

Desert Discovery Center - Scottsdale

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In Association with:
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Prepared for:
City of Scottsdale, Arizona

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Executive Summary

INTERPRETIVE AND MARKET OPPORTUNITIES FOR THE SCOTTSDALE DESERT DISCOVERY CENTER

This report evaluates the interpretive and market opportunities for a proposed Scottsdale Desert Discovery Center (DDC). This report summarizes the consultant's research, analysis and findings, and input received from Scottsdale leadership and community regarding the DDC concept, interpretive themes, project scale and relationship of the DDC to its site and the overall McDowell Sonoran Preserve.

Project Objectives and Planning Process

The project objectives summarized in this report are to:

- ◆ Develop a thematic foundation and design concepts for the DDC;
- ◆ Develop a range for the scale of the DDC;
- ◆ Provide preliminary cost estimates for capital development of the DDC under identified project scales;
- ◆ Test community support for themes, design concepts and project scale;
- ◆ Estimate the attendance and earned revenue potential of the DDC concept as proposed under the identified project scales; and,
- ◆ Advance the planning process and vision for the DDC.

In addition to regular status updates with city project staff, the project planning process included the following elements.

- ◆ Two workshops with over 15 community stakeholders each to develop and refine the DDC concept;
- ◆ Interviews with over 40 community leaders, government officials, and local attractions operators to identify and synthesize local interests;
- ◆ A public openhouse to test interpretive themes and exhibit concepts; and,
- ◆ A market study to understand available resident and tourist markets, as well as comparable visitor centers and destination attractions to understand facility dynamics.

Recommended Interpretive Themes for the Desert Discovery Center

The goal for the interpretive components of a facility such as the DDC is to facilitate visitors' intellectual and emotional connection to a place by telling "stories." Storylines are based on Interpretive Themes, which link a place's tangible attributes (articulated as Statements of Significance) to the intangible ideas, meaning, beliefs and values that connect people with place.

It is not the job of the interpretive components of a facility to tell an audience what to think about a resource, or how to feel about a place. It is the role of the interpretive components to facilitate

personal exploration of meaning, to help people form unique, individual connections with a place on whatever level the individual chooses, be it emotional, intellectual or spiritual.

The set of overarching stories that communicate the essential qualities of a resource are called *Primary Interpretive Themes*. Each is written as a single-sentence abstract that tries to capture the essence of a place and its stories. The *Central Interpretive Theme* is the umbrella that covers the primary themes with a sweeping summation, an expression of the core story of a resource.

Following in **Figure 1** and **Figure 2** are the Recommended Central and Primary Interpretive Themes for the DDC and the McDowell Sonoran Preserve that emerged from the study process. Prototypical exhibit concepts derived from interpretive themes are presented in **Figure 3** through **Figure 7**. These are preliminary and illustrative only, but they begin to provide options for the “look and feel” of the DDC. These Prototypical exhibit concepts will be a starting point for a full exhibit design process moving forward.

These exhibit concepts are based on the Statements of Significance and Interpretive Themes, with particular attention having been paid to the creation of a Wow! factor. The Wow! factor is the facility attribute that will make the visitor experience memorable, that will make the DDC a “don’t-miss” on the menu of Scottsdale attractions and activities. The natural and built environments are the Wow! factors. While the “Wow” of the DDC ultimately will be in its interface with the McDowell Sonoran Preserve, there is an additional experiential “Wow” that is proposed for the DDC based on the exhibit concepts and visitor amenities as well as programming opportunities at the DDC.

Figure 1
Recommended Central Interpretive Theme

Central Interpretive Theme



The diverse adaptations that allow native plants and animals to survive in the harsh environment of the Sonoran Desert are a continual source of wonder to the careful observer, and a wellspring of ideas and inspiration to those who accept the challenge of reshaping human society so that future generations will have adequate resources to meet their needs, as well as the opportunity to experience the magic and mystery of the natural world.



Figure 2
Recommended Primary Interpretive Themes

Edge Ecology

The location of the McDowell Sonoran Preserve on an ecotone between the basin and upland plant communities of the Sonora Desert creates a biological treasure chest of uncommon value, and the intricate network of interactions among its many species is so complex that the human intellect may never achieve the capability to fully comprehend it.



Urban/Wildland Interface

City dwellers place a high value on natural landscapes adjoining urban areas, and increasing recreational pressure on such lands can hamper resource conservation efforts, necessitating a reliance on interpretation and environmental education to create an informed public that actively supports management objectives.



Water

In the arid environment of the Sonora Desert, the presence or absence of water has a profound effect on topography and the composition of natural communities, which reflects the fact that society's critical need for adequate supplies of clean water will define, in large part, the politics of 21st Century human interaction with the remaining natural landscapes of the American Southwest.



Figure 2
Recommended Primary Interpretive Themes (Continued)

Geology/Cultural Geography

Exploitation of the mineral resources of the McDowell Mountains by both prehistoric and more recent human cultures emphasizes the intimacy and depth of the connection between people and planet: geologic forces that occurred millions, or even billions, of years ago shaped a landscape that still shapes patterns of human migration and settlement today.



Sustainability

The vision of the people of Scottsdale to preserve open space in the McDowell Mountains requires striking a delicate balance between economic development, recreational access and resource protection that confers, on those who manage and interpret the resource, a responsibility to set impeccable standards for sustainable development and environmental education.

Archaeology

The evidence of ancient irrigation canals in the McDowell Mountains, and the presence of numerous toolmaking sites, testifies to the fact that humans have always manipulated their environment and employed desert resources, but the eventual passing of early cultures that were far more in tune with the natural rhythms of the desert than modern society reminds us that change is the only constant, and that even our highly-advanced technologies do not free us from the need to adapt or perish.



Biodiversity

Despite the biological diversity of the Sonoran Desert (home to 2000 native plants, 60 mammals, 30 fish, 20 amphibians, 100 reptiles and more than 350 birds), many people still perceive the desert as a wasteland; overcoming this perception may be the last best hope for conserving large enough landscapes to allow ecosystem processes to continue on a genetically-meaningful scale.



Figure 3
Prototypical Exhibit Concept - Wall Mounted Map of the World

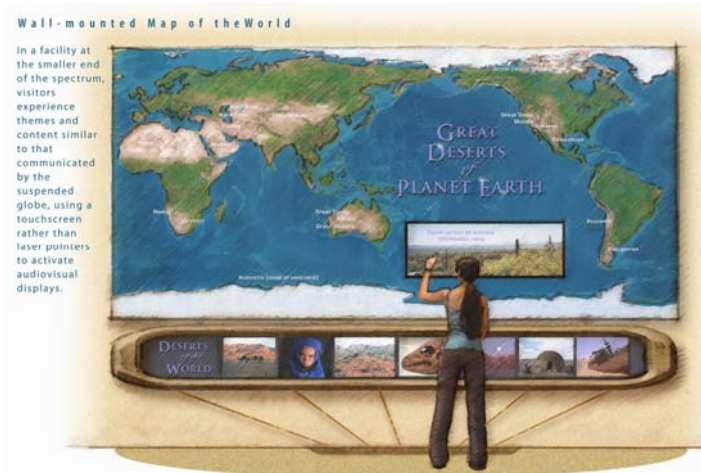


Figure 4
Prototypical Exhibit Concept - 3-D McDowell Mountains Map



Figure 5
Prototypical Exhibit Concept - Suspended Globe



Figure 6
Prototypical Exhibit Concept –Rattler

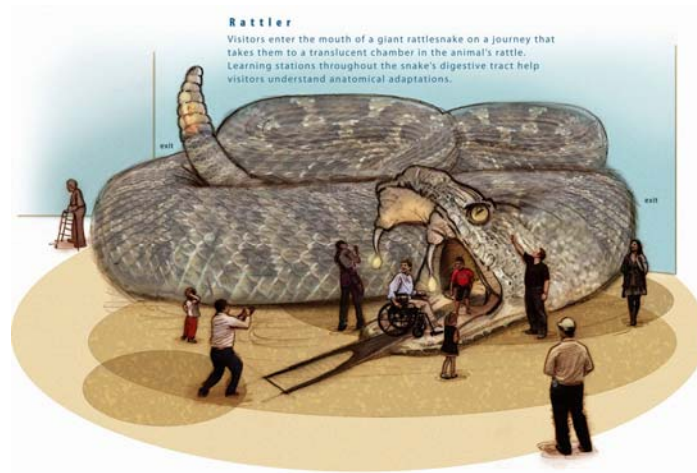


Figure 7
Prototypical Exhibit Concept – X-Ray Ceiling





Facility Scenarios

To better inform community planning of the DDC and to allow future planning flexibility, a range of future facility sizes has been established for this planning phase by presenting two facility scenarios that represent a spectrum of possible final solutions. The scenarios represent a range of facility size and scale. A smaller facility for the purpose of this analysis is called McDowell Portal – a recreation enhancement; a larger facility is called “Exhibition Sonora – a destination attraction.” **Figure 8** is a chart summarizing characteristics of the two scenarios.

It should be stated that in this planning process and moving forward, these two scenarios should not be considered definitive in their size, programs or characteristics, nor should they been considered as the only scenarios. Variations of these two scenarios should be considered moving forward in order to best meet Scottsdale’s goals for the project and resources available to develop and sustain the facility.

Figure 8

Preliminary Description of Facility Characteristics <small>Your input will help determine the size and character of the facility best-suited to serve the Scottsdale community. The table below shows some of the differences and similarities between two possible scenarios at the larger and smaller ends of the spectrum.</small>		
McDowell Portal A recreation enhancement	 Characteristics of Any-Sized Facility	Exhibition Sonora A destination attraction
Introductory exhibits Up to one hour length of stay	Loop interpretive trail(s) <1 mile Patio space & playground Expansive outdoor spaces	In-depth exhibits 1½-3 hour length of stay
Adds value to outdoor Preserve experience	Encouragement of outdoor experience	Exhibits are also a stand-alone experience
60-seat 3D theater 50-seat planetarium w/ observatory	Venue for community meetings & events	120-seat 3D theater 100-seat planetarium w/ observatory
Small gift shop and snack bar	Patio seating with mountain views	Destination-themed retail shop and café
15-25,000 square foot building	"Green" buildings	40-70,000 square foot building
100-seat outdoor amphitheater	Great Room (informal indoor common area)	200-seat outdoor amphitheater
Limited public programs; limited formal research	On-site educational staff Opportunities for volunteerism / internships Library & research center	Many public programs & substantial sponsored research
Serves area residents and local schools		Serves regional residents, schools and tourists.
Adult admission: \$5-10		Adult admission: \$10-20
Free to Scottsdale residents		Substantial discount for Scottsdale residents
Moderate attendance potential Limited national profile		High attendance potential Iconic attraction with high national profile
Capital development costs: +/- \$20 million		Capital development costs: +/- \$50 million
Limited new job creation & economic impacts		Significant new job creation & economic impacts

Both the McDowell Portal – a recreation enhancement and the larger Exhibition Sonora – a destination attraction, represent substantial facilities that would have strong interpretation and positive benefits. The larger Exhibition Sonora – a destination attraction would be a higher profile facility and organization that becomes a well-known aspect of Scottsdale’s visitor offerings, a destination in its own right, and a highly repeatable community resource. The McDowell Portal – a recreation enhancement would have some of these characteristics but to a lesser extent. It would be less likely to be on the short list of things to do while in Scottsdale. As noted project scale relates to initial capital costs, ongoing operating costs, as well as to project benefits.

Attendance Potential

Based on the market research and analysis undertaken and the high-quality visitor experience proposed for both the larger Exhibition Sonora – a destination attraction, and the smaller McDowell Portal - a recreation enhancement, a preliminary range of attendance potential for the DDC has been established for the two scenarios. Attendance potential at the DDC under the McDowell Portal - a recreation enhancement in a stable year (Year 3¹) is estimated at 80,000 to 139,000, with a mid-range “best estimate” of 110,000. Attendance potential at the DDC under the Exhibition Sonora – a destination attraction in a stable year is estimated at 150,000 to 246,000, with a mid-range “best estimate” of 198,000.

¹ Attendance is expected to be somewhat higher in early years of operation due to local excitement about the project and stabilize in the third year. A twenty percent surge in attendance is assumed for year one. Attendance will be balanced during the year with spring especially strong, and with fall also a strong season. This attendance potential analysis reflects a competitive ticket pricing policy, aggressive marketing and successful operations of the DDC.

In addition to visitors to the interpretive areas, it is anticipated that there will be considerable regular use of the non-paid components of the DDC such as the proposed café, information desk, retail and veranda areas by local residents and Scottsdale tourists. This would generally be in conjunction with hiking and other use of the overall McDowell Sonoran Preserve. It is reasonable to expect additional usage for the McDowell Portal - a recreation enhancement of an additional 48,000 to 83,000 informal users of the site, with a mid-range of 66,000. For the Exhibition Sonora – a destination attraction, an additional 75,000 to 123,000 informal users of the site is expected, with a mid-range of 99,000.

Earned Revenue Potential

Under either scenario, the DDC will be a state-of-the-art desert interpretive center that will offer high-quality immersive and multimedia exhibits, educational programs, and access to the McDowell Sonoran Preserve. It will have outstanding visitor amenities that will be appreciated by residents and tourists alike. Based on these attributes and assumptions, the initial project description and attendance analysis there will be substantial operating revenue potential. McDowell Portal - a recreation enhancement, has an estimated \$0.63 million in earned revenue potential in a stabilized year, in 2008 dollars. Exhibition Sonora – a destination attraction has an estimated \$2.02 million in earned revenue potential. Data in **Table 1** provide a stable year operating revenue potential comparison for the DDC scenarios. The larger facility option would have higher operating costs as well. This is a baseline earned revenue analysis that can and should be continually refined as the project moves forward. Earned revenues at a facility of this type typically cover a substantial portion of facility operating costs. However, virtually all such facilities need non-earned revenues as well. These might include private donations, gifts and grants, endowment proceeds, corporate support, gifts-in-kind and governmental support. Each institution has its unique circumstances and revenue mix. In order to achieve its potential the DDC must be aggressively promoted and competently operated, and receive full community support in the public and private sectors. If developed and operated successfully the DDC can provide substantial community and economic benefits and contribute to conservation and desert ecology public awareness and education.

Table 1
Comparison of Earned Revenue Potential for Mid-Range Attendance Range
DDC Scenarios

	McDowell Portal - a recreation enhancement	Exhibition Sonora - a destination attraction
Project Exhibit Square Footage	6,700 SF	23,400 SF
Project Total Square Footage	20,010 SF	52,920 SF
TOTAL ATTENDANCE	110,000	198,000
Per Capita Ticket Revenue	\$3.32	\$6.14
Revenue		
Admission Revenues	\$367,000	\$1,215,000
Membership Revenues	49,000	216,000
Other Earned Revenues	209,000	586,000
Self-Generated Revenue ^{1/}	\$625,000	\$2,017,000

^{1/} It is likely that contributed and other revenues will be necessary to cover operating costs. This is typical for educationally oriented facilities of this type.

Memorandum

To: Kathy O'Connor, Bob Cafarella
From: ConsultEcon, Inc., EDA
Date: May 19, 2008
RE: Project Planning and Decision-making- Recommended Next Steps

1. Project Leadership

Form private sector steering committee- Project Leadership, to spearhead the process to complete required next steps including refining the concept and forging the public/private partnership needed to successfully bring about the Desert Discovery Center

2. Professional Staffing

Engage professionals to undertake subsequent planning steps and to create an operational structure for the DDC

3. Concept Refinement

Refine optional DDC scenarios as presented in this report to include exhibits, visitor experience, building size and design opportunities, site plan and operations plans as well as corresponding capital costs and ongoing operating costs:

- ◆ Preliminary exhibit concept plans for two optional scenarios in cooperation with architectural consultants
- ◆ Alternative site plans for two optional scenarios
- ◆ Refined DDC program of spaces for two optional scenarios based on initial architectural input and concepts

4. Performance Amphitheater

Evaluate on a separate track from DDC planning through a broad community process the desirability and feasibility of locating an outdoor amphitheater in the Gateway

5. Operating and Business Plan

Prepare operating plans for two optional DDC scenarios:

- ◆ Refined attendance revenue estimates based on refined optional DDC scenarios
- ◆ Preliminary operating plans for two optional scenarios including personnel, marketing, operating expenses, and operating pro forma
- ◆ Evaluate project economic impacts and community benefits

6. Capital Cost Analysis

Refine capital cost analysis based on:

- ◆ Architects' and landscape architects' site and building cost estimates for two optional scenarios
- ◆ Exhibit design/fabrication/installation cost estimates for two optional scenarios by exhibit designer
- ◆ Pre-opening and organizational ramp-up costs for two optional scenarios as prepared by business planner

7. Fundraising Capacity

Project leadership in conjunction with community to evaluate funding capacity (possibly with assistance of fund raising counsel):

- ◆ Investigate fund raising capacity for project development
- ◆ Investigate ongoing operating support options from various public and private sources

8. Select Preferred DDC Scenario

City Council and Project Leadership to choose preferred DDC scenario based on the refined options, economic and community benefits of the options, project capital and ongoing costs, and community resources and preferences

9. Project Leadership to Engage Fundraising Counsel if not already Engaged

10. Final Planning and Construction

Project Leadership to continue to involve community and engage design team to finalize planning of the preferred DDC scenario:

- ◆ Hire DDC staff needed for final planning and construction phase
- ◆ Begin and undertake capital campaign
- ◆ Refine exhibits, building and site plans moving in subsequent phases of work to design documents
- ◆ Refine business plan
- ◆ Undertake approvals process

11. DDC Construction

12. DDC Opening

Section I

INTRODUCTION AND ASSUMPTIONS

This report evaluates the interpretive and market opportunities for a proposed Scottsdale Desert Discovery Center (DDC) in Scottsdale, Arizona. This report summarizes the consultant's research, analysis and findings, and input received from Scottsdale leadership and community regarding the DDC concept, interpretive themes, project scale and relationship of the DDC to its site and the overall McDowell Sonoran Preserve.

The objectives of the planning process summarized in this report are to:

- ◆ Develop a thematic foundation and design concepts for the DDC;
- ◆ Develop a range for the scale of the DDC;
- ◆ Provide preliminary cost estimates for capital development of the DDC under identified project scales;
- ◆ Test community support for themes, design concepts and project scale;
- ◆ Estimate the attendance and earned revenue potential of the DDC concept as proposed under the identified project scales; and,
- ◆ Advance the planning process and vision for the DDC.

Based on the outcomes of the analytical process and client and public input processes; and at client group direction, this report presents an assessment of the attendance potential for the DDC under two different project scales. These are based on the preliminary development and interpretive programs articulated in this report for the different project scales. One project scale or a variation or blending of them may be selected in the future as the preferred project scale for more detailed planning and design of the DDC. Further analysis and research in the next planned phase of this assignment will refine the programs of spaces for the identified project scale, as well as their interpretive plans, conceptual development costs and their operating potential. This additional input along with continued leadership and public input will allow a single "Preferred Project Size" to emerge.

Tasks undertaken in preparing this report include the following:

- ◆ Review project objectives and concepts.
- ◆ Review previous analysis and studies on the proposed DDC.
- ◆ Evaluate regional and local trends and characteristics.
- ◆ Review resident and tourist markets.
- ◆ Identify and characterize regional visitor attractions and children's and family oriented museums.
- ◆ Develop preliminary physical planning parameters, program and costs associated with building the DDC.
- ◆ Review the location and evaluate available markets within the experience of the educational attractions industry to provide an initial review of the project's market opportunity.

Study Assumptions

The following assumptions were made in preparing this report. This study is qualified in its entirety by the following.

1. The research and analyses and the conceptual interpretive and exhibit strategies contained in this report have been advanced to the extent necessary to inform the Scottsdale community regarding the options for the proposed DDC and to prepare attendance and earned revenue potential estimates for the two project scenarios presented for the proposed facility. Further and more extensive planning, design and market and economic analysis is needed. As a specific project design and operating plan are developed, additional economic analysis will be needed.
2. The scenarios developed in this memorandum assume the following. The size and design of the DDC will be appropriate to its market potential, and will serve to create a high-quality, stimulating visitor and education center with broad-based audience appeal and a distinctive image as described herein. The DDC will be competently and effectively managed. An appropriate promotional campaign for the DDC will be developed and implemented. This program will be targeted to prime resident and visitor markets. The admission prices for the facility will be consistent with the educational and entertainment value offered.
3. There will be no physical constraints to impede visitors to the facility, such as major construction activity. Changes in economic and social conditions due to events including, but not limited to, major recessions, major environmental problems or disasters that would negatively affect operations and visitation may affect the results of the findings in this study, including operating potential estimates.
4. Every reasonable effort has been made in order that the data contained in this study reflect the most accurate and timely information possible and it is believed to be reliable. This study is based on estimates, assumptions and other information developed by ConsultEcon, Inc., from its independent research efforts, general knowledge of the industry, and consultations with the client group. No responsibility is assumed for inaccuracies in reporting by the client, its agents and representatives, or any other data source used in the

preparation of this study. No warranty or representation is made that any of the projected values or results contained in this study will actually be achieved. There will usually be differences between forecasted or projected results and actual results because events and circumstances usually do not occur as expected. Other factors not considered in the study may influence actual results.

5. Possession of this report does not carry with it the right of publication. This report will be presented to third parties in its entirety or through the Executive Summary and no abstracting of the report will be made without first obtaining permission of ConsultEcon, Inc., which consent will not be unreasonably withheld. This report may not be used for any purpose other than that for which it was prepared. Neither all nor any part of the contents of this study shall be disseminated to the public through advertising media or news media or web site publication without the prior consent of ConsultEcon, Inc.
6. Outputs of computer models used in this report are rounded. These outputs may therefore slightly affect totals and summaries. This report was prepared in November 2007 through March 2008. It represents data available at that time.

Study Methodology

The project team used a combination of quantitative and qualitative analyses to develop and test themes and concepts for facility and exhibit design.

The preliminary Statements of Significance that directed the process were developed at a workshop on December 5, 2007, that was attended by a variety of stakeholders (see Appendix A). A survey instrument was administered at the workshop, and a number of follow up interviews were conducted. In all, a total of nearly forty interviews were held as part of the planning process.

The project team also visited major informal learning facilities in the Greater Phoenix Area to assess thematic content and exhibit style in order to avoid duplication and repetition at the DDC.

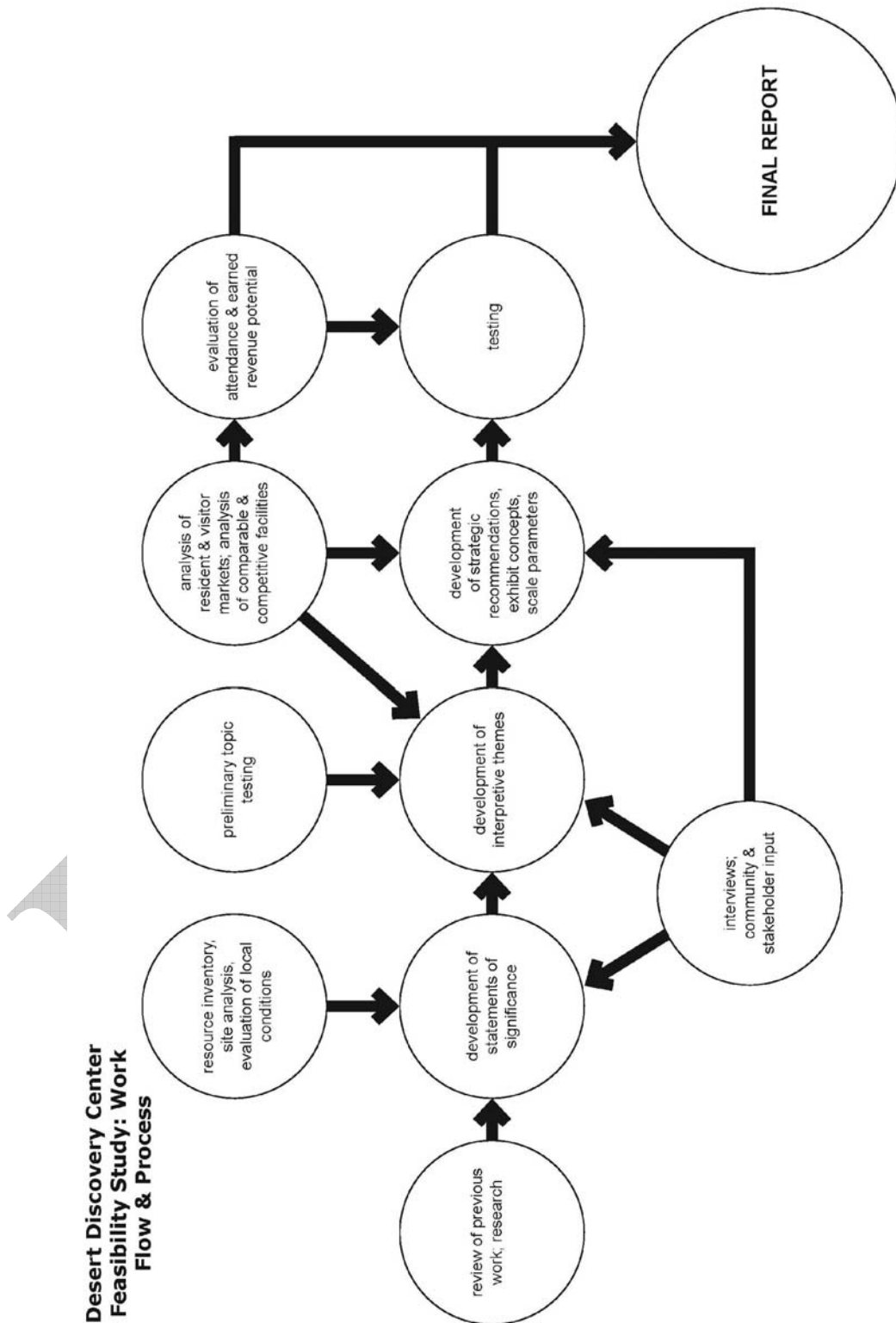
Management staff of each facility was interviewed to get a sense for the challenges they face, what sort of exhibits and programming are effective in the Greater Phoenix market and the state of environmental education in the metro area.

The team conducted market analyses of both the resident and visitor segments, and built a database of comparable facilities. Parameters and attributes were established for prototypical facilities at either end of a continuum of possible sizes for the DDC, and cost estimates for capital construction were developed. A set of strategic recommendations was crafted. Two additional survey instruments were designed, as well as a set of interpretive themes and exhibit concepts.

A second workshop was held March 7, 2008 with a variety of stakeholders (see Appendix D). A survey instrument based on the list of strategic recommendations was administered to workshop participants, and the recommendations were discussed in plenary session (see Appendix E). The other survey instrument focused on themes, exhibits concepts, the role of the facility in the community and facility scale was administered to workshop participants as well as attendees at a public open house the following day.

The work flow for the project is depicted schematically in **Figure I-1**.

Figure I-1
Desert Discovery Center
Feasibility Study Work Flow and Process



Section II

SITE EVALUATION

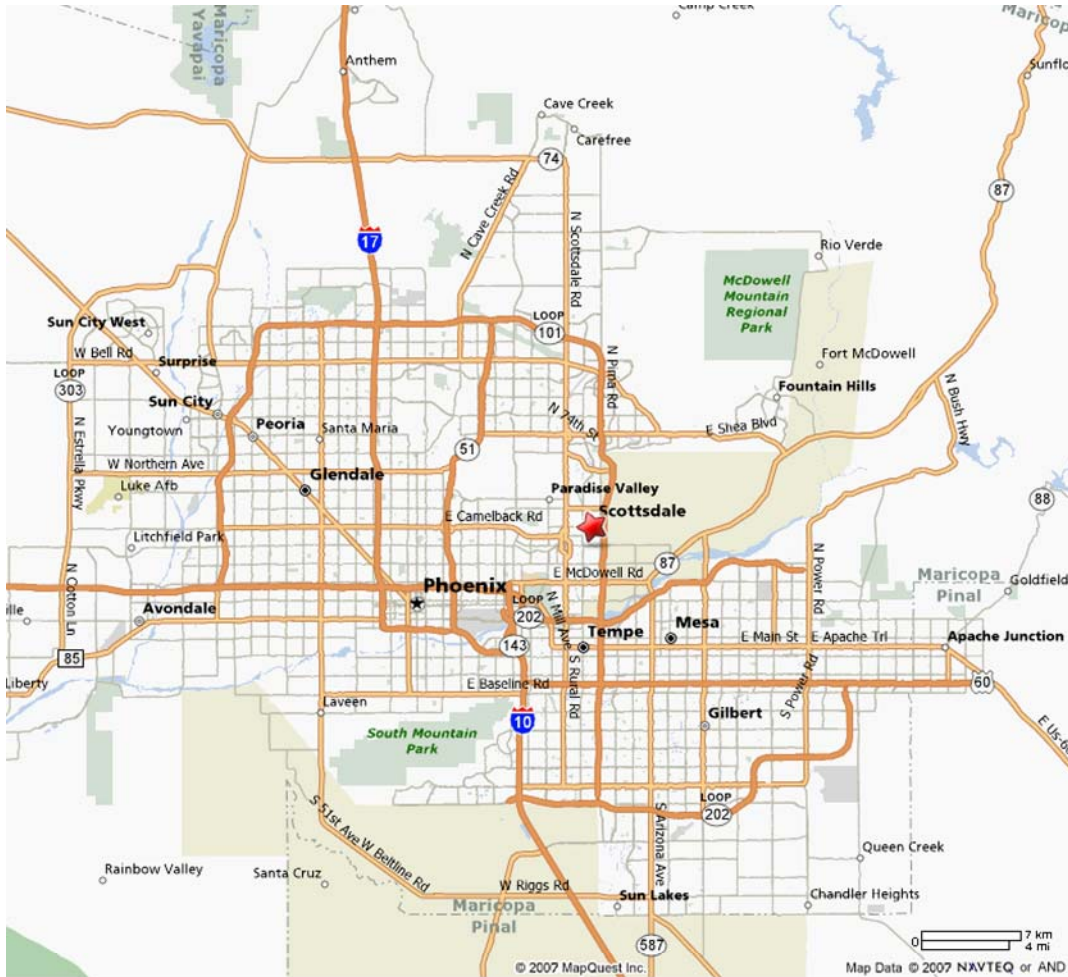
This section reviews the proposed DDC site from a market perspective. Essential aspects of the market potential of a visitor attraction are its location, accessibility, visibility, adjacent uses, and site size and quality. Following is a summary of these factors as they relate to the proposed DDC.

Regional Context

The proposed DDC will be located in Scottsdale, a city in the Phoenix Metropolitan Area in central Arizona. Phoenix is the fifth largest city in the United States, with an estimated population of approximately 1.5 million people. The estimated metropolitan area population in the “Valley of the Sun” exceeds 4 million people.

Figure II-1 is a street map of the Phoenix region. The Phoenix metro area is served by major highways running east-west and north-south through the middle of Phoenix—Interstate 10 and Interstate 17—as well as near concentric highways composed of Loop Routes 101, 202 and 303. The red star shows the location of Scottsdale within the metro area.

Figure II-1
Street Map of Phoenix Metropolitan Area



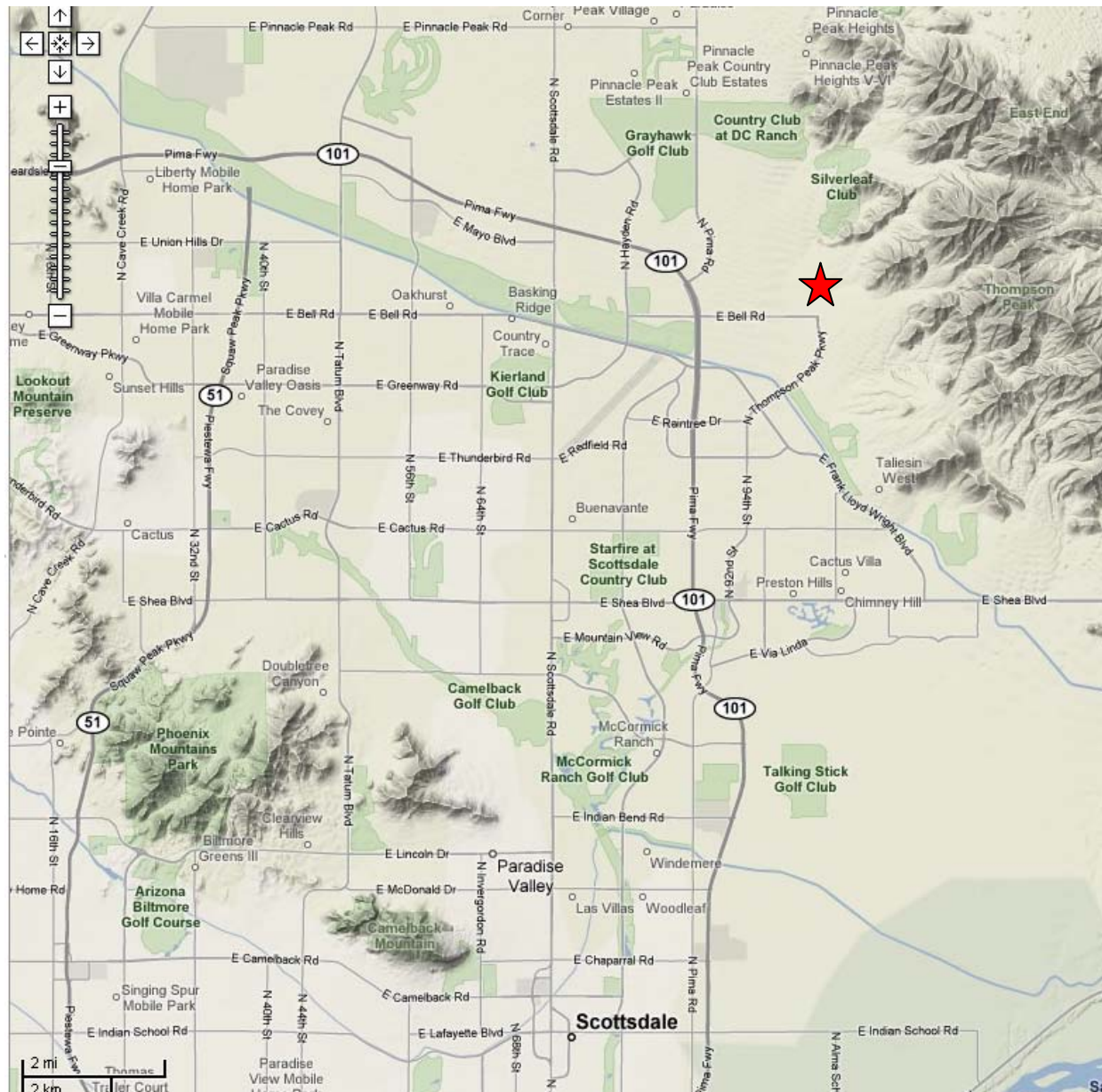
Source: Mapquest.com.

Location

Figure II-2 provides a street map of the Scottsdale area. The proposed DDC site is situated northeast of the intersection of Thompson Peak Parkway and Bell Rd. The intersection is approximately 1 mile from Exit 14 (Bell Rd.) on Route 101, the major north-south limited access thoroughfare to and through Scottsdale that provides connections to all major routes that traverse the metropolitan area.

The proposed DDC site is part of a larger area that has been identified as the Gateway to the McDowell Sonoran Preserve. In addition to the proposed DDC, this area will contain the largest public access, in terms of the range of amenities and trails provided, in the McDowell Sonoran Preserve.

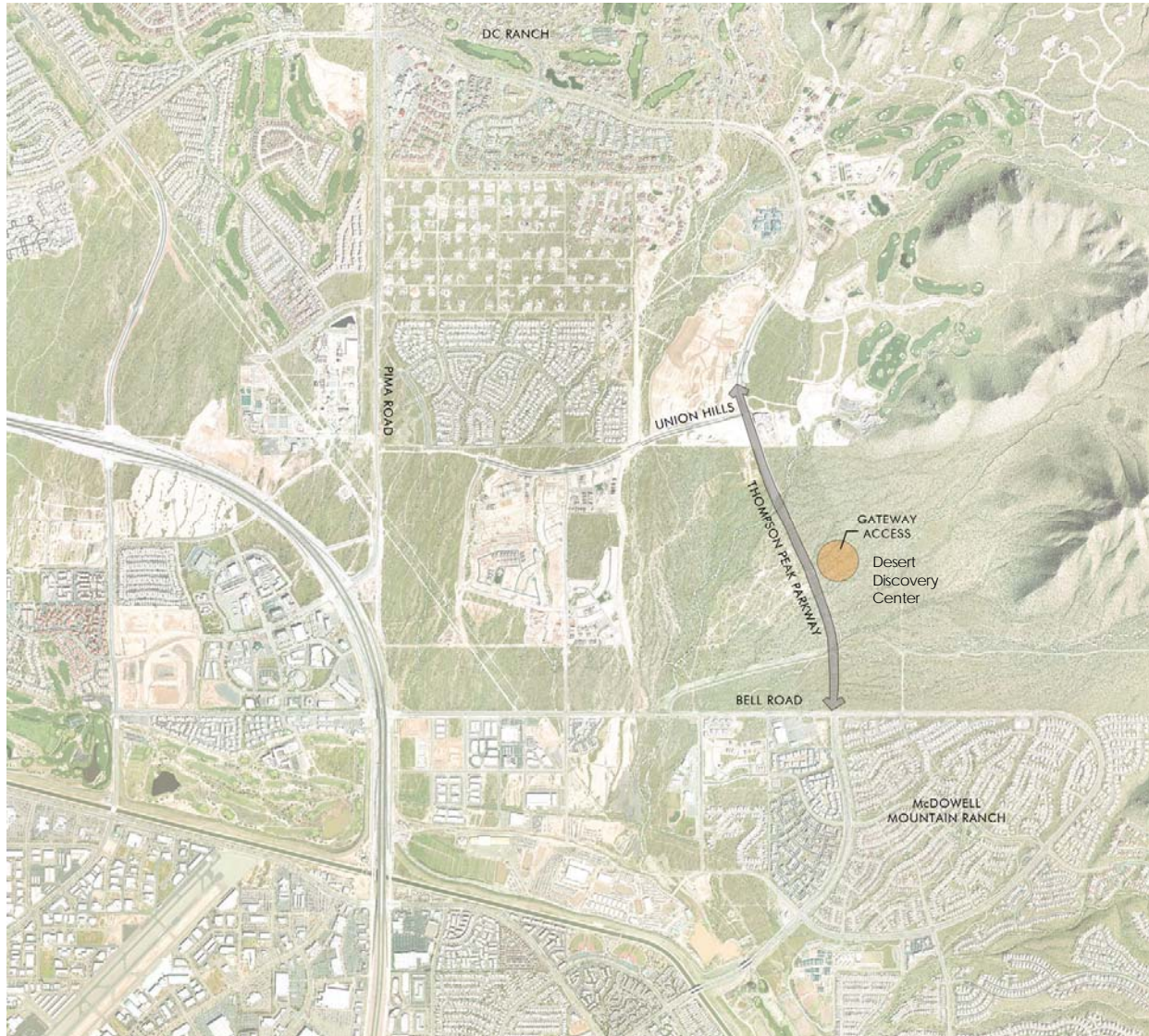
Figure II-2
Map of Location of Proposed Desert Discovery Center



Source: Mapquest.com.

