonprofits lost $38.7 billion in federal support (Kaplan, 1996). The loss of government support encourages people to become less dependent on the government, and more willing to take responsibility for their own well-being. (Salamon, 1994). While these trends provide an opportunity for nonprofits to assume a stronger role in society, it also means doing more with less. With government support declining, nonprofits must depend on private giving to support operational costs now more than ever. This research investigates the importance of private funding realized as a result of active members, involved boards, and collaborative efforts.

Breakdown of operational funding in public gardens

Public gardens receive funding from a variety of sources. This study investigates net operating revenue realized through membership dues, special events, admission charges, on-site restaurants and gift shops, general unrestricted donations, facility and site rentals, educational programs, annual appeals, and investment earnings.

The following table shows the contribution membership dues, special events, on-site food service and gift shop revenue make to the total operating budget in the twenty-seven public gardens included in this study. All of the gardens receive revenue from membership dues. Twenty-two gardens receive revenue from special events and twenty gardens receive revenue from on-site food service and gift shops. These three categories had the highest participation among respondents.
Table 2.3: Major sources of operating revenue in participating public gardens and the percent of the total operating budget

<table>
<thead>
<tr>
<th>Form of Revenue</th>
<th>% of Operating Budget</th>
<th># of Gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership dues</td>
<td>0-20%</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>20-40%</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Over 40%</td>
<td>3</td>
</tr>
<tr>
<td>Special Events</td>
<td>0-20%</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>20-40%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Over 40%</td>
<td>2</td>
</tr>
<tr>
<td>On-site Food and Gift</td>
<td>0-20%</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>20-40%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Over 40%</td>
<td>1</td>
</tr>
</tbody>
</table>

Independently, these forms of revenue account for less than twenty percent of the operational budget in most public gardens participating in this study, but collectively they make a substantial contribution. Other revenue is generated through: restricted donations, government funds, contract services, private foundations set up to support the garden, parent institution support (university or hospital), and income from endowment funds.

Chapter 3 will discuss research methods including, selection of study participants, survey development, and analysis.
Chapter 3

RESEARCH METHODS

Selection of participants

In order to select study participants, an initial postcard mailing was sent to all the American Association of Botanic Gardens and Arboreta Institutional Members (Appendix A). At the time of the mailing, this list totaled over 420 gardens in the United States and Canada. The purpose of the postcard was to gather preliminary information that was used to decide which gardens would be included in the study. A fifty percent response rate was received from the initial postcard mailing. From the information gathered, a decision was made to consider gardens that are 501(c)(3) organizations; raise over seventy percent of the annual operating revenue; and who were willing to participate in the research. Thirty-three gardens were 501(c)(3) organizations and were responsible for raising over seventy percent of their annual operating revenue. Of this number, twenty-seven gardens agreed to participate in this research. A list of participating gardens can be found in Appendix B.

Gathering information

Telephone interview questions were sent to the twenty-seven garden administrators who agreed to participate. These questions can be found in Appendix C. The survey has sections related to defining success and failure in raising operating revenue, age, membership activity, board involvement, and collaboration. Telephone interviews were scheduled with a staff member at each garden. This staff member may have been a director, development officer, board president serving as director, or director of horticulture.
The telephone survey included close-ended questions requiring little explanation, as well as open-ended questions that allowed survey participants to explain and elaborate upon a specific point of view or situation. Notes were taken during telephone interviews, and later used when compiling conclusions. A summary of telephone interview results can be found in Appendix D.

**Group analysis**

After information was compiled from telephone interviews, membership activity and board involvement were separated into high, medium, and low ratings (ranked 1, 2, and 3 respectively); age and collaboration were assigned a ranking of 1 or 2 depending on their age, or involvement in collaborative efforts. These divisions were defined in preparation for statistical analysis. MINI-TAB tables are used in Chapter 4 to represent relationships between the variables. Once rankings were defined, gardens with similar characteristics were grouped together. The group analyses represent these groups. In addition to groups of gardens sharing similar characteristics, there were also some gardens that did not share the characteristics of others. These gardens are referred to as outliers, and are explained in the outlier analyses. These analyses provide information about trends and departures from trends that are likely to yield useful information to managers at public gardens.
Chapter 4

RESULTS AND DISCUSSION

Ranking Determination

The guidelines for ranking age, membership activity, board involvement, and collaboration are based on information received through telephone surveys. The average age of participating gardens is 25 years, as compared to the 37-year average age of all Institutional Members of the American Association of Botanic Gardens and Arboreta. Age rankings are determined as follows: gardens older than 25 receive a high ranking (1), and gardens younger than 25, a low ranking (2).

The membership ranking is based on a composite of three pieces of information: percent of members who are donors; percent membership dues contribute to the total operating budget; and percent individual donations contribute to the total operating budget. Percentages are used because total operating budget size varies among participating institutions.

The results of a 1996 survey in Giving and Volunteering in the United States, a publication that compiles information about the nonprofit sector, reveals that 25 percent of the members of nonprofit organizations are donors. Based on this information, gardens participating in this research with over 20 percent of their members giving donations are rated high (1), and gardens with less than 20 percent of their members giving donations are rated low (2).

The Nonprofit Almanac, a compilation of national trends and statistics on wages, finances, employment, and giving patterns, provides guidance in determining the second and third part of the membership ranking. The Nonprofit Almanac categorizes botanic gardens in the arts and culture group. Nonprofit organizations in this group use 94 percent of solicited funds to support operations. Major sources of funds for nonprofit
organizations include private payments in the form of dues, fees and charges (39 percent), and private contributions from all sources (18 percent). Because 94 percent of all funds solicited support operations, the figures stated above are adjusted to 37 percent, and 17 percent. These figures reflect the entire nonprofit sector and are used to determine the following rankings. Gardens that raise over 37 percent of their operating budget through membership dues are given a high ranking (1), while gardens raising less than 36 percent of the total operating budget are given a low ranking (2). Gardens that raise over 17 percent of their operating budget from individual contributions are given a high ranking (1), and those raising less than 16 percent are given a low ranking (2).

Once percentages are determined and rankings assigned, a composite membership ranking is determined by taking an average of the three rankings. In order to maintain consistency these averages are assigned a value of one, two, or three (high, medium, and low). These membership composite rankings can be found in table 4.1.

Board involvement is defined as it relates to fund raising. Active board members become involved in fund-raising activities by serving on committees, making personal donations, and by contacting, soliciting and recruiting donors. Board involvement varies among participants. The percentage of board members who take an active role in fund raising is used to determine rankings. Gardens with between 80 and 100 percent board involvement are given a high ranking (1), between 20 and 60 percent is a medium ranking (2), and less than 20 percent is a low level of involvement (3).

Many gardens have become involved in collaborative efforts with nonprofit and/or for profit organizations in an effort to raise operating revenue. If a participant has taken part in collaboration a high ranking (1) is assigned. If not, the participant is assigned a low ranking (2).
Group and outlier analysis

In order to determine groupings and outliers, each garden is assigned values based on survey responses. The analyses of these groups contain information about several gardens sharing the same characteristics. Table 4.1 displays four groups sharing similar characteristics, and one set of outliers. The outliers discussed do not share similar characteristics with other gardens, but do have other outstanding qualities.
Table 4.1: Listing of gardens and age, membership composite, board, collaboration rankings, and total of characteristics

<table>
<thead>
<tr>
<th>GARDEN</th>
<th>AGE</th>
<th>MEMBERSHIP</th>
<th>BOARD</th>
<th>COLLABORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>OUTLIERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>*</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>**</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

GROUP 1

| F      | 2   | 1          | 3     | 1             |
| G      | 2   | 1          | 1     | 1             |
| H      | 2   | 1          | 3     | 1             |
| I      | 2   | 2          | 2     | 2             |

