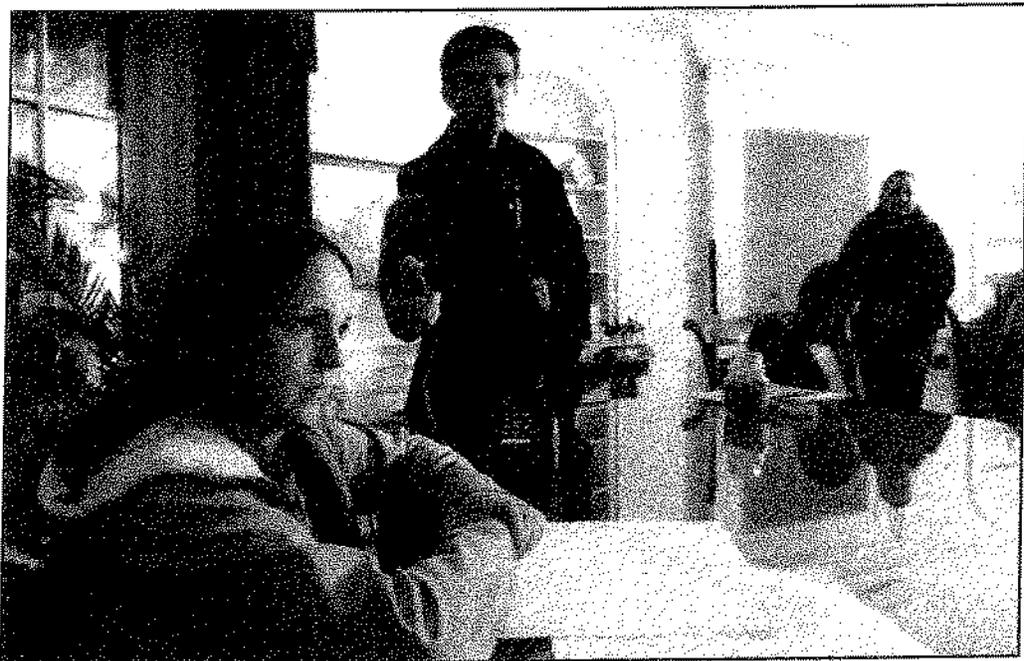


Problem-solving approaches have recently been used in history museums. One example is the Discovery Center program at the Ronald Reagan Presidential Library. This is an immersive, educational experience designed to inspire the next generation of student leaders. It allows students to face the responsibilities and challenges faced by the Executive Branch, military, and media. While visiting the Discovery Center, students have the opportunity to role-play in a realistic, interactive environment. The program is created for students in grades 5 and above (or age 10 and older).

The historical scenario centers on the military action taken on the island of Grenada in October of 1983. Students become advisors to the President, top level military officials, members of the White House Press Corps, or even President Reagan. Along with a combination of pre-visit curriculum materials and post-visit activities, students practice and improve their critical thinking and decision-making skills.

This room is a scaled replica of the Oval Office during the Reagan administration. Students assigned to this module become presidential advisors. Students chosen to be military officers are transported to a situation room aboard an aircraft carrier. Students are tasked with planning "Operation Urgent Fury." Student news reporters find themselves working in a replica of the White House Press Room. They engage in uncovering the details of the highly classified mission. Discussion focuses on international relations, the effects of military involvement in other countries, military strategy, freedoms of speech, and how the press can influence public opinion.

Exhibit 28: Student Role-Playing at the Ronald Reagan Presidential Library and Museum



Source: Ventura County Star.

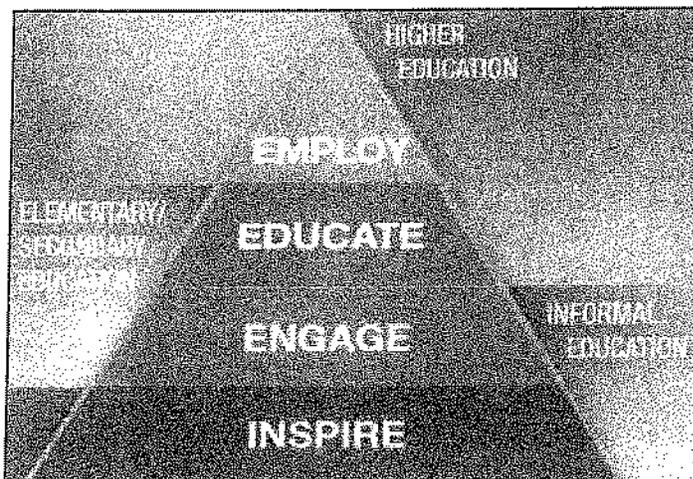
Past planning for the new Guam Museum (Guam and Chamorro Educational Facility) recommended that it not only focus on cultural history, but also on the sciences. Expanding the museum's scope would be beneficial. The U.S. Bureau of Labor Statistics estimates that 60% of the new jobs in the twenty-first century will require the kinds of STEM (science, technology, engineering and mathematics) skills that are possessed by only 20% of the current workforce.

Museums are particularly important for nurturing and sustaining an interest in science, especially for those in underserved populations. A 2009 study by the National Research Council confirmed that exposure to informal science education enables students to grasp concepts faster and more easily. In its strategic planning, the Carnegie Science Center places its recently created Chevron Center for STEM Education and Career Development at the intersection of students, parents, community, formal education, and workforce development.

NASA has developed an implementation framework for its educational efforts, which can also be applied to other STEM initiatives. This framework is illustrated below, and progresses upwards in intensity and usefulness. The traditional role of educational providers in these steps is also shown. This pyramid also symbolically represents the number of museums presently involved at each level. For example, all museums strive to inspire visitors, while fewer actively engage participants, even fewer provide extensive education programs, and very few directly help participants with STEM-related careers.

With the heightened current need for more in-depth STEM education, especially for children, many museums have strongly pushed their efforts upward. Some of these museums have formed partnerships with public school systems and colleges to provide STEM-related programs, especially to underserved populations. This level of commitment has even led to individual museums redefining the mission statement to specifically include science education and workforce development.

Exhibit 29: NASA Education Implementation Framework



Source: National Aeronautics and Space Administration (NASA).

5.5 Key Target Marketing Channels

Marketing channels are the ways products and services get to the end-user. For a museum these typically include:

- Exhibit areas
- Onsite programs
- Special tours
- Student field trips
- School outreach
- Workshops
- Events

5.5.1 Recommended Marketing Channel: Membership and School Involvement

COSI Columbus has high membership revenues in relation to its resident market. Its basic family memberships include free year-long admission to the museum, free or discounted reciprocal admission to 300+ other science centers, member express check-in, invitations to member previews & events, as well as discounts on workshops, camps, special exhibits, merchandise, and food items. The museum's premium family membership adds unlimited admission to its adventure exhibit, one free add-on guest per visit, free or discounted admission to nearly 200 children's museums, and exclusive access to Little Kidspace on select weekdays. The supporting family membership adds unlimited extreme screen movies and VIP access to member previews and events.

The Sci-Port museum in Louisiana has a high level of local participation as a percentage of its available resident market. One reason for this situation is the extra effort it makes with nearby schools. The museum offers school administrators the opportunity to provide a museum membership for all of the students in a classroom with the museum's School Pass Partner program. For a one-time fee of \$12 per enrolled student, the students can visit as often as they want with their class during the school year (August through May). As a School Pass Partner, teachers can request special, customized programs specifically designed to meet their teaching goals. These customized programs meet grade level expectations, common core standards, and curriculum requirements developed with teacher input by the museum's education coordinators and staff.

The new Guam Museum (Guam and Chamorro Educational Facility) should offer combination experiences for its temporary exhibit gallery and theaters. This has been particularly popular for school groups and can help generate frequent repeat visits. For example, the Science Spectrum offers the opportunity for school field trips to experience a combination of activities on the same subject. That subject changes annually. In early 2014, the museum offered a temporary exhibit on penguins, a dome theater documentary about penguins, a hands-on experiment, and learning about preserving penguin habitats. The price per student was \$6.50 for just the temporary exhibit and documentary presentation, or \$9 for the temporary exhibit, documentary presentation, and the rest of the museum.

The new Guam Museum (Guam and Chamorro Educational Facility) should offer multi-day teacher training sessions. This marketing channel would broaden the new museum's interpretive efforts and provide a needed community service.

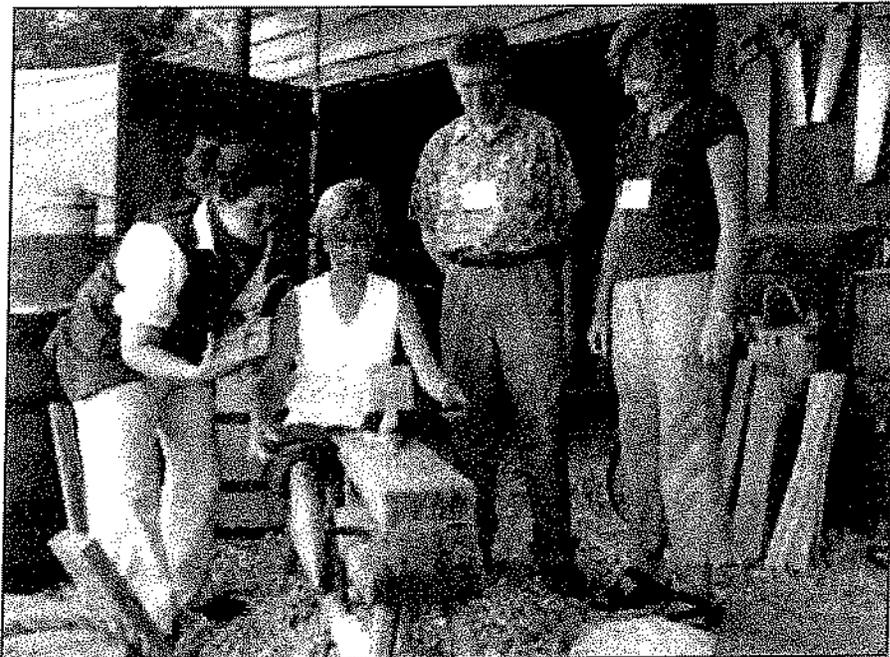
An existing example is the Colonial Williamsburg's Teacher Institute. It is an intensive, six-day workshop that immerses participants in early American history "on location" in Williamsburg, the restored capital of 18th century Virginia. The institute's programs are designed for elementary, middle, and high school social studies teachers.

