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**APPLYING VISITOR SURVEY RESULTS
TO DECISION MAKING IN PUBLIC GARDENS**

By

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the requirements for the degree of Master of Science in Public Horticulture**

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ABSTRACT

There is a knowledge gap between the theoretical value of visitor surveys and the reality of applying survey results to decision making in public gardens. This gap could be narrowed if there were available an increased number of relevant examples of survey result applications. Garden leaders could study these applications before they attempted their own surveys, thereby making themselves more prepared to apply their results to decision making. This thesis presents the following four new cases for their reference: The Minnesota Landscape Arboretum, The Chicago Botanic Garden, The U.S. National Arboretum, and Goodstay Gardens. These cases should also help undecided leaders better understand if a visitor survey would be an appropriate undertaking for their gardens.

Except for the Chicago Botanic Garden, each case was a question-by-question investigation of the results of their survey(s), focusing on how the survey results were applied to decision making. The Chicago Botanic Garden case is an investigation of the data analysis that was done on all twelve surveys conducted at that garden from 1979 to 1995, and how that analysis was applied to decision making.

The decisions affected by the survey results have been categorized into three areas: marketing, programming, and facilities management. For these four cases, marketing decisions were well informed by audience research. Programming decisions were also informed, but more care seemed necessary in question design and interpretation of the results. Minor decisions about facilities management were informed; the expertise of garden staff and contracted designers seemed to make this type of survey result superfluous to decision making.

Due to the unique circumstance surrounding each decision, generalizations were not made about what types of decisions are best informed by survey results. However, four general factors affecting a garden's preparedness to apply survey results to decision making are identified and discussed. They are:

1. Know what information is desired from the survey.
2. Design the appropriate instrument to get that information.
- 3. Become familiar with how to apply the results to decision making.
4. Provide the financial and human resources to carry through the applications.

Chapter 1

INTRODUCTION

High quality audience research, and the inherent value of knowing your audience, are not sufficient to guide an organization to respond to visitor data. The process of applying research results to decision making deserves as much attention as the process of collecting data, because without such attention the value of good audience studies may be lost, or reduced substantially.

(Hayward and Jelen, 1996)

This thesis will describe the application of visitor survey results to decision making at four public gardens. The purpose is to increase public garden leaders' familiarity with visitor surveys as a tool to inform decision-making. There are two benefits to understanding how one's peers have used the information generated from a survey. First, a garden leader will be better able to decide whether a visitor survey would be a useful undertaking for her own garden. Second, if a garden does decide to initiate a visitor survey, these case studies will help the staff assigned to the survey planning team understand some of the potential ways in which they can use the data generated by their survey. Understanding potential applications while still in the planning phase has been identified as critical to enhancing the ultimate utility of the survey results. There is a knowledge gap between the theoretical "inherent value" of audience research mentioned in the quote above, and the reality of applying research results to decision making in public gardens. This thesis seeks to narrow that gap.

What is the inherent value of getting to know your audience better through audience research? Harris Shettel¹ in the introduction to *Visitor Surveys: A User's Manual* (Nichols 1990) explains:

It seems intuitively obvious that an institution open to the public would want to know quite a bit about that public if there is to be an effective channel of communication between the two. Also, as museums, et al, are finding themselves more and more under the influence of market forces, and as the financial support of museums is obtained more and more from private sources, including visitors, knowing more about those visitors (and non-visitors) is no longer a luxury, it is a necessity!

"And yet," Shettel continues, "the number of visitor survey reports that are sitting quietly ignored on the shelves would probably fill a small library."

Why would a garden conduct a survey, compile the results into a report, and then ignore the report? Various garden leaders and visitor studies professionals contacted during this research offer these two suggestions. First, there are not enough relevant examples of applications of survey results to decision making available for living museums to reference. Second, some gardens are only now hiring staff sophisticated enough to know how to effectively use the results of audience research. These barriers to the effective application of research results will be discussed in more detail in the next chapter. Other barriers cited that will not be addressed by this research include poor synthesis and presentation of results, and reluctance to accept the change suggested by research results.

¹Chair of the American Association of Museums (AAM) Standing Professional Committee on Visitor Research and Evaluation in 1990.

Fortunately, some of these professionals also identify what is needed to overcome these barriers. Rubenstein (1989) counsels that those interested in research should “seek assistance early enough to predict, based on previous experience, what changes or results the research can potentially suggest.” Silverman (1994), reporting the consensus view of those attending a session about training in visitor studies at the 1994 Visitor Studies Conference, writes that upper management “needs exercises in using data, and in conceptualizing different scenarios of findings, in order to get them comfortable with the idea of using the information they will be given.”

This thesis will present four new case studies of “previous experience” intended to help survey planners conceptualize different scenarios of their own findings. Each case will be comprised of descriptions of real and intended applications of survey data to decision making. Case study format is used in order to provide the detail necessary to understand the decisions informed, and also the context surrounding those decisions. Thus, the reader can determine the relevance to his or her own garden’s situation. Selection of cases and interview process is described in more detail in the methodology chapter 4.

Four gardens participated in the research. Goodstay Gardens (GG) conducted a member survey to inform decisions about educational programming and to solicit new volunteers. The National Arboretum (NA) conducted a comprehensive year-long visitor survey. The Minnesota Landscape Arboretum (MLA) conducted a member survey, a visitor survey, and a non-visitor survey to inform their new marketing plan. Finally, the Chicago Botanic Garden (CBG) had an analysis done of the twelve surveys they

conducted between 1979 and 1996 to identify characteristics of their most loyal visitors. These cases will effectively double the number of such cases that currently appear in the literature, providing additional relevant examples for survey planners to reference. The three cases that already appear in the literature will be discussed in the literature review chapter 3.

The cases will be examined as follows. First, there will be a brief overview of each garden and the surveys they conducted (chapter 5). Chapter 6 will concurrently discuss the significant survey results from all four gardens as they were applied to decision making. The decisions have been divided into three categories: marketing, programming, and facilities. Marketing decisions are concerned with what type of media a garden should use for its promotions, upon what audience a garden should concentrate its advertising resources, and which garden offerings warrant the heaviest promotion. Programming decisions are concerned with educational classes, activities, special events, interpretation, orientation, membership incentive and benefit programs, and volunteer programs. Facilities decisions are concerned with the physical plant, amenities, and garden design.

Conclusions are made about the types of decisions that were well informed *at these four gardens*. Marketing decisions were best informed by survey results. Programming decisions were informed although surveys do not seem as conducive to informing these types of decisions. Few facilities decisions were informed. Survey purpose and the background of the person charged with analyzing the data are correlated with what types of decisions were informed.

Four factors that affect a garden's preparedness to act on survey results are also identified and discussed within the context of both the cases researched and those described in the literature review.

It is not the aim of this research to generalize what types of decisions are best informed by surveys. The circumstances impacting each decision are too unique to effectively draw such conclusions. Rather, it is urged that the reader examine the applications of survey data that are discussed in the results and discussion chapter 6. Making more examples of these applications available is the primary aim of this research. The burden must fall on the reader to understand the applications as they occurred at the four case sites, and think about those applications in the context of their own garden. That is how this research will help the reader decide whether a visitor survey is an appropriate undertaking for their garden.

Chapter 2

PURPOSE AND JUSTIFICATION

The purpose of this research is to provide garden leaders with information that will help them decide whether to conduct visitor surveys, and, if they do conduct them, how to utilize the results gained from those surveys more effectively. This information is provided in case study format; the cases are comprised of descriptions of real and intended applications of survey data to decision making.

This research is necessary because there is a shortage of examples of the application of visitor survey results to decision making in public gardens. This is not surprising because the field of museum visitor studies is relatively new. Nonetheless, it would help to know something about applying survey results before one conducts research. There is a difference between knowing what information one wants to know and, knowing what to do with that information once one has it.

Consider the recommended planning process outlined in Visitor Surveys: A User's Manual (Nichols, 1990) published by the American Association of Museums. The first step of the planning process states that the following four questions are asked of the team members involved in the visitor survey planning:

1. Will this study provide us with new information?
2. How will we use this information?
3. How will this information help us plan for the future?
4. Are we willing to make changes based on the findings of the study?

The questions are designed to encourage team members to closely examine their thoughts and articulate their ideas about how the results of the study will help them make decisions. Yet what if none, or few, of the planning team members have experience applying results of survey research? They could benefit from some help with this most important step in visitor survey planning. The cases in this research, showing how others have used their survey results, should familiarize survey planners with some of the basic applications of survey findings to decision making.

Based on their experience at the Morton Arboretum, Hayward and Jelen (1996) described seven features of a process designed to help the Arboretum be an effective user of their survey data. Three of those features are: 1) begin planning for implementation before the research is conducted; 2) consider possible applications to all planning and management efforts; and 3) identify some initial examples of applications on which people can agree. For the same reasons stated in the proceeding paragraph, these steps

would be facilitated if those involved had the opportunity to see how other gardens had applied their results to decision making.

The Chicago Botanic Garden (CBG) provides a valuable lesson about what happens with survey results and uninformed staff. The Vice-President of Programs - a twenty-two year veteran of the CBG - explained that the results of twelve visitor surveys conducted by the CBG between 1979 and 1995 were underutilized. Back then, the CBG was simply following the trend collecting of demographic data about its visitors. The Education/Programs Department initiated these surveys and the data was only used in writing reports and grants. The CBG was not "sophisticated in marketing, in taking this demographic data and comparing it with where the CBG wanted to go. It was not used as a decision making tool to advance any of the institution's other programmatic initiatives, whether they be in programs, membership, or development." Dynamic applications did result when the CBG's first Vice-President of External Affairs initiated a new analysis of all of the combined survey data.

The CBG might have used its survey results in a more dynamic fashion earlier if other gardens had set a precedent. If they searched the literature looking for that guidance, chances are they would have only found examples from art, science, and history museums. These examples, while helpful, cannot possibly be as relevant as examples from public gardens.

In *Methods of Audience Research for Museums with Living Collections*, Gwen Stauffer (1993) identifies the lack of relevant examples as a reason why some visitor survey reports remain unused at museums with living collections. She points out that

visitor surveys are a relatively recent phenomenon in museums with living collections (compared to more traditional museums), with few conducting visitor surveys before 1988. For guidance in initiating their audience research, the living museums looked to the published survey reports from traditional museums (with inanimate and largely indoor collections). Unfortunately, visitor surveys from these types of museums lack relevance for museums with living collections. Patterson (1990) agrees, saying that generalization of a visitor study between institutions with such disparate facilities would be "risky". Stauffer also notes that the cases available for reference were frequently reported with an "abundance of confusing discourse on methodology and a sparsity of useful revelations and applicable data." (The literature review presented in Chapter 3 supports this observation, especially the continued dearth of reported applications of survey data in the six years since Stauffer's research.) Stauffer concluded that audience studies in museums with living collections were often undertaken without a true understanding of the "how" and "why" of audience research. In her estimation, visitor surveys became a "technical panacea." It was not uncommon for such projects to finish with disappointing results, damaged staff morale, and a report collecting dust on a shelf.

Therefore, the field of public gardening should begin to accumulate its own body of literature that describes the successful and unsuccessful applications of visitor studies. There is already enough basic theory available to make garden leaders curious about the possibility of getting to know their audience better. Unless we learn from the applications how to make that theory a reality, visitor surveys may remain a less than effective tool for informing decision making,

Chapter 3

LITERATURE REVIEW

Three articles were found that describe the application of visitor survey results to decision making at public gardens. These three articles, together with this thesis, represent the whole body of literature currently available on the subject of *applying* survey results in public gardens. In an effort to present a comprehensive review of the published applications of survey results, these articles are described in more detail than might otherwise occur in a literature review, but in less detail than the four cases of this thesis.

Hood and Roberts (1994) wrote about the yearlong visitor survey they conducted at the Chicago Botanic Garden (CBG) in 1989. Over 2100 usable surveys generated 350 pages of detailed reports. This article focused on the analysis that revealed respondents' age to be a key characteristic affecting audience interest in and response to the Garden. The data showed that in all four seasons, seniors aged 55 and older dominated the audience profile, while younger visitors, aged 18-34 were conspicuously underrepresented. The reasons for these differentials in attendance were found to be differences in the two groups' leisure interests and values, and their differing perceptions of the Garden as a place to satisfy those interests and values.

Garden personnel debated two rather different responses to these findings. On the one hand, it was argued that the Garden should use the findings about the younger group's interests and perceptions to aggressively target this population, which had not yet "discovered" the Garden. On the other hand, it was argued that the institution should put more energy into the development of programs and services for seniors, who were clearly loyal visitors but for whom the Garden had done very little of a special nature.

Though these responses are not mutually exclusive, every institution operates under limited resources so that prioritization becomes necessary. The Garden decided to target the younger age group in order to bring them into regular attendance and hopefully, long-term loyalty. It should be noted that the CBG has a new director since this article was published. This thesis did not investigate whether the following applications were actually implemented.