Figure II-3 is an aerial view of the Gateway to the McDowell Sonoran Preserve site northeast of the Thompson Peak Parkway and Bell Road intersection.

Figure II-3
Aerial View of Proposed Desert Discovery Center Site



Source: City of Scottsdale, Weddle Gilmore Architects, and ConsultEcon, Inc.

Accessibility

The site is accessible by vehicle from Thompson Peak Parkway. A major circumferential highway and primary high-speed route to and through Scottsdale, Route 101, exits onto Bell Road, approximately 1 mile from the Preserve Gateway and proposed DDC site. The site is easily accessible by vehicle to residents from the Phoenix metro area, as well as visitors from outside the region that may be less familiar with the area. The primary commercial airport in the region, Sky

Harbor Airport, is approximately 20 minutes from the site, contributing to Scottsdale's status as a visitor destination.

Visibility

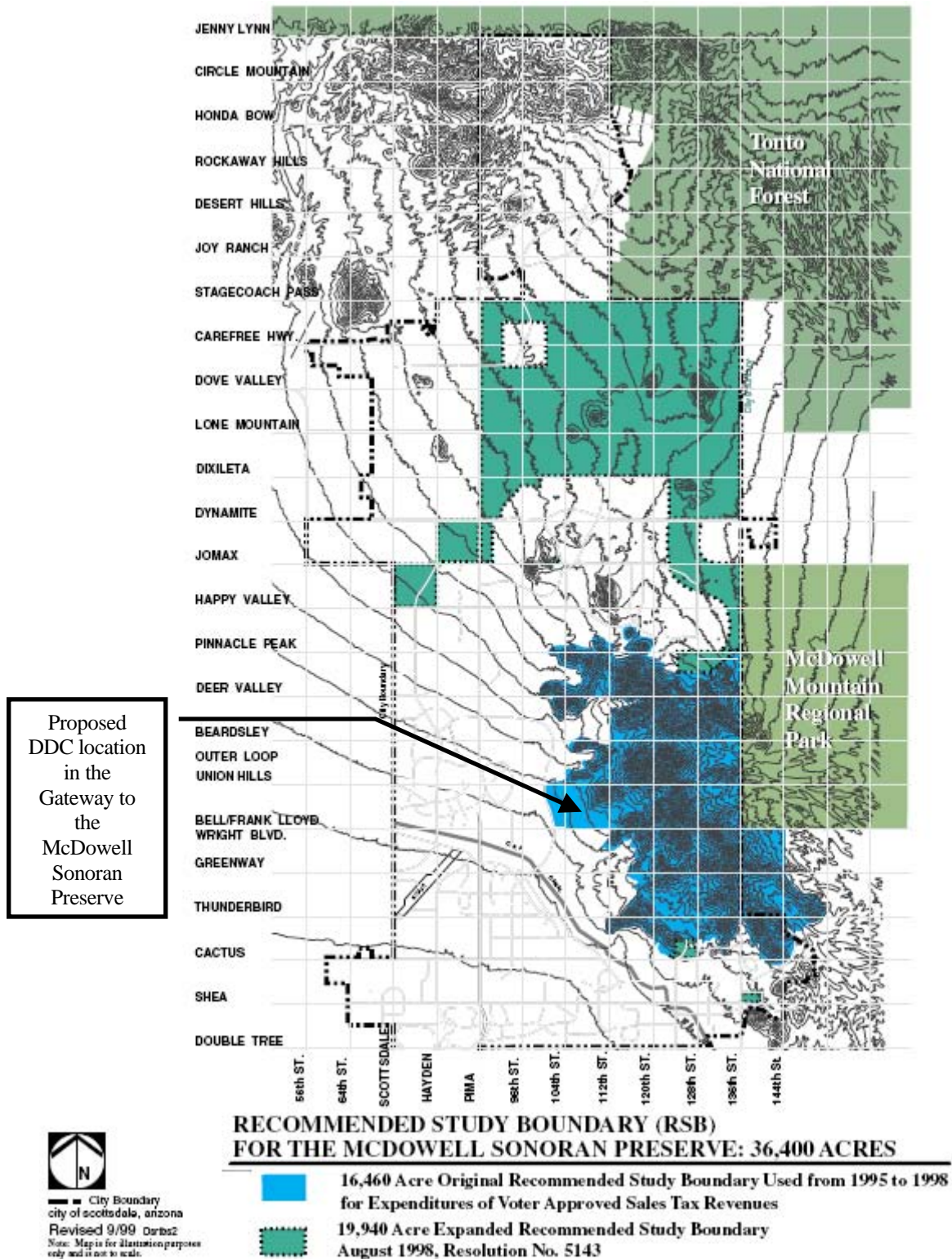
The site is located along Thompson Peak Parkway. Thompson Peak Parkway is one of the few north-south thoroughfares in this part of Scottsdale. The site is on the urban edge and therefore, may not have a considerable amount of pass-through traffic. According to traffic data from the Arizona Department of Transportation, Route 101 average annual daily traffic (AADT) counts have increased since 2003. In the highway segment between Exit 12 and Exit 14 (Bell Rd.), AADT increased 61.5 percent from 80,500 to 130,000 between 2003 and 2006. In the highway segment between Exit 15 and Exit 14 (Bell Rd.), AADT increased 42.5 percent from 70,100 to 122,000 between 2003 and 2006. If this historical trend continues through facility development and operation, designers will be able to heighten the proposed DDC's visibility among travelers with permissible roadway signage.

Adjacent Uses

The primary adjacent use of the proposed DDC is the McDowell Sonoran Preserve, 36,400-acres of Sonoran Desert that is to remain in a natural state for perpetuity. Residential uses lie to the west and south of the site, across Thompson Peak Parkway and Bell Road, respectively, and a mix of uses including resorts are located to the north.

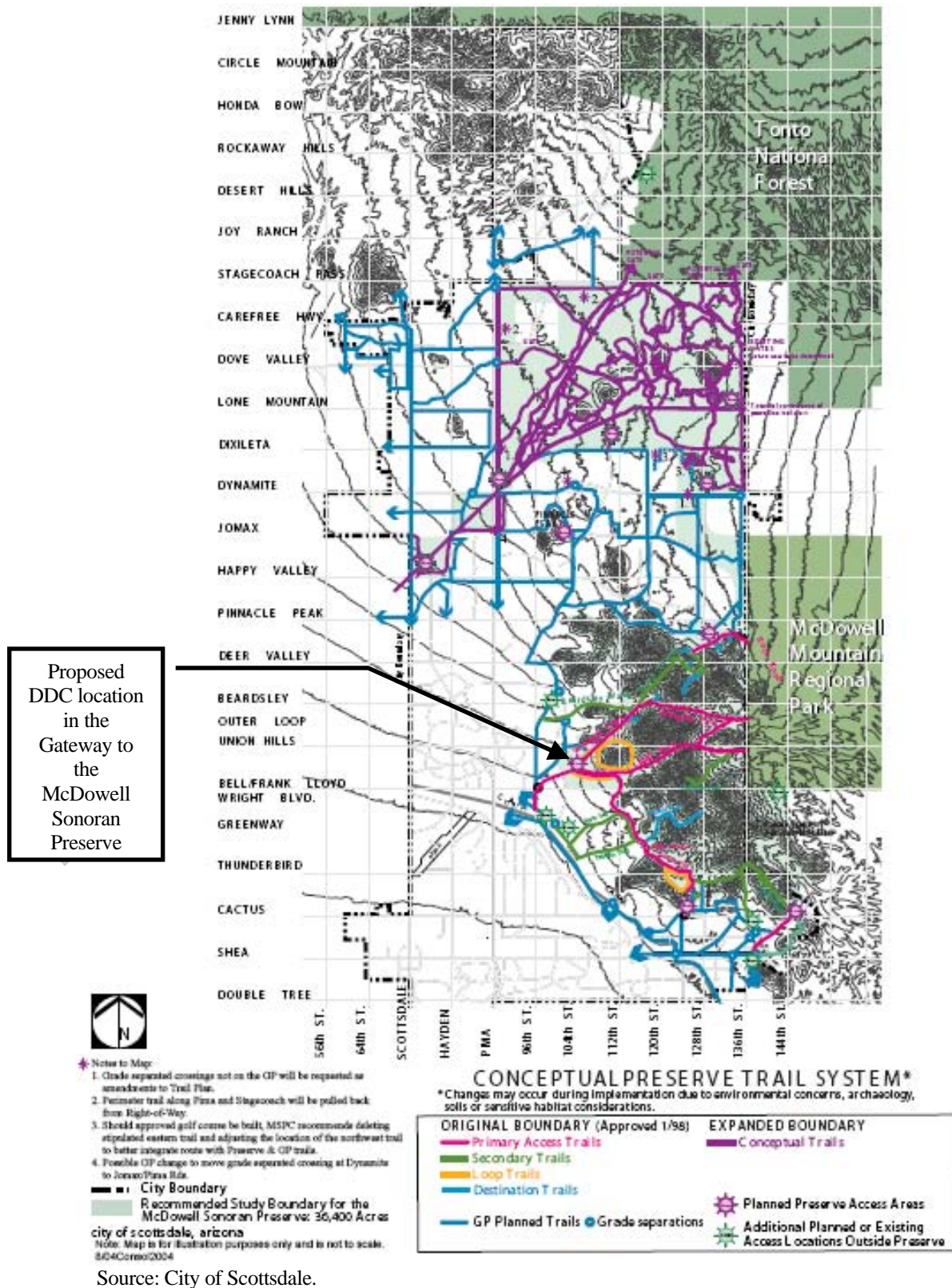
Figure II-4 is a map of the McDowell Sonoran Preserve, as well as other natural areas that are set aside for conservation by other entities. The McDowell Sonoran Preserve contains recreational trails for walkers, hikers, runners, and equestrians. **Figure II-5** shows a map of current and proposed trails for the McDowell Sonoran Preserve.

Figure II-4
Map of McDowell Sonoran Preserve Lands and Adjacent Natural Areas



Source: City of Scottsdale

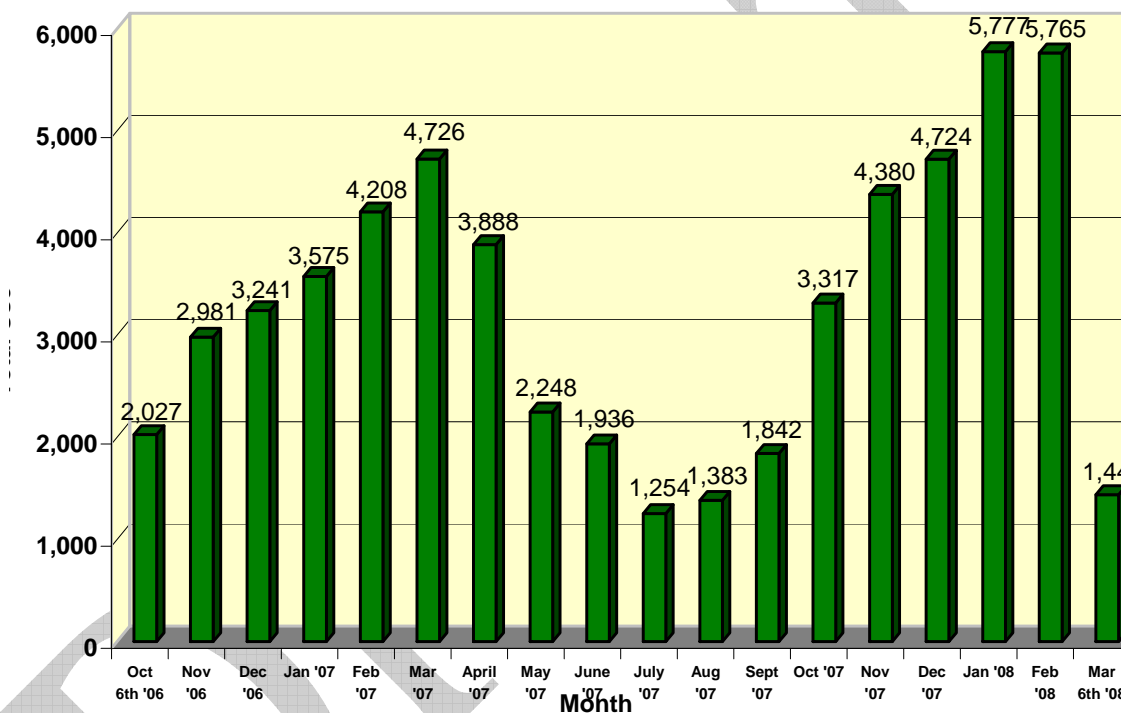
Figure II-5
Map of McDowell Sonoran Preserve Current and Conceptual Trails



Current Trail Use Pattern

An indicator of trail usage in the McDowell Sonoran Preserve is provided by the trail counter system utilized at the Lost Dog Wash Access Area near the trailhead facility. For 2007, there were an estimated 37,480 trail uses. The use seems to be growing, as the period March 2007 through February 2008 had an estimated 41,240 users. Data in **Figure II-6** summarizes trail use for a sixteen month period.

Figure II-6
Lost Dog Wash Trail Use



Source: Scottsdale Preservation Division

Site Size and Quality

The planned McDowell Sonoran Preserve is 36,400 acres of mountains and desert land that encompass the McDowell Mountains and land north of the mountains connecting to the Tonto National Forest. The proposed DDC site in the Gateway is situated at the foot of the mountains, with direct views of several peaks in one direction (see **Figure II-7**), and views over the Phoenix urban area in the other (see **Figure II-8**). This will provide a dramatic contrast of views between natural desert and urban environments.

Figure II-7
View East from Proposed Desert Discovery Center Building Location



Source: ConsultEcon, Inc.

Figure II-8
View West from Proposed Desert Discovery Center Building Location



Source: ConsultEcon, Inc.

Parking

There is sufficient space to accommodate a range of parking needs. The amount of parking required for the proposed DDC will depend on the size and scale of the facility and the activities planned onsite, especially events with potentially large attendance. In addition, parking will need to accommodate non-DDC users of the public Gateway access area and trails in the McDowell Sonoran Preserve. There will need to be sufficient parking for large vehicles, including tour and school buses, as well as vehicles with equestrian trailers.

Summary

The proposed DDC will be located in Scottsdale, a city in the Phoenix Metropolitan Area in central Arizona. Phoenix is the fifth largest city in the United States, with an estimated population of approximately 1.5 million people. The estimated metropolitan population in the “Valley of the Sun” exceeds 4 million people.

The proposed DDC will be located in the Gateway to the McDowell Sonoran Preserve. The Gateway will be the largest public access area in the Preserve. The site would be easily accessible by vehicle to residents from the Phoenix metro area, as well as visitors from outside the region that may be less familiar with the area. The Phoenix metro area is served by major highways running east-west and north-south through the middle of Phoenix—Interstate 10 and Interstate 17—as well as near concentric highways composed of Loop Routes 101, 202 and 303. The proposed DDC site is situated to the northeast of the intersection of Thompson Peak Parkway and Bell Rd., approximately 1 mile from Exit 14 (Bell Rd.) on Route 101, the major north-south limited access thoroughfare to and through Scottsdale.

Adjacent uses and site size and quality are supportive of the development of a facility such as the proposed DDC. The primary adjacent use of the proposed DDC is at the edge of the McDowell Sonoran Preserve, 36,400-acres of Sonoran Desert environment. The Preserve will be the central interpretive theme for the proposed DDC. Residential uses lie to the west and south of the site, across Thompson Peak Parkway and Bell Road, respectively. A mix of uses is located to the north. The proposed DDC site in the Gateway is situated at the foot of the mountains, with direct views of several peaks in one direction and views over the Phoenix urban area in the other. This will provide a dramatic contrast of views between natural desert and urban environments.

Section III

POTENTIAL DESERT DISCOVERY CENTER CONCEPT

This report section describes potential concepts for the proposed DDC that would meet the stated mission for the facility and that would reflect the input received from community leadership and from the public process that guided this plan.

The process undertaken to develop and describe the DDC concepts as presented herein is:

- ◆ Review in-place DDC Mission, suggest refined DDC Mission
- ◆ Develop and refine DDC Statements of Significance
- ◆ Develop and refine DDC Interpretive Themes
- ◆ Describe potential exhibits – “DDC’s WOW!”
- ◆ Provide preliminary illustrations of potential exhibits – to establish their “look and feel”
- ◆ Establish two DDC development scenarios to inform and facilitate community input and to facilitate project planning beyond the stage represented in this report.
- ◆ Prepare conceptual Programs of Spaces for the two DDC scenarios.
- ◆ Prepare conceptual order-of-magnitude Project Capital Costs for the DDC scenarios.
- ◆ Test community support for themes, design concepts and project scale.

Desert Discovery Center Mission that Guided this Process

The mission of the DDC as adopted to date is:

“Through environmental experiences, presented in a natural setting, the Desert Discovery Center inspires learning about the desert through its programs which encourages preservation and instills a sense of harmony with and respect for the desert.”²

As the project has moved forward, there has been additional input from the client group and community as well as research and analysis by the consulting team. This input is the basis for a suggested and interim DDC Mission statement prepared by the consulting team as follows:

² From: 1999 DDC Report

“The mission of the Desert Discovery Center is to increase appreciation and understanding of the McDowell Sonoran Preserve and the ecosystem of which it is a part.”³

This interim revised DDC Mission statement is intended to assist project leadership moving forward knowing that the DDC’s mission statement may be further revised in the future.

McDowell Sonoran Preserve Statements of Significance

The essence of interpretation is discovering a sense of place: building meaningful human connections to a natural or cultural resource. “Statements of Significance” describe why a place is unique, special or important. They are single-sentence statements-of-fact that lay the foundation for the development of interpretive themes.

The McDowell Sonoran Preserve, which is highly-valued by the Scottsdale community, was established by an amendment to the Scottsdale Revised Code.⁴ The amendment states that the purpose of the Preserve is:

“...to establish in perpetuity a preserve of Sonoran desert and mountains to maintain scenic views, as a habitat for wildlife and desert plants; to protect archaeological and historical resources and sites, while providing appropriate public access for educational purposes; and to provide passive outdoor recreational opportunities...”.

The process of developing the Statements of Significance that follow was, in large part, a process of validating community support and confirming the rationale for the Preserve’s stated purpose.

Process for Developing Statements of Significance

Statements of Significance were developed using input gathered from four main sources:

- ◆ A planning workshop (Workshop #1) held at the Chaparral Suites Resort in Scottsdale on December 5, 2007.
- ◆ A survey instrument distributed at the workshop and to interviewees.
- ◆ Interviews with stakeholders conducted by the consultant team during December.
- ◆ Library and desktop research.

³ Source: suggested and interim DDC Mission Statement

⁴ The full text of Scottsdale Revised Code Ordinance #3321 is presented in Appendix H.

Survey data, breakout-group notes, notes from the plenary session discussions, interview notes and research informed the process of writing the statements of significance. See **Appendix A** for additional information on the development of the recommended Statements of Significance.

McDowell Sonoran Preserve Statements of Significance

The following Statements of Significance were created to guide DDC interpretive planning.

- ◆ The McDowell Sonoran Preserve (MSP) is the largest contiguous protected natural land area within the boundaries of a metropolitan area in the United States.
- ◆ The citizens of Scottsdale voted to tax themselves to create the MSP, demonstrating the community's respect for the unique ecology and beauty of the Sonora Desert, and the value its residents place on the contribution made by open space and outdoor recreation to the quality of their lives.
- ◆ The potential to achieve connectivity between the MSP and nearby protected landscapes represents a rare opportunity to conserve a functional, landscape-scale tract of the most biologically-rich desert ecosystem on the planet, a protected area of adequate size to support a full suite of natural processes that includes the survival of viable populations of large predators.
- ◆ The location of the MSP on the urban/wildland interface increases its socioeconomic value while creating local tension between resource preservation and recreational use.
- ◆ The location of the MSP on the interface between the basin and upland natural communities of the Sonoran Desert increases its biodiversity and ecological value.
- ◆ Archaeological resources found in the MSP document thousands of years of continuous human use and habitation.
- ◆ The McDowell Mountains were formed at the edge of the basin-and-range geological province of the American Southwest, a natural phenomenon found in few places on Earth.

Proposed Interpretive Themes for the Desert Discovery Center

Following is a discussion of the purpose of developing interpretive themes for the DDC, the process used in developing the proposed interpretive themes, and a description of the proposed interpretive themes.

Purpose of Developing Interpretive Themes for the Desert Discovery Center

Attaching meanings to a place is a fundamental human trait. So is storytelling. We assign special significance to the places, events, people, and things that touch our lives and shape our culture. Story is the tool that facilitates exploration of resource meaning and the significance of place. Human beings are natural-born storytellers, and societies depend on the power of story to

share the ideas, meanings, beliefs, and values that collectively constitute culture. Storytelling is a fundamental, basic activity of human societies, and it is the heart and soul of interpretation. The goal for the interpretive components of a facility such as the DDC is to facilitate visitors' intellectual and emotional connection to a place by telling "stories." Storylines are based on Interpretive Themes, which link a place's tangible attributes (articulated as statements of significance) to the intangible ideas, meaning, beliefs and values that connect people with place. It is not the job of the interpretive components of a facility to tell an audience what to think about a resource, or how to feel about a place. It is the role of the interpretive components to facilitate personal exploration of meaning, to help people form unique, individual connections with a place on whatever level the individual chooses, be it emotional, intellectual or spiritual.

The set of overarching stories that communicate the essential qualities of a resource are called *Primary Interpretive Themes*. Each is written as a single-sentence abstract that tries to capture the essence of a place and its stories. The *Central Theme* is the umbrella that covers the primary themes with a sweeping summation, an expression of the core story of a resource.

Process of Developing Proposed Interpretive Themes for the Desert Discovery Center

The development of interpretive themes was driven by the Statements of Significance, input from workshops/interviews (see **Appendix B**) and market analysis. The consultant team visited major informal learning facilities in the Greater Phoenix Area to assess thematic content in order to avoid duplication and overlap in the DDC themes. The team also interviewed management staff at major informal learning facilities, not only to discuss potential themes for the DDC, but also to get a sense for the state of environmental education in the metropolitan area. The facilities that were visited include:

- ◆ Taliesin West
- ◆ Phoenix Zoo
- ◆ Arizona Science Center
- ◆ Heard Museum
- ◆ Desert Botanical Garden.

A central interpretive theme and seven primary themes were developed for further testing. The theme universe that was tested is shown in regular type below. Changes/additions made to the

themes following review and testing are shown in *italic type*. Deletions are shown with a ~~strikethrough~~.

Central Interpretive Theme

The diverse adaptations that allow native plants and animals to survive in the harsh environment of the Sonoran Desert are a continual source of wonder to the careful observer, and a wellspring of ideas and inspiration to those who accept the challenge of reshaping human society so that future generations will have adequate resources to meet their needs as well as the opportunity to experience the magic and mystery of the natural world.

***Climate** The climate of the Sonoran Desert, which challenges all living things to adapt to extremes of heat and aridity, also challenges our society to take advantage of the opportunities that are created by those environmental extremes, such as the development of solar energy, to build a sustainable future.*

Biodiversity Despite the biological diversity of the Sonoran Desert (home to 2000 native plants, 60 mammals, 30 fish, 20 amphibians, 100 reptiles and more than 350 birds), many people still perceive the desert as a wasteland. Overcoming this perception may be the last best hope for conserving large enough landscapes to allow ecosystem processes to continue on a genetically-meaningful scale *and mitigate the negative consequences of loss of open space.*

Edge Ecology The location of the McDowell Sonoran Preserve on an ecotone between the basin and upland plant communities of the Sonora Desert creates a biological treasure chest of uncommon value. ~~and the intricate network of interactions among its many species is so complex that the human intellect may never achieve the capability to fully comprehend it.~~

Urban/Wildland Interface ~~City dwellers place a high value on natural landscapes adjoining urban areas, and increasing recreational pressure on such lands can hamper resource conservation efforts, necessitating a reliance on interpretation and environmental education to create an informed public that actively supports management objectives.~~

There is a unique relationship and inevitable conflict where urban uses interface with wildlands. The activities associated with urban activities can have negative unintended consequences on the health and sustainability of the wildland ecosystem challenging resource conservation efforts. And because city dwellers place a high value on natural landscapes adjoining urban uses, recreational uses of these areas increases, exacerbating the problem by placing additional pressures on these lands. Interpretation and environmental education are important and necessary tools to create an informed public and to instill good behavior patterns in users and in the general community.

Water In the arid environment of the Sonora Desert, the presence or absence of water has a profound effect on topography and the composition of natural communities. This reflects society's critical need for adequate supplies of clean water, which will in turn define, in large part, the politics of 21st Century human interaction with the remaining natural landscapes of the American Southwest.

Archaeology The evidence of ancient irrigation canals in the *Phoenix area*, and the presence of numerous toolmaking sites, testifies to the fact that humans have always manipulated their environment and *employed* desert resources, but the eventual passing of early cultures that were far more in tune with the natural rhythms of the desert than modern society reminds us that change is the only constant, and that even our highly-advanced technologies do not free us from the need to adapt or perish.

Geology/Cultural Geography ~~Exploitation of the mineral resources of the McDowell Mountains by both prehistoric and more recent human cultures emphasizes the intimacy and depth of the connection between people and planet.~~ Geologic forces that occurred millions, or even billions, of years ago shaped a landscape that still shapes patterns of human migration and settlement today, *reminding us of the intimacy and depth of the connection between people and planet.*

Sustainability The vision of the people of Scottsdale to preserve open space in the McDowell Mountains *and beyond* requires striking a delicate balance between economic development, recreational access and resource protection that confers, on those who manage

and interpret the resource, a responsibility to set impeccable standards for sustainable development and environmental education.

Figure III-1 and **Figure III-2** graphically display the Recommended Interpretive Themes for the DDC.

Figure III-1
Central Interpretive Theme

Central Interpretive Theme



The diverse adaptations that allow native plants and animals to survive in the harsh environment of the Sonoran Desert are a continual source of wonder to the careful observer, and a wellspring of ideas and inspiration to those who accept the challenge of reshaping human society so that future generations will have adequate resources to meet their needs, as well as the opportunity to experience the magic and mystery of the natural world.



Figure III-2
Recommended Interpretive Themes

Edge Ecology

The location of the McDowell Sonoran Preserve on an ecotone between the basin and upland plant communities of the Sonora Desert creates a biological treasure chest of uncommon value, and the intricate network of interactions among its many species is so complex that the human intellect may never achieve the capability to fully comprehend it.



Urban/Wildland Interface

City dwellers place a high value on natural landscapes adjoining urban areas, and increasing recreational pressure on such lands can hamper resource conservation efforts, necessitating a reliance on interpretation and environmental education to create an informed public that actively supports management objectives.



Water

In the arid environment of the Sonora Desert, the presence or absence of water has a profound effect on topography and the composition of natural communities, which reflects the fact that society's critical need for adequate supplies of clean water will define, in large part, the politics of 21st Century human interaction with the remaining natural landscapes of the American Southwest.



Figure III-2
Recommended Interpretive Themes (Continued)

Geology/Cultural Geography

Exploitation of the mineral resources of the McDowell Mountains by both prehistoric and more recent human cultures emphasizes the intimacy and depth of the connection between people and planet: geologic forces that occurred millions, or even billions, of years ago shaped a landscape that still shapes patterns of human migration and settlement today.



Sustainability

The vision of the people of Scottsdale to preserve open space in the McDowell Mountains requires striking a delicate balance between economic development, recreational access and resource protection that confers, on those who manage and interpret the resource, a responsibility to set impeccable standards for sustainable development and environmental education.

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The evidence of ancient irrigation canals in the McDowell Mountains, and the presence of numerous toolmaking sites, testifies to the fact that humans have always manipulated their environment and employed desert resources, but the eventual passing of early cultures that were far more in tune with the natural rhythms of the desert than modern society reminds us that change is the only constant, and that even our highly-advanced technologies do not free us from the need to adapt or perish.



Biodiversity

Despite the biological diversity of the Sonoran Desert (home to 2000 native plants, 60 mammals, 30 fish, 20 amphibians, 100 reptiles and more than 350 birds), many people still perceive the desert as a wasteland; overcoming this perception may be the last best hope for conserving large enough landscapes to allow ecosystem processes to continue on a genetically-meaningful scale.



Prototypical Exhibit Concepts

These exhibit concepts are based on the Statements of Significance and Interpretive Themes as described above, with particular attention having been paid to the creation of a Wow! factor. The Wow! factor is the facility attribute that will make the visitor experience memorable, that will make the DDC a “don’t-miss” on the menu of Scottsdale attractions and activities. What’s the Wow! was a question that was prominent on both workshop and interview agendas, and there was considerable debate over whether the Wow! should be something in the built environment, or whether it was the landscape of the Preserve itself. The consensus that emerged was that both the natural and built environments are the Wow! factors. While there was strong agreement among stakeholders that one of the most important functions of the DDC (whatever its size) will be to encourage and facilitate visitors’ experience on the landscape of the Preserve, there was also a common understanding that the facility probably will not thrive without an iconic, memorable exhibit experience to attract Scottsdale visitors and provide them the quality, high-class experience that has become associated with the Scottsdale brand.

Five prototypical exhibit concepts were prepared by Exhibit Design Associates to establish the “look and feel” of the visitor experience and to inform the public input process. These exhibit concepts are based on the Statements of Significance and Interpretive Themes as discussed above. While the “Wow” of the DDC ultimately will be in its interface with the McDowell Sonoran Preserve, there is an additional experiential “Wow” that is proposed for the DDC based on the exhibit concepts and visitor amenities as well as programming opportunities at the DDC. **Figure III-3, Figure III-4, Figure III-5, Figure III-6, and Figure III-7** graphically display the types of exhibit opportunities the DDC presents. It is important to note that these are prototypical in nature and may or may not be included in the final exhibit plan for the DDC. However, this plan and the input received from leadership and the public is informed by these depictions and they help to form the ultimate DDC concept.

Figure III-3



In a facility at the smaller end of the spectrum, visitors experience themes and content similar to that communicated by the suspended globe, using a touchscreen rather than laser pointers to activate audiovisual displays.