Participants engage in a number of interdisciplinary activities with colonial American history as the focus. Participants observe museum techniques that are aimed to actively engage their students. Interactive opportunities include working with museum staff and interpreters, analyzing primary sources, and taking part in historic simulations.

There are daily sessions set aside for participants to meet with a master teacher that reinforces teaching strategies presented during the day and offer lessons and strategies that have successfully been used elsewhere with students. Together with staff, participants prepare new instructional materials for use in their own classrooms.

The program began in 1990 with 44 fifth-grade teachers from two school districts. Today, nearly 7,800 teachers from all 50 states and three foreign countries have participated since the inception of the Teacher Institute

Exhibit 30: Teacher Training Institute Session at Colonial Williamsburg



Source: Colonial Williamsburg Foundation.

5.6 Opportunities for Cooperative Marketing

There are many cooperative marketing opportunities for the new Guam Museum (Guam and Chamorro Educational Facility). The most important of these are joint marketing and promotional efforts with the Guam Visitors Bureau. As noted earlier in this report, this bureau's mission is to efficiently and effectively promote and develop Guam as a destination for all visitors. Since one of the goals of the new museum is to help better establish Guam as a global cultural tourism destination, both organizations would be better served by effectively working together. The new museum should be prominently displayed in visitor guides to Guam and in future advertising campaigns for Guam tourism.

The new museum should also extensively work in partnership with Guam travel and tourist agencies, especially those involved in organizing package tours. The right fit is very important regarding what these tourists seek and what the new museums can offer.

5.6.1 *Recommended Cooperative Marketing Partner: Smithsonian Institution*

Annual attendance at some Smithsonian Affiliate museums have increased by as much as 37% after receiving the benefits of this designation. In addition to artifact loans, Smithsonian Affiliations helps member organizations identify appropriate resources within the Smithsonian to accompany exhibit loans, education and performing arts programs, expert speakers, teacher workshops, and technical assistance. The Smithsonian Affiliations program also offers career development workshops for museum professions. A Smithsonian Affiliate may use the tag line "in association with the Smithsonian Institution" and may use the Smithsonian Affiliations logo according to established guidelines.

A publicly-operated museum interested in obtaining Smithsonian collections can apply to become a Smithsonian Affiliate. The Smithsonian considers proposals from institutions whose missions are parallel to the Smithsonian's and who demonstrate a strong commitment to serving their communities. The Affiliation agreement is intended to establish a long-term partnership between the Smithsonian and the affiliating organization. There is no time limitation on the partnership; it can last as long as both parties find it mutually beneficial. As long as the partnership is in place, the affiliating organization agrees to pay an annual fee of \$3,000 in order to cover administrative costs for the program.

Exhibit 31: Website Image Promoting Springfield Museum of Art's Smithsonian Affiliation



Source: Springfield Museum of Art.

As mentioned earlier in this report, PBS Guam has been merged into the Department of Chamorro Affairs. This division will direct the future operation of the theater building at the new Guam Museum (Guam and Chamorro Educational Facility). Current plans are to use this space as a demonstration theater for visitors and as an interactive audiovisual production center. This will also have marketing value for both organizations.

The demonstration theater at the new museum should be enhanced by adding a video projection screen above a presenter's table. This would allow multimedia content to be part of interactive educational programs that can be televised by PBS Guam.

An example is shown below at an existing museum elsewhere, where students and teachers from across the country experienced an interactive live surgery program. Schools connected remotely by videoconference, or participated on-site as a member of the demonstration theater's live audience. This 90-minute program has been one of the museum's most popular educational offerings for students and teachers.

The current high community participation rate for this particular museum is mainly due to the large number of students participating in televised programs from its on-site video production studio. There should be a similar opportunity for the new Guam Museum (Guam and Chamorro Educational Facility) by adding video and teleconferencing capabilities to its demonstration theater.

Exhibit 32: Demonstration Theater at COSI Columbus



Source: COSI Columbus.

5.7 Promotional Opportunities

The new Guam Museum (Guam and Chamorro Educational Facility) should use a variety of promotional tools that have been successful at other museums. These include:

- **Advertising** (such as brochures, print ads, display advertising, television, radio, billboards, display posters, directories, and web ads).
- **Sales Promotion** (such as discounts, coupons, rebates, and contests).
- **Direct Marketing** (such as direct mail, targeted email marketing, and newsletters).
- **Public Relations** (such as community relations, media relations, press kits, press releases, events, trade shows, sponsorships, interviews, photographs, speeches, and public service announcements).
- **Internet** (such as TripAdvisor, other travel websites, Google+, Yelp, and podcasts).
- **Social Media** (such as Facebook, Twitter, Instagram, Pinterest, and blogs).

5.7.1 Promotional Opportunity: Annual Report with Video Presentation

In the *Handbook for Small Science Centers*, published in 2006, Sci-Port pointed out that:

"To quickly and succinctly acquaint grantors, donors, and the interested public with the progress their support makes possible, we take great care in producing and printing an annual report. Without this report, our constituents would be relying heavily on our Form 990 Information Tax Return filed annually with the Internal Revenue Service or fragmented pieces of information they obtain from the media. Neither source shares a full view of our results and the impact of our programs on the people we served during the year.

Our annual report presents the outcomes of the year more in pictures than words to involve the reader in a comprehensive and enjoyable visual journey of the impact our educational activities had on the lives of young people and families."

In addition to preparing an annual report, the President & CEO of the Milwaukee Public Museum personally gives a video presentation of the year's accomplishments and challenges ahead.

Exhibit 33: Title Image of Milwaukee Public Museum Annual Report Video



Source: Milwaukee Public Museum.

Before opening, some new attractions offer a small-scale preview center. The goal is to introduce the concept to visitors and potential donors while the larger main facility is being developed. Within the smaller space, quality of presentation is emphasized using participatory multimedia technology tools. Preview centers have been contained in temporary dedicated structures or within existing building space. These have also been presented in trailers.

The National September 11 Memorial & Museum is the not-for-profit corporation created to oversee the design, raise the funds, and program and operate the 9/11 Memorial at the World Trade Center site. Its Preview Site was an exhibition and retail environment developed to educate the public about the progress of the memorial and museum while these were being built. This preview center was conceived, realized, and opened in under two months.

Selected artifacts from the upcoming museum's permanent collection were presented. Visitors to the Preview Site also had the opportunity to be a part of history by sharing their 9/11 stories. An on-site recording booth allowed the public to contribute to the upcoming museum's planned introductory exhibition that would include a soundscape of people remembering, in multiple languages, where they were on September 11, 2001, and how they learned of the attacks. The Preview Site helped collect these remembrances through 3-minute recorded stories.

Highlights from the upcoming museum's digital collection were available through kiosks at the Preview Site. This collection included photographs and written tributes provided by families and friends.

Opportunities to support the creation of the Memorial and Museum were available at the Preview Site through donations and the sale of 9/11 books, DVDs, and merchandise, with all net proceeds dedicated to the development of the memorial and museum. The Preview Site and its for-sale merchandise introduced the visual identity for the new National September 11 Memorial & Museum.

Exhibit 34: Interior Views of the 9/11 Memorial Preview Site



Source: National September 11 Memorial & Museum.

5.8 Timeline for the Marketing Plan

The marketing plan for the new Guam Museum (Guam and Chamorro Educational Facility) should include the following topics:

- Marketing messages, strategies, and methods
- Approaches for market segments
- Developments expected to effect visitation
- Rationale for planned messages, strategies, methods, approaches
- Specific plans for employing outside agencies and media uses
- Sales plan that includes travel industry relationships

A suggested timeline for the initial marketing effort is presented below. It begins 12 months before the committed opening date. Since the opening date is still not definitely known, these tasks will likely need to be compressed into a quicker timeframe. If that occurs, the amount of labor and budget needed to accomplish these tasks remain the same within this compressed timeframe.

It is recommended that the Guam Visitors Bureau (GVB) administer pre-opening marketing efforts for the new Guam Museum (Guam and Chamorro Educational Facility) because GVB has the existing marketing budget and staff to accomplish this effort. After all newly hired museum marketing personnel are in place and a dedicated operational marketing budget for the new facility is available, the Department of Chamorro Affairs should be responsible for marketing.

Exhibit 35: Recommended Initial Marketing Timeline

Task	12 months before	11 months before	10 months before	9 months before	8 months before	7 months before	6 months before	5 months before	4 months before	3 months before	2 months before	1 month before	Opening
Logo	█												
Select creative agency	█												
Select PR agency	█												
Press updates		█	█	█	█	█	█	█	█	█	█	█	█
Newsletter distributed				█	█	█	█	█	█	█	█	█	█
Trade / travel advertising			█	█	█	█	█	█	█	█	█	█	█
Strategic media alliances			█	█	█	█	█	█	█	█	█	█	█
Select media agency			█	█	█	█	█	█	█	█	█	█	█
On-site media tours				█	█	█	█	█	█	█	█	█	█
Distribute media kits					█	█	█	█	█	█	█	█	█
Media on-site special event								█	█	█	█	█	█
Consumer advertising									█	█	█	█	█
Promotions											█	█	█
GRAND OPENING													█

Source: Leisure Business Advisors LLC.

5.9 Key Retail and E-Commerce Opportunities

According to the 2009 financial survey conducted by the American Alliance of Museums, almost 90% of museums offer an on-site store or gift shop. The median size was about 700 square feet. Visitors typically spend almost \$1.60 each for merchandise, representing more than 5% of a typical museum's gross operating income.