The survey showed that younger visitors generally attend the Garden more for a social occasion or casual visit than for becoming educated about gardening or landscaping. Many of them are first-time guests who are interested in a more exploratory experience. Consequently, the Garden decided to explore the development of outdoor, weather-resistant, interpretive exhibits with which visitors could interact. It was also decided to expand the traditional content of the interpretation to include more humanities based approaches that may have wider appeal than strictly focusing on the scientific or horticultural aspects of plants. Also under consideration was a space specifically for children and families, similar to a discovery center. Finally, some consideration was being given to fostering the young business crowd.

Marketing plans were under discussion and were expected to take shape as particular programs required promotion. The Garden realized that by targeting its publicity more narrowly, potential audiences' awareness of what the Garden had to offer could be improved. Avenues for reaching families, for example, include day-care and preschool services, schools, Parents without Partners, libraries, and religious organizations. Young singles and couples without children might be reached through professional organizations, unions, and church and community singles organizations.

It is worth noting what the data indicated about the seniors. Those that responded to the survey liked scheduled programs, prepared programs for learning, and special events and exhibits. They were also more likely to use various forms of visitor assistance (tour guide, audiotape, and introductory audiovisual presentations). Their primary interest was particular activities rather than gathering gardening or landscape information. Though older guests reported that they like returning to a familiar place, they also did not want it to be a low-key, quiet setting emphasizing rest or solitude. They sought entertainment as much as learning in their leisure activities.

The CBG already has many offerings for seniors in place. The group tours program is being reviewed to develop a more complete package of activities, tours, and lunch. A brochure is being developed to better promote the group tours package.

Hood also conducted a survey at the Missouri Botanic Garden (MBG) in 1990 that is described in Hood, Short, and Adams (1991). Since 1983 the MBG had received approximately one-third of its annual income from St. Louis property taxes. In 1989, a bid to increase the tax levy supporting the Garden was soundly defeated. Following the

defeat the Garden decided it needed to find out how aware the community was of the Garden and how they perceived the Garden's programs and services. A questionnaire was developed to help answer the following sorts of questions. Were people in St. Louis City and county interested in learning about the subjects the Garden offered? How frequent was their visitation to the Garden and how did that compare with their attendance at other local leisure places? How do their lifestyle characteristics relate to their decisions to visit? Over 1300 questionnaires were completed and the Garden received "several hundred pages of reports detailing extensive findings about its community."

Interestingly, Ms. Short, a member of the Garden's staff, wrote that among the design elements of the survey were "stringent criteria to ensure that the only questions asked were those whose answers could be the basis for action or change. This attempted to pro-actively avoid the issue of useless data, however interesting."

The article described the implementation of the survey results by distinguishing between the internal implementation plan and the external plan. The internal plan focused on the internal modifications to the operating procedure of the Garden. It was based on three guiding principles: making staff *aware* of the survey results through repeated presentations, ensuring a proper level of *investment* of resources by the Board, identifying the *pay-off* or benefit to those involved. The least tangible, but most important pay-off to staff was the "professional satisfaction and pride in knowing that sound decisions are being made which are based on accurate and pertinent data." The article, however, did not mention what any of those decisions were.

The external plan, which was also developed by the Garden, consists of an Audience Development Model coupled with specific public relations efforts. This thesis did not investigate whether that plan is still being implemented. The first step of the Model is to identify grass roots community and civic leaders and establish a dialogue between them and the Garden. Ad Hoc groups are formed between these leaders and the Garden's leaders to "create programs for their area that address the psychographic and leisure preferences expressed by the residents there." The next step "designs specific activities in each program with leisure time preferences expressed by the public." Program evaluations and revisions are also part of the model. This is all the article said about the application of the MBG survey results.

The Morton Arboretum (MA) conducted a visitor survey in 1995 as part of their strategic planning process. It was the first comprehensive visitor analysis in the 75-year history of the Arboretum. The MA wanted to understand some basic questions such as: Whom are we serving? How are they using the Arboretum? Do visitors understand what an arboretum is? Approximately 2500 "visitor groups" were surveyed over three seasons.

Hayward and Jelen (1996) wrote an article that focuses on the *process* of applying the research results to planning at the MA. They identify seven features of the process used at the MA that helped them and might help others to be effective users of data.

1. Begin planning for implementation before the research is conducted.
2. Consider possible applications to all planning and management issues.
3. Repeated presentations of research results are essential.

4. Leadership by the top administrator beyond “acceptance” of the process.
5. Identify some initial examples of applications that people can agree on.
6. Consciously create opportunities for discussion by staff.
7. Create a system of facilitating applications.

Few results from the survey appear in the article, and only one actual application is mentioned. Some of the interesting patterns that were reported were:

1. Member visits dominated attendance, representing more than half of attendance counts. The authors note that this is markedly different from almost all cultural institutions, which attract mostly non-members.
2. The MA had low percentages of first-time visitors, and visitor groups with children. The authors note this is also different from many cultural institutions.
3. The audience was attracted by seasonal change, e.g., spring flowering and fall tree color, but non-members, especially, did not visit much in the summer.
4. The MA attracted almost twice as many women as men.

It was also noted that a useful way to understand the diversity of the MA audience is to compare first-time versus infrequent versus frequent visitors.

The application described by Hayward and Jelen was a correction of a perception held by some staff at the MA. Some staff at the MA were under the impression that visitors spent most of their time driving around, without making the effort to get out and

explore the grounds. The article claimed “the data told a different story.” People who make short visits to the Arboretum do spend a considerable portion of time in their cars, but with longer visits the time in the cars is about the same. According to the article, this indicates there is a “threshold” of time required to drive around the site, but that most visitors spend their additional time experiencing the grounds. This interpretation of the data does not really refute the staff’s perception. This response to a staff perception was the only application mentioned in the article.

In summary, there were few examples of applications of survey results to decision making in these three articles. The demographic information the CBG collected suggested they should either target a younger audience or continue to provide for their loyal older audience. They decided to target the younger audience and the psychographic information they collected helped them decide what type of programming to provide. The MBG also indicated they would use the psychographic information they collected to “create programs and design specific activities.” Unfortunately that article did not specifically state what those activities were and how the psychographic information was used. The MA article described a process for applying research results, shared a few interesting results, but only mentioned one application of those results to decision making.

Chapter 4

METHODOLOGY

Case study was the format chosen for this thesis because it allowed for the in-depth interviews necessary to obtain detailed description of the decisions informed by survey results and the context in which those decisions were made. A survey of gardens that have conducted visitor surveys was not done because there are not enough gardens that have conducted visitor surveys so that significant results could be obtained from such a survey. In addition, the widely varying purposes for conducting visitor surveys would make it nearly impossible to develop a standard questionnaire for use in such a survey.

Selection of Cases

Potential case study sites were identified by networking with public garden and visitor studies professionals. Contact was made first with two prominent visitor studies professionals with experience working with public gardens (Marilyn Hood and Randi Korn). From their list of clients and their knowledge of the work of their colleagues, they identified nine different gardens that had conducted any type of visitor study.

An attempt was made to establish contact with all of these gardens to learn in more detail the type and purpose of their visitor studies. Personal contact was made with eight of the nine gardens. During the course of each of these discussions, the respondent was asked if they knew of any other gardens that had conducted studies. From these secondary contacts, six new gardens were identified. Literature reviews revealed no additional gardens that had conducted visitor studies. Thus, there were 14 potential case sites from the pool of 15 gardens that had been identified through primary and secondary contacts. The type of visitor studies used by each garden is shown in the table below.

Table 1. Visitor Study Types Used at Potential and Selected (=shaded) Case Study Sites

	Visitor Survey	Non-Visitor Survey	Focus Group	Exhibit Evaluation	Do Not Know
Berkeley B.G.				X	
Brooklyn B.G.				X	X
Chicago B.G.	X	X		X	
Desert B.G.				X *	
Goodstay Gardens	X				
Holden Arboretum	X				
Huntington B.G./Library	X	X	X		
Longwood Gardens	X		X		
Minnesota Land. Arb.	X	X	X		
Missouri B.G.	X	X		X	
Morris Arboretum	X			X	X
Morton Arboretum	X				
New York B.G.			X	X	X
United States B.G.				X *	
U.S. National Arboretum	X				

* - The Desert Botanic Garden and the U.S. Botanic Garden conducted short, focused visitor surveys as part of their exhibit evaluations.

The decision was made to focus the research on only one type of visitor study, visitor surveys. This decision was made because surveys can be broader in scope than exhibit evaluations and focus groups, affecting more than one aspect of a garden's operation. For this reason, research on visitor surveys may be more relevant to higher level garden decision makers, the intended audience for this research. As a result, the five gardens that had conducted only exhibit evaluations were eliminated from consideration as case sites, leaving 9 potential sites. Unfortunately, after the cases had been selected and the interviews begun it was learned that two of these five gardens had, in fact, recently conducted visitor surveys (Morris and Missouri).

Two criteria helped establish the final pool of possible case study sites. The first criterion was whether the garden was accessible for investigation. Two of the gardens never returned repeated calls or correspondence; thus it appeared they were unwilling to participate in the research. Seven potential sites remained.

The other criterion was that the surveys were conducted within the last three years. Initially, three years was an arbitrarily chosen time frame intended to focus attention on recent surveys. The rationale for the three year time frame was that the more recent the survey, the more relevant its applications would be to today's garden leaders. As it turned out, the criterion time frame could have been extended to five years without affecting which cases remained in the pool. This is because of the seven remaining sites, five had conducted surveys within the last 3 years, one garden had conducted their survey in 1987, and another garden's most recent survey was conducted in 1993.

There were five potential sites remaining. It was estimated that there would only be time to conduct four case studies. The last site was eliminated because it is a botanic garden and museum; hence, their survey included visitors to both places. Again, relevancy would be maximized if the cases were only public gardens. The four cases selected were the Minnesota Landscape Arboretum (MLA), the Chicago Botanic Garden (CBG), the U.S. National Arboretum (NA), and Goodstay Gardens (GG).

Methods Used in Case Studies

The interviews at the MLA, GG, and the NA all followed the same structure. Background questions were asked about the initiation, planning, and implementation of the surveys. Then, using each garden's survey questionnaire as a guide, the following question was asked of each question on each survey. *How was the information gained from the results of this question used in decision making at your garden?*

The CBG case focused on the collective analysis they had done on the data from all twelve of their surveys. A marketing research firm performed the analysis. Background questions similar to the other three cases were asked in the CBG interview. Then the following question was asked. *How was the information gained from the analysis of your surveys used in decision-making at the CBG?*

The Vice President of Programming and the Vice President of External Affairs at the CBG were interviewed in October 1999 concurrently via conference call. The President of the Friends of Goodstay Gardens (FGG) was interviewed in November 1999 via telephone. The Manager of Marketing and Public Relations (MMPR) represented the

MLA. She was interviewed in person in August 1999 at the MLA. The Director of the NA and their Volunteer & Events Coordinator were interviewed separately, in person, in December 1999 at the NA.

The former Head of Education and Visitor Services (HEVS) at the NA was interviewed in person in October 1999, two months after her departure from the NA. She had led the survey effort and, at the director's suggestion, was the NA's primary contact for this research. However, before her interview could be conducted, she left the NA for a position with another public garden.

All interviews were recorded. Findings from those recordings were prepared in January 2000. The findings were sent to the interviewees for their review and approval. This thesis is based upon those approved findings.

Survey reports were used to prepare for the interviews and for reference during preparation of the findings. The CBG, MLA, and NA survey reports were extensive and included analysis of the survey results. The GG survey report was a summary of survey responses with no analysis.

Presentation of Results

Informed decisions are the results of this thesis research. These results should not be confused with the visitor survey results used to inform those decisions. Only those survey results that were significant to decision making, as determined by the person interviewed, will be discussed in the Results and Analysis chapter. The survey questions that provide those results will be referenced in the text in the following way. At the end

of any sentence mentioning a survey result will be a set of parentheses containing the number of the survey question that provided that result. Thus, (9) will indicate the ninth question on a survey. The MLA conducted three surveys. Consequently, their survey questions will be indicated by (m9) for the ninth question on the member survey, (v9) for the visitor survey, and (p9) for the phone survey. The surveys are listed in the appendix for reference.

Strengths and Limitations

Strengths of this research were the multiple contacts at the CBG and the NA. By interviewing more than one person, different insight on the same survey was obtained. The conference call at the CBG was similar to a focus group, one respondent often commented on a point made by the other respondent. The member checks – allowing the respondents to review the findings before writing proceeded – also strengthened the research because any misunderstanding during the interview was corrected.

