Speaking Out on Art and Museums: A Study on the Needs and Preferences of Adults who Are Blind or Have Low Vision

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EXECUTIVE SUMMARY

This report presents findings from a joint study carried out by the Museum of Science, Boston Research and Evaluation Department (MOS) and Art Beyond Sight (ABS, formerly Art Education for the Blind) with museum visitors who are blind or have low vision. The purpose of this study was to gather information that can inform the development of pilot museum programs that meet the needs and interests of visitors who are blind or have low vision and to provide professional development for museum professionals.

Focus groups were used as the primary data collection method, as they enable idea sharing and discussion in a group format where educators can unobtrusively listen to and observe the conversation. Focus groups with participants who are blind or have low vision occurred during 2010 at seven major art museums across the country including the Brooklyn Museum; the Solomon R. Guggenheim Museum; the Indianapolis Museum of Art; the Museum of Fine Arts, Houston; the National Gallery of Art¹; the San Francisco Museum of Modern Art; and the Seattle Art Museum.

Overarching findings from the focus groups indicate that participants who are blind or have low vision:

- Were diverse in terms of their levels of vision, involvement in museums and the arts, needs and preferences, and approaches to self-advocacy;
- Often put significant time and effort into the planning related to a museum visit, and various factors such as the cost of a museum ticket, crowding concerns, and transportation obstacles can affect their decision;
- Have had extremely positive and negative past interactions with museum employees including docents and educators, front of house staff, and security guards;
- Desire accessible programs and museum design that incorporate assistive technologies, tactile opportunities, and safe and clear exhibition and architectural designs; and
- Value the positive feelings gained at museums from being socially involved, intellectually and emotionally stimulated, welcomed, and enabled to explore independently.

Based on these findings, museums might consider:

- Offering multiple solutions that accommodate the interests and needs of visitors who are blind or have low vision, especially in terms of design and interpretive approaches;
- Easing the visit-planning process;
- Training staff to be comfortable and respectful when interacting with blind and low vision visitors;
- Implementing some of the suggested programs, which were, in general, positively received; and
- Creating a welcoming atmosphere that offers social experiences that can be enjoyed with sighted group members along with opportunities that allow for independent learning.

¹ Due to technical issues, the data from the National Gallery of Art focus group were not recorded, and so could not be analyzed for inclusion in the Findings and Recommendations portion of this report. But a summary of the NGA focus group appears in Appendix G of this report.

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I. INTRODUCTION

The Museum of Science, Boston Research and Evaluation Department (MOS) and Art Beyond Sight (ABS, formerly Art Education for the Blind), a non-profit organization dedicated to making art, art history, and visual culture accessible to people who are blind or visually impaired, partnered to carry out a research study with museum visitors who are blind or have low vision. Both institutions recognize museums' inherent responsibility to serve the public, yet acknowledge that museums often fall short in their attempts to welcome and include individuals with disabilities. To help museums increase their level of accessibility for visitors who are blind or have low vision, MOS and ABS conducted focus groups with participants who are blind or have low vision during 2010. The purpose of this study was as follows:

- To gather information that can inform the development of pilot museum programs that meet the needs and interests of visitors who are blind or have low vision; and
- To provide professional development for museum professionals.

This report summarizes findings from focus groups that were held at seven major art museums across the country: the Brooklyn Museum; the Solomon R. Guggenheim Museum; the Indianapolis Museum of Art; the Museum of Fine Arts, Houston; the National Gallery of Art²; the San Francisco Museum of Modern Art; and the Seattle Art Museum. Analysis of the individual focus groups as well as analysis of the six focus groups as a whole suggests overarching issues for museums to consider when planning for visitors who are blind or have low vision. The second professional development-related purpose occurred through the process of preparing for, conducting, and observing the focus groups, and will not be discussed in this report. This study adds the perspectives of people who are blind or have low vision to the conversation about accessibility in museums.

PREVIOUS LITERATURE

This study builds off of a growing body of literature that focuses on people who are blind or have low vision and their museum experiences. Previous literature indicates that the availability of tactile objects and the actions of museum staff have a large impact on a museum experience for visitors who are blind or have low vision. These studies also remind us that real barriers to the museum experience exist for the blind and low vision community and that museums have long ignored or marginalized people with disabilities. These earlier studies provide an important reference point for the analysis and discussion of the gathered focus group data.

One of the most prominent themes in prior research concerning visitors who are blind or have low vision and museums relates to tactile opportunities. Research from the United States and abroad reinforces the fact that tactile experiences positively affect a museum visit and are desired by this community. Qualitative data from Buyurgan's (2009) research in Turkey and Jennings' (1996) focus groups at the Brookfield Zoo in Illinois indicate that tactile objects help orient

 $^{^2}$ Due to technical issues, the data from the National Gallery of Art focus group were not recorded, and so could not be analyzed for inclusion in the Findings and Recommendations portion of this report. But a summary of the NGA focus group appears in Appendix G of this report.

visitors to a space and provide significant learning opportunities. Buyurgan's study explains how university students who are blind or have low vision benefited from a combination of oral descriptions, tactile objects, and hands-on activities during their guided visit to the Museum of Anatolian Civilizations. Jennings proposes that three-dimensional maps would help visitors who are blind or have low vision to grasp the layout of the zoo's 200-acre park and that detailed models would specifically convey educational concepts. Asensio and Simón's (1996) study explains that verbal and not just tactile information may help visitors gain knowledge, but the study's "[r]esults [specifically] suggest that models are the most valued elements" in the Typhlologic Museum in Spain. Chin and Lindgren-Streicher's (2007) research also supports the use of tactile elements in museums but encourages staff to reflect upon how visitors will use touch models. In particular, these authors note that the amount of detail, color choices, and textual clues should relate to the activity's desired learning and educational goals. Candlin's (2003) research points out that people value extra time and guidance when touching objects, especially objects that may be new to them. Candlin (2003) also underscores how museums fail to recognize "the notion of aesthetic pleasure through touch," which is meaningful to everyone, but especially to the blind and low vision community (p. 103).

Recent publications in the museum field, including the 2007 and 2008 edited books *The Power* of *Touch: Handling Objects in Museum and Heritage Contexts* and *Touch in Museums: Policy* and Practice in Object Handling in particular, also address a range of issues and strategies related to tactile experiences in museums, although the publications do not necessarily focus on the experiences of visitors who are blind or have low vision. Erikssons' (1998) work also discusses the long and rich history of tactile diagrams dating back to the 18th century. The 2003 publication *Art Beyond Sight: A Resource Guide to Art, Creativity, and Visual Impairment* also highlights practical information about making art experiences more accessible for visitors who are blind or have low vision, and the history of touch and accessibility dating back to the 1970s and 1980s.

A second significant concern that is noted in previous literature pertains to the interactions between museum staff and visitors who are blind or have low vision. Not only do Chin and Lindgren-Streicher (2007) explain that staff should use descriptive and detailed language with visitors who are blind or have low vision, but Kusayama (2005) underscores how staff training, in general, will be imperative if museums aim to become more inclusive of the blind and low vision community. Kusayama's (2005) study found that only 2.3% of the 873 Japanese institutions that responded to the survey provided specific staff training related to disabled visitors. Poria, Reichel, and Brandt (2009) also emphasize how staff actions can affect a museum or tourist experience. While their research included people who use wheelchairs or crutches as well as those who are blind or have low vision, interview participants across all three groups agreed that they felt that staff avoided interacting with them because of their disability and talked instead to other members in their group. These three authors recommend that staff learn more about the existing accessible facilities in their museums to better communicate with disabled visitors. These authors insist that while aiming at universal design³, "attending to physical

attributes without enough attention to the social environment of service and information supply, will not meet the full social integration target" of museums (Poria, Reichel, and Brandt, 2009, p. 125).

Another theme in the literature identifies how museums address accessibility. Candlin's (2003) analysis of blind and low vision visitors' reactions to museum programs indicates a mixture of responses. She interviewed some individuals who wanted more in-depth content, while others liked the programs for social reasons beyond education and valued the sense of accomplishment gained by arriving at the museum or re-connecting with previous interests. Candlin also argued that museums sometimes "marginalize" the blind visitors they seek to help. Hetherington (2003) also writes about the structure of museums in relation to accountability. His work considers how museums interpret accountability and questions whether or not museums fully address the needs of participants when they claim to address accessibility concerns. Hetherington concludes that the desires of the blind community may not be fully satisfied because museums often ignore or "dispose of the personal ...experiences of particular individuals by establishing contextually what they want to understand by the categories of disability" (p. 110).

In an effort to encourage museums to consider the perspectives of visitors with disabilities, in 2005 the Australian Museum and the National Museum of Australia published a report on "Museum Audiences with Disabilities." The authors, Landman, Fishburn, Kelly, and Tonkin, provide practical and pertinent recommendations for how to improve access to a range of services including transportation, public programs, and cafes. They encourage museums to incorporate universal design techniques when planning products and exhibits. Moreover, they pinpoint specific marketing tactics and staff training tips that will positively affect audiences with disabilities. Their report, which uses powerful quotes from participants with a variety of disabilities, is both a call to action and a fundamental guide for museums dedicated to improving access.

The research of ABS and MOS adds to decades of increasing awareness about blind and low vision museum visitors. This study provides data from museum visitors who are blind or have low vision based on reactions to and recollections of a wide range of experiences in museums as a whole, as well as suggested educational programs. Feedback on the proposed programs will be especially useful for other museums to consider as they plan their own accessible events. Moreover, in this evaluation study, blind and low vision visitors directly describe their own preferences and needs for museum accommodations.

II. METHODS

This study sought to describe the experiences of visitors who are blind or have low vision who visit art museums. In addition, the study aimed to provide museum professionals with an opportunity to learn directly about the needs of visitors who are blind or have low vision by listening to visitors' stories about museums. Given these aims, focus groups were chosen as the primary data collection method. Focus groups can both generate descriptive, in-depth qualitative data and enable idea sharing and discussion in a group format where educators can unobtrusively listen to and observe the conversation. Focus groups are often enjoyable for the participants and can highlight whether or not a group shares views about a certain topic (Patton, 2002). Nonetheless, there are limitations associated with collecting focus group data compared with using individual interviews. Due to the nature of a group setting, fewer questions can be covered and participants have shorter response times (Patton, 2002). Even though facilitators should encourage everyone in the group to share comments, some participants may hold back ideas based on the group's dynamic. Individual opinions may also be difficult to quantify because focus group discussions tend to build upon the responses of other participants. However, such limitations also correspond to the key strengths of focus groups data collection since the back and forth conversations between participants often lead to more in-depth insights.

Instrument design

The focus group protocol was specifically designed for participants who are blind or have low vision. Rather than relying exclusively on nametags to enable participants to address each other, participants were asked to provide their first name and information about themselves to all participants at the start of the focus group, thus enabling everyone in the room an opportunity to hear names and voices connected together at the beginning of the experience. Any staff members present during the focus groups were also asked to introduce themselves so that participants could be aware of everyone in the room. In addition, if participants were asked to provide a visual representation of their stance on a particular issue (such as raising your hand if you had visited a particular museum before), the focus group leader was instructed to provide an unobtrusive and quick description of such data (for example, "OK, I see that that seven people raised their hands"). Given that it would be difficult to share print-based materials during the focus group, the provided programmatic descriptions were read aloud, kept brief, and often repeated, to work within the limitations of auditory working memory. See Appendix C for an example of the focus group protocol. It should also be noted that consent forms were provided in regular print, large print, and Braille at the beginning of the focus group. These forms were collected from all participants at each site, and participants were reminded (both in the consent form and verbally at the start of the focus group) that although the conversations were recorded, the data were confidential. See Appendix A for an example consent form.

During the conversations, questions focused on aspects of an art museum experience that are most important for visitors who are blind or have low vision. Participants were asked to think about their current and past art museum experiences, and in particular, what they hoped for from a museum visit. Focus group facilitators probed to learn more about the content, social, and experiential aspects of a museum visit that are significant to blind and low vision visitors. Focus group participants also provided feedback to several proposed programming examples that were supplied by each institution.

It should be noted that while the participants were specifically asked to comment on their prior art museum experiences, many participants discussed their experiences at a broad range of museum types, including history, natural history, and science museums. Also, participants were asked to comment on all of their prior experiences in museums, not just their experiences at the host institution. Therefore, comments made by participants who are cited in the report refer to prior experiences at numerous museums, not just their experiences at the host museum.

Research orientation

The research orientation for this study can best be described as phenomenology, that is, this study seeks to describe a specific phenomenon or *experience* from the perspective of specific participants (Creswell, 1998). In this case, the experience described is art museum visits, and the participants are adults who are blind or have low vision. Therefore, the study aims to present data about how visitors who are blind or have low vision feel about prior visits they have taken to art museums.

While there are multiple qualitative research orientations that could have been employed for collecting and analyzing data for this study, a phenomenological approach was selected given its applicability to the specific research question. A central tenet of the disability rights movement is "Nothing about us without us" (Charlton, 1998), and therefore, it was important that this study not be one that was conducted *on* people with disabilities, but rather *with* people with disabilities. This study directly represents first-hand opinions and experiences of people with disabilities rather than second-hand opinions represented by service providers, companions, and umbrella agencies. From a more practical standpoint, if museums are to move forward in increasing the inclusion of people who are blind or have low vision in art museums, it is important that they come to understand the benefits of and barriers to art museum participation as they are perceived by people who are blind, as it is the visitors' perceptions of benefits and barriers that will drive or hinder their participation. In other words, if visitors who are blind perceive that art museums do not offer any experiences that are accessible for them, that perception is important for museums to note, regardless of whether or not that perception is based on what the museum actually offers.

RECRUITMENT OF INSTITUTIONS & PARTICIPANTS

Seven art museums selected by ABS from across the nation hosted focus groups: the Brooklyn Museum; the Solomon R. Guggenheim Museum; the Indianapolis Museum of Art (IMA); the Museum of Fine Arts, Houston (MFAH); the National Gallery of Art (NGA); the San Francisco Museum of Modern Art (SFMOMA); and the Seattle Art Museum (SAM). All of the institutions are located in major metropolitan areas, and were either interested in implementing new accessible programs (IMA, MFAH, SFMOMA, Brooklyn, and SAM), or in improving and increasing the visibility of existing programs (Guggenheim and NGA). These institutions were intentionally selected by ABS to represent a diversity of geography, art collection type, and

audiences. Geographic diversity not only took into account the geographic location of the institution, but also the cultural and artistic community in which it was located. Additionally, each institution's location within the city was taken into account as sites can have different challenges related to transportation and architecture.

The participating institutions also had different histories of collaboration with ABS. ABS's relationship with Brooklyn began in 2009 when ABS was contracted to train the museum's educators and docents. This training was repeated in 2010 and 2011. Collaboration has also included a focus on improving outreach efforts. At the Guggenheim, the museum educator in charge of its newly launched program for visitors who are blind or have low vision worked with ABS to train docents and museum staff. The IMA is interested in strengthening its outreach to people with disabilities and is just beginning its efforts in this area. The IMA and ABS did not have a relationship previous to this study. Similarly, the MFAH had no previous relationship with ABS prior to this study. The NGA currently has a program for visitors who are blind or have low vision. ABS has not trained staff at NGA, but the head of the museum's docent program has attended a conference hosted by ABS. Two docents from the SAM also attended a conference hosted by ABS staff conducted staff trainings in conjunction with the focus group.

For each focus group, ABS recruited adults who are blind or have low vision to talk about their actual and desired experiences in art museums. Almost all participants were contacted via email and received logistical information electronically prior to the focus groups. ABS sought out individuals with a diverse range of vision disabilities, professions, interests, and experiences within museums. In some cases, adults who are blind or have low vision were accompanied to the focus group by sighted adults with whom they generally attend museums, such as spouses. These sighted companions participated in the focus group and provided insights on their shared experiences attending museums together. Service providers were not included in the focus groups because ABS and the MOS were eager to hear directly from people with disabilities.

ABS led focus group recruitment for all institutions with the exception of IMA and NGA, at which staff from the host institution recruited participants. Connections with local groups serving the blind and low vision community were used to recruit participants. These groups included local chapters of the National Federation of the Blind (NFB), the American Council of the Blind (ACB) and its local affiliates, and local advocacy groups such as the Texas Council of the Blind and San Francisco Lighthouse. In order to include people who did not have affiliations with disability organizations, participants were also recruited through agencies that provide services to people with disabilities. Recruitment materials focused on recruiting participants who have some interest in art, culture, and cultural experiences and institutions, and some level of visual impairment.

The focus groups were intentionally limited to adults. Children, family groups, and school groups that include individuals who are blind or have low vision were excluded from this particular study. Although each of these audiences are important for museums, it was decided early on in the study planning process that this particular study would only examine adults due to limitations in the study scope. Adults were selected as an important first audience to explore, with the hopes that future studies would examine museum visits for other audiences as well.

The focus groups were also intentionally limited to adults who have visited museums before. As the intention of this study was to learn more about museum-going experiences amongst visitors who are blind or have low vision, prior museum visitation was a necessity for participation. The study, therefore, does not provide insight on why certain individuals who are blind or have low vision may never choose to attend museums. This is another topic that can be explored in future studies.

PARTICIPANT BACKGROUND

Once recruited to participate in the focus groups, attendees were asked to answer a survey regarding their typical art museum attendance, educational offerings they have experienced or would like to experience at museums, and basic demographic information, such as age, race, and gender. (See Appendix B for sample questionnaire.) A total of 49 out of 57 participants completed this questionnaire. The reasons for the missing questionnaires are that the five sighted companions present at the focus groups were not asked to fill out the questionnaire, and three of the participants who were blind or have low vision who participated in the focus groups did not provide survey information.

Table 1 displays how often focus group participants reported they frequent art museums including, but not limited to, the museum hosting the focus group. Nearly a third of focus group attendees (16 of 49) visited museums five times or more a year and a fifth of them (10 of 49) visited two to four times a year. However, just over a third of participants reported visiting less frequently, once every five to 10 years (9 of 49) or once every few years (9 of 49). These data emphasize that these focus groups consisted of both regular museum visitors and occasional attendees.

	Number of Occurrences
Once every 5-10 years or less	9
Once every few years	9
Once a year	5
2-4 times a year	10
5 or more times a year	16

TABLE 1. Frequency of art museum visitation (N=49).

Tables 2 and 3 examine how often participants visited the museum hosting the focus group and when their last visit took place. Twelve participants reported attending two to four times a year, ten participants answered once a year, and seven said they attend five or more times a year. Many attendees had visited within the last year, either within the past three months (9 of 49), three to six months ago (7 of 49) or between six months and a year ago (10 of 49). Alternatively, some participants visited their host museum less often, such as the ten participants who came once every five to ten years or more, or the six who visit once every few years. Six attendees had never visited their host museum before the focus group. In some cases, these participants were new residents in their respective cities. In other cases, these responses might reflect how

participants' visiting habits were affected by the onset of their disability or their degree of blindness.

	Number of Participants
Once every 5-10 years or more	10
Once every few years	6
Once a year	10
2-4 times a year	12
5 or more times a year	7
Never	3
Missing	1

TABLE 2. Frequency of visitation at host museum (N=49).

TABLE 3. Last visit to host museum (N=49).

	Number of Participants
Never	6
More than 10 years ago	0
5-10 years ago	5
2-5 years ago	2
1-2 years ago	7
6 months to within the last year	10
3-6 months ago	7
Within the past 3 months	9
Not sure	2
Missing	1

Table 4 shows that participants most frequently visited art museums with friends (26 of 49), with family (25 of 49), or with other adults only (24 of 49). Many participants also attended with colleagues (15 of 49) or with adults and children (14 of 49). Few of the participants attended with children only (4 of 49). Fourteen participants reported visiting alone, but the majority of participants came accompanied by other individuals. This information is particularly helpful when determining what types of programs would be appropriate for visitors who are blind or have low vision as it suggests that such programming should reflect that visitors who are blind or have low vision come in social groups that likely include individuals who are not blind or do not have low vision.

	Number of Participants
With friends	26
With family	25
With other adults only	24
With colleagues	15
Alone	14
With adults and children	14
As part of a community group outing	12
With children only	4
Not applicable/do not attend art museums	0

Out of the 49 survey respondents, 31 of them were female (see Table 5), and over half of the focus group attendees were middle-aged or older (see Table 6). Twenty-two participants fell between ages 55 and 64, while 12 attendees fell between ages 45 and 54 (6 of 49) or 65 and 74 (6 of 49). Only two participants were under 30. Additionally, the majority of participants identified themselves as White, not of Hispanic origin (31 of 49, see table 7). There were only a few participants who classified themselves as African American (5 of 49) or Hispanic Latino (5 of 49). Others did not respond to this question (9 of 49). Although participants offered diversity through their unique backgrounds, experiences, and ideas, these focus groups predominately voiced the perspectives of a common visitor demographic.

TABLE 5. Participant sex (N=49).

	Number of Participants
Female	31
Male	18

TABLE 6. Participant age (N=49).

	Number of Participants
Younger than 18	0
18-24	0
25-29	2
30-34	8
35-44	4
45-54	6
55-64	22
65-74	6
75-84	0
85 or older	0
Missing	1

TABLE 7. Participant racial/ethnic identity (N=49).⁴

	Number of Participants
White, not of Hispanic origin	31
African American	5
Hispanic/Latino	5
American Indian or Alaskan Native	1
Asian American	1
Other- please describe	1 (West Indian)
Missing	9

⁴ Total adds up to more than 49 as some participants indicated more than one race/ethnicity.

DATA ANALYSIS

Data analysis was consistent with research conducted within a phenomenological tradition (Creswell, 1998). It began with repeated readings and re-readings of the focus group transcripts through which the full suite of included and missing themes in the conversation became apparent (Mazzei, 2004). These readings were conducted by four individuals: two from the Museum of Science Research and Evaluation Department and two from Art Beyond Sight. Members of the Museum of Science Research and Evaluation Department were familiar with social science research methods, while staff members from Art Beyond Sight offered expertise related to art museum experiences for visitors who are blind. These staff members came together regularly to discuss trends and patterns they found in the data. These discussions included identifying trends and characteristics that tended to dominate each individual focus group, as well as trends and patterns that extended across focus groups. Also discussed were key participant exchanges or quotes that the group found particularly poignant or meaningful. The results of these discussions were used to create an initial list of patterns and themes for coding data from the focus group transcripts.

Moreover, the coding of the focus group data was guided by the conceptual framework for inclusion that looked at physical, cognitive, and social inclusion. This framework was put forth in a report sponsored by the Center for the Advancement of Informal Science Education (CAISE) that examined how informal science education institutions (including science museums) are working to include visitors with disabilities in their institutions (Reich, et al., 2010).

Coding of the focus group transcripts focused on identifying patterns and themes at three different levels: individual, group, and cross-group. This style of multilayered analysis was intended to provide a way for individual voices to be heard, while also acknowledging that the viewpoints were shared within a social process where the dynamics of the group influenced the perspectives discussed by each individual.

Analysis of individual participant data

All focus group comments made by each individual were entered into a unique table (see Appendix D). For the purpose of this analysis, a "comment" was considered any portion of a statement or series of statements made by the individual without interruption from others in the discussion. The columns of the tables represented the broad categories within which the participants were asked during the focus group to describe their museum visits, including: how they plan for their visit, what they identify as positive/negative aspects of a museum experience, what they do after going to a museum, and any reactions to the accessible programs that were suggested. The participants' introductions to the group and any other comments that did not fit previous categories were also coded in separate columns. The rows represented the individual attributes or the attributes of the museum experience that these participants discussed during the focus group. Coding in this manner was particularly beneficial since researchers were able to learn about the elements of a museum experience that are important for visitors who are blind or have low vision, the kinds of experiences that will encourage repeat visits, and the kinds of experiences which might discourage future visits.

Data for each individual in a focus group were all coded by the same researcher. The coded data were then reviewed by two additional researchers. In addition, data from one focus group were coded by ABS staff who were present at the focus group and reviewed by two researchers. If any of the reviewers did not feel that the coding accurately reflected the statements of the participant, the comments from the participant were re-read by both the primary researcher and the contesting reviewer to see if their differences could be resolved through closer examination of the participant comments.

Analysis of group data

To identify the important patterns and themes reflected within any one focus group, a parallel analysis was undertaken to create profiles from each individual focus group. As stated above, the viewpoints and perspectives shared within each group reflect a social process that included negotiations through discussions. In addition, each focus group was also influenced by the location of the focus group, with the art museum experiences of the focus group participants being largely shaped by the institution within which the focus group was held. Therefore, it was presumed that there would be stronger commonalities in perspectives amongst participants within one focus group than participants across focus groups. The information from a single focus group may also be useful for the individual host museum, as it would provide a way for this museum to understand the perspectives and viewpoints of its constituents.

The focus group profiles were based on cross-individual analysis that included each participant at a given location. The coded participant comments were examined together to identify common themes across individuals, as well as areas of contention or debate within one focus group. This enabled a way to study themes that were important to this focus group as a whole, as well as mark areas of dissention between individual participants. In addition, the full focus group transcript was re-read to ensure that any key participant exchanges were captured.

The focus group profiles were reviewed by a second researcher, as well as the two staff members from ABS who were present during almost all of the focus groups.⁵ If any of the reviewers did not feel that the focus group profile accurately captured the perspective of the participant, the focus group transcripts were re-read by both the primary researcher and the contesting reviewer to see if their differences could be resolved through closer examination of the discussions. Staff members from the participating art museums who were present during the discussion were also sent copies of their focus group profile and asked to comment on what was written. Again, areas of contention were disputed through researcher/staff member re-reading of the focus group discussion.

Analysis of cross-group data

⁵Profiles from focus groups where staff members from Art Beyond Sight were not present were reviewed by individuals from the art museum in which the focus group was conducted.

Cross-group analysis focused on identifying the patterns and themes that were most essential or salient across each of the focus groups. Salient themes were identified as those that appeared in multiple focus group profiles and in multiple participant profiles. If certain themes appeared across multiple participants and not across multiple focus groups, the participant profiles were examined to explore whether those participants were all a part of the same focus group or different focus groups. If participants were part of separate focus groups, then the theme in question would be elevated to the status of a cross-focus group theme. The two researchers conducted the cross-group analysis in tandem, and the two staff members of ABS served as reviewers. Areas of contention were again resolved through a re-reading of the focus groups transcripts.

Validity

Embedded within this multilayered process were steps taken to enhance the descriptive, interpretive, and theoretical validity of the findings (Maxwell, 1992). The involvement of four MOS researchers and two ABS practitioners in reviewing the data, and especially the inclusion of people who had conducted the focus group themselves and the staff members from the participating museums, was intended to serve as a form of triangulation that would enhance the descriptive validity of the research findings (Maxwell, 1992). The use of a multi-layered analysis approach was also essential for enhancing the interpretive validity as it provided a way to examine the data from multiple perspectives. Connections to the social model of disability (Shakespeare, 2010; Barnes, 1998) served to enhance the theoretical validity of the findings, as well as the study's links to a conceptual framework for inclusion that looked at physical, cognitive, and social inclusion (Reich, et. al., 2010).

III. FINDINGS AND RECOMMENDATIONS

RANGE OF PARTICIPANT BACKGROUNDS

Participants in these focus groups exemplify the broad range of backgrounds found within art museum visitors who are blind or have low vision. As with all visitors, individuals who are blind or have low vision come to museums with different backgrounds. As a participant in the Guggenheim focus group said of individuals who are blind or have low vision, "We are all on a different level; we are all speaking from our own experiences."

During the focus groups, participants shared a number of ways in which they had diverse backgrounds. For example, in all of the focus groups, participants voiced their differing preferences regarding museum programming. However, the specific notion that diversity exists amongst visitors who are blind or have low vision was mentioned across four of the six focus groups. The areas in which this diversity was expressed included the following:

- Diversity of level and history of vision
- Diversity of involvement and interest in the arts and museums
- Diversity of needs and preferences
- Diversity of self-advocacy

Moreover, participants felt that the range of diversity within the blind and low vision community in these different areas should impact how museums plan and program for these visitors. Descriptions of focus group participants' discussions surrounding these areas of diversity are provided below.