Museum shops also typically partner with artisans and manufacturers to identify, design, and produce specific merchandise items related to museum mission and goals. Tourists and local residents generally have different expectations and impacts. Tourists tend to spend more than resident visitors. They are also more likely to purchase gifts for others since they are likely to be single-time visitors.

An increasing number of museums have set up multiple shops and merchandise kiosks rather than having a single large museum store. Dispersed around the museum, these kiosks encourage visitors to take breaks from the exhibit galleries and spend time and money browsing merchandise. An example is the National Museum of the American Indian. The gift shop located on the second floor mainly offers mementos and inexpensive tourist items, while the museum shop located near the museum entrance offers goods of the highest quality and artisanship. These include textiles, jewelry, baskets, and ceramics.

This approach should be used at the new Guam Museum (Guam and Chamorro Educational Facility). In addition to the museum store, a merchandise kiosk should be placed within the waiting area for the orientation presentation that begins the main exhibit experience. The entrance lobby could also have retail areas, one of which could sell books and other educational materials produced by the Department of Chamorro Affairs.

Exhibit 36: Mill City Museum Store



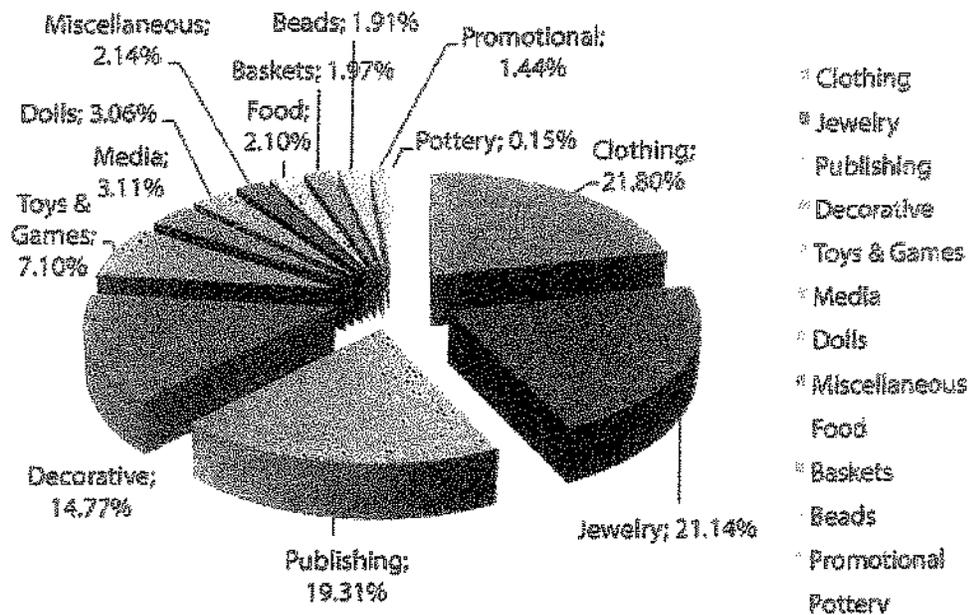
Source: Minnesota Historical Society.

Ah-Tah-Thi-Ki is a museum of Seminole culture and history located near Miami, Florida. It is owned and operated by the Seminole Tribe of Florida. The percentage of total sales for each merchandise category is shown below. Clothing and Jewelry generally have higher retail prices. Publications include not only books, but also other printed material such as postcards, prints, and notecards. Decorative items include some that are not handcrafted by Seminole artisans. Food has been a relatively new category and is limited to packaged food items made by tribal members. The top categories are clothing (22%), jewelry (21%), publishing (19%), and decorative items (15%).

This merchandising experience should be used as initial guidance for the new Guam Museum (Guam and Chamorro Educational Facility). As noted earlier in this section, tourist attractions in the Pacific region typically advertise famous products considered attractive to Japanese visitors, and they want to learn the origin or background of these items.

Planned museum merchandising approaches were recently discussed at a March 2014 conference in Guam, and these are in line with those used at the Ah-Tah-Thi-Ki museum and elsewhere. The new museum plans to offer items made by local artists and artisans, especially those that speak to Guam’s visitors. Department of Chamorro Affairs President Joseph Artero- Cameron commented that there will be diverse opportunities for local creators and merchants to sell both affordable and high-end cultural products. These include artwork, jewelry, books, puzzles, coconut products, and chocolate. Items developed for the museum store should generally be an extension of Guam, with an emphasis on authenticity.

Exhibit 37: Museum Store Sales by Category at Ah-Tah-Thi-Ki Seminole Indian Museum



Source: Seminole Tribe of Florida. 2013 data.

E-commerce is a museum retail activity with strong future growth potential. Online stores are always open and are available to potential customers worldwide. These can often be operated at a reduced cost compared to brick and mortar stores.

Large well-financed museums typically create their own online store. A popular example is the Metropolitan Museum of Art (<http://store.metmuseum.org/>), shown below. Another example is the National Museum of the American Indian (<http://www.nmai.si.edu/store/>).

Smaller museums often use an outside retailing service to set up the online museum store. A direct link from the museum website provides a seamless process for online users. The Museum of the Cherokee Indian website (<http://www.cherokeemuseum.org/>), for example, has a link on the top of its home page that takes the user to the outside service (<http://cherokeemuseum.mivamerchant.net/mm5/merchant.mvc>).

Online museum stores can also be directly accessed by other websites that specifically cater to customers looking for quality merchandise. An example is the Musee.com website (<http://musee.com/index.php>), which helps shoppers find unique products at online museum shops. This website also helps museum shops find online shoppers.

Exhibit 38: Screen Image of Online Store for the Metropolitan Museum of Art.



Source: Website for the Metropolitan Museum.

6 | Implementation Approach

This section presents the recommended implementation approach for the new Guam Museum (Guam and Chamorro Educational Facility). Topics include practical strategies based on the experience of comparable facilities, and the recommended role of a fundraising organization.

6.1 Practical Strategies Based on the Experience of Comparable Facilities

Many practical museum strategies based on best practices are recommended in other sections of this report. Those in previous sections include:

- Cater to children and teenagers
- Showcase innovation
- Promote problem solving
- Provide Science, Technology, Engineering & Math (STEM) informal education
- Maximize museum membership and school involvement
- Offer teacher training
- Consider cooperative marketing with the Smithsonian Institution
- Establish a close partnership with PBS Guam
- Prepare ongoing annual reports with video presentations

The next section of this report describes best practices in these operational areas:

- Employment and hiring
- Community contributions and involvement
- Education
- Procurement and contracting
- Benefit versus cost of operations outsourcing

The following pages of this section provide additional recommendations for the new museum's implementation approach.

6.1.1 Create Construction Update Web Pages

One of the most successful approaches for communicating with the public is the Internet. Beyond basic descriptive information, the website for the new museum can also provide details of the project while it is under construction. Progress can be shown in photographs, live web cams, video segments, audio statements by the director and the architect, and donor acknowledgments. Press releases can be posted online, and email newsletters can provide monthly progress updates.

Successful museums elsewhere offer a temporary exhibit gallery because it provides a constant change of content and particularly appeals to members. Over time, this has become a popular area at museums worldwide.

The first floor of the new Guam Museum (Guam and Chamorro Educational Facility) will have 3,100 square feet of space for changing exhibits. This area should be used on opening day along with the permanent exhibits elsewhere in the museum. It should mainly focus on cultural and historical topics. In addition, this space should also showcase current technology with participatory educational experiences. An example is described below.

Case Study: "Take Apart Studio" Temporary Exhibit at the Putnam Museum.

This exhibit is an example of one that could be quickly developed. It allows visitors to explore items using real tools. They could dismantle an item, discover its inner workings and devise a new plan. These included the inner workings of clocks, phones, and printers. A workbench complete with the tools and safety equipment was provided. After dismantling an item, participants could use the uncovered gears, wires and mechanics to create something of their own invention.

This exhibit highlighted the growing "makers" movement happening worldwide. "Makers" take everyday objects, found items and common components and repurpose them. Makers solve problems with unique solutions and create inventions through experimentation, discovery and problem solving. Exhibit parts were donated by the Waste Commission of Scott County, which also served as a sponsor. Other sponsors were St. Ambrose University, QC Co-Lab and Tennant Trucking.

Exhibit 39: View of Putnam Museum's "Take Apart Studio" Temporary Exhibit



Source: Putnam Museum.

6.2 Role of a Fundraising Organization for the New Museum

The New Guam Museum (Guam and Chamorro Educational Facility) will have one or more fundraising organizations financially supporting it. As mentioned earlier in this report, the Guam Museum Foundation is a non-profit organization that was incorporated in 2006 as a support group for the new Guam Museum (Guam and Chamorro Educational Facility). The foundation's primary purpose is to serve as a private fundraising arm of the Department of Chamorro Affairs' Division of Guam Museum. While the department does not control the Foundation, the resources and fundraising activities of the Foundation are almost entirely for the direct benefit of DCA's Guam Museum division.

This foundation has operated the Latte of Freedom / Hall of Governors Facility. It is recommended that the foundation not perform this function in the future so that it can provide more internal resources towards private fundraising for the new Guam Museum (Guam and Chamorro Educational Facility).

Museums elsewhere have been successful in fundraising efforts by taking these steps:

- Analyze the position of the museum in the marketplace.
- Concentrate on donor sources whose interests are parallel to the museum's.
- Measure the giving potential of each potential donor group.
- Develop a fundraising plan for each donor group based on its fundraising potential.
- Design a continuous solicitation program for each donor group.
- Generate offerings and benefits that appeal to prospective donors.

6.2.1 Use of Fundraising Consultant

The Department of Chamorro Affairs should use an outside professional consultant to assist its fundraising efforts for the new museum. This approach has been successful at other museums. For example, the Putnam Museum in Iowa recently completed a \$1.5 million capital campaign to renovate existing exhibit space for a new participatory exhibit area.