A limitation of this research is that two of the interviews occurred over the telephone. Thus, facial gestures and body language could not be observed. However, the researcher visited one of the gardens and worked at the other so there was no loss in appreciation of the physical context in which decisions were made.

The most important limitation to this research is the small number of gardens available from which to select the cases. Consequently, the survey purposes, designs, and analyses are not at all similar across all the cases. This fact makes comparison among the cases difficult. However, when patterns in the results do arise from such

disparate cases, strong conclusions can be drawn about those patterns. Conclusions about the factors affecting the preparedness of gardens to act on survey results are presented in the conclusion.

Chapter 5

BACKGROUND INFORMATION ABOUT THE GARDENS AND THEIR SURVEYS

The U.S. National Arboretum

The National Arboretum is a U.S. Department of Agriculture research and education facility located in northeast Washington D.C., 2.2 miles from the Mall. The 444-acre campus contains an array of display gardens, collections, and historical monuments set among native stands of Eastern deciduous trees. All parts of the Arboretum can be accessed by car via a network of roads. There is no charge for admission.

A yearlong survey of visitors was conducted between June 1997 and June of 1998. During each month over the course of the year, a standardized questionnaire was distributed to adult visitors on site at both of the Arboretum gates. Survey recipients were asked to mail the questionnaires back to the consultant who helped develop, and process the results from the survey, Randi Korn & Associates, Inc. Of approximately 2055 visitors who were approached by survey administrators, 136 declined to take a survey for a refusal rate of 7%. Of the 1919 surveys distributed, 1442 were mailed back for a 74% response rate.

The main goal of the survey was to provide staff with reliable information about the Arboretum's audiences to assist the institution in planning for the future. Specifically, the objectives of the survey were to determine the following:

- Demographic characteristics
- Psychographic characteristics (e.g., values regarding leisure choices, interests in nature-related topics)
- Visit characteristics (e.g., group composition, frequency of visits, reasons for visiting)
- Visiting behaviors (e.g., which gardens and collections were visited, by vehicle or by foot)
- Visitors' opinions of existing amenities (e.g., visitor map, seating, courtesy of staff)
- Visitors' perceptions of the Arboretum (e.g., park, research facility, educational facility)
- Programs and services that visitors desire
- Quality of visit experience

Planning for the survey was done in two ways. A form was circulated to all staff inquiring what information the staff wanted to know from the survey. Korn & Associates developed this form. Less than five of the 60 forms sent out were returned, possibly because it was March and horticulture staff, in particular, are often extremely busy then. There was also a planning committee comprised of the four Unit Heads (Gardens, Research, Education, Facilities) and the Director.

The Head of the Education and Visitor Services Unit at the time was primarily responsible for the development and implementation of the visitor survey. She was the primary liaison with Randi Korn & Associates.

The Minnesota Landscape Arboretum

The Minnesota Landscape Arboretum is part of the Department of Horticultural Science of the University of Minnesota. It is a research center that develops plants and horticultural practices for cold climates. It is located in the southwest suburbs of Minneapolis about 30-45 minutes drive from the center of the city. It was begun in 1958 and currently covers 1,000 acres. There is a three mile loop drive which allows cars to access most of collections. The majority of the display gardens are located closer to the center of the grounds near to the visitor center. Admission is \$5 for adults and children under 18 are free.

In the spring of 1999 the MLA conducted three types of market research: a phone survey of residents of the Minneapolis metro area, a members survey, and a visitors survey. The market research was initiated as a part of the five-year marketing plan. One of the primary goals of the marketing plan was to double visitation and increase membership by 20%. The director and trustees conceived the marketing plan as a part of the current Capital Campaign.

In February of 1999, the MLA hired its first Manager of Marketing and Public Relations (MMPR) to support the marketing plan. To inform the marketing plan, she determined the MLA ought to conduct some market research. She presented a

coordinated plan for conducting the research to the director and was given the approval and resources to proceed.

The MMPR met with the director of the Arboretum, the director of development and communications, and the managers of membership, events, and publications to find out what information they wanted to gain from the surveys. Students from the University of Minnesota Graduate School of Business were recruited to perform the research as part of a class project. The MMPR led the project and gave the students their direction. The member and visitor surveys were developed and conducted relatively quickly - in two months - to accommodate the student's quarter term. The phone survey was developed by the students and conducted by an outside contractor.

A targeted sample of "baby boomers" was identified for the phone survey. Understanding of this group was desired in order to attempt to diversify the MLA membership. Baby boomers are typically of two types: young families with children, and "empty nesters" with more time and discretionary income on their hands. A random sample of 400 participants was found meeting the criteria: age 35-54, income greater than \$25,000/year, and living in the seven county Minneapolis metro area.

For the members survey, three hundred surveys (of a total fourteen thousand membership base) were completed on-site over an estimated two week period close to Mother's Day. The participants were not randomly chosen. As members drove into the arboretum the attendant in the parking fee collection booth alerted them about the survey. The members decided whether or not to participate. They were, in fact, self-selected.

Participants were enticed to participate with a free beverage at the Tea Room or a free Arboretum poster with the purchase of \$5 or more in the gift shop.

For the visitors survey, four hundred surveys were completed on site over an estimated two-week period close to Mother's Day. Selection occurred in the same way as for the members survey. Visitors were enticed to fill out a survey with an offer of one free beverage at the Tea Room, a coupon for \$2 off their next visit, \$5 off a membership, or one class at member's prices.

Goodstay Gardens

Goodstay Gardens (GG) is an approximately 5-acre Tudor-style kitchen garden next to an historic house that dates from about 1740. In 1968 the owner left the property to the University of Delaware. There are five boxwood lined garden rooms, a natural woodland garden with a stream, and a magnolia allee leading to a reflecting pool. There is no charge for admission. The Friends of Goodstay Gardens (FGG) is an unincorporated membership organization under the auspices of the University of Delaware. They assist the University in preserving the Gardens, which are located on the University's Wilmington campus. FGG is a volunteer-based organization with an annual budget of \$25,000-\$30,000 that was formally organized in 1993.

In 1998, the Education Committee of the FGG decided to conduct a survey of their members to help inform decision-making about new educational components that were being considered for the garden. At the time of the survey, the extent of the

educational programming at GG is one lecture per year. The other primary goal of the survey was to find new volunteers.

A member of the Education Committee was also active with the Delaware Center for Horticulture (DCH) and used the DCH member survey as a model, modifying it according to Goodstay's needs. The survey was sent to the approximately 300 members in September of 1998. Completed surveys were received from approximately 74 members. A different member of the Education Committee compiled survey responses.

The Chicago Botanic Garden

The Chicago Botanic Garden (CBG) is located in the northern suburbs, about a 45-minute drive north of Chicago. It opened in 1972 on 385 acres of land owned by the Forest Preserve District of Cook County. Of the 385 acres, 100 are woods and 75 are lagoons. After parking, the 23 different gardens must be explored on foot or via the tram. There are 200 staff and 800 volunteers working at the CBG. The Chicago Horticultural Society, in existence since 1890, manages the Garden. It costs \$4 to park, but nothing to enter the garden.

In 1993 the CBG hired its first Vice-President of External Affairs (VPEA). She came to the CBG from the Art Institute of Chicago where she worked in marketing and donor development. The CBG had conducted 11 visitor and/or member surveys prior to her arrival. The reports and data were turned over to the new VPEA to help inform her decision making as she began to create the Garden's first division of External Affairs. The reports together are quite voluminous. In addition, in 1995 the CBG conducted

another visitor-member survey. Consequently, in 1996 the VPEA suggested hiring a consultant to do a summary of all the survey reports. The summary would "provide a framework for our thinking, that we could also share with (the director) and senior staff. It became more important as we were building an External Affairs division and we were investing money in membership, we were investing money in building fundraising. We had to get as much information as we could to use those resources in the best way possible on behalf of the garden." The summary took on greater importance because many of the staff that the VPEA hired were new to the Garden and unfamiliar with the Garden's audience.

The Strategy Network, a marketing research firm, was contracted to do the summary. They analyzed data from the following surveys for their *Chicago Botanic Garden Market Research Review* (as they are listed in that document's appendix) and presented that review to CBG senior staff in January 1997:

1. CBG Visitor-Member Survey, 1995; Metro Chicago Information Center; sample 918; on-site self administered survey, Aug. 1995.
2. CBG Visitor-Member Survey, June 1993; Interactive Surveys Inc.; sample 659; on-site questionnaire via interactive computer.
3. CBG Young Family Survey, 1992, Prof., Jill Klein, Northwestern University Kellogg School, sample 75, on-site self-administered questionnaire.
4. Chicago Attractions Study, Oct. 1989, C/J Research, Inc.; 450 telephone interviews within 25 mile radius of Chicago Botanic Garden.
5. CBG Member Survey, 1989, C/J Research, Inc.; sample 360; mailed questionnaire in August.

6. Chicago Botanic Garden Audience Assessment, Hood Associates, sample 2101 from Dec. 1988 through Nov. 1989, on-site intercept.
7. CBG Member, Donor, and Community Survey, 1985, Campbell & Company, Inc.; Community survey by 401 telephone interviews in March; sample of 353 members/Donors surveyed by mail.
8. CBG 1984 Visitor Survey, author unknown; sample 645; conducted on-site in August.
9. CBG 1981 Member Survey, author unknown; sample 710; conducted by mail in late summer.
10. CBG 1981 Visitor Survey, Author unknown; sample 705; conducted on-site in July.
11. 1979 Marketing Study of CBG Visitors, Susan MacLeod, Univ. of Chicago Graduate School of Business; 348 on-site/mail back self administered, July.
12. 1979 Marketing Study of CBG Members, Nakrin & MacLeod, Univ. of Chicago Graduate School of Business; sample 189 by mail, July.

In addition to these twelve studies, *The Strategy Network* also analyzed the:

13. National Gardening Survey 1995-96, by The Gallup Organization for the National Gardening Assoc.; natl. prob. sample, door to door.
14. The Source Book of Zip Code Demographics, 10th Edition; CACI Marketing Systems, 1995 Projections.

This chapter makes it clear that in terms of garden characteristics, survey purposes, number and type of survey, and method of data analysis, there is little in common among the four cases. The next chapter concurrently presents the decisions informed by each garden's survey results. In some instances these decisions mirror one another from garden to garden, and in some instances each garden interprets the same data to suggest different courses of action.

Chapter 6

RESULTS AND DISCUSSION

The results of this research are the decisions informed by survey results. The general format for presenting these results will be the following. A paragraph will typically begin with a sentence that mentions what the survey result was. At the end of that sentence in parentheses will be a number indicating what survey question provided that result. The survey questions can be referenced in the appendices. Next, the decision that was informed by that result will be described, as well as the context surrounding that decision. In some instances there will be analysis of the decision by the researcher.

The decisions have been categorized into three types: marketing, programming, and facilities. The marketing and programming decisions have also been further subcategorized because of the large number of decisions in those two areas. A short section about demographic data used as baseline information precedes the three decision sections because baseline information is an important concept that does not fit neatly into any one of the decision categories.

Demographic Data as Baseline Information

Demographic information is collected to describe a garden's audience across certain variables. The typical demographic variables are sex, age, education, race, income, and location of residence. All cases except for Goodstay Gardens indicated that demographic information was collected primarily as baseline information – a description of the garden's audience at a specific point in time. Baseline information can be compared with data from future surveys to determine what changes have occurred, or patterns are developing, in the demographic profile of an audience. For example, the MLA is targeting baby boomers with its new marketing plan. Five years from now the MLA will conduct a survey to see if the percentage of baby boomers amongst MLA members and visitors has increased. Baseline information is valuable only if future visitor surveys are conducted.

The CBG's analysis of the twelve surveys they conducted between 1979 and 1995 is the only example of using baseline data. Their goal was to identify patterns in their data. They sought to describe the heavy and loyal, and moderate frequency users of the CBG – what they call their “core franchise.” The CBG searched their survey data for recurring characteristics that could be associated with those who visited frequently and/or demonstrated support for the CBG. Four defining characteristics of the CBG core franchise were identified. Two were demographic in nature, age and location of residence. The other two characteristics were 1) being a member, and 2) having an interest in either gardening or reading about gardening.

The first and most important demographic characteristic describing the CBG core franchise was proximity to the garden. Not surprisingly, those visitors that live in the northern suburbs of Chicago, close to the CBG, have the highest indices for visit frequency, the highest percentage of members, and the highest proportion of off-season visitors. This result influenced the CBG's marketing decisions.

The other demographic characteristic of the CBG core franchise is that it consists primarily of people over 45 years old. The "median age range" of visitors is 45-54 and has not changed since 1981. The average age of a member is 54 years old and has been since 1981. These results caused leaders at the CBG to "have some concern about attracting a younger audience" and influenced their programming decisions.