Diversity of level and history of vision

The level of vision amongst focus group participants ranged from those who have had total vision loss since birth to those having high partial vision. Focus group participants highlighted, through both explicit statements about differences as well as individual descriptions of the needs associated with levels of vision loss, how this diversity could impact the museum experience. As one participant in the SAM focus group reminded others, "some of us maybe were born sighted and lost sight later on." A participant from the Brooklyn focus group expressed a similar sentiment explaining, "I think there's a major difference between someone who is blind from really young or from birth as opposed to someone who had sight for long enough" because this individual would have no previous experiences with sight in museums to reference. Nonetheless, participants emphasized that individuals who have been blind for a longer period have had more time and training to adjust their lifestyles and could be more comfortable navigating museums. Illustrating this transition, a woman from the Guggenheim focus group said,

At the time I was doing my degree [Bachelor of Fine Arts], my vision was much better, but since then my vision has been getting worse. In the last five years I've had to make a lot of adjustments, a lot of them are very hard.

Her statements illustrate how learning to navigate a museum experience as a visitor who is blind or has low vision is a new reality for some and may take a significant amount of time.

Other differences related to participants' varying levels of vision related more specifically to visitors with limited or partial vision. For example, there were a few participants from the Guggenheim focus group with Retinitis Pigmentosa. One of them described her condition by saying, "My vision is deteriorating over time.... Having Retinitis Pigmentosa, all this stuff that I see through – the gravel vision, the wax paper. I have double vision. I'm colorblind. My balance is terrible." Three participants from the SFMOMA focus group classified themselves as having high partial vision. One explained that for him, high partial vision means, "I have a good bit of vision but it's still fairly low vision." For another participant in the Guggenheim focus group with glaucoma, his vision loss over the past few years changed how he experienced art in a museum setting. As he explained, "I realized I was looking more carefully than I did a few years ago, and looking at details more carefully because I'm aware of where my holes were....It was very interesting because I actually got more out of it....It was the detail that I appreciated more than I had before."

Diversity of involvement in the arts and museums

As the focus groups were aimed at improving accessibility in art museums, it is not surprising that every participant expressed some interest in the arts in different ways. Some participants even introduced themselves as artists. For example, one individual from the SFMOMA focus group was a sculptor who worked for the San Francisco Art Institute. He explained that as an artist and art collector, "I am very frustrated by how my vision loss makes it hard to enjoy a gallery or museum." Similarly, another participant from the MFAH focus group said, "I used to do photography. It would be nice to get back into that, or gain some skills to do that a different way to make it more interesting." Another woman at the IMA focus group introduced herself by saying, "I am an art connoisseur; I just can't always see it. I would really like to share more about art with my children. I have four sons and I would like to be able to share more art and [be] more artistic, especially since I have at least one that is very artistic." However, some participants had less of an art-centric background, such as one Brooklyn participant who said, "I was never one to go to museums, [my] experience stopped once I left elementary school when they took us on field trips."

The focus groups also brought avid museum-goers together with people who were less inclined to visit museums after losing their vision. A few participants had traveled the world to experience art, such as a participant from the IMA focus group who shared, "I have just recently become legally blind although I still have some vision, I have in my lifetime visited a lot of art museums as well as science and so forth in the U.S. as well as Italy, France, and Japan." This individual's commitment to experiencing art across the world was juxtaposed by the comments from one participant from SAM who explained how he visits the same museum over and over. As he commented, "I've just pretty much been in Seattle… and [I] haven't gone to other museums in part because I don't know what to expect, um, I wouldn't know if there would be somebody who could provide an accessible tour." Numerous participants agreed that it is difficult to put effort into planning visits to a place that might not be welcoming or accessible;

this topic is discussed in detail in the Planning section of this report. Moreover, a participant in the Guggenheim focus group pointed out that individual's visitation habits may be influenced by more than just their level of vision or the amount of effort it takes to get to a museum. This participant believed that

People who do not go to museums, whose families did not orientate them towards art, are not going to be brought into the museum setting because of programs for people with blindness. ... I think in fact that there are probably groups of people who would welcome coming, but, in general, people are going to come or not, and it's not because of vision or lack of vision.

Diversity of needs and preferences

Participants expressed that visitors who are blind or have low vision are not a homogenous group – their differing backgrounds and levels of vision have led to differing needs and accommodation preferences. One individual from the SFMOMA focus group explained, "You really need to have a diversity of information sources; different people get information different ways... [it's] giving people a choice as to how they get information that I think is important." Participants in several focus groups, including those at the SFMOMA and the MFAH sites, also discussed the fact that there is likely not one single best option to meet the needs of all individuals, and felt different types of programs should be provided for people with different interests and backgrounds. A participant from the Guggenheim said, "It's really difficult to say what would make an exhibit truly accessible to all when everyone's needs are so different. Everybody wants something different."

A participant in the Guggenheim focus group voiced a similar sentiment regarding visitors who have low vision, saying, "I think the issue is that low vision is so varied that it's hard to accommodate all people at all times." A participant in the MFAH focus group gave the suggestion that when planning for or working with visitors who are blind or have low vision, "Don't assume experience with one blind person is the same as another. Some need a lot of instructions, some don't need too much; some need more attention, some don't need much. Ask if you can give assistance, don't assume."

In addition to comments that specifically called out differences between individuals who are blind or have low vision, these differing backgrounds and interests often resulted in spirited discussion and debate in some focus groups about the "best" options for visitors who are blind or have low vision. For example, participants in the Brooklyn Museum focus group had the following exchange about the value of description in museums:

Participant 1: I think there is a difference between describing visual pictures as opposed to physical pictures, and telling stories. I think there's a difference there.
Participant 2: I agree.
Participant 3: I don't know if there is a difference. When you're reading something you're getting a description of something.
Participant 2: I see a difference.

Participant 1: I once wrote a story of a league assembled of blind baseball players. I think that's different, going to write about the game... I think that's a major difference than describing what a river is, that's just water, I could touch it but... I could turn on a shower to do that.

Participant 2: Well there's a difference... When you're in a river, you feel the water around you. To picture a river that is yeah wide and yeah long and blue – remember blue does not have any meaning – it doesn't mean the same thing as telling me about people and their experiences. Because the river is a big thing and I can only experience part of it.

Diversity of self-advocacy

Participants from these focus groups reported serving as advocates in different ways, both within and outside their museum experiences, both in an organized manner and spontaneously. Some individuals felt strongly that they had a responsibility to advocate not only for their own needs within museums as a visitor who is blind or has low vision, but for other visitors who are blind or have low vision as well. Nine different individuals across four different focus groups discussed self-advocacy within museum settings. As one participant in the Guggenheim focus group said, "That's the whole purpose of my life, to teach people about people like us. It really worked. It raises consciousness." Another participant from the Brooklyn focus group lost her vision about seven years ago, but remained a devotee to the arts. Her approach was to "train others who were not museum friendly because of their vision problems to see how much they have been losing and all the wonderful things they were missing because of lack of care." Some individuals, in particular, describe their history of self-advocacy within museum settings. For example, one SFMOMA participant shared the fact that a past negative museum experience was not resolved in a satisfactory way. She explained that as a result, "I have filed a formal complaint against the [other local museum] about a disability."

Participants also seem to be serving as advocates beyond their experiences with museums. One member from the Guggenheim focus group explained that he was a filmmaker and had started making a film about "accommodating yourself to vision loss and realizing that going blind is not the end of the world." Participants' high level of involvement with advocacy for the blind community was also evident through their associations with organizations such as Art Beyond Sight and local chapters of the National Federation of the Blind and Lighthouse.

However, other focus group participants did not naturally take on a self-advocacy role, and were encouraged by other participants to become stronger self-advocates, as this exchange from the Brooklyn focus group illustrates:

Participant 1: As a low vision person I went into the Tenement Museum. Because they were trying to create the atmosphere of what it was like there, they had limited lighting and I stopped seeing completely, and it was horrible because the things that you could touch were minimal... *Participant 2*: Did you say anything to the docents?

Participant 1: Yes, they said it was their decision to make it a more accurate representation of what was...
Participant 2: Could you have used a flashlight?
Participant 1: If I had known I could have used a flashlight. But I never thought...
Participant 3: Would you go back with [a] flashlight?
Participant 1: No, I was so turned off I didn't go back.
Participant 2: You should go back. Make them realize they have to depart from a little bit actually.

One SFMOMA participant did point out the downside to feeling the pressure of constantly being ready to defend her needs within a museum setting. She said,

I do feel that I think the biggest barrier for me now with museums is that I have to feel pretty good about myself that day, like I can face this, no matter what happens to me while I'm there I can deal with it. I can deal with the embarrassment of having to lean over and read stuff I, I can deal with guards that might not get it that I need to stand close.

Summary

Throughout the focus group conversations, participants noted that not only do they have different personal interests and represent different levels of exposure to art, ways of engaging with art, and involvement with museums, they also have diverse levels of vision and length of living with vision loss, all of which affect their needs and preferences. Individuals stressed that those who are blind from a young age will have different needs at a museum, or any other learning environment, than individuals who have experienced more recent vision loss. Some participants also explained the various ways they advocate for better museum experiences including involvement with outside organizations, formal complaints, and informally talking with staff, offering their advice and assistance to museums. However, not all participants were willing to advocate for their needs, with some choosing to avoid museums rather than engage in discussions with the museum about any lack of accessibility.

Implications and recommendations

As the participants across several focus groups emphasized, visitors who are blind or have low vision are not a monolithic population – they have diverse backgrounds, needs, and interests. As echoed in other sections of this report, different types of interactions with staff and program experiences are desired by different individuals. Thus it becomes important to offer a choice of types of experiences that cover a variety of content areas when planning programming for visitors who are blind or have low vision. Some individuals may prefer a certain approach or content area, while others will not find the educational approach relevant or the content engaging. Just as general visitors to many museums have different interests and plans for a visit when they arrive at a museum (Falk, 2009), visitors who are blind or have low vision do as well.

Offering them the flexibility to choose experiences that appeal to them is an important step in more fully meeting their needs within a museum setting.

PLANNING AND VISITING LOGISTICS

Planning and logistics related to a museum visit were a significant topic of conversation during the focus groups. For this report, planning pertained to any specific actions participants performed before visiting a museum or directly upon arrival. Logistical components of the museum experience, both beyond and within the museum's control, included factors related to planning the visit, general comfort while at the museum, and any non-staff facilitated services that visitors utilize for information.

Participants commented on several logistical factors including:

- Time and effort required to plan a museum visit
- Ways to find out pre-visit information, such as calling the institution or checking online
- Factors that affect the decision to visit a museum, including the cost of a museum ticket, crowding concerns, and transportation obstacles.

The sections below highlight participants' comments about these particular logistical elements related to a museum visit.

Time and effort

During each focus group, participants were asked to describe how they prepare for a museum visit, and their responses indicated a range of pre-museum preparations. For instance, three participants highlighted how they are quite spontaneous when deciding to visit a museum. As one participant from the Indianapolis focus group said, "I tend to go at random....I went to the Salvador Dali Museum on a whim because I heard it was there...." A participant in the SFMOMA focus group shared a similar strategy and explained, "I'm not organized enough like some people at this table...to look online ahead of time and get a good idea of what to check out. ... [F]or me a trip to the museum is almost an impromptu event." And a Brooklyn focus group participant summarized his casual approach by saying, "I get in the subway and there I am. No planning.... I might end up at the Museum of Modern Art, the Met, the Guggenheim, Morgan, whatever strikes me."

While these participants deemed museum trips to be almost spur-of-the-moment decisions, the majority described the necessity of prior planning. During five focus group discussions, nine participants agreed that planning a museum trip takes an immense amount of time and energy. As one individual from SAM explained, "We don't have the luxury of showing up. If we're going [to] get anything out of anything, we can't just say 'here we are." Another SAM participant who used a guide dog agreed and explained how she constantly has to plan out where her guide dog can relieve itself on or near the premises.

An individual from the Guggenheim also shared the sentiment that museum visits take a significant amount of work and emphasized, "It is huge work in preparing what you want to do." While acknowledging that prep-work can be time-consuming, another participant in the Guggenheim group stated how necessary it is for him to research background information before

he goes to a museum. He explained, if visitors who are blind or have low vision do not "have an opportunity to do any prep before [they go], it can be a very cold and unsatisfying experience...." One SFMOMA participant stated how "it used to be easier" before he lost his sight and admitted that "it's hard for me so I don't" visit museums anymore. As one individual from Houston summarized, "It takes a certain amount of effort to get here, to find the place, and then get back." Several other individuals felt that a designated access staff member would help them plan their visit and be comfortable in the museum space. As one individual from Houston expressed,

Say a blind person calls, [and] says 'hey I want to come to your museum' maybe have a few staff members that are more oriented to blind people, then they can tell them and have more of an interaction with them."

Two participants specifically expressed their irritation with all of the effort that goes into planning museum visits. As one individual from SAM explained, "If you find somebody that's driving for you, you've had to coerce them to come along, you know, convince them ... [and] there's energy invested in that coordinating with another person." A participant from the Guggenheim stated,

I don't want to do a lot of work before going to a museum. I want to go and experience it. I totally understand that with the current circumstances I have to do research and get better acquainted with exhibit, but I don't want to do that. I want to go and explore.

Pre-visit information sources

The participants who plan ahead before visiting a museum shared the various sources they use for obtaining pre-visit information. Calling a museum was one of the most common ways participants get answers to their questions related to the museum's hours and accessibility options. As one participant from SFMOMA said, she always calls up to ask "Can you accommodate me?" A participant in the Brooklyn focus group explained, "I will call ahead to see if there is a touch exhibit." A participant from the Guggenheim focus group stressed that she "always like[s] to ask for help before I get there so that nothing is a surprise to me." An individual from the SAM focus group also emphasized that she calls ahead to "get as much information" as possible. As she said, "When I call, I always ask what's in the museum, and what certain times is somebody there, what kind of art [is on display]." Although only one individual described her positive experience with the pre-recorded phone menu for visitors with disabilities at SAM, other members in the focus group were impressed to learn about this option.

Websites and email mailing lists were also cited in three focus groups as useful sources of information for visitors who are blind or have low vision. In fact, almost all of the individuals were reached by email to confirm their participation in the focus group. During the IMA focus group, one participant explained that before visiting a museum she "read[s] on the internet as much as I can to see what exhibits are there, how long they are there, how many floors there are, if there is a fee." Others found the internet to be a practical place to learn about access

information. As one SFMOMA participant said, "I look on the website to see what is accessible, what accessible services they might have for me."

However, when talking about websites, a few participants noted that museums' digital media could be more accessible for the blind and low vision community. Participants in the SAM focus group recommended that museums avoid frequent use of graphics on their websites and emails because images are difficult for screen readers to decipher. One individual from SAM expressed that "accessibility on [the] website is an issue...[and for the] emails that you get. There are too many pictures." Moreover, a participant from SFMOMA stated that she uses museum websites to find out information related to transportation, but "sometimes [museums] only explain ... [how to get there by] car, which isn't really useful if you're blind."

Not only did a few participants point out changes museums could make to their websites, during two focus groups, several individuals repeatedly mentioned improving advertising efforts targeted at the blind and low vision community. As one participant from the SAM focus group explained, "I'm sure you send your information to the public; make us part of the public so ... we know what's going on at the art museum." One individual from IMA pinpointed the fact that

Newspaper[s]...can work for people if they have enough sight to read it or if they do the Iris reading. But [museums] just can't do newspaper[s]; you have to figure out other ways to utilize a number of avenues to really publicize things.

Participants in the IMA focus group suggested contacting local chapters of the American Council of the Blind or the National Federation of the Blind as possible advertising partners or "using Iris or some other Newsline-type media."

Factors that affect the decision to visit

Certain factors appeared to play into focus group participants' decision to visit museums including the cost of a visit, the ease of transportation options, and potential crowding. Although a few participants' responses echoed one MFAH participant who said price was no "more a factor for blind [visitors] than it would be for a sighted person," nine individuals voiced their concern over museum admission prices. As one individual from the SFMOMA focus group explained, "Cost is definitely a factor for that segment of the disability community that is low income...." When talking about the high price of a special exhibition, a participant from SAM stressed that blind and low vision visitors might not know "what to anticipate" and might not be willing to pay "\$40 for a couple to go in...." An individual from the IMA focus group stated that "having an extra price for the audio description is kinda a slap in the face." Two participants from SAM wondered whether or not there could be a "certain date" when a discount could be given. One participant from SFMOMA also brought up the issue that visitors who are blind or have low vision may come with someone to guide them through the space and that this adds to the cost of a museum visit. This individual felt it would be a helpful if "someone guiding you could ...get in for free because they're assisting you." Another participant from SFMOMA questioned the relative value of the experience and wondered whether visiting a museum would

be worth the cost if, for example, she used a "digital hand held...[when she] might as well sit home and do that on [her] computer."

During four focus groups, participants agreed that crowds often have a negative impact on their experience. As one individual from SFMOMA explained, "I make sure I'm in an aggressive mood [before going to a museum] because people crowd in front of you and I need to be able to stand very close." She continued,

It's unfortunate because it would be much better for me if I could be sitting down, use a wheelchair or something, because I get tired of standing, but if I'm sitting down I'm definitely not going to see anything because people will stand in front of you constantly.

One participant from the Guggenheim also explained that "having Retinitis Pigmentosa [and] being in a museum with a huge crowd is very, very difficult. I have to be able to approach a work of art as close as I'm allowed to [and] with a crowd that's difficult." One individual praised the Guggenheim's programming for the blind and low vision community that is specifically held after public visiting hours as enjoyable because "you don't have to battle with crowds or fight your way to whatever is put on display." A participant from SFMOMA recalled a special access day that allowed him to have "enough time to look at a wall plaque and read it" and not have "people stepping in front of" him.

A few participants explained how they try to avoid going to museums during crowded times. As one individual from the IMA focus group commented, "We try to come... on a day when we think the museum is less likely to be so busy" so that there may be extra staff around to help. A participant from the SFMOMA focus group also indicated how she visits the museum during non-peak hours: "I've been going to museums on Thursday nights because I hate crowds, and Thursday night seems to be a great time [to] go." Two individuals from the SAM focus group specifically felt that other visitors are "scary" because they might not be "aware" of the needs of blind or low vision individuals.

Although transportation was not widely discussed in all of the focus groups, it was seen as a particularly significant barrier for participants in the MFAH, SAM, and IMA focus groups. Two participants in Seattle even had difficulty getting into the museum the day of the focus group and one suggested adding "some sort of drop off or special parking for us." Two other SAM participants described how, before a museum visit, they carefully plan out bus routes that will be accessible. Four participants in the IMA focus group expressed their irritation with the public transportation system. One individual from this focus group emphatically insisted that "transportation, transportation, transportation" is what prevents her from visiting museums. Two IMA participants, in particular, felt the audible signals [at the crosswalks] around town were not well maintained and one said, "It seems like if you are really trying to draw masses in there needs to be an audible signal." One participant in the Houston group summarized how "Transportation is a bigger deal for the blind....You have to get extreme[ly] detailed directions to where [the museum] is from the transit system...." An example of this detailed information was provided by a participant at MFAH, who said he called the public transportation's ride line, which "gave [him] the bus [he] would catch, which rail system to get off at, and how many

blocks we would need to walk. They were very detailed." One participant from SFMOMA emphasized that specific directions including landmarks such as "it's a big brick building in the corner" would help her plan her route because she cannot see building numbers, but does have enough vision to identify landmarks.

Summary

While a few individuals described their museum visits as spontaneous, many focus group participants depicted the great effort that can go into planning a museum trip. Although they may not want to have to plan ahead, participants stressed that there are many logistics to work out in order to have an enjoyable visit. Before they arrive, some participants specifically call to find out about the museum's hours and accessible programming. Museum websites are also frequently used sources of pre-visit information, such as directions, hours, and exhibits on view. When discussing museum websites, a few participants felt that museums could make their digital media and emails more accessible. There were also suggestions for museums to more actively reach out to the blind and low vision community through diverse advertising methods, including mainstream media and disability community media.

Several participants emphasized that before coming to a museum they consider the cost and timing of a visit. Participants explained that some people within the blind and low vision community may be hesitant to pay for the price of a museum visit especially if they do not know what to expect or if they come with a sighted guide. Crowds can also have a negative effect on visitors who are blind or have low vision. Not only do visitors with low vision need to get close to the artwork in order to enjoy it, but focus group participants were anxious that other visitors might not be comfortable interacting with them. In addition, if a museum is not overly busy, more staff might be available to help visitors who are blind or have low vision.

Transportation can also be a challenge for individuals who are blind or have low vision. Focus group participants explained that taking specialized access transportation or public transportation can be time-consuming and frustrating in a number of metro areas, and that even asking for a ride or coordinating rides with others is a big effort. A number of participants indicated that if they are making such effort to get to a museum, they would like to ensure that they will not be disappointed by inaccessible offerings or content they are not interested in. These factors are some of the key logistical considerations that visitors who are blind or have low vision take into consideration before visiting a museum.

Implications and recommendations

Since participants often described the planning process as time-intensive and demanding, museums might consider ways that they can ease this process for potential visitors who are blind or have low vision. One area for improvement suggested by participants was that museums use a variety of advertising methods to reach out to this community and keep them informed. Besides the traditional advertising methods of newspapers, television, and radio, focus group participants recommended contacting local chapters of the American Council of the Blind, the National Federation of the Blind or using Newsline type media. Moreover, advertisements can highlight if museums might have special access phone trees or a particular access person whom visitors who are blind or low vision can directly contact.

Participants also indicated that although they refer to museums websites to learn about the accessible services that would greet them at a museum, the websites themselves could be more accessible. Websites and emails with features such as descriptive alt-text labeled graphics would allow this population to more easily access information that is represented in images and get a better sense of the exhibits and programs offered at the museum.⁶ Other suggestions included providing more detailed and descriptive directions, especially for those using accessible or public transportation, including walking directions from bus stops and drop-off areas, and descriptions of the museum building and nearby landmarks since these help individuals who cannot see building numbers but have some usable sight. Offering special discounts and reduced ticket prices might also be one way to alleviate participants' concerns about the cost of a museum visit. Since crowding is a worry for these visitors, museums could also consider providing information on their website about times when the museum is less crowded. Museums could also plan some accessible programs for times when the museum will be less busy.

In terms of easing transportation issues, perhaps museums could find ways to schedule programs around public transportation schedules, or availability of accessible transportation, or work with community groups to provide transportation to the museum. Indeed, often factors outside of the museums' direct control, such as transportation, influence visitation and may require museums to think outside of their walls to develop unique and creative solutions in order to enhance accessibility for people with disabilities (Falk, 2009).

⁶ A resource for general web accessibility can be found at <u>http://webaim.org/intro/</u>.

INTERACTIONS WITH STAFF

Interactions with staff were an important topic of conversation with focus group participants, and staff members were often the subject of both extremely positive and negative stories of past experiences. For this report, staff interactions encompass all past and theoretical interactions with staff members that were discussed by participants. These staff members include:

- Docents and museum educators
- Visitor services staff
- Security guards

The sections below share participants' comments related to their interactions with staff members while visiting various museums.

Docents and museum educators

Across all six focus groups, participants discussed the role played by docents and museum educators as a part of these visitors' experiences at museums. Often this role was discussed in a positive way, but negative staff interactions were mentioned as well.

During the discussions, twenty four participants across all six focus groups mentioned positive interactions they have had with museum docents, and how they especially valued the depth of experience and content information staff members shared with them. One participant in the SFMOMA focus group explained why she enjoyed interacting with docents so much during her visits saying, "I love the docent experience; I get so much more out of it." Another participant in the Brooklyn focus group appreciated the depth of content docents provide. As he explained, "You want someone to tell you what makes [the piece] unique and worth painting or taking a picture of." One individual from the Guggenheim felt that "[o]ne of the best tours" she ever experienced at a museum was because of the docent's "experience and background [which] made the tour very special." For another participant in the IMA focus group, educators were generally the key aspect in making a visit successful. This individual stated,

There is nothing in my opinion that has ever beaten a really good guide and they are really hard to find and a lot of museums don't have guides. Everywhere that we have even been, a really good guide can make or break, can really make the trip for you.

One individual from SAM who explained her experience on a guided tour stated,

One thing that happened that I found was really incredibly helpful was the docent did ask the folks to let me and my friend stand in the front and then once they sort of established that as um, sort of a premise if you will, then ... as we moved from one exhibit to the next, people just sort of got used to letting us go and stand in front [and that] made it possible for us to hear.

A participant in the MFAH focus group stated the benefit of interactions with museum educators more broadly, saying that he enjoyed "the experience of the people who work here, how much fun they make it, [there is] enthusiasm among staff."

Although participants in the IMA focus group did not discuss their interactions with staff very extensively, the group did stress the importance of good docents. As one IMA participant noted, "I'm particularly fond of lectures – I like that, as you said, trying to bring across something visual. I like experiencing that with someone else, if its friends or family. There is more real-time descriptive to it, maybe an opportunity for questions. I get to experience the reaction of that with the people I'm with. If it's a particularly good lecture, I will let them know that and inquire if there will be other lectures in the future." Some participants even said that they write thank-you letters as a follow up to museum staff members who had been particularly supportive. As one individual explained,

If it's a particularly good museum and the staff is particularly helpful or a good tactile exhibit or helpful people, I usually write a letter to the person and say 'thank you for a great exhibit, thank you for tactile exhibit and everything'-- to let them know that people appreciate it.

However, interactions with docents, both on tours for the general public and accessible tours for visitors who are blind or have low vision, were also described in negative terms by 12 different participants in four focus groups. Many of these comments focused on participants' negative reactions to the lack of proper verbal descriptions or the lack of tactile and multi-sensory elements in the tour that resulted in a less than compelling experience. A participant in the MFAH focus group critiqued docent-led tours for the general public and questioned whether such tours, without multi-sensory learning tools, added any value to his museum experience when he commented, "I like guided tours, but you can almost do the same thing sitting on the couch and listening to a tape." As another participant in the MFAH focus group explained, "I like guided tours, but I can't touch anything. [The tour] was just someone going from place to place saying, 'Look at this, look at that,' but I never got to experience, to which he had a negative reaction, saying,

[For] a lecturer, I sat for an hour, he was describing different paintings on the wall, just kind of moving around the room. He was saying, 'Face this way, that way; now we're facing this painting and then that one; it looks like this and that...

A participant from SAM expressed that verbal description is a skill and it takes an effort to develop such skill and sensitivity, and that there is a "huge disconnect for people who aren't visually impaired. It really takes a conscious effort to, to get into that mindset of what [sighted guides/docents] need to describe ... beyond just colors... but the textures, the diameters, that kind of thing...."

Visitor services staff

Front of house staff were also discussed by participants in both positive and negative terms. Whether the interactions with these staff members were positive or negative, participants' conversations revealed that these staff can play a key role in the initial welcome and orientation to a museum. Eleven participants across five focus groups recounted ways in which front of house staff have or could potentially have a positive impact on their museum visit. In general, participants considered front of house staff as being in a position to create a welcoming first encounter at a museum. As one participant from the Guggenheim explained, "I walk into a space, I don't know it. I want to be met at the door… When you walk in, you ask if there's anyone there that can help you." A participant at the SFMOMA focus group described an ideal experience that occurred with front of house staff that illustrates the impact that proactive customer service can have when simple pre-developed materials are offered:

One of my best experiences was actually ... when I showed up at [the museum] and I went to the information desk kind of not knowing what was going on, what was there, and they very kindly told me what exhibits were up. And [they said] 'Oh by the way I noticed you're visually impaired we have this large-print brochure of all the touchable sculptures, and here's access to an audio tour for this exhibit, and are you good with maps? Because here's a huge map that's in high contrast if you want to see what's around you.'

However, six participants across three different focus groups shared ways in which interactions with front of house staff had been frustrating or otherwise negative. One participant in the SAM focus group stressed that merely having friendly front of house staff was not sufficient – having these staff share relevant information is also important to setting up a successful visit. As she said,

I would just want to know that when I walk in the door, that somebody would say, 'Hello, can I give you information about this'--anything, just somebody that would help, be there, that would speak out loud and not [just] wave at me.