In its FY2009-10 tax return, the Putnam Museum reported that it had retained Benevon because it "consults on sustainable fundraising from individual donors." During that fiscal year, the museum reported approximately \$681,000 in gross receipts from this activity and that it paid the fundraiser \$20,000. This was part of the total \$2.3 million raised in contributions and grants during that period, substantially more than the \$1.4 million raised during the previous fiscal year. According to that Seattle firm's website, Benevon was founded in 1996 by Terry Axelrod, a professional fundraiser and social worker. She designed the Benevon Model for Sustainable Funding after working for more than twenty-five years in the nonprofit sector.

COSI Columbus is another museum that faced past financial difficulties and has used a fundraising advisor. That museum's FY2011-12 tax return reports that it retained the Benefactor Group for "fundraising consultation" and that it paid approximately \$81,000 for this service. According to its website, Laura MacDonald established Benefactor Group in 1999 to serve the needs of nonprofit organizations. It is based in Columbus, Ohio, and serves clients locally and internationally.

An endowment campaign seeks to raise funds for a museum's long-term financial stability, although these funds can be used for short-term needs if needed. Endowment campaigns mainly financially support programs and services rather than physical buildings.

The fundraising organization should undertake an endowment campaign for the new Guam Museum (Guam and Chamorro Educational Facility). This effort typically begins with a funding study of the community and potential financial supporters. The foundation should understand the donor base within the museum's sphere of influence, who the major givers are, what other organizations they support, how much they give to other organizations, how much other organizations are raising from donors, and which donors can bring in other donors.

This funding study would include research on current philanthropic support in the local area. This initial research is followed by confidential interviews with key members of community, major supporters, and potential individual and corporate donors. These interviews should focus on how well donors and potential donors understand the museum's mission and its programs, how they view the museum as a community asset, and whether they would be willing to make a major financial contribution.

After the funding study has been completed, the next step would be a plan that identifies fundraising goals, leaders, donor targets by type, and estimates of how much the museum could raise from each donor. This plan would also include a timeline, budget, staff, and support issues.

Grant funding is an important potential revenue source that should be especially emphasized at the new Guam Museum (Guam and Chamorro Educational Facility). These grants can be obtained from both government and private sources.

For example, Sci-Port receives more than \$700,000 annually from grants, the State of Louisiana, and local communities. Examples of Sci-Port's past grants can provide useful guidance. The AEP Foundation awarded the museum a \$78,300 grant to develop a series of programs and exhibits to be used throughout the local community, the state of Louisiana, and by members of a museum association. The Community Foundation of Shreveport-Bossier funded one of its traveling exhibitions by granting it \$77,900 from the Rubye Moss Ratcliff Fund. The Omega Diagnostics Foundation awarded a \$14,700 grant to the museum for an afterschool program. Other grant sources include the American Association of Museums, Institute of Museum and Library Services, Shreveport-Bossier Convention and Tourist Bureau, International Paper Foundation, St. Louis Science Center Foundation, and the Times Gannett Foundation.

Local corporations often financially support museums and derive benefits from this support. A company may sponsor a special event or ask its employees to volunteer at the museum. A corporation can also make in-kind gifts to the museum. In return for this financial support, the museum typically offers discounted memberships to the corporation's employees.

7 | Best Practices for Sustainability

This section presents selected best practices for museums that help financial sustainability. Topics include employment, hiring, volunteers, community involvement, informal education initiatives, procurement, contracting, and outsourcing.

7.1 Employment and Hiring

Fair staff management procedures are both a practical necessity and an ethical obligation for museums. Fairness begins with a clear commitment to equality of opportunity, which should be expressed in a written equal opportunities policy. This policy should cover recruitment, promotion, day-to-day supervision, management, pay, benefits, and training opportunities.

According to the International Council of Museums (ICOM) code of professional ethics, members of the museum profession, although entitled to a measure of personal independence, must realize that no private business or professional interest can be wholly separated from their employing institution. They should not undertake other paid employment or accept outside commissions that are in conflict with, or may be viewed as being in conflict with the interests of the museum.

7.1.1 *Museum Employment Resources*

The following websites allow museums to post job listings:

- American Alliance of Museums (<http://www.aam-us.org/resources/careers>)
- American Association for State and Local History (<http://jobs.aaslh.org/jobs>)
- Museum Employment Resource Center (<http://museum-employment.com>)
- National Council on Public History (<http://ncph.org/cms/careers-training/jobs>).

7.1.2 *Volunteers*

Most museums recruit volunteers, especially small and medium-sized facilities. Volunteers typically operate information desks, serve as docents for group tours, work in gift shops, support curators, and assist with public affairs. According to the American Alliance of Museums, museums typically have seven volunteers for every full-time staff person. Smaller museums generally have a higher ratio of volunteers to full-time personnel.

According to the ICOM code of professional ethics, the governing body should have a written policy on volunteer work that promotes a positive relationship between volunteers and members of the museum profession. It is important to have established processes for recruiting, training, retaining, and evaluating volunteers. There should be a volunteer orientation manual with an organizational chart that shows the chain of command.

7.2 Community Contributions and Involvement

In addition to being a major tourist attraction, the new Guam Museum (Guam and Chamorro Educational Facility) should also serve its community and encourage local involvement. The following recommendations are based on initiatives taken by comparable museums elsewhere.

7.2.1 Offer Multiple Community Events

The new Guam Museum (Guam and Chamorro Educational Facility) will have a multipurpose room, indoor theater, and outdoor stage. These provide flexible physical space that should be used for many educational community events. These could include:

- **Heritage Programs:** For example, the Atlanta History Center has offered a yearly musical heritage program with corporate and philanthropic partners.
- **Career Fair:** This event is open to all area schools with the purpose of exposing students to various careers locally. An example is shown below.
- **National Inventors' Month:** Participation in the annual month-long event celebrating invention and creativity.
- **NanoDays:** Local involvement in the annual nationwide festival of educational programs about nanoscale science and engineering and its potential impact on the future.
- **Career Guidance Day:** Provided for local area secondary school guidance counselors, this event provides guidance counselors with specific examples and strategies for careers in the local area.

Exhibit 40: Community-Oriented Events at Marbles Kid Museum



7.2.2 Collaborate with the Indigenous Chamorro Community

The new Guam Museum (Guam and Chamorro Educational Facility) should work with the indigenous Chamorro community to correct misinformation about Chamorro cultural heritage, add Chamorro names for collection items, and develop protocols for handling culturally sensitive items. The new museum should also work with Chamorro artists to create art that communicates the nature and relative arrangements of places and physical features, Chamorro culture, and diverse ways of seeing and knowing. This community collaboration should be based on traditional practices.

7.2.3 Establish a Local Business Community Advisory Committee

The new museum should not directly compete with local businesses. Instead, it should establish a local business community advisory committee that would work in tandem with the museum in ways that will be mutually beneficial. This collaboration could include joint promotions, special events, and live performances. The new museum is expected to be an anchor development within the Hagåtña capital and cultural district, which is currently being restored and redeveloped. Its presence should therefore enhance surrounding businesses.

It is also expected to become a destination attraction that will give reason for tourists to stay longer on Guam, thereby contributing more to the local economy. There are currently no cultural attractions in Guam and the Commonwealth of the Northern Mariana Islands that are comparable to the new museum.

7.2.4 Serve Underrepresented Groups

In order to increase its visibility within the community, the new museum should offer reduced-price family access memberships to families based on financial need. This approach has been successful elsewhere. For example, the reduced membership price for needy families at COSI Columbus is 75% less than its standard price. This program is a way to increase museum access by children who otherwise would not be able to visit. To be eligible, families typically need to show they are on Medicaid, food stamps or the WIC (Women, Infants and Children) nutrition program.

The AT&T Foundation awarded Sci-Port a \$34,000 grant for an after-school program for at-risk students. High school sophomores met on Monday and Wednesday afternoons to engage in a multidisciplinary curriculum consisting of hands-on projects.

The Science Center of Iowa's Girls in Science Initiative includes informal learning opportunities for girls to meet successful women and learn about careers in a variety of fields. Putnam Museum began an annual "Introduce a Girl to Engineering" Day program in conjunction with John Deere. Fifty 8th grade girls from local area schools join 30 (mostly female) Deere engineers for a hands-on exploration in their field. It currently serves 125 girls annually. Sciencenter strives to build goodwill in its community by offering free membership to families eligible for free or reduced lunches.

Competitions have traditionally been an effective way to galvanize interest in education, and the new Guam Museum (Guam and Chamorro Educational Facility) should offer these on a regular basis. The new museum could also provide preparatory professional development sessions for elementary and middle-school teachers so that they can better guide their students through the competitions and connect these competitions to lessons taught in their classrooms.

In addition, museum staff should also assist with event logistics and planning for qualifying events. FIRST (For Inspiration and Recognition of Science and Technology) organizes a variety of competitions. One of these is the FIRST Tech Challenge. It is designed for students in grades 7 to 12 and allows them to compete head to head using a sports model.

Teams are responsible for designing, building, and programming their robots to compete in an alliance format against other teams. The robot kit is reusable from year-to-year and is programmed using a variety of programming languages. Teams, including coaches, mentors and volunteers, are required to develop strategy and build robots based on sound engineering principles. Awards are given for the competition as well as for community outreach, design, and other real-world accomplishments. Putnam Museum in partnership with the Quad City Science and Engineering Council (QCESC) hosts an annual FIRST Tech Challenge Regional Qualifier competition.

Exhibit 41: FIRST Tech Challenge Competition at Hill Air Force Base Aerospace Museum



Source: Weber State University.

In addition to being a tourist attraction, the new Guam Museum (Guam and Chamorro Educational Facility) will also provide informal education experiences to visitors. It should have strong links with local schools and be a resource for lifelong learning.

7.3.1 *Provide a Classroom Environment*

Currently, a multi-purpose room is provided on the first level of the new Guam Museum (Guam and Chamorro Educational Facility). That room should also be used as a classroom for school groups. It should include mobile whiteboards in order to make children at home in their own environment. Comparable museums offer a variety of programs within on-site classrooms.