Marketing Decisions

Three types of marketing decisions are informed by the results of the surveys in these cases. What types of media should a garden use for its promotions? Upon what audience should a garden concentrate its advertising resources? Which garden offerings warrant the heaviest promotion?

Media Type

To help determine the most effective media for reaching potential visitors (fitting the baby boomer criteria), the MLA asked respondents to their telephone survey to select their "major source of information" about a group of cultural attractions in the Minneapolis area, including the MLA (p2). Print media were chosen by over 50% of

respondents and word of mouth by 28%. For the MMPR this result implies that mass communication is the most effective way to reach baby boomers. Thus, in the marketing plan the MMPR is recommending that the MLA gain a certain frequency in the Minneapolis Star Tribune. The MLA will also utilize multiple media by placing public service announcements on television and radio.

In the same survey, the largest percentage of respondents (35%) indicated they go to "local attractions" because they are family oriented (p3). This result suggested to the MMPR that advertising in family oriented media such as ParentsTM magazine and the AAATM travel guide would connect with a receptive audience. The Minneapolis Star Tribune has a new section for parents covering children's activities. The MLA is going to begin working with the editor of that section as well as continuing to build its relationship with the editor of the Home/Gardening section.

The NA asked their visitors how they "first heard of the U.S. National Arboretum?" Fifty-seven percent said it was because they live in the area and 41% said by word of mouth (1). These results are not surprising given the local residence of most visitors to the NA. Slightly more than one-third of visitors to the NA live in Washington D.C. (36%). Of those who live outside the district, more than half live in Maryland (56%) and almost one-third live in Virginia (30%) (37,38). The leadership of the NA found these results "disappointing" because they indicate few out of town visitors come to the Arboretum.

In addition, guidebooks were used by only 11% of respondents, and no one indicated they used a travel agent or tour promoter to become aware of the NA. These

are important results, especially in Washington D.C. where a major portion of the potential audience are tourists. The NA Head of Education and Visitor Services indicated the NA would work harder to get known via these sources. It is not so much a problem of receiving press in the guidebooks as it is receiving positive press. She said reviews in the guidebooks often focus on the perceived danger of a trip through the neighborhoods surrounding the NA instead of focusing on what awaits visitors in the Arboretum.

Options for promotion are limited for the NA due to a scarcity of resources and the restrictions on the NA, as a branch of the federal government, to pay for advertising. Unlike the U.S. Botanic Garden, it does not receive the foot traffic that comes from being located on the Mall with the Smithsonian Institutions. The NA relies on free publicity that comes from newspaper write-ups, calendar listings and public service announcements. Thus, reviews in guidebooks become more important, especially if they are negative.

The survey consultant used by the NA counseled that word of mouth was the best way for a cultural institution to become known to a larger audience. While generally accepted as true by most museum professionals, this belief needs to be qualified for cases like the NA. Word of mouth may be the best way to become known among an audience that permanently resides within commuting distance of an institution.

The Manager of Marketing and Public Relations at the MLA uses word of mouth to gauge the success the MLA is having increasing visitation with their mass media and direct marketing efforts, and providing those new visitors with a good experience. If visitors enjoy themselves, they are more willing to recommend the MLA to someone

else. Hence, in the next survey, the MLA will check to see if the percent of respondents who indicate they heard of the MLA via word of mouth increases.

Targeted Marketing

Targeted marketing is sometimes referred to as direct marketing. Perhaps the most recognizable form of targeted marketing is direct mail. The goal of targeted marketing, as with choosing a media type, is to efficiently utilize a garden's marketing resources. This is done by identifying a smaller segment of the total population which the garden thinks will be receptive to its message. The garden can then send information only to this audience, eliminating the expense of communicating with people who might not care about gardening. Both the CBG and the MLA used their survey data to define a target audience.

As mentioned in the Baseline Information section, the CBG had the data analyzed from twelve visitor and member surveys that were conducted over a seventeen-year period. From this analysis the CBG core franchise was identified. Defining characteristics of the CBG core franchise are that they live in the communities close to the CBG, they are gardeners, and they are members of the CBG.

The Vice President of Programming at the CBG indicated this information suggests the CBG must go to the members first for any of their big public events that are fee-based because the members are the CBG core audience. The CBG sends a postcard to its members to publicize such events. In addition, the CBG is directing most of their advertising resources towards the twenty-five suburbs surrounding the garden.

An interesting analysis was done to determine how much room for visitor/member growth is in these targeted suburbs. CBG records show that 68% of visitors come from 24 North and Northwest Suburban and 10 Chicago zip codes. This percentage is multiplied by the total number of visitors to obtain the total number of visitors coming from these zip codes. This total is compared to the total population in those zip codes as determined by the Source Book of Zip Code Demographics. Comparison of the two totals shows 36% of the population in these zip codes has visited the CBG, leaving 64% of the market in these zip codes "unpenetrated."

For members, records show 70% of CBG members are concentrated in 25 North and Northwest Suburban zip codes. A similar calculation as that done for visitors reveals membership penetration of households in these zip codes is only 5.1%. A more sophisticated calculation using the results of the 1995 National Gardening Survey shows that penetration of projected *gardening* households in these zip codes is only 7.4% of households that do any form of gardening, and 11.1% of households that do Flower, Houseplant or Vegetable gardening. The consultant who performed the analysis concludes, "This is the market to mine for increased participation and revenue"; and, "This market is large and has ample room for penetration growth."

The MLA wanted to know where their visitors were coming from and they did this by asking for the respondent's zip code (v20). The MLA is located in the southwest suburbs of Minneapolis, a half-hour commute from downtown Minneapolis. Is their audience coming only from the neighboring zip codes or are they drawing from the whole

metro area? This data has not yet been analyzed, but the MMPR said the results will affect where and how the MLA decides to promote itself.

The MLA does not yet have years of survey data to analyze for visitation and membership patterns. Thus, they sought to learn to what other cultural organizations their visitors and members belong. If a large percentage of respondents belong to an organization, public radio for example, the MLA would then try to obtain the mailing list for the public radio station in Minneapolis. The MLA would then mail their information to all the members of public radio. The theory is that if a large number of MLA patrons are members of public radio, other public radio members might also be interested in what the MLA has to offer. Public radio could be thought of as a defining characteristic of the MLA core audience.

On all three of their surveys the MLA asked respondents to identify other memberships from a list of fifteen cultural organizations in the Minneapolis area (p5,m20,v9). One of the most common memberships was, in fact, Minnesota Public Radio. Consequently, the MLA is advertising in the public radio monthly newsletter and sending direct mail to public radio members. They are also direct mailing to University of Minnesota alumni and will be considering other organizations, as resources become available.

The MLA did compare the visitors' and members' survey data. They found that across most variables, visitors to the MLA were similar to members. The MLA is in the early stages of developing visitor and member profiles, of which demographic information is one aspect. They hope to target communications to non-members with the

information will be added to the orientation brochure, and new wayfinding to the home demonstration garden is being created. An audiocassette, to be played in automobile stereos, is also being developed for visitors who choose to drive the 3-mile loop around the MLA. This tape will focus driver's attention towards plants in bloom as well as provide landscaping uses for the plants in the various collections.

For their audience outside the garden, the MLA learned its educational programming could be better promoted. Two-thirds of respondents to the phone survey were aware the MLA offered adult and children's programs (p8). However, 78% of respondents to the member survey indicated they had not attended one educational class or seminar in the last year (m9). Neither had 95% of respondents to the visitor survey (v6). The MMPR reasoned either the class content was unappealing, or visitors and members were not aware of the classes. Separate focus groups with members and visitors were held to probe this and other questions further.

The focus groups revealed that members are interested in the courses offered, but need to be reminded of them. Currently the courses are mentioned only in the member's newsletter, and there is direct marketing to past class attendees. Members said once they set the newsletter down, they forgot about registering for the classes. Visitors, on the other hand, were often never even aware of the classes; they do not receive the member's newsletter. Consequently, the MLA is now publishing a class schedule on their web site, in the newsletter of the Minnesota Nursery and Landscape Association, and in the monthly magazine of the Minnesota State Horticultural Society.

The web site itself needs promotion. Only one-third of member respondents are aware of the web site; of those that are aware 74% have not used the site. The MMPR is recommending the web site address be included on all MLA printed material, even employee business cards.

Programming Decisions

For the purpose of this thesis “programming” will include educational classes, activities (in which education might not be the primary purpose), special events, interpretation, orientation, membership incentive and benefit programs, and volunteer programs.

Families and Children

All cases used their survey results to inform decision making about the development of children’s and/or family activities. For the CBG leadership, analysis of their surveys confirmed that the average age of both visitors and members is not young (statistics mentioned in baseline information section). They decided they should be more concerned with attracting a younger audience. Consequently, they have been doing a lot more family programming. For example, “Celebrations” is a new annual end-of-the-year holiday light display; and the Big Bugs exhibit was mounted at the CBG in the summer of 1999. Attendance grew by 38% as a result of the Big Bugs exhibit and while there was no exit survey done, the Vice President of Programs believes that 75% of those in attendance were families.

Goodstay Gardens also learned the average age of their audience was not young; 70% of the respondents to their survey are over 60 years old (4). Their reaction to these results was the exact opposite of the CBG reaction. "(This result) puts children's programs more or less on the back burner" said the president of GG. She does not believe many of the members of GG, at their advanced age, still have children at home that they would bring to the garden. She does, however, state later in the interview that "(the survey results) prompt us to do something to attract and recruit younger members." These are not necessarily conflicting interpretations of their survey data. One way to attract a younger audience, as the CBG is trying, would be to offer programming that appeals to families with children. Unlike the CBG, however, GG does not have the resources to pursue an audience that rarely visits their garden. They choose to concentrate their resources on the audience they do attract.

The NA is looking for some guidance about how to attract families with children. Sixteen percent of the respondents to the NA survey were visiting the Arboretum with children under the age of sixteen (15). The NA has previously tried to mount two programming initiatives aimed at children only to cancel them because of low registration. Coincidentally, the same Big Bugs exhibit that was at the CBG will appear at the NA in the summer of 2000. The director of the NA regards the exhibit as an "interesting experiment to see if we substantially increase visitation by families with children." He said, "Big Bugs will give us a clue in terms of future programming." He did not indicate what action the NA would take if Big Bugs was, or was not, a success.

In response to their telephone survey, the baby boomers that the MLA is targeting said that “family oriented” would be the best reason for attending local attractions (p3). In the visitor survey, 78% of respondents indicated that the MLA’s family orientation “most influenced” their decision to come to the Arboretum (v12). The MLA wants to offer more of those types of family programs that respondents to the visitor survey said attracted them to the Arboretum. The MLA is in the midst of creating a Children’s Garden System. Instead of one children’s garden area, the MLA is planning multiple activity areas dispersed throughout the Arboretum grounds. The intention is to attract families to all areas of the Arboretum.

First Time and Repeat Visitors

Goodstay Gardens and the National Arboretum indicated that visit frequency affects how they design their programming. GG asked their members how often they visit the gardens (7). They believe the results show the “majority visit between 4 and 20 times a year.” As a result, GG will put more effort into self-guided tours and less into guided and special tours. Their rationale is that if someone visits frequently, they will be familiar with the garden and will not need a guide to point out what is new. Someone who only visits once or twice per year, however, might need the help of a guide.

Seventy-four percent of respondents were repeat visitors to the NA (3,4). While the director appreciates the apparent loyalty of visitors to the NA, this result tells him the NA needs to continue to develop new exhibits and programming so repeat visitors will not get bored by their visit. The NA would also like to increase the percentage of first

time visitors. The survey consultant used by the NA recommends more festivals, “discovery days” or open-house type events to attract more first time visitors.

The MMPR at the MLA agrees that high profile events, as she calls them, can attract first time visitors who are weighing their choices for leisure time entertainment. They must be high profile in order to rise above the “noise” created by the promotion of competing events at other cultural institutions. Big Bugs has the potential to be a high profile event for the NA. Given the difficulty the NA has marketing itself, Big Bugs might still be under-visited simply because visitors to Washington D.C. are not aware of it. The director will need to keep this in mind when deciding why Big Bugs was, or was not a success.

Special Events

The MLA asked a seemingly straightforward question designed to help them decide whether to continue or discontinue some of their annual special events (m8). “Which of the following special events have you attended in the last year?” Some of the special events are the Sugarbush Pancake Brunch, the Easter and the Mother’s Day Brunches, the Auxiliary Plant Sale, the Orchid Lights fundraiser and a 5K Run/Walk. In hindsight, the Manager of Marketing and Public Relations believes this question offered the MLA no usable results.

The first problem is each event has been in existence a different number of years. The MMPR indicated older, more established events would have a tendency to score higher than less established events. Thus, it is hard to compare the 6.7% of respondents

who said they attended Thursday Evenings in the Park, in only its second year, to the 46% who said they went to the Plant Sale, which is one of the MLA's longest running events.