An individual from Houston emphasized that staff need to remember that "if one blind person makes you annoyed, don't take that into account when approaching the next." A participant in the MFAH focus group pointed out that front of house staff could play a key role in making visitors who are blind or have low vision comfortable in an unfamiliar environment. As he explained, some people who are blind or have low vision are "fearful to just show up at a place they have no experience with, that no one will meet them at the door and they'll be blundering about, which nobody wants to do." In this case, having a greeter that could assist with basic orientation and background information could greatly help to ameliorate this fear.

The importance of high-quality training for staff was especially emphasized at the SAM focus group. As one participant from SAM explained:

When you enter the door of the reception....[You ask yourself] What kind of reception are you having? Is [the staff member] welcoming or is she one of the people [who exude the sense that] 'you don't belong here' you know, that makes a huge difference, even if [the museum doesn't] have somebody [to specifically

help a blind visitor] ... just how you talk to that person makes a huge difference....It's just how ... you communicate.

Participants in this focus group acknowledged that extra training would likely be needed for staff to fully understand how to best assist visitors who are blind or have low vision. They suggested several local resources for staff training, including speaking highly of the front of house staff at the Seattle Public Library. The following exchange highlights three participants' comments about the positive experiences that come along with well-trained staff members:

Participant 1: I'm just giving you an example, now they have three employees to accommodate us, you know I, [k]now the library is more accessible because of them. They know our needs, they are there, you ask a question and at your fingertip you have the answer. I feel welcome whenever I go, and the, the welcome people are well trained and person, that person is to provide all the assistance.

Participant 2: Right by the door when you walk in too, which is really good, and they see you and actually know your name.

Participant 3: Which is obviously a HUGE building, and really, the point is, that their staff is trained, when you see a blind person walk in the door, say something...

This conversation may suggest that, for art museums looking for ongoing opportunities to improve their service to the blind and low vision communities, a productive option may be to seek resources and partnerships with other non-profit and educational institutions within their own communities.

During the SFMOMA focus group, a participant also emphasized the need for staff to be appropriately trained:

When I walk into a Museum whether I know the place or not, I still want to ask people things, and the people that meet me at the info desk or the ticket counter or the "I'm going to check if you have weapons of mass destruction" desk that they have at the Asian Art Museum now, all those people that I first come in contact with when I first walk into the door, whether it's, as I said, tickets, information, or security, I want those people to know a lot about blind and vision impaired people, among those things I would like them to know that when I'm carrying a white cane, either folded up or opened, what it means; if I say I'm vision impaired, or partly blind, or legally blind, I want them to understand what those terms mean.

For a few participants, front of house staff also played an important role in visit planning. Four participants across two different focus groups discussed how front line staff helped them to plan their visit. As one participant in the SFMOMA focus group shared, in advance of her visit to a different art museum in her city, "I just popped in the front door and asked the front desk, I like to talk to people for information. I asked them about the existence of audio tours and what was on exhibit."

Security guards

In contrast with the generally positive feedback about docents and front of house staff, focus group participants tended to discuss their interactions with security guards in a more negative manner. Negative past experiences with security guards were recounted by seven participants across four focus groups, and it was a particular topic of conversation for participants from SFMOMA where many participants shared stories of past interactions with security guards. As one participant from SFMOMA said a guard made her feel like "a bank robber or a child molester." Another SFMOMA participant explained, "I feel like a criminal because I'm getting too close to the art and the guards go, 'Oh, she's five inches from the art!""

Across different focus groups, several participants who had low vision also recalled instances of being verbally reprimanded by guards after approaching works of art too closely in order to better see them. A participant in the MFAH focus group told a story in which a security guard laughed at her instead of helping her when she was having difficulty navigating through a gallery. As she recounted:

The worst experience I had was when I bumped into something, having a guard laughing and me and told me to be more careful. Not acknowledging what happened and not having a clue where I was and laughing at me pretty much.

In the SAM focus group, participants exchanged negative experiences with guards in the following manner:

Participant 1: I couldn't see where to go or anything and there was no one really around, but then I started looking at the things under glass really close and going up to the paintings and then the security guard came over and said "you can't do that," and then [Group: yeah] ...that kinda alerted me to the fact that that was different and from then on I sort of started hesitating to really go to museums and that was a long time ago, but I just remember that distinctly that the guard came over and I thought, 'oh no, I can't do that' and it made me feel strange and then I didn't go to many museums after that. ...I just remember that [experience] just really made me hesitate to go to a museum but that was a long time ago.... *Participant 2*: [N]ow also it seems that when the guards say those things, it's often in a voice that's very like, [laugher] it's NOT friendly voice, "Get away from there!" [Unknown: that's right]

Participant 1: He was standing, you know, with his hands folded and he had to come over to tell me and I though oh no...[Group: laughter]

However, one participant in the SFMOMA shared a story of an unfriendly interaction with a security guard that ultimately turned into a positive exchange.

I was looking at something apparently too close up I didn't know about the 18inch rule at that time. A guard came up to me and barked at me 'You're too close get back,' and I turned to her – I was using my white cane at the time – and I said, 'I'm legally blind. I'm standing close so I can see,' and she said, 'Well you can't.' And I said, 'Okay, I will not get close to the art, but I want you to know that I can't really see it, but one thing I'd like you to realize, you can't talk to me in that tone of voice, that's not okay.' And I walked around, continued looking at the art, and about three or four pieces of art later she came up to me and said, 'Excuse me can I talk to you?' And I said, 'Yes.' She said, 'I want to apologize for shouting at you; I don't know very much about blind people, will you teach me?' ... She was totally open, she asked me about the cane, she asked me what I could and could not see, she asked me everything she could think of about blind people. Then she told me while I was in the gallery in her part I could get as close as I wanted... And that was so nice, she started out yelling at me, and she ended up apologizing and learning something.

This story led another participant in this focus group to remark, "I think the lesson there is that [security guards are] not bad people, they're just poorly trained people." As another participant pointed out, security guards are often employees sub-contracted through a separate agency, so they may not go through the same training that front of house staff go through, even though they often can be the only staff presence for visitors while they are in galleries.

During the focus groups, one participant did report having positive interactions with security guards. This Brooklyn participant explained, "I have security guards help me go from room to room."

Summary

Across focus groups, discussions concerning interactions with museum staff members featured strong opinions and emotional stories, both positive and negative. This is true whether docents and educators, front of house staff, or security guards were being discussed. Participants, in particular, emphasized the positive effect that docents can have on their museum experience. For example, they appreciate the information and additional help that docents provide. However, participants noted that not all docents provide them with the verbal descriptions and proper directional information they need in order to explore and understand the art and the surrounding space.

When participants discussed front of house staff, they expressed how these individuals play a key role in orienting their museum visit. These are usually the first people who greet them and tell them about the museum and, therefore, can set the mode of their whole experience.

Negative interactions with security guards, in particular, have made several visitors wary of a museum experience. These responses suggest that, for visitors who are blind or have low vision, interactions with staff can have a large impact on their enjoyment of a museum experience and desire to become a repeat visitor or a museum member.

Implications and recommendations

During the focus groups, one repeated theme was the importance of training all staff who interact with visitors directly. This includes training staff to be comfortable in their interactions with visitors who are blind or have low vision and emphasizing the importance of treating all visitors with respect. As one participant in the MFAH summarized, "There's absolutely no substitute for constant training of the museum staff to be sensitive." This is true for educators and visitor services staff, but equally important for security guards. Even if security guards are not directly employed by an institution, they are still seen as carrying out the museum's policy toward visitors with vision loss, especially in gallery spaces where they may be the only staff present.

However, focus group participants made clear that basic friendliness and good etiquette are not sufficient for a fully positive interaction. Front of house staff should be equipped to talk about all of the museum's accessible programming or features. In addition, they should be familiar with sighted guide techniques, and able to give proper directions, as well as descriptive orientation to the building, so that visitors who are blind or low vision can visit the galleries of their choice.

Docents, while receiving generally positive feedback, are also in need of skills and training that will make their tour engaging for visitors who are blind or have low vision. Simply listing the works of art in a gallery and giving a basic description of their content was not enough to engage some focus group participants. For these individuals, additional background on the subject matter or artist would make the tour more engaging, explaining why the piece was notable and interesting. Many participants suggested adding multimodal elements to verbal description in tours, which will be discussed in more depth in the section focused on museum programming for visitors who are blind or have low vision

ACCESSIBLE PROGRAMMING AND DESIGN

Accessible programs and design were key themes of the focus groups. For the purposes of this report, programs and design are defined as any type of programming or service that a museum does/should provide to improve accessibility of the art or museum experience.

Participants in all six of the focus groups expressed interest in an extensive range of programs and accommodations that could enrich their museum visits. These included the following:

- Changes to existing exhibition and architectural designs
- Assistive technologies such as audio guides and other digital devices
- Tactile or touch opportunities where they can experience the art
- New programs proposed by the participating museum

Detailed descriptions of the focus group participants' thoughts about each of these areas are provided below.

Exhibition and architectural design

Blind and low vision participants were especially concerned about exhibition and architectural design aspects within museums. Twenty-six participants in the six focus groups mentioned how design issues such as lighting and poor labels have contributed to past negative museum visits and were likely to still be a barrier to fully experiencing a museum. Wayfinding was also seen as a particular challenge in museums.

People who are blind or have low vision experience wayfinding difficulties beyond those of other museum visitors and these challenges can become safety concerns. Like all visitors, they may not know where to go, but they may also encounter hazards posed by exhibits themselves and unfamiliar galleries. While the specific architectural and wayfinding challenges are unique to each institution, individuals across focus groups expressed concerns in this area. One individual from SFMOMA explained that museum entrances with clear doors can be an issue at the very beginning of a museum trip. As he recalled, "I run into them occasionally. I understand the aesthetics, but if you can't see the door...." One participant from the Guggenheim also described her difficulty with the layout of museums and said, "I have walked into buildings and fallen down stairs because I didn't have a description about [the] building. If that happens when you're just starting out, it messes up the whole day." A participant from SFMOMA was also worried that she was "going [to] run into a sharp corner" because of the insufficient paint contrast on the walls. One individual from SAM underscored that "[t]ripping up not standardized stairs is very humiliating, it's dangerous...." Another individual suggested having better indications of stairs and elevators would be useful and recommended painting "[y]ellow lines." One individual from the Guggenheim voiced that just to "go to a place where you feel safe, where you don't have to worry about stairs, where it's flat" allows her to be "so much more relaxed and more able to enjoy [her] experience at a museum." One MFAH participant emphasized the importance of being able to navigate a space, and said, "I don't think about coming here to sit, I think about coming to move around."

A few participants focused on wayfinding difficulties, and expressed their aggravation with getting lost in museums. One individual from the Brooklyn focus group insisted that museums need to become "'people with bad vision' friendly." As she said, it is important to know the answer to questions such as,

Where do we hang our coat? Do you carry your wet coat all the way down to the Post-Impressionism/modern area or do you get it right where you pay your fee so you get rid of your jacket, or coat, or wet umbrella.

As one individual from the Guggenheim said, "[the] galleries are so convoluted, I need help to get through." Another participant described her first experience at the Met as "walking around in circles" but explained that she has since taught herself "through landmarks." A participant from MFAH described that "being lost, wandering around, never being able to access anything [makes her just end] up getting frustrated." One individual from SAM felt that an explanation of "how large the room is when walking across, [and] also a description of the place you're in and the relationship of the object you're looking at" would enhance her experience. One participant from the Guggenheim felt that "a model for architecture is a wonderful idea, but [I] don't think it's going to be an answer for everything" when it comes to finding one's way around a museum. Another Guggenheim participant explained that she benefits from a special program where an "intimate group once a month ... go specifically to a certain show or gallery [and] that has familiarized me with the space."

Lighting was also a common annoyance for low vision participants. When one participant from Brooklyn described her experience at a dimly lit museum she said, "I stopped seeing completely." She felt "there should be an option to have decreased lighting, but also switch for people who need it. It could be turned back off for the ambiance." This participant also noted that lighting, including its resulting glare, can be an issue for seeing artifacts, but dark museum floors can "absorb" light and make it difficult to walk. A few individuals pointed out how artifacts under glass are especially difficult to see even with proper lighting. As one SAM participant said, "I started to hesitate going to any museum that involved paintings or things under glass...." Another participant from the Brooklyn museum stressed that "the ideal situation is first to feel comfortable in the space, which means having a certain amount of lighting so I'm not afraid of hitting something." An individual from the Guggenheim suggested having "lights on the floor that you could follow through the museum." Another Guggenheim participant summarized his exhibition design requests as "well-lit for people who are partially sighted, and the graphics be clear and bold. It's a no-brainer."

Indeed, several participants commented on poor label design as affecting their time at a museum. One individual from the Guggenheim recalled a particular exhibit at another New York museum where the labels made him "angry." He described the exhibit as being "offensive." He continued to say,

Talk about not designing for people, but for what the exhibit looks like. The labeling and the text was utterly ridiculous. It was so low contrast – gray ink on

mauve paper – it was absurd. It was ridiculous, insulting, and it would be difficult for anyone, let alone someone with low vision.

A participant from MFAH commented that "most places have all uppercase font, it's easier to read if there is both upper and lower case font...." She also noted that small print is "useless for me." One individual from SFMOMA explained that "if [labels are] in big enough print I can read if you give me enough time, but my reading is so slow these days it's just very frustrating." This individual also stated that,

Whether it's audio tour numbers or labels or directional signs or something that says where bathrooms is, the thing that we've come across is that in the museum, aesthetics are unbelievably important and most curators and museum staff would prefer there not to be any signs, and that's why you have these weird [paint] contrasts on art labels [to match the aesthetics of the gallery.]

When another participant from SFMOMA gave feedback on labels, she hoped museums "could stick to high contrast print, dark against light for not only the titles but the content [because] that would really help... anything on the website or paper sent out – all of it should be in high contrast."

During conversations about labels, Braille options were mentioned infrequently. One participant from the Guggenheim dismissed Braille labels and said, "People who read Braille don't know where the Braille markers are, and I've heard this time and time again. In order for us to find it we have to find the wall and run our hand along the wall." However, a participant from SFMOMA indicated that she would benefit from Braille markers and described how "a Braille or a large-print label next to an item to identify it would be great...." Another participant from SFMOMA expressed interest in a Braille handout as she entered a museum. For her,

My ideal visit would be to walk into a museum on whichever day I choose to go, and if I go to the information desk and ask about accessibility...they hand my friend a large-print pamphlet, they hand me the same one but in Braille... and in the pamphlet I would find exactly what's on the plaques next to each art piece, so I can read it how I want to.

One individual from SFMOMA explained that she relies "on the large-print labels, but sometimes... if I can't figure out what these labels are talking about within probably five minutes because they're all out of order or something, I put them down."

Assistive technologies

Across the six focus groups, 27 participants mentioned how technology, in particular, can support positive museum experiences without the need for museum staff. Audio guides were repeatedly mentioned in these conversations about technology. Participants noted that highly descriptive audio guides from a variety of delivery devices had been valuable to them. However, some have also encountered difficulties while using these devices in the past.

One participant from SFMOMA described her first experience with audio guides as "fantastic" because she "learned so much more that [she] wouldn't have otherwise without the audio tour." As she said,

I do get enjoyment out of [audio guides] when the descriptions are good. I have [now] taken two audio tours that included both navigation around the exhibit as well as really great descriptions of the exhibit and it was a very fulfilling experience.

As one individual with low vision from IMA explained, "[the iPod] was particularly helpful in being able to 'see' the piece." She and her sighted guests felt that "the descriptors of the narration were excellent." Another participant from IMA commented generally that "audio devices and audio descriptions and things like that are great." A few participants explained that they even seek out museums that have audio guides. One individual from IMA recalled that "someone mentioned to me that Alcatraz [had] an audio tour and I made a specific point to go there." Cell phone tours were also praised by a few participants. As one individual from the Guggenheim said, "I know how to use my cell phone; it was a familiar option for me."

However, many participants described the drawbacks associated with audio guides and cell phone tours, in particular getting positional information and matching the audio guide stop with the gallery location. They explained that not only can finding the corresponding numbers on the walls be difficult, but punching them into the key pad can also be a challenge. One participant from the Guggenheim felt that with cell phone tours "the concept is nice, but it isn't there yet" because "I can't see the numbers." As one individual from IMA said, "You might as well just sit out in the lobby and punch in random numbers" for the audio guide since he cannot see the matching numbers on the wall. A participant from SFMOMA similarly said that "[t]he challenge for me with the audio tour is that I can't see the silly number." Another SFMOMA participant emphatically exclaimed, "Hear hear!" when agreeing that the numbers on the audio guides are difficult to read. One participant from the MFAH focus group felt that audio guides do not provide an independent experience "because the audio guides are not positional, [and] you have to tell it where you are, you have to go around with a sighted person to get anything out of it." Some potential solutions to this problem were also shared. One individual from IMA shared his positive experience with an audio guide being on a "track" which described when to move onto the "next exhibit." One participant from IMA suggested using "RFID tagging... [so certain] devices themselves respond to being in proximity to the specific RFID station."

Several participants suggested information that would be beneficial to include on an audio guide, but is not always included. For example, a few participants emphasized that audio guides should include specific wayfinding directions and clearly match the exhibition. One individual from the IMA explained it can be confusing if an audio guide's description does not clarify "exactly...what is in the exhibit." One individual from the Guggenheim recommended having two different types of tours – "[o]ne with an orientation to the building and the second for the exhibition." One Guggenheim participant recalled that "a lot of museums are now making tours that you can download before you get to the museum." She found it helpful to have this sort of "orientation before you arrive."

A few individuals talked about how audio guides can offer different layers of information. One individual from the Guggenheim explained how he would not enjoy in-depth levels of interpretation, and said, "I personally don't want a lot of audio description, because I want to interpret it myself. Sometimes when there's too much [description], the interpretation is done for me, [but] then some people want more details. It's personal preference and it's hard to bridge that gap to make something universally workable." Another participant from the Guggenheim provided a potential solution – "If it's a cell phone and you don't want the information, you can turn it off."

During the course of the focus groups, participants mentioned other technologies that could enhance their experience at museums. Participants in the SAM focus group thought of using magnifying glasses. Two participants in the MFAH group described how TVs and "descriptive videos" (audio described videos) are appealing. A few participants in the Brooklyn focus group mentioned how flashlights might help them in dimly lit situations, although one Brooklyn participant said she didn't know if she "could have used a flashlight."

A few participants were interested in bringing their own technology devices to the museum. For example, one participant from SFMOMA, although unsure of whether he would be allowed to bring in his Jordy, was eager to use this "electronic low vision aid ...[that is] a closed circuit television and it's like electronic binoculars, [with a]camera... [that] projects to the inside of the goggles" at the museum. Another SFMOMA participant liked how digital devices could provide blind and low vision visitors with many options. She wondered if visitors "could download [information] into [their] electronic Braille notetaker or iPhone or iPad or something... [because] that way the individual could choose whether it's print or Braille or speech."

Several participants thought that a digital device such as an iPad might allow them to look closely at labels for the artwork. One individual from SFMOMA thought that museums could provide and use

iPads in lieu of our large-print label notebooks....[because with] some programming you could turn an iPad into something where when a person walked into a gallery there would be a picture of the gallery on the iPad which showed the various pieces of artwork, [and] you could have a picture next to the art label...

Another participant from SFMOMA was excited by the idea of

A digital device that would maybe show you an image of the piece of art you're looking at so you can maybe zoom in on certain details or you can zoom in on the text, and read it but still also have the full-scale physical thing in front of you....

One individual from the Guggenheim expressed that "we're very fortunate as visually impaired people to be living at this time" because of all the "technology assistance" that is available.

Tactile interpretation opportunities

Twenty-four of the blind and low vision participants commented on the positive experience of touching objects at museums. Indeed, participants in all six of the focus groups indicated that touching objects allows them to gain a richer perspective of the art. As one participant in Brooklyn explained, "If you take me to a house made of bottle caps... and I can feel it, now you're fascinating me, but if you describe it to me, I'm going to fall asleep on my feet." For her, after "five minutes of a description...it's over." A participant from MFAH also felt that going to museums without touch experiences can be very unsatisfying. As he said,

My history of visiting museums, on a personal level, has not been that exciting, because most of the museums I've been to you cannot touch anything, and me not having any vision that's the way I see.

An individual from Brooklyn questioned "how could anyone experience the exhibition if you can't touch or see it...?" Another participant from IMA emphasized that there "needs to be more touchable, more touchable" opportunities at museums.

Although one participant from Brooklyn explained that she has "never been to a touch museum yet," several participants shared fond memories of past touch experiences in museums. One individual from Brooklyn recalled how,

I never knew how long and sharp alligator's teeth were and I put my hand in the alligator's mouth and it went all the way to my elbow... it blew me away. All these years I've been reading books, little stories when I was a kid, and they all tell you alligators are nine feet long, bears are like this, but once I went and touched it – it made it believable.

One participant from the Guggenheim described a behind-the-scenes tour as "one of my favorite experiences in the world" because he "got to touch fossils." This participant also discussed the power of touching authentic objects, and told the group,

I was in Greece last September and I got to touch the marbles in the Parthenon, because I'm visually impaired. And it was my way of experiencing something that's been there for two and a half millennia. It was a really incredible experience to do that. I don't know that it equaled the experience of my sighted counterparts, but it gave me own personal experience that was really rich. It was very moving.

One individual from Brooklyn recalled memorable experiences where staff allowed her to touch objects even though visitors are "not supposed to touch things." Two individuals from Brooklyn explained how they "get a lot of info from the gift shop" since they can touch the items there. As one individual described,

"The first thing I do...when I leave the museum is [go] directly to the gift shop. I do [this] because I want to touch the things I've seen. For example, I was at the Heard Museum in Arizona recently, and they had a display of Kachina dolls but they were all behind glass, and I asked if there was any way I could touch one but they said no. I went to the gift shop and lo and behold we went to the gift shop, and they had Kachina dolls for sale. So I was able to actually touch different ones and friends that were with me were just going through the dolls, picking them up and say, 'Here's one like what we were seeing behind glass,' and so it goes, with a lot of the things that we looked at with a lot of the things in the museum that were behind glass they were able to do that with me."

Although many participants understood that touching objects can pose problems for certain materials, they gave suggestions for ways to incorporate tactile possibilities. As one participant from MFAH said, "I understand both sides of that story, some of the stuff could get broken and it's irreplaceable. But I've seen a few places that have this – not the actual object but a model of it." Another participant from Houston agreed that when "the actual is too precious" perhaps "some kind of model" would work. However, one SFMOMA lobbied, "I think touching is very important. I think that those [no touching] rules need to be bent." One participant from the Guggenheim suggested having tactile examples of "a specific [artistic] technique" for "people who cannot see…what the artist was doing" would be helpful. One participant from Indianapolis urged the museum to consider haptic technology, which he described as a special "type of touch screen" that could help visitors tactilely explore digital models of exhibits and works of art.

Several participants described how touch models would assist their understanding not only of artifacts but of the larger museum space. One participant from Indianapolis described himself as "a lover of scale models, if [I] could snap my fingers and have a scale model of everything [I] would do it; people, buildings, cars." A participant from the Guggenheim expressed how he is "a big fan of tactile floor mapping. … It spatially orients you … if a scale model can give me anything near that it would be really wonderful." An individual from SAM also recalled using "a tactile map of the museum."

Potential programs

All six of the museums suggested potential programs unique to their institution to the focus group participants in order to obtain feedback from potential visitors who are blind or have low vision.⁷ In each focus group, staff members from the host museum provided a list of four to six programs for visitors who are blind or have low vision that their particular institution was considering implementing. Although each institution provided different program descriptions, in general, participants responded positively to:

- New tactile opportunities
- Special docent-led tours of the galleries
- Multi-sensory programs

Brochure options, including Braille handouts, and a special free access day were less well received by their respective focus group. The following descriptions provide insight into the participants' responses.

⁷Note: the full reactions to the programs proposed by SFMOMA were lost due to technical difficulties.

Many participants seemed to be attracted to the proposed hands-on opportunities. Both the tactile models as well as the art-making options were greeted with enthusiasm. For example, one participant liked the proposed hands-on *Arts of India* tour at MFAH because "it's the hands-on, not just mental picture." A participant who praised the proposed hands-on sculptural workshop at SAM said she "would love the ceramic sculpture thing" to gain a better sense of the current sculpture exhibit. One participant who favored the proposed art-making activity at the IMA said, "Selfishly I like that one because it would be the most fun to share with my children because they love to make art." An individual reacting to the proposed touch tour of Rodin's artistic process at the Brooklyn museum felt that that "if [I] could touch [a] Rodin that would be a more fascinating experience." "The opportunity to touch replicas" at the IMA was also seen as a positive option. Participants were interested in a tactile model of the Guggenheim and thought it would be "a really terrific idea" to learn about the orientation of the building. However, one individual from the Guggenheim voiced his opinion that the proposed "raised-line drawings... do not translate to blind people, even people who are born blind. It's a nice little coloring book image that's a waste of money."

The various multisensory programs that were proposed by the museums were also received positively. For example, the verbally described tour of the European painting collection at Houston that incorporated music was seen as a strong potential idea. As one participant explained, "I think pairing music with art is a good idea." The multisensory tour of the African collection at Brooklyn was also rated favorably by participants. One individual said the description "sounds so inclusive" since it used music and objects. Participants at the IMA were interested in the audio description of a dance performance, yet were concerned that they would not be familiar with specific dance terminology. Several participants agreed that "it probably would be very helpful if … a few minutes before the performance would start, the artist could describe some of that or define some of that terminology so that people would have a little bit more of a grasp …."

The descriptive tours, too, were met with interest. Participants at SAM favored the tour which focused on certain parts of the collection versus the general overview because it highlighted one "type of art." Participants suggested rotating the topic of this tour and offering it several times a year. As one participant at the Guggenheim summarized, "I think there's a general consensus that an audio tour [or] description is something that would be very beneficial."

The Guggenheim's proposed informational brochure detailing services and activities for visitors who are blind or low vision and the Braille exhibition handout with label text were met with less enthusiasm. Although these options intrigued some participants, others found them to be ineffective. One participant from the Guggenheim said, "I like the big brochure because I still have some of my vision. I often go to the museum on my own." However, one individual from the Guggenheim focus group felt that someone would have to read the brochure to him and that "the last thing [a companion would] want to do is sit and read a bunch of stuff." Others asked questions about the brochure such as, "Would it include a description of the physical layout?" and "How would I know that you have a brochure at the desk?"

SAM's proposed free access day option, although appealing to some, brought up significant concerns for others. Participants were especially worried about being isolated from the general public. One participant did explain that this option was "an excellent way to orient and hook people...[into] wanting to come back." However, several participants voiced their anxiety about this type of event. As one participant said, "I have a problem with that isolation and the idea of making, you know, a special day for special people....those kinds of things you put in place for a day like that, why can't they be there all the time? It just does not make sense to me." Another described how she would "rather be there with the kids and the grandmas and everybody.... part of being at a museum is coming and enjoying the, the hubbub...."

Summary

In summation, programs and accommodations were discussed across all six focus groups. During these discussions, individuals explained that blind and low vision visitors would have greater access to museums if multisensory experiences were offered. Audio experiences could be provided through various technology options such as audio guides and digital devices. Hands-on learning opportunities, such as art making, exploration of art materials, and workshops with artists were mentioned. Several participants recalled tactile experiences of models and authentic art objects with fond memories and explained how architectural models can provide a sense of the museum's layout.

While audio guides can be extremely useful, several participants were quick to note that these guides have several drawbacks for visitors who are blind or have low vision. Many participants also insisted that museums should pay greater attention to exhibition and architectural design details that negatively affect blind and low vision visitors. Due to poor contrast, lighting, and convoluted spaces, wayfinding in a museum can be difficult for members of this community. Also, when in front of artworks, lack of lighting and poor label and wall-text legibility can also inhibit their experience.