The best comparable guidance comes from Bishop Museum, which offers many on-site educational programs in culture and science. All of these programs are aligned with state educational standards. These programs range in length from 25 minutes to one hour. There are no additional fees for these educational programs but the museum generally has a limit of no more than two programs per school group. Currently, that museum is not offering off-site outreach programs in school classrooms.

Bishop Museum charges \$5 per student during the school year and \$8 per student during the summer months and holiday breaks. Part of this fee is used to cover the costs needed to provide the on-site educational programs, since its pricing approach includes educational programs. This "one price includes all" approach for schoolchildren reinforces the idea that interpretive programs are an integral part of a student's visit to the museum.

An example of a relevant educational program offered at Bishop Museum is its "The Future is in the Past" program. Through the lens of Pacific voyaging, students explore the works of their ancestors and discover that STEM (science, technology, engineering and mathematics) is nothing new to their culture.

Another example is the Science Center of Iowa. Its discovery labs are available during the school year. These 45 to 60 minute sessions give groups of up to 30 students a hands-on investigative science experience with museum staff members. Sci-Port offers lab programs in robotics, mathematics, physical sciences, and earth science. In its 60-minute robotics lab session, participants learn programming and robotics while conducting missions to test their robot's speed. Its alternative energies lab program teaches problem-solving and team-building skills by programming robots to complete tasks such as powering a wind turbine and closing a dam.

Based on similar museums, the new Guam Museum (Guam and Chamorro Educational Facility) should offer a variety of regular on-site educational programs that are aligned to the Common Core State Standards. These educational standards have been adopted by Guam.

7.3.2 Offer Workshops

The new Guam Museum (Guam and Chamorro Educational Facility) should offer workshops on a variety of subjects, and target some of these to under-served groups. For example, the Science Center of Iowa provides specialized workshops for its Girls in Science Initiative. That museum also offers monthly classes designed specifically for young children age three to five and their families.

During the first year of its education-oriented turnaround strategy, COSI Columbus offered workshops for children as young as 18 months when stimulation can aid brain development. It also provided a Science of Parenting course based on research findings at that time. Putnam Museum offers a popular workshop that meets the first Sunday of each month during the school year, where students in second to sixth grades experience hands-on activities that covering a variety of engaging topics.

7.3.3 Offer Overnight Programs and Multi-Day Camps

Natural history museums, such as Chicago's Field Museum, have witnessed a surge in interest in their family night programs. Overnight programs at museums in general have become increasingly popular, and the new museum should offer these programs. These single night educational experiences allow children to spend the night at the museum.

The new museum could also offer camp experiences in order to broaden its educational programs. For example, the U.S. Space & Rocket Center offers a Robotics Camp for children in grades 4 to 6 and a Robotics Academy for those in grades 7 to 9. Both are five-night programs.

Recently, Putnam Museum began offering an annual Engineering Kids Day Camp. The Science Center of Iowa has day camp programs in meteorology, physics, technology, and chemistry.

7.3.4 Provide Workforce Training

The Cradle of Aviation Museum has many workforce development initiatives. These include a its Job Shadow off-site program. This is a work experience where participants learn about a job by walking through the workday as a shadow to an employee in an occupational area of interest. The goal is that this informal learning experience will lead to more meaningful internships.

Currently the museum has established over 30 industry partners who are willing to assist in providing these job shadow opportunities. Among them are Curtiss Wright, National Grid and Northrop Grumman.

The new Guam Museum (Guam and Chamorro Educational Facility) must use procedures prescribed by the Guam Procurement Act. When a specific procurement involves the expenditure of federal assistance or contract funds, or other federal funds as defined by Section 20 of the Organic Act of Guam, this act requires that all persons within the Government of Guam shall comply with such federal law and regulations that are applicable. The museum should therefore adopt a procurement policy that will allow it to qualify for funding from federal sources.

The federal government has established procurement requirements that have affected museum funding elsewhere. For example, the US Department of Housing and Urban Development (HUD) audited its funding for the New Orleans African-American Museum in 2005 and required that part of that funding be repaid due to mismanagement. The audit report concluded that the museum did not have adequate controls over procurement.

Based on existing procurement requirements, the following approaches are recommended:

- **Full and Open Competition** – The museum’s procurement transactions should be conducted in a manner providing full and open competition.
- **Efficient and Economic Purchases** - The museum should review proposed procurements to avoid purchase of unnecessary or duplicative items.
- **Intergovernmental Procurement Agreements** - If this approach is possible, the new museum should enter into intergovernmental agreements for procurement of common goods and services in order to foster greater economy and efficiency.
- **Awards to Responsible Contractors** - The museum should make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement.
- **Ethical Standards of Conduct** - The museum should have written standards of conduct regarding potential conflicts of interest.
- **Written Standards of Conduct** – The museum should maintain a written code of conduct governing the performance of their employees engaged in the award and administration of contracts.
- **Written Procurement Selection Procedures** - The museum should have written selection procedures for procurement transactions.
- **Pre-Qualification Criteria** - The museum should ensure that all lists of prequalified persons, firms, or products that are used in acquiring goods and services are current and include enough qualified sources to ensure full and open competition.
- **Contract Administration System** – The museum should maintain a contract administration system that ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.
- **Written Record of Procurement History** - The museum should maintain records detailing the history of procurement.

7.5 Benefit Versus Cost of Operations Outsourcing

Outsourcing offers opportunities to enhance operating efficiency but also has challenges. Therefore, outsourced functions should be carefully managed at the new Guam Museum (Guam and Chamorro Educational Facility).

7.5.1 *Recommended Outsourcing of Entire Museum Operations*

The City of Corpus Christi in Texas has outsourced the entire operation of its Corpus Christi Science and History Museum to a single outside operator. This company already owned other entertainment venues near the museum. It promotes the museum along with these other properties in that area.

This company, Corpus Christi Museum Joint Venture, is run by a local family. It initially operated the museum for a two-year period under a profit-sharing agreement. The company must maintain the museum's certification and accreditation. It also must have professional museum staff members who can manage and care for exhibits.

7.5.2 *Recommended Outsourcing of Visitor Services*

An alternative approach would involve the Department of Chamorro Affairs retaining core functions such as collection, conservation, interpretation, education, and exhibition design. It would then outsource ticketing, admissions, security, and other visitor services functions.

The Imperial War Museum in London is currently outsourcing its visitor services and security functions to an outside company. The museum's public notice for these services stated that the contract covered the appointment of a single experienced and competent contractor to deliver high quality visitor and security related services. These services included interacting with visitors to ensure that the staff enhances the visitor experience when visiting the museum. This is important because visitor services staff are the museum's visible face to the visitor. The contract required that the core staff have good interpersonal skills, be good decision-makers, and have general knowledge of the galleries to ensure that they would be able to properly direct visitors. These services also covered the provision, delivery and management of security services to each building and the outdoor area.

The contract required the appointed contractor to provide visitor services staff and security guards on a 24-hour /seven-day-a-week basis for the entire calendar year, with particular emphasis on providing sufficient staff during the museum's opening hours. The contractor was also required to manage their staff in association with the museum's core management. The contract was for an initial term of three years with the option to be extended for two additional two year periods.

Based on the success of this approach at the Imperial War Museum, the nearby National Gallery pursued a similar outsourcing approach for its visitor services and security. Its public notice for these services was published in February 2015.

The International Association of Museum Facility Administrators conducted a survey of its members concerning outsourcing specific services. The top services outsourced were:

▪ Equipment Maintenance	87%
▪ Grounds Maintenance	74%
▪ Exterior Building Maintenance	71%
▪ Custodial Services / Housekeeping	50%
▪ Security	37%

Museums have also outsourced administrative activities such as:

- Advertising and Public Relations
- Surveys and Market Research
- Membership Services
- Accounting and Payroll
- Employee Recruitment and Human Resources
- Grant Writing

As noted earlier in this report, museums often outsource retail operations and such an approach has been financially successful elsewhere. For example, the museum store for the Abraham Lincoln Presidential Library and Museum is operated by an outside concessionaire. Per capita retail sales there have exceeded typical benchmarks for comparable museums. A local company also provides catering serviced for special events.

The following approaches are recommended based on best practices at existing museums elsewhere:

- Decide which services can and cannot be outsourced.
- Clearly define the scope of what is outsourced.
- Establish clear roles and responsibilities for the suppliers
- Establish benchmarks and procedures for evaluating performance.
- Maintain regular supplier contact
- Establish a partnering relationship with the supplier.
- Retain responsibility for setting standards, policy and procedures.
- Make the supplier responsible for delivery.
- Retain the right to conduct audits at the supplier's premises.
- Aim for continuous improvement
- Hold regular meetings to monitor achievements
- Encourage the supplier to propose changes based on their expertise
- Have a contingency escape plan covering the outsourcing contract, ownership
- Maintain the right to invite tenders for new work.
- Continue to benchmark the service and consider alternative approaches.

8 | Financial Analysis

This section provides the financial analysis for the new Guam Museum (Guam and Chamorro Educational Facility). Topics include financial assumptions, financial performance of comparable museums, operating pro forma for breakeven operation, and cash flow analysis.

8.1 Financial Assumptions

Key assumptions are discussed below and on the following pages that affect future financial performance. These include admission pricing, educational fees, and membership rates.

This financial analysis assumes that the new museum is directly operated by the government. Should the museum be operated by an external organization through a Request for Proposals (RFP) process, this analysis is provided as suggested guidance.

8.1.1 Admission Price

The 2013 updated feasibility study recommended that general admission prices be similar to those charged by the Bishop Museum in Hawaii, which is a comparable attraction. This is a reasonable approach for pricing. Current prices there are shown below. These prices are in line with those currently charge by popular Guam attractions. For example, the standard admission price for adults at Underwater World is currently \$23. As noted earlier in this report, Guam attractions typically offer substantial discounts through promotional partners and tour operators. This pricing approach has been assumed in this financial analysis, and is reflected in estimated future per capita spending amounts.