GROUP 2

| J      | 1   | 3          | 2     | 1             |
| K      | 1   | 3          | 3     | 1             |
| L      | 1   | 3          | 2     | 1             |
| M      | 1   | 2          | 3     | 1             |
| N      | 1   | 3          | 3     | 1             |
| O      | 1   | 3          | 3     | 1             |

GROUP 3

| P      | 2   | 2          | 2     | 1             |
| Q      | 2   | 2          | 2     | 1             |
| R      | 2   | 2          | 2     | 2             |
| S      | 2   | 2          | 3     | 2             |
| T      | 2   | 2          | 3     | 2             |
| U      | 2   | 2          | 3     | 1             |
| V      | 2   | 2          | 2     | 1             |

GROUP 4

| W      | 2   | 3          | 2     | 2             |
| X      | 2   | 3          | 3     | 2             |
| Y      | 2   | 3          | 3     | 1             |
| Z      | 2   | 3          | 2     | 1             |
| AA     | 2   | 3          | 3     | 1             |

TOTAL

|         | Old (1) = 9 | Active (1) = 5 | Active (2) = 10 | Active (3) = 3 | Collaboration (1) = 18 |
|         | Young (2) = 18 | Average (2) = 10 | Average (2) = 10 | Average (2) = 11 | No Collaboration (2) = 9 |

KEY

- **Age** – Older than 25 = 1, Younger than 25 = 2
- **Membership composite** – Active members = 1, Average members = 2, Inactive members = 3
- **Board** – Less than 20% active in fund raising = 3
- Between 20 – 60% active in fund raising = 2
- Between 80-100% active in fund raising = 1
- **Collaboration** – Involved = 1, Not involved = 2

*Garden B uses membership dues to support capital projects.
**Garden E does not have members.
Outliers

Gardens A, B, C, and D have outstanding qualities. Garden A is older than 25 years, has active members, average board involvement, and is not involved in collaboration. Membership activity is the outstanding quality of this outlier, recruiting new members, and upgrading existing members is an organizational priority. The director at Garden A feels members will support the garden if they are nurtured and made to feel important.

Garden B is older than 25 years, has an active board, and is not involved in collaboration. Membership dues in this garden support capital expenses, not the operating budget. Garden C is younger than 25, has average membership activity, high board involvement, and does not take part in collaborative efforts to raise operating revenue. Garden D is older than 25, has average membership activity, active board involvement, and is involved in collaboration.

Gardens B, C, and D all have exceptional board involvement. All board members at these gardens take an active role in fund raising. Board size varies among these gardens. In this group board size does not affect activity, both large and small boards are active. Between 81 and 100 percent of board members give donations to support operating revenue in gardens B and C, while 21 to 40 percent of board members support the operating budget at garden D. In the two older gardens (B and D), over 40 percent of the board is involved in finding new donors. Board members in Garden B go through an orientation to the organization at the beginning of their term. The director at Garden D views board members as the fund raisers, the development office functions to support fund raising efforts of the board. All these characteristics support the high board involvement ranking.

High membership activity and board involvement in combination with age are the characteristics that set these gardens apart from other groups. There are no other gardens that are old, and have high membership activity as seen in Garden A, and no other gardens that have a high level of board involvement as seen in gardens B, C, and D.
Garden E is young, does not have members, has low board involvement, and takes part in partnerships with other organizations. This garden is associated with a university, and relies on contributions from individuals for a large portion of the operating budget. The board does not solicit for operating funds at this time; interest in the organization is the only characteristic considered when selecting board members. These unique qualities make Garden E an outlier.

**Group One**

Gardens in group one are young, have active members, average to inactive boards, and most are involved in collaboration. The four gardens in group one all share high membership activity rankings, a quality that sets this group apart.

Membership dues provide operating revenue in each of these gardens. In Gardens F and I, between 20 and 40 percent of members give additional contributions, and in Garden G, between 60 and 80 percent. Garden H is in a unique situation. This garden is just getting started, only 20 percent of members contribute at a level above their membership due requirements, but membership dues in this garden contribute 200 percent of the operating budget. At this time, the operating budget is small, because there have not been any significant operating costs. Current membership dues are being saved to cover future operating expenses. The administrator at Garden G feels membership size is too small to affect the solicitation of operational funding at this time. In the future, membership size is expected to increase, and become a factor in the successful solicitation of operating revenue.

In the other gardens, membership dues contribute between 8 and 39 percent of the operating budget, and individuals contribute between 17 and 36 percent. Administrators at Gardens F, G, and I value members becoming involved in activities, and learning about all aspects of the garden. Through education and involvement, members are better equipped to support the garden. Members at Garden G share a sense of belonging in their small community.
Average to inactive board members also characterize the gardens in group one. Interest in the organization is the most important characteristic for board members to possess in Gardens G, H, and I. The board of garden F has been historically composed of gardeners. The administrator expressed the need for more professional expertise, specifically individuals with legal, financial, public relations, and writing experience. Board members at garden G are currently “big on time and low on money.” In the future, this administrator plans to put more emphasis on the ability of board members to raise and donate funds. Garden G also utilizes a network of advisory boards consisting of people with specific expertise who provide advice to the garden board on an as-needed consulting basis. None of these gardens have development subcommittees of the board; all administrators are working to enhance board involvement in fund-raising activities through education sessions and workshops.

Collaborative efforts include working with local school districts to sponsor teacher training sessions, co-sponsoring horticultural lectures, and exchanging services with a city parks and recreation department.

**Group two**

The six gardens in group two are old, have average to inactive members, average to inactive boards, and all are involved in collaboration in an effort to raise operating revenue.

Membership dues provide between 8 and 20 percent of the operating budget, and contributions from individuals provide between 6 and 15 percent. Between 0 and 20 percent of members make additional contributions to the operating budget in all gardens except garden M, where 20 to 40 percent of members make additional contributions to support operations.

The administrator at Garden N is the only person in this group who questions whether membership size affects the ability of the garden to solicit operating revenue. All others state there is strength in numbers; there is an advantage in having a large membership constituency because members are the first people approached during fund-
raising campaigns. At Garden J members are valued because they provide support for grant applications.

Important qualities for board members to possess at Gardens J and K include knowledge of horticulture and landscaping, and interest in the organization. The administrator at Garden L stresses the importance of having board members interested in the organization along with the ability to raise and donate funds. Representatives of various groups of people are represented on the board of gardens L and O, including individuals with various ethnic affiliations and disabilities. Board members at Garden M serve as a vital communication link between the community and the garden and vice versa.

All gardens in group two are involved in collaborative efforts. These partnerships include sponsoring educational events, working with the local museum authority to institute a cultural tax, developing a map and signage system for tourists that includes all area nonprofits, and becoming part of joint planning grant proposals.

**Group three**

These seven gardens are young, have average membership activity, average to low board involvement, and most are not involved in collaboration.

Most garden directors in group three view age as a factor in the successful solicitation of operating revenue. There are advantages and disadvantages associated with being a young garden. Advantages include generating excitement, and getting the community involved in planning. Disadvantages include a lack of public awareness, the challenge of educating the community about mission and focus, competition with other more established nonprofit organizations, and having an established donor base. The director at Garden Q does not feel age affects the solicitation of operating revenue. Visitors value the experience of coming to the garden because it is a beautiful natural area; age is not seen as a factor that affects this quality.

Membership dues support the operating budget in all gardens in group three. Revenue generated from membership dues is between 8 and 24 percent of the operating
budget in Gardens Q, R, S, T, and U. Garden P generates 45 percent of the operating budget through revenue from membership dues, but this garden does not receive any funding from individual contributions. In contrast, Garden S generates 50 percent of the operating budget through individual contributions; the other gardens generate between 34 and 15 percent. A large membership is viewed as an advantage in fund raising at these gardens because members are the first people approached for funding; membership is the first step in becoming a donor.