When participants gave feedback on the museums' proposed programs, they repeated many of the above ideas and were enthused about tactile opportunities and multisensory programs. Docent-led verbally described tours were also seen as exciting options. However, the suggestion to have a special access day was met with considerable concern from one focus group, as participants wanted to be treated like other visitors, enjoy new exhibits with their sighted friends and family, rather than be invited to a museum on a "special day" and segregated in a "special group."

Implications and recommendations

Although there were trends in the participants' responses, it is clear that people with vision loss have diverse opinions about valuable museum programming and accommodations. In order to increase accessibility to the blind and low vision community, museums will have to consider more than just one strategy when reaching out to these visitors. For example, a combination of tactile and audio programs may be necessary to turn museums into engaging and enriching environments. Moreover, museums will need to consider changes they can make to their exhibit designs and architecture that will allow participants who are blind or have low vision to have better, safer experiences within museum spaces. As participants explained when they spoke against the proposed special access day, blind and low vision visitors deserve every-day support that will allow them to enjoy museum experiences along with others.

These findings suggest that the addition of descriptive audio guides, when well-deployed, could significantly enhance the accessibility of a museum. Strong audio described tour options would be those that would help blind and low vision participants obtain information without having to visually locate and type in numbers, as that aspect was a particular frustration about this technology. Visitors with low vision also expressed interest in having programs for their iPads and digital technology that could help them experience exhibits. Research into digital applications and other similar programming for exhibits could be an especially rich area for museums to investigate.

Participants also expressed a strong interest in tactile opportunities and encouraged museums to incorporate more hands-on experiences. As participants who are blind or have low vision themselves acknowledged, although interaction with original objects provides a powerful experience, they do not always expect to touch original artifacts and often would be pleased to explore models. In fact, some participants found and explored models and replicas in museum stores in lieu of a proper touch tour. The focus groups discussed a wide array of ways museums could include tactile components, including architectural models, replicas of artifacts, tangible examples of art techniques, examples of artists' tools, and even art-making experiences.

In order to improve wayfinding, museums might consider any changes or additions they could make to existing design layouts and signage. Entrances, amenities, and exhibits need to be clearly marked and easy to get to. Brochures and audio guides also need to provide information about the each museum's physical layout. Visitors with low vision stressed that high-contrast labels with larger text would allow them to read exhibit information. Exhibit designers who focus on label and wall-text design might be especially interested in these recommendations. Furthermore, museums need to understand how disappointing an experience can be if lighting denies visitors the opportunity to experience the artwork or read wall text. Museums can certainly draw upon the wealth of ideas that the focus group participants suggested so that museum experiences can become more comfortable and engaging for blind and low vision visitors.

PARTICIPANTS' DESIRED OUTCOMES

During the focus group conversations, participants frequently emphasized what they wanted from or valued about a museum experience. For this report, these desires were identified as outcomes that participants who are blind or have low vision hope to gain or experience during a museum visit. These outcomes, while not based on a given set of museum-specified goals, are participants' expectations for museum visits.

The focus group participants highlighted, in particular, the importance of:

- Being socially involved;
- Being intellectually and emotionally stimulated;
- Feeling welcomed;
- Being enabled to explore independently; and
- The universal appeal of accommodations.

The subsequent sections provide examples of participants' desired outcomes and their belief that many accommodations made for visitors who are blind or have low vision, in fact, benefit all.

Social experiences

Although one individual from SFMOMA explained that she visits museums alone or at least "tends to walk around by [herself] because that way [she] can really focus on the art," multiple participants across all six of the focus groups underscored the social aspect of a museum experience. Indeed, 18 individuals mentioned that spending time with others was a major motivation for planning a museum visit. As one individual from Houston described, "[My] main reason for going to a museum … is for socialization…to be with [sighted people] while they're doing something." A participant from SFMOMA also explained that she usually goes to art museums for social reasons "because [her] friends [might] want to go for a particular exhibit that they are excited about." A participant from Brooklyn commented that, in fact, he has "never gone to a museum alone." One participant from SAM stressed that an ideal experience for her would be "to come to the museum very comfortably and freely with [her] grandchildren."

A few participants voiced that they enjoy interacting with strangers they happen to meet at museums. As one individual from SAM noted, "I love hearing from the other people on the tour, what they're seeing, 'cause it really brings the picture, and it brings up questions." An individual from Brooklyn explained that he "find[s] that a lot of people are willing to talk, not to guide, but just to talk about a painting...."

When commenting on the social experiences that take place in museums, a few participants emphasized how they rely on companions to read the labels for them or help them through the space. As one participant from Brooklyn explained, "I use someone's arm when I go to the museum, and ... they can [also] read the label[s] to me." One individual from the Guggenheim describe how "having that experience of being here with our group makes me want to come back

to a specific exhibit to explore it on my own or with someone who has a little more vision than me that also has an interest."

Not only did the blind or low vision participants usually come to the museum with friends, family, or an organized group, but also 12 participants commented on how afterwards they conversed with others about their visit. Although one individual from MFAH felt it can be difficult "talking about the exhibit afterwards," especially if he has not had an opportunity to have a tactile experience with the artwork, a few participants described how they enjoy reminiscing about their trips. For instance, one individual from SFMOMA said,

[I bring] home materials that have some of the pictures and representations of what [I] saw... home to my friends who can see even though I can't see the detail...[because] it's sharing that experience and maybe getting a little more out of your experience post-visit from what others are telling you.

Another individual from SFMOMA also explained that she brings home "postcards" because they are "pocket-sized carry-able art that you can share with people."

In addition, nine participants in five of the focus groups emphasized how they can be great advertisers for museums after their visit. A participant from SAM explained, "If we've had a fabulous experience that's been welcoming and accessible and enriching, we're going to go out and tell everybody we know about it...." As one participant from the Guggenheim noted, "We're not [just] talking to low vision and blind people, but to people in our community who have vision." An individual from IMA explicitly said he tries "to express to others what I have come in contact with or been exposed to and in any way if they have interest, encourage them to go investigate it for themselves." However, one participant in SAM countered that if visitors "have [a] negative experience" then that "reality" will be what is shared with others.

Educational and meaningful art experiences

During all six focus groups, participants emphasized their interest and pleasure in learning about art. Specific exhibitions or content, in particular, were mentioned by ten individuals as a reason to come to museums. As one participant from SFMOMA explained, "I just know there's a particular exhibit that I want to go to there [and see] and I'll simply go." One participant from MFAH similarly commented that an exhibit "would have to …pique my interest" before she went to a museum.

Moreover, seven participants described how a museum visit sometimes encourages them to continue learning about a topic. As one SAM participant stated, "I often find myself wanting to get more information about the show. I'll have questions, or want to know more about an artist, or a period of time....I'll do a little bit more research...." An individual from SFMOMA also commented on the fact that "there will be a piece or a particular artist that I've learned about that day and want to learn more about, so [afterward] I'll sit down and do research on what I've learned." Two individuals from SFMOMA described that reading exhibit catalogues at home is

one way they "prolong the experience" since they can either read the labels or look more closely at the artwork.

Besides describing the high value they place on learning at museums, several participants also searched for words to express their meaningful intellectual, emotional, and aesthetic experiences with art. As one individual from IMA explained, "What I look forward to finding in museums [are] those unexpected deeper meanings." Another participant from IMA emphasized that learning about "what [artists] were experiencing, what [artists] were feeling, or what feelings [artists] were trying to convey in the color and conception" of a particular piece let her "be part of the moment." One SFMOMA participant described how "art for everyone is very different and a very personal experience" and that she "love[s] to revisit the same piece over and over again with different people who can describe [the] pieces to me" since "the magic of art is interpretation."

Feeling welcome

Throughout five focus groups, participants expressed a strong desire to feel welcomed at museums and have a sense of belonging to a museum community. Individuals from SFMOMA were especially vocal about this topic and several expressed doubts about whether or not museums currently offer pleasant and inclusive experiences. They also stressed that their experiences are influenced by the fact that in the past their community was singled out and given unequal treatment in public spaces. The museum experiences participants described seem to especially touch on participants' dignity and identity.

One individual from SFMOMA explicitly said, "I stopped being a member here because I felt not welcome." Another individual from SFMOMA explained, "I don't want to be in people's way and I don't want to wait for them to go until the coast is clear. I want to enjoy the museum... to the same extent as everyone around me." To her, "feeling welcome... goes right back to that dignity issue again of being treated as a human and not a child or a moron just because we're blind." One individual from SFMOMA agreed and said, "I think for me the most important thing in making an art museum experience pleasant and something I'm going to want to do again is the courtesy and basic human caring and nothing fancy or extra...." This individual admitted to the group that "I didn't really realize how angry and frustrated I felt about museums and how hard it's been for me until I was here listening to other people, because it has been really hard."

An individual from SAM explained her hesitancy to visit museums because "I don't trust that they're going to be prepared for a visually impaired person, and often they're not." Another individual from SAM explained that inaccessible museum experiences can be "very unsatisfying" and that "[i]t ultimately comes down to the fear of disappointment. Fear of... not getting the experience that you know is possible to get." A participant from MFAH expressed similar feelings and said,

I'm in a relationship with someone who is totally blind like me, and we want to come on a date to a museum, but we haven't done it because we're not sure

what's going to be there when we get there, what kind of experience we're going to have.

A Brooklyn participant shared that he doesn't "want to do anything different than someone who was totally sighted would do" when he visits the museums.

One participant from the Guggenheim felt that the focus groups were taking an important step towards making museums more accessible to the blind and low vision community; "I cannot thank you enough for thinking about 'us'; the very act of thinking about us is opening a door." An individual from SAM was also pleased that the museum was asking for their opinions and said, "if you implement most of the idea[s] we gave you, and we know that we can come, we can enjoy, we're welcome, we're accommodated—[then] yes, I want to come more often, I want to be a member."

Independence

Some participants in four focus groups mentioned their wish to be able to access museums on their own. One participant, in particular, shared a positive memory of when she independently explored tactile elements at a museum. With a large-print brochure, this SFMOMA participant "went on my merry way and did the museum thing without any help and it was incredible. It was empowering." However, one individual from Brooklyn explained how she "find[s] it difficult to contemplate going on [her] own when it could be an experience in futility." One SAM participant was also intimidated by the thought of visiting a museum alone. As she said, "I might be interested in [going to a museum,] but I won't go if I think there won't be accessibility.... what I do is usually I wait for a group to go." An individual from SFMOMA also commented that she "would also like to come alone and personally interpret pieces, if … they were accessible." However, an individual from Brooklyn said, "I still tend to want to figure it out myself, but only when I can't make it, I'll ask for help."

A few participants talked about the possibility of taking part in museum programs that would give them the foundation to come back on their own. As one individual from the Guggenheim stated, "I like to be in a museum in a situation with people who have vision loss, getting to explore and then coming back and getting to build on it myself and having the accessibility for that." This participant emphasized that the opportunity to "go back on my own and get more intimate with the works I'm interested in" was particularly appealing.

Universally designed programs

Although not a significant topic of discussion in any one focus group, seven participants across four different focus groups did note that accommodations for visitors who are blind or have low vision could also positively impact other visitors. For instance, one Guggenheim participant felt that having artists give additional "background would be beneficial to both sighted and blind people." A few participants felt that certain technologies, such as audio guides, could be very useful for all visitors. As one participant from Indianapolis explained, "[E]ven my son and

daughter-in-law who have 20/20 vision, they felt that [an audio guide] added" to their visit. One participant from SAM who also felt that technology could enhance everyone's experience said, "[H]ow great it would be for everybody – everybody in the public to be able to push a button and hear the artist's own words about their process or the materials or whatever."

Two people specifically mentioned the term universal design and felt that museums could successfully appeal to a larger audience if they used this all-inclusive design approach. As one participant from SFMOMA who used this term said, "We're all smart in different ways and learn in different ways. Not only can [the programs] benefit us, but also ADD youth, people with dyslexia, they can speak to all sorts of people." The Guggenheim participant who brought up universal design cited that "we have an aging population" and that he "think[s] cultural institutions are really missing out and alienating people in a huge manner and they could be getting many more people." For him, floor lighting and low-contrast text labels, for example, seem "to be setting a barrier for the public. To the entire public."

Summary

During the focus group discussions, participants highlighted how social experiences and learning stem from their museum visits. Multiple participants noted that they relish spending time with friends, family, and even strangers while at museums. Several participants emphasized how their museum visits extend beyond the institution's doors when they talk with others about their trip afterwards.

Intellectually, emotionally, and aesthetically stimulating experiences were also stressed by some participants as an important outcome of a museum visit. Participants explained that their particular interests can be a motivating factor for museum trips and that sometimes they continue to research topics of interest after they leave. For others, it was the powerful and unique experiences with art that stood out as significant museum memories.

Several participants felt that they would be more willing to make the effort to visit museums if they knew museums could accommodate them. Many individuals believed that museums offer a less-than-welcoming environment for visitors who are blind or have low vision, and are therefore hesitant to visit. Although certain accommodations could enhance their time at a museum, several participants stressed that simply showing visitors who are blind or have low vision basic courtesy would be a desired improvement. If there were accommodations or ways to become acquainted with the building, a few participants explained that they would be keen to independently experience the museum. Moreover, some participants felt other audience groups may benefit from accommodations that would help visitors who are blind or have low vision such as the accommodations of multisensory experiences, useful technology, improved lighting, and high-contrast labels.

Museums should continue to listen to feedback from the blind and low vision community. As participants explained, they are great advertisers and will inform others about their positive and negative experiences. A few participants considered these focus groups to be an important step

towards making museums more accessible. Museums should be ready to continue learning about the needs and preferences of this audience.

Implications and recommendations

The focus group participants emphasized that they value museums since a museum experience can offer significant social and educational opportunities, but felt that they would be more likely to visit museums if they knew what to expect and felt welcomed in the environment. These responses indicate potential solutions that could help museums attract a larger audience of people who are blind or have low vision.

To begin with, museums may need to expand their understanding of what is important in a museum visit. For visitors, especially those who have experienced continued marginalization, the feelings of independence and being welcomed in an environment take on increased importance. Thus, when museums define the desired outcomes of their accessibility efforts, they may want to specify goals such as "visitors feel the museum is a welcoming environment" and "visitors feel a sense of independence as they learn in the space" since these statements reflect participants' desires.

Moreover, focus group participants indicated that visitors who are blind or low vision seek social learning experiences where they can enjoy the museum with family and friends—many of whom may be sighted. This finding suggests that museums may want to design accessibility programs and offerings that encourage visitors who are sighted, blind, or have low vision to explore the museum together.

Finally, it is important to note that visitors who are blind or have low vision value both social experiences and opportunities for independence. The underlying message from these participants is that these two experiences are not mutually exclusive. As participants explained, they may attend the museum with others, but do not necessarily want to be dependent upon their companions during their visit. Instead they want to experience the museum together.

IV. CONCLUSION

Museums have much to offer visitors who are blind or have low vision. During the focus groups conducted at seven art museums across the U.S., participants expressed that they valued their experiences in museums. Some individuals were professional and amateur artists, art collectors, and art aficionados, and art museums offer a way for them to connect with a topic that is an important part of their identity. For others, museums present opportunities for spending time with friends and family. Still for others, museums facilitate powerful learning experiences that generate excitement, new insights, and lasting memories, as well as provide avenues for concretizing abstract ideas, contemplation, and immersion, as these comments illustrate:

Conner Prairie [Interactive History Park], with the reenactments, people in character that don't leave that character so that you do, I get chills just thinking about it, you do get the feeling that – yes, I'm talking with these real people or I'm listening to and that could be part of this program. Here's an artist telling me what they were experiencing, what they were feeling, or what feeling they were trying to convey in the color and conception of this piece – whether it be painting of sculpture or whatever, breathing... am I getting across my point? Letting you be part of the moment. (*IMA Focus Group Participant*)

I went to a school for the blind when I was a child. And we were going to go the Museum of Natural History and on the ceiling there is a whale that's 90 feet long. The teacher asked, "Does anybody know how long 90 feet is"? So out come the yardsticks, so we got to go out just about to the library and we had dimension we had to work with, and wow, that's how long the whale is... (*Brooklyn Focus Group Participant*)

...Like the Egyptian exhibit, I just went because it happened to be in San Antonio when I was there. My friend and I wanted to do something [that] would bond she and I and my family together, and that was an avenue, that was a good choice. *(MFAH Focus Group Participant)*

While these experiences highlight the positive potential of what museums can be for visitors who are blind or have low vision, participant comments from focus groups also reveal another reality – one where museum experiences are not always positive, and at times are profoundly negative. A repeated theme across focus groups was that visitors who are blind or have low vision often feel unwelcome, and even worse, unsafe when visiting art museums. For some visitors, the absence of accessible experiences made them feel that museums were not worth the effort to visit – even when they were interested in the topic, such as this SAM participant:

When I first moved to Seattle, I called up the Seattle Science Center because I wanted to see the Lucy exhibit, and I called to ask if there was any way of... if they were, you know, prepared for that, and basically they just said no and that was that...I didn't escalate it at all because I was busy, and I had just moved here and I had a lot of other things going on. But I just felt like that was really kind of

a non-answer for me, although it was a clear answer, it was very unsatisfying. And, so therefore... I just didn't go.

Some participants see negative museum encounters in the context of discriminating stereotypes and misconceptions. Certain participants described experiencing a loss of "dignity" in museums or feeling like a "criminal" when reprimanded by museum staff who did not understand their needs, such as this SFMOMA participant:

I kind of would like to jump in here because this was something I wanted to touch on earlier. I was really glad [Participant 1] brought up the issue of criminality, and you just hit on it again with feeling like a leper and you shouldn't be in public, [Participant 2] hit on the idea of feeling you're standing in people's way and you definitely did too [Participant 3]... I don't want to be in people's way and I don't want to wait for them to go until the coast is clear. I want to enjoy the museum or whatever aspect of life I happen to be talking about to the same extent as everyone around me. That's why a Braille or a large-print label next to an item to identify it would be great but then having a non visual like a Braille or an audio version of the description so that I can step back and other people can enjoy the exhibit and I can take it in. So it became a big dignity issue for me so hearing this feedback from both [participants] about not feeling welcome it goes right back to that dignity issue again of being treated as a human and not a child or a moron just because we're blind.

Furthermore, participants also described how existing architectural and exhibition designs posed potential hazards that could lead to physical harm. The following quote from a SFMOMA participant highlights, for example, difficulties glass walls can pose:

I have filed a formal complaint against [a museum] about a disability issue after I was injured there and was bleeding when I walked into a glass wall at a dimly lit area that was not marked.

A Brooklyn participant also noted, "[T]oday I would have never found [the entrance], it was glass, so I had no idea, it was glass at the last moment."

The challenges described by visitors who are blind or have low vision are not insurmountable. Focus group participants offered potential solutions to the existing barriers to museum participation, many of which were based on experiences at museums that offer accessible programming and have staff trained to welcome visitors with low vision. They also responded positively to most of the programmatic ideas the hosting museums presented to them for feedback and consideration. Such reactions support the notion that it is possible to create museum experiences that offer positive experiences for visitors who are blind or have low vision.

While there are many actions museum professionals can take to make their institutions more accessible for visitors who are blind or have low vision, what is also clear is that no one single action will likely be sufficient. Focus group participants repeatedly expressed, sometimes explicitly through their statements and other times implicitly through their disagreements with

one another, that not all individuals who are blind or have low vision are the same. As such, museum should not build their program or staff training assuming that the needs of one individual who is blind or has low vision is a representative of the larger population. The blind and low vision population includes individuals with varying levels and types of sight as well as varying experiences with vision loss. In addition, just as with sighted visitors, visitors who are blind or have low vision have a diverse range of backgrounds, interests, learning styles, and experiences they bring with them to the museum, which shape the content they are interested in and the ways they wish to learn.

Further confirming the necessity for multiple solutions is the need for the overall organization to become more accessible and not just one particular area where accessible programming takes place. This was expressed explicitly by participants in comments such as the following from SFMOMA:

To me the museum is more than an hour and a half experience, so if I'm going to come out this way, I'm going to milk it, so yes, cafeteria, gift store, outside grass, hang out spots, all important, I'm just going to luxuriate in the world of art for as long as I can.

The need for the overall organization to be accessible and multiple museum departments to be trained in welcoming visitors with vision loss was also implicitly referenced in the range of museum areas participants mentioned as needing improvement. Participants highlighted the desire for all staff members to be aware of their needs, whether those staff members are docents, professionals working in the front of house, store clerks, group reservations, phone operators, or security guards.

Focus group attendees were interested in finding ways to visit museums when the location was not too crowded, and expressed that transportation and cost of admission can be a barrier for some. Participants also require information they can use to plan their visit that is available through either phone menus or accessible websites, as well as exhibitions and buildings that are easy to navigate and absent of potential hazards. In their discussion of interpretive approaches, participants sought tactile and other multisensory learning opportunities, as well as verbally described tours (delivered by a person or technology) that went beyond description to include content, background information about the artist, and sometimes even convey emotions and excitement about a work of art.

The prospect of creating an overall experience that is accessible for people who are blind or have low vision can feel daunting for museums that are just beginning to reach out to this audience. As museums move forward and prioritize areas for change, it may help to keep in mind the desired outcomes that are sought by visitors who are blind or have low vision – social experiences that are intellectually and emotionally stimulating, welcoming, and enable independence. Participants' comments suggest that creating an environment where people who are blind or have low vision feel welcome may be an important first step. Museums can offer an environment where these visitors can reaffirm their dignity and create or reaffirm their identity as art lovers, museum patrons, and equal cultural contributors. After describing her desire to "luxuriate in the world of art," this same SFMOMA focus group participant went on to express that what she most wants from a museum is to feel welcome and supported during her visit:

Sometimes, I've had it happen here a long time ago, but other places as well, I feel like a criminal because I'm getting too close to the art and the guards go, "Oh, she's five inches from the art!" (Lots of laughter.) I had a friend trying to describe a piece to me; we're up close, and she's trying to tell me, "Oh, up in this corner there's this," and I had a guard say, "Don't point at the art!" So I feel like a criminal sometimes when I go into museums, like I'm waiting for a force field I'm going to stick my nose in and it's going to go zap! So yeah, ways we can feel at ease, there's very few of us, we're not going to come in with Freddy Kruger claws and try to read Braille and slash the canvas, we're just trying to get close to what we want to know. We're here to learn like everybody else. We learn a little differently, and if we could have some sense of mutual support in that instead of being red lettered.

Focus group participants also remind us that changes that make the museum more accessible for visitors who are blind or have low vision may also enhance the experience for sighted visitors. Such an idea is supported by findings from studies of science museums (Davidson, Heald, & Hein, 1991; Reich, 2006) and is also exemplified in an exchange that took place between a museum educator and the participants during the Guggenheim Museum focus group:

Educator: I'm thinking of a brochure around what I do with groups that would allow someone else to pick up that role. It would be really good verbal descriptions, questions that relate to the descriptions. *Participant 1*: Why would you limit it to low vision and blind people? It's really just a good descriptive brochure for everybody. Where would you draw the line? [all in agreement] *Participant 2*: I'm sure everyone could benefit from it. *Educator*: It can be for all.

As museums move forward to create, expand, and improve access for visitors who are blind or have low vision, they may generate innovative practices that lead to enhanced experiences for a broad range of visitors – an outcome that will make the effort more than worthwhile.

Findings from these focus groups highlight the diversity found within the population of museum visitors who are blind or have low vision. These visitors, who have diverse backgrounds, needs, interests, and experiences with vision loss, also have had a diverse range of experiences in museums. Some experiences were positive and fruitful, while others led to negative feelings and decreased visitation. The conversations between museum professionals and visitors who are blind or have low vision that were facilitated through these focus groups were an important step in the process of generating more positive museum experiences for visitors who are blind or have low vision. Participants' insights and prior experiences for this audience and suggestions that, if followed, can lead to enhanced museum experiences for this audience and potentially others as well. Given the diversity of experiences and opinions amongst visitors who are blind or have low vision, however, continuing the conversation by conducting future studies and providing

opportunities for continued feedback as new accommodations or programs are developed or existing experiences are improved will likely prove to be a similarly valuable endeavor.

- Asensio, M. & Simón, C. (1996). The effectiveness of communicative instruments for blind visitors. *Visitor Studies*, *9*(*1*), 135-149.
- Axel, E.S. & Levent, N.S. (Eds.). (2003). Art beyond sight: A resource guide to art, creativity, and visual impairment. New York: Art Education for the Blind and AFB Press.
- Barnes, C. (1998). The social model of disability: A sociological phenomenon. In T. Shakespeare (Ed.), *The disability reader: Social science perspectives* (pp. 65-78). New York, NY: Continuum.
- Buyurgan, S. (2009). The expectations of the visually impaired university students from museums. *Educational Sciences: Theory & Practice*, 9(3), 1191-1204.
- Candlin, F. (2003). Blindness, art and exclusion in museums and galleries. *The International Journal of Art and Design Education*, 22(1), 100-110.
- Charlton, J. (1998). Nothing about us without us. Berkeley, CA: University of California Press.
- Chatterjee, H. J. (Ed.). (2008). *Touch in museums: Policy and practice in object handling*. Oxford: BERG.
- Chin, E., & Lindgren-Streicher, A. (2007). Designing experiences that enable all visitors to learn. *Informal Learning*, *85*, 1-6.
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: SAGE Publications.
- Davidson, B., Heald, C. L., & Hein, G. (1991). Increased exhibit accessibility through multisensory interaction. *Curator*, *34*(4), 273-290.
- Eriksson, Yvonne. (1998). "Tactile pictures. Pictorial representations for the blind 1784-1940." Acta Universitatis Gothoburgensis, Gothenburg Studies in Arts and Architecture, 4.
- Falk, J. (2009). Identity and the museum visitor experience. Walnut Creek, CA: Left Coast Press.
- Hetherington, K. (2003). Accountability and disposal: visual impairment and the museum. *museum and society*, 1(2), 104-115.
- Jennings, H. (1996). Focus groups with zoo visitors who are blind or have low vision: How can we deliver our messages to those who cannot see signs?.*Visitor Studies*, *9*(1), 171-175.
- Kusayama, K. (2005). Access to museums for visually challenged people in Japan. *International Congress Series*, 1282, 877-880.

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- Landman, P., Fishburn, K., Kelly, L., & Tonkin, S. (2005) Many voices making choices: Museum audiences with disabilities. Australian Museum Trust and National Museum of Australia.
- Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3), 279-300.
- Mazzei, L. (2004). Silent listenings: Deconstructive practices in discourse-based research. *Educational Researcher, March*, 26-34.Patton, M.Q. (2002).*Qualitative Research & Evaluation Methods*.3rd ed. Thousand Oaks, CA: Sage Publications.
- Poria, Y., Reichel, A., & Brandt, Y. (2009117-). People with disabilities visit art museums: an exploratory study of obstacles and difficulties. *Journal of Heritage Tourism*, 4(2), 117-129.
- Pye, E. (Ed.). (2007). *The power of touch: Handling objects in museum and heritage contexts.* Walnut Creek, CA: Left Coast Press.
- Reich, C. (2006). Universal design for computer interactives for science museum exhibitions. Paper presented at the National Association for Research in Science Teaching Annual Meeting, San Francisco, CA.
- Reich, C., Price, J., Rubin, E., & Steiner, M. (2010). Inclusion, disabilities and informal science learning. A CAISE inquiry group report. Washington, DC: Center for the Advancement of Informal Science Education (CAISE).
- Shakespeare, T. (2010). The social model of disability. In L. J. Davis (Ed.), *The disabilities studies reader* (pp. 266-273). New York, NY: Routledge.

APPENDIX A: PARTICIPANT RELEASE FORM

Contact: Christine Reich (617) 589-0302 creich@mos.org

Adult Participant Release Form

You have been invited to participate in a focus group for a group of museums led by Art Beyond Sight's Art Education for the Blind and the Museum of Science, Boston. This focus group, conducted by staff from [museum name], is intended to help art museums develop educational programs for visitors who are blind or visually impaired. To help ensure that we accurately capture your feedback, the focus group will be audio recorded.