Exhibit 42: Standard Admission Prices for Bishop Museum

Category	Adult	Senior ^{1/}	Junior /Youths ^{2/}	Child ^{3/}
<i>Individual:</i>				
General Admssion	\$19.95	\$16.95	\$14.95	Free
Resident / Military ^{4/}	\$12.95	\$10.95	\$8.95	Free
Guest of Resident / Military ^{4/}	\$16.95	\$13.95	\$11.95	Free
<i>Group:</i>				
Non-Resident	\$16.95	\$13.95	\$12.95	---
Resident	\$9.95	\$7.95	\$6.95	---

^{1/} Age 65 and over.

^{2/} Ages 4 to 12.

^{3/} Age 3 and under.

^{4/} Hawaii State ID, Hawaii driver's license or active military identification is required.

Source: *Bernice Pauahi Bishop Museum.*

The best comparable guidance also comes from the Bishop Museum, which offers many on-site educational programs in culture and science. All of these programs are aligned with state educational standards. These programs range in length from 25 minutes to one hour. There are no additional fees for these educational programs but the museum generally has a limit of no more than two programs per school group. Currently, that museum is not offering off-site outreach programs in school classrooms.

Bishop Museum charges \$5 per student during the school year and \$8 per student during the summer months and holiday breaks. Part of this fee is used to cover the costs needed to provide the on-site educational programs. It is recommended that the new museum follow Bishop Museum's pricing approach, which includes educational programs in its student pricing. This "one price includes all" approach for schoolchildren reinforces the idea that interpretive programs are an integral part of a student's visit to the museum.

An example of a relevant educational program offered at Bishop Museum is its "The Future is in the Past" program. Through the lens of Pacific voyaging, students explore the works of their ancestors and discover that S.T.E.M (science, technology, engineering and mathematics) is nothing new to their culture.

Based on similar museums, the new Guam Museum (Guam and Chamorro Educational Facility) should offer a variety of regular on-site educational programs that are aligned to the Common Core State Standards. Guam currently has adopted these educational standards.

Current membership rates at the Bishop Museum are shown on the next page. General admission fees can be applied towards any membership level within seven days with an accompanying receipt. All membership levels have these benefits for a 12 month period:

- Unlimited free admission to Bishop Museum and J. Watumull Planetarium year-round
- Free admission to Amy B.H. Greenwell Ethnobotanical Garden
- Invitations to special member previews and other Museum programs
- Free/discounted admission to special programs and events
- Subscription to the museum's journal
- 20% discount on Bishop Museum Press books
- 10% discount on most merchandise in the museum's gift shops
- 10% discount on historic print reproductions from the library and archives.

Patron and premier membership levels have additional benefits, which are listed on the next page. The overall goal is to provide more appealing benefits to higher priced membership levels. Many of these involve personal and exclusive privileges.

Exhibit 43: Bishop Museum Membership Rates

Student \$35	For one high school or college student (under age 25) with valid student ID
Senior \$45	For one adult 65 or over and one guest or spouse
Friend \$50	For one adult
Dual/Family \$85	For two adults and up to six children or grandchildren under 18
Patron \$120	All Membership benefits listed above for two adults, up to six children or grandchildren under age 18, plus: <ul style="list-style-type: none"> • Two free guests per visit when accompanied by a member • Free or discounted admission to more than 300 natural history and science museums worldwide (ASTC Passport Program) • Invitation to attend <i>Museum After Dark</i>, an annual after-hours event exclusively for members and their guests • An additional 10% discount (20% total) on most merchandise in the Museum's gift shops and Café Palama
Benefactor \$250	All Patron benefits, plus: <ul style="list-style-type: none"> • Invitations to attend VIP Behind-the-Scenes Tours led by Museum experts • Two guest passes to the Museum -- great for out-of-town guests (a \$40 value) • Special edition Bishop Museum note card • 10% facility rental discount at Bishop Museum (up to a \$400 value)
Visionary \$500	All Benefactor benefits, plus: <ul style="list-style-type: none"> • Invitation for two to the annual <i>President's Reception</i> • Two additional guest passes (four total—a \$80 value) • A Bishop Museum Press book for your personal library
Museum Explorer \$1,000	All Visionary benefits, plus: <ul style="list-style-type: none"> • Invitation for two to the annual <i>Chairman's Reception</i> • Invitations to attend intimate Explorers' gatherings highlighting timely Museum topics • Free admission for a total of four guests per visit—when accompanied by a member • Two additional guest passes (six total—a \$120 value) • A special membership card
Preservation Council \$2,500	All Museum Explorer benefits, plus: <ul style="list-style-type: none"> • Reserved seating for select Museum events (<i>Traditions of the Pacific</i>, <i>The Sky Tonight</i>, etc.) • Enjoy <i>An Evening With DeSoto Brown</i>, highlighting treasures from the Library & Archives • Two additional guest passes (eight total—a \$160 value)
Charles Reed Bishop Society \$5,000	All Preservation Council benefits, plus: <ul style="list-style-type: none"> • Invitation to attend an exclusive birthday celebration honoring Museum founder Charles Reed Bishop • Exclusive opportunities to view the Museum's collections at select events • Opportunity to reserve one private docent-guided tour of Hawaiian Hall for up to ten people • One gift Patron level membership for the recipient of your choice
Pauahi Circle \$10,000	All Charles Reed Bishop Society benefits, plus: <ul style="list-style-type: none"> • Personal updates from the Museum's President • Private collections tour for up to eight people • Exclusive invitation to attend a private event with the Museum's President and Chairman of the Board

Source: Bernice Pauahi Bishop Museum.

8.2 Financial Performance of Comparable Museums

Selected existing comparable museums are examined below. The Museum of the Cherokee Indian is located in North Carolina, and is described in a detailed case study in Section 4.4 of this report. Its mission is to preserve the history, culture and heritage of the Cherokee Indians. Total building space is approximately 30,000 square feet, which is similar in size to the new Guam Museum (Guam and Chamorro Educational Facility). The Bishop Museum is in Hawaii, and has been referenced many times in this report. It is home to the world's largest collection of Polynesian cultural artifacts. The Bullock Texas State History Museum is a history museum that strives to be financially sustainable.

Key business ratios are also shown below. These include the number of annual attendees per square foot of building space, per capita earned income, and earned income as a percentage of operating expenses. These ratios for estimated future breakeven operation of the new Guam Museum (Guam and Chamorro Educational Facility) fall within the range already achieved by the comparable museums.

Exhibit 44: Financial Performance of Selected Comparable Museums

Factor	Bernice Pauahi Bishop Museum			Museum of the Cherokee Indian			Bullock Texas State History Museum		
	Annual Amount	Per Capita	Per Square Foot	Annual Amount	Per Capita	Per Square Foot	Annual Amount	Per Capita	Per Square Foot
Reported Annual Attendance	350,000	---	3.0	100,000	---	3.3	445,000	---	2.5
Total Building Space (square feet)	117,000 ^{1/}	---	---	30,000	---	---	175,000	---	---
Adult Admission Fee	\$20	---	---	\$11	---	---	\$12	---	---
<i>Earned Income:</i>									
Admissions, Programs, and Events	\$1,898,831	\$5.43	\$16	\$674,260	\$6.74	\$22	\$2,280,856	\$5.13	\$13
Net Sales of Inventory	\$534,843	\$1.53	\$5	\$368,635	\$3.69	\$12	\$994,742	\$2.24	\$6
Memberships, Rentals, and Other ^{2/}	<u>\$1,277,142</u>	<u>\$3.65</u>	<u>\$11</u>	<u>\$94,646</u>	<u>\$0.95</u>	<u>\$3</u>	<u>\$1,661,368</u>	<u>\$3.73</u>	<u>\$9</u>
Total Earned Income	\$3,710,816	\$10.60	\$32	\$1,137,541	\$11.38	\$38	\$4,936,965	\$11.09	\$28
Percentage of Operating Expenses	39%	---	---	101%	---	---	82%	---	---
<i>Revenues:</i>									
Earned income	\$3,710,816	\$10.60	\$32	\$1,137,541	\$11.38	\$38	\$4,936,965	\$11.09	\$28
Investments	\$7,554,799	\$21.59	\$65	\$399,466	\$3.99	\$13	\$1,148,002	\$2.58	\$7
Other Revenues ^{3/}	\$1,501,954	\$4.29	\$13	\$28,214	\$0.28	\$1	\$0	\$0.00	\$0
Total Revenues	\$12,767,569	\$36.48	\$109	\$1,565,221	\$15.65	\$52	\$6,084,967	\$13.67	\$35
Operating Expenses ^{4/}	\$9,485,723	\$27.10	\$81	\$1,123,520	\$11.24	\$37	\$6,006,817	\$13.50	\$34
Financial Information Year	FY2014	---	---	2012	---	---	FY2014	---	---

^{1/} Includes floor space used for exhibits, public area, laboratories, offices, and library.

^{2/} Includes parking fees and research contracts.

^{3/} Includes fundraising events, sales of assets, and miscellaneous revenue.

^{4/} Excludes occupancy, interest, depreciation, depletion, and amortization costs.

Source: Museum management and Internal Revenue Service (IRS). Financial information is for the latest year available.

8.3 Operating Pro Forma for Breakeven Operation

The operating pro forma for the new Guam Museum (Guam and Chamorro Educational Facility) is presented below for breakeven operation. It is recommended that the new museum be budgeted for this level of future operation until higher performance has actually been achieved. At that time, expanded operations would be justified and higher expenses could be budgeted. The first fiscal year of operation is assumed to end in 2016.

Breakeven annual attendance is based on similarly-sized comparable museums. Visitor per capita spending amounts are also based on the experience of comparable museums adjusted for expected future inflation of 2% annually. The sales of inventory line item includes gift shop sales, online sales, and retail sales from special exhibits. The net amounts are for gross sales less discounts and cost of goods sold. "Earned income" is typically defined as income earned by providing goods or services. Government grants, private contributions and sponsorships typically do not qualify as earned income sources. Earned income as a percentage of total revenues is also based on comparable experience. The remaining revenues would therefore need to come from sponsorships, private contributions, investment income, and government grants. By the end of the first five years of operation, the new museum may be financially self-sufficient and not need government grants or private contributions.