Figure III-4

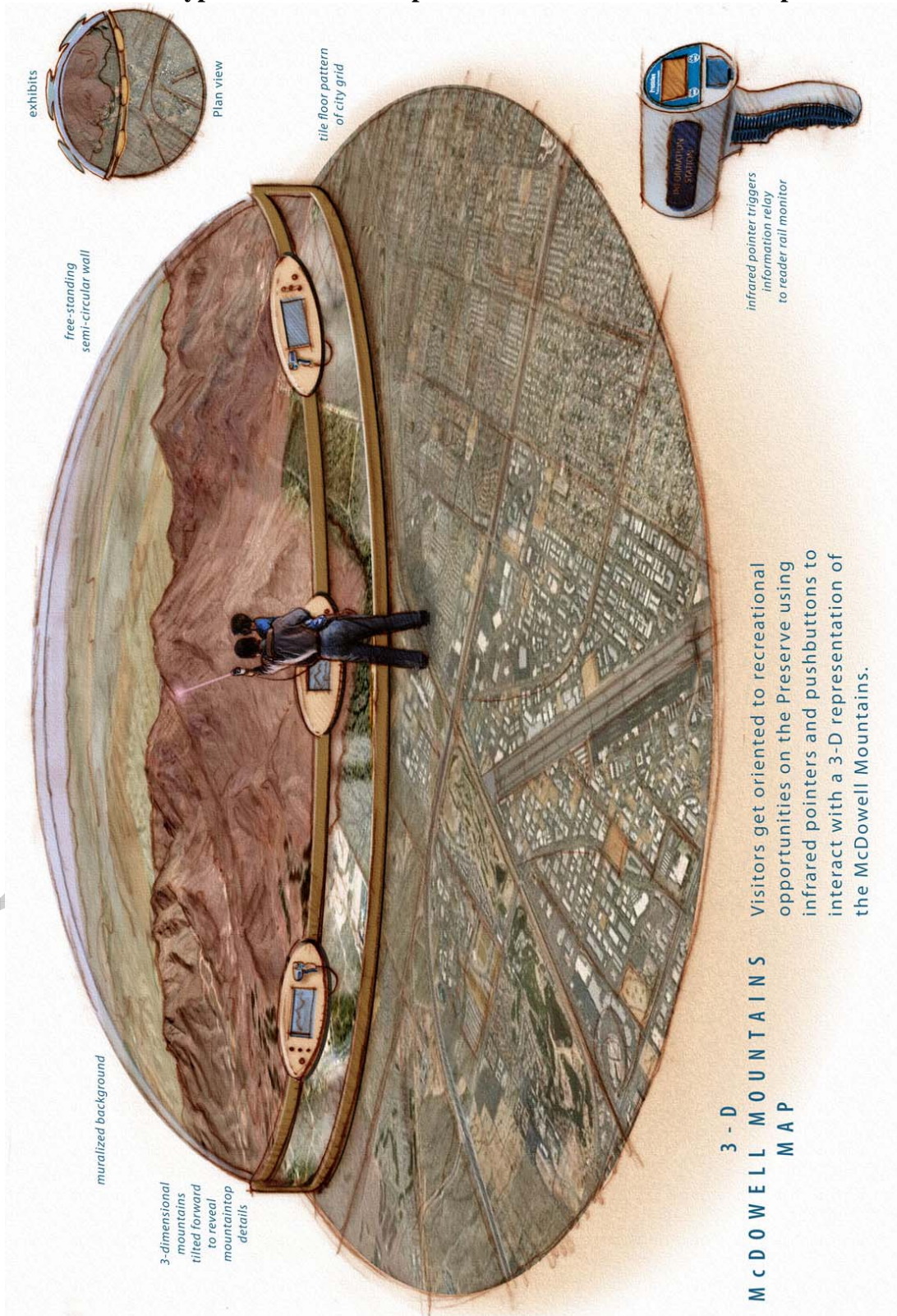


Figure III-5
Prototypical Exhibit Concept - Suspended Globe

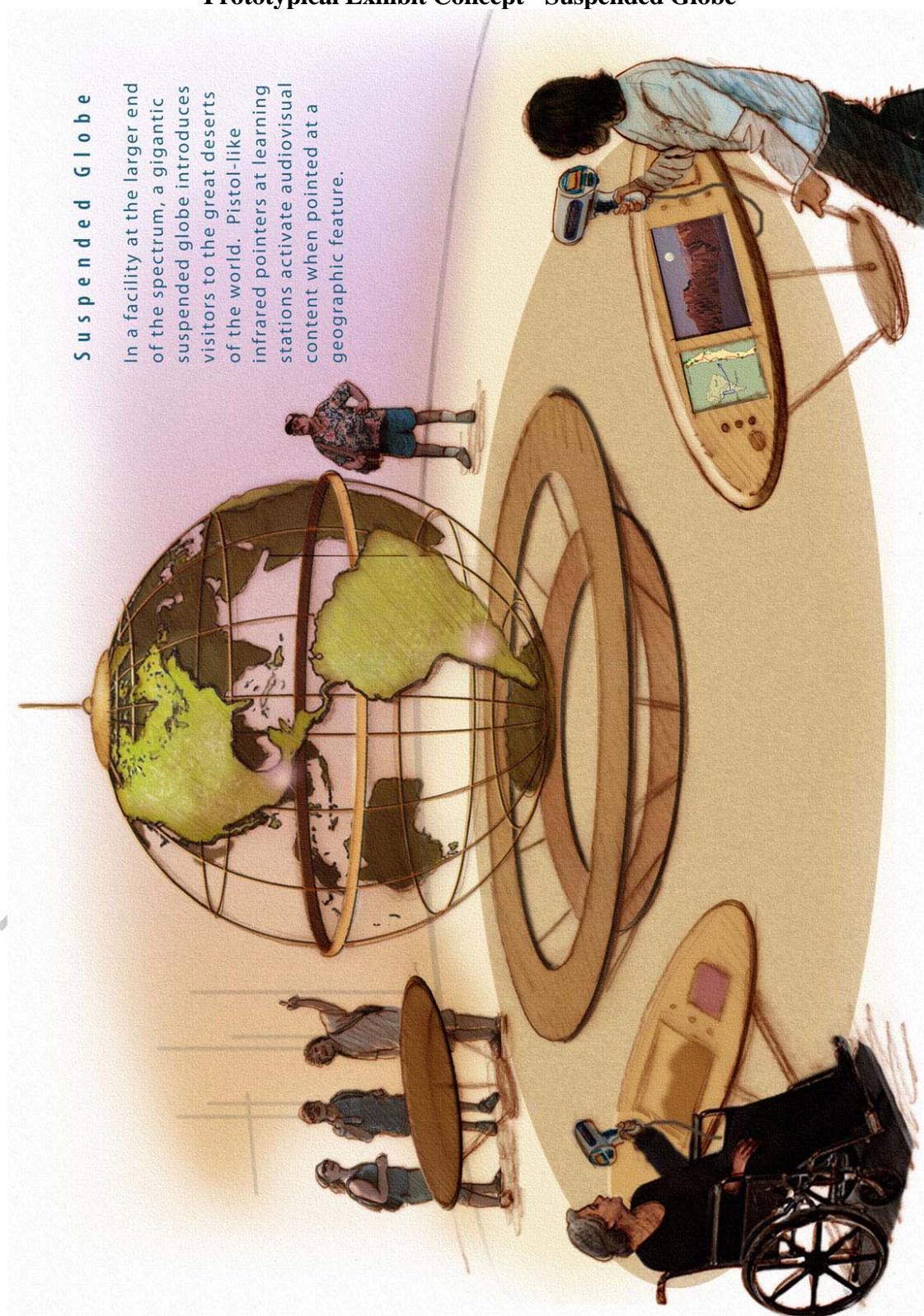


Figure III-6
Prototypical Exhibit Concept –Rattler

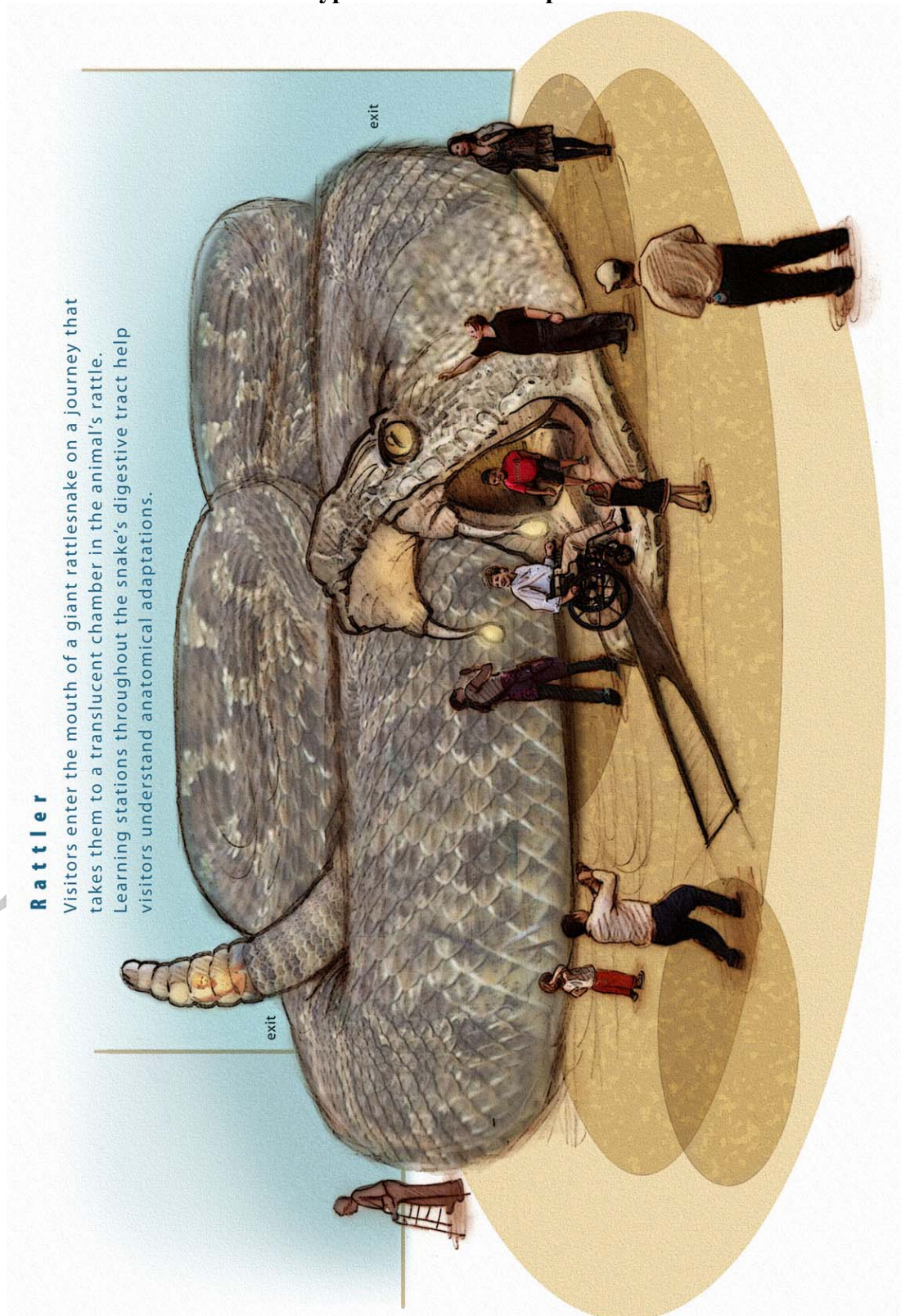
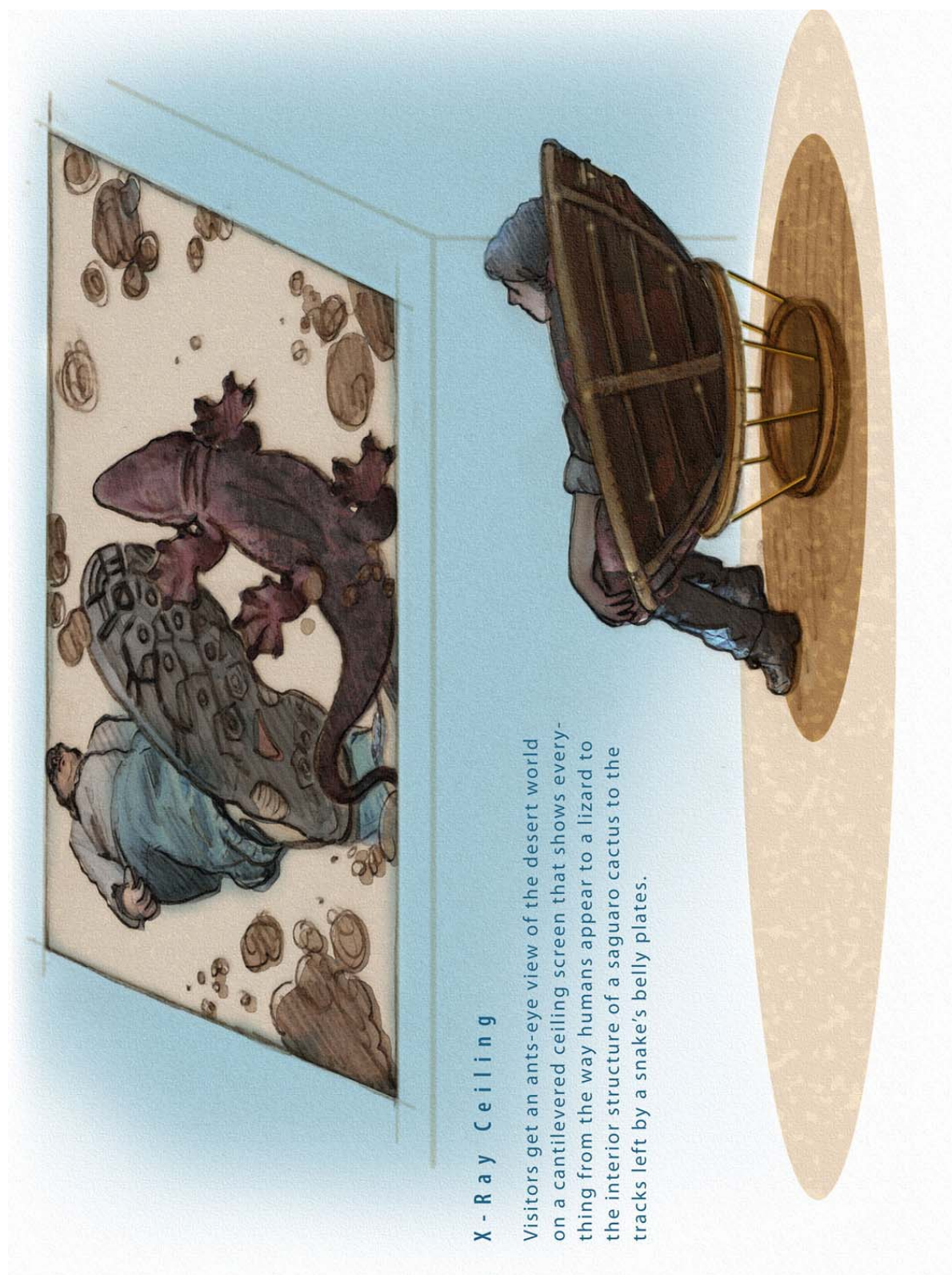


Figure III-7
Prototypical Exhibit Concept – X- Ray Ceiling



X - R a y C e i l i n g

Visitors get an ants-eye view of the desert world on a cantilevered ceiling screen that shows everything from the way humans appear to a lizard to the interior structure of a saguaro cactus to the tracks left by a snake's belly plates.

WORKSHOP AND INTERVIEW IMPLICATIONS

Theme and Mission

If a single phrase could be used to describe the input regarding interpretive themes, it would be “focus on local natural resources.” Input on interpretive topics from the December workshop (Appendix Table 2) clearly indicates that natural history topics are preferred: the seven top-rated topics were biological. This preference is reinforced by the solid support (4.56 out of 5, 9th out of 21, Appendix Table 3) given by the March working group to the strategic recommendation that the DDC “focus on natural history and ecology with a central theme of adaptation.”

The manner in which humans interact with, adapt to and manipulate the natural world seems to be an important concept as well. This is indicated by the high rating given to the topics of *Social & Ecological Tension on the Urban/Wildland Interface* and *Human Impacts on the Landscape* (8th and 9th out of 31, Appendix Table 2) by the December working group, and the favorable overall response to the *Urban/Wildland Interface* theme expressed at the March workshop and open house (4.26 out of 5, Appendix Table 4). Further evidence that human interaction with (and adaptation to) the environment has strong support as a major thematic element is the fact that the *Sustainability* theme received the highest overall ranking.

Scottsdale visitors are interested in Native American culture (44% engage in some form of learning about or experiencing Native American culture during their stay), and the December working group rated *Native American Culture (Past and Present)* 12th out of 31 topics (Appendix Table 2). The focus on natural history and adaptation that has received strong support certainly does not rule out interpretation of native cultures at the DDC. The difference in the way indigenous people interacted with the environment prior to EuroAmerican settlement, and the manner in which humans have utilized Sonoran Desert resources since is profound. Interpretation of these contrasting lifeways is covered by the conceptual umbrella of adaptation.

Effective interpretation of Native American cultures needs to involve the communities from the outset. The project team reached out to the local Indian communities through several channels. Representatives from the Cultural Preservation Office of the Salt River Pima Maricopa Indian Community took a half-day hike in the Preserve with the consultant team, City of Scottsdale staff and representatives of the McDowell Sonoran Conservancy. The group walked to several petroglyph sites and a spring, and the tribal representatives performed a ceremony at the spring.

The consultant team and City staff expressed to the Native American representatives that they hoped the tribe would play an active role in interpretation of their culture at the DDC (if they wanted to see any such interpretation happen). Communication with the tribes and an open-door policy will continue. Outreach to Native American communities should not be taken to mean that the DDC intends to compete with the Heard Museum or become a repository for Indian artifacts. Communicating the way indigenous cultures used the land, though, and how they adapted to the desert environment falls solidly within the scope of the proposed thematic universe.

Support is lacking for interpretation of some cultural topics: *Local/Regional Art History*, *Recent (post-1900) History of the Scottsdale Area* and *Post-Euroamerican Settlement Culture ("Cowboy Culture")* finished dead last out of 31 topics that were rated by the December working group (Appendix Table 2). One comment was received in the 78 surveys returned from the March events that suggested “Must have exhibits of the history of the McDowell Mountain-not just archaeology. Need exhibits about the post-Hohokam Indians, U.S. Army usage, 20th Century ranching, etc.” and another suggested “you should not forget to include part of the west culture...the part kids & adults expect from old John Wayne movies.” No comments on the proposed themes suggested adding an additional cultural/historical component. The fact that the proposed Museum of the American West will focus on recent history gives credence to an approach that relegates the topics of ranching, mining and cowboy culture to a subordinate role (that is, being viewed through the lens of adaptation; interpreted as one of the ways that humans adapted to the desert environment).

There is very little support for direct interpretation of art or architecture. The statement “*The DDC should be a place that celebrates the unique artistic heritage of Scottsdale; exhibits and programs focused on the fine arts should be a part of the visitor experience*” was the second-lowest rated statement on the March survey. While the DDC undoubtedly should make powerful architectural and artistic statements through the design of its buildings and exhibits, interpretation of those topics appears to be better left to the Scottsdale Museum of Contemporary Art and the facility focused on architecture at Taliesin West that is being considered by the Frank Lloyd Wright Foundation in partnership with the Guggenheim Museum.

The essential outcome of the input-gathering process is that the thematic universe that was tested in the March workshop and open house appears to have broad community support, and there is no obvious reason why it should not be used as the foundation for development of the DDC.

Exhibit Concepts/Design Guidelines

There are myriad ways to view the results of input on exhibit concepts (written comment can be found in Appendix G). For the purposes of this study, though, the results are considered with an eye toward developing general design criteria, rather than trying to use community input to refine specific design elements.

The Raised-Relief Map was the most well-liked concept. Is that because its focus is local? Community input directed theme development toward a local focus, and it certainly does not seem unreasonable to assume that that same dynamic is operating here. It makes even more sense when considered in light of the fact the globe concepts got the lowest ratings. It is obviously not as simple as that, but it is a point that should not be forgotten going forward.

The gist of the negative comments about the exhibit concepts was that they were too high-tech and too expensive. Some survey respondents criticized them as artificial and gimmicky, such as the person who wrote “If I want artificial interfaces, I’ll go to Disneyland. The preserve is real. These exhibits are a barrier to the desert experience, are complex and expensive to maintain, needlessly expensive and counterproductive.” This attitude was echoed by a strong negative reaction among March workshop participants to the phrase in one of the strategic recommendations “Do not be afraid to go Hollywood.” Nearly one-third of all survey respondents crossed out the phrase.

One of the criticisms not heard was that the exhibits were too big, too grand in scale, despite the presence of a giant rattlesnake. The Scottsdale community does not appear to object to exhibit concepts on the basis of size. This might be taken to reflect an overall impression (gleaned from more than forty interviews) that the community wants to see the DDC done right if it is done at all (and bigger might be better). The consultant team heard, again and again, that the exhibit experience at the DDC should be world-class, worthy of a community whose brand image includes luxury resorts and spas, championship-caliber golf courses and among the finest medical facilities in the Southwest.

The wall-mounted globe concept may have finished dead last because it was too specific (alone among the concepts, it included verbiage and images that suggested specific content), and people may have been reacting to the (global, not local) content rather than the design. One of the questions that should be getting asked is whether the reaction to the concept was lukewarm because respondents found it too generalized, or whether it was because the design is somewhat pedestrian (it employs a common, perhaps overused exhibit structure: flat, wall-mounted graphics with a reader rail below).

In general, there was support for the creation of an icon. A number of respondents reacted positively to the giant rattlesnake on this basis (“...would be the draw...the ‘must-see’”). But several also noted that the saguaro cactus is the iconic biological component of the Sonora, and suggested a giant, walk-in saguaro.

What do the two most highly-rated exhibit concepts (Raised Relief Map and X-Ray Ceiling) have in common? Both play with perspective, in each case giving the visitor an experience from a point of view that they cannot easily get in the real world. They differ in level of interactivity, though, with the X-Ray Ceiling being a largely passive viewing experience while the map requires a high degree of involvement.

The following design guidelines are suggested, based on the public reaction to the exhibit concepts as well as input from surveys and interviews:

- ◆ create an icon or icons that add the “must-see” attribute
- ◆ create experiences that allow visitors to view the world from unusual, unique perspectives
- ◆ plan for a seamless transition between the inside and outside experience
- ◆ design exhibits to be art objects that engage and entertain first, educate and inspire second
- ◆ think big, think large-scale
- ◆ integrate exhibit design with building design
- ◆ maintain focus on the local, natural world and how plants, animals and people adapt to it.

Role in the Community/Facility Scale

Community sentiment regarding facility scale can be assessed in two ways: directly, through the survey question that asked respondents to indicate what they considered an appropriate size for the facility and indirectly, by implication from the set of statements related to the role of the DDC in the community (results can be found in Appendix Table 6). Of the 18 statements, nine implied a larger facility (“size-positive”); two implied a smaller facility (“size-negative”) and seven were considered “size-neutral.”

There is a clear divergence of opinion between workshop participants and open house attendees on the issue of scale. The workshop participants indicated that they felt a larger facility was appropriate with a mean response of 5.75 out of 7 on the direct scale question, compared to 4.62 out of 7 for open house attendees.

The mean response of workshop participants on every size-positive statement was higher than the mean for the open house, and lower on every size-negative statement. This may reflect the difference in composition between the two groups: the workshop had a number of participants from the hospitality industry, while the open house audience was dominated by members of the McDowell Sonoran Conservancy (logo clothing was prominently in evidence throughout the event).

Six of the nine size-positive statements sank to the bottom of the rankings. Can this be taken to mean that community wants a (relatively) smaller facility? The answer is a qualified yes, but consideration must be given to the nature of the statements. It may be that the relatively low rankings have as much (or more) to do with function than size. Each of the six size-positive statements that got low rankings suggested an activity that someone might do at the DDC:

- ◆ watching large-format films
- ◆ spending an entire half-day inside the building doing various activities
- ◆ going to the DDC for the purpose of eating/socializing
- ◆ attending a concert, play or dance performance
- ◆ learning about other Scottsdale opportunities
- ◆ shopping.

The statements were considered size-positive because the activities suggested in them would require more space. But the relatively low rankings for these statements may have resulted because survey respondents objected to the inclusion of a certain type of activity at the DDC, independent of the implication that a given activity would mean a larger built environment.

Of the three size-positive statements that rose to the near the top of the list, two implied quality rather than a certain activity-type:

The DDC should be a place that is high on the list of places where Scottsdale residents want to take out-of-town guests to see exhibits and displays.

The DDC should be a signature Scottsdale attraction that attains a nationwide reputation as a “don’t-miss” opportunity for Scottsdale visitors.

The other positive statement implied the desert concierge function, which is probably more palatable to most persons wanting to see a smaller facility than, for instance, a performing arts venue:

The DDC should be a place where even inexperienced visitors can get the advice and equipment they need to have a safe, enjoyable outdoor experience in the McDowell Sonoran Preserve.

In any case, the appetite of the community for a significant facility is clearly evident.

Amphitheatre

A small outdoor interpretive-oriented amphitheater for school groups, presentations, and group activities is an important component of the DDC program. Its ultimate size, seating types and design will emerge with the overall program. This would be focused to DDC use. Participants of some of the early workshops raised the question of whether a large performance driven amphitheater should also be included in the project. Such an amphitheater would be more externally oriented. Opinion on whether or not to build such a large (1,500-2,000 seats) amphitheatre is polarized. Mean responses to both the “should-” or “should-not-build-an-amphitheatre” statements on the strategic recommendations survey conducted at the March workshop were almost exactly in the middle of the scale. This indicates strong opinions one way or the other, with the group being fairly evenly divided on the issue.

There was considerable discussion at the March workshop regarding the possibility of a major outdoor performing arts venue on the DDC campus. Advocates of a large amphitheatre noted the need for such a facility in Scottsdale, its positive image benefits, the possibility of creating a positive revenue stream and the fact that the scenic beauty of the site could not be duplicated elsewhere. Opponents noted that many such facilities lose money, and mentioned possible problems with providing adequate food and beverage service, restrooms and parking as well as neighborhood concerns over traffic and noise. In particular, the discussion focused on whether or not an amphitheatre was mission-appropriate for the DDC.

Considerable concern was expressed that packaging a large amphitheatre as part of the DDC might hamper fundraising efforts. Survey results suggest that this might indeed be the case. The mean response to the statement focused on a performing arts venue in the March survey was 3.49 (15th out of 18, just above neutral), implying lukewarm support at best, and the results of the survey executed at the December workshop rated the inclusion of a performing arts last in a list of ten possible roles the DDC might play in the community. The consultants and several March workshop participants noted that the DDC and a large amphitheater are not dependent on each other for market support, or arguably for financial support. The outcome of the planning process as expressed by workshop participants and based on consultant recommendations was that the best way to move forward is to de-couple the DDC and discussion of the potential for a large performance driven amphitheatre in this location and allow them to proceed on separate planning and development tracks. Again, it should be noted that a small amphitheatre dedicated to the interpretive needs of the DDC is an important part of the DDC program and is included in the two development scenarios evaluated in this report.

Wildlife Interpretation/Live Animals

The issue of wildlife interpretation at the DDC has some contradictory elements. Many interviewees stressed the importance of wildlife interpretation, especially in capturing the attention of kids. *Biodiversity* was the second highest-ranked theme, and this clearly indicates a major role for fauna in the interpretive milieu. The contention that there is no such thing as a manufactured exhibit as compelling as a live animal even got tested at the open house, where a number of static graphics competed for attention with three displays of live animals. Open house

attendees were interested in the graphics but were captivated, even moved, by the birds and reptiles that were on view.

The strategic recommendation “Don’t be a zoo,” though, received very strong support (Appendix Table 3), with a positive rating of 4.67 out of 5, and an ordinal ranking of 6th out of 21.

What does this mean? First, it indicates that most interested parties do not want the DDC to be a collector of specimens, live animals or otherwise. People do not want to perceive the DDC as having an accumulation function, but rather as a place that provides experiences. It also suggests, indirectly, that many people are aware of the high maintenance costs associated with displaying live animals (especially large mammals), and do not want the DDC to take on these major operating expenses. But many people are also aware of the tremendous drawing power of wildlife.

There is strong opposition to the DDC being a zoo, but keeping reptiles, insects or even birds on a relatively small scale might be another case. This could be accomplished in partnership with one of the local non-profit organizations focused on wildlife conservation (including Wild at Heart, Liberty Wildlife and the Phoenix Herpetological Society). Representatives of all these organizations were interviewed as part of this process, and the interest level in exploring partnership possibilities, in every case, was high.

Among the suggested alternatives to displaying live animals was the idea of placing cameras at sites on the Preserve where animals are known to congregate (i.e. watering stations) and broadcasting the images to the DDC where visitors could view the animals in real-time.

Facility Name

The strategic recommendation that an alternative to the name “Desert Discovery Center” be developed was not well-received at the March workshop. It was ranked 18th out of 21 recommendations with a numerical score of 3.87 out of 5. Workshop participants felt that the brand identity was already fairly well-established in the public mind, and that abandoning it might cost more than it was worth. But some workshop participants argued for inclusion of the word “Scottsdale” and others advocated “Sonora” or “Sonoran” to create a sense of

local/regional identity. Based on this input, Desert Discovery Center (or DDC) has been retained as the facility name for the purposes of this report.

Environmental Education

The project team visited the major facilities providing environmental education in the Greater Phoenix Area, and interviewed management staff at the Center for Native and Urban Wildlife (at Scottsdale Community College), Arizona Science Center, Phoenix Zoo and Desert Botanical Garden. The major challenges facing any expansion of existing environmental education programs appear to be funding (in the less-affluent school districts) and transportation. The idea that metro area informal learning facilities might band together to seek some sort of grant funding to provide transportation for school groups was explored in the interviews. The consensus opinion was that the idea had merit, but that implementation would be far more complex than it seemed at first glance due to the large number of school districts in the metro area with different policies and priorities.

There is strong support for the DDC taking a role in offering environmental education for kids. But a number of survey respondents objected to the statement *“Make programming for kids and creating opportunities for nature-based free play the highest priority”* because of the use of the word “highest.” Several survey respondents also made the point that the focus of environmental education efforts should not be limited to either children or the local audience, but should include adults and visitors as well.

Strategic Recommendations for Consideration

Based on input from the March workshop, the following set of revised strategic recommendations is provided to function as a concise guide for ongoing facility and experience design, and to stimulate further community input and project refinement. The original strategic recommendations were developed using data gathered through the workshop/interview process conducted in December. They represented a summary of the consensus opinions of the stakeholder group, tempered by information gathered in the market analyses. The development of the recommendations was an attempt to express those development strategies that will be viable not just in terms of the approach to experience design, but also in terms of political will and economic feasibility. Only on the issue of whether or not to build a large-scale (capacity > 1000 persons) amphitheatre on the DDC campus

does there appear to be a major divergence of opinion. The purpose of these strategic recommendations is not to be definitive at this phase of the planning process, but to provide guidance to the process moving forward. It is assumed that project strategy will be refined moving forward.

- ◆ **Establish a Clearly-Defined Development Zone**, with adequate space for future expansion. Limit the built environment to the development zone and design the visitor experience in such a way that a high proportion of use is concentrated within it.
- ◆ **Focus Exhibits and Programming on Natural History and Ecology with a Central Theme of Adaptation.** Create a “brand” 45-90 minute easy Sonoran Desert hike – providing water, sunscreen, etc. to introduce participants to the natural desert environment.
- ◆ **Define The DDC “WOW!”**
 - **It’s the Landscape of the McDowell Sonoran Preserve Itself.** A primary objective should be the encouragement (and facilitation) of low-impact recreation on the Preserve trail system. Enjoyable, safe outdoor experiences help visitors understand and appreciate the value of the lands their tax dollars help to protect.
 - **The WOW! is the Built Environment Too.** Buildings and the ancillary built environment should be low-profile with high quality design to allow visual connection to the landscape and as such be interesting and attractive buildings and physical spaces. A primary project purpose of facilitating outdoor recreational experiences should not be mutually exclusive from offering using engaging exhibits to entertain, educate and inspire.
- ◆ **Include Rotating Exhibition Space.** This space would be where national and international exhibits on the environment would be showcased. This would be a “must see” exhibit on par with Body Worlds and King Tut.
- ◆ **Create an Icon.** Whether giant snake, walk-in saguaro cactus or something else altogether, the DDC needs a signature, trademark feature that generates “don’t-miss” buzz.
- ◆ **Dig. Go Down.** For example: build an underground theatre as one of the WOW!’s. Create a talisman, an icon, with cutting-edge architecture and engineering that allows visitors to enter the earth in much the same way desert animals burrow to survive climatic extremes
- ◆ **Build Green.** Structures should be built to the highest possible environmentally friendly standards.
- ◆ **Build the Commons.** At least some of the spaces where people can congregate and socialize should be accessible without an admission fee.
- ◆ **Create a Seamless Transition Between the Inside and Outside Aspects of the Visitor Experience.** Through creative design, the visitor should naturally progress from his/her indoor experience to the outside which will invoke/encourage interaction with and immersion in the native environment.

- ◆ **Facilitate Environmental Education for Residents And Visitors.** Prioritize providing on-site infrastructure (i.e. classrooms, exhibits, trails) for activities, with a secondary emphasis on offering programming (both on-site and off-site), curricula and logistical support (i.e. transportation) to local schools. Provide settings for both educational activities and nature-based free play.
- ◆ **Do not be a Zoo or Museum.** Do not accumulate. But remember the powerful attraction of wildlife in experience design, and strongly emphasize wildlife themes in all exhibits and programming. Build partnerships and use technology in innovative ways to provide wildlife encounters. Consider low-maintenance live animal displays such as an insectarium or herpetarium focused strictly on native fauna.
- ◆ **Continue to Use the Facility Name “Desert Discovery Center.”** But serious consideration should be given to adding local/regional identity by using either the word “Scottsdale” or “Sonora.”
- ◆ **Continue to Involve the Local Community in Planning/ Design,** and do not forget to reach out to school-age audience.
- ◆ **Continue to Reach out to the Native American Communities.** This is critical to the mission of interpreting adaptation, and responds to a very high degree of interest in Native American culture on the part of Scottsdale visitors.
- ◆ **Strive to be a Year-Round Attraction with Tasteful, Low-Key Retail/Restaurant Development and Plenty of Indoor Summer Activities.**
- ◆ **Consider Whether to Provide for the Possible Construction of a Performing Arts Venue,** but approach the issue of a large amphitheatre on a separate track with a stand-alone feasibility study. Do not bundle a performing arts venue with fundraising efforts for the DDC.
- ◆ **Maintain Private Sector Support by Cross-Marketing.** Visitors to the DDC should have the opportunity to learn about the entire spectrum of activities in Scottsdale, from outdoor recreation to cultural opportunities, shopping and dining. Tasteful, low-key promotion (not of the brochure-rack-in-motel-lobby sort) of the entire menu of local activities will earn the support of Scottsdale businesses and foster the reciprocal promotion of the DDC by those businesses that perceive the facility as value-added to their customers’ Scottsdale experience.
- ◆ **Target Economic Sustainability and Community Benefits.** The economic sustainability of the DDC and its community benefits should be planning factors as project planning and design proceed. This strategy would apply to:
 - The buildings and outdoor areas
 - The activities and programs to occur there
 - The organizational and operating structure, and
 - The projects funding mechanisms initially and for ongoing operations
- ◆ **Consider Phasing of the Development of DDC.** A sufficient project “critical mass” would be needed for the first Phase.

- ◆ **Promote Preserve Research.** Be a venue to facilitate research in the Preserve. Create partnerships with colleges and universities, environmental and think tank entities.

Testing Process for Statements of Significance, Interpretive Themes and Strategic Recommendations for the Desert Discovery Center

Initial Statements of Significance and Interpretive Themes, preliminary Strategic Recommendations and potential roles for the DDC in the community were developed by the consulting team based on their research and analysis, extensive interviews and outreach in the local area and the Workshop #1 process. These were refined and tested along with the prototypical exhibit concepts at workshop #2 and a public open house held on March 7-8, 2008, in Scottsdale. (The workshop was held at Chaparral Suites Resort, and the open house was held in Brett's Barn at WestWorld).

Detailed Appendix Data and the Testing and Public Input Process

The above findings were informed by and reflect the testing process. See **Appendix A** for a summary of Workshop #1 in December 2007 that includes input used in developing Statements of Significance and the DDC Experience. See **Appendix B** for December Workshop input used in developing Interpretive Themes. **Appendix C** provides inputs used in developing Strategic Recommendations that were derived from the December Workshop. **Appendix D** provides data related to Workshop #2 and the public Open House in March 2008 including the testing process and results for Interpretive Themes, Strategic Recommendations and Potential Role for the DDC. **Appendix E** provides the March 2008 survey instruments used in the Workshop and Open House.

Data in **Appendix F** provides a list of persons interviewed during the course of the study.

Desert Discovery Center Facility Scale, Program of Spaces and Order-of-Magnitude Capital Costs

Following is a summary of the research, analysis and public input used to provide initial DDC project definition regarding facility scale, program of spaces and order-of-magnitude costs for consideration by the Scottsdale community. These important facility characteristics will be refined as planning moves forward. Input to date suggests that a major facility with a mission focused on interpreting local resources and providing high-quality informal learning experiences can achieve consensus community support. Scottsdale residents value the Preserve not only for its intrinsic worth and contribution to their quality of life, but also for its value to the tourism industry. This

synergism suggests an opportunity to build a broad base of support across most socioeconomic/ideological categories.

Core Project Characteristics that Shape Market Potential and Project Benefits

Several core project characteristics shape the capacity of a mission-oriented visitor attraction to achieve a high public profile and visitation, fulfill its mission, offer benefits to its community, and develop a positive operating profile. These include:

- ◆ **Institutional Mission** – Suggested mission elements and desired outcomes for the DDC have included enhancing conservation and education regarding Sonoran and other desert environments, tourism development, and resident recreation.
- ◆ **Interpretive Focus and Themes** – Scottsdale's McDowell Sonoran Preserve and the Sonoran Desert are the core focus and themes of the DDC. There are numerous opportunities for interpretation and celebration of these and related topics and sub-themes.
- ◆ **Location, Accessibility, and Site Quality** – This includes a location with good accessibility to potential users, and a location that provides excellent views and accessibility to the subject natural resource. The proposed DDC location has excellent characteristics from the perspective of access by visitors. It also offers outstanding opportunities to access the Preserve, and to view the desert and mountains to the east.
- ◆ **Focus of Facility Use** – The vision for the DDC includes a balance between its function as a destination attraction and its function as a portal to the desert experience. Some visitors will not venture on to the landscape at all, and be attracted to the facility solely for the purpose of viewing exhibits or attending programs. Others will use the DDC as a staging area for hiking (or other recreational activities) in which they could participate whether or not the facility was there. The experience of most visitors will probably include both built and natural environments, and the balance between the two is an important consideration that will be determined in large part by decisions about facility scale.
- ◆ **Facility Size and Scale** – Larger facilities with more exhibits, event spaces, educational spaces, and visitor amenities tend to be able to support more broadly defined missions, and wider interpretive foci, to serve more users in different ways, and to have larger operating and marketing budgets than smaller facilities. Smaller facilities have the advantage of lower initial capital costs, lower operating costs, and more focused activities.
- ◆ **Facility Governance and Operations** – The DDC is expected to be operated as a not-for-profit educational attraction. Its governance has not yet been established, but it is likely that some form of public-private partnership would be best suited for this facility. The extent of programming, education, marketing, service and amenity provision on an ongoing basis, and the quality of such operations will be a hallmark of ongoing success and institutional sustainability for the DDC. While highest quality is proposed and expected in any manifestation of the DDC, decisions made regarding institutional mission, focus of interpretation, facility use focus, and facility size and scale have implications for the size of the future operating budget. Generally a more ambitious mission with more programs in a

larger facility will have higher operating costs than in a smaller facility. In turn, this implies a need for higher ongoing contributed revenues.

- ◆ **Project Benefits** – The initial required investments and ongoing requirements for operating support are balanced against the various benefits of a project such as the DDC. These will include conservation, education, and celebration of the Sonoran Desert, improved quality of life for Scottsdale and area residents, enhancement of the tourism economy, and overall economic and fiscal impacts.
- ◆ **Memorable Visitor Experiences** – The facility should embrace and utilize modern technology, not for its own sake, but to create memorable experiences that help visitors understand and appreciate the Preserve. The placement of cameras at watering stations (and other places wildlife are known to frequent), for instance, would allow visitors to view wildlife on screens within the DDC. This creates a win-win situation: the wildlife is not stressed by the presence of humans and visitors have a much better chance of actually seeing the animals. A “monsoon chamber” in which visitors experience a flash flood would be another example of the use of technology so that the message content transcends its medium. Visitors would not only have a memorable experience, but get valuable information about safety and desert climate as well, going well beyond simple appreciation for the technology used to create the experience.
- ◆ **Facilitate Research** – Actively pursue partnership opportunities with colleges and universities, environmental organizations, think tanks and other entities to support scholarly inquiry, volunteer work programs, learning opportunities such as eco-tours and the establishment of a research library.
- ◆ **Programming** – Continually changing, innovative programs will be critical to the success of the DDC mission. In addition to a full menu of interpretive programs, the facility will need to actively support research, environmental education and special events that involve a wide spectrum of locals as well as visitors in order to fulfill its potential as a vibrant focal point of community life.
- ◆ **Facilitation of the Outdoor Experience** – The “doing” will make the DDC unique. Few stakeholders envision anything less than a world-class exhibit experience. Nonetheless, creating a seamless transition between inside/outside and facilitating/encouraging low-impact use of Preserve trails so that visitors have their own unique, individual experience of the desert environment will be more important to the facility’s continued success than exhibitry.

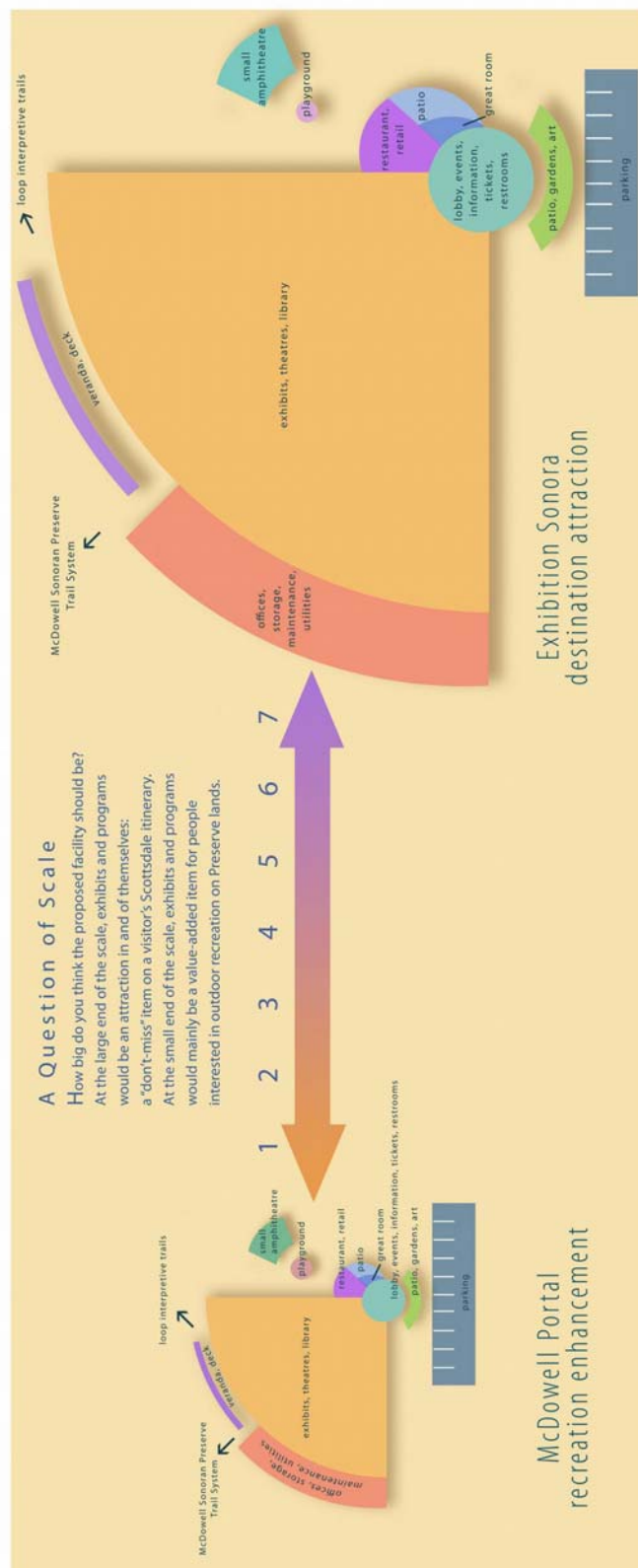
Potential Desert Discovery Center Facility Scenarios

To better inform community planning of the DDC, and to allow future planning flexibility, a range of future facility sizes has been established for this planning phase by presenting two potential facility scenarios. The scenarios represent a range of facility size and scale. A smaller facility for the purpose of this analysis is called “McDowell Portal – a recreation enhancement” a larger facility is called “Exhibition Sonora – a destination attraction”. These two potential facility scenarios reflect the planning process presented in this report. **Figure II-8** provides a graphical representation

of the relative scale of the scenarios. **Figure II-9** is a chart summarizing characteristics of the two scenarios. These graphics were used in the March Workshop and the March Open House to inform attendees regarding the range of project scales being evaluated in this report and to solicit community input on facility scale and characteristics. Again, it should be stated that in this planning process and moving forward, these two scenarios should not be considered definitive in their size, programs or characteristics, nor should they be considered as the only facility scenarios that should be considered. Variations of these two scenarios should be considered moving forward in order to best meet Scottsdale's goals for the project and resources available to develop and sustain the facility.