Gardens P, Q, R, and V have average board involvement. Between 20 and 60 percent of board members in these gardens are actively involved in fund raising. These gardens have development subcommittees; Gardens S, T, and U do not. Based on the information gathered from this group, having a development subcommittee helps board members become involved in fund-raising efforts. Administrators encourage board involvement by holding a mandatory orientation for new members, communicating specific contribution expectations, encouraging members to select a committee in which to become involved, naming contributors in the annual report, and other forms of recognition.

Gardens R, S, and T are not involved in collaborative efforts. The others have become active in events for children, educational seminars, matching grants, and grand openings of local businesses. The director at Garden U emphasizes the importance of determining guidelines for all organizations involved in collaboration; this will prevent one organization from doing all the work and not being fairly compensated.

**Group four**

Gardens in group four are young, have inactive members, average to inactive boards, and most are involved in collaboration. In addition to age, membership activity, board involvement, and collaboration other factors such as the overall economy, weather, staff qualifications, publicity, and competition with other nonprofits affect the solicitation of operating revenue in these gardens.
Garden W has a formal annual fund, the other gardens do not have a fund at this time, but some are planning to have one in the future. At Garden Y their proposed annual fund will initially support operations, and then provide support to special projects and the endowment. Age is seen as a factor that affects the successful solicitation of operating revenue in all gardens in group four. The administrator at Garden Y believes organizations evolve. In public gardens, horticulture and educational programming are the first steps in encouraging community support and involvement. Once this first stage is achieved, new staff members are hired who possess specific expertise in fund raising, public relations, advertising, etc. Other directors state that by being older, often a larger constituency of donors is cultivated, and community involvement is enhanced.

Contributions from membership dues range from 3 to 19 percent of the operating budget and individual contributions support between 1 and 12 percent. Most gardens view a large membership as an advantage in soliciting operating revenue, but the director at Garden Z brought up an interesting point. Garden Z has a large membership base. The community in which garden Z is located views this large group of members as providing all the needed support. Individuals who are not members of the garden do not choose to become members because they feel the garden already has enough support.

The administrator at garden AA does not feel membership size should be seen only as an advantage in generating operating support; members are viewed as a source for guaranteed income and community involvement. Administrators at Garden W are aware of the potential cost of having a large membership. If free admission is a benefit to members, as membership numbers grow, admission fees are lost. This can be a problem if new visitors are not constantly being attracted to the garden.

Gardens W and Z have average board involvement. Directors at these gardens stress the importance of having board members who can contribute or raise funds, and who have corporate or business connections. Garden W is the only garden in group 4 that has a development subcommittee. Garden Z has a ways and means committee that functions in a fund-raising capacity when necessary. The ability to
Contribute and/or raise funds is not a consideration when selecting board members at Gardens X, Y, and AA. At gardens X and Y the director and staff are responsible for fund raising. Garden AA relies on large contributions from family members of the garden founder to support operations. Generating operating revenue is not a priority for the boards at Gardens X, Y, and AA. This supports the low board involvement ranking at these gardens.

Collaborative partnerships provide operating revenue in Gardens Y, Z, and AA. These gardens have become involved with city parks and recreation departments and umbrella nonprofit organizations such as the United Way.

Summary of groupings

The five groupings highlight gardens that share similar characteristics. Not all gardens are identical within these groups, but for a variety of reasons they share some of the same basic qualities related to age, membership activity, board involvement, and collaboration. Rankings are based on information gathered through specific telephone survey questions.

Chi-square analysis

Information compiled through group and outlier analysis is used to determine whether relationships exist between factors. Chi-square contingency table statistical analysis is used to test for a relationship between two factors. The chi-square contingency tables are also called chi-square tests for independence.

Each relationship starts with a null hypothesis ($H_0$), no relationship exists, and a $H_1$ hypothesis, or research hypothesis. The $H_1$ hypothesis is based on the information gathered through research, but has no statistical basis. The $H_0$ hypothesis is statistically tested using chi-square contingency tables.

Once information is entered into the MINITAB statistical programming package, two-way comparisons are made using chi-square analysis. The chances a relationship exists are determined by observing the p-value of each table. Relationships
are determined based on the p-value; this value assesses the probability of being wrong if
the researcher says a relationship exists. If the p-value is low, there is a small chance of
being wrong, so a relationship exists. If the p-value is high (over 0.1) it is too risky to say
a relationship exists. There must be strong evidence, a low p-value, to say a relationship
exists.

In order to determine the p-value, chi-square and degrees of freedom must be
calculated. The following equation is used to determine chi-square values:

\[ X^2 = \sum \frac{(f_o - f_e)^2}{f_e} \]

In this equation, \( f_o \) and \( f_e \) values represent the expected and observed (actual)
frequencies. This equation is computed for each cell of the chi-square table. The
following table results from the comparison of age and collaboration.

**Table 4.2 Chi-square table comparing age and collaboration**

<table>
<thead>
<tr>
<th>Age</th>
<th>Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>6.00</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>12.00</td>
</tr>
</tbody>
</table>

Chi-square = 0.750, Degree of Freedom = 1, P-Value = .368

**KEY**

Age: Older than 25 years = 1, Younger than 25 years = 2
Collaboration: Involved = 1, Not Involved = 2

Once the \( x^2 \) equation is computed for each cell of the table, actual and
expected frequencies are determined. The top number represents the actual frequency,
and the bottom number represents the expected frequency.

In the table above, there are actually seven gardens that are older than 25
years and involved in collaborations, versus the expected number of six. The top right
cell shows there are actually two gardens older than 25 years that are not involved in
collaboration, versus the expected value of three. There are actually eleven gardens younger than 25 years that are involved in collaboration, versus twelve gardens expected to be involved in collaborations. The last cell represents an actual number of seven gardens younger than 25 years that are not involved in collaboration, versus six gardens expected to have these characteristics. Expected values represent the expected number of gardens possessing the given characteristics if no relationship exists.

If the variables are not related, $f_e$ and $f_o$ are close in value, as can be seen in the table above. If the $f_e$ and $f_o$ values are far apart, a relationship exists because there is a large difference between what is expected, and what is actual.

In addition to deriving a chi-square value, the degree of freedom is also determined for each table using the following equation:

$$DF = (\text{# of rows} - 1)(\text{# of columns} - 1).$$

In the table above, there are two rows and two columns, plugging these values into the equation yields a degree of freedom of one. The degree of freedom value is important because the probability of obtaining a specific chi-square value depends on the number of cells in the table (Nie, 1975). The chi-square and degree of freedom values are used to determine the p-value.

Each table has a p-value associated with the test results. This p-value weighs the evidence in determining whether a relationship exists. A p-value of 0.1 or less signifies a relationship does exist between variables. The smaller the value, the less chance the researcher has of being wrong about the variables being related.

**Results of chi-square contingency table tests**

Chi-square contingency tables were run using the following variables: age, membership composite ranking; percent of members who are donors, percent membership dues contribute to the operating budget, percent individual donations contribute to the operating budget, board involvement, and collaboration. Based on the research, relationships were expected to exist between age and all other factors.
Chi-square contingency tables determined no relationship exists between the following factors: age and membership activity composite; age and board involvement; age and collaboration; membership activity composite and collaboration; board involvement and collaboration; age and the percent of members who are donors; board involvement and the percent of members who are donors; collaborations and the percent members who are donors; and board involvement and the percent membership dues contribute to the operating budget.

Relationships were found between: age and percent membership dues contribute to the operating budget; collaborations and the percent membership dues contribute to the operating budget; age and percent individual donations contribute to the operating budget; and collaborations and the percent individual donations contribute to the operating budget.

Two crosses are invalid: membership composite and board involvement; and board involvement and percent individual donations contribute to the operating budget. These crosses are invalid because some of the cells have values less than one, and several cells have values less than five.