The focus group will be audio recorded for research purposes. These audio recordings will only be shared with staff working on the project. You will never be identified name in the audio tapes, every reasonable effort will be made to ensure that your ideas and feedback are kept confidential, and pseudonyms (made-up names) will be used.

The focus group is intended to collection information so art museums can design more educational and engaging programs for visitors who are blind or have low vision. By collecting feedback about what you want from a museum experience, what encourages you to visit museums, and what discourages you from participating at museums, we hope to better design future educational programs.

If you do not wish to participate or be audio recorded, please indicate so below. You have the right to withdraw consent at any time and may do so and direct any questions, comments, or concerns about this project at any time to Christine Reich at the Museum of Science using the contact information above.

Consent for Participation andAudio Recoring (check one)			
□Yes,I agreeto be interviewed and audio recorded as detailed in the letter above.			
I do not agree to be interviewed and audio recorded.			
Your Name:			
Your Signature: Date:			

This form was approved as part of Protocol #2010.02 under IRB Expedited Review on 3/25/2010 and expires 3/24/2011.

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APPENDIX B: FOCUS GROUP PARTICIPANT SURVEY

[Museum name] focus group survey

Please help us to better understand who will be attending our focus group by answering the nine questions below.

 How often do you visit art museums? Put an x next to all answers that apply. Once every five or 10 years or less
 Once every few years
 Once a year
 2-4 times a year
 5 or more times a year

2. How often do you visit [museum name]? Put an x next to the answer that most applies.
Once every five or 10 years or less
Once every few years
Once a year
2-4 times a year
5 or more times a year

3. When was the last time that you visited [museum name]? Put an x next to the answer that most applies.
Never
Within the past three months
3 - 6 months ago
6 months to within the last year
1 - 2 years ago
2 - 5 years ago
5 - 10 years ago
More than 10 years ago
Not sure

4. With whom do you usually attend art museums? Put an x next to all answers that apply. Alone
With adults and children
With other adults only
With children only
With family
With colleagues
With friends
As part of a community group outing
Not applicable/do not attend art museums

5. Which of the following educational offerings have you experienced in art museums before? Put an x next to all answers that apply.
General guided tours
Touch tours
Audio guides
Large print labels

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Large print brochures Tactile models of artwork Lectures Hands-on art making

6. Which of the following educational offerings do you enjoy participating in at art museums? Put an x next to all answers that apply.
General guided tours

Touch tours
Audio guides
Large print labels
Large print brochures
Tactile models of artwork
Lectures
Hands-on art making

7. What is your age? Put an x next to the answer that most applies.

Younger than 18 18 – 24 25 – 29 30 – 34 35 – 44 45 – 54 55 – 64 65 – 74 75 – 84 85 or older

8. With what racial or ethnic group(s) do you classify yourself? Put an x next to all answers that apply.

African-American American Indian or Alaskan Native Asian-American Hispanic/Latino White, not of Hispanic origin Other – please describe:

9. What is your sex? Put an x next to the answer that most applies. Male Female

APPENDIX C: FOCUS GROUP GUIDE

Focus Group Guide:

Preferences, needs, experiences, and expectations of visitors who are blind or have low vision

Welcome and Introduction

- Thank participants for coming
- Introduce yourself to the group:
 - Your name
 - What you do at your museum
- Ask participants to briefly introduce themselves:
 - o Name
 - Why they came
- Purpose of the focus group:
 - To learn about art museum experiences for people who are blind/have low vision
 - \circ $\,$ To gather feedback from you before we develop new programs
- How focus groups will run:
 - One person speaks at a time
 - Honest conversation so both <u>positive</u> and <u>negative</u> comments are encouraged
 - No right or wrong answers
 - We want to hear from everyone here today!
 - Anonymity we will not associate your name or any identifying information with what you say today, and we ask all participants to keep this conversation confidential
 - If words you don't understand / speaking too fast / can't hear let us know
 - Bathroom location, other comfort considerations
- Questions?
- Introduce focus group outline:
 - First, we want to hear about prior or current museum visits
 - Then, we want to hear your thoughts about potential future museum visits

Focus Group Questions

We are going to begin with a set of questions about your current museum experiences

- 1. How many of you have been to [your museum] before?
 - a. Ask them to raise their hands if they've visited [your museum] before
 - b. Count aloud the number of hands raised [so that the group knows how many people raised their hands]
 - c. If some participants do not raise their hands, ask the group to raise their hands if they've visited another art museum, but not [your museum]
 - d. Count aloud the number of people who raise their hands again

- 2. Before you visit a museum, what do you do to plan your trip?
 - If participants do not discuss where they get information to plan their visit: Where do you get information about the museum?
 - From the museum
 - Website, phone call, radio or TV ads
 - From other sources
 - Newspaper articles, friends/family
 - If participants do not discuss how they get to the museum:
 Do you need to make any transportation or other arrangements?
 - If participants do not discuss who they plan trips with:
 With whom do you plan your visit?
 - If participants do not discuss helpful resources:
 What resources could the museum provide that would help plan your trip?
- 3. When you are visiting the museum, what do you do?
 - If participants do not mention any of the following elements, and your museum is interested in them:
 - Gift shop?
 - Cafeteria?
 - Participate in special programs?
 - Audio guides?
 - Visit specific exhibitions?
 - Take a tour?
- 4. What, if anything, do you usually do as a follow-up to your visit?
 - If participants do not mention any of the following elements, and your museum is interested in them:
 - Talk about the experience with others?
 - Continue learning about topic?
 - Go to the museums Web site?
 - Connect with other visitors you met at the museum?
- 5. In general, what prevents you from visiting this museum more often?
 - If participants do not mention any of the following elements, and your focus group is interested in them:
 - Price?
 - Location/convenience of transportation?
 - Lack of interesting programs/exhibits?
 - Lack of accessible programming?

This second set of questions relates to possible future experiences in art museums

- 1. Describe what an ideal experience for you would be like in an art museum.
 - If participants do not discuss visiting group: Who would you visit with?

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- If participants do not discuss specific experiences: What would you experience during your visit?
- If participants do not discuss what they would like to learn: What would you learn during your visit?
- If participants do not discuss interactions with staff or other visitors: What types of conversations would you have while in the art museum?
- If participants do not discuss issues of physical comfort: What services or accommodations would the museum offer that would make you feel physically comfortable? (Resting places, restrooms, temperature, etc.)
- If they do not mention how they go through the museum: During your visit, would you take an organized tour or view the galleries on your own/with your group?
- 2. Describe the worst possible art museum experience you could imagine.
 - If participants do not discuss visiting group: Who would you visit with?
 - If participants do not discuss what they would or would not experience: What would you experience or not experience during your visit?
 - If participants do not discuss what learning opportunities they would miss: What wouldn't you learn during your visit?
 - If participants do not discuss interactions with staff or other visitors: What types of conversations or interactions would you have that would upset you while in the art museum?
 - If participants do not discuss issues of physical comfort: How might the museum make you feel physically uncomfortable? (Resting places, restrooms, temperature, etc.)
 - If they do not mention how they go through the museum: During your visit, would you take an organized tour or view the galleries on your own/with your group?
- 3. I'm going to describe [three or four] different kinds of programs [your museum] might develop in the future. We'll then go through each example one by one, and I'll ask you what you like most and least about it.

[Examples are below – each museum will write their own, Christine & Anna will review the descriptions at least a week before the focus group]

- A verbally described tour of our watercolor collection that includes touch exploration of the artist's process tools, such as brushes, paints, paper, etc.
- A series of sculpting classes inspired by Greek ceramics.
- Exploration of Rodin's work through touch, scale models, and reenactment.
- A verbally described tour of our furniture collection with touchable scale models, carvings, and tools.
- Verbal descriptions of multi-media installations that explore environmental issues followed by a discussion or artist talk.
- [For each program, re-read description and ask:]
 - What did you like best about this program? What did you like the least?

- 4. Out of everything that has been discussed here today, what are some of the experiences [your museum] could offer that would make you want to...
 - a. Visit again?
 - b. Bring family or friends?
 - c. Become a member?

Conclusion

- Thank participants again for taking the time to provide you with feedback
- Share information with the group about any existing programs or exhibits you think they might be interested in [Note: DO NOT do this before the focus group begins or during the focus group discussion]
- Encourage them to contact you again if they have any further suggestions or questions.

APPENDIX D: FOCUS GROUP CODING SCHEME

ABS Focus Group Coding Scheme December 22, 2010

This code description was created to guide the coding of focus group data collected at seven museums across the country. Coded data are entered into a table (see the attached coding scheme) The columns of this table represent the broad categories within which the participants were asked to describe their museum visits during the focus group: how they plan for their visit, what they identify as positive/negative aspects of a museum experience, what they do after going to a museum, and any reactions to the accessible programs that were suggested. The participants' introductions to the group and any other comments that did not fit previous categories were also coded in separate columns. The rows represent the attributes of the museum experience (or themselves) that these participants discussed during the focus group. The following descriptions provide information about each of the codes listed in the rows and columns.

COLUMNS

Planning- comments pertaining to a participant's actions before visiting a museum or directly upon arrival. This could include where they get information to plan their visit and/or how they get to the museum.

Positive/Ideal experiences- any actual and/or hypothetical experience or action that the participant found/would find enjoyable at the museum and/or useful in terms of accessibility.

Negative museum experience/Worst possible/Barriers- any actual and/or hypothetical experience or action that the participant found/would find uncomfortable or unacceptable at the museum. This also includes actual/potential barriers to accessibility.

Post museum experience- comments describing what a participant does as a follow-up to their museum visit. This could include talking with others about the experience, continuing to learn about the topic, going to the museum's website, and/or connecting with other visitors they met.

Program descriptions- comments pertaining to the specific accessibility programs presented by each museum during the focus group.

Introduction- participants' introductions to the focus group and other personal facts.

Other- comments that do not fit in the previous column categories.

ROWS

Logistics: Statements pertaining to the logistical aspects of the museum visit, including planning the visit, comfort, and non-accommodation, non-staff-facilitated or non-educational services. Beyond museum's control

Location & Transportation- comments referring to a museum's physical location and transportation options. This also includes participants' explanation of how they usually arrive at museums or got there that day.

Crowds- comments related to crowds at the museum.

Time and Effort- acknowledging that museum visits may require additional planning and thinking ahead; visiting the museum can be difficult because it takes extra effort; the ability to show up to a museum unannounced and still be able to have an enjoyable visit; suggested times and dates for programming.

Within museum's control

Café- comments associated with the museum café or eating in general.

Price- comments regarding costs of museum admission/membership.

Phone Service- comments related to phone calls made to the museum about accessibility issues/services.

Website- comments related to material presented on museum websites that specifically helps participants plan for their visit in advance and/or any accessibility concerns with this aspect of the website.

Logistics Other- comments that do not fit in previous categories.

Staff: Statements regarding any staff interactions at a museum.

Docents/Museum Educator- comments related to any docent and/or museum educator experience/action. This could include statements about programs such as art classes or guided tours since they are staff lead. This can also include mention of guided tours that have a hands-on component if the guided-tour is the overarching theme.

Front of House Staff/ Visitor Services- comments pertaining to the helpfulness, knowledge, tactfulness and/or professionalism of FOH staff and/or the visitor services department.

Security/Guards- comments related to all interactions with museum security personnel

Staff Other- comments that do not fit in previous categories.

Blindness: Statements that help us know what life is like for individuals who are blind or have low vision.

Description of background- comments about the participant's background including introduction comments.

Advocating for what you need- participants make statements about wanting to/having to advocate for accessibility in order to make the museum experience better for the blind.

Diversity within Blind Population- acknowledging different degrees of blindness and the varying demographics of the blind population visiting museums and/or participating in the focus groups. This can included comments made by individuals where they express why their needs are different than others' in the focus group.

<u>Programming/Accommodations: Statements about accessibility of the design of art/learning experiences in museums</u>

Technologies- mention of technologies aimed to enhance the museum experience for visitors who are blind or sighted and intended for use without a museum educator. This could include audio and/or visual technology such as audio guides, flashlights, and cell phone descriptions.

Exhibition & Architectural Design (incl. Way Finding)- comments describing the building's architectural design or exhibit layout. This also includes comments about a participant's ability to find his or her way around the museum, museum signage, lighting, and/or label text size. This could include comments where Braille is mentioned in the context of the exhibition design and/or labels.

Touch/Tactile Experiences- comments describing actual/hypothetical experiences where blind visitors can touch and/or use their hands in the museum. This could include instances where scale models, fabrics, or other tactile objects are mentioned. Participants' comments about touching gift-shop items are also included here.

Multi-sensory experience—comments that highlight a desire to excite more than one sense. For example, exhibits or programs that include vision and hearing opportunities or touch and hearing options.

Other Accessible Programming +/ Services or Accommodations- any other type of programming (lecture, organized meetings, tours) or non-educational service that the museum does/should do to improve accessibility that is not technology, exhibit design, touch, or docent/museum educator-related. Brochures for the blind population would be included here as

would specific Braille handouts. Comments related to website programming and/or website content that is specifically designed for people with disabilities could be included here.

Outcomes: Statements about the outcomes of their museum learning experience

Conversations/Social Experience- experiencing the museum with other people and/or discussing material presented with others; using the museum as a place to socialize. This also includes instances when participants explain if family and/or aids help them around the museum, or if they discuss attending the museum as part of a particular social group.

Art Experience/ Learning- comments where the participant places emphasis on learning new information at/from the museum or the museum's website. This could also include mention of a meaningful/spiritual experience they had with the art or any program at the museum.

Word of Mouth Marketing- participants indicating that they share their experiences with others in order to encourage them to visit museums or that they themselves were encouraged by others to visit.

Want to know the Museum is for them- the desire to feel included and comfortable when visiting museum.

Independence- wanting/being able to experience the museum without significant assistance from an aid or museum staff member.

Good for Everyone—comments that suggest all members of the public might benefit from a museum's specific initiative or program. This could also include statements where participants talk about an experience being inclusive for all.

Outcomes Other- comments that do not fit in previous categories.

APPENDIX E: FOCUS GROUP SELECTED QUOTES

Listed below are tables consisting of the categories developed when coding the transcripts and example quotes pulled from the data to help illustrate each code. In some cases, there were coding categories with no sample quotes to choose from, so they have been removed from the tables.

TABLE	1. P	lanning
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Code	Selected Quote
Logistics	
Location & Transportation	You know public transit, private transit, taxi, I'll take any and all of it to get there.
Crowds	I guess this sounds weird but I make sure I'm in an aggressive mood (lots of laughter) because people crowd in front of you and I need to be able to stand very close.
Time & Effort	But I don't wanna do all that work. I want it to be done for me.
Café	I go have lunch
Price	I don't think it's any more a factor for blind than it would be for a sighted person, the economic.
Phone Service	When we travel, I always call the museums in the area.
Website	Read on the internet as much as I can to see what exhibits are there, how long they are there, how many floors there are, if there is a fee.
Logistics Other	Whatever city I'm in, I go to museums.
0. "	
Staff	
Docents/Museum Educator	I always make arrangements for a private tour. That's the only way I am able to see a museum now.
Front of House Staff/Visitor Services	So to me the information desk is an important first desk to choose what else I do for the rest of the trip, and the information desk in my experience, like [someone] said, "Over there is a very big place," you know they're not as informational if you have a visual impairment.
Security/Guards	I have security guards help me go from room to room.
Blindness	
Diversity within the Blind Population	We're both totally blind. I think that makes a difference. [lack of something to touch prevents from going]
Blindness Other	We really, because Richard can't see the exhibits, we haven't been to the art museum in a couple of years I think.
Programming/Accommodations	I would first of all add we are interested in audio or tactile tours.
Technologies Exhibition & Architectural Design	You know, Nina, I guess I've been to the museums enough times so that I
(incl. Way Finding)	kind of know what to expect when I get here. I kind of know where the restrooms are, how to do this how to do that.
Touch/Tactile Experiences	I have never been to a touch museum yet, which makes me interested in doing that,
Other Accessible Programming/Services or Accommodations	So I think it is important to have accessible resources available when you walk in, and that information desk which is usually the first place I go, after paying a fee to enter, the next step to me is to ask the information desk "Do you have a Braille copy of the description next to the art pieces?"
Outcomes	
Conversations/Social Experience	Always with a group, I have never gone to a museum alone.
Conversations/Social Experience	Aways with a group, thave hever yone to a museum alone.

Art Experience/Learning	For me, for one, I'm not overly in to art, so it would have to be specific types of museums [in order to go]
World of Mouth Marketing	So I collect data usually word of mouth, [if friends want to see something]
Want to know the Museum is for them	I have not gone to Art Museums very much because when I've gone with groups of friends or classes it has been incredibly boring because not much to do
Independence	Now with George's program here it's started to be more like "oh there's some cool stuff I can participate in I don't have to wait for so and so to be available"

TABLE 2. Positive/Ideal Experiences

Code	Selected Quote
Logistics	
Location & Transportation Crowds	This location is perfect with the city bus and light rail. Advantage of galleries because they are not as crowded. you can be closer with the art in a less stressful environment
Time & Effort	Evenings might be good.
Café	Occasionally I have had food there once or twice,
Price	Right and the cost of donation that you would contribute at a museum would be no different from other social event if it is something you desire to do, like going to a movie.
Phone Service	This other day on the phone, I called to find out about where to meet and actually I pushed button for disabilities and there was somebody that I talked to, which I thought was really great
Website	Maybe the website ought to say, need to advertise more if you have guided tours, accessible programs.
Logistics Other	Yeah and keeping a number of local organizations, and keeping them informed I think would get the word out to, you got ACB, NFB and a couple of others I think where you can get the word out.
Staff	
Docents/Museum Educator	One of the best tours I ever took at a museum was when we went to the
Docents/Museum Educator	Frick with an expert whose experience and background made the tour very special for us.
Front of House Staff/Visitor Services	and they very kindly told me what exhibits were up and "Oh by the way I noticed you're visually impaired we have this large print brochure of all the touchable sculptures, and here's access to an audio tour for this exhibit, and are you good with maps? Because here's a huge map that's in high contrast if you want to see what's around you."
Security/Guards	Then she told me while I was in the gallery in her part I could get as close as I wanted and if she got in trouble she would deal with her boss, and that she was going to let me look at the art. And that was so nice, she started out yelling at me and she ended up apologizing and learning something.
Staff Other	Approach some of the art schools, even the art center (Broad Ripple Art Center) and ask for volunteer artists to come and to describe the paintings or to help the people.
Blindness	
Description of background	I've been to a museum in Alabama, we talked about, in Birmingham, that
	was very accessible to people with visual impairments and wanted to talk about that and um, was in, on a cruise ship tour, we we're one of the, although even though Douglass and me don't have guide dogs, we were part of a group with people with guide dogs who allowed in the Vatican.
Advocating for what you need	When I called DIA they had no program, no nothing. I volunteered to go in and walk with staff to let them know what people with vision loss want/need

Speaking Out on Art and Museums

Diversity within the Blind Population I know it's not fair for me to say that a museum shouldn't do it, [lecture] even if someone is totally blind they could still enjoy it if they had vision for a considerable amount of time. Blindness Other I do tours at the Jewish Museum. I'm partially sighted. I think it is important for all museums to get people who are blind to talk about the art. Programming/Accommodations Technologies At MoMA, I work on their audio tour, that is really a fabulous, it is so informative, it's the verbal imaging of paintings and sculpture. Exhibition & Architectural Design (incl. Way Finding) My ideal experience would be that A. First that I could find the entrance which be very nice, considering today I would have never found it, it was glass, so I had no idea, it was glass at the last moment. Touch/Tactile Experience It is not only visual, she involves all the senses. She does installations, video, performance art; every time you walk into one of her spaces there's arom, sound, light on your body. The only people who spoke about her art were blind. Other Accessible I've been to some really fascinating exhibits and a lot ofbecause it was geared to blind people, people with low sight, and I guess that's why I get a lot out of it. Outcomes I usually go with a friend, I should say I always go with a friend, If you have somebody who understands art or is passionate about what they are looking at, it improves our experience. World of Mouth Marketing Perhaps try to get our attention using Iris or some other newsline type media to when specific		
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them said, the local organizations. How do you plan on advertising these things?	World of Mouth Marketing	
Independence I still tend to want to figure it out myself, but only when I can't make it, I'll		
ask for help.	Independence	
Good for Everyone Make it a universal access thing. [brochure that all could use or take with afterwards].	Good for Everyone	
Outcomes Other To me the museum is more than an hour and a half experience, so if I'm going to come out this way, I'm going to milk it, so yes, cafeteria, gift store, outside grass, hang out spots, all important, I'm just going to luxuriate in the world of art for as long as I can.	Outcomes Other	going to come out this way, I'm going to milk it, so yes, cafeteria, gift store, outside grass, hang out spots, all important, I'm just going to luxuriate in the

TABLE 3. Negative Museum Experiences/Worst Possible/Barriers

Code	Selected Quote
Logistics	
Location & Transportation	catching 38 th Street to catch the return bus is a nightmare. I don't know if they have added any crossing signals it seems like if you are really trying to draw masses in there needs to be an audible signal.
Crowds	Having RP, being in a museum with a huge crowd is very, very difficult. I have to be able to approach a work of art as close as I'm allowed to, with a crowd that's difficult.
Time & Effort	But if you're to go to a museum, to a show in another city, and didn't have an opportunity to do any prep before you went, it can be a very cold and unsatisfying experience if you just go to see what there is to see without anything else.

Café	
Price	Also, I don't know the cost of the IMA, but I know some museums can be pretty pricy for admissions and everything. The people that are blind are low income.
Website	Um, but the Accessibility on Website is an issue, um as emails that you getum, there's too many pictures
Logistics Other	And another thing, I have my guide dog here and I, I mean, Jennifer told me when she dropped me off that there's no place for her to do her business out here I don't think, there's no grass, and when you have a guide dog and you go to these places you have to think about, well where is she going to do her business.
Staff	
Docents/Museum Educator	I should be able to know what they are talking about, I was in a museum where she wasn't paying attention to, she know where she was standing and knew what was suppose to be behind her but they changed the exhibits,
Front of House Staff/Visitor Services Security/Guards	And unfortunately a lot of times the people at the information desks are not the ones that know[what accessible resources are available] I feel like a criminal because I'm getting too close to the art and the guards
·	go "Oh, she's five inches from the art!"
Staff Other	Can I interject? Great. I think that we have some huge problems among partially sighted and blind. People are terrified about people who are losing their vision. It's one of the biggest fears.
Blindness	
Description of background	and I do feel that I think the biggest barrier for me now with museums is that I have to feel pretty good about myself that day, like I can face this,
Advocating for what you need	And I have filed a formal complaint against the Asian Art Museum about a disability issue after I was injured there and was bleeding when I walked into a glass wall at a dimly lit area that was not marked, I asked the museum to deal with it, I wrote a letter they blew me off, so I filed a complaint with the mayor's office of disability.
Diversity within the Blind Population	I've been blind since I was two years old, if it's nothing I can touch it makes absolutely no sense. However, blind people who have been sighted for a long time and lost their sight at one point that stuff is priceless to them.
Blindness Other	and we aren't hard of hearing, either! (laughter all around)
Programming/Accommodations	
Technologies	but me and Kim have been to a number of exhibits where they give you an audio device that is programmable and has numbers on the device, and you have to look at the exhibit and punch the number in and that is absolutely and inaccessible as not having the audio device.
Exhibition & Architectural Design (incl. Way Finding)	I have walked into buildings and fallen downstairs because I didn't have a description about building. If that happens when you're just starting out; it messes out the whole day.
Touch/Tactile Experiences	So now you can go through the tour but you have to have a docent with you and also that takes a timeline to set it up. [touching tour at Hirschorn in DC]
Other Accessible Programming/Services or Accommodations	The other thing, I guess a comment I would make, is that by the very nature of things, some art forms can be more readily made accessible than others. It will always be a challenge to make paintings accessible, it's a visual medium.
Outcomes Conversations/Social Experience	Also I have to go around with a sighted person [because audio guides don't

Art Experience/Learning	[For deaf friend] and, you know even for her, as a fabric artist, they did not have much there about the process, or what kind of paints were used or how many layers it took to get that effect. For, for her it was even a dissatisfying trip. So, um, yeah, that prevents me.
World of Mouth Marketing	In the same way, if have negative experience, that's what the reality is, you know, where we don't feel like coming, or we don't want to bring people
Want to know the Museum is for them	Like Kim or Edie mentioned earlier, getting the word out. Many people that live here in Indianapolis and even NYC, where I am from, they are blind, they get around the subway or the bus but they don't know about exhibits that exist.
Independence	That was not an answer to the question. I'm very adventurous, if you give me detailed enough instructions I will go and try to find it on my own and will, 8 times out of 10, instead of waiting ten minutes for someone to come down from the fourth floor when I could have already been there.
Good for Everyone	Talk about lighting on the floor, walking to the opera the lighting is abysmal and you watch these people, mostly who are 70+ trying to walk. We're really talking about universal design that's really the issue.
Outcomes Other	This has really been an interesting experience for me. I didn't really realize how angry and frustrated I felt about museums and how hard it's been for me until I was here listening to other people, because it has been really hard.

TABLE 4. Post Museum Experiences

Code	Selected Quote
Logistics	
Café	I go to the cafeteria!
Website	So I've been discovering and sometimes hoping that the same info is on the website so I don't have to take home all the paper, and like Lisa said research something that caught my attention, or a historic fact that corresponded with the piece of art.
Logistics Other	Actually, I always go for the sales in the museum shop
Staff	
Docents/Museum Educator	I get to experience the reaction of that with the people I'm with, if it's a particularly good lecture, I will let them know that and inquire if there will be other lectures in the future.
Staff Other	We did write a letter thanking them, but I don't think we've had any conversation since if they have kept that up or had any new exhibits.
Blindness	
Advocating for what you need	You should go back. Make them realize there are some things they have to depart from a little bit from actuality. [Tenement museum]
Programming/Accommodations	
Technologies	Would you go back with flashlight?
Touch/Tactile Experiences	The first thing I do by the way when I leave the museum is directly to the gift shop. I do because I want to touch the things I've seen, for example I was at the Heard museum in Arizona recently, and they had a display of Kachina dolls but they were all behind glass, and I asked if there was any way I could touch one but they said no. I went to the gift shop and lo and behold we went to the gift shop, and they had Kachina dolls for sale.
Other Accessible Programming/Services or Accommodations	Sometimes print is helpful as a take away. It can be more fun to read about it afterward.

Outcomes	
Conversations/Social Experience	I think also for me what's important is I love the catalogues, because I can share those with friends
Art Experience/Learning	A lot of times, in the past, I've picked a lot up print materials, and this is all the stuff I'm not going to learn now but I'll take it home, and then I'll be like Oh, that makes more sense!
World of Mouth Marketing	Our tours here at the Guggenheim are so good that we talk to a lot of people about them. We're very fortunate.
Want to know the Museum is for them	You go back to places that are warm and welcoming.