Both the "McDowell Portal – a recreation enhancement" and the larger "Exhibition Sonora – a destination attraction" represent substantial facilities that would have strong interpretation and positive benefits. The larger Exhibition Sonora – a destination attraction scenario, would be a higher profile facility and organization that becomes a well-known aspect of Scottsdale's visitor offerings, a destination in its own right, and a highly repeatable community resource. The McDowell Portal – a recreation enhancement scenario, would have some of these characteristics but to a lesser extent. It would be less likely to be on the short list of things to do while in Scottsdale. As noted project scale relates to initial capital costs, ongoing operating costs, as well as to project benefits. Following are initial analyses of possible programs of spaces and capital costs for these two facility scenarios. It should be noted that a phased development plan is certainly possible for the DDC. A sufficient project "critical mass" would be needed for the first Phase. In addition, a plan that anticipates and accommodates facility expansion should be considered as facility planning moves forward.

Figure III-8
Conceptual Facility Scale Diagram



Source: EDA and CEI

Figure III-9
Conceptual Facility Characteristics Summary

Preliminary Description of Facility Characteristics Your input will help determine the size and character of the facility best-suited to serve the Scottsdale community. The table below shows some of the differences and similarities between two possible scenarios at the larger and smaller ends of the spectrum.	
McDowell Portal A recreation enhancement	Exhibition Sonora A destination attraction
Characteristics of Any-Sized Facility	
Introductory exhibits Up to one hour length of stay	In-depth exhibits 1½-3 hour length of stay
Adds value to outdoor Preserve experience	Exhibits are also a stand-alone experience
60-seat 3D theater 50-seat planetarium w/ observatory	120-seat 3D theater 100-seat planetarium w/ observatory
Small gift shop and snack bar	Destination-themed retail shop and café
15-25,000 square foot building	40-70,000 square foot building
100-seat outdoor amphitheater	200-seat outdoor amphitheater
Limited public programs; limited formal research	Many public programs & substantial sponsored research
Serves area residents and local schools Adult admission: \$5-10 Free to Scottsdale residents Moderate attendance potential Limited national profile Capital development costs: +/- \$20 million Limited new job creation & economic impacts	 Serves regional residents, schools and tourists. Adult admission: \$10-20 Substantial discount for Scottsdale residents High attendance potential Iconic attraction with high national profile Capital development costs: +/- \$50 million Significant new job creation & economic impacts

Source: EDA and CEI

Potential Desert Discovery Center Project Scale

Data in **Appendix H** provide an analysis of different types of space that could be included in either or both the McDowell Portal – a recreation enhancement, and Exhibition Sonora – a destination attraction scenarios. This appendix table represents the focus that was placed in the analytical process on evaluating the required functionality of various space types and the broad range in scale that might occur at the DDC under different approaches to project development. In all approaches to DDC development, outdoor experiences are proposed to play an important role in the visitor experience and interpretation of the desert resource. This approach was used in preparing the potential facility scenarios.

Data in **Table III-1** provide a preliminary program of spaces for discussion purposes for both scenarios, the McDowell Portal – a recreation enhancement, and Exhibition Sonora – a destination attraction.⁵ The focus in this analysis is to balance interpretive aspects of the program with information functions, visitor amenities, revenue generation potential, and back of house requirements. In this analysis, the Exhibition Sonora – a destination attraction scenario, is about two and a half times larger than the McDowell Portal – a recreation enhancement scenario. However, in the larger scenario, there is about three and a half times as much indoor interpretive area. Visitor stays would be longer at the Exhibition Sonora – a destination attraction scenario, but it would be more repeatable at the same time. The Exhibition Sonora – a destination attraction scenario, would support a much larger organization offering more programs, events, marketing, and generally having a much higher profile in the resident and tourist markets.

It should be noted that the intent of the McDowell Portal – a recreation enhancement scenario, is to create a high quality attraction in its own right that should not be confused with information and amenity oriented visitor centers that often are placed near major attractions and natural areas. As proposed, the DDC McDowell Portal – a recreation enhancement scenario, would offer high quality and immersive interpretation, many community oriented spaces and very high quality information resources and amenities to create a facility that would fully reflect the quality of development and visitor experience that Scottsdale offers to its guests.

⁵ The analyses in Tables III-1 and III-2 vary somewhat from the facility size and range costs that were assumed in Figure III-9 *Conceptual Facility Characteristics Summary* because they were developed with further research and analysis subsequent to the March Workshop and Open House.

Table III-1
Desert Discovery Center Preliminary and Conceptual Program of Spaces
Subject to Further Refinement - For Illustrative Purposes Only

Program Area	McDowell Portal – a recreation enhancement			Exhibition Sonora – a destination attraction		
	Square Feet	% Net Building Area	Notes	Square Feet	% Net Building Area	Notes
Net Square Footage						
Indoor Public Spaces						
Lobby (includes Ticketing, Info. Desk/Concierge)	650	3.9%		1,800	4.1%	
Coat and /or lockers	50	0.3%		100	0.2%	
Desert Great Room	800	4.8%		1,200	2.7%	
Public Rest Rooms	400	2.4%		600	1.4%	
Subtotal Indoor Public Spaces in NSF	1,900	11.4%		3,700	8.4%	
Commercially Oriented Spaces						
Gift Shop	500	3.0%		1,200	2.7%	
Food / Vending	250	1.5%	Multiple locations?	250	0.6%	
Flexible Events Space	500	3.0%	Spill to Veranda?	1,500	3.4%	
Catering Kitchen	125	0.7%	In this model will be Catering Support Kitchen	250	0.6%	
Café/Restaurant/Kitchen	750	4.5%	Spill to Veranda? 20 seats	2,600	5.9%	Spill to Veranda? 80 seats
Subtotal Commercially Oriented Space in NSF	2,125	12.7%		5,800	13.2%	
Exhibits - Permanent Interior Exhibits						
Exhibit 1	600			1,000		
Exhibit 2	1,200			2,500		
Exhibit 3	1,000			2,000		
Exhibit 4	500			2,000		
Exhibit 5	500			2,000		
Exhibit 6	0			2,000		
Exhibit 7	0			2,000		
Exhibit 8	0			2,000		
Exhibit 9	0			2,000		
Subtotal Permanent Interior Exhibits in NSF	3,800	22.8%		17,500	39.7%	
Other Interpretive Areas						
Changing Exhibits / Flex Space	1,200	7.2%		2,500	5.7%	
High Definition Theater	900	5.4%	60 Seats	1,800	4.1%	120 Seats
Observatory / Planetarium	800	4.8%	40 Seats	1,600	3.6%	80 Seats
Subtotal Indoor Interpretive Areas in NSF	6,700	40.2%		23,400	53.1%	
Resource & Research Areas						
Classroom & Community Room	400	2.4%		800	1.8%	
Research library / Resource Room	400	2.4%		700	1.6%	
Research labs	400	2.4%		600	1.4%	
Subtotal Resource & Research Areas in NSF	1,200	7.2%		2,100	4.8%	
Back of House Areas						
Administrative Offices	900	5.4%	5 offices & 1 general work area & reception	2,750	6.2%	15 offices & 2 general work areas & reception
Staff Break Room & Kitchen	200	1.2%		300	0.7%	
Volunteer Room	250	1.5%		400	0.9%	
Staff Bathrooms	150	0.9%		250	0.6%	
Curatorial & Exhibits shop	600	3.6%		900	2.0%	
Storage	1,000	6.0%		1,500	3.4%	
Other Back of House & Mechanical / Building	1,650	9.9%		3,000	6.8%	
Subtotal Back of House Areas in NSF	4,750	28.5%		9,100	20.6%	
Subtotal Building Interior in NSF	16,675	100.0%		44,100	100.0%	
Grossing Factor	20%	3,335	20.0% Additional Circulation, wall widths, mechanical	8,820	20.0%	Additional Circulation, wall widths, mechanical
Total Building Area in GSF	20,010	120.0%		52,920	120.0%	
Low Range -- Total Building GSF	-20%	16,000 GSF		42,300 GSF		
High Range -- Total Building GSF	20%	24,000 GSF		63,500 GSF		
Exterior Spaces						
Veranda / Deck	1,000	6.0%		2,000	4.5%	
Small Amphitheater	1,800		100 Seats	3,600		200 Seats
Kids Play Area	2,000 GSF			3,000 GSF		
Entrance Plaza / Landscape / Public Art / Outdoor Exhibit areas	21,780 GSF		0.5 Acre	43,560 GSF		1 Acre
Parking	45,000 GSF		150 Spaces	75,000 GSF		250 Spaces
Subtotal of Exterior Spaces	70,580 GSF			125,160 GSF		
Building Footprint	10,505 GSF		assumes 2 level building	27,460 GSF		assumes 2 level building
Total Site Size	81,085 GSF		1.9 Acres	152,620 GSF		3.5 Acres

NOTE: SF = square feet; NSF = net square feet; GSF = gross square feet. Source: ConsultEcon, Inc. and Exhibit Design Associates.

Order-of-Magnitude Project Capital Costs

While attendance would be higher, tourism impacts greater, and community benefits superior in the Exhibition Sonora – a destination attraction scenario, the initial capital costs and the ongoing operating costs would be greater as well. Data in **Table III-2** summarize the preliminary size and development cost analyses. Based on the size and development cost assumptions used in the analysis, at about \$57 million in current dollars, the Exhibition Sonora – a destination attraction scenario, has a development cost more than twice that of the McDowell Portal – a recreation enhancement scenario. These cost estimates reflect the program of spaces as developed to date, and they would vary as the plan changes in its size and components. Further, these are typical unit cost estimates applied to the program of spaces and typical development cost categories. Actual development costs will also depend on the types and levels of construction, extent of integration of “green” or LEED design characteristics, actual exhibits developed, the extent of costs associated with site development and the soils and terrain being developed, the time required to develop the facility, future construction cost escalations and other relevant factors. While these are order-of-magnitude estimates for illustrative purposes only, they provide an initial indicator of the substantial commitment that will be necessary to create facilities of the type desired and that reflect the quality and amenities that Scottsdale has adopted as its hallmark.

Table III-2
Desert Discovery Center Preliminary Conceptual Estimates

	McDowell Portal – a recreation enhancement		Exhibition Sonora – a destination attraction	
Mid-Range				
Indoor Public Spaces	1,900	NSF ^{1/}	3,700	NSF ^{1/}
Exhibit SF	6,700	NSF	23,400	NSF
Commercially oriented space	2,125	NSF	5,800	NSF
Resource & Research Areas	1,200	NSF	2,100	NSF
Back of House Areas	4,750	NSF	9,100	NSF
Grossing Factors	3,335		8,820	
Total Facility Size	20,010	GSF ^{2/}	52,920	GSF ^{2/}
Preliminary Conceptual Development Cost Estimate	\$23,358,000		\$56,854,000	
Low Range				
Total Building GSF	16,000	GSF	42,300	GSF
Preliminary Conceptual Development Cost Estimate	\$18,687,000		\$45,484,000	
High Range				
Total Building GSF	24,000	GSF	63,500	GSF
Preliminary Conceptual Development Cost Estimate	\$28,030,000		\$68,225,000	

^{1/} NSF means net square feet or "usable space".

^{2/} GSF means Gross square feet which includes useable space plus wall widths, verticle circulation etc.

Source: ConsultEcon, Inc. and Exhibit Design Associates.

Data in **Table III-3** provide the detailed analysis used to create the initial conceptual indications of possible capital costs associated with the McDowell Portal – a recreation enhancement, and Exhibition Sonora – a destination attraction, scenarios. As the DDC project moves through subsequent phases of planning, a refined program of spaces and refined estimates of project capital costs will emerge. It is quite possible that a hybrid model that includes features of both these development approaches is adopted as the preferred approach.

Desert Discovery Center Summary

To better inform community planning of the DDC, and to allow future planning flexibility, two optional facility scenarios have been prepared. The scenarios represent a range of facility size and scale. A smaller facility for the purpose of this analysis is called “McDowell Portal – a recreation enhancement” a larger facility is called “Exhibition Sonora – a destination attraction”. Further planning for the DDC will occur within the context of the Central Interpretive Theme of desert diverse adaptations along with Primary Interpretive Themes: Biodiversity, Edge Ecology, Urban/Wildland Interface, Water, Archaeology, Geology/Cultural Geography and Sustainability. Whatever the facility model selected, DDC exhibit and programmatic concepts are based on the substantive interpretive themes that will contribute to meeting the DDC’s mission, and will also provide some of the “Wow” that the DDC ultimately will offer. Visitor amenities as well as programming opportunities at the DDC will also be important to its success and sustainability. This plan and the community’s input certainly indicate however that it is the landscape of the McDowell Sonoran Preserve itself that is the project’s primary asset and attraction element – it’s the Wow! Enjoyable, safe outdoor experiences help visitors understand and appreciate the value of the lands their tax dollars help to protect.

Table III-3
Desert Discovery Center Preliminary Derivation of Project Hard and Soft Costs
Conceptual Estimates are Subject to Further Refinement - For Illustrative Purposes Only

Program Area	McDowell Portal – a recreation enhancement				Exhibition Sonora – a destination attraction			
	Square Feet	Assumed Costs Per SF	Assumed Total Costs	% of Total Development Cost	Square Feet	Assumed Costs Per SF	Assumed Total Costs	% of Total Development Cost
Site Costs								
Site Acquisition		\$0 per SF of Site Size	0	0.0%		\$0 per SF of Site Size	0	0.0%
Site Development Costs		\$10 per SF of Site Size	\$905,900	3.9%		\$10 per SF of Site Size	\$1,780,800	3.1%
Subtotal Site Costs			\$905,900	3.9%			\$1,780,800	3.1%
Indoor Areas								
Public Spaces	1,900	\$225	\$427,500	1.8%	3,700	\$225	\$832,500	1.5%
Commercially Oriented Spaces	2,125	275	\$584,375	2.5%	5,800	275	\$1,595,000	2.8%
Permanent Interior Exhibits	3,800	250	\$950,000	4.1%	17,500	250	\$4,375,000	7.7%
Changing Exhibits / Flex Space	1,200	200	\$240,000	1.0%	2,500	200	\$500,000	0.9%
High Definition Theater	900	275	\$247,500	1.1%	1,800	275	\$495,000	0.9%
Observatory / Planetarium	800	275	\$220,000	0.9%	1,600	275	\$440,000	0.8%
Resource & Research Areas	1,200	225	\$270,000	1.2%	2,100	225	\$472,500	0.8%
Back of House Areas	4,750	175	\$831,250	3.6%	9,100	175	\$1,592,500	2.8%
Gross Building Areas	3,335	275	\$917,125	3.9%	8,820	275	\$2,425,500	4.3%
Subtotal Building Hard Costs	20,010	\$234	\$4,687,750	20.1%	52,920	\$241	\$12,728,000	22.4%
Building Fit-Out								
Exhibits - Interior Exhibits (NSF)	3,800	\$400	\$1,520,000	6.5%	17,500	\$400	\$7,000,000	12.3%
LFT Equipment / Feature Film Allowance			\$1,500,000	6.4%			\$1,700,000	3.0%
Observatory / Planetarium Equipment Allowance			\$800,000	3.4%			\$1,000,000	1.8%
FF&E for Non-Exhibit Areas		75	\$748,125	0		75	\$1,552,500	2.7%
Subtotal Building Fit-Out			\$4,568,125	19.6%			\$11,252,500	19.8%
Total Building Hard Costs			\$9,255,875	39.6%			\$23,980,500	42.2%
Exterior Areas								
Veranda / Deck	1,000	\$100	\$100,000	0.4%	2,000	\$100	\$200,000	0.4%
Small Amphitheater	1,800	75	\$135,000	0.6%	3,600	75	\$270,000	0.5%
Kids Play Area	2,000	100	\$200,000	0.9%	3,000	100	\$300,000	0.5%
Entrance Plaza / Landscape / Public Art / Outdoor Exhibit areas	21,780	100	\$2,178,000	9.3%	43,560	100	\$4,356,000	7.7%
Site work	50,390	25	\$1,259,750	5.4%	122,580	25	\$3,064,500	5.4%
Parking (Cost Per Space)	\$ Per Space	3,000	\$450,000	1.9%	\$ Per Space	3,000	\$750,000	1.3%
Total Exterior Areas Hard Costs			\$4,322,750	18.5%			\$8,940,500	15.7%
Total Site, Indoor and Exterior Hard Costs			\$14,484,525	62.0%			\$34,701,800	61.0%
Construction Contingency	12.0%		\$1,738,143	7.4%	12.0%		\$4,164,216	7.3%
Total Hard Costs			\$16,222,668	69.5%			\$38,866,016	68.4%
Soft Costs & Contingency		Factor				Factor		
Building Design	12.0%	Of Building & Veranda / Deck Hard Costs	\$574,530	2.5%	12.0%	Of Building & Veranda / Deck Hard Costs	\$1,551,360	2.7%
Exhibit Design	22.0%	Of Exhibit Costs	334,400	1.4%	22.0%	Of Exhibit Costs	1,540,000	2.7%
Landscape/Exterior Design	10.0%	Of Exterior Areas Costs, not including Veranda / Deck	422,275	1.8%	10.0%	Of Exterior Areas Costs, not including Veranda / Deck	874,050	1.5%
Other Permitting & Planning	5.0%	Of Hard Costs	811,133	3.5%	5.0%	Of Hard Costs	1,943,301	3.4%
Owners Costs ^{1/}	5.0%	Of Hard Costs	811,133	3.5%	5.0%	Of Hard Costs	1,943,301	3.4%
Pre-Opening Operations, Marketing & Gala Opening	7.0%	Of Hard Costs	1,135,587	4.9%	7.0%	Of Hard Costs	2,720,621	4.8%
Sub-Total Soft Costs			\$4,089,059	17.5%			\$10,572,633	
Project Contingency	15.0%	Of Total Project Costs	\$3,046,759	13.0%	15.0%	Of Total Project Costs	\$7,415,797	13.0%
Total Potential Development Costs			\$23,358,486	100.0%			\$56,854,446	100.0%
Summary Mid-Range Project								
Total Building Cost per GSF			\$743				\$732	
Total Project Cost Per Building GSF ^{2/}			\$1,167				\$1,074	
Building Costs Per GSF of Building Size			\$463				\$453	
Exterior Costs Per GSF of Exterior Areas			\$75				\$87	
Assumed Conceptual Total Development Cost Range for Range of Facility Sizes								
		Facility SF	Total Costs			Total Costs		
Low-Range	-20%	16,000	\$18,687,000		-20%	42,300	\$45,484,000	
High-Range	20%	24,000	\$28,030,000		20%	63,500	\$68,225,000	

NOTE: SF = square feet; NSF = net square feet; GSF = gross square feet. Amounts are in the 2008 value of the dollar.

1/ Includes development process, fundraising, community relations, Owner's project management etc. Other such costs accounted for under the Contingency.

2/ Total project costs per Per SF interior SF go up in the smaller facility because exterior site does not decrease in size and cost comensurately.

Source: ConsultEcon, Inc. and Exhibit Design Associates.

Section IV

RESIDENT MARKET AREA DEFINITION AND ANALYSIS

The proposed DDC is expected to attract visitors from both resident and tourist markets. This section of the report evaluates the resident markets for the project.

Resident Market Definition and Analysis

Although the proposed DDC will draw a variety of market segments, the project's resident market will be a significant source of visitors. Ultimately, the geographic reach and available markets for a project depend on the size and quality of the attraction, its accessibility and location, the presence of other nearby attractions, regional transportation networks, and marketing efforts.

The resident market for an attraction such as the proposed DDC is defined as the area whose residents would visit the attraction as part of a day-trip. Persons in the resident market often have repeat visitation patterns, or become members of the institution. Visiting the project would be a primary purpose or important part of a day-trip. Resident markets are analyzed within a "gravity model" context; the closer residents live to the attraction, the more likely they are to visit. Depending on the individual market's circumstances, resident markets can extend up to 100 or more miles, or be as narrow as 50 miles. On its periphery, the resident market changes over to the visitor (or tourist) market. The visitor market will be reviewed in a subsequent section of this report.

The overall Resident Market Area for the proposed DDC is defined as the area surrounding Scottsdale within Arizona, extending to about 75 miles away from the planned site. Within this overall Resident Market Area, Primary, Secondary and Tertiary Market segments are defined as follows:

- ◆ **Primary Resident Market Area:** City of Scottsdale, Arizona.
- ◆ **Secondary Resident Market Area:** Area within a 30-minute drive of the intersection at East Bell Road and North Thompson Peak Parkway in Scottsdale, not including the Primary Resident Market Area.
- ◆ **Tertiary Resident Market Area:** Phoenix Metropolitan Area (Maricopa and Pinal Counties) not including the Primary and Secondary Resident Market Areas.

Figure IV-1 shows the Resident Market Areas for the proposed DDC⁶.

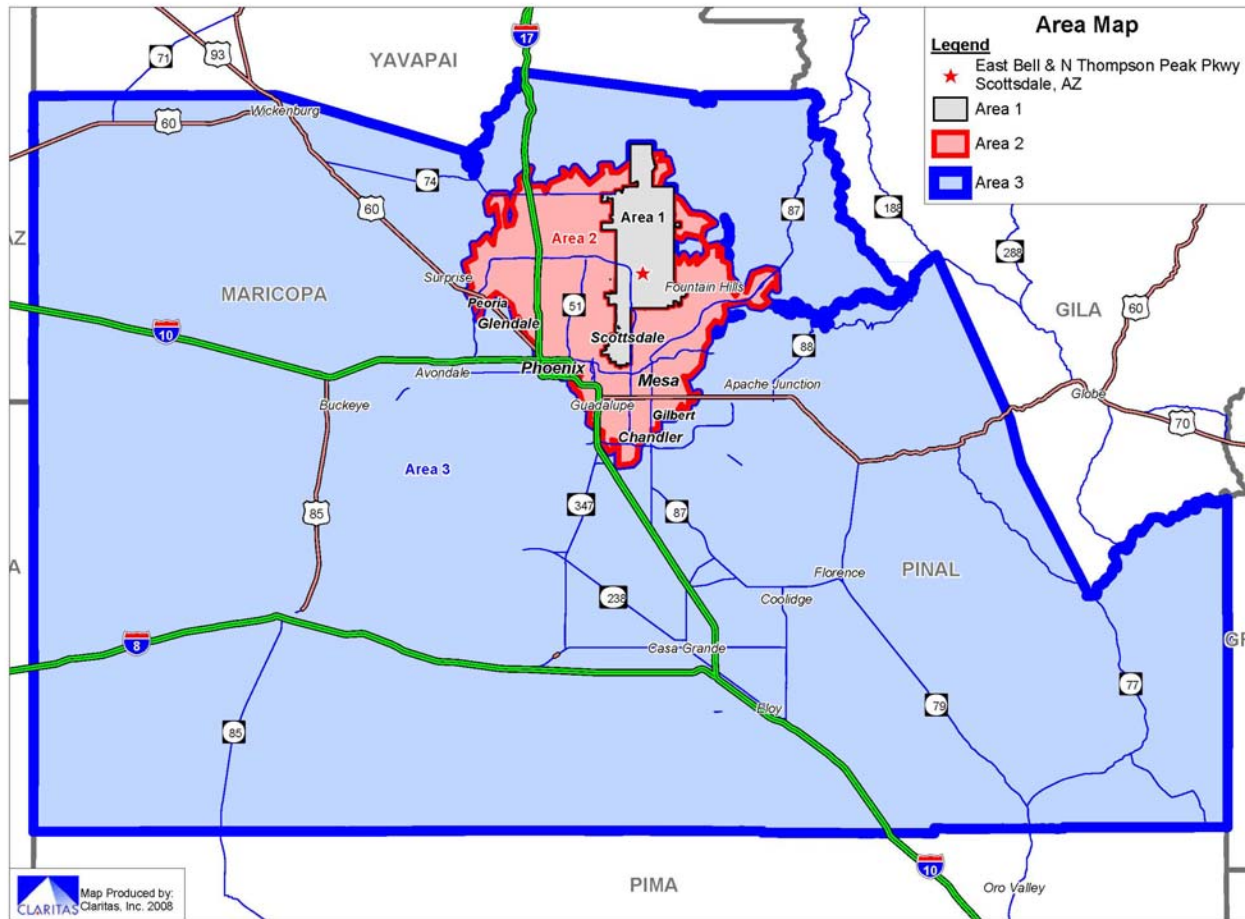
The Primary Resident Market Area is located near the site, and would draw spontaneous trips to the facility. The residents are familiar with the travel routes and Scottsdale is a “top-of-mind” destination for recreational and educational activities. There is potential for the residents of this area to develop repeat visitation patterns.

The Secondary Resident Market Area is defined as the population residing within a 30-minute drive time from the project site (excluding the Primary Market Area). This area is within easy day-trip distance. The residents of the area are probably familiar with travel routes, and they identify themselves with Scottsdale as a media market and the central city in the region. There is potential for the residents of this area to make repeat visits.

The Tertiary Resident Market Area is defined as the Phoenix Metropolitan Area (excluding the Primary and Secondary Market Areas), extending about 75 miles from the site. The residents of the Tertiary Market Area are still within day-trip distance; however, the trip would likely be planned in advance and include visits to other attractions. These residents are familiar with the travel routes, but live farther from the site.

⁶ On Figure IV-1, the Primary Market Area is identified as “Area 1”; the Secondary Market Area is identified as “Area 2sirius Radio”; and, the Tertiary Market Area is identified as “Area 3”.

Figure IV-1
Resident Market Areas for the Proposed Desert Discovery Center



Source: Claritas, Inc. and ConsultEcon, Inc.

Resident Market Area Demographic Characteristics

Following is a review of the demographic characteristics of the Primary, Secondary and Tertiary Resident Market Areas.

Resident Market Area Population

Data in **Table IV-1** detail estimated 2007 and projected 2012 populations within the Resident Market Areas.

Table IV-1
Resident Market Area Population Characteristics
Proposed Desert Discovery Center

	2007 Estimated Population	2012 Projected Population	% Change 2007 to 2012
Primary Market Area	229,000	250,200	9.3%
Secondary Market Area	1,915,900	2,059,400	7.5%
Tertiary Market Area	1,889,000	2,292,000	21.3%
Total Resident Market	4,033,900	4,601,600	14.1%

Source: Claritas, Inc. and ConsultEcon, Inc.

The Primary Resident Market Area population is estimated at 229,000 in 2007, and is projected at 250,200 in 2012, an increase of 9.3 percent. The Secondary Resident Market Area population is estimated at 1,915,900 in 2007, and is projected to increase to 2,059,400, an increase of 7.5 percent, by 2012. The Tertiary Resident Market Area was an estimated 1,889,000 residents in 2007, and is projected to increase to an estimated 2,292,000 by 2012, an increase of 21.3 percent. The overall Resident Market Area population is projected to increase by 14.1 percent, from 4,033,900 to 4,601,600, from 2007 to 2012.

The growth rate in the total Resident Market Area, 14.1 percent, is slightly higher than the projected growth rate of the population of the State of Arizona over the same period, 12.9 percent, and significantly higher than the projected growth rate of the population of the U.S. as a whole over that period, 4.6 percent. The market data represent a growth trend that will increase the size of the markets available for the project.

Resident Market Area Age Profile

Important audiences for attractions such as the proposed DDC are adults in their mid 20's through 40's with children, and adults in their 40's and 50's who have more time and disposable income for recreational activities of this type. Data in **Table IV-2** profile the Resident Market Areas by age categories.

Table IV-2
2007 Age Group Comparison for the Resident Market Areas,
State of Arizona, and the US as a Whole
Proposed Desert Discovery Center

	0-17	18-24	25-34	35-54	55+
Primary Market Area	20.0%	6.6%	12.5%	30.3%	30.6%
Secondary Market Area	26.3%	10.2%	16.0%	28.5%	19.0%
Tertiary Market Area	29.1%	9.1%	14.6%	25.3%	22.0%
Total Resident Market	27.3%	9.5%	15.1%	27.1%	21.1%
<i>State of Arizona</i>	<i>26.6%</i>	<i>9.7%</i>	<i>14.2%</i>	<i>26.4%</i>	<i>23.0%</i>
<i>US Population</i>	<i>24.5%</i>	<i>9.9%</i>	<i>13.4%</i>	<i>28.8%</i>	<i>23.4%</i>

Source: Claritas, Inc. and ConsultEcon, Inc.

The overall Resident Market population has an age profile that is consistent with that of the State of Arizona and the U.S. as a whole. The Primary Resident Market Area has an age profile slightly older than that of the State and the U.S.

These data are supportive of the development of the proposed DDC, as people in these older age groups are often retirees (and grandparents), with disposable time and income, and can form an important component of the audience for this type of attraction.

Resident Market Area School Age Population

Students are an important component of an educational attraction's market for several reasons. First, families with children are frequent visitors to this type of facility, as parents seek educational, as well as entertaining family outings. Second, school groups are an important component of visitation, particularly during off-peak periods and on weekdays when general visitation numbers are lower. In addition, visits to an attraction such as the proposed DDC by children in school groups can result in word-of-mouth advertising to friends and family. This in turn leads to repeat visitation and new visitation. Data in **Table IV-3** show the estimated number of children ages 5 through 18 in the Resident Market Areas in 2007, as well as the projected number of school age children in 2012.

Table IV-3
Estimated and Projected Numbers of School Age Children in the Resident Market Areas
Proposed Desert Discovery Center

	Estimated 2007	Projected 2012	Percent Change 2007-2012
Primary Market Area	36,100	39,300	8.9%
Secondary Market Area	384,500	415,900	8.2%
Tertiary Market Area	407,200	493,600	21.2%
Total Resident Market	827,800	948,800	14.6%

Source: Claritas, Inc. and ConsultEcon, Inc.

In all, there were an estimated 827,800 school age children in 2007 in the Resident Market Area. This number is projected to increase by 14.6 percent, to approximately 948,800 by 2012.

Resident Market Area Households

Data in **Table IV-4** show the estimated and projected numbers of households in the Resident Market Areas.

Table IV-4
Estimated 2007 and Projected 2012 Households in the Resident Market Areas
Proposed Desert Discovery Center

	2007 Estimated Households	2012 Projected Households	% Change 2007 to 2012
Primary Market Area	103,000	113,300	10.0%
Secondary Market Area	725,500	781,700	7.7%
Tertiary Market Area	640,100	775,000	21.1%
Total Resident Market	1,468,600	1,670,000	13.7%

Source: Claritas, Inc. and ConsultEcon, Inc.

In 2007, there were an estimated 103,000 households in the Primary Resident Market Area, 725,500 households in the Secondary Resident Market Area, and 640,100 households in the Tertiary Resident Market Area, for a total of 1,468,600 households. The number of households in the overall Resident Market Area is projected to increase 13.7 percent between 2007 and 2012 with the Tertiary Resident Market Area showing the largest increase.

Data in **Table IV-5** show household size characteristics in the Resident Market Area compared to the State of Arizona and the U.S. as a whole.

Table IV-5
Estimated 2007 and Projected 2012 Household Sizes in the Resident Market Areas
Proposed Desert Discovery Center

	2000 Household Size	2007 Estimated Household Size	% Change 2000 to 2007	2012 Projected Household Size	% Change 2007 to 2012
Primary Market Area	2.22	2.21	-0.45%	2.19	-0.90%
Secondary Market Area	2.61	2.61	0.00%	2.60	-0.38%
Tertiary Market Area	2.86	2.89	1.05%	2.91	0.69%
Total Resident Market	2.67	2.70	1.16%	2.72	0.45%
<i>State of Arizona</i>	<i>2.64</i>	<i>2.65</i>	<i>0.38%</i>	<i>2.65</i>	<i>0.00%</i>
<i>United States</i>	<i>2.59</i>	<i>2.58</i>	<i>-0.39%</i>	<i>2.57</i>	<i>-0.39%</i>

Source: Claritas, Inc. and ConsultEcon, Inc.

The Primary Resident Market Area has the lowest estimated average household size with 2.21 persons per household in 2007, while the Secondary and Tertiary Resident Market Areas have larger households, with 2.61 and 2.89 persons per household, respectively. The 2.70 weighted average household size in the Resident Market Area is slightly higher than that of the State of Arizona (2.65) and that of the U.S. as a whole (2.58). It should be noted, however, that although decreasing household sizes are an ongoing national trend, the average household size in the overall Resident Market Area is projected to increase, by about one-half of one percentage point. Households with children are a target market of educational attractions such as the proposed DDC; and in this case the larger household sizes in the Resident Market Areas (indicating families with children) are a positive indicator for visitation potential.

Resident Market Area Income Characteristics

Higher incomes are associated with visitation to attractions such as the proposed DDC, both in terms of the ability to visit (disposable income, transportation and leisure time) and the desire to visit, as higher incomes frequently reflect higher educational attainment. Several measures of income are provided in this assessment. Data in **Table IV-6** show the median household incomes in the Resident Market Areas as compared to the State of Arizona and the U.S. as a whole.

Table IV-6
2007 Estimated and 2012 Projected Median Household Income Comparison
Proposed Desert Discovery Center

	2007 Median Household Income	2012 Projected Median Household Income	Percent Change 2007 to 2012
Primary Market Area	\$66,094	\$70,746	7.0%
Secondary Market Area	\$50,820	\$55,502	9.2%
Tertiary Market Area	\$53,108	\$59,759	12.5%
Total Resident Market	\$48,252	\$53,714	11.3%
<i>State of Arizona</i>	<i>\$48,132</i>	<i>\$53,317</i>	<i>10.8%</i>
<i>United States</i>	<i>\$49,314</i>	<i>\$54,551</i>	<i>10.6%</i>

Source: Claritas, Inc. and ConsultEcon, Inc.

The estimated 2007 median household income for the Primary Market Area is \$66,094, which is higher than that of the Secondary and Tertiary Resident Market Areas, with estimated incomes averaging \$50,820 and \$53,108, respectively. The estimated weighted median household income in the overall Resident Market Area, \$48,252, is fairly comparable to that of the State of Arizona (\$48,132) and slightly lower than the U.S. as a whole (\$49,314). While this indicates a significant number of households that can afford to visit an attraction such as the proposed DDC, care should be taken in planning ticket price ranges to be affordable to all economic levels in the Resident Market Areas.

The 2012 projected weighted median household income for the overall Resident Market Area is \$53,714, indicating a growth rate (11.3%) that is just slightly higher than that of the State of Arizona and the U.S. as a whole.

A second measure of income is by income groups. Data in **Table IV-7** compare the income groups of the Resident Market Areas to the State of Arizona and the U.S. as a whole.

Table IV-7
Estimated 2007 and Projected 2012 Income Group Comparison
(by Percentage of Households)
Proposed Desert Discovery Center

	Less than \$25,000	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 +
Primary Market Area	15.7%	8.9%	13.4%	18.6%	12.0%	31.4%
Secondary Market Area	20.7%	11.6%	17.0%	20.1%	12.2%	18.4%
Tertiary Market Area	20.1%	11.0%	16.2%	21.5%	13.1%	18.0%
Total Resident Market	20.1%	11.2%	16.4%	20.6%	12.6%	19.1%
<i>State of Arizona</i>	<i>23.3%</i>	<i>12.1%</i>	<i>16.7%</i>	<i>19.8%</i>	<i>11.5%</i>	<i>16.6%</i>
<i>United States</i>	<i>23.9%</i>	<i>11.2%</i>	<i>15.6%</i>	<i>19.5%</i>	<i>11.9%</i>	<i>17.9%</i>

Source: Claritas, Inc. and ConsultEcon, Inc.

The above data show that the total Resident Market Area has a greater proportion of households with an income greater than \$50,000+ than the State of Arizona; approximately 52.3 percent of households in the Resident Market Area have incomes in that range, compared to approximately 47.9 percent of households in the State of Arizona, and 49.3 percent in the U.S. as whole. These income data are supportive of the first income analysis, with a significant percentage of Resident Market Area residents that have the economic means to attend educational attractions such as the proposed DDC.