**Relationship one**

The cross involving age and the percent individual donations contribute to the operating budget resulted in a relationship. The chi-square value in this relationship is large, 3.291, signifying a strong relationship. Table 4.3 shows the figures associated with this cross.
Table 4.3: Relationship between young and old gardens and individual donations contribute to the total operating budget

<table>
<thead>
<tr>
<th>Age</th>
<th>% Individual Donations Contribute to Operating Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3.08</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>6.92</td>
</tr>
</tbody>
</table>

Chi-square = 3.291, Degree of Freedom = 1, P-value = 0.070

**KEY**

- Age: Older than 25 years = 1, Younger than 25 years = 2
- % Individual Donations: Over 18% of operating budget = 1,
  Less than 17% of operating budget = 2

This table shows more young gardens get higher levels of funding from individuals than older gardens. This can be seen by comparing the actual values in the top left cell to the bottom left cell, 1:9. One garden over 25 years generates over 18 percent of the operating budget from individual donors, and nine gardens younger than 25 years receive over 18 percent of the operating budget from individual donors. Seven old gardens generate less than 17 percent of the operating budget from individual donors, and nine young gardens generate less than 17 percent.

More older gardens generate less than 17 percent from individual donations, while equal numbers of young gardens generate high and low levels of revenue from individual donations. A possible explanation for younger gardens generating more funding from individual donors may include the idea that many young gardens do not have an endowment; therefore, they must solicit needed funds. Because individuals contribute eighty cents of every philanthropic dollar, gardens have the best chance of receiving funding from individuals.
Relationship two

Age and the percent of the operating budget generated through membership dues were compared in the following table.

Table 4.4: Relationship between young and old gardens and the percent membership dues contribute to the total operating budget

<table>
<thead>
<tr>
<th>Age</th>
<th>% Membership Dues Contribute to Operating Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1.28</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2.72</td>
</tr>
</tbody>
</table>

Chi-square = 2.241, Degree of Freedom = 1, P-value = 0.134

KEY
Age: Older than 25 years = 1, Younger than 25 years = 2
% Membership Dues: Over 37% of operating budget = 1,
Less than 36% of operating budget = 2

Table 4.4 shows more young gardens generating high levels of membership dues than older gardens. All old gardens raise less than 36 percent of the operating budget from membership dues. These findings are the reverse of what was expected. The researcher expected older gardens to generate high levels of income from membership dues, but these results strengthen the idea that younger gardens are aggressively recruiting members. These members make a substantial contribution to the operating budget by paying dues. As stated in the first relationship, another reason membership dues comprise such a large percent of the operating budget of younger gardens may be because some of these gardens do not have a large endowment or other sources of revenue upon which to draw operating funds. These young gardens rely on their members to make a sizeable contribution to the operating budget.
**Relationship three**

Many of the gardens included in this study are involved in collaborative partnerships in order to generate operating revenue. This third chi-square cross involves collaboration and the percent membership dues contribute to the operating budget.

**Table 4.5: Relationship between collaborative efforts and the percent membership dues contribute to the total operating budget**

<table>
<thead>
<tr>
<th>Collaboration</th>
<th>% Membership Dues Contribute to Operating Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 13</td>
</tr>
<tr>
<td></td>
<td>2.72 14.28</td>
</tr>
<tr>
<td>2</td>
<td>0 8</td>
</tr>
<tr>
<td></td>
<td>1.28 6.72</td>
</tr>
</tbody>
</table>

Chi-square = 2.241, Degree of Freedom = 1, P-value = 0.134

**KEY**
- Collaboration: Involved = 1, Not Involved = 2
- % Membership Dues: Over 37% of the operating budget = 1
- Less than 36% of the operating budget = 2

Four gardens involved in collaboration generate over 37 percent of the operating budget from membership dues, while there are no gardens not involved in collaboration that generate over 37 percent of the operating budget through membership dues. Thirteen gardens are involved in collaboration and generate less than 36 percent of their operating budget through membership dues, and eight gardens are not involved in collaborative efforts and generate less than 36 percent of the operating budget.

Gardens involved in collaboration generate more of their operating revenue from membership dues than those do that are not involved. Collaborative partnerships may enhance the ability of a garden to recruit members, and may also provide an opportunity to promote the organization to a new audience. When these two events take place, potential and current members learn about the garden and may decide to become members or increase their membership level. If this happens, the percent membership
dues contribute to the operating budget increases. Many survey participants stated that they have recently become involved in collaborative efforts; as these partnerships become more established, significant membership dues may increase.

**Relationship four**

This chi-square comparison determines a relationship between collaboration and the percent individual donations contribute to the operating budget. Table 4.6 displays the specific figures.

Table 4.6: Relationship between collaborative efforts and the percent individual donations contribute to the total operating budget

<table>
<thead>
<tr>
<th>Collaboration</th>
<th>% Individual Donations Contribute to Operating Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>6.92</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>3.08</td>
</tr>
</tbody>
</table>

Chi-square = 2.821, Degree of Freedom = 1, P-value = 0.093

**KEY**

Collaboration: Involved = 1, Not Involved = 2

% Individual Donations: Over 18% of the operating budget = 1

Less than 17% of the operating budget = 2

The information in table 4.6 shows five gardens involved in collaboration that generate over 18 percent of the operating budget through individual donations, and thirteen gardens also involved in collaborations that generate less than 17 percent of the operating budget through individual donations. Five gardens that are not involved in collaboration generate over 18 percent of the operating budget through individual donations, and only three gardens not involved in collaboration generate less than 17 percent of the operating budget through individual donations.
These results determine that high individual donations do not depend on involvement in collaboration. Ten gardens generate over 18 percent of the operating budget through individual donations, five of these gardens are involved in collaboration, and five are not. As for low levels of individual contributions, collaboration does make a difference. There are over four times as many gardens generating less than 17 percent of the operating budget through individual donations that are involved in collaboration as there are gardens that are not involved in partnerships. Collaborative efforts provide an opportunity for gardens to expand the current network and audience by becoming involved with other organizations. If more people know about the garden, more may choose to support the gardens through individual donations.

**Summary of relationships**

The four relationships were determined using statistical analysis. Some of the relationships were predicted based upon telephone interviews, others contradicted the research hypothesis. A relationship between age and funds generated through membership dues and individual contributions was expected, but old gardens were expected to generate more funding than younger ones. The close relationship between collaboration and the contribution of membership dues and individual donations was not expected, but is easily understood.

Chapter 5 will draw conclusions based on groupings, relationships, and other studies, provide advice based on the findings of this research, and suggest areas for future research.
Chapter 5
CONCLUSION AND RECOMMENDATIONS

Conclusion

This research involves 27 botanic gardens throughout the United States. Information gathered through telephone interviews was used as a basis to determine rankings, groupings, and relationships. Generalizations about all botanic gardens cannot be made without an extensive survey involving more gardens; therefore the results of this research apply only to participating gardens, but form the basis for comparisons among participating gardens and other gardens and nonprofit organizations.

Age was expected to directly influence all other factors. Young and old gardens deal with different sets of challenges affecting the successful solicitation of operating revenue. Older gardens have several advantages because they have had more time to build a large membership constituency and a strong board; diversify sources of revenue; increase endowment funds; and form mutually beneficial relationships with other organizations. Unexpected findings that act as disadvantages when older gardens solicit operating revenue include: the expanded need for funding as a garden grows and adds staff and facilities; and the challenge of redefining themselves to donors after major changes take place.

Young gardens are able to generate excitement about mission and future plans, and this provides an opportunity for community buy-in. Over half of the young gardens participating in this research are involved in collaboration (11 out of 18); these partnerships provide further opportunities to strengthen community involvement. A major challenge facing young gardens is educating the community; a public garden may be a totally new concept in certain areas. It is important to realize this challenge may be turned into an advantage. Through education, the mission and future plans are
communicated. Young gardens have had less time to recruit members and build strong boards.