TABLE 5. Program Descriptions

Code	Selected Quote
Logistics	
Location & Transportation	We couldn't find a beaten path or I didn't notice a beaten path to the advantage point. So all I noticed actually was a lot of mud.
Crowds	And I like number, um 3, cause you're getting all that in one day and the public isn't there, you know that accessibility
Time & Effort	I like 1 because you don't need to wait for any specific exhibit you can come at any time.
Logistics Other	Frankly, you get that many disabled, sight impaired people in the same place at once, sounds just like a madhouseI mean it's very nice and very noble, but ugh, it would be difficult.
Staff	
Docents/Museum Educator	So, I would hate to see, um, audio described tours limited. Um, being a
Docents/Museum Educator	docent, I feel that it would be wonderful if any tour could be made into an audio guided tour.
Front of House Staff/Visitor Services	It would be great to have some people here that when you have large groups, they can direct people to the restroom or to the elevator, if they need help finding the restaurant, just something that um, it's hard to find people, if there could be some more volunteers.
Blindness	
Diversity within the Blind Population	I like most of themWould be useful for the many types of people who have different types of vision.
Blindness Other	There are so many great ideas that have been given. They will benefit all of us. I like just about everything.
Programming/Accommodations	
Technologies	I think there's a general consensus that an audio tour/description is something that would be very beneficial.
Exhibition & Architectural Design (incl. Way Finding)	I just think a model for architecture is a wonderful idea, but don't think it's going to be an answer for everything because it's not.
Touch/Tactile Experiences	make it 3-D instead because as you feel 3-D sculptures you get to feel 3-D you get the true appreciation of the sculpture piece as oppose to 2-D.
Multi-sensory Experience	Africa one because it sounds so inclusive, because you said there's music involved too, and seems extremely involved and interactive.
Other Accessible Programming/Services or Accommodations	How would I know that you have a brochure at the desk?
Outcomes	
Conversations/Social Experience	Selfishly I like that one because it would be the most fun to share with my

Speaking Out on Art and Museums

Museum of Science and Art Beyond Sight

	children because they love to make art and to make it with me. It would just be fun.
Art Experience/Learning	I like the idea of the workshops, creating art and again giving you access to the process but also giving access to people that they can be creative.
Independence	if you were to go out to it by yourself without the tour guide you have the opportunity to do it more individually, more independently if you wanted to so that when you came back, you can do it again without necessarily needing to have someone take you there,
Good for Everyone	but part of it is you're teaching the public how to interact with us. I hate that isolation.

TABLE 6. Introduction

Code	Selected Quote
Staff	
Docents/Museum Educator	Since their inception at the Whitney Museum, and I'm a docent at the Jewish Museum, and I've been there for 34 years I started when I was 12.
Blindness	
Description of background	I am from Art Education for the Blind, I have low vision and am a museum goer and am always happy to help.
Advocating for what you need	I'm interested in making the experience richer for people who can't fully see the art. And that's why I'm here.
Diversity within the Blind Population	Something else about blindness. Having retinitis pigmentosa, all this stuff that I see through the gravel vision, the wax paper. I have double vision. I'm color blind. My balance is terrible. So these are important for people who are planning shows for people who are partially blind, well whatever helps people like us helps everybody.
Programming/Accommodations	
Technologies	I like the audio guides.
Exhibition & Architectural Design (incl. Way Finding)	I've been involved in putting together exhibits, I've done some travelling shows with the Smithsonian and there's a real effort to make sure that the information you're trying to impart is easy to access for everyone.
Touch/Tactile Experiences	My interest here is frankly that I never go to museums because I find it boring not to be able to touch things, so if I know that a museum has a touch exhibit, but I also understand that it's only going to be part of the museum so I find it difficult not to be part of the whole experience.
Outcomes	
Conversations/Social Experience	I've been to the museum on occasion with my family.
Art Experience/Learning	As I have matured over the years I have gotten an appreciation for the history of what is being exhibited at the museum I'm going to
Want to know the Museum is for them	I was gonna mention just some of the, oh, I guess being a social worker, the feeling part always comes out and uh, I remember after I had my, my partial vision loss, I was really, um, I was nervous about coming here and being real disappointed,
Good for Everyone	it's not us who are blind or disabled everybody is at some degree, you know, they see different degrees, you need to include the population is growing

TABLE 7. Other

Code	Selected Quote
Logistics	

Time & Effort	You're always balancing. How much energy is it going to take from point A to point B and how much am I going to get out of it? So it's, it's it is a good question, but not just related to the museum class.
Logistics Other	In terms of the exhibits that there are? [responding to whether or not wants info mailed to him or online]
Staff	
Docents/Museum Educator	I had a couple of instances. In my job I get a lot of people coming to San Francisco who are blind or visually impaired and they're like what can I do? So the first thing I say is call Tish Brown and the Dee Young because if you give her some time she can set up a docent tour for you.
Front of House Staff/Visitor Services	But would you, if you find you can't make itwhat would you want them to do.
Staff Other	Over there is a very big place! (laughter) [interjects after someone is talking about planning a trip and getting info from staff at the info desk]
Plindnass	
Blindness Description of background	I've written other poems about other pictures that have been described to
Description of background	me, these are people that I get to know through these descriptions
Advocating for what you need	know someone who has done work for the Tenement museum. Will pass this on to her. Do have a program for the visual impairednext one wasn't that good. Will have another exhibit soon. You might get more out of italways looking for suggestions.
Diversity within the Blind Population	I'm interested in uh the sorta demographic aspect of our discussion and just curious about how, how blind youth, and blind kids and young folks are going to be included in this?
Blindness Other	You didn't have the stigmata?? (laughter) [responding to someone who said they don't always take their cane]
Programming/Accommodations	Did it hand around your neak? The accustication
Technologies Exhibition & Architectural Design	Did it hang around your neck? The acousticguide When shows are being planned, and it's different for museums of various
(incl. Way Finding)	sizesWhen I started going I already had a lot of information.
Touch/Tactile Experiences	Has anyone heard of MOMA's exhibition of nude people? Somebody got caught touching and he's banned for life.
Multi-sensory Experience	Yes [being in exhibition and hearing same story]
Other Accessible Programming/Services or Accommodations	would be happy to do that. But should tell you that AFB has a section Christa Earl – that's what they do and help people do the technical things to make them accessible.
Outcomes	
Conversations/Social Experience	So did you go by yourself? [asking someone about their Lucy exhibit experience]
Art Experience/Learning	In the past we've just wandered, seen the exhibits, and wandered out.
Good for Everyone	Why would you limit it to low-vision and blind people? It's really just a good descriptive brochure for everybody. Where would you draw the line? [all in agreement]
Outcomes Other	And I guess, when we're finished with all of this and you get all of your data, um, how will we know the, I would like to be on a mailing list so that I'm kept apprised of progress nationally,

APPENDIX F: FOCUS GROUP PARTICIPANT COMMENT TOTALS

<i>Total Participants (P): 57</i> <i>Total Focus Groups (FG):</i>	Planning	Positive/ideal experiences	Negative museums experiences/Worst	Post museum	Program descriptions	Introduction	Other
6		experiencee	possible/Barriers	experiences	accomptions		
			Logistics	oxponionoco			
Location &	P: 9	P: 8	P: 8		P: 1		
Transportation	FG: 4 ; H, SF, S, I	FG: 3 ; H, S, I	FG: 3 ; H, S, I		FG: 1 ; I		
Crowds	P: 2 FG: 2 ; SF, I	P: 4 FG: 2 ; G, SF	P: 7 FG: 4 ; G, SF, S, I		P: 1 FG: 1 ; S		
Time and Effort	P: 9 FG: 5 ; B, G, S, I, H	P: 5 FG: 4 ; H, SF, S, I	P: 8 FG: 4 , S, SF, H, G		P: 5 FG: 3 ; H, S, I		
Café	P: 3 FG: 2 ; SF, S	P: 2 FG: 2 ; H, S		P: 3 FG: 1 ; H			
Price	P: 2 FG: 1 ; H	P: 5 FG: 3 ; H, SF, S	P: 9 FG: 4 ; B, SF, S, I				
Phone Service	P: 10 FG: 5 ; B, SF, S, I, G	P: 1 FG: 1; S					
Website	P: 8 FG: 3 ; SF, S, I	P: 1 FG: 1 ; H	P: 1 FG: 1; S	P: 1 FG: 1; S			
Logistics Other	P: 11 FG: 6 ; H, SF, I, G, B, S	P: 5 FG: 3 ; H, S, I	P: 4 FG: 2 ; S, I	P: 1 FG: 1, S	P: 3 FG: 2 ; S, I		P: 6 FG: 4 ; H SF, S, B

			Staff				
Docents/Museum	P: 6	P: 24	P: 12	P: 1	P: 5	P: 2	P: 4
Educator	FG: 4 ; G,	FG: 6 , I, H, S,	FG: 4 ; I, H, S, B	FG: 1; S	FG: 3 ; G, S, H	FG: 2 ; G, B	FG: 3 ; G,
	B, S, H	B, G, SF					S, SF
Front of House Staff/	P: 4	P: 10	P: 6		P: 1		P: 3
Visitor Services	FG: 2 ; B,	FG: H, SF, S, B,	FG: H, SF, S		FG: 1 ; S		FG: 2 ; G,
	SF	G					В
Security/Guards	P: 1	P: 1	P: 7				
	FG: 1 ; B	FG: SF	FG: 4 ; B, S, SF, H				
Staff Other							
			Blindness				
Description of		P: 2	P: 2			P: 56	P: 10
background		FG: 2 ; S, B	FG: 2 ; SF, S			FG: 6 ; SF, S,	FG: 5 ;
						B, G, H, I	SF, S, B,
							H, G
Advocating for what you		P: 6	P: 2	P: 1		P: 10	P: 1
need		FG: 3 ; G, SF, H	FG: 1; SF	FG: 1 ; B		FG: 5 ; I, G, H,	FG: 1 , B
	_	_	_	-		S	
Diversity within Blind	P: 1	P: 5	P: 5		P: 2	P: 1	P: 4
Population	FG: 1 ; B	FG: 3 ; B, SF, H,	FG: 3 ; B, H, G		FG: 2 ; G, SF	FG: 1 ; G	FG: 2 ; S,
		S	_	-	_		G
Blindness Other	P: 1	P: 3	P: 5		P: 1		P: 13
	FG: 1 ; SF	FG: 3 ; I, G, H	FG: 4 ; I, H, SF, S		FG: 1 ; G		FG: 5 ; H,
							SF, G, B,
							S
To show shows a			ramming/Accommoda				
Technologies	P: 5	P: 27	P: 16	P: 2	P: 4	P: 1	P:8
	FG: 3 ; B,	FG: 6 ; I, G, H,	FG: 6 ; I, SF, S, H, G,	FG: 1 ; B	FG: 1 ; G	FG: 1 ; H	FG: 4 ; I,
	SF, I	B, SF, S	B P: 26		D: 4	P: 1	G, H, SF
Exhibition &	P: 2	P: 16	-		P: 4		P: 6
Architectural Design	FG: 2 ; B,	FG: 5 ; B, S, SF,	FG: 6 ; I, H, G, B, SF,		FG: 2 ; G, I	FG: 1 ; G	FG: 4 ; B,
(incl. Way Finding) Touch/Tactile	SF P: 5	H, G P: 24	S P: 4	P: 1	P: 27	P: 1	S, G, I P: 4
	FG: 2 ; I, B	FG: 6 ; I, H, G,	FG: 4 ; H, SF, S, B	FG: 1 ; B	FG: 6 ; I, H, G,	FG: 1 ; B	F. 4 FG: 2 ; B,
Experiences	Г. 2 , 1, В		га. 4, п, эг, э, р	Г. I, D	B, SF, S	FG. I, D	га: 2 ; в, G
Multi-sensory experience		B, SF, S P: 5			P: 10		P:1
wuru-sensory experience		FG: 3 ; B, H, G			FG: 3 ; B, H, I		F. I FG: 1; B
Other Accessible	P: 3	P: 19	P: 2	P: 2	P: 18		РС. 1 , В Р: 4
Programming +/ Services	FG: 2 ; SF,	FG: 6 ; I, G, H,	FG: 2 ; SF, I	F. 2 FG: 2 ; I, G	FG: 5 ; I, G, B,		F. 4 FG: 4 ; S,
Frogramming +/ Services	FG. 2 , 3F,	та. о , і, а, п,	T G. Z , SF, I	1°0. z , I, U			FG. 4 , 3,

Speaking Out on Art and Museums

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or Accommodations	G	B, SF, S			S, SF		B, H, G
Outcomes							
Conversations/Social Experience	P: 18 FG: 5 ; SF, S, B, H, G	P: 19 FG: 6 ; I, H, G, SF, S, B	P: 2 FG: 2 ; S, H	P: 12 FG: 5 ; I, H, B, SF, S	P: 4 FG: 2 ; S, I	P: 2 FG: 2 ; I, H	P: 2 FG: 2 ; S, G
Art Experience/ Learning	P: 10 FG: 4 ; G, H, B, SF	P: 17 FG: 6 ; I, G, H, B, SF, S	P: 3 FG: 3 ; G, B, S	P: 7 FG: 3 ; H, S, SF	P: 20 FG: 5 ; I, G, H, B, S	P: 1 FG: 1 ; H	P: 5 FG: 3 ; I, H, B
Word of Mouth Marketing	P: 1 FG: 1; SF	P: 2 FG: 2 ; SF, S	P: 3 FG: 2 ; SF, S	P: 9 FG: 5 ; SF, S, H, G, I			
Want to know the Museum is for them	P: 2 FG: 2 ; H, B	P: 7 FG: 4 ; G, B, SF, S	P: 6 FG: 2 ; S, SF	P: 1 FG: 1; SF		P: 1 FG: 1 ; S	
Independence	P: 4 FG: 3 ; G, B, S	P: 6 FG: 4 ; I, G, B, SF	P: 3 FG: 3 ; H, B, S		P: 2 FG: 1 ; I		
Good for Everyone		P: 7 FG: 4 ; I, G, SF, S	P: 1 FG: 1; G		P: 6 FG: 3 ; I, G, S	P: 1 FG: 1 ; S	P: 2 FG: 2 ; G, S
Outcomes Other		P: 1 FG: 1; SF	P: 1 FG: 1; SF				P: 2 FG: 2 ; B, S

APPENDIX G: INSTITUTIONAL FOCUS GROUP REPORTS

SAN FRANCISCO MUSEUM OF MODERN ART

The focus group at the San Francisco Museum of Modern Art (SFMOMA) took place on March 26, 2010, and was moderated by Nina Levent from Art Beyond Sight (ABS, formerly Art Education for the Blind). This focus group consisted of ten individuals including the sighted spouse of one participant. There were seven female and three male attendees, ranging in age from the late twenties to early seventies. Participant recruitment for this focus group was mainly done through the American Council of the Blind and its affiliates, and the San Francisco Lighthouse for the Blind and Visually Impaired. These groups, with strong existing connections to ABS, strove to recruit a participant pool that reflected the diversity within the Museum's local community. The focus group exhibited varying degrees of blindness with six participants having high-partial or partial vision and three with more severe vision loss. Although a majority of participants received services from the San Francisco Lighthouse, a representative of the National Federation of the Blind was also included

This group included many individuals who were regular museum-goers and lovers of art. Over half of the participants qualified as frequent museum visitors because they attended museums multiple times a year. In most cases visitors indicated they visited museums over five times a year. Many also visited art galleries, and some have been professional or amateur artists. Participants most commonly visited art museums with other adults or with friends. Although almost everyone had previously visited SFMOMA, some participants had been here recently and for others it had been years since their last visit. Attendees were excited about discussing access changes at the Museum because of their background in the arts and/or their involvement in the blind community.

The participants in the focus group recognized that their needs may not be the same as every individual who is blind or has low vision. They stressed the importance of providing different options for different individuals. As one person pointed out, "You really need to have a diversity of information sources; different people get information different ways... [it's] giving people a choice as to how they get information that I think is important."

Need for self-advocacy in museums

Two members of the group expressed the need for self-advocacy while in museums. One participant felt that advocating for himself and his needs was important for his own experience as well as the future experiences of others. Another had a more active history of self advocacy in arts institutions – she explained that when an incident in a museum was not resolved in a satisfactory way she "filed a formal complaint against the [other local museum] about a disability." However, one participant expressed the problem with constantly needing to advocate for ones' self in museums. As someone who was not as active a self-advocate, she explained, "I think the biggest barrier for me now with museums is that I have to feel pretty good about myself that day, like I can face this, no matter what happens to me while I'm there, I can deal with it. I

can deal with the embarrassment of having to lean over and read stuff. I can deal with guards that might not get it that I need to stand close."

Planning and visit logistics

This section focuses on participants' actions before their visit or directly upon arrival. Non-staff facilitated services that provide information about the museum and other factors related to participants' general comfort and planning are also addressed here.

Five participants reported using a website to plan museum trips. In addition, two people said they also used email listservs from specific museums to find out what shows were currently open. One participant specifically said that she did not use the web for planning as most of her visits were spontaneous; "I'm not organized enough like some people at this table to look online ahead of time and get a good idea of what to check out... for me a trip to the museum is almost an impromptu event." In addition, one participant would call the museum in advance of a visit to plan the trip.

In general, a barrier to museum visits that was discussed was the time and effort it takes to make a trip. Three participants brought up this issue, including one person who said, "Making time for [a visit] is the huge thing for me." An additional barrier discussed by two individuals was the cost of a museum trip. As one participant pointed out, "Cost is definitely a factor for that segment of the disability community that is low income." Another individual agreed and asked, "If you're having someone guiding you could they get in for free because they're assisting you?"

Participants also discussed how potential crowding can affect their decision to visit the museum, as well as their enjoyment of the visit. Three participants felt strongly that crowding negatively affected their museum experience, especially for those individuals with low vision who needed to examine a painting for a longer period of time from a close distance. As one participant explained, "It gets back to... not having people stepping in front of you, having enough time to look at a wall plaque and read it in your own time – that means a huge amount to people." Another participant elaborated, saying, "I make sure I'm in aggressive mood because people crowd in front of you and I need to be able to stand very close."

Interactions with staff

This section explores all past and theoretical interactions with staff members discussed by participants, including docents and museum educators, front of house staff, and security guards.

The focus group at SFMOMA featured extensive conversation on participants' interactions with museum staff members including staff at the information desk, security guards, and docents or educators. One theme that arose was the need for ongoing training for all museum staff – front-line staff, security guards, and educators alike. As one participant said, "There's absolutely no substitute for constant training of the museum staff to be sensitive."

One group of staff that was discussed at great length was security guards. A few participants shared several lengthy stories about past museum experiences with guards. As one participant pointed out, in many museums security guards may not receive the same training in working with visitors who are blind or have low vision as front-line staff. A common experience among participants focused around negative interactions with security guards after getting closer to the art than museum regulations allowed. As one participant explained, "I feel like a criminal because I'm getting too close to the art and the guards go, 'Oh, she's five inches from the art!'" Another participant shared a similar story but described how the negative incident with a security guard turned into an ultimately positive interaction as a result of her self-advocacy through conversation with the security guard. In this case, the visitor informed the guard of her disability and needs, and the guard in the end gave her unofficial permission to get closer to the works of art. As another participant observed, "I think the lesson there is that they're not bad people, they're just poorly trained people." Another participant emphasized how important staff are to an overall experience. As he explained, "How many people go to stores where the clerks are rude? If we go places where we are not going to be treated well, that takes a lot to get over." Another participant agreed, and said, "I think about the times when I stopped going to museums - I stopped going here for a long time because I thought people were pretty hostile at the desk, and the guards..."

Museum programming and accommodations

This section focuses on participants' discussions about accessible programming and design, which includes any type of programming or non-educational service or feature which could improve accessibility of the art museum experience.

This focus group also had a long discussion on the types of programs and format of programming they preferred. As the following examples illustrate, many participants expressed interest in more than one programming format, although they did differ in their preferences. Four participants were interested in audio tours. As one participant explained, "I would prefer to take in an audio format and the reason primarily being is that I am an adult learner of Braille, so my speed is extremely slow." However, one participant did point out a shortcoming of relying solely on audio tours, saying, "The challenge for me with the audio tour is that I can't see the silly number [associated with each work of art]." Three participants were also interested in tactile experiences. One participant recalled visiting a museum where you "could go on your own and experience the pieces touchably in the gallery; that was one of my best experiences."

As might be expected with the variety of vision loss experienced by focus group members, there were also varying preferences for the format of printed materials. Some preferred large print, while others preferred Braille. One participant expressed a preference for large-print materials over audio and said, "I like to read things if I can rather than audio. I'm more of a visual processor, unfortunately, more than an audio processor, and always have been." However, several expressed that having both types of materials would meet the needs of different audiences. As one participant explained, "My ideal visit to a museum [would] be that the pieces are labeled in Braille, preferably Braille or large print, to accommodate, both would be ideal."

In addition to talking about program format, participants discussed issues and preferences related to museum architectural and exhibition design. Two participants had past negative experiences with the architecture, design, and lighting of museums. One had difficulty distinguishing entrances which were glass doors, saying, "The clear doors are a problem, so I think that's an issue [with] the entrances, as to marking them more precisely that they're there." Another participant expanded on this area of discussion and said, "In terms of the architecture and the interior design of the museum, even the walls or the floor are often very low contrast and I'm sometimes worried I'm going to run into a sharp corner." Participants also commented on label legibility and contrast. As one participant acknowledged, readability is not always the main concern of designers: "In the museum, aesthetics are unbelievably important and most curators and museum staff would prefer there not to be any signs." One participant gave a general recommendation, saying, "Stick to high-contrast print, dark against light for not only the titles, but the content."

Feedback on potential programs⁸

The San Francisco Museum of Modern Art offered four potential programs for participant review:

- A verbally described tour of SFMOMA's painting and sculpture collection which would include tactile exploration of the artists' tools.
- A verbally described tour of SFMOMA's painting and sculpture collection with tactile reproductions of specific works.
- A verbally described tour of select special exhibitions.
- Large-print wall labels and exhibition texts that would be available at the front desk.

Two participants thought that all of the programs had different strengths and, therefore, felt all should be offered. One of these participants explained that these programs would appeal to different people and said, "You need more than one because you have people with different vision." Another participant advocated for the tour that would include a tactile exploration of artists' tools and mentioned that "a lot of blind people don't have access to art materials." An inclusive instead of an accessible program was suggested by one participant. She suggested that these programs should not be targeted only to visitors who are blind or have low vision, but that other visitors would benefit from them as well. Encouraging a universal design approach, she suggested, "Not only can [these programs] benefit us, but also ADD youth, people with dyslexia, [the programs] can speak to all sorts of people."

Outcomes of a museum visit

This section explores what participants hope to gain or experience during a museum trip. These outcomes, while not based on a given set of museum-specified goals, are what participants said they look for from museum visits.

⁸ Data for this section are not complete, as this portion of the conversation was not audio recorded.

Six participants discussed the importance of their museum visit as a social experience. As one explained, "For me it's usually socializing and talking with friends about the exhibit and the artist." For another participant, the post-visit was a social experience as well. As he explained, after visiting a museum "I'd discuss the content of the show, what it meant to me, and find out what it meant to other people who had seen it, compare notes." Another participant agreed, saying that she enjoyed, "bringing home materials that have some of the pictures and representations of what you saw. I like to bring it to my friends who can see even though I can't see the detail, per se. Again, it's sharing that experience maybe getting a little more out of your experience post-visit from what others are telling you." Another participant said that a museum visit is an entertainment experience, that is a "more than hour-and-a-half experience," it includes time at the "cafeteria, gift store, outside grassy spots." Yet another participant adds that her ideal experience is a full day at a museum.

However, for one participant, museum visits were individual aesthetic contemplative experiences. For him, "Most of the time I go alone, or even if I go with someone else, I tend to walk around by myself because that way I can really focus on the art - I'm not just chatting with [an]other person, which I love to do, but I'll do that when I'm eating dinner, not when I'm looking at art." For three participants, the follow-up to a museum experience had social aspects as well, as they found out about or shared with others their reactions to accessible museum experiences through word-of-mouth marketing.

Participants' experiences with art and the related learning were also mentioned by five individuals. Several participants discussed their meaningful experiences with art in the museum setting, and one participant also explained how she extended her learning experience at home to make up for inaccessible content at the museum; "I've been buying [catalogues] more frequently because I can take them home and look at them with my CCTV and read the labels I couldn't read in the museum." Another participant had a specific approach to getting his ideal art experience in a museum. As he explained, "The magic of art is interpretation; art for everyone is very different and a very personal experience. I love to revisit the same piece over and over again with different people who can describe pieces to me."

Three participants also expressed a desire to be able to independently access museums. As one participant said, "I would also like to come alone and personally interpret pieces, if I could, because they were accessible." Another participant shared a past museum experience at a different institution that stood out for her. Upon her arrival, she was given large-print educational materials to access tactile elements throughout the museum. As she explained, "I just went on my merry way and did the museum thing without any help and it was incredible. It was empowering."

Several participants simply wanted museums to be welcoming environments for them. As one participant stressed, "I think for me the most important thing in making an art museum experience pleasant and something I'm going to want to do again is the courtesy and basic human caring and nothing fancy or extra." Another participant agreed that feeling welcome was a key aspect of a museum visit, and said that, "I stopped being a member here because I felt not welcome."

MUSEUM OF FINE ARTS, HOUSTON

The focus group at the Museum of Fine Arts, Houston took place on April 25, 2010, and was facilitated by Nina Levant from Art Beyond Sight (ABS, formerly Art Education for the Blind). It included four male and two female participants between the ages of 30 and 65. Within this group, there were varying degrees of blindness. For example, one participant was partially sighted and another was new to having low vision. Participant recruitment for this focus group was administered by local advocacy groups with connections to ABS, such as the Texas Council of the Blind and the National Federation for the Blind (NFB), or agencies that provide services for people with vision impairment. Participants were excited about enacting access changes, particularly because the majority of them were affiliated with the NFB or other blind activist communities. Participant selections purposely included individuals with a variety of vision impairments and levels of art engagement. However, it was not required that attendees be current or active museum goers. Amongst this group, only one participant would be considered a regular art museum visitor (by attending once a year), while the others visited only once every few years or once every five to ten years. This was the first MFAH visit for two of the focus group attendees. Two participants reported usually attending museums alone or with family, while other individuals noted visiting with adults and children, with other adults, and with colleagues or with friends.

Four different participants in this focus group discussed the diverse needs and interests of individuals who are blind or have low vision. As one participant explained, "Don't assume experience with one blind person is the same as another. Some need a lot of instructions, some don't need too much; some need more attention, some don't need much. Ask if you can give assistance, don't assume." These differences in needs extend to all aspects of the museum visit. As another participant shared, "[Ease of transportation] depends on your experience, it depends on every individual's ability to get around."

Planning and visit logistics

This section focuses on participants' actions before their visit or directly upon arrival. Non-staff facilitated services that provide information about the museum and other factors related to participants' general comfort and planning are also addressed here.

Participants discussed a diverse range of issues related to the topic of visit planning and logistics. Two participants discussed how planning and executing a visit to the museum takes time and effort, which may be related to the large spread of the city of Houston and its public transportation options. One of these participants said, "It takes a certain amount of effort to get here, to find the place, and then get back." Issues surrounding transportation were also discussed more specifically with two people remarking that the museum was lucky to have easy access via public transportation, such as the individual who said, "The location is perfect with the city bus and light rail." However, another participant found public transportation more difficult to use and remarked on the need of explicit directions from the drop-off spot /public transportation stop to the one or the other of museums' interest, "Transportation is a bigger deal for the blind [...] You have to get extremely detailed directions to where it physically it is from the transit system."

While planning a visit was not widely discussed, despite a specific question related to the topic, a few participants did share different ways they found out about opportunities or exhibits of interest at the museum. One participant found out about new exhibits through the newspaper or radio while another found out through television stories. A third individual tended to look for this information through the museum's website.

Participants also discussed whether or not price would be a barrier for visitors who are blind or low vision who wish to visit the museum. One participant expressed concern that this might be the case for some individuals who are blind or have low vision while another disagreed. The dissenting participant explained, "I don't think it's any more a factor for blind [visitors] than it would be for a sighted person." Later this participant also pointed out the misconception that people who are blind are unemployed thus is not able to pay admission or can attend programs during the week. He suggested that the programs should be held on weekends.

Interactions with staff

This section explores all past and theoretical interactions with staff members discussed by participants, including docents and museum educators, front of house staff, and security guards.

Participants in this focus group generally described their interactions with staff in positive terms with a few exceptions. Five participants discussed interactions with front of house staff in positive ways, including one individual who said that ideally these staff are "accommodating and respectful." Another individual provided additional suggestions for assisting with wayfinding and introductory material and explained, "If people ask you, 'Would you like me to show you?,' that's a perfect approach." One participant did voice worries related to interacting with front of house staff, saying that some people who are blind or have low vision are "fearful to just show up at a place they have no experience with, that no one will meet them at the door and they'll be blundering about, which nobody wants to do."

One participant spoke about the different interactions museum staff may have with visitors who are blind or have low vision. He noted, "If you don't know anything about the space, staff needs to be immensely patient. [...] If I'm coming here and spending so much time here, I'm going to have problems because it's so big and I don't know it yet. If one blind person makes you annoyed," he added, "don't take that into account when approaching the next."