Summary

The population in the overall Resident Market Area is projected to increase by approximately 14.1 percent, from 4,033,900 to 4,601,600, over the period from 2007 to 2012. This growth trend will increase the size of the markets available for the proposed DDC. The demographic characteristics of the Resident Market Areas include moderately high-income levels, a similar age profile to the United States as a whole, and a large population of school-age children. In all, there were an estimated 827,800 school age children in 2007, a number that is projected to increase, 14.6 percent, to 948,800 by 2012. The median household income in the Total Resident Market Area in 2007 was fairly similar to that of the State of Arizona and the U.S. as a whole, and is projected to increase at a slightly higher rate than the State and U.S. in the period from 2007 to 2012. Overall, these population and income level data are good indicators for resident market visitation to the proposed DDC.

Section V

TOURISM MARKET

This section reviews the tourist markets available to the proposed DDC. This includes a review of regional tourism trends, and an evaluation of Scottsdale tourism. The data utilized in this section represent the latest data available for the geographies under consideration.

For this study, tourist⁷ market segments will include:

- ◆ **Hotel Visitor** – Visitor occupying a transient lodging room in the market area.
- ◆ **Seasonal Visitor** – Visitor occupying a residence (owned or rented) for less than a full year in the City of Scottsdale.
- ◆ **Day Visitor** – Visitor not staying overnight in the market area.

VISITATION TO SCOTTSDALE

Due to its natural beauty, desert surroundings, and local attractions, Scottsdale has a long history of tourism. According to the City of Scottsdale's *The Scottsdale/Paradise Valley Tourism Study—Part II: Visitor Statistics* in 2007 and *City of Scottsdale Visitor Inquiry Study* for 2007, the most recent year for which data are available, the Scottsdale Market Area hosted 7.7 million visitors, comprised of 6.4 million (83 percent) day visitors and 1.3 million (17 percent) hotel visitors. The economic impact was \$3.5 billion. The number of visitors to the metro Phoenix area in 2006 was approximately 13.8 million.

The Scottsdale Market Area is defined as:

- ◆ **Scottsdale** – Within the corporate limits of the City of Scottsdale.
- ◆ **Paradise Valley** – Within the corporate limits of the Town of Paradise Valley.
- ◆ **Other** – Within the Scottsdale/Paradise Valley market area; including portions of East Phoenix, North Tempe, Carefree, Cave Creek, and Fountain Hills.

⁷ The terms "visitor," "tourist" and "traveler" are used interchangeably.

Visitor Profile

As reported in the City of Scottsdale's "2007 Leisure Visitor Inquiry Study" conducted by Behavior Research Center, Inc. of inquirers to the Scottsdale Convention and Visitors Bureau (SCVB), the typical Scottsdale visitor is 55 years old with a median yearly income of \$102,700. The median length of stay by Scottsdale visitors is 5.4 nights.

Data in **Table V-1** show the age distribution of inquirers to the SCVB.

Table V-1
Scottsdale Visitors Age Distribution, 2007⁸

Under 25	25-34	35-44	45-54	55-64	65+
1%	6%	17%	26%	34%	16%

Source: City of Scottsdale Leisure Visitor Inquiry Study, 2007

Scottsdale visitors originated primarily from the Midwestern and Northeastern regions of the United States. The top ten activities participated in by Scottsdale visitors are: shopping, day trips, outdoor activities, art galleries & museums, Western culture & attractions, Native American arts & culture, nightlife, special events, spas, and golf. The DDC will help to diversify and enhance Scottsdale's tourism offerings with its outdoors – desert focus. It will also be a large high-profile attraction of the type that is essential to destinations such as Scottsdale.

Data in **Table V-2** summarizes activities that Scottsdale visitors participated in during recent years. The "kids activities" category is especially interesting in that it indicates that there are substantial numbers of travel parties to Scottsdale that include children; and that there are opportunities to increase this travel segment with an attractive family oriented activity and destination such as the DDC.

⁸ This data is illustrative of age profile, but is not definitive in that it reflects travel inquiries to the CVB. Further it reflects those making the inquiry. Therefore children are not represented.

Table V-2
Scottsdale Visitors Activity Participation 2007

(AMONG OVERNIGHT VISITORS)

"During your most recent visit to Scottsdale, did you participate in any of the following activities?"

	2007	2006	2005	2004	2003
Shopping	89%	91%	83%	84%	86%
Day trips to other locations in Arizona	64	68	63	65	69
Outdoor desert activities	53	65	53	52	59
Art galleries and museums	50	53	44	48	51
Native American arts and culture	44	48	37	40	51
Western culture and attractions	43	50	42	43	48
Nightlife	36	45	36	47	45
Special events	31	33	21	27	33
Golf	30	25	25	33	34
Spa/rejuvenation	25	27	19	23	23
Overnight trips to other locations in Arizona	25	NA	NA	NA	NA
Sporting events	24	21	21	29	28
Performing arts	18	17	10	16	20
Kids activities	11	13	16	10	9

Source: City of Scottsdale Leisure Visitor Inquiry Study, 2007

Additionally, in the City of Scottsdale 2005 Leisure Visitor Inquiry Study, a question was included regarding desire for additional products and experiences. Data in **Table V-3** summarizes the findings from that survey. It is important to note that data in Table V-3 reflects a strong desire by many Scottsdale travelers for more kids activities, outdoor desert activities and day trips. All of these would be addressed by the DDC.

Table V-3
Additional Scottsdale Attractions Desired by Survey Participants 2005

(AMONG OVERNIGHT VISITORS)

"Scottsdale strives to provide the best experience possible to its guests and would like to better understand the activity areas it should more fully develop. How important do you feel it is that Scottsdale have additional products or experiences within each of the following activity areas – very important, somewhat important, not very important or not at all important?"

	Very Important	Somewhat Important	Not Very Important	Not at All Important	Not Sure	TOTAL IMPORTANT ¹
More day trips	21%	37%	21%	15%	6%	58%
More outdoor desert activities	23	34	22	14	7	57
More special events	16	40	22	15	7	56
More dining	24	30	27	15	4	54
More Native American arts and culture	18	31	25	18	8	49
More shopping	20	27	27	22	4	47
More western culture and attractions	17	30	28	17	8	47
More performing arts	15	30	26	18	11	45
More art galleries and museums	12	29	29	21	9	41
More sporting events	12	28	29	23	8	40
More nightlife	12	24	30	26	8	36
More spa/rejuvenation	9	23	32	27	9	32
More kids activities	12	19	22	32	15	31
More golf	11	16	30	35	8	27

¹Very + somewhat

Source: City of Scottsdale Leisure Visitor Inquiry Study, 2007

Seasonality

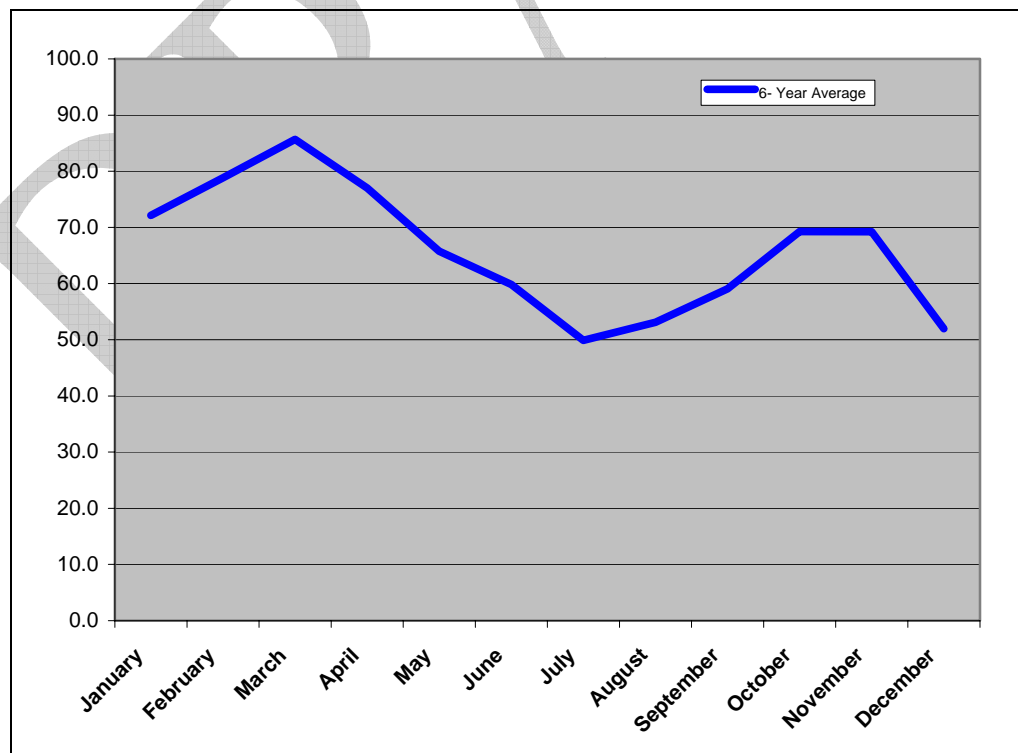
Data in **Table V-4** show seasonality of visitation of occupancy rates for Scottsdale/Paradise Valley Market Area hotels from 2002-2006 and **Figure V-1** charts the 5-year average.

Table V-4
Seasonality of Occupancy Rates for Scottsdale/Paradise Valley 2002-2007

	2002	2003	2004	2005	2006	2007	6- Year Average
January	66.7	69.3	72.9	72.7	75.2	76.1	72.2
February	74.0	76.8	79.9	82.3	83.9	76.2	78.9
March	81.9	80.7	86.5	89.1	89.0	86.8	85.7
April	73.2	71.5	78.7	82.4	78.9	77.4	77.0
May	61.3	62.0	66.5	69.5	68.5	66.7	65.8
June	54.8	55.3	58.5	63.1	66.4	61.0	59.9
July	42.3	46.9	50.3	55.6	53.3	51.0	49.9
August	48.3	49.1	51.8	57.6	55.6	56.4	53.1
September	51.0	53.9	60.5	64.2	63.9	60.9	59.1
October	63.2	64.5	69.4	73.0	75.0	70.4	69.3
November	65.0	64.5	69.8	73.9	74.7	67.4	69.2
December	46.1	51.6	54.3	55.1	55.2	49.6	52.0

Source: Smith Travel Research

Figure V-1
6 Year Average Seasonality of Occupancy Rates for Scottsdale/Paradise Valley 2002-2007



Source: Smith Travel Research

The peak season for tourism in Scottsdale is mid-January through mid-April, the low season from mid-June through mid-September, and shoulder seasons between mid-April and mid-June and mid-September through early- to mid-January.

Hotel Market

The Scottsdale/Paradise Valley market area has more than 75 resorts and hotels, with over 15,500 rooms, the market overall has grown by almost 45 percent, nearly 5,000 rooms during the past ten years. The average room rate for market area hotels in 2006 was \$164.19, up 13 percent from \$145.31 in 2005. The occupancy rate was 69.9 percent in 2006, a 0.5 percent decrease from 2005; then moved downward slightly to 66.6% in 2007.

Hotel Guest Spending

Estimated hotel guest spending per person per day in 2006 was \$246.54, while the average day visitor spent \$49.31 per day. Scottsdale Market Area visitors staying in hotels estimated percentage of expenditures were: lodging 37 percent, food and beverage 25 percent, retail 14 percent, local transportation 9 percent, and entertainment 15 percent.

Local Attractions

The Phoenix/Scottsdale area offers many popular attractions, major shopping malls, a substantial accommodations base, and cultural offerings that include museums, festivals and events, and professional sports teams that play year-round. In addition to leisure travel, the Greater Phoenix area is also an active business locale that draws a number of business travelers. The \$600 million expansion of the Phoenix Convention Center will triple its size, offering nearly 900,000 square feet of rentable space and more than 2 million square feet total. Smaller convention venues are located throughout the Greater Phoenix area.

In addition to the popular recreational destinations, Phoenix and Scottsdale have a diverse offering of local attractions that includes cultural museums, educational attractions, national parks, and major historic sites. Attendance at the top tourist attractions in Phoenix and Scottsdale ranges from an estimated 20,000 to over 1.3 million. Ticket prices at local attractions vary greatly, from \$2.00 at some of the smaller venues to \$14.00 at the Zoo, with the most popular attractions generally charging \$9.00-\$10.00 for adult admission.

The nature of these attractions, their attendance and pricing levels inform the assessment of attendance potential at the proposed DDC. Data in **Table V-5** show selected Phoenix/Scottsdale area attractions and provide a summary of attendance, ticket prices, and descriptions.

Table V-5
Selected Phoenix/Scottsdale Regional Attractions (Ranked by Attendance when Available)

Attraction/ Location	Annual Attendance	Admission Pricing	Description
Phoenix Zoo, Phoenix	1,300,000	\$14.00 adult \$ 9.00 senior \$ 6.00 child 3-12	The Phoenix Zoo has 125 acres of exhibits, with trails leading through an African savanna, a tropical rainforest and the Arizona environs, with wildlife of the respective regions.
Desert Botanical Gardens, Phoenix	317,900	\$10.00 adult \$ 9.00 senior \$ 5.00 student w/id \$ 4.00 child 3-12	The Desert Botanical Garden showcases 50 acres of outdoor exhibits, including rare, threatened and endangered plant species from around the world.
Arizona Science Center, Phoenix	300,000	\$9.00 adult \$7.00 senior \$7.00 child 3-12	Collections include interactive exhibits on human body, psychology, networks, weather, aerospace, geology & physics, a 285-seat giant screen theater, and 200-seat planetarium.
The Heard Museum, Phoenix	225,000 est.	\$10.00 adult \$ 9.00 senior \$ 5.00 student w/id \$ 3.00 child 6-12	The foremost showcase of Native American art and culture in the U.S., the Heard Museum reveals the cultures of tribes in the region through exhibits, demonstrations and live performances and displays the work of contemporary Native American artists. Artists demonstrate their work during the week and musicians perform on most weekends.
Phoenix Art Museum, Phoenix	210,000	\$10.00 adult \$8.00 senior \$4.00 child 6-17	One of the largest art museums in the Southwest, the museum houses a permanent collection of some 16,000 works of art spanning the centuries and also includes a popular miniatures collection and a "Please Touch" children's gallery, as well as a Café and gift shop.
Taliesin West, Scottsdale	100,000	\$32.00 general admission \$29.00 senior, student, and military \$20.00 youth 6-12	Taliesin West was architect Frank Lloyd Wright's winter home and school in the desert, today; it houses the Frank Lloyd Wright Foundation, a school for architects, and is open to the public for tours.
Pioneer Arizona Living History Village & Museum, Phoenix	65,000 est.	\$7.00 adult \$6.00 senior \$5.00 student 6-18	This living history complex features over 20 late 19 th -century homes & shops, pioneer life artifacts, agricultural items & machinery, Arizona history memorabilia, a day theatre and restaurant, as well as a gift shop.

Table V-5 (cont.)
Selected Phoenix/Scottsdale Regional Attractions (Ranked by Attendance when Available)

Attraction/ Location	Annual Attendance	Admission Pricing	Description
Pueblo Grande Museum and Archaeological Park, Phoenix	57,900	\$2.00 adult \$1.50 senior \$1.00 child 6-17	More than 1,000 years old, these ruins are from a Native American village and the artifacts unearthed from the area. Features include hands-on activities, hikes and tours.
Arizona State University Art Museum, Tempe	51,000	No charge	Art Museum & gallery feature collections of contemporary art, including new media, American & European print collection- 15 th century to present, contemporary ceramics, Latin American art, research library, seminar rooms, gift shop.
Arizona State Capitol Museum, Phoenix	48,000	Free	Housed in the restored Capitol Building, this museum presents programs and exhibits about the government of the Arizona Territory and the early days of statehood.
Scottsdale Museum of Contemporary Art	46,000	\$7.00 adult \$5.00 student Free for child under 15	Museum features collections of modern & contemporary paintings, sculpture, prints, drawings, photos, architecture and design, outdoor sculpture garden, gift shop.
Arizona Mining and Mineral Museum, Phoenix	40,000	\$2.00 adult	The Arizona Mining and Mineral Museum features collections of lapidary, geology, mining artifacts, minerals of Arizona and the world.
Hall of Flame Museum of Firefighting, Phoenix	35,000	\$6.00 adult \$5.00 senior \$4.00 student 6-17 \$1.50 child 3-5	The Hall of Flame has about an acre of fire history exhibits, with over 90 fully restored pieces of fire apparatus on display, dating from 1725 to 1969. The Hall of Flame sponsors the National Firefighting Hall of Heroes, which honors firefighters who have died in the line of duty or who have been decorated for heroism.
American Heart Association Halle Heart Center, Tempe	28,000	No charge; donations accepted	The Halle Heart Center Museum features 16,000 square feet of collections of medical equipment, hands-on exhibits, library, 50-seat large screen & interactive stage, TV theater, activity center, electric industrial demonstration kitchen.
Shemer Art Center and Museum, Phoenix	25,000 est.	Free (for most shows) \$5.00 for most special events	The Shemer Art Center and Museum is a historical site operated by the City of Phoenix Parks and Recreation Department as a family-oriented art education center and museum. Shemer offers a variety of fine art classes for all ages as well as a monthly professional development lecture series. Their exhibitions include traditional and nontraditional works by contemporary Arizona artists.
Arizona Historical Society Museum at Papago Park, Tempe	25,000 est.	\$5.00 adult \$4.00 senior & students 12-18 Free under 12	History Museum features collections of 19 th & 20 th -century items, china, silver, decorative arts, textile, clothing, tools, photos, books, maps, works by Arizona artists. Facilities include library pertaining to 20 th -century Arizona & Western history, 272-seat auditorium, 50-seat theater, catering kitchen, outdoor exhibitions.

Table V-5 (cont.)
Selected Phoenix/Scottsdale Regional Attractions (Ranked by Attendance when Available)

Attraction/ Location	Annual Attendance	Admission Pricing	Description
Phoenix Museum of History, Phoenix	25,000 est.	\$6.00 adult \$4.50 AAA \$4.00 senior, military & students \$3.00 child 7-12	The Phoenix Museum of History is housed in a 20,000 square foot facility that hosts both a main gallery and a changing exhibit gallery, facilities that can be rented for events or meetings, a library and archives room featuring rare and current books on Arizona history, and a museum store. The Museum features interactive and historical exhibits, such as aroma-smelling barrels that evoke the smells of old Arizona.
Tempe Historical Museum	22,200	No charge; donations accepted	Museum features collections of late 19 th & early 20 th century domestic artifacts, farm & ranch equipment, business equipment, photos, & archives, gift shop.
Sylvia Plotkin Judaica Museum of Temple Beth Israel, Scottsdale	20,000 est.	\$3.50 adult (suggested donation)	Religious antiques museum housed in Temple belonging to oldest Jewish Congregation in the Phoenix area, featuring collections of Jewish arts & ceremonials from 1600 to present, archaeology of Israel, Tunisian period gallery of synagogue, pioneer Jews of Arizona, Biblical garden.
Heard Museum-North, Scottsdale	NA	\$10.00 adult \$ 9.00 senior \$ 5.00 student w/id \$ 3.00 child 6-12	A community location of the Heard Museum, featuring two exhibit galleries of American Indian artwork, and educational programs and special events like the annual Navajo Folk Festival
Bison Museum, Scottsdale	NA	\$5.00 adult \$4.00 senior, \$2.00 students Free under 6	The Bison Museum displays bison and western collections. The museum also has a western library, gift shop, conference room, refreshment lounge, and the Bison Homes Information Center.

Source: Facilities listed, *Official Museum Directory*, 2006; and ConsultEcon, Inc.

In addition to the museums and attractions described in the table, there are a number of other local attractions that draw large numbers of tourists, including parks and recreation venues as well as shopping and dining destinations. Some of the more popular of these include:

- ♦ **Papago Park** - Covers 1,200 acres and has numerous picnic sites with ramadas, tables, grills, water and electricity. The Park also contains fishing lagoons, bike paths, and a golf course. Two of east Phoenix's best known landmarks are in the Park, Hole-In-The-Rock, a natural geologic formation; and Hunt's Tomb, a white pyramid burial place of Arizona's first governor.
- ♦ **Historic Heritage Square** – A part of Heritage & Science Park that includes the Arizona Science Center, Phoenix Museum of History, restaurants and a parking garage. The Park is operated by the city of Phoenix Parks and Recreation Department in conjunction with the Rosson House-Heritage Square Foundation. This tourist center contains shops, museums

and restaurants, and also includes the only remaining group of residential structures from Phoenix's original settlement.

SUMMARY

Scottsdale is known for its desert surroundings, an integral component of the Scottsdale tourism. In 2006, the Scottsdale Market Area hosted 7.7 million visitors, comprised of 6.4 million (83 percent) day visitors and 1.3 million (17 percent) hotel visitors. The economic impact was \$3.5 billion. The number of visitors to the metro Phoenix area in 2006 was approximately 13.8 million.

Scottsdale visitor originated primarily from the midwestern and northeastern regions of the United States. The top ten activities participated in by Scottsdale visitors are: shopping, day trips, outdoor activities, art galleries & museums, Western culture & attractions, Native American arts & culture, nightlife, special events, spas, and golf.

The 2006 typical overnight leisure traveler to Scottsdale is 55 years old with a median household income of \$98,000. The median length of stay for Scottsdale hotel guests in 2006 was 5.4 days with a per-person per day spending of \$246.54, while the average day visitor spent \$49.31 per day. The Scottsdale/Paradise Valley market area has more than 75 resorts and hotels, with over 15,500 rooms, the market overall has grown by almost 45 percent, nearly 5,000 rooms during the past ten years.

Section VI

COMPARABLE PROJECT REVIEW

This section of the report reviews the experience of comparable visitor centers, nature centers, and museums that focus on interpretation of local natural areas, especially as they relate to desert ecology. These projects are categorized into one of two operational scenarios: visitor centers and destination attractions. Both scenarios are reviewed to illustrate relevant attributes, to make comparisons between the two scenarios, and to identify the implications for the planning and development of the proposed DDC from each scenario. As proposed, the DDC concept may include elements of both visitor centers and destination attractions, which is unique. As such, there is no perfectly comparable project to the proposed DDC, yet elements of each comparable project reviewed in this section offers insight into the DDC's interpretive and physical planning and development.

Overview of Visitor Centers and Destination Attractions

Visitor centers—sometimes referred to as nature centers, interpretive centers, and environmental education centers—serve the needs of local residents, tourists, school children, and nature enthusiasts in many communities throughout the United States. In many cases, they are located in parks, wildlife refuges, or environmental sanctuaries, ranging in size from several dozen to several thousands or even millions of acres. They usually interpret plants and animals in their surroundings and the environment, as well as the local culture.

While similar in their interpretive focus, destination attractions are typically larger in size and scale than visitor centers. They too may be located in parks, wildlife refuges, or environmental sanctuaries of various sizes, but they may also be located outside of the natural resource that is being interpreted. Generally, they are located on sites as small as a dozen acres though some are larger, with hundreds or thousands of acres of associated land area. Due to their larger profile, they generally contain more exhibitry than visitor centers, have larger operating budgets, draw more attendance, and appeal to a wider segment of local residents, school children, and tourists.

Attributes of Comparable Projects

There is no perfectly comparable project to the DDC due to its unique location at the interface of a large urban area and a large natural preserve. Comparable projects are intended to inform several topical areas relevant to the development of the DDC and will reflect one or more of these areas, including:

- ◆ **Interpretive and Experience Focus** – The interpretive focus is on natural environments, primarily desert environments. Visitor experiences, amenities and services offered are high quality and sufficient to warrant a half-day trip or longer.
- ◆ **Gateway to Major Outdoor Area** – The facility serves as a place to introduce people to a large outdoor area through exhibits, programs, and activities.
- ◆ **Extent of Multi-Faceted Interpretation** – Interpretation is focused on one or many major topical areas, with a variety of exhibits and programs developed to highlight these areas.
- ◆ **Project Scale** – The project is large, medium, or small, and is adequately sized to its market potential and the visitor experience offered.
- ◆ **Features Sustainable Architecture** – Project elements and programming are related to a “green” building or other sustainable features, including site and building elements.
- ◆ **Amphitheater** – There are large and/or small structured outdoor gathering spaces located onsite.
- ◆ **Project's Market Focus** – The project appeals to resident and tourist markets.
- ◆ **Market Context** – The project is located in or is near a large resident population within a day’s drive. The facility can be located in remote or in densely populated areas. The project also has large tourist populations.

Each comparable visitor center and destination attraction reflects one or more of the above attributes. Data in **Table VI-1** provides an assessment of some of the characteristics of the comparable projects as they relate to potential attributes of the proposed DDC.

Table VI-1
Facility Characteristics of Comparable Projects

Name	Location	Opening/ Founding	Building Size (SF)	Land Area (acres)
<i>Visitor Centers</i>				
Anza-Borrego Desert Nature Center	Borrego Springs, CA	1979 (Park)	7,000	600,000
Dorothy Buell Memorial Visitor Center	Porter County, IN	2006	12,180	15,067
Kalamazoo Nature Center	Kalamazoo, MI	1960	NA	1,100
Sabino Canyon Visitor Center	Tucson, Arizona		less than 5,000 (estimate)	1.78 million (Coronado Nat. Forest)
Spring Mountain Ranch State Park	Blue Diamond, NV	1974	3,000	520
Suwannee River Visitor Center	Fargo, GA	2004	7,000	80
Zion National Park Visitor Center	Springdale, UT	2000	7,600	147,000
<i>Destination Attractions</i>				
Arizona-Sonora Desert Museum	Tucson, AZ	1952	NA	21
Desert Botanical Gardens	Phoenix, AZ	1937	NA	50
High Desert Museum	Bend, OR	1974	110,000	135
Las Vegas Springs Preserve	Las Vegas, NV	2007	176,000	180
The Living Desert	Palm Desert, CA	1970	NA	200
The WILD Center - The Natural History Museum of the Adirondacks	Tupper Lake, NY	2006	35,000	31
University of Alaska Museum of the North	Fairbanks, AK	1929	Total: 84,000 Expansion: 43,791	NA

Source: Facilities profiled and ConsultEcon, Inc.

Comparable Visitor Centers

Following is an overview of comparable visitor centers.

- ◆ **Anza-Borrego Desert Nature Center** – Borrego Springs, CA – The center is located in Anza-Borrego Desert State Park, which is part of the Sonoran Desert in California. The park draws over 176,000 visitors annually. The nature center exhibits the areas desert wildflowers, Indian rock art and mythology and offers guided tour and talks about the park.
- ◆ **Dorothy Buell Memorial Visitor Center** – Porter County, Indiana – This 12,180 square foot visitor center serves as a gateway to the 15,000 acre Indiana Dunes National Lakeshore, one of the most popular seashores along Lake Michigan. The visitor center is comprised of exhibit space, including an artist-in-residence exhibit, an information kiosk staffed by rangers and the local CVB in addition to 24-hour displays, a 100-seat theater, and a bookstore.
- ◆ **Kalamazoo Nature Center** – Kalamazoo, MI – This visitor center is located on 1,100 acres of wooded, rolling countryside and draws over 266,000 visitors annually. The interpretive center features interactive exhibits about local ecology, live animals, and an indoor tropical forest. The center has miles of trails to explore also includes an 11-acre arboretum.
- ◆ **Sabino Canyon Visitor Center** – Tucson, Arizona – The visitor center provides orientation and a small interpretive center contains exhibits on the desert canyon ecology, as well as the Santa Catalina Mountains. Sabino Canyon Recreation Area is located in the Coronado National Forest at the edge of Tucson. A private operator runs narrated tram tours into the canyon and the Friends of Sabino Canyon staffs an information desk and sponsors events in the canyon.
- ◆ **Spring Mountain Ranch State Park** – Blue Diamond, Nevada – This is an example of a state park with a modest visitor center with a large performance space. Approximately 23 percent of the park's 200,000 annual visitors visit the visitor center. The visitor center is 3,000 square feet with a small retail store. There is a large outdoor amphitheater with a resident theater production company, as well as areas for living history days, school programming and guided hikes.
- ◆ **Suwannee River Visitor Center** – Fargo, Georgia – This 7,000 square foot visitor center, a LEED-certified gold building, serves as a gateway to Stephen C. Foster State Park, an 80 acre park located within the 402,000 acre Okefenokee National Wildlife Refuge. The visitor center contains a registration area, exhibit space, classrooms, a gift shop, and a theater, which shows an 11-minute film overview of the river and swamp.
- ◆ **Zion National Park Visitor Center** – Springdale, UT – Zion Canyon is known for its impressive canyon walls and the national park draws over 2.5 million visitors annually. The 7,600-square foot visitor center is a "green" building that reduces the building's energy consumption by an estimated 74 percent. The park service also operates a shuttle bus service powered by natural gas and banned cars due to pollution and traffic congestion. The Human History Museum visitation exceeds 125,000 annual visitors.

Comparable Destination Attractions

Following is an overview of comparable destination attractions.

- ◆ **Arizona-Sonoran Desert Museum** – Tucson, Arizona – This museum is a zoo, botanical garden, and natural history museum that draws over 500,000 visitors annually. Eighty-five percent of the museum's exhibits are outdoors and incorporate 2 miles of pathways, over 21 acres. Facilities include Center for Sonoran Desert Studies, ASDM Art Institute, 2 cafes, coffee bar and snack shop, and retail store.
- ◆ **Desert Botanical Gardens** – Phoenix, Arizona – The botanical garden features a wide array of desert plants over 50 acres and hosts over 300,000 visitors annually. The garden holds a number of events each year, including music events, desert food events, and desert plant sales. Garden facilities include café, gift shop, meeting space, research library, and herbarium.
- ◆ **High Desert Museum** – Bend, OR – This 110,000 square foot museum focuses on living history and desert wildlife in the high desert of Oregon. The site totals 135 acres. Exhibits are located indoors and outdoors, with over 150 live animals. Facility includes gift shop and café.
- ◆ **Las Vegas Springs Preserve** – Las Vegas, Nevada – This is an example of a comparable attraction with extensive interpretation, exhibits, and project elements. Built at a cost of over \$250 million, interior building space totals 176,000 square feet and the Nevada State Museum under construction will add another 78,000 square feet. Located in the middle of Las Vegas, the site is 180 acres, with 8 acres of gardens and 1.8 miles of trails (2.6 miles upon completion). There is an outdoor amphitheater with 1,800 seats, as well as a smaller 250-seat garden amphitheater and a 156-seat indoor theater.
- ◆ **The Living Desert** – Palm Desert, CA – This attraction is described as a zoo, botanical garden, nature preserve and natural history museum. The preserve encompasses 1,800 acres and facilities include cafes, gift shops, garden center, and a 600-seat outdoor amphitheater.
- ◆ **The WILD Center- The Natural History Museum of the Adirondacks** – Tupper Lake, NY – The museum opened in 2006 and is located on a 31-acre site near the geographic center of the Adirondack Park. Annual visitation is estimated at 76,000 visitors. The museum features an outdoor trail system, main exhibit hall, the "Living River", which follows a course from a marsh to its source at the summit of a High Peak, live animals, hands-on collections and discovery boxes.
- ◆ **University of Alaska Museum of the North** – Fairbanks, AK – The Museum of the North visitation exceeds 96,000 annually, and is located on the University of Alaska-Fairbanks campus. The museum exhibits Alaska's five major geographic regions in highlights of the objects and artifacts, people, wildlife, geography and history of each region, as well as art of Alaska and other exhibits related to Alaskan culture. The museum underwent a \$42 million expansion in 2006 that double the museum's space to 84,000 square feet.

Facilities

Visitor centers are typically smaller in building size than destination attractions. However, they tend to be located in parks or natural areas with a significant amount of land area. The comparable visitor centers range in size from 3,000 square feet to 12,180 square feet. On the other hand, comparable destination attractions range in size from 35,000 square feet to 176,000 square feet. The capital costs of visitor centers are typically less than those for destination attractions, due to both the facility size and the expense associated with the exhibit development.

Data in **Table VI-2** provide a comparison of selected facility characteristics of comparable visitor centers and destination attractions.

Market and Attendance

Visitor centers and destination attractions can be located in densely populated areas or in more remote locations. At visitor centers, attendance tends to be driven by attendance to the park or natural area in which they are located. Conversely, attendance to destination attractions is driven by the attraction themselves. Annual attendance at visitor centers ranged from 25,000 to 300,000. Annual attendance at destination attractions ranged from 96,000 to 600,000.

Data in **Table VI-3** provides population and attendance characteristics of comparable visitor centers and destination attractions.

Table VI-2
Facility Characteristics of Comparable Projects

Name	Location	Opening/ Founding	Reported Capital Costs	Building Size (SF)	Capital Cost per SF	Land Area (acres)
<i>Visitor Centers</i>						
Anza-Borrego Desert Nature Center	Borrego Springs, CA	1979 (Park)		7,000		600,000
Dorothy Buell Memorial Visitor Center	Porter County, IN	2006	\$3 million	12,180	\$246	15,067
Kalamazoo Nature Center	Kalamazoo, MI	1960		NA		1,100
Sabino Canyon Visitor Center	Tucson, Arizona			less than 5,000 (estimate)		1.78 million (Coronado Nat. Forest)
Spring Mountain Ranch State Park	Blue Diamond, NV	1974		3,000		520
Suwannee River Visitor Center	Fargo, GA	2004	\$2 million	7,000	\$286	80
Zion National Park Visitor Center	Springdale, UT	2000		7,600		147,000
<i>Destination Attractions</i>						
Arizona-Sonora Desert Museum	Tucson, AZ	1952		NA		21
Desert Botanical Gardens	Phoenix, AZ	1937		NA		50
High Desert Museum	Bend, OR	1974		110,000		135
Las Vegas Springs Preserve	Las Vegas, NV	2007	\$250 million	176,000	\$1,420	180
The Living Desert	Palm Desert, CA	1970		NA		200
The WILD Center - The Natural History Museum of the Adirondacks	Tupper Lake, NY	2006	\$30 million	35,000	\$857	31
University of Alaska Museum of the North	Fairbanks, AK	1929	\$42 million (2006 expansion)	Total: 84,000 Expansion: 43,791	\$959	NA

Source: Facilities profiled and ConsultEcon, Inc.

Table VI-3
Market Population and Attendance of Comparable Projects

Name	Location	Metro Area or County	2006		Attendance	Attendance to Population Ratio
			Metro/County Population	Population		
Visitor Centers						
Anza-Borrego Desert Nature Center	Borrego Springs, CA	San Diego-Carlsbad-San Marcos, CA	2,941,454	Park: 600,000 (on average) VC: 154,000 (on average)	Park: 0.20 VC: 0.05	
Dorothy Buell Memorial Visitor Center	Porter County, IN	Chicago-Naperville-Joliet, IL-IN-WI	9,505,748	300,000 (projected)	0.03	
Kalamazoo Nature Center	Kalamazoo, MI	Kalamazoo-Portage, MI	319,738	266,000	0.83	
Sabino Canyon Visitor Center	Tucson, Arizona	Tucson, AZ	946,362	150,000 (shuttle tour)	0.16	
Spring Mountain Ranch State Park	Blue Diamond, NV	Las Vegas-Paradise, NV	1,777,539	Park: 200,000 VC: 45,000	Park: 0.11 VC: 0.03	
Suwannee River Visitor Center	Fargo, GA	Charlton County	10,882	Park: 120,000 VC: 25,000	Park: 11.03 VC: 2.30	
Zion National Park Visitor Center	Springdale, UT	St. George, UT	126,312	Park: 2,589,250	20.50	
Destination Attractions						
Arizona-Sonora Desert Museum	Tucson, AZ	Tucson, AZ	946,362	444,000 (2006 AZA)	0.47	
Desert Botanical Gardens	Phoenix, AZ	Phoenix-Mesa-Scottsdale, AZ	4,039,182	300,000	0.07	
High Desert Museum	Bend, OR	Bend, OR	149,140	96,000	0.64	
Las Vegas Springs Preserve	Las Vegas, NV	Las Vegas-Paradise, NV	1,777,539	600,000 (projected)	0.34	
The Living Desert	Palm Desert, CA	Riverside-San Bernardino-Ontario, CA	4,026,135	376,000 (2006 AZA)	0.09	
The WILD Center - The Natural History Museum of the Adirondacks	Tupper Lake, NY	Franklin County	50,968	100,000 (in first year)	1.96	
University of Alaska Museum of the North	Fairbanks, AK	Fairbanks, AK	86,754	96,000	1.11	

Source: Facilities profiled, Census Population Estimates 2006, and ConsultEcon, Inc.

Ticket Prices

In general, visitor centers do not charge a ticket price for entrance into the facility, though there are per vehicle charges to enter the parks in which they are located. This entrance charge ranges from \$3.00 to \$25.00. Destination attractions charge adult ticket prices of between \$9.00 and \$18.95.

Data in **Table VI-4** provide adult ticket prices at comparable visitor centers and destination attractions.

Table VI-4
Ticket Prices of Comparable Projects

Name	Adult Ticket Price
Visitor Centers	
Anza-Borrego Desert Nature Center	Free with Park Pass
Dorothy Buell Memorial Visitor Center	Park: \$6.00 per vehicle VC: no charge
Kalamazoo Nature Center	\$6.00
Sabino Canyon Visitor Center	Park: \$5.00 per vehicle VC: no charge Shuttle tour: \$7.50
Spring Mountain Ranch State Park	Park: \$5.00 per vehicle VC: no charge
Suwannee River Visitor Center	Park: \$3.00 per vehicle VC: no charge
Zion National Park Visitor Center	Park: \$25.00 per vehicle VC: no charge
Destination Attractions	
Arizona-Sonora Desert Museum	\$12.00 (high season) \$9.00 (low season)
Desert Botanical Gardens	\$10.00
High Desert Museum	\$15.00 (May to Sept.) \$10.00 (Oct. to April)
Las Vegas Springs Preserve	\$18.95
The Living Desert	\$11.95 (Sept. to June) \$8.75 (June to Aug.)
The WILD Center - The Natural History Museum of the Adirondacks	\$15.00
University of Alaska Museum of the North	\$10.00

Source: Facilities profiled and ConsultEcon, Inc.