The Orchid Lights event is an invitation only fundraiser. The MMPR said it should not have been included on the survey. Similarly, the 5K Run/Walk limits its number of participants. It has attracted that limit the two years it has been in existence. It also should not have appeared on the survey. The Sugarbush and Fall Festival are also at their capacity. Hence, it is also hard to learn anything useful by including these two events in this question.

The only meaningful result from this question was that only 7% of respondents went to the Mother's Day brunch, an event that has been around for years. However, MLA leaders already knew, by observation, that the future of this event needed reconsideration. Thus the Manager of Marketing and Public Relations calls this a "throw away question" that might have been eliminated from the survey had they spent more time in the planning stages.

New Topics for Activities, Educational Classes, and Events

GG and the MLA asked questions designed to elicit areas of interest that could be investigated for future programming. Whether open-ended or not, none of these questions generated a critical mass of interest in any one topic that prompted either of the gardens to take action. Surveys might not be the best way to get at this kind of information.

First GG asked “What would you like FGG to offer that is not currently available?” Two questions later they asked, “What topics would you like to learn more about?” The next question was “What types of tours or programs would you like to be offered?” These were all open-ended questions and between ten and twenty different responses were received for each question (9,11,12). This is not surprising when one considers the huge number of potential gardening topics and people’s individuality. Consequently, no one topic could be interpreted as being in high demand and no action was taken.

The primary purpose of the GG survey was to obtain feedback on educational programming, thus a few comments are necessary about how their survey instrument hampered achieving that goal. First, there is not enough distinction between what the questions are asking for. Second, if GG was solely seeking new ideas for programming, then these questions are appropriate. If they were trying to determine if there was consensus opinion behind one or two programming options, then open-ended questions are not appropriate. Rather they should use multiple choice questions and only offer choices that they are able to provide should a majority of respondents indicate interest. Respondents should not be asked to voice an opinion about a choice that has no chance of being offered by the garden. Such choices mislead the respondent and provide no usable information for the garden.

It is also interesting to notice that while there were ten to twenty responses to each of the open-ended questions, there were 74 total GG surveys returned. Perhaps most

respondents do not know what topics, tours or programs they would like to be offered. They might prefer to react to a suggestion rather than make the suggestion themselves.

The MLA asked four multiple choice questions seeking this type of information. On the telephone survey they asked respondents how likely they would be to participate in each of 14 different activities if they were to visit the MLA (p10). On the member survey they asked which of 15 hobbies/activities did the respondent participate in regularly (m21). On the visitor survey they asked almost identical versions of both of these questions (v4,v10). Respondents indicated they would participate in activities like self-guided nature walks, hiking/walking events, and home landscaping ideas. They were not interested in activities such as sporting events, book discussion groups, and golfing. The MMPR said the results “do not have the definite quality of taking action. They work to support or confirm other answers (the respondents) have made about landscaping, nature, etc.”

Useful information was gained from this question, however, when the MLA was looking for information about a specific issue. For example, the MLA was interested in developing winter activities to draw visitors during this traditionally low attendance period. Enough respondents indicated they were interested in “winter activities” and “cross-country skiing” that winter activities will be pursued. The MLA is already planning a snow shoe race for next winter. The MLA also asked if visitors were interested in renting their cross-country ski equipment at the MLA. They are not interested; thus ski rental will not be pursued.

The NA asked a question similar to the MLA questions. It required respondents to value a list of eleven activities and hobbies (20). Their results showed that a typical visitor to the NA highly values going to all types of museums while placing low value on attending sports events. The Head of Visitor and Education Services said the results to this question “just said what I thought they would say.” The NA attracts the “typical” museumgoer. “It wasn’t very revealing but I suppose we needed to have a record of it.” In order to move beyond the typical museum going audience, she would like to see the NA offer more events to attract the new visitor.

Results to this question did provide valuable information only when that information was about activities already available at the Arboretum. The NA learned that bird watching was valued only slightly higher than going to a sports event. Photographing nature was valued just above that. The HEVS thought more visitors took photos and watched birds than apparently is the case. Consequently, she will not “expend as much energy getting things set up for bird watchers or photographers.”

Clearly there is another reason for asking these questions that solicit information about respondents’ leisure time activities and hobbies – a type of psychographic information. Why else would the NA ask their respondents to indicate how much they value going to five different types of museums, the theater, or a musical or dance performance? Visitor studies practitioners claim such information can be used to develop a lifestyle profile of a garden’s audience, and that profile can *suggest* the types of activities that a garden should offer. The reader is referred to the CBG case in the literature review to see how psychographic information was used to influence

programming. The MMPR at the MLA was beginning to experiment with using lifestyle profiles in order to target marketing. None of the participants in the cases in this thesis, however, appeared to have the sophistication to use this psychographic information to affect programming. When one of the choices offered in the question was directly relevant to an activity the garden was already offering or that was under consideration, the information seemed more useful.

Collaborative Programming

The MLA and GG are developing programs in collaboration with other organizations as a result of their surveys.

Goodstay Gardens asked respondents if they were also members of the Academy of Lifelong Learning (5). The Academy is a continuing education center for seniors located on the property with GG. Forty-six percent indicated they are members of the Academy. This result was shared with leaders of the Academy and suggested that collaborative programming would mutually benefit both organizations. A tree walk has been the first joint project.

The MLA asked respondents to their member survey to indicate to what other cultural organizations they belong (m20). Twenty percent are members of the Minnesota State Horticultural Society (MSHS). The Manager of Marketing and Public Relations indicated collaborative programming is being discussed with the MSHS.

Interpretation and Orientation

Goodstay Gardens asked respondents to identify their level of gardening interest and skill from five choices ranging from non-gardener to professional gardener (8). Thirty-five percent indicated they are beginning or non-gardeners, and 46% are intermediate gardeners. GG was planning plant label copy and decided, because of this result, to make the common plant name the most prominent on the label, and diminish the less familiar botanical plant name. Also, the common family name appears on the labels and the botanical family name does not. GG wants to make the labels relevant to the beginning and intermediate gardeners. Some would argue that an educational opportunity for those gardeners was lost by not including the botanical family name.

The MLA learned that their visitors would like more labels and signs at the point of contact with the plants. From a question on their visitor survey the MLA found that 75% of respondents indicated educational opportunities are one of the offerings that most influenced their decision to come to the Arboretum (v12). This result caused the Manager of Marketing and Public Relations to probe (in focus groups) for what kind of educational opportunities are preferred. Focus group participants said there was not enough information at the point of contact in the Arboretum. When a visitor encountered something question-provoking on the grounds, too often there was no immediately available information to answer the question. The MLA is investigating how to solve this dilemma without putting a sign on everything in the Arboretum.

The NA found that only two percent of their annual audience comes from foreign countries (39). Prior to the survey some of the NA staff thought there were a lot of

foreign visitors and brochures in foreign languages were being considered. As a result of the survey, they concluded investing in such brochures might not be the best allocation of resources.

According to the HEVS, the NA also learned that “if they had resources to invest in only one type of interpretation and orientation in the garden it should be signs before brochures.” They had just spent three years creating their current Arboretum map/orientation brochure. Before investing in the development of more brochures about different subjects, the NA wanted to determine if their first brochure was the preferred method of gaining information. So they asked their survey respondents to choose up to three ways they “would like to receive information about the collections, services, and facilities at the Arboretum?” (19). Sixty-three percent indicated signs in the garden, 48% said reading a brochure, and 33% indicated “by taking a tour” and “by asking a knowledgeable person.” It is hard to know what to do with the results from this question because the question is not singular. Someone might prefer to learn about the collections from signs in the garden, while learning about available facilities from a brochure or a knowledgeable person. This question should have been divided into three questions. One question would ask about how they would like to receive information about the collections, another would ask how they would like to receive information about NA services, and the last would ask about receiving information about facilities.

The results to this question did, however, clearly indicate that the NA should abandon the idea of developing the type of audio devices commonly used in art museums and at the New York Botanic Garden’s Enid Haupt Conservatory. Fifteen percent of

respondents indicated they would like to receive information with a portable audio device. As a large garden that can be driven through, visitors might be receptive to a tape that can be played in car stereos such as the MLA is developing. In addition, few respondents indicated they want to receive information by interacting with a computer (13%). For future studies the NA might want to sharpen this question by asking specifically about the different ways of interacting with a computer: surfing the web, as part of a kiosk in the visitor center, or purchasing a CD ROM from the gift shop to take home.

The NA survey included a question that was designed to help them understand how visitors toured the Arboretum (12). The HEVS said they really wanted to know if their brochure was useful. This question is a good example of how the results of one question, in this case the question about first time versus repeat visitation, can confound the results to another question, this question about touring strategies. The touring strategy question asked which of five choices best described how the respondent had toured the Arboretum. Fifteen percent of respondents indicated they used the visitor map to guide their visit. This is not surprising when one remembers that 74% of visitors are repeat visitors, hence presumably familiar with the layout of the Arboretum.² The familiarity of repeat visitors also explains why 26% visited the specific gardens they came to see, and might explain why 20% went to a few garden areas and then left the Arboretum. Of course the NA did not know they had so many repeat visitors before they

² Indeed, cross tabulation revealed first time visitors were more likely to use the guide map than were repeat visitors and less likely to visit specific gardens that they intentionally came to see.

designed this question. Consequently, the NA cannot draw a good conclusion about the usefulness of their brochure even though they know only 15% of respondents used it.

The results of this question, while not informing a specific decision, caused the staff at the NA to begin discussing orientation. "It made us start to think about how we orient our visitors, where they start their visit and how they plan their visit," said the HEVS. One of the things the NA "toyed with in a minor way" was to provide brochures outlining suggested tours in case the visitors had limited time to visit the Arboretum. These brochures were placed at the kiosk in the parking lot.

The director found it significant that 27% of respondents indicated they "wandered through the gardens." He understood this result to suggest that the NA needed to improve their directional signage, even though respondents rated finding their way around the NA as 5.8 ± 1.4 on a scale of 1 to 7 with 7 being very easy. The first phase of the signage project is already complete. He also stated that the fact that visitors wander confirms the goal of the new Master Plan - to tie or unite the various collections together that are dispersed all over the grounds. This interpretation of the data seems to ignore the possibility that some people might prefer to wander. It also points out the care that must be taken so that survey results do not simply become tools to confirm the soundness of decisions already made rather than informing decisions yet to be made.

The questions on the NA survey about touring strategy and how visitors prefer to get their information "spurred more thought than anything else," according to the HEVS. The HEVS said obtaining the visitors' preferred method of gaining information is the first, necessary step in developing a comprehensive interpretive plan.

Membership Programs

The MLA used the surveys as an opportunity to learn more about why their members joined, which benefits of membership were most important, and what incentives might cause visitors to become members and members to upgrade their memberships.

They found the factors that influenced participation at the membership level were a visit to the Arboretum and word of mouth (m2). Marketing of the Arboretum had almost no influence on membership, perhaps reflecting the “minimal effort made by the MLA in these areas.” These results validate the primary goal of the marketing plan – to double visitation. Naturally, a potential member wants to experience what they are paying for before they join. The Manager of Marketing and Public Relations will use these results as baseline information against which she can gauge the effectiveness of future marketing programs.

Free admission, supporting the Arboretum, and the newsletter were determined to be the most important benefits of membership while discounts on classes were of generally low value (m5). As previously mentioned in the marketing section, the MLA takes this result as a challenge to more effectively promote the availability of classes. Free access to the Yard & Garden Line (a horticulture information service) also had low value. Focus group participants, however, indicated they value this type of information. Thus, the Yard & Garden Line will also receive better promotion in an effort to remind members of its existence. Had the focus groups indicated this was not a valued service, the MLA would probably still continue the Yard & Garden Line. The MLA leadership

believes it provides the kind of information, and in such a way, that fulfills an important part of the Arboretum's mission.

Both members and visitors chose guest passes, gift incentives, and discounts at local nurseries when asked what factors would influence them to upgrade or obtain a membership (m19,v8). The MLA tried a guest pass program in the past and it had poor response. They are going to take another look at guest passes and may develop them as a slightly different program. A program of discounts at local nurseries is under strong consideration. It is attractive because it provides a convenient value to those members who live inconveniently far from the MLA. They would not have to drive all the way to the Arboretum in order to enjoy all the benefits of membership. Gift incentives, also known as premiums, scored high enough to merit consideration. The MLA has never offered these before, thus any ideas would be tested with focus groups to determine which incentives would be well received before investing any resources. Incentives are attractive because with them the MLA is not discounting the membership price. They want to maintain the integrity in their membership pricing.

Volunteer Programs

The secondary goal of the GG member survey was to find new volunteers. Respondents were asked if they would they be willing to participate on any of eight committees, or as a garden guide or garden worker (17). The GG survey was the only survey to ask for respondents' name, address, and phone number (1,2,3). This was used to get in touch with the 30% of respondents who indicated they were willing to volunteer.