Docents, and docent-interpreted tours, were discussed in more mixed terms. These comments generally focused on docents' approaches to verbal description, in contrast with the concerns participants reported having about front-of-house staff, which focused mainly on feeling welcome and accepted. While three participants enjoyed tours led by docents, three other participants did not value their past experiences with docent-interpreted tours as highly. As one participant explained, in a guided tour he would have preferred a tour that had touch objects, not only verbal description, "I like guided tours but I can't touch anything. It was just someone going from place to place saying look at this, look at that, but I never got to experience it so I was bored. And I never came on my own or with family because the other experiences were boring."

Another participant, in speaking about a recent tour he took at a science center, complained about the tour guide lack of skill in giving a detailed verbal description, "Look, can you see this? Look, can you see that?" But," he said, "she did not give detail about what we were looking at. I'd like the person to give detail about what we are looking at." Another participant said, "I like guided tours, but you can almost do the same thing sitting on the couch and listening to a tape."

Three participants also discussed the positive ways in which museum staff members, in general, could make them feel welcome while two participants shared the negative effect that staff members could have on their museum experience. One of these positive comments was directed specifically at the staff at the Museum of Fine Arts, Houston, as one participant remarked, "The experience of the people who work here, how much fun they make it, [there is] enthusiasm among staff."

Museum programming and accommodations

This section focuses on participants' discussions about accessible programming and design, which includes any type of programming or non-educational service or feature which could improve accessibility of the art museum experience.

When discussing museum programming in general, tactile elements were the most frequently positively discussed approach. For one participant, the tactile objects extended his understanding of the work of art. He said, "Someone can describe it to me and give me somewhat of a picture, but having something hands on would help a lot." Another participant understood that having authentic tactile objects could be a challenge in an art museum, but suggested the use of replicas. He acknowledged, "I understand both sides of the story, some of the stuff could get broken and it's irreplaceable. But I've seen a few places that have this, not the actual objects but a model of it." Another participant, when talking about the effort it takes for someone who is blind to get to a museum, said there needs to be something in the museum, such as a model he could touch, to make it worthwhile.

One participant suggested that a guided tour might be more meaningful if the participants sit down and talk about what they've seen and heard after the tour. "Or maybe you do it at each time, the person giving the tours says this is what this is, then you access it with a model, large print, maybe even a Braille display, and they say, 'Let's talk about it. Is there anything you missed.... They make sure you had the full experience right on the spot and not later."

Audio guides were given mixed feedback. Two participants enjoyed regular audio tours and their descriptions. However, another participant said that audio guides did not allow him to have an independent museum experience. As he explained, "[b]ecause the audio guides are not positional, you have to tell it where you are, you have to go around with a sighted person to get anything out of it."

Issues with wayfinding within an institution were also widely discussed by participants who shared past problems with wayfinding in museums. Participants commented on being fearful of

place with which they were not familiar and having a greater comfort with public spaces that were explained to them. One participant described her worst possible museum experience as "being lost, wandering around never being able to access anything, just ending up getting frustrated." Another participant offered a suggestion to help visitors who are blind or have low vision get oriented to the museum. He recommended that museums could "[m]aybe have a time where people who are blind and have low vision could come and get a sense of what's where. Every once and a while, get a tour and a layout of what is here."

One participant also emphasized the importance of good label design for readability and comprehension. For her the size of the font was an important factor in readability and she added that "[m]ost places have all uppercase font, [and] it's easier to read if there is both upper and lower case font."

Feedback on potential programs

The Museum of Fine Arts, Houston offered four programs for participant review:

- An exploration and discussion of highlighted pieces from the Museum's permanent collection. This verbally described tour aims to create an image of the exhibit in the participants mind rather than simply typical narration.
- An exploration and discussion of a specific collection area, such as Impressionistic paintings, American Art, or Arts of Africa.
- A verbally described tour integrating hands-on materials pertaining to the Arts of India collection. The hands-on materials would help educate participants on the techniques used to create works of art in this collection.
- A verbally described tour of the European painting collection which pairs works of art with examples of contemporary music.

The most positively discussed program, which was reviewed favorably by all six participants, was the one which features the Arts of India and hands-on experiences with tools and techniques. As one participant explained, "It's the hands on, not just mental picture, but something you can put to touch to go along with the mental picture." The fourth potential program, featuring verbal descriptions of European paintings and contemporary music, was also positively reviewed by four of the participants. For many of these individuals, the music was a welcome addition to a verbally described tour.

The remaining two tours were less heavily discussed. The first program, which featured more extensive verbal description of the permanent collection, was discussed positively by two participants. The second program, which highlighted a specific area of the permanent collection, was mentioned negatively by one individual, who explained, "I'm afraid [the program] has no interest to me because I have not paid any attention to Impressionistic art."

Outcomes of a museum visit

This section explores what participants hope to gain or experience during a museum trip. These outcomes, while not based on a given set of museum-specified goals, are what participants said they look for from museum visits.

Several participants discussed the social outcomes of a museum visit. For one participant, the experience was nearly exclusively a social experience. As he explained, "[The] main reason for going to a museum I do think is for socialization with another group, sharing with sighted people, to be with them while they're doing something." Another said she'd thought of going to a museum on a date, but she didn't know what to expect and feared it might be a negative experience, so chose to go elsewhere. Yet another participant discussed the negative side to the social aspects of a museum visit when the experience itself was not accessible. This participant said, "It's kind of hard for us, like talking about the exhibit afterwards, for us to say, 'The sculpture in that exhibit was really great' when we didn't touch it or see it. A lot of people, when they come out they say, 'Wow did you see that painting.' The painting was irrelevant as to what it looks like."

For three participants, their museum experiences were mainly driven by the content of an exhibit. As one participant explained, the decision to visit was mainly based on seeing a specific exhibit, and a general drop-in visit was unlikely to occur. She said, "It would have to be whatever the exhibit is to pique my interest, would have the time to just stop what I'm doing to visit." For another participant, learning from a museum experience was related to the content of an exhibit. As he explained, "I'm afraid you don't get much out of the exhibit beside information itself. That's of interest to me, but I don't get much out of the physical objects." For two additional participants, the history behind the exhibition itself was of interest. As one explained, "The history behind a lot of it is what intrigues me."

One participant also discussed the importance of being able to have an independent experience when visiting a museum, and knowing that a museum was a welcoming, inclusive place. Another participant recounted a negative experience in this area and explained, "The first time I went to Washington, D.C., [I] went with someone who was partially sighted. [We] asked, 'Where is the capitol?' They said, 'That way.' That's not only not very descriptive, but it's borderline rude."

One participant, in summing up what she would like from a museum experience, listed "More hands-on stuff, models to touch, etc. An accommodating and respectful staff to blind people.... some regular time when blind people can take a tour and see what's available. If they could tell us what's coming up." Other participants echoed the importance of staff being welcoming.

BROOKLYN MUSEUM

The focus group at the Brooklyn Museum took place on April 29, 2010, and was moderated by an evaluator from the Museum of Science. This focus group consisted of three male and five female participants whose ages ranged from late twenties to early seventies. Participants were recruited for this focus group through individuals and/or local chapters of various advocacy organizations with strong ties to Art Beyond Sight (ABS, formerly Art Education for the Blind). Recruiters aimed to choose a group of people that reflected a mix of blindness, ethnic backgrounds, ages, and art interests from the Museum's local community. All of the attendees were residents of Brooklyn. For a couple of focus group attendees, this was their first time at the Brooklyn Museum of Art. Within this group there were also a variety of vision levels - some attendees had more recent vision loss while others had been blind since a young age or birth. The spectrum of blindness ranged from limited or low vision, to an ability to distinguish light perception, to a couple of participants being totally blind. The diversity exhibited within this group sparked a meaningful discussion about different challenges and perceptions regarding vision impairment. As dedicated advocates for greater access opportunities and lovers of the arts, all participants were excited about the focus group and how the programs offered related to their specific needs.

Some participants were more active museum visitors than others in the group. One of the participants who has been blind from early age and has also been a museum lover from early age, recalled her museum visits as a child, as well as many experiences as an adult at museum around the country and abroad. Another participant lost his sight recently, but had traveled extensively and visited museums as a sighted person. Yet another participant has only wanted to visit a museum once, and when he did, was told there was nothing for him at that museum.

In addition to the differing opinions expressed by individuals in this focus group, two participants also explicitly drew attention to the diversity of vision impairments and needs of the individuals within the focus group. In regards to preferences for program type within an art museum, one participant explained, "I think there's a major difference between someone who is blind from really young or from birth as opposed to someone who had sight for long enough."

One participant urged another participant to engage in self-advocacy within a museum setting. Upon hearing the negative experience of another individual, this participant responded, "You should go back. Make them realize there are some things they have to depart from a little bit from actuality."

Planning and visit logistics

This section focuses on participants' actions before their visit or directly upon arrival. Non-staff facilitated services that provide information about the museum and other factors related to participants' general comfort and planning are also addressed here.

Planning was not widely discussed in this focus group. Despite being explicitly asked about their planning process, three participants did not discuss how they planned for a museum visit, and one individual explicitly stated that he preferred not to plan in advance for his visits. However, two participants did say that they would call the museum in advance of their visit, such as the participant who commented, "I will call ahead to see if there is a touch exhibit." One other participant said that he associated museums most frequently with his travels and not necessarily as something he did in his hometown. As he explained, "I always associate museums with traveling, and I have traveled extensively all over the world, so I always have in London, Paris."

Interactions with staff

This section explores all past and theoretical interactions with staff members discussed by participants, including docents and museum educators, front of house staff, and security guards.

Participants in this focus group discussed both positive and negative interactions with staff. The comments about staff included interactions with educators and docents, security guards, and front of house staff. Discussion of educators and docents mostly focused on the style and approach to verbal description that an individual used. One of the three participants who discussed positive experiences with docents explained, "You want someone to tell you what makes [the piece] unique and worth painting or taking a picture of." In contrast, three participants described negative experiences with docents or educators. As one shared, "Some guy, a lecturer, I sat for an hour, he was describing different paintings on the wall, just kind of moving around the room. He was saying face this way, that way, now we're facing this painting and then that one, it looks like this and that..." Another participant also had problems with docents who share too much knowledge about the artworks, saying that some docents "throw too much information" at a person on one visit.

Participants also reported having positive and negative interactions with security guards. The participant who had positive interactions with security guards explained, "I have security guards help me go from room to room." Another individual shared that her most negative museum experience involved a security guard. As she recalled, "The worst experience I had was when I bumped into something, having a guard laughing at me and told me to be more careful. Not acknowledging what happened and not having a clue where I was and laughing at me pretty much." Two participants also reported that they relied on front-of-house staff for wayfinding and orientation, such as the individual who said, "I probably go to the admission or visitor desk first" when visiting.

Museum programming and accommodations

This section focuses on participants' discussions about accessible programming and design, which includes any type of programming or non-educational service or feature which could improve accessibility of the art museum experience.

Participants in this focus group spoke at length about past positive and negative experiences with museum programming and accommodations in general. The most frequently discussed experiences were multi-sensory and tactile educational programs. Four different participants discussed multi-sensory programs positively. As one participant explained, "The mix of verbal description and being able to touch is interesting for me because while being proactive it is less straining for my eye because I can touch and listen, it's less tiring in a lot of ways."

During the discussion a number of the participant referenced their past touch and multi-sensory experiences, in some cases childhood experiences or museum visits that took place over five years ago, showing how memorable these types of experiences can be. For another participant, an early museum memory was of a multi-sensory experience. As she shared, "We were going to the Museum of Natural History and on the ceiling there is a whale that's 90 feet long. The teacher asked, 'Does anyone know how long 90 feet is?' So out come the yard sticks, so we got to go out just about to the library and we had dimensions we had to work with, and wow, that's how long the whale is..." Another participant noted her strong preference for touch over description and attributed it to her early blindness: "I do not find descriptions of pictures very interesting. I have never had any significant vision so it doesn't for me mean anything to hear a description ... You put something in my hand, an old quilt, even if you can't show me the exact thing because it could fall apart, this is very much like an old quilt, the patterns are the same...the fabric is the same ... I'll be very interested." A discussion about a possible preference for touch experience among early blind people followed.

Four participants also shared their positive thoughts on tactile experiences. For one participant, tactile elements were a make-or-break part of his museum visit. As he explained, "Generally the only way I will go to a museum is with friends, but I will probably opt out if there's no touch exhibit." For another participant, hands-on opportunities were a positive alternative to audio descriptions. She said, "[A tactile experience] makes all the difference to me. Five minutes of description and it's all over." One participant even sought out tactile experiences outside of the usual educational avenues. He shared, "I get a lot of info from the gift shop! I can touch things." Another noted that she always stops in the gift shop on her way out of a museum: "I do because I want to touch the things I've seen." She cited a visit to a museum where Kachina dolls were exhibited behind glass, and she was told there were none she could touch; when she got to the gift shop, she found Kachina dolls that she could pick up and explore tactiley. However, for one participant, the content was the main driver of his interest, beyond just tactile programmatic elements. As he explained, "For me, it would have to be certain types of artifacts that I could get into."

Architecture and exhibit design were also discussed. Two participants noted the importance of lighting. For one participant, lighting was key to her experience in a museum setting. She said, "The ideal situation is first to feel comfortable in the space, which means having a certain amount of lighting so I'm not afraid of hitting something." Two participants also discussed the importance of good wayfinding assistance and how it impacts their museum experience. As one participant explained, "People who have bad vision said they find it so hard when they're in a museum, 'Where is the ladies room, where are the escalators, where are the elevators?' For those who don't have vision, and [museums don't] have an escort for you one to one, or you're

wandering around and too embarrassed because people are too busy studying the paintings or listening to the docents so you don't know where to go."

Some participants also talked about how technologies could be used to improve their museum experience. For these three participants, suggestions ranged from devices to improve the lighting to assistive technologies that would help visitors with low vision better see works of art.

Feedback on potential programs

The Brooklyn Museum offered four programs for participant review:

- A multisensory tour for adults with visual impairments and their companions. This tour, highlighting the Museum's Permanent African art collection, would help visitors experience art through the senses by integrating verbal descriptions, music, and objects from the Museum's touch collection.
- A multisensory tour of American high style fashion. This tour highlighted objects from the costume collection, such as dress mannequins, hats, sketches, shoes, and other fashion related items. The tour included verbal descriptions and touchable fabric samples.
- A touch tour exploring Rodin's artistic process. This program helped participants make personal connections with Rodin sculptures by giving them opportunities to touch several of the original pieces.
- A touch tour into the world of ancient Egypt where participants would be able to touch objects from the Egyptian collection.

The multisensory tour of the African collection was the most popularly discussed program. For some, the multisensory approach to the tour was the most interesting element. One such participant said, "It sounds so inclusive, because you said there's music involved too, and [it] seems extremely involved and interactive." For some of the other participants, the content of the program was attractive. As one participant explained, the tours of the African and Egyptian collections were appealing "[b]ecause of what I've read and learned about those cultures." This was a common theme among the three participants who liked the idea of an Egyptian-focused tour.

Two participants also called out the Rodin tour as an intriguing idea. For one participant, the tactile approach was the attraction. As she explained, "If I could touch [a] Rodin that would be a more fascinating experience."

The exploration of American fashion drew both positive and negative reviews. While one participant was attracted to the content, others felt that the multisensory aspects did not go far enough. One participant summed up these feelings by saying, "The one that would be the most interesting to me would be number two, with the fashion, and yet, that would be my least favorite, because just touching fabric doesn't interest me."

Outcomes of a museum visit

This section explores what participants hope to gain or experience during a museum trip. These outcomes, while not based on a given set of museum-specified goals, are what participants said they look for from museum visits.

Most of the participants in this focus group looked for social experiences as a part of their museum visit. For one of these six participants, the social experience included meeting other museum-goers on his visit. As he explained, "I meet the people who are the citizens, get into conversations with them. I find that a lot of people are willing to talk, not to guide, but just to talk about a painting or an article." Another participant looked to extend her visit by sharing it with friends. After a visit, she would, "Buy a lot of postcards! [...] To give to friends."

For three participants, experiences with or learning about the art were important outcomes of a museum visit. One individual, in particular, desired meaningful connections to the art. As she explained, "Art influences life, but has to have a meaning to me... [I've] seen lots of things, but [they] have no meaning to me..."

The desire for independent and inclusive experiences was also discussed in this focus group. Two participants said they wanted to be able to have an independent museum experience. One explained that ideally, "I still tend to want to figure it out myself, but only when I can't make it, I'll ask for help."

Two participants also discussed the importance of feeling that the museum was a place for them. As one individual explained, she wished to be treated in the same manner as a visitor with vision and stated, "[I] don't want to do anything different than someone who was totally sighted would do."

SOLOMON R. GUGGENHEIM MUSEUM

The focus group at the Solomon R. Guggenheim Museum took place on April 30, 2010 and included eight participants, one of whom was the sighted spouse of another participant. Art Beyond Sight (ABS, formerly Art Education for the Blind) relied on individuals and local advocacy chapters from the Guggenheim's community to recruit people with diverse demographics and vision impairments. Participants who indicated that they visit museums with spouses, friends, or assistants were encouraged to bring them along to the focus group. All but one of the participants who were blind or had low vision were frequent museum-goers, reporting that they attended art museums multiple times per year. The majority of these individuals also indicated that they have recently and repeatedly visited the Guggenheim.

Focus group participants had a range of visual impairments. Most had experienced a loss of vision sometime within the past decade and, therefore, most of the attendees had experienced museums in the past as sighted individuals. One participants described his vision loss from glaucoma as seeing only holes; this condition forced him to look at art exhibits more carefully and he "actually got more out of it," appreciated the detail more than he did before, and went back to see more of exhibits. One participant described receiving mobility training and help reacquainting her with art museums after the loss of her vision. A number of participants saw themselves as "consumers of art"; museum goers and art patrons.

This focus group featured occasionally spirited discussion and debate about what would be the "best" option for visitors who are blind or have low vision. This illustrates that there may not be a one-size-fits-all approach to programming for visitors who are blind and low vision. As one participant summarized, "I think the issue is that low vision is so varied that it's hard to accommodate all people at all times." Another participant echoed this sentiment, saying, "We are all on a different level, we are all speaking from our own experiences." Like any visitor, participants would come to the museum with their own different backgrounds and interests, all of which impacts their preferences and visitation habits. One participant discussed the importance of background in determining visitation habits and said, "People who do not go to museums, whose families did not orientate them towards art, are not going to be brought into the museum setting because of programs for people with blindness. … I think in fact that there are probably groups of people who would welcome coming, but in general people are going to come or not, and it's not because of vision or lack of vision."

One participant also felt strongly that she should be advocating for her own needs and the needs, in general, of other visitors who are blind or have low vision. As she explained, "That's the whole purpose of my life, to teach people about people like us. It really worked. It raises consciousness."

Planning and visit logistics

This section examines participant actions before their visit or directly upon arrival, and factors related to participants' general comfort and non-staff facilitated services used for information.

Despite being explicitly asked about how they planned a museum visit, many of the participants did not discuss this topic. One participant gave insight into a possible reason for the lack of feedback in this area and expressed disinterest in planning his visit when he said, "I have to research and get better acquainted with the exhibit, but I don't want to do that. I want to go and explore." Another participant expressed how exhausting the planning process can be and explained, "It is huge work in preparing what you want to do." This participant also generally called in advance of her visit to gather information about entrances and wayfinding. One participant noted that "a lot of museums are now making tours that you can download before you get to the museum, so that you have an orientation before you arrive on what you might see, which I think is helpful."

However, some feedback was provided by focus group participants on other logistical considerations when planning a visit. Two participants discussed the difficulties associated with crowds in museums. As one participant said, "Having [retinitis pigmentosa], being in a museum with a huge crowd is very, very difficult. I have to be able to approach a work of art as close as I'm allowed to, [and] with a crowd that's difficult." This participant, in addition to another, expressed that visiting the Museum as a part of the Guggenheim's program for visitors who are blind or had low vision offered them an opportunity to visit after peak visiting times. Another participant suggested that basic orientation and mobility training was useful in her ability to get to the museum for a visit.

Interactions with staff

This section explores all past and theoretical interactions with staff members discussed by participants, including docents and museum educators, front of house staff, and security guards.

Although interactions with museum staff were not a frequent topic of conversation, these interactions carried great weight with some focus group participants. Three participants expressed the importance of docents to their museum experience. One expressed appreciation for the educators associated with the Guggenheim's current programs, and another explained that she only visits museums when she is able to arrange for a private tour. This participant, who also preferred to conduct advanced planning by phone, wanted front-of-house staff available to help her orient herself upon entering the museum; "I walk into a space, I don't know it. I want to be met at the door. [...] When you walk in, you ask if there's anyone there that can help you." Another participant suggested that what holds museum staff back from offering help is their fear of blindness: "People are terrified about people who are losing their vision."

Accessible programming and design

This section focuses on participant discussions about accessible programming and design, which includes any type of programming or non-educational services and features which could improve accessibility of the art or museum experience. Programming and accommodations for visitors who are blind or have low vision was the most heavily discussed topic in this focus group.

Some of this discussion focused on technologies that could be used in the museum – nearly all of the participants expressed interest in cell phone or audio tours. However, the preferred content and level of audio description was debated. As one participant summarized, "I personally don't want a lot of audio description, because I want to interpret it myself. Sometimes when there's too much [description] the interpretation is done for me, and then some people want more details. It's personal preference and it's hard to bridge that gap to make something universally workable." Another participant suggested that two types of audio tours would be useful: "one with an orientation to the building and the second for the exhibition."

Different interpretive approaches were also discussed. For several participants, tactile experiences were also highly valued. One participant explained, "touching sculpture and other types of physical space art is very important." He went on to describe a tactile experience at the Parthenon in Greece, which included the historical site and authentic artifacts, as "rich" and "very moving." Another participant who talked about the positive tactile experiences at other institutions recalled touching works of art with gloved hands at MOMA and being presented with a scale model of Mt. Rushmore at the park's visitor center. This participant also enjoyed a direct interaction she had with an installation by an artist who specializes in multi-sensory work. As she described, "Every time you walk into one of her spaces there's aroma, sound, light on your body."

Several participants also enthusiastically discussed the opportunity to make their own art through current programs. One participant said that the art-making experience expanded her overall museum experience and emphasized, "It adds to the museum experience, the life experience."

Some negative aspects of the museum experience were also discussed, many of which focused on design. "I feel museums don't care about people, they care about the aesthetics of the exhibition," stated one participant. Another participant echoed this sentiment when commenting on poor label contrast and lighting in an exhibition, saying "I have never been so angry in my life. It was so offensive." For this man, the design choices in the exhibition provoked a strong emotional response. This participant had a clear solution in mind: "Well lit for people who are partially sighted, and the graphics be clear and bold. It's a no-brainer." However, another participant did not find the same utility in large-print labels and said that for her "It just doesn't work. So, sticking your nose against a wall... does it work for you?" Another participant spoke about being upset with the contrast, lighting, and labels at museums, and that he "would like to see this change."

Several participants discussed the difficulties associated with understanding and making their way through a space. One participant emphasized the importance of being able to navigate through a museum, saying that "if [a mistake] happens when you're just starting out, it messes up the whole day." Two participants pointed out that the architecture of the Guggenheim made their movement through the space safer and more comfortable, saying that the museum "is a safe place for me because of the ramps and no steps and it's a very safe place to be."

Feedback on potential programs

The Guggenheim Museum offered seven programs for participant review:

- A brochure detailing the services and activities arranged for visitors who are visually impaired. This pamphlet, available at the front desk, would include information about verbal descriptions, historical information, questions to consider when going through the Thannhauser or Kandinsky galleries and information about special exhibitions. This brochure would be intended for the sighted companions to read aloud.
- A touch model of the exterior and interior of the Guggenheim building. This model would provide navigation for visitors, as well as information about the structure's historical, architectural, and artistic significance.
- A forty-minute audio tour verbally imaging the building's architecture, Thannhauser permanent collection, and Kandinsky galleries. The Thannhauser gallery includes work by Picasso, Cezanne, Manet, Monet, Van Gogh, and other late 19th-century/early-20th-century artists.
- A hands-on art-making class led by art professionals. This experience would focus on specific materials, techniques or concepts, such as the art of perfume.
- A handout containing the wall text and label information in Braille and a similar largeprint version.
- Raised-line drawings of important artworks from the museum's permanent collection.
- A staff member at the Guggenheim Museum also offered a program during the focus group with object touch bags that visitors could take with them through the galleries to help orient themselves by using touch and texture.

Of these options, the tactile model of the building and audio tours elicited the most positive responses. Several participants appreciated that they would be able to get a sense of orientation in the building as a whole, and the ability to find specific galleries within the museum. "I could never find my way around this building, it's such a maze. I think [the scale model] would be a really terrific idea," said one participant. However, another participant cautioned against relying on the model as an orientation aid and felt that, "To get from the model to where you want to go means you have to have the memory of an elephant, and I don't think any of us have that." However, he did think that using the model to give a sense of the architecture of the building was a good approach. One participant brought up the idea of multiple models; another suggested "not just a building model, but some details as well. [...] I'm a big fan of tactile mapping. We had that where I work. It made huge difference to be able to put my hand on something and see where I want to be."

The proposed audio tour was met with generally positive feedback. As one participant summarized, "I think there's a general consensus that an audio tour [or] description is something that would be very beneficial." Another said, "The audio tour is the most important. I would divide it into two parts. [...] One with an orientation to the building and the second for the exhibition." Another participant suggested that the museum encourage artists of works in the museum to "give their interpretations via audio, which would be of interest not just because of the art, but that would help you see the work through their perspective..." A negative about audio tours mentioned was that some tours rely on keying the audio to a number near the

painting: "If I can't see the numbers..." One participant raised the idea of audio information being activated automatically when one stood in front of an artwork; another liked the idea of getting audio information via a cell phone or iPad. "If it's a cell phone and you don't want the information, you can turn it off," he said. It was agreed that audio description "should be accessible by a blind person without a sighted companion."

The suggested hands-on art-making classes were well received, although not much discussed. As one man said, "I like the idea of the workshops, creating art and again giving you access to the process, but also giving access to people that they can be creative."

The proposed Braille or large-print exhibition labels and printed brochure both were met with a less positive reaction. One participant who dismissed the idea of Braille labels explained, "People who read Braille don't know where the Braille markers are [...] in order for us to find it we have to find the wall and run our hand along the wall." However, another participant liked the idea of a large-print brochure she could use herself that was associated with this program, saying, "I still have some of my vision. I often go to the museum on my own. So when I go, I would like to have the big brochure." Regarding the large-print brochure, one participant asked, "How would I know that you have a brochure at the desk?" Another expressed that he did not like relying on a traveling companion for the information contained in the brochure and emphasized that "[t]he last think they want to do is sit and read a bunch of stuff. I can't see anyone I'm going with is going to read it."

Participants' desired outcomes

This section explores what participants hope to gain or experience during a museum. These outcomes, while not based on a given set of museum-specified goals, are what participants said they look for from museum visits.

Participants frequently discussed the importance of the social aspects of their museum visit. One participant highlighted how important finding a good companion for a visit was for him, and said, "Getting someone to a museum, you want someone who has a similar interest, not just someone who can read the info on the card." After a museum visit, the social experience extends to word-of-mouth marketing. Focus group participants explained how they talk with blind, low vision, and sighted people about the museum. As one participant said, "We're not [just] talking to low-vision and blind people, but to people in our community who have vision."

Multiple participants also expressed the desire for independence and a welcoming environment for a visit. One participant viewed the existence of this study as good progress towards these goals, saying, "The fact that you are doing this is extraordinary [...] the very act of thinking about us is opening a door." One participant also discussed how participating in programs specifically for visitors who are blind or have low vision increased his comfort level such that he could be more independent in his visits and could come without waiting for a specific person to be available for visits. Another woman agreed, and said, "I like to be in a museum in a situation with people who have vision loss, getting to explore, and then coming back and getting to build on it myself, and having the accessibility for that."