Operations

The operating expenses required for a visitor center are significantly lower than those required for a destination attraction. Visitor center budgets ranged from \$110,000 to \$2.1 million. (The latter figure is an outlier relative to the budgets of other visitor centers due to the larger operation and organizational focus of the Kalamazoo Nature Center.) Destination attraction budgets ranged between \$2.8 million and \$8.4 million.

The earned revenue potential is greater for destination attractions than for visitor centers. In addition to charging higher admission fees, destination attractions can earn revenue through retail and food service, program fees, and membership dues. For destination attractions, revenue from program services and memberships and dues cover between 27 percent and 70 percent of the comparable destination attractions' operating cost.

Visitor centers have fewer employees than destination attractions. Visitor centers had between 4 and 21 full-time equivalent (FTE) employees. Destination attractions had between 85 and 128 employees.

Data in **Table VI-5** present selected operating characteristics of comparable visitor centers and destination attractions.

Table VI-5
Available Operational Characteristics of Selected Comparable Projects

Name	Governance/ Management	Program Service Revenue	Membership and Dues Revenue	Operating Expenses	Program Service and Membership Revenue as Percent of Operating Expenses	Employees	Expenses per Employee
<i>Visitor Centers</i>							
Anza-Borrego Desert Nature Center	California State Park			NA		21 (park)	
Dorothy Buell Memorial Visitor Center	National Lakeshore			\$199,000 (VC)		10 FTE (VC)	\$19,900
Kalamazoo Nature Center	Non-Profit	\$554,000	\$107,000	\$2.1 million (FY06 990)	31%		
Sabino Canyon Visitor Center	U.S. Forest Service			NA			
Spring Mountain Ranch State Park	Nevada State Park			\$340,621 (Park)		6 FTE (Park)	\$56,770
Suwannee River Visitor Center	Georgia State Park			\$110,000 (VC)		4 FTE (VC)	\$27,500
Zion National Park Visitor Center	National Park			NA			
<i>Destination Attractions</i>							
Arizona-Sonora Desert Museum	Non-Profit	\$4.7 million	\$1.2 million	\$8.4 million (FY06 990)	70%	over 100	\$84,000
Desert Botanical Gardens	Non-Profit	\$2.0 million	\$1.0 million	\$8.1 million (FY06 990)	37%		
High Desert Museum	Non-Profit	\$929,000	\$308,000	\$3.7 million (FY06 990)	33%		
Las Vegas Springs Preserve	Non-Profit			NA		125	
The Living Desert	Non-Profit	\$3.3 million	\$1.1 million	\$8.1 million (FY06 990)	54%	128	\$63,281
The WILD Center - The Natural History Museum of the Adirondacks	Non-Profit	\$756,000		\$2.8 million (FY06 990)	27%		
University of Alaska Museum of the North	University			\$5.5 million (FY06 Annual Report)		85	\$64,706

Source: Facilities profiled, Guidestar, and ConsultEcon, Inc.

Summary of Findings

Following are relevant findings that apply to DDC planning and development based on a review of comparable projects.

- ◆ “Visitor centers” tend to be almost exclusively gateways to major outdoor areas. They are small facilities, with low levels of interpretation and exhibit space, staffing, expenses, and revenue potential. A visitor center would be an appropriate model if the DDC were to function purely as a gateway to the McDowell Sonoran Preserve.
- ◆ “Destination attractions” are generally three to ten times the size of visitor centers and have extensive interpretive programs, exhibitry and facility activities. As such, some destination attractions have staffs larger than 100, with bigger operating expenses, and greater attendance and earned revenue potential than visitor centers, due to the value of the experience offered, facility pricing, opportunities for supportive commercial uses like retail and food service, and membership and sponsorship potential. The DDC as a destination attraction would require a large facility and development ranging from 20 to 50 or more acres to include extensive exterior exhibits, public circulation, and parking.
- ◆ Both visitor centers and destination attractions incorporated sustainable architecture and site design principles. If the DDC were to be constructed using LEED or other green building guidelines, there is an opportunity to integrate the design and construction of the building with interpretive themes and exhibits, perhaps relating to nature and engineering. Moreover, while sustainable design and building may result in higher capital investment costs, there would be savings over the facility’s lifecycle through energy reduction and water and waste conservation.
- ◆ Visitor centers and destination attractions have the potential to serve both resident and tourist markets. Whereas visitor centers are typically in remote locations, destination attractions are more common in urban areas due to the large resident population. The DDC’s location with access to large resident markets and a large and well-understood tourist market has significant attendance potential as a destination attraction. The DDC has the potential to capture a larger market share of the resident population and the tourist population if it were a destination attraction than if it were a visitor center.
- ◆ Visitor centers do not charge to park, though often vehicles entering parks may have to pay an entry fee. Comparable destination attractions charge a full adult ticket price, which is often lower in the summer due to the high desert heat. If the DDC were closer in format to a visitor center, it may have a modest admission (or parking) fee perhaps \$5.00 to \$10.00 per vehicle or \$3 to \$5 per adult visitor depending on final program. As a destination attraction, the DDC has potential for ticket prices ranging from \$10.00 to \$20.00, depending on the number and quality of the visitor experiences offered, during the peak season.
- ◆ A destination attraction has the potential to draw larger attendance and earn more revenue than a visitor center through higher admission fees, retail and food service, program fees, and membership dues. Contributed revenue requirements would also increase with the associated increases in the scale of the operating budget. The DDC’s potential in all of these categories is greater as more elements of comparable destination attractions are incorporated into the facility.

- ◆ Ultimately, the DDC can have elements of both visitor centers and destination attractions. Visitor centers with more exhibit space and public programming can be significant generators of public activity, but to achieve the earned revenue potential as a destination attraction, the DDC building would likely need to be more than 50,000 square feet, with at least 5 acres of exterior pathways, exhibits and activity areas.

DRAFT

Section VII

DESERT DISCOVERY CENTER ATTENDANCE POTENTIAL

Following is an assessment of the attendance potential of the DDC under two development scenarios. The scenarios are: the larger “Exhibition Sonora – a destination attraction” and the smaller “McDowell Portal - a recreation enhancement”. The two development scenarios reflect different physical scales, but also different organizational scales that vary in programming, changing exhibits, marketing, staff, facility rentals and a wide variety of other factors. One of these scenarios or a variation of them will be selected as the preferred scenario for the further planning and design of the DDC. Further analysis and research in the next planned phase of this assignment will refine the programs of spaces for the scenarios as well as their interpretive plans, conceptual development costs and their operating potential. This additional input along with continued leadership and public input will allow a single “Preferred Scenario” to emerge from future planning processes.

Attraction Success Factors

Planning, creating and operating an area serving attraction, such as the DDC, is a substantial undertaking. Audiences today are exposed on a daily basis to extremely high-tech, high-quality media at work or school and on television. Due to high audience standards, those in the entertainment and educational attraction industry have adopted the same high quality techniques to attract visitors. As the expectations by audiences of leisure time products and educational experiences are very high, a successful attraction must meet audience expectations of value, provided both in terms of money and time spent. To achieve its goals for interpretive and economic success, an attraction such as the proposed DDC should fulfill the following criteria.

- ◆ **Exhibit Quality and Audience Appeal** - The interpretive elements should have a high degree of interest and/or relevance to the audience. Audience expectations of content and presentation have risen dramatically.
- ◆ **Good Location** - The accessibility and visibility of the location is critical to its market success. Facilities in outstanding locations, from an accessibility and visibility perspective, naturally have the greatest market opportunity.
- ◆ **Critical Mass of Attraction Elements** - There must be sufficient attraction content to appeal to a diverse audience with a degree of subject interests, ages and educational levels. There must be a variety and quantity of experiences for the visitor to feel they have visited a special place.

- ◆ **Exhibit Quality and Audience Appeal** - The attraction must have sufficient quality and quantity of content to warrant a special trip, and to possibly forego alternative activities. Typically, this implies that more than one hour is spent experiencing the attraction, with a target length of stay of perhaps one and a half to two or more hours. When combined with a meal or snack, shopping for souvenirs, taking a walk and/or relaxing in an outdoor area or taking a hike, the experience must be the focal point of a half-day or full day recreational experience. Most importantly, it must be an entertaining experience.
- ◆ **Repeatability** - For most nature-based attractions of the scale being analyzed, the resident market is the focus audience, and a repeat visitation pattern is necessary for success. To bring an audience back, the attraction must have exhibits, program and site qualities that justify repeatable experiences. Changing and interactive exhibitry, consistently new and innovative programming and special/annual events are successful ways for projects of this type to encourage repeat visitation. Large format film theaters have constantly rotating and changing films that are very attractive to audiences, and create repeat visitation patterns.
- ◆ **Serves Visitor and Residents** – Educational attractions of the scale proposed can and should focus on both visitor and resident markets. Planning for and marketing to both groups ensures both maximum and year-round visitation. Further, successful local marketing is an essential approach to attracting the visitor market, as many tourists are visiting friends and relatives, and many locals advise out-of-towners on the best local attractions.
- ◆ **Serves as an Event Venue for Facility Rentals** – Visitor attractions and museums and are increasingly being used as “unique” event venues for facility rentals. Visitor attractions located in desirable nature based settings especially those with great views, have been very successful in this regard. Further when the facility is designed to accommodate this use and is physically large enough, interesting event spaces can be created. In Scottsdale, the proximity of a substantial tourist population and a large hospitality resources base makes this a good business opportunity. In order to serve this market segment, the building program must support catering, and the facility staff and operation must successfully market and administer the events.
- ◆ **Marketing and Programs** - Successful visitor attractions allocate resources to creatively reach their resident and tourist markets. The marketing must not only describe the quality of the attraction, but also create excitement among potential visitors to travel to the attraction. Marketing in channels that reach enthusiasts is an important success strategy. Ongoing programming is important in attracting first time visitors and repeat visitors.
- ◆ **Comprehensive Facility and Programs** – The facility and its programs should be comprehensive to include research and library functions, classrooms, information provision and visitor center functions, spaces for events and facility rentals, venues for lectures and presentations, retail and food service offerings and adequate office space and back-of-house areas to fully support the multiple activities that would occur on site.
- ◆ **Sound Financial Base** - An appropriate project scale for the potential audience is important so that revenues can support both operations and the physical infrastructure of the facility. Entrance fees must be set to maximize revenues while maintaining optimum visitation levels given the markets to be served. Operations and marketing must sustain the audience size

and the physical infrastructure and provide a quality visitor experience. Operations must be scaled to the particular attributes of the facility, including staffing, seasonality and other factors. Meeting these requirements will help to create a sound financial base.

The DDC has the potential to become a successful project. Following is a discussion of factors underlying the estimate of visitation to the project.

- ◆ **Attraction Elements** – Two scenarios for the DDC are under evaluation. The larger Exhibition Sonora – a destination attraction would function as a high-profile regional serving attraction with substantial tourism appeal. It would attract audiences with a wide range of interest in the desert environment. The smaller McDowell Portal - A recreation enhancement would function more as an area serving attraction with a lower profile and would be focused on market segments with a strong interest in desert environments – many of whom would be primarily interested in experiencing the preserve itself. Both would offer indoor interpretation, access to an interpreted loop trail as well as immediate access to the larger McDowell Sonoran Preserve trail system.
- ◆ **Location, Site and Accessibility** - A successful nature-based attraction must be highly accessible both locally and regionally. Scottsdale and the subject site have good regional accessibility. Within Scottsdale, the DDC location is readily accessible and can have an effective signage and wayfinding program.
- ◆ **Available Markets** - The DDC will draw a major portion of its attendance from resident markets. The estimated 2012 population of the City of Scottsdale, the Primary Resident Market Area is 250,200. The Secondary Resident Market Area within a 30-minute drive of the site has an estimated to have a 2012 population of 2,059,400. The remainder of the Phoenix Metropolitan Area is the Tertiary Resident Market Area with an estimated to have a 2012 population of 2,292,000.
- ◆ **Scottsdale is an urban tourism destination.** Scottsdale and the surrounding area have an active tourism economy. Scottsdale attracts large numbers of visitors -- the most recent year for which data are available, the Scottsdale Market Area⁹ hosted 7.7 million visitors, comprised of 6.4 million day visitors and 1.3 million hotel visitors. In addition, there are millions of visitors to other places in the Phoenix metro area that would be DDC visitor prospects given its proposed unique offerings.
- ◆ **Facility Pricing** - The attraction's ticket prices are assumed to be in keeping with the breadth and quality of the visitor experience, and the time a visitor would spend at the DDC. In current value of the dollar, the ticket price should be competitive with other comparable attractions in the region, and should take into account income levels of the resident population. The larger Exhibition Sonora – a destination attraction assumes an admission fee of \$9.00 for adults, \$8.00 for seniors, and \$6.00 for youth; while the smaller McDowell Portal - a recreation enhancement assumes an admission fee of \$5.00 for adults, \$4.00 for seniors, and \$3.00 for youth. An allowance for coupons and discounts has also been included in this plan at 2 percent of ticket prices is assumed in both scenarios. These ticket price assumptions were informed by the comparable

⁹ See Section IV for full details on Scottsdale area tourism economy.

facilities and ticket prices in the Phoenix Metro area. The assumptions are focused on balancing ticket revenues with strong attendance patterns.

- ◆ **Competitive Context** – There are several nature-based attractions in the greater Phoenix area and therefore provide some competition for visitors. These include the Phoenix Zoo, Desert Botanical Gardens which are both first-rate and popular attractions. The DDC as proposed however would be uniquely positioned from two perspectives. First, it will be located in perhaps the premier Phoenix-area accessible wilderness area; second, it would be directly focused on the local environment rather than biomes from around the world. Therefore it could position itself uniquely in the market.
- ◆ **Marketing and Programs** - The design and operating plan for the DDC assumes an ongoing marketing effort aimed at prime audiences, which include the defined resident market area, as well as Scottsdale tourists and tourists to the greater Phoenix area. With the tourism audiences, there are marketing channels that can be used to build awareness of the DDC. These include hotel and information center “pamphlet racks”; cooperative marketing with the Scottsdale Convention and Visitors Bureau; co-operative marketing with the other nature-based attractions in the greater Phoenix area; local newspapers and radio spots and other marketing channels. Because the marketing budget will be relatively limited, skillful use of the marketing budget and an emphasis on non-cash expense marketing efforts will be necessary for success in the marketing effort.
- ◆ **Days Open** - It is recommended that DDC operate year-round. Closing days for major holidays would depend on the local market and operating experience.

Attendance Potential

The DDC in either scenario -- the larger Exhibition Sonora – a destination attraction, or the smaller McDowell Portal - a recreation enhancement, has substantial attendance potential from resident and visitor markets. A repeat attendance pattern locally can be developed. The estimate of attendance potential at the DDC for each scenario has been prepared through a “gravity model” analytical approach. That is, the propensity to visit this nature-based attraction is strongest among people who reside the closest, or who are visiting areas closest to the facility. In addition, attendance prospects who are staying overnight in the area are more likely to visit than those people who are visiting less proximate areas of the metropolitan area. The attendance potential estimates have been informed by the comparable facilities profiled in this report, as well as the various educational attractions in the Phoenix metro area. Further, the experiences of facilities of this type nationally have been considered in preparing the attendance potential estimates. These factors include the facility type and scale, interpretive topics, the opportunity for outdoor experiences and the proposed quality of facility and operations.

The attendance potential of the two development scenarios is presented below.

McDowell Portal - a recreation enhancement Attendance Potential

Data in **Table VII-1** provide a summary of the derivation of the attendance potential estimate for the McDowell Portal - a recreation enhancement scenario, for the DDC, based on the data and analyses contained in this report, and the proposed program.

Table VII-1
Preliminary Attendance Potential Estimate
Desert Discovery Center McDowell Portal - a recreation enhancement

	Estimated 2012 Market Population	Market Penetration Rates		Visitation Range			Percent to Total
		Low	High	Low Range Attendance	Mid Range Attendance	High Range Attendance	
Resident Market							
Primary Market Area	250,200	3.0%	5.0%	7,506	10,008	12,510	9.1%
Secondary Market Area	2,059,400	2.0%	3.0%	41,188	51,485	61,782	47.0%
Tertiary Market Area	2,292,000	0.5%	1.0%	11,460	17,190	22,920	15.7%
Total Resident Market	4,601,600	1.31%	2.11%	60,154	78,683	97,212	71.8%
		Visitor Market as a Percent of Total Visitation		Low Range Attendance	Mid Range Attendance	High Range Attendance	
		Low	High				
Visitor (Tourist) Market		25.0%	30.0%	20,051	30,857	41,662	28.2%
Total Stabilized Attendance Potential Range				80,205	109,540	138,874	100.0%
Mid Range Attendance ^{1/}				80,000	110,000	139,000	
Use of "Free" Areas By Residents and Visitors As a Trailhead and a Leisure Destination ^{1/}				48,000	66,000	83,000	
Total Site Use				128,000	176,000	222,000	

^{1/} Rounded to nearest 1,000

Source: ConsultEcon, Inc.

The estimated market capture rates for the McDowell Portal - a recreation enhancement scenario is estimated at 3.0 percent to 5.0 percent of residents in the Primary Market Area and 2.0 to 3.0 percent of residents in the Secondary Market Area. These capture rates indicate a steady pattern of use of the ticketed areas of the facility among those area residents interested in the topics being interpreted and strong school group use. While the majority of the visitation will come from residents of the Phoenix Metro Area, the DDC will be attractive to Scottsdale and area tourists, people visiting friends or relatives in the area, or convention and meeting attendees. In addition

there would be use of the facility by people on longer day trips from beyond the metro area. These are estimated to over a third of all visitation based on the size of the available markets.

Stabilized attendance levels are typically achieved in the third or fourth year after opening.

Attendance potential at the DDC under the McDowell Portal - a recreation enhancement, in a stable year (Year 3) is estimated at 80,000 to 139,000, with a mid-range estimate of 110,000.

In addition to visitors to the interpretive areas, it is anticipated that there will be considerable regular use of the non-paid components of the DDC such as the proposed café, information desk, retail and veranda areas by local residents and Scottsdale tourists. This would generally be in conjunction with hiking and other use of the overall McDowell Sonoran Preserve. Given current usage patterns of the McDowell Sonoran Preserve trail system, (for example, Lost Dog Wash receives over 40,000 uses annually) it is reasonable to expect additional usage of perhaps 60% informal use to ticketed attendance in a stable year. This assumption indicates an additional 48,000 to 83,000 informal users of the site, with a mid-range estimate of 66,000. These would be mostly local area residents who use the facility regularly and on an ongoing basis. The extent of use, of course will be dependent on the on-site offerings that might appeal to these users, and the extent to which various organizations promote such use among their members and the general public. These are above and beyond the attendance to the DDC as summarized above.

Exhibition Sonora – a destination attraction Attendance Potential

Data in **Table VII-2** provide a summary of the derivation of the attendance potential estimate for the Exhibition Sonora – a destination attraction, for the DDC, based on the data and analyses contained in this report, and the proposed program.

The estimated market capture rates under the Exhibition Sonora – a destination attraction, is estimated at 4.0 percent to 7.0 percent in the Primary Market Area and 2.5 to 3.5 percent in the Secondary Market Area, indicating a steady pattern of use of the ticketed areas of the facility among those area residents interested in the topics being interpreted and strong school group use. While the majority of the visitation will come from residents of the Phoenix Metro Area, the DDC will be attractive to Scottsdale and area tourists, people visiting friends or relatives in the area, or convention and meeting attendees. In addition there would be use of the facility by people on

longer day trips from beyond the metro area. These are estimated to be forty percent or more of all visitations based on the size of the available markets.

Table VII-2
Preliminary Attendance Potential Estimate
Desert Discovery Center Exhibition Sonora – a destination attraction

	Estimated 2012 Market Population	Market Penetration Rates		Visitation Range			Percent to Total
		Low	High	Low Range Attendance	Mid Range Attendance	High Range Attendance	
Resident Market							
Primary Market Area	250,200	4.0%	7.0%	10,008	13,761	17,514	6.9%
Secondary Market Area	2,059,400	2.5%	3.5%	51,485	61,782	72,079	31.2%
Tertiary Market Area	2,292,000	1.25%	2.0%	28,650	37,245	45,840	18.8%
Total Resident Market	4,601,600	1.96%	2.94%	90,143	112,788	135,433	56.9%
		Visitor Market as a Percent of Total Visitation		Low Range Attendance	Mid Range Attendance	High Range Attendance	
		Low	High				
Visitor (Tourist) Market		40.0%	45.0%	60,095	85,452	110,809	43.1%
Total Stabilized Attendance Potential Range				150,238	198,240	246,242	100.0%
Mid Range Attendance ^{1/}				150,000	198,000	246,000	
Use of "Free" Areas By Residents and Visitors As a Trailhead and a Leisure Destination ^{1/}				75,000	99,000	123,000	
Total Site Use				225,000	297,000	369,000	

^{1/} Rounded to nearest 1,000

Source: ConsultEcon, Inc.

Stabilized attendance levels are typically achieved in the third or fourth year after opening.

Attendance potential at the DDC under the Exhibition Sonora – a destination attraction, in a stable year (Year 3) is estimated at 150,000 to 246,000, with a mid-range estimate of 198,000.

In addition to visitors to the interpretive areas, it is anticipated that there will be considerable regular use of the non-paid components of the DDC such as the proposed café, information desk, retail and veranda areas by local residents and Scottsdale tourists. This would generally be in conjunction with hiking and other use of the overall McDowell Sonoran Preserve. The extent of visitor amenities and the higher attendance patterns at the facility would create a higher pattern of such

“informal” use of the facility than in the smaller McDowell Portal - a recreation enhancement. Such use additional non-ticketed use of the Exhibition Sonora – a destination attraction, in a stable year is expected to add up to 50% informal use to ticketed attendance. This assumption indicates an additional 75,000 to 123,000 informal users of the site, with a mid-range estimate of 99,000. These would be mostly local area residents who use the facility regularly and on an ongoing basis. The extent of use, of course will be dependent on the on-site offerings that might appeal to these users, and the extent to which various organizations promote such use among their members and the general public. These are above and beyond the attendance to the DDC as summarized above.

Attendance Factors

The range in the estimates of attendance for both the McDowell Portal - a recreation enhancement, and the Exhibition Sonora - a destination attraction, are based on several factors:

- ◆ How well the concepts proposed for the project are translated into the visitor experience. As no conceptual or schematic exhibit planning has occurred, there can be substantial variability in the type, quantity, impact and focus of exhibitry.
- ◆ Quality, scale, relevance and frequency of rotating (or traveling) exhibits.
- ◆ The facility size and the program of spaces.
- ◆ The extent of visitor amenities that are offered such as food, retail, visitor information.
- ◆ The extent of facility rentals.
- ◆ The extent of on-site programming such as demonstrations, lectures, docent led hikes and so forth.
- ◆ Ticket pricing policies.
- ◆ The extent of special events and exhibits, and changing exhibits.
- ◆ Quality of operation and attention to visitors will affect attendance levels.
- ◆ Success of membership development efforts.
- ◆ The amount and quality of marketing employed (including pre-opening marketing).
- ◆ The changes in the economic environment in Scottsdale and the U.S. generally.
- ◆ The variation in market acceptance of the project that may occur.

Ten Year Attendance Patterns

During the first few years after opening, the project would be expected to achieve higher attendance based on local excitement about the facility. This would be balanced by the need to grow awareness in the Tertiary Market Areas of the project to get the project included on more school field trip

itineraries and to build awareness in the visitor (or tourist) markets. Based on these factors, a first year attendance pattern of 20 percent above stabilized attendance for these two scenarios for the DDC is estimated with a 5 percent factor for year 2. Attendance would then be expected to decline to a stabilized attendance level in the third year. Data in **Table VII-3** provide estimated ten-year attendance potential for the McDowell Portal - a recreation enhancement, and data in **Table VII-4** provide estimated ten-year attendance potential for the Exhibition Sonora – a destination attraction.

Table VII-3
Early Year Attendance Factors and Attendance Growth Pattern
Desert Discovery Center McDowell Portal - a recreation enhancement

	YEAR 1	YEAR 2	STABLE YEAR 3	YEAR 4	YEAR 5
Percentage of Stabilized Attendance	120%	105%	100%	100%	100.5%
Mid Range Visitation Potential	132,000	115,500	110,000	110,000	110,550

1/ Stabilized attendance expected to occur in Year Three. This analysis assumes that the full facility will be open for Year One of operations.

Source: ConsultEcon, Inc.

Table VII-4
Early Year Attendance Factors and Attendance Growth Pattern
Desert Discovery Center Exhibition Sonora – a destination attraction

	YEAR 1	YEAR 2	STABLE YEAR 3	YEAR 4	YEAR 5
Percentage of Stabilized Attendance	120%	105%	100%	100%	100.5%
Mid Range Visitation Potential	237,600	207,900	198,000	198,000	198,990

1/ Stabilized attendance expected to occur in Year Three. This analysis assumes that the full facility will be open for Year One of operations.

Source: ConsultEcon, Inc.

Attendance Seasonality

An important factor in facility planning is seasonality of visitation. Data in **Table VII-5** provides a summary of stabilized year attendance by month for the McDowell Portal - a recreation enhancement. Data in **Table VII-6** provides a summary of stabilized year attendance by month for the Exhibition Sonora – a destination attraction. This estimated attendance pattern reflects the composition of the audience, school year attendance patterns, the experience of the current DDC, major events in Scottsdale, and the experience of other nature-based attractions.

Table VII-5
Monthly Attendance Distribution
Desert Discovery Center McDowell Portal - a recreation enhancement

	<u>Low Attendance Scenario</u>		<u>Mid-Range Attendance</u>		<u>High Attendance Scenario</u>	
	Seasonality	Total Attendance	Seasonality	Total Attendance	Seasonality	Total Attendance
January	9%	7,200	9%	9,900	9%	12,510
February	10%	8,000	10%	11,000	10%	13,900
March	11%	8,800	11%	12,100	11%	15,290
April	12%	9,600	12%	13,200	12%	16,680
May	11%	8,800	11%	12,100	11%	15,290
June	7%	5,600	7%	7,700	7%	9,730
July	6%	4,800	6%	6,600	6%	8,340
August	6%	4,800	6%	6,600	6%	8,340
September	6%	4,800	6%	6,600	6%	8,340
October	7%	5,600	7%	7,700	7%	9,730
November	8%	6,400	8%	8,800	8%	11,120
December	7%	5,600	7%	7,700	7%	9,730
Total ^{1/}	100%	80,000	100%	110,000	100%	139,000

^{1/} Rounded to nearest 1,000.
Source: ConsultEcon, Inc.

Table VII-6
Monthly Attendance Distribution
Desert Discovery Center Exhibition Sonora – a destination attraction

	<u>Low Attendance Scenario</u>		<u>Mid-Range Attendance</u>		<u>High Attendance Scenario</u>	
	Seasonality	Total Attendance	Seasonality	Total Attendance	Seasonality	Total Attendance
January	9%	13,518	9%	17,820	9%	22,158
February	10%	15,020	10%	19,800	10%	24,620
March	11%	16,522	11%	21,780	11%	27,082
April	11%	16,522	11%	21,780	11%	27,082
May	10%	15,020	10%	19,800	10%	24,620
June	7%	10,514	7%	13,860	7%	17,234
July	6%	9,012	6%	11,880	6%	14,772
August	6%	9,012	6%	11,880	6%	14,772
September	6%	9,012	6%	11,880	6%	14,772
October	7%	10,514	7%	13,860	7%	17,234
November	9%	13,518	9%	17,820	9%	22,158
December	8%	12,016	8%	15,840	8%	19,696
Total ^{1/}	100%	150,000	100%	198,000	100%	246,000

^{1/} Rounded to nearest 1,000.
Source: ConsultEcon, Inc.

Peak Attendance Analysis

The peak attendance analyses presented in **Table VII-7** and **Table VII-8** use the estimated stabilized attendance for the two scenarios to prepare estimates of peak attraction attendance days (facility visitors) during the peak season. This analysis uses the estimate of the attendance during a peak month (the peak month would be estimated to occur during April); a strong week during that period; and a peak day in that week (25 percent of weekly attendance, probably a Saturday); to arrive at an appropriate “design day” attendance levels for the DDC given the overall assumptions and analyses of this report.

Table VII-7
Peak On-Site Population
Desert Discovery Center McDowell Portal - a recreation enhancement

Annual Visitation	Mid- Range Attendance			
	110,000			
	Peak Periods		Average Periods During Peak Months	
Peak Month Attendance	13,200			
Average Month Attendance			9,167	
High Week (28%) of peak period	3,696		2,567	
Peak day Attendance (18%) in high week	665		462	
Length of Stay	(.75 hr. stay · 20%)	(1.0 hr. stay · 25%)	(.75 hr. stay · 20%)	(1.0 hr. stay · 25%)
Peak in-house Population	133	166	92	116
Rounded	130	170	90	120

Source: ConsultEcon, Inc.

Table VII-8
Peak On-Site Population
Desert Discovery Center Exhibition Sonora – a destination attraction

Annual Visitation	Mid- Range Attendance			
	198,000			
	Peak Periods		Average Periods During Peak Months	
Peak Month Attendance	23,760			
Average Month Attendance			16,500	
High Week (28%) of peak period	6,653		4,620	
Peak day Attendance (18%) in high week	1,198		832	
Length of Stay	(1.75 hr. stay - 30%)	(2.0 hr. stay - 35%)	(1.75 hr. stay - 30%)	(2.0 hr. stay - 35%)
Peak in-house Population	359	419	249	291
Rounded	360	420	250	290

Source: ConsultEcon, Inc.

Attendance Potential Summary

Based on the market evidence presented in this report, the high-quality visitor experience proposed for both the larger Exhibition Sonora – a destination attraction, or the smaller McDowell Portal - a recreation enhancement, a preliminary range of attendance potential for the DDC has been established for the two scenarios. Attendance potential at the DDC under the McDowell Portal - a recreation enhancement, in a stable year is estimated at 80,000 to 139,000, with a mid-range “best estimate” of 110,000. Attendance potential at the DDC under the Exhibition Sonora – a destination attraction, in a stable year (Year 3) is estimated at 150,000 to 246,000, with a mid-range “best estimate” of 198,000. In addition to visitors to the interpretive areas, it is anticipated that there will be considerable regular use of the non-paid components of the DDC such as the proposed café, information desk, retail and veranda areas by local residents and Scottsdale tourists. This would generally be in conjunction with hiking and other use of the overall McDowell Sonoran Preserve. Given current usage patterns of the McDowell Sonoran Preserve trail system, (for example, Lost Dog Wash receives over 40,000 uses annually) it is reasonable to expect additional usage of an additional 48,000 to 83,000 informal users of the site, with a mid-range of 66,000 for the McDowell Portal - a recreation enhancement, and an additional 48,000 to 83,000 informal users of the site, with a mid-range of 66,000 and an additional 75,000 to 123,000 informal users of the site, with a mid-range of 99,000 in the Exhibition Sonora – a destination attraction. These are above and beyond the attendance to the DDC as summarized above.

Attendance is expected to be somewhat higher in early years of operation due to local excitement about the project a twenty percent surge in attendance is estimated in year one. Attendance will be balanced during the year with spring especially strong with fall also a strong season. This attendance potential analysis reflects a competitive ticket pricing policy and aggressive marketing of the DDC. This preliminary attendance potential represents a range of market response, but it also reflects a high-quality program and interpretive focus.

Section VIII

DESERT DISCOVERY CENTER EARNED REVENUE POTENTIAL

This section evaluates the earned revenue potential of the larger Exhibition Sonora – a destination attraction, or the smaller McDowell Portal - a recreation enhancement. Earned revenues of the DDC will be derived mainly from ticket sales and memberships, with additional revenue derived from sources such as retail sales, café and vending, memberships, and use of the facility for receptions and banquets. It is anticipated that contributions and grants will also be necessary to sustain the DDC. The amounts of such contributed revenues will depend on the facility's design and operating plan.

Ticket Revenues

Average per capita admissions revenue is a product of ticket prices and the mix of ticket types sold (adults, children, etc.). Based on their differing market and operating profiles, the Exhibition Sonora – a destination attraction, and the McDowell Portal - a recreation enhancement, would have different ticket prices and different audience make-ups. These two scenarios are evaluated below for ticket revenue potential based on their differing profiles.

Data in **Table VIII-1** provide DDC ticketing assumptions for the McDowell Portal - a recreation enhancement. A benchmark DDC adult ticket price of \$5.00 is assumed in this scenario. Data in **Table VIII-2** provides the ticketing assumptions for the Exhibition Sonora – a destination attraction. A benchmark DDC adult ticket price of \$9.00 is assumed in this scenario. The ticket prices used are in current 2008 dollars¹⁰. When developed, price inflation would be built into the actual future ticket price. As the project moves forward and the DDC plan is refined, the ticketing assumptions and pricing will need to be revisited along with assumptions regarding the use of “coupons” and discount admissions. These ticket prices are in line with the assumed product offerings, the experience of comparable facilities nationally, and with local area educational attractions.

¹⁰ See facility pricing discussion on page VII-3

Table VIII-1
Admissions Analysis
Desert Discovery Center McDowell Portal - a recreation enhancement

Per Capita Ticket Revenue					
	% to Total Attendance	Attendance By Type	Ticket Price	Achieved Per Cap	Achieved Per Cap % to Total
Adult	42.0%	46,200	\$5.00	\$2.10	63.2%
Senior	15.0%	16,500	\$4.00	\$0.60	18.1%
Youth (3-12)	20.0%	22,000	\$3.00	\$0.60	18.1%
Children (0-2)	2.0%	2,200	\$0.00	\$0.00	0.0%
Student Group	9.0%	9,900	\$1.00	\$0.09	2.7%
Members	6.0%	6,600	\$0.00	\$0.00	0.0%
Free/Complimentary ^{1/}	6.0%	6,600	\$0.00	\$0.00	0.0%
Less Coupons & Discounts @ 2%				(\$0.07)	-2.0%
Total	100%	110,000		\$3.32	100.0%
Memberships Estimates					
		Membership Types	Percent to Total	Estimated Number of Memberships	Avg. Price By Type
No. of Member Attendances	6,600	Family	92%	764	\$40
Average Annual Attendances Per Membership	8	Donor	5%	42	\$150
Est. Total Memberships	830	Sponsor	2%	17	\$250
Average Membership Fee	\$59.00	Patron	1%	8	\$1,000
Membership Revenue	\$48,970		100%	831	\$59.10
			Rounded:	830	\$59.00

1/ Includes complimentary tickets, facility rental visitors, events & programs etc.

Source: ConsultEcon, Inc.

Table VIII-2
Admissions Analysis
Desert Discovery Center Exhibition Sonora – a destination attraction

Per Capita Ticket Revenue					
	% to Total Attendance	Attendance By Type	Ticket Price	Achieved Per Cap	Achieved Per Cap % to Total
Adult	42.0%	83,160	\$9.00	\$3.78	61.5%
Senior	15.0%	29,700	\$8.00	\$1.20	19.5%
Youth (3-12)	18.0%	35,640	\$6.00	\$1.08	17.6%
Children (0-2)	2.0%	3,960	\$0.00	\$0.00	0.0%
Student Group	7.0%	13,860	\$3.00	\$0.21	3.4%
Members	10.0%	19,800	\$0.00	\$0.00	0.0%
Free/Complimentary ^{1/}	6.0%	11,880	\$0.00	\$0.00	0.0%
Less Coupons & Discounts @ 2%				(\$0.13)	-2.0%
Total	100%	198,000		\$6.14	100.0%
Memberships Estimates					
		Membership Types	Percent to Total	Estimated Number of Memberships	Avg. Price By Type
No. of Member Attendances	19,800	Family	92%	2,282	\$70
Average Annual Attendances Per Membership	8	Donor	5%	124	\$150
Est. Total Memberships	2,480	Sponsor	2%	50	\$250
Average Membership Fee	\$87.00	Patron	1%	25	\$1,000
Membership Revenue	\$215,760		100%	2,481	\$87.00
			Rounded:	2,480	\$87.00

^{1/} Includes complimentary tickets, facility rental visitors, events & programs etc.

Source: ConsultEcon, Inc.

Memberships

Memberships can be an important revenue source. Due to the scale of the Resident Market and the price of a family membership versus the price of general admissions, membership to the DDC has the potential to be substantial. Free admission with the purchase of a membership is an important economic incentive for becoming a member. This analysis assumes approximately 830 memberships in a stabilized year in the McDowell Portal - a recreation enhancement, and 2,480 memberships in the Exhibition Sonora – a destination attraction. Based on the value of the attraction and the estimated number of memberships, an average membership fee of \$40.00 per membership is estimated in current dollars in the McDowell Portal - a recreation enhancement,

and an average membership fee of \$70.00 per membership in the McDowell Portal - a recreation enhancement. This includes family and individual memberships as well as higher-level “supportive” memberships.

Data in **Table VIII-3** and **Table VIII-4** present the assumed distribution of tickets and ticket sales by type two scenarios over a five year period. Year 3 is considered the “stable year of operations. Members are assumed to enter free of charge. There is also provision made for a limited number of complimentary and VIP tickets, facility rental attendees and children under the age of 3. These are all included in the Free/Complimentary category.

Operating and Revenue Assumptions

As a cultural and educational not-for-profit destination attraction, the DDC would operate under the norms of such institutions nationally, adjusted for local conditions. Data in **Table VIII-5** summarize key operating assumptions for the DDC under the McDowell Portal - a recreation enhancement. Data in **Table VIII-6** provide these assumptions for the DDC under the Exhibition Sonora – a destination attraction.