It is not clear if the questions asking for the contact information inhibited GG members from responding to the survey. Only 25% percent of GG members responded to the survey, and some of the questions received only a 10-15% response rate. Survey researchers warn that without anonymity, people are usually less candid with their responses, if they decide to respond at all.

Decisions About Facilities

For the purposes of this research, facilities decisions will refer to decisions concerned with the physical plant, amenities, and garden design.

The results of three questions, taken together, suggested to Goodstay Gardens that more benches are needed in their garden. GG learned that 70% of their members are over 60 years old (4). At least one respondent indicated they would like more benches when asked what they would like that is not currently available (9). Finally, when asked what are the two most important features of GG, many respondents indicated GG is a nice place to relax (19). The president of FGG said the answers to these questions “will lead us to see what we can do about seating areas.” Did GG need a survey to tell them they needed more benches? It might be that survey results were needed to instigate action towards the construction of new seating areas.

The NA was the only other garden to use their survey results to inform decisions about facilities. One question asked respondents to rate nine different aspects of the NA, from availability of seating to restrooms to selection of items in the gift shop (17). Everything except availability of water fountains rated high. Had any of the items rated

poorly the NA would have taken action to correct them. The NA already realized their water fountain problems; it might not have been necessary to rate them on the survey. It should be noted that "courtesy of staff" rated highest and the NA made a point of sharing this result with their staff.

The next question on the NA survey asked respondents to choose from a list of twelve programs and services that they would like to see the NA offer (18). Almost a third of respondents indicated they would like to see rental bikes, and so the NA is going to begin offering them.

The five other most desired services, chosen by 27 to 40% of respondents, were: information about plants and gardening, home gardening information, an eating facility, live demonstrations, and an orientation to the garden. Taken together, the director of the NA says these results substantiate the need for a Visitors Center. A new Visitor Center is a major component of the recently designed Master Plan. It should be emphasized that the leadership of the NA recognized the need for a new Visitor Center without relying on survey results.

An eating facility is in the design for the new Visitor Center. Until the Visitor Center is built, something is needed to satisfy the 32% of respondents who indicated they would like to see an eating facility at the NA.³ A limited food concession was granted in 1999. Because it was successful, its permit will be renewed in 2000. Given the perceived safety concerns in the neighborhood immediately surrounding the NA, an

³ This figure might actually be higher. The repeat visitors might not expect an eating facility since there has never been one, and thus might not have chosen an eating facility on the survey.

eating facility within the Arboretum seems critical to helping visitors to the NA plan their visit.

In a series of three questions the NA survey asked respondents 1) why they came to the NA, 2) if they came to see specific gardens and if so, which ones; and 3) which gardens and collections they saw during their visit that day (5,6,7). The results of these questions made it clear that the National Bonsai and Penjing Museum was by far the number one attraction at the NA. Because the Museum is so popular, the NA is discussing ways to keep it open to the public for more hours each day. The grounds of the NA are open from 8 a.m. to 5 p.m. The Museum is open from 10 a.m. to 3:30 p.m., and during viewing hours there is an alarm protecting the collection. After 3:30 p.m. the horticulturist turns off the alarm to water and work on the collection. The NA is considering keeping the collection open to the public until 5 p.m. and making arrangements for the care of the collection after the Arboretum has closed (and most of the staff has left for the day).

It was also discovered that respondents visited the Perennial Collection least frequently of all the collections, most likely because of its remote location. The Perennial Collection is going to be moved closer to the core area near the National Herb Garden and the Bonsai Museum. This decision of the Master Plan was made because of the visitor survey results.

It was somewhat of a pleasant surprise that the Asian Collections are so popular, especially because they are located on the East Side of the Arboretum, farthest from the core area. This is also where the Holly, Magnolia, Azalea, and Dogwood collections are

located. One of the intentions of the new Master Plan, supported by the findings from the survey, is to design a parking node for this area. This node would contain interpretation for these collections. It would also contain wayfinding to the collections so that the Dogwood collection, for instance, which was visited by only 14% of respondents, would not be over-looked by a visitor to that side of the garden.

Chapter 7

CONCLUSIONS AND RECOMMENDATIONS

The initial premise of this research is that garden leaders will benefit from understanding how survey results have been applied to decision making in public gardens. Examining applications made by their peers will foster that understanding. This thesis provides such applications and they are in the previous Results and Analysis chapter. The first recommendation is the reader should not skip the Results and Analysis chapter. From those results and analysis, conclusions are drawn and other recommendations are made below.

The first conclusion is that of the types of decisions informed at these four gardens, marketing decisions seem to have been better served by survey results than programming decisions, and decisions about facilities were least informed by survey results. More marketing decisions (fourteen) were informed by survey results than any of the other type of decisions. There were slightly fewer decisions about programming successfully informed (eleven), and few decisions about facilities were informed (five). Conversely, of the survey questions intended to provide information about these three areas of garden operations, the questions designed to inform programming decisions provided more unusable results than questions designed to inform marketing or facilities

decisions. Thus, in these four cases marketing decisions have been better informed than programming decisions, which in turn have been better informed than decisions about facilities. There are two reasons for this conclusion: 1) the different purposes each garden had for conducting their surveys, and 2) the preparedness of each garden to act on their survey results.

First, consider the purpose of each of the surveys and the focus of their data analysis. The Minnesota Landscape Arboretum (MLA) conducted their surveys to inform the development of their new marketing plan. Their Manager of Marketing and Public Relations led their survey effort from development through analysis and implementation. The Chicago Botanic Garden (CBG) shifted responsibility for 20 years of survey data from the programs department to the department of external affairs. Subsequently, the leader of external affairs delegated responsibility for the data analysis to a marketing research firm. Thus, it is understandable that most of the decisions informed at these two gardens were marketing decisions. Goodstay Gardens (GG) designed their survey to inform educational programming decisions and identify new volunteers. All but one of the decisions informed at GG were programming decisions. In contrast to the other three gardens, the National Arboretum (NA) survey was comprehensive - it was not designed to inform decisions in one area to the exclusion of any other. As a result, an almost equal number of decisions were informed in all three areas. Hence, the differing survey purposes begin to explain why more marketing decisions were informed than decisions about programming or facilities.

While survey purpose determines the types of decisions that *should* be informed by survey results, one can also conclude that a garden's preparedness to act on those results fundamentally determines whether they actually affect decision making. The four cases in this thesis demonstrate that there are four factors that affect whether a garden is prepared to act on their survey results. The first two factors concern the planning done before the survey. First, a garden must take the necessary steps to determine what information they want from the survey. Second, a garden must ensure that their survey instrument is designed to furnish that information and that their response rate is large enough to give confidence in the results. The third factor - the focus of this thesis - is that a garden should know what to do with the information when they get it. This step should reflect discussion undertaken before the survey as well as the handling of the data after it has been gathered. The last factor can prevent action with even the most promising survey results. A garden must allocate the financial and human resources to act on the information. Let us briefly examine the influence these four factors had on the application of survey results in the four cases.

All four gardens attempted to find out what information they wanted by holding planning meetings with the necessary stakeholders - usually senior management and board members. The NA also attempted to involve front line staff in the planning by sending them a form inquiring what information they wanted to know. However, less than five of the sixty forms sent out were returned. The lack of staff input, which is critical on a comprehensive survey like the NA's, left a void in the survey planning process that was filled by the consultant. For at least five of the questions on their

survey, the representative of the NA was not sure why the consultant had included them. Clearly, the chances that the results from a question will be applied to decision making will be diminished if a garden does not understand why they asked the question.

There are two things that must be done to make sure a survey provides the desired information. The first is that the garden must obtain enough responses that they can feel confident the survey respondents represent their audience. For example, GG had a 25% of membership response rate, and for certain questions that rate dropped to as low as 15%. With such a low response rate, the leadership at Goodstay had a hard time interpreting their results as the consensus view of their members.

Proper question design also affects whether a survey will furnish the desired information. While most of the questions in these surveys provided results that were utilized, a few did not and deserve mention so that other gardens will not make the same mistakes. One non-singular question was asked and the utility of the response to that question was severely limited as a result. The open-ended questions asked on the GG survey were also problematic because the variety of responses prevented GG from drawing any conclusions about the majority opinion of their members.

The psychographic questions asked by both the MLA and the NA seeking to determine their audiences' preferred leisure time activities and hobbies also informed few decisions. Only when the activities listed in the question were being considered by the garden as potential activities did the results from these questions affect decision making. According to visitor studies literature, the information gained from psychographic questions is used to develop a lifestyle profile of the audience. Respondents demonstrate

a preference for various activities and hobbies, and that information is used to develop a lifestyle profile of the respondents. New programming or activities – not necessarily those listed as choices in the survey question - are then developed to appeal to someone with that profile.

It appears the application of information from psychographic questions might currently be too sophisticated for most garden professionals. The Manager of Marketing and Public Relations at the MLA is just beginning to try lifestyle profile applications to target marketing. The article about the CBG survey discussed in the literature review does mention how they use their psychographic information to develop programming for a specific audience (Hood and Roberts, 1994). The Missouri Botanic Garden (MBG) case mentioned in the literature review indicated they did as well, although no specific programs are cited (Hood et al., 1991). It is interesting to note that more than one person interviewed for this research feels the public garden profession already knows this profile and need not continue to ask these types of psychographic questions, unless it is truly suspected that the surveyed audience is not the traditional garden audience.

The third factor affecting preparedness is knowing what to do with the survey information. Knowledge of applications is key, and that knowledge comes either from personal experience or from studying the experience of others. This thesis, including the cases mentioned in the literature review, provides examples of the experience of others.

Due in large part to the experienced personnel that were hired or contracted to analyze their survey data, the CBG and MLA demonstrated dynamic applications of survey results to decision making. The NA also hired a consultant and her experience

was valuable during the development of the survey tool and the analysis of the results. The NA consultant, however, played a limited role in the application of the results to decision making. This phase of the survey process appropriately fell to the garden staff, and unfortunately for the National Arboretum, the person with primary responsibility for leading the application process left the Arboretum.

Her position at the time of this research had not yet been filled. The NA case points out the importance of having the resources, both financial and human, to act on the survey results. Contrast this with the support shown by the board of the MLA. They were able to allocate monies from their capital campaign to finance the new marketing position. The CBG hired a new Vice-President for External Affairs and is continuing their commitment to audience research with a new yearlong comprehensive visitor survey and a smaller survey of their food service. The MBG case in the literature review identified “a proper level of investment of resources by the board” as one of the key components of their internal plan to implement their survey results. Clearly, financial support is necessary to apply survey results.

The lack of financial resources can also affect the breadth of a garden’s vision as it applies survey results. Consider Goodstay Gardens, it is a strictly volunteer organization with an annual budget of approximately \$25,000. GG approaches their results with an attitude of “what can we afford to do?” rather than “what would we like, or need to do?” Where other gardens interpreted survey results to indicate children’s and family programming was needed to attract a younger audience, Goodstay interpreted

those results to mean they must concentrate their limited resources on the loyal audience that already utilizes their garden.

Another conclusion that can be drawn from these cases is that survey results can be valuable even when a decision is not informed. In this “application,” the survey results caused discussion of issues that might not have been discussed otherwise. The Head of Education and Visitor Services at the NA said that some of their results about interpretation and orientation caused them to discuss how the NA oriented, or failed to orient their visitor. Hayward and Jelen (1996) stated that “creating opportunities for discussion of survey results by staff” was one of the seven factors positively affecting the process of applying research results at the Morton Arboretum. In fact, surveys might raise more questions than they answer. Gardens need to understand audience research is more effective as a longitudinal process. They should be prepared to continue collecting data.

Survey results can also be useful without informing decisions by pointing out what a garden is doing right. The courteousness of the NA staff rated highest among NA amenities, and this result was shared with the staff.

In conclusion, the purpose of this thesis is to present examples of applications of audience research to decision making in public gardens. Those who intend to conduct research can study these applications before they plan their own survey. These examples should help them know what questions to ask, and to begin thinking about how they will

use the data from those questions. In short, it will help them become better prepared to apply their survey results to decision making.

The director of a garden is the person who must be convinced that a survey is what is needed to inform the decision making at their garden. After all, there are many ways to inform decision making, such as utilizing teams, creating community advisory boards, contacting trusted colleagues, or simply by using one's own personal experience and judgment. Why then, would one use a visitor survey? Directors can study the applications of survey results to decision making as described at these four gardens and decide for themselves whether visitor surveys might be the way to inform some of the decisions facing their own gardens.