Evidence of these challenges can be seen in table 4.1. There are 18 gardens less than 25 years old. Of these 25 gardens, 5 percent have high board involvement and 22 percent have high membership involvement, 50 percent have low board involvement and 27 percent have low membership activity. Of the 9 older gardens, 22 percent have high board involvement, and 11 percent have high membership activity; 44 percent have low board involvement and 55 percent have low membership activity.

More young gardens have extreme board activity (active or inactive) and inactive members, while a larger percent of older gardens have active members. Because young gardens have more active and inactive boards, factors in addition to age are predicted to have an effect on board involvement. Only a 5 percent difference is seen between old and young gardens in relation to inactive members, because a larger percentage of old gardens have active members, which signifies age as being one factor in membership activity.

In relationships one and two, age is related to the percent individual donations contribute to the operating budget and the percent of the operating budget generated through membership dues. Tables 4.3 and 4.4 show that in this research sample, more young gardens generate high levels of membership dues and contributions from individuals than older gardens. These results were not expected, but may be explained by the idea that some young gardens lack large endowments, and diverse sources of revenue; they must raise a sizeable portion of their operating revenue every year through membership dues and individual contributions.

The research completed by Schram revealed no relationship between capital campaign goal achievement and the age of the organization, although he did conclude that older organizations are more likely to raise funds in excess of the campaign goal. Other research conducted by McCormick and Gatewood found age to have a significant affect on the ability of private colleges to raise endowment gifts, and the age of an educational
foundation and fund-raising success. The results presented in this thesis strengthen some
of the work of Schram, but also contradict other findings.

There was no relationship found between age and board involvement, or age
and collaboration. A strong relationship was seen between age and the percent
membership dues and individual donations contribute to the total operating budget. The
later finding contradicts other studies in that a larger percent of younger gardens were
found to generate more than older gardens from membership dues and individual
donations. This finding signifies a departure from a trend seen in other nonprofit
organizations.

In gardens where membership is a priority, dues and individual contributions
may account for half of the operating budget. The first outlier, and the gardens in group 1
have high membership activity. Gardens with high to average membership activity must
continually educate, involve, and cater to members in order to maintain and enhance the
size and activity of this important constituency.

The gardens in group four have low levels of membership involvement.
Several of these gardens stated problems related to having a large membership, including
the perception of the community that their involvement is not needed because many other
people are supporting the garden, and the loss of revenues at the admission gate resulting
from a free admission membership benefit. The gardens that seem to concentrate on the
disadvantages of having a large membership predictably have low membership activity
levels, while other gardens that strive to recruit new members, and nurture current
members have high levels of membership activity.

Elements of the membership activity ranking are involved in all four
relationships. Age and collaboration are shown to be related to the percent membership
dues contribute to the operating budget, and the percent individual donations contribute.
Younger gardens in this research generate more funding through members and
individuals, and collaborations enhance contributions from membership dues and
individuals.
Nurturing members and building a strong board takes time and commitment. Education is an on-going process in gardens with high to average board involvement. Orientation sessions for new members where expectations are discussed and agreed upon are key. In order to be effective, board and staff must each be aware of the role both groups play in fund raising. One director stated that the board members are the fund raisers, and staff support and coordinate their efforts. Others stated that their boards do not possess the necessary fund raising expertise or experience, therefore, staff must be the fund raisers.

Several administrators are dealing with boards that were not created to raise funds, in these situations important board members characteristics include a strong interest in the organization and expertise in horticulture and landscape design. While these characteristics are vital in order to understand and help administer a botanic garden, they are not always as beneficial in fund raising efforts. Gardens that do not consider fund raising expertise when selecting board members have low board involvement in fund raising.

In this research 13 out of 27 gardens have a low board involvement ranking; 44 percent of old gardens and 50 percent of young gardens have a low board involvement ranking. Boards at gardens with low rankings may be more involved in determining organizational mission and purpose, selecting an executive director, developing policy, learning about the organization, or generating a master plan. The level of board involvement may also relate to the stage of growth of the organization.

Administrators and board presidents who make fund raising a priority for their boards have high involvement; this includes recruiting members with fund-raising expertise. Gardens that have a development subcommittee of the board also have higher levels of involvement. As seen in outlier Gardens B, C, and D, board size does not determine activity level. These three gardens each received a high ranking for board involvement with board size ranging from 11 to 50 people. This finding contradicts that
of Gatewood who found the number of board members does affect fund raising activities at community college foundations.

Board members must be committed and involved in the organization. Members must receive recognition and, most importantly, members must be kept informed about all fund raising activities (Hitchcock, 1985). Encouraging board participation in fund raising, establishing expectations, and continually educating the board were stressed by administrators at participating public gardens as being vital to board involvement. This finding strengthens the research of Collier, McCormick, and Schram. Collier found that active participation of the governing board in private colleges and universities is effective in helping the organization achieve fund raising goals. McCormick identified leadership and participation from board members as a factor contributing to the success of a capital campaign. Schram found a relationship between capital campaign goal achievement and the presence of campaign chairpeople, commonly board members.

Collaboration may start at the board level. Garden G has a special advisory board composed of individuals with specific expertise. Normally, these individuals do not attend board meetings, but receive copies of the minutes, and are asked to support the garden through their knowledge about a specific area. By forming this advisory board, the garden has increased its constituency, and formed relationships with other organizations.

Over half of the gardens participating in this research take part in collaborative efforts in order to generate operating revenue: of those involved in collaboration, 38 percent are old, and 62 percent are young. Collaboration is a new area for many nonprofit organizations, and as seen in the last two relationships, can influence contributions from members and individual donors. Gardens involved in collaboration generate more of their operating revenue from membership dues, and increase their chances of attracting contributions from individuals more than gardens not involved. Gatewood also found that the extent to which a partnership exists between a community,
a college, and the college foundation may be used to evaluate the success of fund-raising activities. Collaborative efforts will become important in the future as funding sources become more interested in making a greater impact through a contribution that will help support several organizations.

As can be seen through the findings of this research, other studies have been supported, and some contradicted. The contradictions may be the result of this research focusing on operating revenue in public gardens, as opposed to capital campaigns or other forms of fund raising in other types of nonprofits. The findings in this research signify that funds raised for operations and methods used to secure those funds are vastly different from those secured for capital campaigns; therefore different factors affect each process. Another possibility is that public gardens do not totally reflect other nonprofit organizations in their solicitation of operating revenue.

Future study

In order for the questions posed above to be answered, more research specifically related to fund raising in public gardens is needed. This study is a preliminary effort to investigate certain factors that have an effect on the successful solicitation of operating revenue in public gardens.

Topics for future research include investigating other factors that may affect the solicitation of funds such as the type of organization, focus of mission statement, location, qualifications of development staff, number of board members, selected audience, public relations, and demographics of the surrounding community. Few gardens participating in this study have high membership activity as defined by the parameters. Perhaps a study comparing membership activity at gardens and other nonprofit organizations would provide insight. A study based on membership may also reveal a relationship between active members and an active board. In addition, current and anticipated trends may indicate areas worthy of research related specifically to public gardens.
Anticipated trends

New trends will continue to emerge in the twenty-first century. These trends will be influenced by changing demographics, changing philosophy of business philanthropy, and the role government chooses to play in the funding of nonprofit organizations.

The current population is becoming more diverse. Baby boomers are a major group whose philanthropic decisions will influence all nonprofits. Different generations have different ideas about philanthropy. Giving used to be part of our culture; the good person was the person who supported philanthropy. For the older generation giving is a habit. Only time will tell whether the next generation will be as generous (Braus, 1994).

Baby boomers are expected to support organizations because it feels right. As these people age, they are expected to contribute to organizations for which they have a passion. They like to be personally involved in the organization, while in the past it was enough to know the organization had a good track record. In order to successfully attract contributions, organizations must be able to communicate a mission that satisfies a need in the community. (Kropf, 1997).