Per capita retail sales are assumed at \$2.50 per attendee (in a stabilized year, in current dollars) for the McDowell Portal - a recreation enhancement, and \$3.50 per attendee for the DDC Exhibition Sonora – a destination attraction. Cost of Goods sold (COGS) are assumed at 52 percent of gift shop sales, which is an industry standard under both scenarios. These are relatively strong retail sales factors reflecting the strong tourism component of the audience and the good merchandising opportunities for the DDC. Food service per capita sales are assumed at \$2.50 (in a stabilized year, in current dollars) for the McDowell Portal - a recreation enhancement, for vending and light snacks likely at a DDC operated small scale food service facility. In the Exhibition Sonora – a destination attraction, a small café is assumed that provides rental income to the DDC. In addition vending and low-scale beverage and food sales at the store might yield \$1.00 per capita. Interviews with Scottsdale hospitality leadership indicate that the DDC would create a new and popular venue for business and social facility rentals. At many similar facilities nationally, facility rentals have generated considerable attendance and earned revenues. Such use would be included in the DDC operating plan and the facility program of spaces should support such use. Miscellaneous earned

revenues are assumed at 1 percent of earned revenues. These might include research fees, interest on bank accounts, advertising within the facility etc.

Table VIII-3
Attendance Distribution and Ticket Price Assumptions¹¹
Desert Discovery Center McDowell Portal - a recreation enhancement

% to Total Attendance	STABLE				
	Year 1	Year 2	YEAR 3	Year 4	Year 5
Adult	44.0%	43.0%	42.0%	42.0%	42.0%
Senior	17.0%	16.0%	15.0%	15.0%	15.0%
Youth (3-12)	20.0%	20.0%	20.0%	20.0%	20.0%
Children (0-2)	2.0%	2.0%	2.0%	2.0%	2.0%
Student Group	6.0%	7.5%	9.0%	9.0%	9.0%
Members	5.0%	5.5%	6.0%	6.0%	6.0%
Free/Complimentary ^{1/}	6.0%	6.0%	6.0%	6.0%	6.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Attendance By Type					
Adult	58,080	49,665	46,200	46,200	46,431
Senior	22,440	18,480	16,500	16,500	16,583
Youth (3-12)	26,400	23,100	22,000	22,000	22,110
Children (0-2)	2,640	2,310	2,200	2,200	2,211
Student Group	7,920	8,663	9,900	9,900	9,950
Members	6,600	6,353	6,600	6,600	6,633
Free/Complimentary ^{1/}	7,920	6,930	6,600	6,600	6,633
Total	132,000	115,500	110,000	110,000	110,550
Percentage of Adult Ticket Price					
Adult	100%	100%	100%	100%	100%
Senior	80%	80%	80%	80%	80%
Youth (3-12)	60%	60%	60%	60%	60%
Children (0-2)	0%	0%	0%	0%	0%
Student Group	20%	20%	20%	20%	20%
Members	0%	0%	0%	0%	0%
Free/Complimentary ^{1/}	0%	0%	0%	0%	0%
Achieved Per Capita Ticket Revenue					
Adult	\$5.00	\$5.00	\$5.30	\$5.30	\$5.60
Senior	\$4.00	\$4.00	\$4.20	\$4.20	\$4.40
Youth (3-12)	\$3.00	\$3.00	\$3.20	\$3.20	\$3.40
Children (0-2)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Student Group	\$1.00	\$1.00	\$1.10	\$1.10	\$1.20
Members	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Free/Complimentary ^{1/}	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Less 2% Coupons & Discounts	(\$0.07)	(\$0.07)	(\$0.07)	(\$0.07)	(\$0.08)
Per Capita Average Revenue	\$3.47	\$3.40	\$3.52	\$3.52	\$3.72

^{1/} Includes complimentary tickets, facility rental visitors, events & programs etc.
Source: ConsultEcon, Inc.

¹¹ Per capita average ticket revenue reflects mix of ticket prices based on the baseline ticket price assumptions and assumed inflation for the year under consideration as well as variations in the mix of ticket types sold.

Table VIII-4
Attendance Distribution and Ticket Price Assumptions¹²
Desert Discovery Center Exhibition Sonora – a destination attraction

% to Total Attendance	STABLE				
	Year 1	Year 2	YEAR 3	Year 4	Year 5
Adult	44.0%	43.0%	42.0%	42.0%	42.0%
Senior	16.0%	15.5%	15.0%	15.0%	15.0%
Youth (3-12)	19.0%	18.5%	18.0%	18.0%	18.0%
Children (0-2)	2.0%	2.0%	2.0%	2.0%	2.0%
Student Group	6.0%	6.5%	7.0%	7.0%	7.0%
Members	8.0%	9.0%	10.0%	10.0%	10.0%
Free/Complimentary ^{1/}	5.0%	5.5%	6.0%	6.0%	6.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Attendance By Type					
Adult	104,544	89,397	83,160	83,160	83,576
Senior	38,016	32,225	29,700	29,700	29,849
Youth (3-12)	45,144	38,462	35,640	35,640	35,818
Children (0-2)	4,752	4,158	3,960	3,960	3,980
Student Group	14,256	13,514	13,860	13,860	13,929
Members	19,008	18,711	19,800	19,800	19,899
Free/Complimentary ^{1/}	11,880	11,435	11,880	11,880	11,939
Total	237,600	207,900	198,000	198,000	198,990
Percentage of Adult Ticket Price					
Adult	100%	100%	100%	100%	100%
Senior	89%	89%	89%	89%	89%
Youth (3-12)	67%	67%	67%	67%	67%
Children (0-2)	0%	0%	0%	0%	0%
Student Group	33%	33%	33%	33%	33%
Members	0%	0%	0%	0%	0%
Free/Complimentary ^{1/}	0%	0%	0%	0%	0%
Achieved Per Capita Ticket Revenue					
Adult	\$9.00	\$9.00	\$9.50	\$9.50	\$10.00
Senior	\$8.00	\$8.00	\$8.40	\$8.40	\$8.90
Youth (3-12)	\$6.00	\$6.00	\$6.30	\$6.30	\$6.70
Children (0-2)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Student Group	\$3.00	\$3.00	\$3.20	\$3.20	\$3.40
Members	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Free/Complimentary ^{1/}	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Less 2% Coupons & Discounts	(\$0.13)	(\$0.13)	(\$0.13)	(\$0.13)	(\$0.14)
Per Capita Average Revenue	\$6.43	\$6.29	\$6.48	\$6.48	\$6.84

^{1/} Includes complimentary tickets, facility rental visitors, events & programs etc.

Source: ConsultEcon, Inc.

¹² Per capita average ticket revenue reflects mix of ticket prices based on the baseline ticket price assumptions and assumed inflation for the year under consideration as well as variations in the mix of ticket types sold.

Table VIII-5
Operations Analysis Assumptions in Current Dollars
Desert Discovery Center McDowell Portal - a recreation enhancement

General		
Project Exhibit Square Footage	6,700	
Project Total Square Footage	20,010	
Mid-Range Facility Attendance	110,000	
Use of "Free" Areas By Residents and Visitors As a Trailhead and Leisure Destination	60%	
Inflation	2.75%	
Annual Attendance Growth after Year 4	0.5%	
Admission Fees and Revenue		
Adult Ticket Price	\$5.00	
Per Capita Ticket Revenue	\$3.32	
Coupons & Discounts as a % of Per Capita Ticket Rev.	2.0%	
Ticket and Membership Price Increase % every other year	5.60%	
Retail		
Per Capita Retail Sales	\$2.50	
Cost of Goods Sold as a % of Retail Sales	50%	
Food Service		
Per Capita Food / Beverage Sales	\$2.50	^{1/}
DDC Net Proceeds from Food Service	15.0%	
Food Service Size	750	SF
Family & Individual Memberships		
Number of Family, Individual & Supportive Memberships	830	Stable Year
Average Membership Fee	\$59.00	
Annual Attendances Per Membership	8	
Facility Rentals and Receptions		
Major Rentals Per Year	10	
Target Attendance in Stable Year	1,000	Avg. 100 per event
Average Net Revenue per Rental	\$1,500	
Minor Rentals Per Year (includes birthday parties)	52	
Target Attendance in Stable Year	1,040	Avg. 20 per event
Average Net Revenue per Rental	\$175	
Other Revenue As a % of Earned Revenue	1%	

^{1/} Food service assumed to be limited menu / limited service, with a focus on serving basic visitor needs.

Source: ConsultEcon, Inc.

Table VIII-6
Operations Analysis Assumptions in Current Dollars
Desert Discovery Center Exhibition Sonora – a destination attraction

General		
Project Exhibit Square Footage	23,400	
Project Total Square Footage	52,920	
Mid-Range Attendance	198,000	
Use of "Free" Areas By Residents and Visitors As a Trailhead and Leisure Destination	50%	
Inflation	2.75%	
Annual Attendance Growth after Year 4	0.5%	
Admission Fees and Revenue		
Adult Ticket Price	\$9.00	
Per Capita Ticket Revenue	\$6.14	
Coupons & Discounts as a % of Per Capita Ticket Rev.	2.0%	
Ticket and Membership Price Increase % every other year	5.60%	
Retail		
Per Capita Retail Sales	\$3.50	
Cost of Goods Sold as a % of Retail Sales	50%	
Food Service		
Vending and Retail Shop Per Capita Food / Beverage Sales	\$1.00	^{1/}
DDC Net Proceeds from vending & store food sales	25.0%	
Food Service Size	2,600	SF ^{2/}
Restaurant Lease Rate Per SF	\$30.00	^{2/}
Family & Individual Memberships		
Number of Family, Individual & Supportive Memberships	2,480	Stable Year
Average Membership Fee	\$87.00	
Annual Attendances Per Membership	8	
Facility Rentals and Receptions		
Major Rentals Per Year	15	
Target Attendance in Stable Year	3,000	Avg. 200 per event
Average Net Revenue per Rental	\$3,000	
Minor Rentals Per Year (includes birthday parties)	120	
Target Attendance in Stable Year	3,000	Avg. 25 per event
Average Net Revenue per Rental	\$400	
Other Revenue As a % of Earned Revenue	1%	

1/ Limited vending and beverage / snacks available in gift shop. Other food provided by café.

2/ 3 year term increased at inflation For 2nd term

Source: ConsultEcon, Inc.

Earned Revenue Potential

The DDC has substantial earned revenue potential from admissions, memberships, gift shop, café, facility rentals and miscellaneous sources under the two scenarios. The DDC Exhibition Sonora – a destination attraction, as a larger destination attraction has considerably higher earned revenue potential, but in turn it is larger and would have higher operating costs. Data in **Table VIII-7** summarize earned revenue potential for the DDC under the McDowell Portal - a recreation enhancement. Data in **Table VIII-8** summarize earned revenue potential for the DDC under the Exhibition Sonora – a destination attraction. Under the assumptions of this analysis under the McDowell Portal - a recreation enhancement, has \$.63 million in earned revenue potential in a stabilized year, in 2008 dollars; the Exhibition Sonora – a destination attraction, the DDC has \$2.01 million in earned revenue potential.

Table VIII-7
Earned Revenue Potential
Desert Discovery Center McDowell Portal - a recreation enhancement

	YEAR 1	YEAR 2	STABLE YEAR 3	YEAR 4	YEAR 5	Att. (in current dollars)	Percent to Total
TOTAL ATTENDANCE	132,000	115,500	110,000	110,000	110,550	110,000	
Per Capita Ticket Revenue	\$3.47	\$3.40	\$3.52	\$3.52	\$3.72	\$3.34	
REVENUE							
Earned Revenues							
Ticket Revenue	\$457,934	\$392,203	\$387,541	\$387,541	\$411,688	\$367,074	58.7%
Membership Attendance	6,600	6,353	6,600	6,600	6,633	6,600	1.1%
Individual & Family Memberships	830	790	830	830	830	830	0.1%
Average Membership Fee	\$59.00	\$59.00	\$62.00	\$62.00	\$65.00	\$59.00	0.0%
Family Membership Revenue	\$48,970	\$46,610	\$51,460	\$51,460	\$53,950	\$48,970	7.8%
Retail Net of COGS	\$165,000	\$148,345	\$145,166	\$149,159	\$154,027	\$137,500	22.0%
Food Service Net	49,500	44,504	43,550	44,748	46,208	41,250	6.6%
Facility Rental	24,100	24,763	25,444	26,143	26,862	24,100	3.9%
Miscellaneous Revenue	7,455	6,564	6,532	6,591	6,927	6,189	1.0%
TOTAL EARNED REVENUE	\$752,959	\$662,989	\$659,693	\$665,641	\$699,663	\$625,083	100.0%

NOTE: Year 1 is in current dollars.
Source: ConsultEcon, Inc.

Table VIII-8
Earned Revenue Potential
Desert Discovery Center Exhibition Sonora – a destination attraction

	YEAR 1	YEAR 2	STABLE YEAR 3	YEAR 4	YEAR 5	Att. (in current dollars)	Percent to Total
TOTAL ATTENDANCE	237,600	207,900	198,000	198,000	198,990	198,000	
Per Capita Ticket Revenue	\$6.43	\$6.29	\$6.48	\$6.48	\$6.84	\$6.13	
REVENUE							
Earned Revenues							
Ticket Revenue	\$1,527,483	\$1,307,005	\$1,282,216	\$1,282,216	\$1,360,976	\$1,214,500	60.2%
Membership Attendance	19,008	18,711	19,800	19,800	19,899	19,800	1.0%
Individual & Family Memberships	2,380	2,340	2,480	2,480	2,490	2,480	0.1%
Average Membership Fee	\$87.00	\$87.00	\$92.00	\$92.00	\$97.00	\$87.14	0.0%
Family Membership Revenue	\$207,060	\$203,580	\$228,160	\$228,160	\$241,530	\$216,110	10.7%
Retail Net of COGS	\$415,800	\$373,830	\$365,820	\$375,880	\$388,147	\$346,500	17.2%
Food & Beverage Sales / Vending	59,400	53,404	52,260	53,697	55,450	49,500	2.5%
Café Lease Revenue	78,000	78,000	78,000	84,614	84,614	78,000	3.9%
Facility Rental	93,000	95,558	98,185	100,885	103,660	93,000	4.6%
Miscellaneous Revenue	23,807	21,114	21,046	21,255	22,344	19,196	1.0%
TOTAL EARNED REVENUE	\$2,404,550	\$2,132,491	\$2,125,688	\$2,146,707	\$2,256,720	\$2,016,807	100.0%

Source: ConsultEcon, Inc.

Data in **Table VIII-9** provide the operating revenue potential comparison for the DDC for a stable year under the two scenarios. Again, it should be noted that they represent very different initial capitalization requirements and different ongoing operating costs. The Exhibition Sonora – a destination attraction has higher development and ongoing operating costs but also has higher attendance potential and earned revenue potential than the McDowell Portal - a recreation enhancement.

Contributed, Endowment and Other Revenues

The DDC under any development scenario will require supplemental revenues from contributed revenue sources such as gifts, grants and endowments. Sources of contributed revenues might include corporate, foundation government sources as well as private and individual philanthropy. The additional non-earned revenue amounts needed for the DDC will depend on the operating profile established and the facility design.

Table VIII-9
Comparison of Earned Revenue Potential for Mid-Range Attendance Pattern
Desert Discovery Center Scenarios

	McDowell Portal - a recreation enhancement	Exhibition Sonora - a destination attraction
Project Exhibit Square Footage	6,700 SF	23,400 SF
Project Total Square Footage	20,010 SF	52,920 SF
TOTAL ATTENDANCE	110,000	198,000
Per Capita Ticket Revenue	\$3.32	\$6.14
Revenue		
Admission Revenues	\$367,074	\$1,214,500
Membership Revenues	48,970	216,110
Other Earned Revenues	209,039	586,196
Self-Generated Revenue	\$625,083	\$2,016,807
Contributed Revenue	\$0	\$0
Total Revenue	\$625,083	\$2,016,807

Source: ConsultEcon, Inc.

Earned Revenue Potential Summary

As conceived, the DDC will be a state-of-the-art desert interpretive center that will offer high-quality multimedia exhibits, educational programs, and will introduce the McDowell Sonoran Preserve. It will have outstanding visitor amenities that will be appreciated by residents and tourists alike. As such it will serve both Scottsdale residents and visitors. Based on these attributes, the initial project description and attendance analysis indicates substantial operating revenue potential. This evaluation of the DDC's earned revenue potential provides guidance to subsequent planning and refinement of the physical plan and program of spaces; the funding plan as well as the operating plan. In order to achieve its potential the DDC must be aggressively promoted and competently operated, and receive full community support in the public and private sectors. This is a baseline earned revenue analysis that can and should be continually refined as the project moves forward. Earned revenues at a facility of this type typically cover a substantial portion of facility operating costs. For virtually all such facilities non-earned revenues are needed. These might include private donations, gifts and grants, endowment proceeds, corporate support, gifts-in-kind and

governmental support. Each institution has its unique circumstances and revenue mix. In the case of the DDC, the earned revenues can be substantial given the project's scale and proposed operating profile. However, the DDC will also require substantial non-earned revenues from some or all of the types identified, in order to operate successfully and to provide its potential community and economic benefits and its contributions to conservation and desert ecology public awareness and education.

Memorandum

To: Kathy O'Connor, Bob Cafarella
From: ConsultEcon, Inc., EDA
Date: May 19, 2008
RE: Project Planning and Decision-making- Recommended Next Steps

1. Project Leadership

Form private sector steering committee- Project Leadership, to spearhead the process to complete required next steps including refining the concept and forging the public/private partnership needed to successfully bring about the Desert Discovery Center

2. Professional Staffing

Engage professionals to undertake subsequent planning steps and to create an operational structure for the DDC

3. Concept Refinement

Refine optional DDC scenarios as presented in this report to include exhibits, visitor experience, building size and design opportunities, site plan and operations plans as well as corresponding capital costs and ongoing operating costs:

- ◆ Preliminary exhibit concept plans for two optional scenarios in cooperation with architectural consultants
- ◆ Alternative site plans for two optional scenarios
- ◆ Refined DDC program of spaces for two optional scenarios based on initial architectural input and concepts

4. Performance Amphitheater

Evaluate on a separate track from DDC planning through a broad community process the desirability and feasibility of locating an outdoor amphitheater in the Gateway

5. Operating and Business Plan

Prepare operating plans for two optional DDC scenarios:

- ◆ Refined attendance revenue estimates based on refined optional DDC scenarios
- ◆ Preliminary operating plans for two optional scenarios including personnel, marketing, operating expenses, and operating pro forma
- ◆ Evaluate project economic impacts and community benefits

6. Capital Cost Analysis

Refine capital cost analysis based on:

- ◆ Architects' and landscape architects' site and building cost estimates for two optional scenarios
- ◆ Exhibit design/fabrication/installation cost estimates for two optional scenarios by exhibit designer
- ◆ Pre-opening and organizational ramp-up costs for two optional scenarios as prepared by business planner

7. Fundraising Capacity

Project leadership in conjunction with community to evaluate funding capacity (possibly with assistance of fund raising counsel):

- ◆ Investigate fund raising capacity for project development
- ◆ Investigate ongoing operating support options from various public and private sources

8. Select Preferred DDC Scenario

City Council and Project Leadership to choose preferred DDC scenario based on the refined options, economic and community benefits of the options, project capital and ongoing costs, and community resources and preferences

9. Project Leadership to Engage Fundraising Counsel if not already Engaged

10. Final Planning and Construction

Project Leadership to continue to involve community and engage design team to finalize planning of the preferred DDC scenario:

- ◆ Hire DDC staff needed for final planning and construction phase
- ◆ Begin and undertake capital campaign
- ◆ Refine exhibits, building and site plans moving in subsequent phases of work to design documents
- ◆ Refine business plan
- ◆ Undertake approvals process

11. DDC Construction

12. DDC Opening

DRAFT

Appendix A

WORKSHOP #1 INPUT USED IN DEVELOPING STATEMENTS OF SIGNIFICANCE AND THE DESERT DISCOVERY CENTER EXPERIENCE

Representatives of a variety of local agencies and organizations participated in the December, 2007 Workshop #1. Following is a list of attendees.

Attendees:

- ◆ Lynn Beattie, McDowell Sonoran Conservancy (MSC)
- ◆ Ruthie Carll, MSC
- ◆ Brent DeRaad, Scottsdale Convention and Visitors Bureau
- ◆ Bill Eider Orley, Resident
- ◆ Carla, Resident
- ◆ Dan Gruber, MSC
- ◆ Brent Herrington, DMB
- ◆ Melinda Gulick, McDowell Sonoran Preserve Commission
- ◆ Rick Kidder Scottsdale Chamber of Commerce
- ◆ Linda Milhaven, Wells Fargo Bank
- ◆ Tom Morrow, Tourism Development Commission (TDC)
- ◆ Zante Skjelford, Scottsdale Community College Center for Nature and Urban Wildlife (CNUW)
- ◆ Mike Surguine, TDC
- ◆ BJ Tatro, MSC
- ◆ Bob Vairo, Resident
- ◆ Nancy Vaughn, Scottsdale Unified School District
- ◆ Jeff Williamson, The Phoenix Zoo

Observing the workshop were: Kathy Carlisle O'Connor and Robert Cafarella, City of Scottsdale.

The workshop was an all-day charrette that commenced with a plenary session discussion regarding resource significance. A second plenary session focused on the DDC's target audience. The group broke into smaller groups for a working lunch at which three topics were addressed:

- ◆ Attributes of the DDC experience
- ◆ DDC's role in environmental education
- ◆ The WOW! factor.

The working group reconvened in plenary session after lunch, heard reports from each breakout group, and concluded with a discussion of next steps.

The Workshop #1 survey instrument focused on two areas: the role of the DDC in the community, and prioritization of interpretive topics. Respondents were asked to rate the relative importance of various roles the DDC might play on a five -point scale (1=least important, 5=most important). The results of that section of the survey are provided by data in **Appendix Table 1**.

Appendix Table 1
Desert Discovery Center
Relative Importance of DDC's Role in the Community (Workshop #1)

Role	Mean Response (n=18)
Create memorable experiences for Scottsdale residents	4.39
Create memorable user experiences for Scottsdale visitors	4.35
Provide environmental education for schoolchildren	4.29
Preserve the resources of the MSP by teaching conservation ethics and fostering individual stewardship	4.22
Interpret the natural communities and ecological dynamics of the MSP	4.17
Provide environmental education for adults	3.89
Facilitate low-impact recreational use of the MSP	3.83
Interpret the cultural history of the MSP; tell its stories	3.83
Broaden the spectrum of recreational learning opportunities in Scottsdale	3.11
Provide a unique venue for a variety of special events such as concerts, weddings, lectures & festivals	3.03

Source: Exhibit Design Associates, Inc.

Answers to Open-Ended Questions
Workshop #1 Survey

The DDC will be most successful if:

- 1) It is a venue for very worthwhile experiences that enrich our lives.*
- 2) It succeeds in communicating the story of the Sonoran Desert in such a way that visitors leave the DDC with a commitment to preserving the Desert.*
- 3) It spoke for the tourist and the resident. It must be a facility that is attractive to a broad audience; celebrating the natural environment as well as the cultural environment. The residents of this community deserve to have a venue that they use and want to bring their guests and family.*
- 4) It is a fun experience for the visitor and not just a skeleton operation serving the Preserve. It should be its own attraction.*
- 5) no response*
- 6) It can draw repeat visitors.*

- 7) *It provides an exciting and user friendly venue for residents and visitors to understand the wonders of the desert and its history. It would be helpful if residents and visitors could have this experience in some interactive way as they move around and through the DDC.*
- 8) *It provides a truly memorable experience to a wide range of audiences.*
- 9) *It is interesting & exciting for children & families to visit.*
- 10) *Does whatever it decides to do, well. Focuses on education and creating excitement through immersive experiences. Is bold and innovative.*
- 11) *Provides an authentic experience that facilitates appreciation of and support for the MSP.*
- 12) *We think big! It must be a regional & tourist draw.*
- 13) *The DDC serves to communicate how our residents adapt to this environment.*
- 14) *It is a distinctive suite of engaging experiences that motivate caring about place.*
- 15) *It increases in a meaningful way Sonoran Desert awareness and appreciation among the residents and visitors of the City of Scottsdale, Arizona. The DDC has a unique opportunity to educate the public on the importance of Sonoran Desert Biodiversity and the need and methods to help preserve it.*
- 16) *It is sustainable – from an economic and vitality/interest standpoint and it serves to inspire residents, visitors and especially children to love and protect nature – while always respecting the mission and purpose of the Preserve – DO NOT LOVE IT ALL TO DEATH!! (Please!!!!!!)*
- 17) *It is relevant and meaningful.*
- 18) *no response*

I would be disappointed if the DDC:

- 1) *Does not meet our expectations but we do have to fund it and must keep it to a realistic amount.*
- 2) *Became commercialized.*
- 3) *no response*
- 4) *Is only a minimal concept. It has to have some WOW factors.*
- 5) *no response*
- 6) *Becomes too commercial.*
- 7) *Became a commercialized venue that would alienate residents and visitors from returning or promoting the DDC through word of mouth based on their experiences.*
- 8) *If we don't realize the possibilities for creating a world-class asset for the City of Scottsdale.*
- 9) *Does not include "hands-on" activities for children.*
- 10) *Is mediocre. Is so constrained in scale, quality and ambition that it is not a worthwhile addition to Scottsdale. Tries to encompass too many themes and ends up being superficial.*
- 11) *Were commercialized and lacked an educational focus.*
- 12) *no response*
- 13) *Does not follow through on its mission.*
- 14) *Was just another superficial desert encounter, or formal place of instruction?*

- 15) *Used and/or overemphasized human centered themes (“cowboy culture”, “cultural history”) instead of plant and animal centered themes and ecological process (pollination, predation, competition, etc.).*
- 16) *Turned into a clubhouse for MSC.*
- 17) *Focused on topics without the last chapter of the book is about action. Also – if the DDC tried to be everything to everyone – it won’t serve anyone well.*
- 18) *no response*

The most significant mistake that could be made with the DDC from a content, function or activity perspective would be:

- 1) *Not being a true Scottsdale enriching experience.*
- 2) *Creating something artificial. Not staying true to theme - the theme being: Discovering the Sonoran Desert*
- 3) *Limit the footprint that would limit the educational and community uses.*
- 4) *Not to take advantage of the potential the DDC has to be a visitor destination in its own right.*
- 5) *Any degradation of the Preserve concept by the nature or operation of the DDC.*
- 6) *If its management/operations fall into the hands of those who do not know the preserve.*
- 7) *To ignore the above observations.*
- 8) *To forget that, if it is to be successful financially, it must appeal to and provide experiences that will attract a much larger share of the population than can access the MSP itself.*
- 9) *no response*
- 10) *Is static and boring. Duplicates information and activities available elsewhere. Relies on wizardry or inauthentic experiences to create excitement.*
- 11) *To do damage to the MSP.*
- 12) *no response*
- 13) *Making consensus our objective. While this is a project that is community based, there is the danger that the city will weigh in heavily on process & not necessarily on what will best impact the community.*
- 14) *Avoid traditional cultural paradigm. Don’t show, teach, or tell – engage, involve & allow for the evolution of the experience. Plan to serve audiences in 2025 & 2050, not today.*
- 15) *Not adequately or effectively explaining to DDC visitors the importance of the McDowell Sonoran Preserve.*
- 16) *To not leverage the natural treasure that is the Preserve – it doesn’t need to be replicated but the experience “heightened” and shared. 2) To let one group run this process or the DDC to the point where the whole community does not feel ownership. This was not meant to the MSC’s private empire building exercise but to help tourism, students, residents and us all experience the Preserve!! (and celebrate)*
- 17) *too expensive to have repeat experiences and duplicate the efforts of other local destinations*
- 18) *no response*

Additional Comments Submitted

The DDC will need to find ways to make residents & visitors return-again and again

Clearly differentiate between education of the public and student by state curriculum. Define “education” so all have a common understanding of what “education” means (re: DDC).

The DDC should have a narrow focus on nature.

Special interests (development and commercial) may have an impact on the DDC.

I once saw an exhibit that was 365 photographs in order of the same site at the same time of day. It was fascinating to see the change in light, weather, vegetation.... Cool.

(In reference to the topics in general): With the exception of Local Art History and Post 1900’s History of Scottsdale, all the following topics are important to creating an understanding of the Sonoran Desert, and none are mutually exclusive.

(In reference to the topic of Native American Culture [Past and Present]): In the context of how it has adapted to living in the Sonoran Desert

(In reference to the topic of Recent [post-1900] History of the Scottsdale Area): I would rank this subject matter as more important if it focused on how the explosive growth of this area has impacted the Sonoran Desert. That is, higher daytime high and nighttime low temperatures, deterioration in air quality, water supply concerns, loss of wildlife habitat, etc.

(In reference to interpreting the cultural history of the MSP; telling its stories): there should be a small permanent part that tells the true story of how the Preserve came to be BEFORE folks rewrote that history

(In reference to the topics in general and which additional topics might be included): sustainability

Climate variation; rapid urbanization & the intersection where humans & natural systems merge.

Sonoran Desert Biodiversity/why its preservation is important

Nature Preserve Design/what factors, conditions, etc. should be considered in Nature Preserve Design, Development and Management.

Reptiles & Amphibians of the MSC

What the Beauty of Nature Brings to Our Lives

Not just what people say they want – we need to be visionary and think what they would say in 2050 with hindsight.

I once saw an exhibit that was 365 photographs in order of the same site at the same time of day. It was fascinating to see the change in light, weather, vegetation.... Cool.

DRAFT

***Desert Discovery Center Concept Workshop
Participant Survey***

Many thanks for your participation in the workshop. We know that your time is valuable, and sincerely appreciate your contribution to the planning process and the Scottsdale community. Information obtained through this survey will be used to help the project team evaluate and prioritize target audiences and interpretive themes.

*The Desert Discovery Center has the potential to play multiple roles within the Scottsdale community. Please indicate how you feel about the relative importance of its possible roles.
(1=least important, 5=most important)*

Provide environmental education for schoolchildren

() () () () ()
1 2 3 4 5

Create memorable user experiences for Scottsdale visitors

() () () () ()
1 2 3 4 5

Facilitate low-impact recreational use of the McDowell Sonoran Preserve (MSP)

() () () () ()
1 2 3 4 5

Interpret the natural communities and ecological dynamics of the MSP

() () () () ()
1 2 3 4 5

Provide a unique venue for a variety of special events such as concerts, weddings, lectures and festivals

() () () () ()
1 2 3 4 5

Preserve the resources of the MSP by teaching conservation ethics and fostering individual stewardship

() () () () ()
1 2 3 4 5

Interpret the cultural history of the MSP; tell its stories

() () () () ()
1 2 3 4 5

Provide environmental education for adults

() () () () ()
1 2 3 4 5

Broaden the spectrum of recreation learning opportunities in Scottsdale

()	()	()	()	()
1	2	3	4	5

Create memorable experiences for Scottsdale residents

()	()	()	()	()
1	2	3	4	5

*Please indicate your opinion on the relative importance of the topics listed below to the development of interpretive themes to guide the design of exhibits and programs.
(1=least important, 5=most important)*

Human Impacts on the Landscape

()	()	()	()	()
1	2	3	4	5

Archaeology

()	()	()	()	()
1	2	3	4	5

Sustainability of Daily Lifestyles (How to Live Green)

()	()	()	()	()
1	2	3	4	5

Geology

()	()	()	()	()
1	2	3	4	5

Wildlife

()	()	()	()	()
1	2	3	4	5

The Unseen World (Micro Flora & Fauna)

()	()	()	()	()
1	2	3	4	5

Animal Adaptations

()	()	()	()	()
1	2	3	4	5

Sky Island Ecology

()	()	()	()	()
1	2	3	4	5

Sonoran Desert Ecology

()	()	()	()	()
1	2	3	4	5

Social and Ecological Tension on the Urban/Wildland Interface

() () () () ()
1 2 3 4 5

Cultural Geography (Human Use of the Land)

() () () () ()
1 2 3 4 5

Forces of Change in the Natural World

() () () () ()
1 2 3 4 5

Native American Culture (Past and Present)

() () () () ()
1 2 3 4 5

Plant Adaptations

() () () () ()
1 2 3 4 5

Water

() () () () ()
1 2 3 4 5

Plants of the Sonoran Desert

() () () () ()
1 2 3 4 5

Paleontology

() () () () ()
1 2 3 4 5

Safety in the Sonoran Desert

() () () () ()
1 2 3 4 5

Mining/Minerals of the Sonoran Desert

() () () () ()
1 2 3 4 5

Soils/Life Beneath the Surface

() () () () ()
1 2 3 4 5

Recent (post-1900) History of the Scottsdale Area

() () () () ()
1 2 3 4 5

Local/Regional Art History

() () () () ()

1	2	3	4	5
Effects of Extreme Climates on Cultural Development				
() 1	() 2	() 3	() 4	() 5
Birds of the MSP				
() 1	() 2	() 3	() 4	() 5
Landscape Plants for Homes in the Sonoran Desert				
() 1	() 2	() 3	() 4	() 5
Alternative Energy Sources				
() 1	() 2	() 3	() 4	() 5
Post-EuroAmerican Settlement Culture ("Cowboy Culture")				
() 1	() 2	() 3	() 4	() 5
Sustainable Architecture & Building Techniques				
() 1	() 2	() 3	() 4	() 5
Astronomy/Star-Gazing				
() 1	() 2	() 3	() 4	() 5
Desert Microclimates				
() 1	() 2	() 3	() 4	() 5
Insects of the Sonoran Desert				
() 1	() 2	() 3	() 4	() 5

Are there any other topics or themes that you feel are important to consider as part of the planning process? Please list them below, and feel free to add any other comments. If you can make the time, will you also complete the sentences below?

The DDC will be most successful if _____

I would be disappointed if the DDC _____

The most significant mistake that could be made with the DDC from a content, function or activity perspective would be_____

Thanks again for your time and your input, is it highly valued. If you do not have the opportunity to return this survey by hand to a representative of either Exhibit Design Associates or ConsultEcon at the December 5 workshop, it can be mailed to the EDA project manager, Biff Baird, at 1269 Chasm Drive, Estes Park, CO 80517 or e-mailed to biff@exhibitdesignassociates.com.

Appendix B

WORKSHOP INPUT USED IN DEVELOPING INTERPRETIVE THEMES

Respondents to the Workshop #1 (December 2007) survey were also asked to rank various possible interpretive topics by their relative importance on a five-point scale (1=least important, 5=most important). The results of the second section of the Workshop #1 survey are provided by data in **Appendix Table 2**

Appendix Table 2
Desert Discovery Center
Possible Interpretive Topic Rankings (Workshop #1)

Topic	Mean Response (n=18)
Wildlife	4.56
Sonoran Desert Ecology	4.56
Plants of the Sonoran Desert	4.50
Water	4.39
Animal Adaptations	4.33
Birds of the MSP	4.06
Insects of the Sonoran Desert	4.06
Social & Ecological Tension on the Urban/Wildland Interface	4.00
Human Impacts on the Landscape	3.94
Forces of Changes in the Natural World	3.89
Plant Adaptations	3.89
Native American Culture (Past & Present)	3.83
Desert Microclimates	3.83
Geology	3.78
Unseen World (Micro Flora & Fauna)	3.78
Cultural Geography (Human Use of the Land)	3.78
Archaeology	3.72
Sustainability of Daily Lifestyles	3.50
Soils/Life Beneath the Surface	3.50
Safety in the Sonoran Desert	3.33
Sustainable Architecture & Building Techniques	3.33

Topic	Mean Response (n=18)
Effects of Extreme Climates on Cultural Development	3.28
Paleontology	3.22
Mining/Minerals of the Sonoran Desert	3.17
Astronomy/Star-Gazing	3.17
Landscape Plants for Homes in the Sonoran Desert	3.06
Alternative Energy Sources	3.06
Sky Island Ecology	3.00
Local/Regional Art History	2.56
Recent (post-1900) History of the Scottsdale Area	2.50
Post-Euroamerican Settlement Culture ("Cowboy Culture")	2.28

Source: Exhibit Design Associates, Inc.

Appendix C

INPUTS USED IN DEVELOPING STRATEGIC RECOMMENDATIONS

Possible Strategic Recommendations for Development of the DDC infrastructure As Developed After Workshop #1

An additional output of the December 2007 workshop plus the initial interviews and market analysis process was a set of possible strategic recommendations for development of the DDC infrastructure and visitor experience for further testing and discussion. These possible strategic recommendations as presented below were refined during the second workshop and rounds of testing.

1. First: Do No Harm

Developing facilities with zero environmental impact is not possible. But maintaining focus on limiting development (and eventually containing a high proportion of visitor use) within a strictly-defined development area should be an absolute priority.

2. Create a Distinctive, Place-Identified Brand

Both Scottsdale and the Sonoran Desert are unique. The phrase “Desert Discovery Center” fails to capture that. Name the facility something that, at a minimum, creates a region-specific identity. Try to use the word “Scottsdale.”

3. Focus on Natural History and Ecology...

...with a central theme of adaptation. Do one thing, do it well. View the interpretation of human cultures through the lens of adaptation to environment. Phoenix already has a museum interpreting Native American culture, a botanical garden and a zoo. Scottsdale already has an art museum. Facilities interpreting cowboy culture (Museum of the West) and architecture (joint project between the Frank Lloyd Wright Foundation and Guggenheim Museum) are proposed. In the words of Dizzy Dean: “Hit it where they ain’t.”

4. Reach Out to the Local Community, Early and Often

Many Scottsdale residents were visitors first, who liked what they experienced and eventually chose the Scottsdale lifestyle fulltime. Although visitors are a critical target market, the DDC will not thrive without robust local support. This criterion implies a nimble management approach with dynamic programming and lots of space for changing exhibits that stimulate repeat local visitation. Community-focused programming such as day camps for kids and a robust environmental education outreach is a critical part of this vision.

5. What's the WOW!?

◆ **It's the Landscape of the McDowell Sonoran Preserve Itself**

A primary objective should be the encouragement (and facilitation) of low-impact recreation on the Preserve trail system. Buildings should be low-profile to allow visual connection to the landscape. *Enjoyable, safe outdoor experiences help visitors understand and appreciate the value of the lands their tax dollars help to protect.*

◆ **The WOW! is the Built Environment Too**

Do not be afraid to go "Hollywood." There is no reason why facilitation of outdoor recreational experiences has to be mutually exclusive from using cool exhibits to entertain, educate and inspire. Just because an exhibit experience might be labeled by some as "not authentic" because it does not take place on the landscape does not mean it is not honest or meaningful.