There are two recommendations to make if a survey is contemplated. First, try to reach the highest level of preparedness possible in order to increase the likelihood that the survey results will get applied. Second, if this is one of the first attempts at a visitor survey, start small. Conduct a short survey that focuses on one aspect of the garden's operation. It is true that a focused survey does not present a holistic view of a garden. However, small surveys are less expensive than large, comprehensive surveys. They generate a smaller amount of data, which is easier to synthesize and present to staff. A garden could use a smaller survey as an opportunity to learn successful survey technique without risking the resources that are necessary for a large survey. Short, focused surveys would allow public gardens to partake in the "inherent value of audience research" while making it more probable that the results are actually applied.

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APPENDIX A

U.S. NATIONAL ARBORETUM VISITOR SURVEY

Question 1. How did you first hear of the U.S. National Arboretum? (choose all that apply)

Newspaper, Road Sign, Friend/Relative/Teacher, Travel Agent/Tour Promoter, Live in the Area, Website, Guide Book, Other_____

Question 2. How did you travel to the Arboretum? (choose one.)

By automobile, By public transportation, By a tour bus, By taxi, On foot, Other_____

Question 3. Is this your first visit to the Arboretum? Yes or No

If "No", Question 4. Not including today, how many times have you visited the Arboretum in the last two years?

No times, 1-2 times, 3-4 times, 5 or more times

Question 5. Why did you come here today? (You may choose up to four reasons.)

To do research	To see the blooms
To see the National Bonsai and Penjing Museum	To see Native Plant Collections, incl. FernValley
To relax in a beautiful environment	To see a specific garden
To see the azalea collections	To see the National Boxwood Collection
To photograph	To run/walk/exercise/bike
To see the Asian collections	To see the Capital Columns
To see the Conifer Collections	To shop in the gift shop
To attend a meeting	To have an outing with family/friends
To learn about plants and gardening	To attend a special event
To see the National Herb Garden	Other_____

Question 6. If you came to see one or more specific gardens, please identify up to two of them below and indicate why you wanted to see them.

Question 7. Which gardens and collections did you see today? (Choose all that apply.)

Asian Collections	National Grove of State Trees
National Herb Garden	Dogwood Collections
Azalea Collections	Native Plant Collections
National Bonsai and Penjing Museum	Friendship Garden
Capital Columns	Perennial Collections
National Boxwood Collection	Holly and Magnolia Collections
Conifer Collections	Other _____

Question 8. Was the motorized tour (tram) in operation today? Yes or No

If "yes", Question 9. Did you take the tram tour?

If "No", Question 10. Please indicate why not.

Question 11. Did you get out of your car while you were visiting the National Arboretum? Yes or No

Question 12. Which one of the following best describes how you toured the Arboretum today? (Choose one.)

I used the visitor map to guide my visit, I wandered through the gardens, I visited the specific gardens I came to see, I went to a few gardens/areas and then left, Other _____

Question 13. With whom did you come today?

Alone, Friends, Family, Friends and Family, Tour Group, Other _____

Question 14. Including yourself, how many people were in your group? _____

Question 15. Were you accompanied by children who are under 16 years of age? Yes or No

If "yes", Question 16. What are their ages?

Question 17. Please rate the items below. Circle one number on each scale below. (Circle "9" if you did not use or experience an item.)

Each item was rated on a likert scale with 1 being poor and 7 being excellent.

Courtesy of staff, Directional signs, Availability of seating, Visitor Map, Motorized tour (Tram), Restrooms, Information on plants, Selection of items in the gift shop, Availability of water fountains,

Question 18. What other programs and visitor services would you like to see the National Arboretum offer? (Choose all that apply.)

Information about plants and gardening, More water fountains, Home gardening information, More benches, An eating facility, Activities for children, Rental bikes, Activities for seniors, Live demonstrations, Rental strollers, An orientation to the gardens, Other

Question 19. How would you like to receive information about the collections, services, and facilities at the Arboretum? (You may choose up to three items.)

By reading signs in the garden	By reading a brochure at home
By reading a brochure during your visit	By listening to portable audio device
By taking a tour led by a person	By interacting with a computer
By asking a knowledgeable person	Other

Question 20. Using the number scales below, indicate how much you value each activity or hobby. Please be sure to circle one number for each activity.

Each of the following activity or hobby was rated on a likert scale with 1 being low value and 7 being high value.

Visiting a botanical garden, arboretum, etc.	Doing my own gardening
Visiting an art museum/gallery	Visiting a science museum/center
Visiting a history museum/house/historic site	Photographing the outdoors/nature
Attending a musical or dance performance	Going bird watching
Visiting a zoo or aquarium	Attending a sports events
Attending the theater	

Question 21. How would you describe the National Arboretum? (You may choose up to two descriptions.)

A community park, A national park, An educational facility, A research facility, A place to display plants, A place for recreation, Other_____

Question 22. Your experience at the Arboretum was: (Circle one number on the scale below.)

Not Recreational 1 2 3 4 5 6 7 Recreational

Question 23. Your experience at the Arboretum was: (Circle one on the number scale below.)

Not Educational 1 2 3 4 5 6 7 Educational

Question 24. Finding your way around the National Arboretum was: (Circle one number on the scale below.)

Very Confusing 1 2 3 4 5 6 7 Very Easy

Question 25. How safe do you feel in the Arboretum? (Circle one number on the scale below.)

Not Safe 1 2 3 4 5 6 7 Very Safe

Question 26. Overall, your experience at the National Arboretum was: (Circle one number on the scale below.)

Poor 1 2 3 4 5 6 7 Excellent

Question 27. What are the chances you will return to the National Arboretum in the next 12 months? (Circle one number on the scale below.)

Definitely would not return 12 3 4 5 6 7 Definitely would return

Question 28. If you circled a number ranging from 1 to 4 in Question 27, please explain why. _____

Question 29. Do you have any other comments about your visit? _____

Question 30. Please rate your interest in the following items by circling one number on each scale below.

Each of the items was rated on a likert scale with 1 being low interest and 7 being high interest.

Landscape gardening, City gardening, Conservation/ecology, Wildlife/birds, Botanical research

Question 31. Are you Male? Female?

Question 32. What is your age?

Question 33. Do you have children who are under 16 years of age? Yes or No

If "yes", Question 34. What are their ages? under 6, 6-10, 11-15

Question 35. Please indicate the highest level of education you have completed. (Choose one response.)

Elementary school, Some high school, High school, Some college/Associate's degree, College Graduate/Bachelor's Degree, Some graduate work, Graduate degree, Other_____

Question 36. For USA residents: With which group do you most identify?

African American, Asian American, Caucasian, Hispanic/Latino, American Indian, Other_____

Question 37. For USA residents: Do you live in the District of Columbia? Yes or No

If no, Question 38. In what state do you live?

Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, Other_____

Question 39. For Foreign Visitors: In which country do you live?

APPENDIX B
MLA PHONE SURVEY

1. Which of the following local attractions are you familiar with? Use the scale:
A. Unfamiliar B. Familiar C. Very Familiar

Minnesota Landscape Arboretum, Minnesota Zoo, Como Zoo, Science Museum of Minnesota, Minneapolis Sculpture Gardens, Minneapolis Institute of Art, Walker Art Center

2. Which one of the following options is your major source of information regarding the previous attractions?

Print Media, Radio, Word of Mouth, Television, Internet, Other

3. Which one of the following options would be the best reason for attending local attractions?

Low Cost, Family Oriented, Convenient Location, Variety of things to see and do, Educational Activities, Other

4. Which of the following hobbies/activities do you participate in?

Woodworking, Photography, painting/Drawing, Hiking/Walking, Cooking, Reading, Bird Watching, Gardening, Cross Country Skiing/Snowshoe, Camping, Fishing, Golfing, Internet, Up North Vacationing

5. Which Twin cities organizations are you, or someone in your household, a member of?

Bell Museum of Natural History, Minnesota Horticultural Society, Children's Museum, KTCA (public TV), Minneapolis Institute of Fine Arts, Minnesota Historical Society, Minnesota Public Radio, Science Museum of Minnesota, Walker Art Center, Minnesota Zoo, Minnesota Raptor Center, Animal Humane Society, Environmental Organizations, U of MN Landscape Arboretum

6. How many time have you visited the MLA in Chanhassen within the last five years?

0 times, 1-5 times, 6-10 times, more than 10

7. Would you describe the Minnesota Landscape Arboretum as:

- Primarily a research facility
- An educational institution
- A club for the affluent
- A place where you can learn how to identify plants and landscape your own yard
- Somewhere you can get away from it all
- A place to enjoy the outdoors
- A place where the family can enjoy activities together
- A wonderful environment to volunteer
- A place where you can enjoy nature and be entertained at the same time

8. Do you know that the Minnesota Landscape Arboretum:

- Is open to the public year-round
- Is a center for horticultural research - new cold-hardy plant introductions
- Is a non-profit organization funded primarily through private donations
- Offers 16 display gardens and 60 plant collections
- Offers children's educational programs - science and nature
- Offers adult education classes - landscape/gardening
- Offers rental of building, and garden facilities for private gatherings

9. What would be the most likely reason(s) why you would want to visit the arboretum?

See what's in bloom, Identify plants for your yard, Landscaping ideas, New gardens, Educational opportunities, Volunteering opportunities, Enjoy nature

10. If you were to visit the MLA, please indicate how likely you would be to participate in the following activities. Use the scale: Not Likely, Likely, Very Likely

Classes for your children, Gardening/Landscaping classes, Classes on Weekends/Evenings, Bird-watching, Hiking/Walking, Cross Country Skiing, Self-Guided Nature Walks, Home Landscaping Ideas, Winter Activities, Book Discussion Groups, Sports Events, On-Site Cross Country Ski Rental, Music or Live Entertainment in the gardens, Other

11. What would entice you to visit the MLA?

Availability of Public Transportation, Free Admission, Brochure/More Information, Nothing, Other

12. What is your gender?

13. What is your age?
under 35, 35-40, 41-45, 46-50, 51-55, over 55

14. What is the highest level of education you have received?

less than high school, high school, vocational/technical school, college, post-graduate,
other

15. What is your zip code?

APPENDIX C

MLA MEMBER SURVEY

Question 1 Type of Membership

Individual	Senior Individual
Household	Senior Household
Contributing	Student Individual
Friend	Student Household
Supporting	Charter Life

Question 2. What influenced you to get an Arboretum membership?

Friend, Visit, Direct Mail, Advertisement, Family, Special Event, Coupon/Promotion,
Other(please specify)

Question 3. How many years have you been a member of the Arboretum?

less than 1 year, 1-2 years, 3-4 years, 5+ years

Question 4. Overall, how satisfied are you with your Arboretum membership?

Answered on a likert scale of 1 to 5 with 1 being very dissatisfied and 5 being very satisfied.

Question 5. Please indicate the importance of the following membership benefits.

Each of the following was answered on a five point likert scale with 1 being not important and 5 being extremely important.

Free admission, Support Arboretum, Free access to Yard & Garden Line, Special Events, Arboretum Newsletter, 10% discount in the gift shop, Discounts on educational classes and seminars

Question 6. How many times do you visit the Arboretum per year?

1-3, 4-6, 7-9, 10+

Question 7. Which of the following "member only" events have you attended?

Ice Cream Social, Member's Luncheon, Festival of Trees, New Member Reception

Question 8. Which of the following special events have you attended in the last year?

Sugarbush Pancake Brunch, 5K Run/Walk, Thursday Evening in the Park, Mother's Day Brunch, Easter Brunch, Orchid Lights, Fall Festival, Holiday Open House, Auxiliary Plant Sale

Question 9. How many times in the last year have you attended Arboretum educational classes or seminars?

0 times, 1-2 times, 3-4 times, 5+ times

Question 10. Please indicate your interest level in the following:

Each of the following was answered on a five point likert scale with 1 being not interested and 5 being extremely interested.

Flower Gardens, Vegetable Gardens, Landscape Design, Prairie, Woody Plants, Lawn Care, Wild Flowers, Indoor Gardens, Herbs, Fruits, Environmental Issues.

Question 11. Please indicate the importance of each feature of the Arboretum Newsletter:

Each of the following was answered on a five point likert scale with 1 being not important and 5 being extremely important.

Feature Article, Calendar of Events, Director's Message, Volunteers Opportunities, Class Schedule, Auxiliary information, Special Events, Arboretum News, Horticulture Research, Member garden spotlights. Horticulture/Gardening Information

Question 12. How important would the inclusion of the following sections in the Newsletter be to you?

The following were answered on the same five point likert scale as above.

Children's Section, New Members Listing, Library News, Other (please specify)

Question 13. How many time did you use the Yard & Garden Line last year?

0 times, 1-2 times, 3-4 times, 5 or more

Question 14. Are you aware of the Arboretum web site? Yes or No

Question 15. If you answered "yes" to question 14, how many times have you visited the web site in the last month?