Exhibit 45: Operating Pro Forma for Breakeven Operation of the New Guam Museum

Factor	Year 1 FY2016	Year 2 FY2017	Year 3 FY2018	Year 4 FY2019	Year 5 FY2020
Annual Attendance	89,000	92,000	95,000	98,000	100,000
<i>Visitor Per Capita Spending:</i>					
Admissions, Programs, and Events	\$6.67	\$6.80	\$6.94	\$7.08	\$7.22
Net Sales of Inventory	\$3.65	\$3.72	\$3.79	\$3.87	\$3.95
Memberships, Rentals, and Other	<u>\$0.93</u>	<u>\$0.95</u>	<u>\$0.97</u>	<u>\$0.99</u>	<u>\$1.01</u>
Total Visitor Spending	\$11.25	\$11.47	\$11.70	\$11.94	\$12.18
<i>Operating Revenues:</i>					
Earned Income from Visitors	\$1,001,250	\$1,055,240	\$1,111,500	\$1,170,120	\$1,218,000
Sponsorships, Contributions, Grants ^{1/}	<u>\$371,766</u>	<u>\$345,237</u>	<u>\$316,986</u>	<u>\$286,936</u>	<u>\$268,197</u>
Total	\$1,373,016	\$1,400,477	\$1,428,486	\$1,457,056	\$1,486,197
Earned Income Percentage	73%	75%	78%	80%	82%
<i>Operating Expenses:</i>					
Salaries, Wages, and Services	\$933,651	\$952,324	\$971,371	\$990,798	\$1,010,614
Other	<u>\$439,365</u>	<u>\$448,153</u>	<u>\$457,115</u>	<u>\$466,258</u>	<u>\$475,583</u>
Total	\$1,373,016	\$1,400,477	\$1,428,486	\$1,457,056	\$1,486,197

^{1/} Also includes miscellaneous revenue.

Source: Leisure Business Advisors LLC.

The cash flow analysis for the new Guam Museum (Guam and Chamorro Educational Facility) is shown below. The future breakeven level amounts are from the operating pro forma presented on the preceding page. The potential level amounts are from the 2013 updated feasibility study that was prepared by Knowledge Based Consulting Group. LBA used the feasibility study as a key reference source because it is the only document that previously projected financial performance for the new museum. The goal of a feasibility study is to gauge the potential of a new museum, and this 2013 feasibility study concluded that the new museum has significant potential. The purpose of this business and sustainability plan is to be a practical document for operation of the new museum. By its nature, such a plan will generally be more conservative than a feasibility study, and our breakeven projections follows this typical approach.

It is recommended that the new museum be budgeted for the breakeven level of future operation until higher performance has actually been achieved. At that time, expanded operations would be justified and higher expenses could be budgeted. Although some existing museums are profitable, the great majority need significant private contributions or government funding to operate. LBA has used the actual experience of comparable museums in its breakeven financial projections, such as the Bishop Museum.

This comparison shows that potential operating performance could be significantly higher than the breakeven level. There is potential for additional earned revenue opportunities. These opportunities, which have been discussed previously in this report, include expanded retail and e-commerce operations.

Exhibit 46: Cash Flow Analysis for the New Guam Museum

Factor	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Annual Attendance:</i>					
Potential Level ^{1/}	215,000	195,000	195,000	195,000	195,000
Breakeven Level	89,000	92,000	95,000	98,000	100,000
Percent	41%	47%	49%	50%	51%
<i>Revenues:</i>					
Potential Level ^{1/}	\$3,814,191	\$3,594,572	\$3,666,463	\$3,739,792	\$3,814,588
Breakeven Level	\$1,373,016	\$1,400,477	\$1,428,486	\$1,457,056	\$1,486,197
Percent	36%	39%	39%	39%	39%
<i>Expenses</i>					
Potential Level ^{1/}	\$2,760,244	\$2,815,448	\$2,871,757	\$2,929,193	\$2,987,776
Breakeven Level	\$1,373,016	\$1,400,477	\$1,428,486	\$1,457,056	\$1,486,197
Percent	50%	50%	50%	50%	50%
<i>Operating Surplus / Deficit:</i>					
Potential Level ^{1/}	\$1,053,947	\$779,124	\$794,706	\$810,599	\$826,812
Breakeven Level	\$0	\$0	\$0	\$0	\$0

^{1/} From 2013 updated feasibility study.

Source: Knowledge Based Consulting Group; and Leisure Business Advisors LLC.

9 | Operational Approach

This section presents the recommended operational approach concerning staffing for the new Guam Museum (Guam and Chamorro Educational Facility). Topics include the suggested organizational chart for major positions and job descriptions.

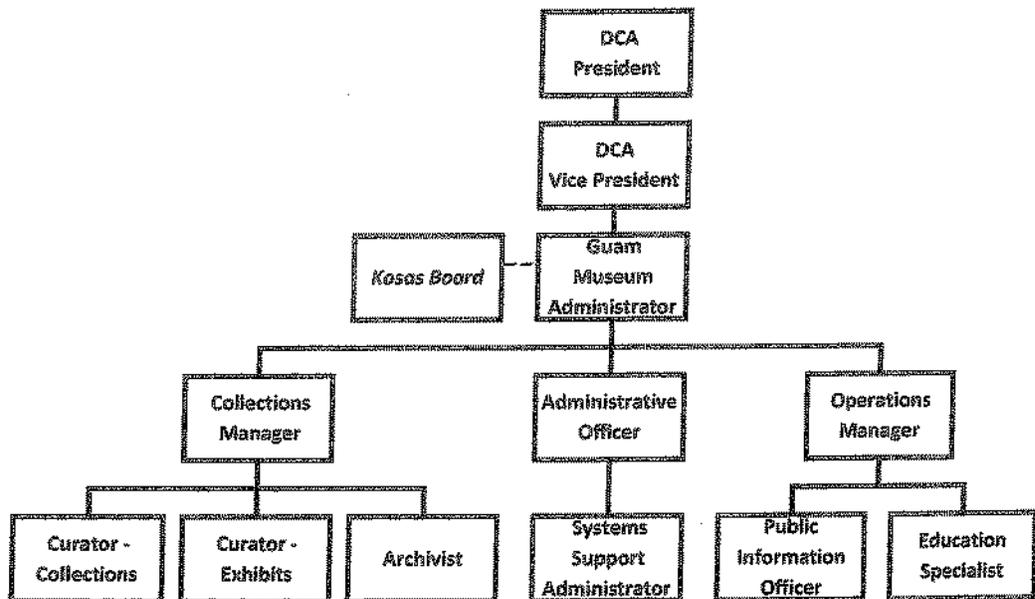
Many of the recommendations in this section are based on the results of the *2014 National Comparative Museum Salary Survey* conducted by the American Alliance of Museums (AAM). Data provided in that report was contributed by 962 museums in response to a comprehensive survey. Almost half of the museums in the sample (46%) were identified as history museums.

This section assumes that the new museum is directly operated by the government. Should the museum be operated by an external organization through a Request for Proposals (RFP) process, this information is provided as suggested guidance.

9.1 Organizational Chart for Major Positions

The recommended organizational chart for major positions is shown below. Job descriptions for these positions are generally grouped by department and provided on the following pages.

Exhibit 47: Recommended Organizational Chart for Major Positions



Source: Leisure Business Advisors LLC.

9.2 Guam Museum Administrator

The new museum's top position would be the Guam Museum Administrator. This individual administers the Division of the Guam Museum under the Department of Chamorro Affairs, and works under the general guidance and direction of the President, Board of Trustees of the Department of Chamorro Affairs, and Guam Museum Board of Advisors as mandated in Public Law 25-69. This position is titled "Director / CEO / President" in the AAM survey. This individual typically provides institutional leadership, works with the board, plans, organizes and directs museum activities. Specific responsibilities may include:

- Realization of the museum's mission.
- Conceptual leadership through specialized knowledge of the museum's mandate.
- Recommendation of policies and plans to the board.
- Implementation of policies and plans.
- Planning, organizing, and staffing.
- Directing and coordinating day-to-day operations through the staff.
- Financial management and funding.
- Liaison with all relevant levels of government, the academic community, and the private sector in the interests of the museum.
- Serve as the overall administrator and liaison for the new Guam Museum (Guam and Chamorro Educational Facility).
- Oversee all management and administrative functions of the collections, administrative, and public programs departments.
- Oversee the direction of the planning and implementation of the Strategic Plan for the new Guam Museum.
- Develop and enforce general policies and procedures for the new Guam Museum.
- Guide the direction and scope of all revenue generating sources.

9.3 Major Job Descriptions for the Collections Department

This department combines the "Collections" and "Exhibitions" job categories in the AAM survey.

9.3.1 *Collections Manager*

The head of this department would be the Collections Manager. It is officially titled "Museum Curator (Collections)" in the FY2016 budget request and "Curator A / Chief Curator" in the AAM survey. This individual typically is responsible for curatorial affairs and exhibitions. Specific responsibilities may include:

- Collection development and management, according to museum standards.
- Interpretation of all collections according to museum standards.
- Preparing plans, policies, and procedures relevant to the collections.

- Design and implementation of a collection research / library program. General and object-specific research and the publication of that research in a form accessible to visitors and other users of the museum.
- Providing consultation in the creation of permanent and temporary exhibitions.
- Providing consultation in the creation of public programming.
- Cooperative and joint ventures of research projects and exhibitions.
- Supervision of collections functions and staff.
- Selection of software programs and hardware to meet collection management and museum standards.
- Determines the conservation needs of the collections and oversees contracts for professional conservation services.
- Prepares the annual request for operating and capital needs for the collections.
- Researching potential grant sources in collections areas.

9.3.2 Curator - Collections

This position would report to the Collections Manager. It is officially titled "Museum Curator (Natural History)" in the FY2016 budget request and "Registrar A" in the AAM survey. This individual is typically responsible for the registration of collections, the development and maintenance of record systems, administration of loan transactions involving the collections. Specific responsibilities may include:

- Care of the Guam Collection.
- Digitization of the Guam Collection.
- Public access to Guam Collection.
- Acquisition and deaccessioning of Guam Collection material in all media except archives.