Men and women respond differently to funding requests. Women often support organizations that promote change, while men are more commonly in favor of maintaining the status quo. Women currently occupy two-thirds of all nonprofit staff positions, and will ultimately control nearly 90% of the wealth in our country. The influence of women will mold a trend that will continue well into the future (Braus, 1994).

Corporate philanthropy is forecasted to remain flat (Kropf, 1997). Changes in philosophy of corporations and businesses include a focus on partnerships for which they receive something in return. The business community will become increasingly interested in putting a public relations spin on charitable giving (O’Connell, 1997). These organizations often give to fit their own agendas. Conversely, foundation giving is predicted to increase during this decade as an estimated $10 trillion moves from
one generation to the next. Much of these funds are ending up in family foundations (Hartsook, 1997). Community foundations are emerging as a major force in nonprofit funding. The increased role of community foundations will make collaborative efforts a vital trend (AAM News, 1997).

Government funding has been decreasing and will continue to do so. Contributions to cultural agencies amount to $1 out of every $10,000 in federal expenditures. No nonprofit survives on government funds alone, but all are subject to the powerful effects of government policy (Monroe, 1995). Because of this trend, nonprofit organizations are being forced to replace government funding with more reliable sources. Endowments will become important sources of operating revenue (Kropf, 1997).

In order to be successful and profitable in the future, public gardens must be aware of trends and changes in demographics as they relate to a potential donor population, and adapt fund solicitation practices accordingly. "Fund raising is always about sharing visions and nurturing relationships," (Thaler, 1998). People give to people, not causes, and they give to winners, not losers. In order to be effective, organizations must understand that fund raising involves providing a service to the donor, "you are presenting people with a chance to do something fulfilling." "In the end, fund raising is not about giving money, it is about asking questions important to donors and seeing if they can achieve their objectives through your organization" (O’Connell, 1997). Fund-raisers form relationships with donors and present them with opportunities to support an organization.
GLOSSARY

AABGA – American Association of Botanic Gardens and Arboreta, an international membership organization for public gardens

Active members - members who contribute to the annual fund, participate in programs, recruit new members, purchase products in the gift shop, and/or restaurant, leave bequests

*Admission charges – the entrance fee

Age – date of incorporation

(The AABGA Membership Directory lists the date gardens opened to the public. This date was used to calculate the average age of gardens. The average date open to the public and the date of incorporation were two years apart in the gardens included in my survey.)

*Annual fund drive – any annual organized effort by a nonprofit organization to obtain gifts, usually to support in part or totally general operations

Collaborations – joint efforts between nonprofit or for profit and nonprofit organizations in order to raise operating revenue -- only collaborations which generate operating revenue are included in this study

*Educational programs – lectures, conferences, and other learning events for which a fee may be charged to registrants

*Facility and site rentals – fees gathered from rentals for staff housing, parties, weddings, conferences, large corporate meetings, etc.

Failure to raise operating revenue – not raising the budgeted amounts -- the consequences may include eliminating programs or staff positions, not reaching new audiences, or not satisfying current audiences
*General unrestricted donations* – funding received from an individual, foundation, or corporation to further the work of the entire organization, rather than for a specific capital project -- these donations may be used to defray the operating budget

*Investment earnings* – revenue generated from specific investments

**Involved board members** – for the purpose of this research involvement is defined as it relates to fund raising, it includes individuals who serve on the governing board of an organization and become active in fund raising efforts including making gifts themselves, contacting donors, recruiting donors, soliciting donors (making the ask)

*Membership dues* – annual dues paid by members, these dues usually support operations

**Operating revenue** – funds that cover the day-to-day personnel, administrative, and maintenance costs of existing programs and projects

*On-site Restaurants, Food Service, Gift Shops* – facilities operated by the organization in an effort to secure operating revenue

**Public garden** – an institution using living plant collections for public service through botany and horticulture having a diversity of forms, functions, purposes, services, and programs

**Setting fund-raising goals** – an extensive process at most organizations, involving staff at all levels as well as the board of directors, goals are usually reviewed at regular meetings of staff and CEO.

*Special Events* – activities which take place at an organization, to generate revenue for the operating budget, positive public relations is also an added benefit

**Success in raising operating revenue** – meeting or exceeding budgeted goals, other mission-driven factors may affect success such as how well the organization executes its mission, audience acquisition, retention, and satisfaction, community involvement, gaining new members and donors, and completing projects

* Revenue from these items usually supports operations.


Krupanski, George, “Major Role of the Board,” Environmental Institutional Management Course, University of Delaware, Photocopy.


Simonson, Robert, "Study's Forecast Dire on Private Arts Contributions: The President's Committee on the Arts and Humanities," *Back Stage* 37, no. 7 (February 16, 1996): 1-2.


APPENDIX A:

POSTCARD MAILING
FRONT OF CARD:

1. Is your organization classified as a 501c3 non-profit institution by the IRS?  
   Yes  No

2. What is your annual operating budget? ____________________________

3. What % of operational funds are you responsible for raising each year?  
   (This figure should not include funds from the government.)  
   _______%

4. Would you be willing to participate in my thesis research?  
   Yes  No  
   (may involve filling out a 2-3 page questionnaire, a 20-30 minute telephone interview, or being involved in a 1-2 day case study)  
   ** Please return this card even if you are not willing to participate in my research.  
   (over please)

BACK OF CARD:

Please enclose a business card, or fill in the following information

Name: ____________________________________________

Organization: ______________________________________

Address: __________________________________________

Phone Number: _____________________________________

Best time to reach you by telephone: ___________________

Fax Number: _______________________________________

email: ____________________________________________
APPENDIX B:

LIST OF PARTICIPATING GARDENS
Berkshire Botanical Garden, Stockbridge, MA
Botanical Gardens of Asheville, Asheville, NC
Brookgreen Gardens, Pawleys Island, SC
Cape Fear Botanical Garden, Fayetteville, NC
Coastal Maine Botanical Garden, Wiscasset, ME
The Dallas Arboretum, Dallas, TX
Descanso Gardens Guild, La Canada Flintridge, CA
Great Plains Native Plant Society, Hot Springs, SD
Hawaii Tropical Botanical Garden, Hilo, HI
Huntsville Botanical Garden, Huntsville, AL
Leach Gardens Friends, Portland, OR
Leila Arboretum Society, Battle Creek, MI
McKee Botanical Garden, Verno Beach, FL
Minnesota Landscape Arboretum, Chanhassen, MN
Mobile Botanical Gardens, Mobile, AL
Moody Gardens, Galveston, TX
Mt. Pisgah Arboretum, Eugene, OR
National Wildflower Research Center, Austin, TX
The Omaha Botanical Gardens, Omaha, NE
Pine Tree State Arboretum, Augusta, ME
Quail Botanical Gardens, Encinitas, CA
The Rhododendron Species Foundation, Federal Way, WA
Rotary Gardens, Janesville, WI
Santa Fe Botanical Garden, Santa Fe, NM
Stratford Hall Plantation, Stratford, VA
Tucson Botanical Gardens, Tucson, AZ
University of Nevada, Reno, NV
Survey Questions

DEFINING SUCCESS:

1. How does your organization define success in raising operating revenue?

2. How does your organization define failure in raising operating revenue?

3. Who defines success, or failure?
   - [ ] Development officer
   - [ ] CEO
   - [ ] Board
   - [ ] Other, please explain

4. Who sets success goals?
   - [ ] CEO
   - [ ] Board committee
   - [ ] Development officer
   - [ ] Other, please explain

5. How are these goals reviewed?

6. How do you know when you have been successful?

7. What factors affect your ability to raise operating revenue?

8. What areas contribute to the annual operational revenue generated by your organization? On a % basis, what is their contribution to the annual operational budget?
   - [ ] membership dues (net revenues)
   - [ ] special events (net revenues)
   - [ ] admission charges
   - [ ] on-site restaurants, food service, and gift shops
   - [ ] general unrestricted donations
   - [ ] revenues from facility and site rentals
   - [ ] educational programming (net revenues)
   - [ ] annual appeal
   - [ ] investment earnings
I. Age:

1. When was your organization incorporated? Date: ______________

2. Do you have an annual fund?  
   Yes  No

3. Does your annual fund support operations?  
   Yes  No

4. If not, what supports operations?
   _____ endowment
   _____ investments
   _____ government funds
   _____ restricted donations
   _____ other, please explain

5. How long have you been raising money to support operations? (number of years)
   _____ 0-10  _____ 10-20  _____ 20-30  _____ 30-40  _____ 40-50  _____ 50+

6. During a five-year period, what percentage of the annual operational budget is solicited each year?
   _____ year 1
   _____ year 2
   _____ year 3
   _____ year 4
   _____ year 5

7. Do you think the age of your garden influences the amount of operating revenue you are able to solicit?  
   Yes  No

8. What factors resulting from your garden’s age enable the organization to raise more operating revenue?
II. Membership Activity:

1. Do your membership dues provide operational revenue? Yes No

2. What percentage of your members are donors, giving more than their annual dues to support operations?
   ____ 0-20% ____ 20-40% ____ 40-60% ____ 60-80% ____ 80-100%

3. How many donors to the annual fund do you have? (number of people)
   ____ 0-100 ____ 100-200 ____ 200-300 ____ 300-400 ____ 400-500
   ____ 500+, please estimate the number of donors ________

4. Total amount you raise annually from individuals?
   $___________

5. Total amount you raise annually from membership dues?
   $___________

6. Do you feel the membership size of your organization increases your ability to raise operational funding? Yes No
   If so, how?

III. Board Involvement:

1. What attributes do you consider when selecting board members?
   ____ ability to raise funds
   ____ ability to donate funds
   ____ involvement in community
   ____ interest in organization
   ____ commitment to organization
   ____ corporate/business connections
   ____ specialized expertise (legal, financial, etc.)
   ____ other

2. How many people currently serve on your board? (number of people)
   ____ 0-10 ____ 11-20 ____ 21-30 ____ 31-40 ____ 41-50 ____ 51+

3. What percentage of your board takes an active role in fund raising?
   ____ 0-20% ____ 21-40% ____ 41-60% ____ 61-80% ____ 81-100%

4. Does your board have a development committee? Yes No

5. If so, what percentage of your board serves on this committee?
   ____ 0-20% ____ 21-40% ____ 41-60% ____ 61-80% ____ 81-100%
6. What percentage of your board members gives money to operating revenue?
   
   0-20%  21-40%  41-60%  61-80%  81-100%

7. Personal donations from board members account for what percentage of the total operating budget?
   
   0-20%  21-40%  41-60%  61-80%  81-100%

8. What percentage of your board members is involved in finding new donors?
   
   0-20%  21-40%  41-60%  61-80%  81-100%

9. Is the generation of operating revenue a priority for your board?
   
   Yes  No

10. How do you encourage your board to become involved in giving or soliciting operating revenue?

   IV. Collaborations:

   1. Has your garden been involved in collaborations in an effort to raise operating revenue?
      
      Yes  No

   2. If so, what are some examples of collaborations in which you have been involved?

   3. Does the money raised through these collaborations support operating expenses?
      
      Yes  No
APPENDIX D:

SUMMARY OF TELEPHONE INTERVIEW QUESTIONS
RESPONSES TO INTERVIEW QUESTIONS

Percentages of total operating budget:

Membership Dues:
- 3 - Gardens between 0-5%
- 5 - Gardens between 6-10%
- 6 - Gardens between 11-15%
- 6 - Gardens between 16-20%
- 0 - Gardens between 21-25%
- 1 - Garden between 26-30%
- 2 - Gardens between 31-35%
- 1 - 45%
- 2 - 85 - 94%

Special Events:
- 5 - Gardens between 0-5%
- 8 - Gardens between 6-10%
- 0 - Gardens between 11-15%
- 2 - Gardens between 16-20%
- 2 - Garden between 21-25%
- 2 - Gardens between 26-30%
- 1 - 36- 41%
- 1 - 60%

Admission Charges:
- 2 - Garden between 0-5%
- 4 - Gardens between 6-10%
- 1 - Gardens between 11-15%
- 0 - Gardens between 16-20%
- 2 - Garden between 21-25%
- 2 - Gardens between 26-30%
- 3 - NA
- 2 - 60 - 70%

On-site Restaurants,
Food Service, Gift Shops:
- 5 - Gardens between 0-5%
- 4 - Gardens between 6-10%
- 3 - Gardens between 11-15%
- 2 - Gardens between 16-20%
- 3 - Garden between 21-25%
- 2 - Gardens between 26-30%
- 1 - 41%
*General Unrestricted Donations:*
- 10 - Gardens between 0-5%
- 3 - Gardens between 6-10%
- 3 - Gardens between 11-15%
- 1 - Garden between 16-20%
- 3 - Gardens between 21-25%
- 1 - Gardens between 26-30%
- 1 - Garden 40%
- 1 - Garden 60%

*Revenues from Facility and Site Rentals:*
- 10 - Gardens between 0-5%
- 3 - Gardens between 6-10%
- 4 - Gardens between 11-15%
- 0 - Garden between 16-20%
- 2 - Gardens between 31-35%

*Educational Programs:*
- 15 - Gardens between 0-5%
- 2 - Garden between 6-10%
- 0 - Gardens between 11-15%
- 0 - Gardens between 16-20%
- 1 - Garden between 21-25%

*Annual Appeal:*
- 6 - Gardens between 0-5%
- 1 - Garden between 6-10%
- 4 - Gardens between 11-15%
- 1 - Garden between 16-20%
- 0 - Garden between 21-25%
- 1 - Garden 30-40%

*Investment Earnings:*
- 11 - Gardens between 0-5%
- 4 - Gardens between 6-10%
- 0 - Gardens between 11-15%
- 1 - Garden between 16-20%
- 1 - Garden between 26-30%
- 1 - 48%

*In three gardens, the annual appeal and unrestricted donations were the same, so the amount was split between both categories.*
AGE

1. 2 - Gardens are 0-5 years old
   2 - Gardens are 5-10 years old
   5 - Gardens are 11-15 years old
   6 - Gardens are 16-20 years old
   3 - Gardens are 21-25 years old
   2 - Gardens are 26-30 years old
   1 - Gardens are 31-35 years old
   2 - Gardens are 36-40 years old
   1 - Gardens are 41-50 years old
   0 - Gardens are 51-60 years old
   3 - Gardens are 61-70 years old
   0 - Garden is over 71 years old

2. 17 - Gardens have an annual fund
3. The annual fund supports operations in 15 gardens
   2 - Gardens have an annual fund that does not support operations, but rather capital projects

2. 10 - Gardens do not have an annual fund
4. Supports operations:
   8 - Fund raising events, memberships, contributions, rentals, programs,
   6 - Restricted donations
   5 - Government funds
   5 - Endowment
   3 - Investments
   2 - Foundation for garden
   1 - Gift shop, membership and special events
   1 - Visitors may send checks the go into the operations budget
   1 - Contract Services

5. How long have you been raising money to support operations?
   10 - Gardens 0-10 years
   9 - Gardens 11-20 years
   2 - Gardens 21-30 years
   2 - Gardens 31-40 years
   2 - Garden 41-50 years
   2 - Gardens 51+
6. During a 5 year period, increases and decreases in operating funding have been the result of:
   12 - Constant
   4 - Constant growth, have become more vigorous in fund raising effort
   3 - Opening a new facility often brings unexpected costs
   1 - Goal is to support 50% of operations through endowment and friends groups, admissions, and continued unrestricted donations
   1 - Increasing each year because good mayor and council members
   1 - IMS grant brought in operating funds so didn't have to raise as much
   1 - Operating budget has doubled in past 4 years, new director, increasing membership revenues
   1 - Increasing because bringing on additional staff
   1 - Up 50% in last 5 years, focusing on raising money and maturity of garden