0 times, 1-2 times, 3-4 times, 5-6 times, 7+ times

Question 16. If you answered yes to question 14, what part of the website is most useful to you? (choose only up to three choices)

What's in Bloom, Classes and Events, Horticulture research updates, On-line education, On-line gardening advice. Plant Locator at the Arboretum, Gardening Activities for children, Chat room, On-line gift shop, Arboretum garden spotlight, Member garden spotlight, Plant & pest information

Question 17. Would you be likely to contribute to the Arboretum, above and beyond your membership, if given the opportunity to target your donation to a specific area?

Yes or No

Question 18. If you answered "yes", what would be your level of interest in targeting the following:

Each of the following was answered on a five point likert scale with 1 being not interested and 5 being extremely interested.

Garden renovation/restoration, New garden construction, Adult Education programs, Building renovation, New building construction, Land acquisition, Web site development, Marketing & Public Relations programs, Research projects, Garden maintenance

Question 19. To what level of importance would the following factors influence you to upgrade your membership:

Each of the following was answered on a five point likert scale with 1 being not important and 5 being extremely important.

Guest passes, Additional percentage off at gift shop, Free tram ride, Free class, Gift incentives, Discounts at local nurseries, Other (please specify

Question 20. Which Twin cities organizations do you, or a member of your household, belong to? (check as many as apply)

Bell Museum of Natural History, Minnesota Horticultural Society, Children's Museum, KTCA (public TV), Minn. Institute of Art, Minn. Historical Society, Minn. Public Radio, Science Museum of Minnesota, Walker Art Center, Minn. Zoo, Minn. Raptor Center, Animal Humane Society, Environmental Organizations, Other

Question 21. Which of the following activities/hobbies do you participate in regularly?
(check all that apply)

Woodworking, Photography, Painting/Drawing, Hiking/Walking, Cooking, Reading,
Bird Watching, Gardening, Cross Country Skiing, Camping, Fishing, Golfing, Internet,
"up north" vacationing, other (please specify)

Question 22 Gender Male Female

Question 23 Age under 18 45-54
 18-28 55-64
 25-34 65-74
 35-44 74+

Question 27 Income <\$15,000 \$45,000-\$59,000
 \$15,000-\$29,999 \$60,000-\$74,999
 \$30,000-\$44,999 over \$75,000

Question 25 Education <than high school College
 High School Post-Graduate
 Vocational/Tech School Other

APPENDIX D

MLA VISITOR SURVEY

Question 1. How do you use the Arboretum (check all that apply)?

Classes/activities for children, Gardening/Landscaping classes, Special Events, Bird-watching, Hiking, Cross-Country Skiing, Nature Walks, Home Landscaping Ideas, Identify Plants, Volunteer, Other

Question 2. Would you describe the Minnesota Landscape Arboretum as (check all that apply):

- Primarily a research facility
- An educational institution
- A club for the affluent
- A place where I can learn to identify plants and landscape my own yard
- Somewhere I can get away from it all
- A place to enjoy the outdoors
- A place where the family can enjoy activities together
- A wonderful environment to volunteer
- A place where I can be entertained and enjoy nature at the same time

Question 3. Do you know that the Minnesota Landscape Arboretum (check all that apply):

- Is open to the public year-round
- Is a center for horticultural research - new cold-hardy plant introductions
- Is a non-profit organization funded primarily through private donations
- Offers 16 display gardens and 60 plant collections
- Offers children's educational programming - science and nature
- Offers adult education classes - landscape/gardening
- Offers rental of building, and garden facilities for private gatherings

Question 4. If the Minnesota Landscape Arboretum were to offer the following activities, how likely would you be to participate?

Each activity answered on a likert scale; 1 being very unlikely and 5 being very likely.

Book discussion groups, Shuttle buses to Arboretum, Winter activities, On-site cross country ski rental, Hiking/walking events, University classes for credit, Sports events

Question 5. Indicate which of the following special events you have attended in the last year?

Sugar bush Pancake Brunch, Orchid Lights, Fall Festival, Holiday Open House,
Auxiliary Plant Sale,
5K Run/Walk, Thursday Evenings in the Park, Mothers Day Brunch, Easter Brunch

Question 6. How many Arboretum classes or seminars have you attended in the last year?
0, 1-2, 3-4, 5+

Question 7. Please indicate your interest level in each the following:

Each topic was scored on a likert scale with 1 being not interested and 5 being extremely interested.

Flower Gardens, Vegetable Gardens, Landscape Design, Prairie, Woody Plants, Lawn Care, Wild Flowers, Indoor Gardens, Herbs, Fruits, Environmental Issues

Question 8. To what level of importance would the following factors influence you to get a membership?

Each factor is rated on a likert scale with 1 being not important and 5 being extremely important.

Guest Passes, Additional Discount at Gift Shop, Free Tram ride, Free Class, Gift Incentives, Support the Arboretum, Discount at Local Nurseries, Other (specify)

Question 9. Which Twin cities organizations are you, or someone in your household, a member of?

Bell Museum, Minnesota Horticultural Society, Children's Museum, KTCA (public TV), Minneapolis Institute of Art, Minnesota Historical Society, Minnesota Public Radio, Science Museum of Minnesota, Walker Art Center, Minnesota Zoo, Minnesota Raptor Center, Animal Humane Society, Environmental Organizations, Other

Question 10. Which of the following activities/hobbies do you participate in regularly? (check all that apply)

Woodworking, Photography, Painting/Drawing, Hiking/Walking, Cooking, Reading, Bird Watching, Gardening, Cross Country Skiing, Camping, Fishing, Golfing, Internet, "up north" vacationing, other (please specify)

Question 11. How satisfied are you with what the Arboretum has to offer?

Not at all satisfied 1 2 3 4 5 Very Satisfied

Question 12. What most influences your decision to come to the Arboretum? Use the following scale:

A. Least Influenced B. Somewhat Influenced C. Most Influenced

Low Cost, Family Orientation, Convenient Location, Variety of things to see and do, Educational opportunities, Exercise, Enjoy Nature, See what's in bloom, Special Event, Other (please specify)

Question 13. Would you be willing to make a donation to the Arboretum? Yes or No

Question 14. If you answered "yes" to question 13, what would be your level of interest in donating to the following:

Each of the alternatives was answered on a likert scale with 1 being not interested and 5 being extremely interested.

Garden renovation/restoration, Building renovation, Building construction, New gardens, Land acquisition, Adult education programs, Children's education programs, Research Projects, Garden maintenance, Marketing & public relations, Website development, Other (please specify)

Question 15 Gender Male 29% Female 71%

Question 16 Age under 18 25-34 45-54 65-74
 18-28 35-44 55-64 74+

Question 17 Who else resides in your household? Please indicate the number of people in each category.

Adults over 18 Dependants age 13-18
Dependants under 13 other

Question 18 Education <than high school College
 High School Post-Graduate
 Vocational/Tech School Other

Question 19 Income <\$15,000 \$45,000-\$59,000
 \$15,000-\$29,999 \$60,000-\$74,999
 \$30,000-\$44,999 over \$75,000

APPENDIX E

GOODSTAY GARDENS MEMBER SURVEY

Question 1. Name: _____

Question 2. Address: _____

Question 3. Phone: _____

Question 4. Age group: Under 30____, 31-40____, 41-50____, 51-60____, Over 60____

Question 5. Are you a member of the Academy of Lifelong Learning? Yes or No

Question 6. How long have you been a member of Friends of Goodstay?

Question 7. How often do you visit the gardens?

Question 8. What is your level of gardening interest and skill?

Non-gardener, Beginning gardener, Intermediate gardener, Advanced gardener,
Professional gardener

Question 9. What would you like Friends of Goodstay (FGG) to offer that is not currently available?

Question 10. Please indicate your preference of times for workshops and lectures:

The best day(s) of the week _____

The best time(s) of the day _____

Question 11. What topics would you like to learn more about?

Question 12. What types of tours or programs would you like to be offered?

Question 13. Do you have a contact name and a phone number of some person you think would be interesting for other FGG members to hear?

Name: _____ Phone: _____ Topic: _____

Question 14. Program format that you would favor (may check more than one).

slide show _____ hands-on learning in garden _____ workshop _____ garden
tour _____ Other (specify) _____

Question 15. Do you enjoy our current newsletter? _____
How many issues per year should we publish? _____
Would you be willing to contribute a short article? _____

Question 16. Would you be interested in renting the Garden for a private party or
function? _____
(The Garden is available through the University.)

Question 17. What volunteer opportunities would you be willing to offer your time and
experience to:

Please indicate your choice(s) and Day Time Available Hours per month

Volunteer committee
Special Event committee
Newsletter committee
Membership committee
Finance committee
Garden guide
Garden worker
Art Exhibition committee
History/Archive & Plant Research committee
Education committee

Question 18. Do you have computer skills that you could donate for mailing lists, plant
lists, membership reports? If yes, what specialty?

Question 19. What, for you, are the two most important features of Goodstay Gardens?

Question 20. Additional comments:

APPENDIX F

SUMMARY OF DECISIONS INFORMED BY CATEGORY

Chicago Botanic Garden

- Marketing- Core franchise leads to targeted marketing.
- Marketing- Advertise to core franchise first for fee based events.
- Marketing- Determined the room for penetration growth in northern suburbs.
- Programming- Core franchise is older indicates need to increase family programming.

National Arboretum

- Marketing- Low percentage of out of town visitors indicates need for better promotion.
- Marketing- Low percentage use guidebooks or tour promoters indicates need to get more favorable press in the guidebooks.
- Marketing- Few respondents describe NA as place for research indicates need to promote research aspect of NA.
- Programming- High percentage of minority visitation led to more programming targeted at local community.
- Programming- Low percentage of foreign visitors causes NA not to pursue brochures in foreign languages.
- Programming- High percentage of repeat visitors indicates need to keep exhibits fresh. Low percentage of first time visitors indicates need for more festivals and discovery days.
- Programming- Hobby/activity participation question provided little useful information. I recommend talking to public garden colleagues.
- Programming- Question to determine how visitor would like to receive information is problematic because it is not singular. Collections, facilities, or services?
- Programming- Stop pursuing audio devices.
- Programming- The question about how visitors toured the NA was confounded by high percentage of repeat visitors. The results of this question did cause discussion about how NA visitor is oriented during visit. That 27% of respondents "wander" confirms Master Plan goal of tying together or uniting the collections.
- Facilities- Nine aspects are rated and all rate high except for water fountains. The NA already knew their water fountains needed attention. Courtesy of staff rated high and this result was shared with staff.
- Facilities- rental bikes will be offered.
- Facilities- The need for a Visitor Center – called for in the Master Plan – is substantiated. An eating concession will be continued until the VC is built.

- Facilities- The Bonsai Museum is most popular collection and the NA will try to extend the hours it is open to the public.
- Facilities- Perennial Collection will be moved.
- Facilities- parking node for East Side of Garden – called for in Master Plan – is substantiated by survey results.

Minnesota Landscape Arboretum

- Marketing- Target communications to non-members with same profile as members.
- Marketing- Zip codes to determine where visitors are coming affects where MLA promotes itself.
- Marketing- What media to use = mass communication (print, TV and radio).
- Marketing- Promote the Arboretum in family oriented publications.
- Marketing- Use word of mouth to gauge success of mass media and direct marketing efforts.
- Marketing- Target mailings using mailing lists from institutions with high cross over membership.
- Marketing- Most likely reason to visit indicates “what’s in bloom” and “landscaping ideas” should receive more promotion.
- Marketing- Focus groups help to understand that educational classes need better promotion. Respondents are aware of classes but few take them.
- Marketing- The factors that influenced membership will be used as baseline data to gauge the effectiveness of marketing efforts to increase membership.
- Programming- Family oriented is key reason for visiting; thus the MLA will offer more children’s programming.
- Programming- Special Events question plagued by confounding factors. Results largely unusable.
- Programming- Hobby/activity participation questions (four of them) were ineffective unless reaction to specific activities was sought (e.g. winter activities).
- Programming- Collaborative programming with Minnesota State Horticultural Society.
- Programming- More information at point of contact is desired. MLA working on this.
- Programming- The membership benefits that respondents value most indicates to the MLA which benefits need better promotion (availability of classes and Yard & Garden Line). Guest passes, gift incentives and discounts at local nurseries are identified as factors that influence membership and upgrades of membership.

Goodstay Gardens

- Programming- Age of their audience indicates children’s programming should not be pursued.
- Programming- High percentage of repeat visitors means self-guided tours will be pursued more than guided and special tours.
- Programming- New programming questions (three of them) were largely ineffective. They were open-ended and GG received numerous varied answers.
- Programming- Collaborative programming with Academy of Lifelong Learning.

- **Programming- Gardening level of respondents influences label copy.**
- **Programming- Finding new volunteers was the secondary goal of the GG survey. Non-anonymity might have influenced response rate.**
- **Facilities- Age and a “nice place to relax” and one respondent suggest the creation of more seating areas.**