9.3.3 Curator - Exhibits

This position would also report to the Collections Manager. It is officially titled "Exhibitor" in the FY2016 budget request and "Chief of Exhibitions" in the AAM survey. This position typically is responsible for planning, design, production, and operation of exhibits. Specific responsibilities may include:

- Planning and producing of exhibitions that meet the museum's exhibitions objectives.
- Preparing plans, policies, and procedures affecting exhibitions.
- Convening and chairing the standing exhibition committee. Appointing exhibition personnel to exhibition task forces and other project teams.
- Planning and implementation of audiovisual and interactive components of exhibits and public programming.
- Production and budgeting of exhibitions including proposals, design costing, construction, scheduling, maintenance, and repairs.
- Circulation of traveling exhibitions and achievement of revenue targets associated with these exhibitions.

- Evaluation of exhibits in collaboration with the public programs department.
- Coordination of technical supplies and creative producers.
- Evaluation of all system, product, and service proposals for exhibitions.
- Supervision and performance of exhibition staff.
- Converting curatorial and educational staff ideas into permanent, temporary, and traveling exhibitions through renderings, plans, designs, specifications, drawings, models, lighting, and layout of exhibition materials.
- Supervising and participating in fabrication and installation of exhibits, setting schedules and budgets, meeting opening and maintenance deadlines, and keeping within budget.
- Dealing with outside contractors and providers of services for exhibition production.
- Working with staff to integrate and implement technical systems and media operations, and to update all warranty requirements.
- Drafting, selecting, and monitoring exhibitions design and fabrication contracts.
- Completing all aspects of both on and off site exhibition development, installation and related materials, including statements, labels and gallery sheets.
- Maintain related paperwork including contracts, shipping, insurance, loan forms, and collection records.
- Care of items in the permanent collection and on loan for temporary exhibits.
- Consulting / assisting with education and exhibition programs.
- Serve as spokesperson for exhibitions. Prepare press releases and promotional materials, including announcements, calls for entry, gallery sheets, essays, and catalogues.
- Work with staff to prepare the exhibition schedule of approved shows.
- Supervise and prepare the storage of all exhibit materials and equipment. Work with the Education Specialist to develop adjunct activities for all exhibitions.
- Assist with training documents for tours of exhibitions.
- Provide gallery talks on a regular basis upon request.
- Maintain the collection. Monitor environmental conditions. Prepare an annual review of collection to detect conservation problems, and condition report each piece.
- Process all loan requests. This includes all correspondence related to booking of touring shows from the collection. Complete registration work in a timely fashion.
- Develop traveling shows. Maintain and update exhibit data base, slide archive and general center archives.
- Write, prepare, and distribute press releases on every exhibition and arrange for photographs and interviews. Prepare the call for entries brochures for all competitions.
- Publicize the collection, including listing shows.
- Help prepare an annual budget for the exhibitions program and collection.
- Assist the Guam Museum Administrator and Public Information Officer with locating grant sources to fund exhibitions and the collection and assist with the preparation of those grants.
- Help prepare all exhibition related reports for grants.

The Archivist position would report to the Collections Manager, and has the same name in the AAM survey. This individual typically has physical and intellectual responsibility for archival collections. Tasks include writing, maintaining automated databases, and providing research and reference use of collections materials. Specific responsibilities may include:

- Research and documentation of the museum archives.
- Care of the archival collection in all media.
- Preparing plans, policies, and procedures relevant to the museum archives.
- Digitization of archival text and images.
- Public access to archival resources.
- Public inquiries and requests for archival information.
- Participation in the creation of archival exhibitions and public programs.
- Preparing catalogs or other publications resulting from archival research in all media.
- Acquisition and deaccessioning of archival material in all media.
- Linking of museum archives with national or international networks or databases.
- Development, management, and operation of the museum resource library.
- Research and documentation of the museum archives.
- Care of the archival collection in all media.

9.4 Major Job Descriptions for the Administration Department

This department combines the "Administration" and "External Affairs" job categories in the AAM survey. It includes information technology (IT) functions.

9.4.1

Administrative Officer

The head of the department would be the Administrative Officer, which is titled "Vice President / Deputy / Associate Director" in the AAM survey. This individual typically is responsible for several areas of administration, including finance, personnel, information technology, buildings, security, and retail operations. Specific responsibilities may include:

- Financial management, including budgeting, accounting, purchasing, human resources, salary and benefits, and contracts.
- Operation of the Guam Museum physical plant and its security.
- External and internal auditing.
- Revenue generating activities such as the museum store and rentals.
- Oversight of administrative functions that are outsourced to service providers.

This position administers the Information Technology (IT) systems at the museum, including the exhibit areas. It is officially titled "IT/Web Master" in the FY2016 budget request and "Manager of Information Services & Technology" in the AAM survey. This individual typically is responsible for information, technology and network management and provides direct systems support. Specific responsibilities may include:

- Create, monitor, and update the official website for the new Guam Museum (Guam and Chamorro Educational Facility).
- Maintain and update website content and statistics.
- Coordinate and convert information with program staff for display on the website.
- Implement website policies and priorities.
- Prepare departmental budget and project reports.
- Explore fundraising and marketing opportunities for support of website development.
- Train and educate staff on creating and presenting information in formats easily convertible to the website.
- Promote departmental awareness of website resources.
- Evaluate and make recommendations for software, hardware, and related equipment purchases.
- Keep abreast of relevant professional literature, attend professional conferences, and serve on external committees.
- Develop, implement, and manage technology "help-desk" to improve customer service by providing a single point of contact for all museum technology support issues.
- Manage all aspects of routine support and disaster / contingency support of critical and non-critical Museum systems and data to ensure stability and to maximize system uptime.
- Provide reports and statistics on support issues and through data analysis.
- Recommend and implement ongoing improvements to Information Technology systems and training.
- Develop and manage museum-wide technology education initiatives to improve computer literacy for the museum's general staff.
- Train the museum's technology professionals.
- Effectively communicate support issues, programs, and status to user community.
- Develop and manage the budget for all hardware, software, and desktop support.
- Provide technical leadership by creating "hands-on" technical solutions for individual project components.
- Provide support to the Guam Museum Administrator for departmental project planning.
- Administer long term Information Technology maintenance schedule of building and facility repairs.

9.5 Major Job Descriptions for the Public Programs Department

This department combines the "Education" and "Visitor Services & Research / Evaluation" job categories in the AAM survey.

9.5.1 *Operations Manager*

The head of this department would be the Operations Manager. This position is officially named the "Volunteer/Docent Coordinator (Program Coordinator IV)" in the FY2016 budget request and "Educator A / Director of Education" in the AAM survey. This individual typically manages the educational function of the museum, and is responsible for general program development. Specific responsibilities may include:

- Management of the Public Programs department, which includes the development and management of audiovisual programming, activities, materials, and events that attract and serve a whole range of audiences, including schools.
- Oversee educational and public outreach programs, such as tours, workshops, lectures, and classes.
- Prepare plans, policies, and procedures affecting public programs.
- Work with educational institutions to prepare lesson plans related to the museum's public programs.
- Liaison with the school system to increase awareness of the museum as an educational resource.
- Liaison with Education Specialist, Public Information Officer, exhibitors, special events coordinators, technical program suppliers, and artists.
- Achieve revenue and attendance targets established in the marketing plan for all areas of the new Guam Museum (Guam and Chamorro Educational Facility).
- Supervise performance of staff within the public programs department.
- Analyze a variety of information sources, and noting patterns and trends. Present the results in an appropriate format.
- Utilize effective and efficient methods for the management of public programs to ensure authenticity and accessibility.

9.5.2 *Public Information Officer*

The position reports to the Program Coordinator, and manages docents, volunteers, and special events. It is officially titled "Management Analyst IV (Program Development)" in the FY2016 budget request and "Outreach Coordinator" in the AAM survey. This individual is typically responsible for special events, rental functions, and community relations. Specific responsibilities may include:

- Planning and providing tours of the museum for groups of all ages, for both permanent collection and temporary exhibits.
- Collaboration with teachers on educational use of the museum, including live demonstrations in the galleries.

- Planning and implementing the volunteer/docent program. Recruitment, training, and supervision of volunteers and docents in collaboration with other departments. Placement, scheduling, and booking of volunteer/docent assistance. Creation and delivery of a recognition program for volunteers with the support of the board and management.
- Design and delivery of a lecture series, musical or theatrical performances, film series, festivals, and other special events to complement exhibitions and other programs. Recruitment and coordination of speakers, instructors, and facilitators.
- Developing and implementing outreach programming aimed at bringing underrepresented groups into the museum as visitors, and extending museum services into the community.
- Promoting and operating a program to rent the museum's facilities for functions such as meetings, conferences, parties, and receptions.
- Handle inquiries and bookings of the rented facilities, and coordinate security and cleaning staff for events.
- Serve as a liaison with community groups, other community services, caterers, furniture rental companies, tour operators, corporations, and other target client groups.

9.5.3 Education Specialist

The Education Specialist manages the educational programs, and is officially titled "Interpretive Planner" in the FY2016 budget request and "Educator B" in the AAM survey. Specific responsibilities may include:

- Planning, managing, and delivering learning programs within the museum and online.
- Managing and developing partnerships with schools to offer curriculum-based programs related to the museum's collection within the museum, in schools, and online.
- Setting standards for all educational programming.
- Serving as a liaison with schools, community groups, and other target audiences to arrange educational programs and field trips with guided tours and demonstrations.
- Providing advice on the design of future exhibitions and other public programming that will help enhance educational impact.
- Programming audio guides to the galleries if necessary.
- Striving to achieve school attendance and revenue targets.
- Preparing publications and media-based products for schools.
- Approving future educational programs for the museum.
- Developing and implementing adult education programs related to the museum's collections.
- Planning and providing school field trip tours of the museum's galleries for both the permanent collection and temporary exhibitions.

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