SEATTLE ART MUSEUM

The focus group at the Seattle Art Museum (SAM) took place on June 17, 2010, and was facilitated by Nina Levent from Art Beyond Sight (ABS, formerly Art Education for the Blind). It included eleven female participants, the sighted husband of one individual, and an assistant of another participant. Both sighted individuals were invited to join the discussion because they accompany most museum visits. ABS recruited for this focus group by reaching out to their contacts at local advocacy groups such as the Lighthouse for the Blind and Visually Impaired, along with the Vision Connection, a local group that provides recreational opportunities to people with vision loss. The selection process aimed to include participants with a diversity of vision loss, demographics, and art interests in order to reflect the Seattle community of people with visual impairments. Most of the individuals chosen were over the age of 55 and exhibited varying degrees of blindness. One of the participants was a docent at SAM who had lost her sight recently. Just over half of them reported visiting art museums at least once a year, mainly accompanied by friends, family, or colleagues. Only one participant had never visited SAM before, and she described herself as a new Seattle resident. All attendees were enthusiastic about improving access opportunities in Seattle and came to this session with various backgrounds in access professions, social work, and the art world.

During the focus group, a few participants noted that blind and low vision visitors should not be generalized into one homogeneous group. Not only does blindness come in varying degrees, but as one individual explained, "Some of us maybe were born sighted and lost sight later on." This participant felt that docents should take these distinctions into account and be prepared to give different explanations for people who were born blind compared with those who lost sight later in life. Another participant agreed and added, for instance, "that a lot of us who were born without seeing colors, are still completely fascinated" by them. This same participant also pointed out that everyone in the focus group was of a particular age and questioned how museums are addressing the desires of "blind kids and young folks."

Planning and visit logistics

This section focuses on participants' actions before their visit or directly upon arrival. Non-staff facilitated services that provide information about the museum and other factors related to participants' general comfort and planning are also addressed here.

Participants in the Seattle focus group agreed that planning a museum trip requires significant time and energy. Prior planning often included figuring out transportation options or calling ahead to find out what type of accessible programming would be available upon arrival. Even though one individual appreciated the help that SAM's disabilities phone-tree option gave her to plan her trip, others relayed their frustration with making travel plans. As one participant stated, "It's probably going to take 2-3 times as long on transit to get here than if somebody could drive. [Or] if you find somebody that's driving for you, you've had to coerce them to come along." Two other participants explained that because of where they got dropped off that very day they had difficulty finding the entrance. Another woman explained how before making a trip, she always has to consider where her guide dog can go to the bathroom. These comments did not

come as a surprise to one participant who explained, "We don't have the luxury of [just] showing up."

A few participants briefly mentioned price as yet another hurdle of a museum visit. These participants wondered if there could be discount days or programs. One individual, in particular, cited that the additional price of special exhibits is high if, for example, you have only "heard about Picasso, but maybe [do] not really know what to anticipate."

Three individuals also pointed out how crowds can negatively impact a museum visit. One participant explained that crowds can be "scary" because they might not be familiar interacting with visitors who are blind or have low vision. Others described how crowds make it difficult to see and hear if you are on a guided tour.

Advertising was seen as an area in which the museum could improve communication with the blind and low vision community. One woman explained, "I'm sure you send your information to the public; make us part of the public so ... we know what's going on at the art museum." Others specifically advised SAM to use fewer graphics in their newsletter or emails since graphics can confuse text reader software.

Interactions with staff

This section explores all past and theoretical interactions with staff members discussed by participants, including docents and museum educators, front of house staff, and security guards.

During the conversation, focus group participants discussed both positive and negative interactions with museum staff and offered SAM suggestions based on their previous experiences at various museums. Instances when staff had been especially supportive or welcoming were highly regarded by participants. A few examples of valuable interactions included times when staff had made sure guests with low vision were near the front of a guided tour or when staff had spent time providing individualized attention. Yet two participants complained that guards had made them uncomfortable in museums since they had used loud and unfriendly voices to tell them to move away from the art. One participant recalled that "I started looking at the things under glass really close and going up to the paintings and then the security guard came over and said 'You can't do that' and…from then on I sort of started hesitating to really go to museums…I just remember that distinctly that the guard came over and I thought '[O]h no, I can't do that' and it made me feel strange and then I didn't go to many museums after that."

Three participants noted that the Seattle Public Library staff is very well trained to recognize and assist visitors who are blind and have low vision. Several focus group participants felt museum staff should go through similar training so that they can better interact with this community. One participant acknowledged that specialized training is necessary because staff may not be familiar working with visitors who are blind or have low vision. Another individual recalled a training program for sighted guides run by the Department of Services of the Blind, which uses headgear to "simulate different kinds of vision impairment." Other participants emphasized how staff

should use detailed verbal information and descriptions of spatial relations when interacting with blind or low vision visitors. One participant, for example, explained how describing that "the ceilings are 20 ft. high, ... this column is 15 ft. tall and 6 ft. around" would greatly help her get a better sense of the space.

Several individuals stated they would like someone to greet them at the entrance of the museum and be willing to answer questions and help them find their way around. As one person explained, "I would just want to know that when I walk in the door, that somebody would say, 'Hello, can I give you information about this'--anything, just somebody that would help, be there, that would speak out loud and not [just] wave at me." One participant mentioned that he knew of three other local institutions that have a staff member who is blind who interacts with visitors in different capacities. Two other participants described how a specific contact person who is familiar with the blind and low vision community could facilitate their experience.

Museum programming and accommodations

This section focuses on participants' discussions about accessible programming and design, which includes any type of programming or non-educational service or feature which could improve accessibility of the art museum experience.

Tactile opportunities were seen as important accommodations for visitors who are blind and have low vision. Several participants shared fond memories of touching objects during previous museum trips and hoped to have this chance again. As one participant said, "[I]n other countries...they were very nice about letting blind people touch the objects, like the stone carvings, or the beautiful faces ...which was very nice." Another participant remembered touching objects in a DC museum and stated, "I was allowed to touch it and the only [thing] I had to do [was] wear gloves, which is fine – gives me an idea." One individual stated how tactile experiences with "textiles...as well as various types of sculpture" could provide exciting programming ideas.

Another suggested that SAM create a tactile map to help orient visitors who are blind and have low vision. Besides a tactile map, participants encouraged the museum to consider additional accommodations that would help them maneuver throughout the physical layout. A family restroom was seen as necessary, and stairs were thought to be a particular challenge. One participant described how "humiliating" and "dangerous" stairs can be. She continued on to say that "so many of these buildings are designed to be beautiful to the eye but the stairs are curved... there are no rails and often they're not standard step lengths and so if you're not gonna have somebody there to guide a person that's sight impaired, you've got a liability on your hands...." "Yellow lines" were suggested as one way to identify stairs and elevators. Another participant who was concerned with way-finding in SAM felt that greater contrast between the lobby furniture and the dark floor color would prevent her and others, such as "people with babies in the strollers" from tripping.

Participants in the focus group also mentioned several assistive devices and technologies that have enhanced past museum visits. In addition to magnifying glasses, audio guides were

frequently described as useful devices which help blind and low vision visitors understand a museum's layout and art. Although participants felt audio guides' in-depth descriptions are valuable, they repeatedly complained that the numbers associated with audio guides are too small and difficult to find. One technology suggestion which drew considerable interest from others in the focus group was "ear buds." One participant shared her positive experience with using these special earphones which allow a large group of people to clearly hear a guide speaking into a microphone no matter where they are standing.

An introductory discussion prior to a museum tour was highly recommended by two individuals who had experienced this sort of museum programming. As one participant said, "I think that idea of being able to ... sit down and kind of look at the big picture and talk about things... is a good way to start when it's possible." The opportunity to sit down and "listen to a presentation before going out in the gallery" was considered extremely useful.

Feedback on potential programs

The Seattle Art Museum offered four potential programs for participant review:

- A verbally described tour highlighting the Museum's global collection. This tour would last approximately sixty minutes and feature five works of art.
- A verbally described tour of a specific collection, such as African or Native American art.
- A special free day at the museum, dedicated to making the galleries more accessible to a diverse audience. The event would take place on a day when the museum is closed to the general public. Activities offered during this time would be both verbal and audio described tours, as well as touch stations. Services made available during the event would include sign language interpreters, greater access to chairs and seating in the galleries, and large font label text in high contrast colors.
- A hands-on sculptural workshop based on the practices of an artist currently on view at the museum.

Immediately after the facilitator explained these options, the focus group chimed in with enthusiasm for all of the programs. And even as individuals discussed their personal preferences, many were eager for "all of the above."

Though participants agreed that all of the options had strong potential, the special free day option brought up significant concerns and ultimately had the least support. Participants were overwhelmingly troubled by the fact that they would be isolated from the general public since the museum would only be open to people with disabilities. They considered the social aspect of a museum visit crucial and explained that they did not want to be excluded from other visitors. One participant did state that this option "is an excellent way to orient and hook people….[into] wanting to come back." However, the following quotes highlight the general uneasiness with this setup.

"I just feel like I'd rather be there with the kids and the grandmas and everybody... part of being at a museum is coming and enjoying the, the hub...."

"[This option] sounds like a nightmare. Frankly, you get that many disabled, sight impaired people in the same place at once, sounds just like a madhouse...I mean it's very nice and very noble, but ugh, it would be difficult."

"I hate to be isolated; you know it's nice to come the day the museum is closed to the public, but part of it is you're teaching the public how to interact with us. I hate that isolation."

"I have a problem with that isolation and the idea of making, you know, a special day for special people....those kinds of things you put in place for a day like that, why can't they be there all the time? It just does not make sense to me."

Not only were participants concerned with being separated from other visitors, one individual worried about the logistics and timing of this specific type of event. This participant was worried that the museum would not be able to find a convenient day and time to close the museum to the general public yet keep it open for invited guests.

In terms of the two tour options, participants were intrigued by both, yet the tour highlighting certain parts of the collection especially resonated with the focus group. The global tour was considered a good "overview" of the museum's collection, whereas, the tour of a specific collection elicited enthusiasm for "zeroing in on" a specific "type of art" and "cultural aspects" of the museum. Participants suggested offering this program throughout the year, rotating the featured collection, or creating a program related to the special exhibits which come through the museum. One person said that she would like tours "to be ongoing, interesting, challenging" experiences that would allow people to feel that they always learn something new. As she explained, "I think [tours] would be a wonderful experience for many people, and not just for this group, but I'm thinking the older population, a lot of other people, is to have maybe one time every month, every two months, where there would be a different gallery [featured], and a different experience … It would be an ongoing learning experience."

The hands-on workshop was favored by several participants. The tangible experience was praised by individuals since it provided another way to learn about and interact with the art. One of the sighted participants also explained how tactile options "add" to anyone's museum visit.

Outcomes of a museum visit

This section explores what participants hope to gain or experience during a museum trip. These outcomes, while not based on a given set of museum-specified goals, are what participants said they look for from museum visits.

Multiple participants highlighted the social aspects of a museum experience. Not only were museum visits seen as a way to spend time with family, but they provided meaningful interaction

with others. As one participant explained, "I love hearing from the other people on the tour, what they're seeing, 'cause it really brings the picture, and it brings up questions." This individual also stressed that she "would love to be able to come to the museum, very comfortably and freely with my grandchildren."

Participants also emphasized the aesthetic pleasure of interacting with art, as well as learning about the history behind the art. For instance, participants said they come to museums with a desire to "understand the…spirit in which the art is written" or the "emotion" and "history" behind a piece. One participant compared her museum visits to "art immersion." Another explained that after a museum trip, "I often find myself wanting to get more information about the show. I'll have questions, or want to know more about an artist, or a period of time…I'll do a little bit more research….." Participants value the knowledge they gain from a museum visit and as one said, "If we've had a fabulous experience that's been welcoming and accessible and enriching we're going to go out and tell everybody we know about it…."

Although participants enjoyed both the educational and social aspects of a museum visit, many admitted they were hesitant about visiting museums, especially by themselves, since they often do not know what to expect. One participant explained, "I don't trust that they're going to be prepared for a visually impaired person, and often they're not." Another described how "unsatisfying" it can be when there are no accessible programs. One individual agreed with this sentiment and said, "I might be interested in [going to a museum,] but I won't go if I think there won't be accessibility....what I do is usually I wait for a group to go...." As one participant summarized, "We want to get as much information as we possibly can. We want to feel respect. We want to have a good time. And then it's great... It ultimately comes down to the fear of disappointment. Fear of, a fear of not, not getting the experience that you know is possible to get." Another individual concluded that "if you implement most of the idea[s] we gave you, and we know that we can come, we can enjoy, we're welcome, we're accommodated—[then] yes, I want to come more often, I want to be a member."

NATIONAL GALLERY OF ART

The focus group at the National Gallery of Art (NGA) took place on July 22, 2010 and was facilitated by museum staff. The focus group included two female and one male participant. All three participants had been to museums before, yet for one individual this was the first visit to the NGA. In their introductions, two individuals described current and past involvement with organizations for people who are blind while the third participant explained he is a frequent visitor to the NGA and hopes to encourage others to attend. Due to technical issues, the data from the NGA was not recorded or transcribed and this report relies on notes from the focus group. Full-coding of this data was not possible because the focus group was not recorded, so notes were available but not a full transcript. However, general themes that were discussed are highlighted in this report. As such, all quotes below are excerpted from focus group notes, and are not necessarily verbatim quotes from participants.

Planning and visit logistics

This section focuses on participants' actions before their visit or directly upon arrival. Non-staff facilitated services that provide information about the museum and other factors related to participants' general comfort and planning are also addressed here.

As focus group participants discussed planning trips to museums, issues related to transportation arose. All three participants mentioned using MetroAccess, a transit service for people with disabilities within the Washington Metropolitan Area, when arranging museum trips. Yet the focus group notes indicate that one individual said, "trains and time commitment are [a] major problem. It takes an hour-plus to get here." During the conversation about transportation, one museum staff member asked if the NGA provided a van it would help alleviate blind or low vision visitors' transportation concerns. In the notes, one participant is recorded as saying "yes," while another explained that the helpfulness of the van "depends on the group. We have people in Fairfax, Arlington, etc."

One individual commented on the large amount of time and effort it takes to plan a museum trip and how these factors often keep her from visiting. The focus group notes show that one participant mentioned both calling museums and consulting websites prior to a visit in order to find out information. One suggestion related to website design was to "put directions to the Gallery from [the] Metro on the Web."

Participants in the NGA focus group also discussed advertising. One suggestion was to "advertise which exhibitions would be good for vision impaired people. Include information in [the] *Washington Post* about exhibitions that are good for people with vision impairment. Advertise more." Another individual felt that an "email list for 'Picture This'" would help plan her trip. This participant believed that "brochures do not work." Yet one individual felt that "the disabled and elderly do not have e-mail. So that would not work for them."

Interactions with staff

This section highlights all past and theoretical interactions with staff members discussed by participants, including docents and museum educators, front of house staff, and security guards.

NGA focus group participants talked about how docents have positively affected their museum experiences by helping them understand the artwork and answering questions. One participant also suggested that museums keep tour group size small. As the notes indicate she said, "Tours with only one leader with a large group – larger than eight people--is not good." Individuals in the NGA focus group had other suggestions related to training staff, especially about the etiquette of assisting visitors who are blind or have low vision.

Museum programming and accommodations

This section focuses on participants' discussions about accessible programming and design, which includes any type of programming or service or feature that could improve accessibility of the art museum experience.

Participants talked about audio tours in the NGA focus group. One participant said that an audio tour "takes away from the experience." Focus group participants also touched upon the importance of wayfinding in museums. Judging from the notes, one individual said, "Having a layout to follow is good." Another person expressed that "getting lost" would be her worst experience at a museum. This individual explained that inconsistency in program locations can be problematic.

All three participants positively reacted to touch options at museums. The notes said that one individual "likes places he can touch" and that since "[he is] forbidden to touch sculptures, so [he] hang[s] on to every word and picture[s] works in [his] mind." Another participant described when she goes to a museum she "like[s] to touch more than hear talking." A fellow participant agreed with this comment.

In terms of other accommodations at museums, one participant wondered about providing "wheelchairs with attendants for the blind during 'Picture This.'" Another individual specifically wanted reproductions of photos and a magnifying glass that would help him see the art. One participant felt that "information regarding what is in the galleries would be helpful." Participants were split as to whether Braille or large-print text would be most useful

Feedback on potential programs

The NGA offered three potential programs for participant review:

• A hands-on exploration of sculpture, tools, and materials such as clay, wax, and stone. This would be offered one or two times a year in the Education Studio. There would also be reproductions and smaller versions of actual pieces to touch.

- The ability to touch 3D textual paintings made by The Cavazza Institute in Italy.
- A children's film program that would also have audio description provided by the NGA. In the fall, the movie would be *Red Like the Sky* which is in Italian with subtitles. This film is about a child becoming blind.

Participants responded positively to both of the hands-on options. In response to the film possibility, one participant felt that "lots of parents are looking for things for children." But another participant questioned if it was for only children, and the museum staff explained that it would be for everyone.

One participant expressed that "all three sound great." Another participant wondered how often the programs would be offered and how they would be promoted, and suggested that weekend activities would be more highly attended. Participants also recommended advertising the programs through the Prevention of Blindness and Northern Virginia Council of the Blind.

Outcomes of a museum visit

This section explores what participants hope to gain or experience during a museum trip. These outcomes, while not based on a given set of museum-specified goals, are what participants said they look for from museum visits.

During the focus group, participants discussed the social experiences connected with a museum visit. Two participants indicated they come to museums with others. As the notes record, one individual said that the "Low Vision Support Group plans [his] trips" while another participant explained that her friends plan the trip. One person indicated that what keeps her from coming to a museum is her desire to not come alone. Another individual explained how being with a group is helpful in a museum and expressed that he would not visit a museum alone.

INDIANAPOLIS MUSEUM OF ART

The focus group at the Indianapolis Museum of Art (IMA) took place on December 8, 2010 and consisted of thirteen individuals. The focus group included six female and seven male participants, three of whom were the sighted spouses of other participants. A staff member from the IMA facilitated the focus group while additional IMA staff observed and took notes. Over half of the participants reported visiting art museums at least once at year, and eleven of the thirteen individuals had previously been to the IMA. When introducing themselves, most participants described how much they enjoy art and how they were eager to improve museum experiences for visitors who are blind or have low vision. Participants had a range of vision, and one participant, in particular, had just recently become legally blind. The IMA conducted the recruitment for this focus group. During the recruitment process, the Museum adhered to selection guidelines set by Art Beyond Sight by choosing attendees with diverse levels of vision impairment and museum or art experiences. Participants who indicated that they typically attend museums with a companion were invited to bring this person along to the discussion.

Planning and visit logistics

This section examines participants' actions before their visit or directly upon arrival. Non-staff facilitated services that provide information about the museum and other factors related to participants' general comfort and planning are also addressed here.

When asked about any planning that participants do before a museum visit, only a few participants indicated that they did any prior preparation. For these individuals, it was important to learn about the hours of admission, possible transportation methods, or accessibility accommodations that would impact their experience before their trip. As one participant explained, "I usually contact the museum online or make a telephone call to find out if there are any tactile exhibits or audio described exhibits before I attend." Another participant described how she "read[s] on the internet as much as I can to see what exhibits are there, how long they are there, how many floors there are, if there is a fee." Alternatively, one participant stated that he "tend[s]to go at random... I went to the Salvador Dali Museum on a whim because I heard it was there."

Transportation was repeatedly mentioned as hindering the blind and low vision community's ability to visit a museum. Four participants specifically described their frustration with the public transportation system, and two of these individuals stressed the importance of functioning audio street-crossing signals. One participant conveyed his annoyance with the transportation situation when he spoke of catching a bus on 38th Street as a "nightmare."

Besides transportation, the topic of price arose as a potential barrier to museum visits. Although general admission to the IMA is free, a few participants were upset at high admissions at other museums and the fact that audio guides are often an additional fee. One participant explained, in particular, that "audio description is [for] a specific audience" and "[h]aving an extra price for the audio description is kinda a slap in the face" for blind or low vision visitors.

Several participants stressed the need for more effective advertising methods to inform potential visitors who are blind and have low vision of what was going on at the IMA. These participants stressed that traditional marketing methods simply don't reach this community. As one participant said, "Part of the problem sometimes is getting the word out because in the newspaper it can work for people if they have enough sight to read it or if they do the iris reading. But [museums] just can't do newspaper, you have to figure out other ways to utilize a number of avenues to really publicize things." Organizations such as American Council of the Blind or the National Federation of the Blind were suggested as possible advertising partners.

Interactions with staff

This section explores all past and theoretical interactions with staff members discussed by focus group participants, including docents and museum educators, front of house staff, and security guards.

Even though participants during the focus group talked only briefly about their past interactions with museum staff, they underscored the importance of good docents. As one participant explained, "There is nothing in my opinion that has ever beaten a really good guide, and they are really hard to find and a lot of museums don't have guides. Everywhere that we have even been, a really good guide can make or break, can really make the trip for you." Another participant echoed this sentiment and expressed how she "get[s] chills just thinking about" the positive interactions she has had with role-players at living history sites.

Others agreed they are especially appreciative of staff who are "willing to take the time" to explain an exhibit or provide extra assistance. One participant described how her family visits museums on less crowded days with the hope that a volunteer might be available to read things for them. One participant suggested recruiting volunteers from IUPUI or Broad Ripple Art Center so that more staff are on hand to "describe the paintings or to help the people."

The participants had very few negative comments about museum staff, which mainly focused on staff at other museums. One individual described a crowded situation when a guard had warned her she was standing too close to a case while another participant remembered being annoyed by a guide who told visitors incorrect information. However, two other participants specifically indicated that they write thank you letters to the staff in order to provide "positive feedback" if they have been particularly helpful.

Museum programming and accommodations

This section focuses on participants' discussions about accessible programming and design, which includes any type of programming or non-educational service or feature which could improve the accessibility of the art museum experience.

Both verbal description/audio guides and tactile objects were frequently cited as valuable museum accommodations for visitors who are blind or have low vision. Six people commented

on the positive effect audio guides have had on their museum experiences. As one individual said, "I need to express here that audio devices and audio descriptions and things like that are great." Another participant explained that "[s]omeone mentioned to me that Alcatraz [had] an audio tour, and I made a specific point to go there." One participant even commented on how audio guides were "incredibly helpful" for her sighted companions and can provide benefits for a broad audience. However, a few people cautioned that regular audio guides developed for the general public can be a challenge for visitors who are blind or have low vision to use. Not only can it be confusing if the audio guide does not explain "exactly...what is in the exhibit," but it can be difficult to locate the corresponding numbers and punch them into the keypad. One individual said, "[I] have been to a number of exhibits where they give you an audio device that is programmable and has numbers on the device, and you have to look at the exhibit and punch the number in and that is absolutely [as] inaccessible as not having the audio device. You might as well just sit out in the lobby and punch in random numbers." A few participants tried to think of ways to avoid typing in the numbers and suggested using RFID tags to trigger audio guides within a certain proximity or having them set on an automatic track. Yet, one participant complained that if a guide is on a pre-determined route, visitors will have to follow the audio guide.

Touch experiences were strongly endorsed by several participants. Although one person admitted that "by the very nature of things, some art forms can be more readily made accessible than others," he continued on to say "if I could snap my fingers and have a scale model of everything I would do it." Three other participants also emphasized how tactile experiences in museums have provided "wonderful" memories. One participant remembered a high school field trip when she wore gloves and was able to touch objects and commented, "That was many years ago but I [have] never forgotten it …." Another participant even urged the museum to research haptic technology since these special touch screens could help visitors who are blind or have low vision explore exhibits independently.

In regards to other programming at the IMA, one visitor wondered if the museum could assist visitors who are blind to create mental maps related to pieces of art. She felt the museum environment could help visitors acquire mental mapping skills and encouraged the IMA to "brainstorm ... about how that mental map could be more readily provided for the piece of art ... to give them that excitement." Another participant stressed how she values the museum's lectures because she can enjoy them with others and ask questions. She explained, "I'm particularly fond of lectures – I like that, as you said trying to bring across something visual ... [and there is] maybe an opportunity for questions. I get to experience the reaction [to the lecture] with the people I'm with...."

Feedback on potential programs

The Indianapolis Museum of Art offered four programs for participant review:

• An hour long audio described gallery tour with touchable elements. During this tour, participants would visit Georgia O'Keefe's *Jimson Weed* and be able to touch a two dimensional model of the plant depicted in the painting. They would also visit Paul

Manship's bronze sculpture of *The Flight of Europa* and be able to touch a twodimensional scale replica that shows the spatial qualities of the piece.

- An audio description of a dance/theater performance of *Wonder Boy*, interpreted by a San Francisco based group. *Wonder Boy* is a recent work created in collaboration with a puppeteer and set to music. This story of a peculiar superhero isolated by his gift would be audio described by an Indianapolis artist and last approximately forty-five minutes.
- A tour combining touchable models with a visitation to two art installations at 100 Acres: The Virginia B. Fairbanks Art & Nature Park. The touchable models in the museum would allow visitors to get a sense for the arrangement of the art installations in relation to the river and its formation around the lake. Visitors would have the option of walking to the park or using the provided transportation.
- An art making activity in a studio setting. This activity would use African, Asian, and Mediterranean art objects for inspiration and encourage participants to create a personal sculpture out of air hardening clay. This experience would last approximately one hour.

Although a few participants questioned why the touch models which supplemented the audio described gallery tour were 2-D instead of 3-D, the opportunity to touch objects, in general, received positive feedback. As one individual commented, "The opportunity to touch replicas would be good." Even so, one participant asked, "Why the 2-D and not 3-D? You are going that far to make it, make it 3-D instead because as you feel 3-D sculptures you get to feel 3-D you get the true appreciation of the sculpture piece as oppose to 2-D."

However, the audio description of the dance performance elicited concern. A few participants were worried that they would not be familiar with the dance terminology that the artist would use to describe the performance. To alleviate this dilemma, participants suggested that the museum provide background information about the show and specific explanations of dance vocabulary so they could understand the performance and narration. One individual explained, "My suggestion would be that if they're going to use dance terminology, which is a reasonable thing to do after all, it probably would be very helpful if ... a few minutes before the performance ... define some of that terminology so that people would have a little bit more of a grasp of it." Another participant expressed how she has "some dance [experience], but for the most part [she doesn't] know dance terms." One participant, who was apprehensive about the "subjective nature of the description," was nonetheless hopeful that the artist would be able "to express some of the grace or ineffable qualities of the dance."

When commenting on the proposed 100 Acres walking tour and tactile models, two participants noted how this program would perhaps encourage independent exploration of the nature park and repeat visits. These two participants felt that the guided tour and accompanying models would help them become comfortable with the park and make them want to return on their own. As one individual said, "You don't necessarily need to have someone hold your hand through it every time." A few participants commented on the downsides of an outdoor program and the fact that extreme weather, mud, and unmarked trails could all negatively affect people's experiences.

The format and potential social outcomes of the art making activity were greeted with positive reactions from a few eager participants. As one participant said, "It's definitely an interactive exhibition because you are creating as well as observing." Another participant commented on the social aspect of this activity when she exclaimed that "Selfishly I like that one because it would be the most fun to share with my children because they love to make art and to make it with me. It would just be fun." The one criticism mentioned by a participant was the fact that an hour would not be enough time to do the activity.

Outcomes of a museum visit

This section explores what participants hope to gain or experience during a museum trip. These outcomes, while not based on a given set of museum-specified goals, are what participants said they look for from museum visits.

Several participants placed emphasis on learning new information from a museum visit. Three participants cited meaningful museum experiences that have given them insight into art. As one individual said, learning from an artist about "what they were experiencing, what they were feeling, or what feeling they were trying to convey in the color and conception" of a particular piece let her "be part of the moment." Another participant explained it is the "unexpected deeper meanings" that he takes away from a museum visit. This individual also summarized how after a museum visit he tries "to express to others what I have come in contact with or been exposed to and in any way if they have interest, encourage them to go investigate it for themselves."