7. 20 - Gardens think age does affect their ability to raise operating revenue
   5 - Gardens think age does not affect their ability to raise operating revenue
      2 - Large trees and open space are fast disappearing in urban areas
      2 - People are coming to see and experience the beauty of a public garden
   2 - Gardens are not sure

8. Reasons why age helps raise money:
   11 - More mature and known
   4 - Young gardens generate excitement
   3 - Community support
   2 - Stability, Donor appeal, give to established garden
   1 - Takes a long time to put together a strong board
   1 - People know the garden is not open yet, and are planning
   1 - Established programs
   1 - Increased endowment helps maintain gardens
   1 - Young gardens can do things to show the community that they have visions and will make it, a way to gain support from community
   1 - Continue to add exhibits as age

Reasons why age may hurt efforts to raise money:
   7 - When young, must educate the public
   4 - Still young, people are just catching onto the idea of the garden
   2 - Do not have land or building on site yet
   1 - Fluctuations with board and interest in garden
   1 - The older a garden is, the more it must endure, hurricanes
   1 - Young gardens often have inexperienced staff and board members
   1 - Age brings a perception of stability, everything has been moving along smoothly for so long, public questions the need for money
   1 - After a length of time, or when major changes are being made, the garden must redefine itself to donors
   1 - Annual operating needs increase as a garden grow
MEMBERSHIP ACTIVITY

1. Membership dues provide operating revenue in 26 gardens
   Membership dues do not provide operating revenue in 0 gardens
   • one garden does not have members

2. Percentage of members who are donors, giving more that their annual dues to support operations:
   16 - Gardens 0-20%
   7 - Gardens 20-40%
   1 - Garden 40-60%
   2 - Gardens 60-80%
   0 - Gardens 80-100%
   • one garden has no membership

3. How many donors to the annual fund do you have?
   8 - Gardens have 0-100
   4 - Gardens have 100-200
   2 - Gardens have 200-300
   2 - Gardens have 300-400
   2 - Gardens have 400-500
   2 - Gardens have over 500
   7 - Gardens have no annual fund

4. Amount you raise annually from individuals? (in thousands of dollars)
   2 - Raise no funds from individuals
   5 - Less than 10
   2 - Between 10 - 20
   2 - Between 20 - 30
   3 - Between 30 - 40
   2 - Between 40 - 50
   1 - Between 50 - 60
   1 - Between 60 - 70
   1 - Between 70 - 80
   0 - Between 80 - 90
   3 - Between 90 - 100
   2 - Between 200 - 300
   1 - Between 300 - 400
   2 - Between 600 - 700
   1 - Between 70 - 80
   1 - Between 200 - 300
   1 - Between 300 - 400
   3 - Between 400 - 500
   1 - Over 50

5. Amount you raise annually from membership dues? (in thousands of dollars)
   1 - Raise no funds from membership dues
   4 - Less than 10
   5 - Between 10 - 20
   2 - Between 20 - 30
   1 - Between 30 - 40
   0 - Between 40 - 50
   1 - Between 50 - 60
   5 - Between 60 - 70
   0 - Between 70 - 80
   0 - Between 80 - 90
   1 - Between 90 - 100
6. 23 - Gardens feel membership size affects their ability to raise operating revenue

3 - Gardens feel membership size does not affect their ability to raise operating revenue
   Membership size is not at a level that impacts fund raising
   No members
   Memberships are used to promote community involvement
1 - Garden is not sure

Positive comments about membership size
17 - More members you have the more money you can raise; members are primary donors
5 - Members will bring their friends and create a snowball effect
3 - Members have a sense of ownership
2 - Renewing members
2 - Members support educational programs and special events
2 - Word-of mouth advertising
1 - Indicator of overall community and local support
1 - Better support for grant applications
1 - Money from friends group goes directly into the education budget

Negative comments about membership size
1 - Public knows the garden has many members, and thinks they do not need to help the garden because it already has enough members
1 - As membership grows, you loose admission fees unless more people are coming and their entrance fees off set the fees lost when visitors join as members
BOARD INVOLVEMENT

1. What attributes do you consider when selecting board members?
   20 - Gardens consider the ability to raise funds
   19 - Gardens consider the ability to donate funds
   21 - Gardens consider involvement in the community
   26 - Gardens consider interest in the organization
   22 - Gardens consider corporate/business connections
   20 - Gardens consider professional expertise: legal, marketing, hort.
   11 - Gardens consider other attributes:
       3 - Diversity: age, sex, good judgement, ethnic affiliation
       3 - Depends on who leaves
       2 - Time in place of money
       1 - Horticulture background
       1 - Board of advisors – specialized board with legal and hort.
       expertise
       1 - Geographic diversity, board members are national and
       regional
       1 - Knowledge of how to run a board, and a non-profit
       organization
       1 - Ability to represent garden to the community and vice versa

2. How many people currently serve on your board?
   4 - Gardens have 0-10
   8 - Gardens have 11-20
   10 - Gardens have 21-30
   2 - Gardens have 31-40
   1 - Garden has 41-50
   2 - Gardens have 51 +

3. What percentage of your board takes an active role in fund raising?
   13 - Gardens have 0-20%
   5 - Gardens have 21-40%
   6 - Gardens have 41-60%
   0 - Gardens have 61-80%
   3 - Gardens have 81-100%

4. 14 - Gardens have a development subcommittee
   13 - Gardens do not have a development subcommittee
5. What percentage of your board serves on the development subcommittee
   10 - Gardens have 0-20%
   4 - Gardens have 21-40%
   0 - Gardens have 41-60%
   0 - Gardens have 61-80%
   0 - Gardens have 81-100%

6. What percentage of your board members give to operating revenue?
   7 - Gardens have 0-20%
   4 - Gardens have 21-40%
   2 - Gardens have 41-60%
   0 - Gardens have 61-80%
   14 - Gardens have 81-100%

7. Personal donations from board members account for what percentage of the total operating budget?
   24 - Gardens have 0-20%
   2 - Gardens have 21-40%
   0 - Gardens have 41-60%
   0 - Gardens have 61-80%
   1 - Garden has 81-100%

8. What percentage of your board members is involved in finding new donors?
   16 - Gardens 0-20%
   3 - Gardens 21-40%
   5 - Gardens 41-60%
   0 - Gardens 61-80%
   3 - Gardens 81-100%

9. Is the generation of operating revenue a priority for your board?
   20 - Gardens say yes
   7 - Gardens say no
10. Methods used to encourage board members to become involved in giving or 
soliciting operating revenue.
   10 - Establish board expectations from beginning
   4 - Members are involved in committees
   4 - Fund Raising workshops, lectures or retreats for board
   4 - Lists given to each member of goals to raise and ways to do it
   3 - Ask board members to make personal contacts for donations
   2 - Strongly encouraged by chair of board, key to have chair who makes fund 
      raising a priority
   2 - Get board buy-in from the beginning
   1 - Maintaining constant contact with board members
   1 - Tap into the personal interests of the board and get them involved in those 
      areas
   1 - Moral support - concentrate on success
   1 - Pop quizzes at board meetings to see who has prepared for the meeting
   1 - Naming contributors in reports

COLLABORATIONS

1. 19 - Gardens have been involved in collaborations in an effort to raise 
      operating revenue.
     8 - Gardens have not been involved in collaborations in an effort to raise 
      operating revenue.

2. Examples of collaborations.
   7 - Schools or University Continuing Education Program
   6 - Area Arts or Cultural Organizations
   7 - Other horticulture organizations
   2 - Local Department Store
   2 - City Parks and Rec. Dept.
   1 - Matching donations from corporations from individuals
   1 - Museum authority - tax revenues
   1 - Children’s organizations