6. Dig. Go Down

For example: build an underground theatre as one of the WOW!'s. Create a talisman, an icon, with cutting-edge architecture and engineering that allows visitors to enter the earth in much the same way desert animals burrow to survive climatic extremes.

7. Be a National Leader...

...in the treatment of nature deficit disorder. Make programming for kids and creating opportunities for nature-based free play the highest priority. Strive to build the strongest possible ties with local school districts by providing not only a setting for environmental education, but also curriculum materials and logistical support.

8. Don't be a Zoo

But remember that wildlife is a huge attraction and potent emotion-generator. Look to partners to provide wildlife demonstrations, use remote cameras to bring animals inside in real-time and consider innovative exhibitry that displays small live animals (bugs, for instance) in ways that create memorable visitor experiences.

9. Involve Local Kids in Planning

Conduct focus groups composed of local schoolchildren (at the elementary, middle and high school levels) to get input on exhibit and program concepts.

10. Size Matters!

◆ **A large amphitheatre should be a part of the DDC vision.**

A performing arts venue with capacity of up to 1500 people should be an integral part of the DDC facility. The experience of acoustic performances in a scenic outdoor setting will make an important contribution to the suite of activities available to Scottsdale residents and visitors.

♦ **A Large Amphitheatre Should Not be a Part of the DDC Vision.**

The DDC can achieve its preservation/education objectives without such a venue. The problems of parking, noise and traffic make a strong case against a large amphitheatre. But facilities to accommodate up to 200-300 people for weddings, corporate parties and so forth should be available upon rollout, because a special-events revenue stream is needed (60% of Scottsdale visitors are in a group of some sort).

11. Be the Halo...

...that floats over the “best of the best” that the Phoenix metro area has to offer. Build partnerships with the Heard Museum, Taliesin West, Phoenix Zoo, Desert Botanical Garden and Arizona Science Center by providing temporary exhibit space and hosting programs. Staying thematically-focused on adaptation will create the synergy of a complementary, not competitive, experience.

12. Support Science...

...on every possible level, including everything from sponsoring formal academic research to offering programs that allow amateur scientists, volunteers and students to participate in field research and digs.

13. Go Green

Structures should be built to the highest possible LEED standards (platinum).

14. Build the “Commons”

Many times during the course of preliminary research, words like “linger, congregate, gather and hangout” were heard. Whether exterior (gardens, patio, playground) or interior (internet café, coffee shop, bookstore, library, great room), it will be important to provide spaces that invite visitors to spend time in a setting that encourages a feeling of community, shared ownership and personal belonging. If successful, many local residents may be stimulated to buy annual passes/memberships for casual access (i.e. to meet friends for coffee and a walk).

15. Exploit Fear

People’s fear of the desert can be turned into a WOW! factor by using typical fear-generators (snakes, scorpions, bats, bugs) as major, even iconic, exhibit/architectural features. Gigantic, larger-than-life sculptures big enough for people to enter could function at once as art objects, teaching tools and vehicles to demystify the animal and empower the visitor through understanding.

16. Think Summer

Providing an extensive suite of inside (or morning/evening) summer activity options could endear the DDC to the local community and help boost summer tourism. In addition to multimedia offering such as films, summer day camps targeted at local youth would probably be well-attended (parents in desert climates are often challenged to find summer activities for their kids for obvious

reasons). Some local resorts have successfully increased summer occupancy rates by building water parks and targeting the family market. Some of the concierges who were interviewed noted though, that kids get bored after a few hundred times down the water slide, and that alternatives to pool-related activities would probably be welcomed by summer guests.

17. Blur the Line Between Inside And Outside

To accommodate different types of groups (doing different things) throughout the year, and to encourage repeat local visitation, a high degree of flexibility in spaces is desirable (i.e. patio space that can be cooled in summer and warmed in winter through the use of adjustable shade structures and moveable walls).

18. Be Entrepreneurial, Not Commercial

Nobody wants Starbucks and McDonalds. Everybody wants revenue. A quality, mid-range food service (i.e. bakery/coffeehouse/deli) is acceptable to most stakeholders, and so is a bookstore/gift shop. Gift shops at similar locations in the Southwest generate huge per-square-foot revenues by focusing on marketing items designed by local artists (i.e. t-shirts with graphics). The executive director's job description might include something along the lines of "impresario of tasteful marketing."

19. Sell Planet Scottsdale

It is vital that the DDC be perceived by its management as part of the "Scottsdale experience," which already has considerable cachet and significant market appeal. A permanent exhibit to provide information on other Scottsdale experiences should be prominent in the exhibit mix. This might be integrated with the "desert concierge" function by creating something along the lines of an upscale "guide shack" where visitors could get information, hire outfitters, rent/buy equipment and so forth.

Appendix D

TESTING PROCESS AND RESULTS FOR INTERPRETIVE THEMES, STRATEGIC RECOMMENDATIONS AND POTENTIAL ROLE FOR THE DESERT DISCOVERY CENTER

The interpretive themes, strategic recommendations and potential roles for the DDC in the community were refined and tested along with the prototypical exhibit concepts at workshop #2 and a public open house held on March 7-8, 2008, in Scottsdale. The workshop was held at Chaparral Suites Resort, and the open house was held at Brett's Barn in WestWorld. This section presents the results of that testing process. A copy of the survey instrument that was used to gather input at both the workshop and open house can be found in **Appendix E**.

The March 8 workshop was attended by most of the stakeholders who participated in the first workshop in December, with several additional invitees. Following is a list of attendees.

Attendees:

- ◆ Lynn Beattie, MSC
- ◆ Ruthie Carll, MSC
- ◆ Brent DeRaad, SCVB
- ◆ Dan Gruber, MSC
- ◆ Melinda Gulick, DMB
- ◆ John Holdsworth, TDC
- ◆ Frank Jacobson, Resident
- ◆ Virginia Korte, Retired Scottsdale Chamber of Commerce, President & CEO
- ◆ Linda Milhaven, Wells Fargo Bank
- ◆ Tom Morrow, TDC
- ◆ Bill Eider-Orley, Retired Hotelier
- ◆ Tom Silverman, DDC Taskforce
- ◆ Zanthé Skjelford, CNVW
- ◆ Mike Surguine, TDC
- ◆ Dan Tavrytzky, SCVB
- ◆ BJ Tatro, MSC
- ◆ Bob Vairo, Resident

Observing the workshop were: Kathy Carlisle O'Connor and Robert Cafarella, City of Scottsdale.

Strategic Recommendations Survey Instrument and Results

The first part of the morning session of the March workshop was devoted to a discussion of the strategic recommendations, during which the workshop participants assigned numerical rankings to possible strategic recommendations. Respondents ranked the concepts on a five-point scale

(1=strongly disagree, 2=somewhat disagree, 3=neutral, neither agree nor disagree, 4=somewhat agree, 5=strongly agree) and provided written comments. Data in **Appendix Table 3** presents the results of the survey of strategic recommendations ranked in order from those that received the highest ratings to those that received the lowest.

Appendix Table 3
March 7 Workshop
Strategic Recommendations Ratings and Comments

Recommendation	Mean Response (n=16) 1=strongly disagree, 3=neutral, 5=strongly agree	Notes & Comments
Reach out to the local community, early and often.	5.0	Several respondents emphasized the importance of changing exhibits; one suggested that changing exhibits should be a higher proportion of total exhibit space.
What's the WOW!? b. The WOW! is the built environment, too.	5.0	Nearly one-third of all respondents crossed out the phrase "Do not be afraid to go Hollywood."
Go green.	4.93	Suggestions included partnering w/ Frank Lloyd Wright foundation and making the building itself part of the educational experience. Concerns over increased construction costs were expressed.
Build the "commons."	4.80	Concern was expressed over people having to pay admission to access common areas, retail and food service amenities.
Blur the line between inside and outside.	4.80	Seamless integration between the interior and exterior aspect of the visitor experience was emphasized.
Don't be a zoo.	4.67	Although most respondents agreed that displaying live mammals was not appropriate, there was consensus that placing cameras at watering stations to allow remote viewing was a good idea. Suggestions for an insectarium, aviary and display of low-maintenance live reptiles were made.
Be entrepreneurial, not commercial.	4.67	Very little opposition to a modest level of tasteful commercial development was evident, but any sort of franchise operation would probably not be supported.
Dig. Go down.	4.63	Respondents were positive about linking architecture and the interpretive theme of adaptation.
Focus on natural history and ecology... with a central theme of adaptation.	4.56	Positive response to this recommendation reflects the preferences expressed in the first workshop survey for topics related to natural history.
Be a national leader.....in the treatment of nature deficit disorder.	4.53	Nearly one-third of respondents objected to making this the "highest" priority, and several emphasized focusing not just on local kids, but also adults and visitors.
Be the halo...that floats over the "best of the best" that the Phoenix metro area has to offer.	4.47	Complementary, not competitive; do not duplicate what others are doing.
Support science...on every possible level	4.40	Support for science in general terms is well-accepted, but it is not clear exactly what form it might take.
Think summer.	4.38	Market research prior to any summer camp offering was suggested.

Recommendation	Mean Response (n=16) 1=strongly disagree, 3=neutral, 5=strongly agree	Notes & Comments
What's the WOW!? a. It's the landscape of the McDowell Sonoran Preserve itself.	4.33	Several respondents objected to describing "encouragement and facilitation of low-impact recreation" as a "primary" objective.
Involve local kids in planning.	4.33	Involvement of "all stakeholders" and "lots of people in addition to kids" were among the comments.
Sell Planet Scottsdale.	4.07	The concept of the "desert concierge" received support. Promotion of other Scottsdale attractions was also supported, but neither concept can be said to have received the level of consensus agreement as others toward the top of this list.
First: do no harm.	4.0	This generated considerable debate; several respondents noted that smaller was not necessarily better and there was general agreement that the language needed to be changed.
Create a distinctive, place-identified brand.	3.87	The phrase "Desert Discovery Center" has already been established as a brand, and respondents generally wanted to keep some form of it.
Exploit fear.	3.79	The relatively low ranking of this design approach might reflect a negative reaction to the phrase "Exploit fear" rather than disagreement with the possible approach of using large, iconic desert animals as exhibit elements.
Size matters! a. A large amphitheatre should be a part of the DDC vision.	3.13	The fact that this recommendation, and its opposite recommendation fall almost exactly in the center of the rating scale indicates polarization on the issue.
Size matters! b. A large amphitheatre should not be a part of the DDC vision.	3.13	The question of building a performing arts venue in the form of a large amphitheater is the single most divisive issue facing those seeking to develop a consensus vision for the DDC.

Source: Exhibit Design Associates, Inc.

Summary of Responses to Strategic Recommendations Survey - March Planning Workshop

Following is a summary transcription of the written comments obtained from the survey that was administered to participants in the March planning workshop. Also provided is a summary of the quantitative data obtained from the survey. Readers are cautioned not to make conclusions based on these data, particularly given the small sample size from the workshop (n=13).

Note: surveys were randomly numbered, and written comments were transcribed into this summary document according to survey number in a *blue italic font*.

Numerical rankings were assigned as follows:

- 1=strongly disagree
- 2=disagree
- 3=neither agree or disagree; neutral
- 4=agree
- 5=strongly agree

1) First: do no harm.

Developing facilities with zero environmental impact is not possible. But maintaining focus on limiting development (and eventually containing a high proportion of visitor use) within a strictly-defined development area should be an absolute priority.

#1 clarify this statement

Inserted “facility” b/n “limiting” and “development”

#2 smaller not necessarily better

#3 Want to be good stewards of land, but don’t want to be boxed into “strictly-defined development area”—could change in 10-20 years based on facility usage & community will.

#4 Refocus statements

#5 Tweak it

#6 Crossed out “(and eventually containing a high proportion of visitor use)”; replaced “development” w/ “footprint of built environment”

#7 the footprint of the built environment

#9 Replaced “containing” w/ “concentrate” and added comment: smaller does not equal better

#11 Smaller is not necessarily better. The reality is that most visitors will not leave the immediate area of the DDC. Make the “built” environment compelling enough to concentrate the visitation and support repeat visitation from residents and visitors.

#12 Crossed out “absolute”

#14 I agree, if only, this does NOT imply limiting size of center.

#15 All answers as restated! Balance preservation w/ community access by designating a portion of the Preserve to provide citizens an opportunity to enjoy + explore the desert.

Mean (n=16): 4

Ordinal Ranking (out of 21): 17

2) Create a distinctive, place-identified brand.

Both Scottsdale and the Sonoran Desert are unique. The phrase “Desert Discovery Center” fails to capture that. Name the facility something that, at a minimum, creates a region-specific identity. Try to use the word “Scottsdale.”

#5 Scottsdale Desert Discovery Center

#7 how about: “McDowell Sonoran Preserve Discovery Center” or “Desert Discovery Center in Scottsdale”

#8 McDowell Mountain’s Experience, Scottsdale, AZ

#9 bad idea (in reference to “Try to use the word “Scottsdale.”)

#12 Depends on alternatives; keep both formal & informal names in mind.

*#14 Circled word “Scottsdale” and added comment: NO
Sonora Desert Discovery*

Mean (n=16): 3.79

Ordinal Ranking (out of 21): 18

3) Focus on natural history and ecology...

...with a central theme of adaptation. Do one thing, do it well. View the interpretation of human cultures through the lens of adaptation to environment. Phoenix already has a museum interpreting Native American culture, a botanical garden and a zoo. Scottsdale already has an art museum. Facilities interpreting cowboy culture (Museum of the West) and architecture (joint project between the Frank Lloyd Wright Foundation and Guggenheim Museum) are proposed. In the words of Dizzy Dean: “Hit it where they ain’t.”

*#11 Can we partner with Frank Lloyd Wright Foundation on architecture. Good for us/
good for them.*

#15 Added “human” before adaptation

Mean (n=16): 4.60

Ordinal Ranking (out of 21): 9

4) Reach out to the local community, early and often.

Many Scottsdale residents were visitors first, who liked what they experienced and eventually chose the Scottsdale lifestyle fulltime. Although visitors are a critical target market, the DDC will not thrive without robust local support. This criterion implies a nimble management approach with dynamic programming and lots of space for changing exhibits that stimulate repeat local visitation. Community-focused programming such as day camps for kids and a robust environmental education outreach is a critical part of this vision.

#3 Emphasizing that this will be a community resource with community programs will help allay concerns of neighbors who will be fearful of facility’s traffic impacts.

#6 Underlined “dynamic programming and lots of space for changing exhibits”

#7 Underlined “robust environmental education outreach is a critical part of this vision” and added “yes”

#12 Personally, I think this (changing) space should be a higher proportion of total space (>10-20%)

#14 Added “+ diversity of uses” after the phrase “changing exhibits”

#15 Underlined “robust local support” and “changing exhibits”

Mean (n=16): 5.00

Ordinal Ranking (out of 21): 1(tie)

5) What’s the WOW!?

a. It’s the landscape of the McDowell Sonoran Preserve itself.

A primary objective should be the encouragement (and facilitation) of low-impact recreation on the Preserve trail system. Buildings should be low-profile to allow visual connection to the landscape. Enjoyable, safe outdoor experiences help visitors understand and appreciate the value of the lands their tax dollars help to protect.

#3 Low-impact recreation is important, but built environment needs to be substantial enough to be a “must visit” on tourists’ agendas.

- #7 Circled “A primary” and added comment: *it’s important but not primary, not primary but secondary or tertiary or “main” objective or “major” objective*
- #8 Wow needs to be more than just land—has to be experience
- #9 Circled “A primary objective” and added comment: *does this match theme? Will this objective be an outcome that is delivered by the theme?*
- #10 Crossed out “A primary objective should be the encouragement (and facilitation of low-impact recreation on the Preserve trail system.”
- #12 Integrate the two! Built environment should directly lead outside.
- #14 Seamless integration
- #15 Replaced the first sentence w/ “The landscape of the McDowell Sonoran Preserve should be the focus.
- Crossed out “A primary objective should be the encouragement (and facilitation) of low-impact recreation on the Preserve trail system.”
- #16 Crossed out “A primary” and added “An”

Mean (n=16): 4.43

Ordinal Ranking (out of 21): 14(tie)

b. The WOW! is the built environment, too.

Do not be afraid to go Hollywood. There is no reason why facilitation of outdoor recreational experiences has to be mutually exclusive from using cool exhibits to entertain, educate and inspire. Just because an exhibit experience might be labeled by some as “not authentic” because it does not take place on the landscape does not mean it is not honest or meaningful.

- #1 Crossed out “Do not be afraid to go Hollywood.”
- #2 Crossed out “Do not be afraid to go Hollywood.”
- #5 Crossed out “Do not be afraid to go Hollywood.”
- #6 Crossed out “Do not be afraid to go Hollywood.” Seamless integration
- #7 Circled “educate and inspire” and added comment: Intrinsic, primary: educate and inspire Secondary: entertain, in other words, entertainment is okay if it educates
- #10 Crossed out “Do not be afraid to go Hollywood.”
- #12 Both environments should be perceived as part of overall Preserve experience.
- #15 Crossed out “Do not be afraid to go Hollywood.” Replaced “There is no reason why facilitation of outdoor recreational experiences has to be mutually exclusive from using cool exhibits to entertain, educate and inspire. Just because an exhibit experience might be labeled by some as ‘not authentic’ because it does not take place on the landscape does not mean it is not honest or meaningful.” w/ “Facilitate outdoor recreational experiences that are integrated with cool exhibits to entertain, educate and inspire.”
- #16 Crossed out “Hollywood” and added “be distinctive/unique”

Mean (n=16): 5.00

Ordinal Ranking (out of 21): 1(tie)

6) Dig. Go down.

For example: build an underground theatre as one of the WOW!'s. Create a talisman, an icon, with cutting-edge architecture and engineering that allows visitors to enter the earth in much the same way desert animals burrow to survive climatic extremes.

- #4 This should be developed as a theme.*
- #9 James Terrey (sp?)—light in tunnels—perfect fit*
- #12 very consistent with “adaptation” theme*
- #14 Added “multi-purpose” before “theatre”*
- #15 Added “and/or classrooms” after “theatre”*

Mean (n=16): 4.6

Ordinal Ranking (out of 21): 8

7) Be a national leader...

...in the treatment of nature deficit disorder. Make programming for kids and creating opportunities for nature-based free play the highest priority. Strive to build the strongest possible ties with local school districts by providing not only a setting for environmental education, but also curriculum materials and logistical support.

- #1 Circled “nature-based free play”*
- #2 Crossed out “the highest” and replaced w/ “a”*
- #4 Visitors as well as residents*
- #6 Don’t limit to just school children but also families, visitors*
- #8 Crossed out “the highest”*
- #9 Crossed out “the highest” and replaced w/ “a”*
- Added: including families (in reference to programming for kids)*
- #10 very important, not highest priority*
- visitors & residents, too*
- #11 Crossed out “the highest” and replaced w/ “a”*
- #12 Crossed out “highest”, “strongest” and “possible”*
- #14 Must have kid friendly activity for residents & visitors*
- #15 Crossed out “Be a national leader” and replaced w/ “National leader, not limited to education, providing educational opportunities.”*
- #16 Crossed out “highest”*

Mean (n=16): 4.57

Ordinal Ranking (out of 21): 10

8) Don’t be a zoo.

But remember that wildlife is a huge attraction and potent emotion-generator. Look to partners to provide wildlife demonstrations, use remote cameras to bring animals inside in real-time and consider innovative exhibitry that displays small live animals (bugs, for instance) in ways that create memorable visitor experiences.

- #4 or botanical garden—differentiate—use remote technology*

- #7 Underlined “use remote cameras to bring animals inside in real-time and added comment: great as well as comment: unless you could do just a small number a live animals that are all native to the Sonoran Desert
- #9 Circled “remote cameras” w/ arrow pointing to “strongly agree” response an aviary would great, so would a reptile & insect vivarium
- #10 Circled “small live animals (bugs, for instance)” and added comment: not sure
- #11 I’m not in favor of a mammal collection. I’m open to reptiles, arachnids, arthropods.
- #12 Underlined “remote cameras” and added comment: and other remote sensing
- #14 Added “or botanical garden” after “Don’t be a zoo.”
We are not an archival collection entity.
- #15 Added “or birds” after “bugs”
- #16 Added “very” to “strongly agree” response

Mean (n=16): 4.64

Ordinal Ranking (out of 21): 6(tie)

9) Involve local kids in planning.

Conduct focus groups composed of local schoolchildren (at the elementary, middle and high school levels) to get input on exhibit and program concepts.

- #3 Don’t feel strongly about this, but you never know what type of suggestions might result—may lead to a fabulous addition or two.
- #7 Yes, because adults have forgotten what it’s like to be a kid, and what kids enjoy!
- #9 Added: “and all stakeholders” to “involve local kids”
I may not know enough about this to know if this is viable
- #12 involve lots of people in addition to kids

Mean (n=16): 4.29

Ordinal Ranking (out of 21): 14(tie)

10) Size matters!

a. A large amphitheatre should be a part of the DDC vision.

A performing arts venue with capacity of up to 1500 people should be an integral part of the DDC facility. The experience of acoustic performances in a scenic outdoor setting will make an important contribution to the suite of activities available to Scottsdale residents and visitors.

- #3 If done properly, could address the need for a new, unique performing arts center.
- #4 Circled “up to 1500” and added “!#300-500”
- #7 Takes us off track. Put an amphitheatre in another parcel, like WestWorld or city land, but not at DDC.
- #9 Don’t attach to DDC
- #10 All components need to be consistent w/ mission.
- #12 not an essential part of the DDC, even if it would be a desirable community amenity

#14 Circled “1500” and added comment: or more/less? Must study to meet all potential markets + economic feasibility. The important point is to diversify uses in order to attract diversity of users + fundraising capabilities.

#15 Crossed out “1500” and replaced w/: “2000”

Mean (n=16): 3.00

Ordinal Ranking (out of 21): 20(tie)

b. A large amphitheatre should not be a part of the DDC vision.

The DDC can achieve its preservation/education objectives without such a venue. The problems of parking, noise and traffic make a strong case against a large amphitheatre. But facilities to accommodate up to 200-300 people for weddings, corporate parties and so forth should be available upon rollout, because a special-events revenue stream is needed (60% of Scottsdale visitors are in a group of some sort).

#3 This is a must (“must” referring to “facilities to accommodate 200-300...”), weddings & corporate groups will be substantial revenue re: facility rental & particularly food & beverage.

#4 Needs to be looked at as potentially separate initiative

#6 Allow space but insure w/ additional work to confirm it can fit.

#14 (In reference to “strongly disagree” ranking): though accommodations for weddings, parties, etc., should be provided.

Mean (n=16): 3.2

Ordinal Ranking (out of 21): 20(tie)

11) Be the halo...

...that floats over the “best of the best” that the Phoenix metro area has to offer. Build partnerships with the Heard Museum, Taliesin West, Phoenix Zoo, Desert Botanical Garden and Arizona Science Center by providing temporary exhibit space and hosting programs. Staying thematically-focused on adaptation will create the synergy of a complementary, not competitive, experience.

#7 Underlined “Build partnerships” and added comment: good. Underlined “complementary, not competitive, experience” and added comment: good, don’t duplicate what others are doing.

#12 Again, this emphasized the need for lots of flexible space.

Mean (n=16): 4.43

Ordinal Ranking (out of 21): 11

12) Support science...

...on every possible level, including everything from sponsoring formal academic research to offering programs that allow amateur scientists, volunteers and students to participate in field research and digs.

#9 Should be primary objective.

#10 Circled “digs” and added comment: ? not sure about this

#12 This could be:

- *a differentiating factor*
- *a valuable education experience*
- *help make DDC “world class”*

#14 Circled “formal” and added comment: tough word

#15 Circled “sponsoring formal academic” and added comment: ?

Mean (n=16): 4.43

Ordinal Ranking (out of 21): 12

13) Go green.

Structures should be built to the highest possible LEED standards (platinum).

#9 Should be primary objective & part of exhibit.

#11 Partner w/ Frank Lloyd Wright Foundation for architecture

#12 Go further—be leading edge, make this part of the educational experience, e.g. monitoring energy generation/consumption, etc.

#14 If we can afford it.

Mean (n=16): 4.93

Ordinal Ranking (out of 21): 3

14) Build the “commons.”

Many times during the course of preliminary research, words like “linger, congregate, gather and hangout” were heard. Whether exterior (gardens, patio, playground) or interior (internet café, coffee shop, bookstore, library, great room), it will be important to provide spaces that invite visitors to spend time in a setting that encourages a feeling of community, shared ownership and personal belonging. If successful, many local residents may be stimulated to buy annual passes/memberships for casual access (i.e. to meet friends for coffee and a walk).

#12 Crossed out “buy annual passes/memberships” and added comment: BUT nobody should need a pass/membership to have a cup of coffee!

Mean (n=16): 4.79

Ordinal Ranking (out of 21): 4(tie)

15) Exploit fear.

People's fear of the desert can be turned into a WOW! factor by using typical fear-generators (snakes, scorpions, bats, bugs) as major, even iconic, exhibit/architectural features. Gigantic, larger-than-life sculptures big enough for people to enter could function at once as art objects, teaching tools and vehicles to demystify the animal and empower the visitor through understanding.

#1 adaptation!???

#4 Circled "major, even iconic, exhibit/architectural features"

#12 Underlined "People's fear of the desert can be turned into a WOW! factor and added comment: agree with this, but not necessarily invest space/money in large scale static features"

Mean (n=16): 3.92

Ordinal Ranking (out of 21): 19

16) Think summer.

Providing an extensive suite of inside (or morning/evening) summer activity options could endear the DDC to the local community and help boost summer tourism. In addition to multimedia offering such as films, summer day camps targeted at local youth would probably be well-attended (parents in desert climates are often challenged to find summer activities for their kids for obvious reasons).

Some local resorts have successfully increased summer occupancy rates by building water parks and targeting the family market. Some of the concierges who were interviewed, though, noted that kids get bored after a few hundred times down the water slide, and that alternatives to pool-related activities would probably be welcomed by summer guests.

#10 but consistent w/ other guiding principles

Circled "summer day camps" and added comment: would need to do market research before jumping in-

Mean (n=16): 4.42

Ordinal Ranking (out of 21): 13

17) Blur the line between inside and outside.

To accommodate different types of groups (doing different things) throughout the year, and to encourage repeat local visitation, a high degree of flexibility in spaces is desirable (i.e. patio space that can be cooled in summer and warmed in winter through the use of adjustable shade structures and moveable walls).

#7 Energy outdoor patio being cooled (in summer) or heated (in winter) is very wasteful of energy (electricity): not congruent with sustainability (LEED certification)/

#12 Blur the lines even further by having what's indoors actually draw people outdoors (at least into climate-moderated space)

Mean (n=16): 4.79

Ordinal Ranking (out of 21): 4(tie)

18) Be entrepreneurial, not commercial.

Nobody wants Starbucks and McDonalds. Everybody wants revenue. A quality, mid-range food service (i.e. bakery/coffeehouse/deli) is acceptable to most stakeholders, and so is a bookstore/gift shop. Gift shops at similar locations in the Southwest generate huge per-square-foot revenues by focusing on marketing items designed by local artists (i.e. t-shirts with graphics). The executive director's job description might include something along the lines of "impresario of tasteful marketing."

#3 Again, I don't want to be boxed in, I'd like to see a title sponsor for the facility & to maximize private-sector investment. It's hard to derive private-sector investment. I'd like to see us do all we can to solicit it.

Mean (n=16): 6(tie)

Ordinal Ranking (out of 21): 4.64

19) Sell Planet Scottsdale.

It is vital that the DDC be perceived by its management as part of the "Scottsdale experience," which already has considerable cachet and significant market appeal. A permanent exhibit to provide information on other Scottsdale experiences should be prominent in the exhibit mix. This might be integrated with the "desert concierge" function by creating something along the lines of an upscale "guide shack" where visitors could get information, hire outfitters, rent/buy equipment and so forth.

#3 This is a great opportunity to promote private-sector Scottsdale businesses that provide desert experiences (e.g. jeep tours, rock climbing, horseback riding, etc....).

#8 bike, hike, horseback, run, walk

#11 Circled "desert concierge" and added comment: I'm not so sure this is part of the WOW. Maybe it is not necessary.

Mean (n=16): 4.00

Ordinal Ranking (out of 21): 16

Interpretive Theme Survey Instrument and Results

Potential Interpretive Themes were tested at the March Workshop and open House. Data in **Appendix Table 4** presents the results of this survey. These are ranked by overall mean response. Respondents ranked the themes on a five-point scale (1=least important, 2=somewhat important, 3=moderately important, 4=very important, 5=extremely important). Table 4 shows the rankings, organized from highest to lowest.

Appendix Table 4
Input on Themes from March Workshop & Open House

Theme	Overall Mean Response (n=76)	Workshop Mean Response (n=13)	Open House Mean Response (n=63)
Sustainability	4.52	4.42	4.54
Biodiversity	4.47	4.33	4.50
Central Theme (Adaptation)	4.44	4.42	4.44
Water	4.31	4.25	4.32
Urban/Wildland Interface	4.26	4.17	4.28
Archaeology	4.11	4.25	4.08
Edge Ecology	4.03	4.09	4.02
Geology/Cultural Geography	3.88	4.0	3.86

Source: Exhibit Design Associates, Inc.

Summary of Responses to Theme/Concept/Community Role/Facility Scale Survey (Workshop Only)

Following is a summary transcription of the written comments obtained from the survey that was administered to participants in the March planning workshop. Also provided is a summary of the quantitative data obtained from the survey. (This survey was also completed by open house attendees.)

Surveys were numbered arbitrarily; written comments from the surveys are transcribed in this document by number *in a blue italic font*. The numbers assigned to the theme/concept/scale surveys do NOT correspond to the numbers that were randomly assigned to the strategic recommendations surveys. Readers are cautioned not to make conclusions based on these data, particularly given the small sample size from the workshop (n=13).

Theme rating scale:

- 1=not at all important
- 2=only a little important
- 3=moderately important
- 4=very important
- 5=extremely important

1) Central Interpretive Theme

The diverse adaptations that allow native plants and animals to survive in the harsh environment of the Sonoran Desert are a continual source of wonder to the careful observer, and a wellspring of ideas and inspiration to those who accept the challenge of reshaping human society so that future generations will have adequate resources to meet their needs, as well as the opportunity to experience the magic and mystery of the natural world.

#8 Great central theme!

Mean Response (n=13): 4.42

2) Biodiversity

Despite the biological diversity of the Sonoran Desert (home to 2000 native plants, 60 mammals, 30 fish, 20 amphibians, 100 reptiles and more than 350 birds), many people still perceive the desert as a wasteland; overcoming this perception may be the last best hope for conserving large enough landscapes to allow ecosystem processes to continue on a genetically-meaningful scale.

#2 The lay-person has a difficult time understanding the importance of diversity.

Mean Response (n=13): 4.22

3) Edge Ecology

The location of the McDowell Sonoran Preserve on an ecotone between the basin and upland plant communities of the Sonora Desert creates a biological treasure chest of uncommon value, and the intricate network of interactions among its many species is so complex that the human intellect may never achieve the capability to fully comprehend it.

#11 Crossed out entire phrase after the comma

#12 I don't understand this question

Mean Response (n=13): 4.09

4) Urban/Wildland Interface

City dwellers place a high value on natural landscapes adjoining urban areas, and increasing recreational pressure on such lands can hamper resource conservation efforts, necessitating a reliance on interpretation and environmental education to create an informed public that actively supports management objectives.

Mean Response (n=13): 4.17

5) Water

In the arid environment of the Sonora Desert, the presence or absence of water has a profound effect on topography and the composition of natural communities, which reflects the fact that society's critical need for adequate supplies of clean water will define, in large part, the politics of 21st Century human interaction with the remaining natural landscapes of the American Southwest.

Mean Response (n=13): 4.25

6) Archaeology

The evidence of ancient irrigation canals in the McDowell Mountains, and the presence of numerous toolmaking sites, testifies to the fact that humans have always manipulated their environment and exploited desert resources. However, the eventual passing of early cultures that were far more in tune with the natural rhythms of the desert than modern society reminds us that change is the only constant, and that even our highly-advanced technologies do not free us from the need to adapt or perish.

Mean Response (n=13): 4.25

7) Geology/Cultural Geography

Exploitation of the mineral resources of the McDowell Mountains by both prehistoric and more recent human cultures emphasizes the intimacy and depth of the connection between people and planet: geologic forces that occurred millions, or even billions, of years ago shaped a landscape that still shapes patterns of human migration and settlement today.

Mean Response (n=13): 4

8) Sustainability

The vision of the people of Scottsdale to preserve open space in the McDowell Mountains requires striking a delicate balance between economic development, recreational access and resource protection that confers, on those who manage and interpret the resource, a responsibility to set impeccable (appropriate?) standards for sustainable development and environmental education.

Mean Response (n=13): 4.33

Other Suggested Themes - Workshop

Are there any themes or topics not represented here that you think should be? Please use the space below to suggest additional themes or topics, or to make comments.

#2 The DDC is a celebration of the Sonora Desert. It is a celebration by our community, our residents. We, being a very diverse community, celebrate in many ways. Therefore, a theme of celebration should include amenities, such as cultural, in the design and mission of the DDC.

Open House (Only) Summary of Responses to Interpretive Theme/Concept/Community Role/Facility Scale Survey

Open House (Only) Summary of Responses to Interpretive Theme Survey

Following is a summary of the Interpretive Themes, written responses and comments received at the March open house. Surveys were numbered arbitrarily; written comments from the surveys are transcribed in this document by number *in a blue italic font*.

1) Primary Interpretive Theme

*al) added “800 bees” to species list
au) sentence very awkward; added period at end of “society”, capitalized “future” and crossed out “will” and added “must”*

2) Biodiversity

None

3) Edge Ecology

None

4) Urban/Wildland Interface

bh) Are management objectives always correct?

5) Water

None

6) Archaeology

None

7) Geology/Cultural Geography

None

8) Sustainability

ab) crossed out economic development and added comment: “does not belong in this series”

Other Comments – Open House

Are there any themes or topics not represented here that you think should be? Please use the space below to suggest additional themes or topics, or to make comments.

b) These themes encompass all that should be conveyed in this Center-great job and very thorough. I appreciate that the consultants included both natural and cultural themes. I would love to assist in this ongoing process-let me know how I may be of help!

m) Q's 1-8 all seem similar to me & it is hard to differentiate one being more imp. than another

*o) Geology-controls water & resources
extremely important
Earth fissures from too much pumping of water*

z) protection of environment

aa) All these points are "feel good" statements. How can one argue that water is not important or that Archaeology, geology, wildlife, ecology...? These statements are biased, allow no opportunity for tradeoffs, and no diversity of respondents. As a useful information gathering tool, these questions are vacuous.

ak) I think biodiversity is the key, but other themes like "rocks of the Sonoran" "flowers" "insects" "mammals" "the Sonoran sky" "desert rain" "dangerous snakes" "gold" and so on...

al) Take a walk, what you see, important to stay on trail, don't feed wildlife, don't block trails

ar) Please make direct, factual questions to be addressed to the community, not vague topics to confuse the public community.

bd) Lots of politics in the above. If you intend the DDC to be around for a generation+ you will need to be flexible enough to change with that climate.

*bh) Is it Sonoran or Sonora? Both are used in themes!
I find the questions biased and lead to one conclusion=a bigger Discovery Center.*

bi) Sonoran Desert is a unique desert among deserts of the world. I feel that visitors should walk away from the DDC with a feeling for these unique characteristics-plant life, animal life and the changes that occur when rainy cycles disappear.

*bl) Include insects in biodiversity area--out-of-state visitors have many misconceptions & kids are fascinated by "creepy crawlies."
Exhibit Concepts*

Prototypical Exhibit Concepts Survey Instrument and Results

Prototypical Exhibit Concepts were tested at the March Workshop and open House. The depictions of the concepts are provided in Section III of the report. Data in **Appendix Table 5** presents the results of this survey, organized from highest overall ranking to the lowest. These are ranked by overall mean response. Respondents ranked exhibit concepts on a five-point scale (1=dislike it very much, 2=dislike it, 3=neither like nor dislike, 4=like it, 5=like it a lot).

Appendix Table 5
Input on Exhibit Concepts from March Workshop & Open House

Exhibit Concept	Overall Mean Response (n=76)	Workshop Mean Response (n=13)	Open House Mean Response (n=63)
Raised-Relief Map	4.27	4.33	4.26
X-Ray Ceiling	4.03	4.33	3.97
Giant Rattlesnake	3.49	3.18	3.54
Wall-Mounted Globe	3.35	3.0	3.41
Suspended Globe	3.22	3.30	3.20

Summary of Responses to Exhibit Concepts Survey (Workshop Only)

Following is a summary transcription of the written comments obtained from the survey that was administered to participants in the March planning workshop. Also provided is a summary of the quantitative data obtained from the survey. (This survey was also completed by open house attendees.)

Surveys were numbered arbitrarily; written comments from the surveys are transcribed in this document by number *in a blue italic font*. The numbers assigned to the theme/concept/scale surveys do NOT correspond to the numbers that were randomly assigned to the strategic recommendations surveys. Readers are cautioned not to make conclusions based on these data, particularly given the small sample size from the workshop (n=13).

Exhibit concept rating scale:

- 1=dislike it very much
- 2=dislike it
- 3=neither like nor dislike
- 4=like it
- 5=like it a lot

General Comments

#3 How do these relate to “adaptation”--??

Exhibit Concept #1: Giant Rattlesnake

#3 re-adaptation theme

#8 big investments in space & money in fairly large, static exhibits; too much “art”

Mean Response (n=13): 3.18

Exhibit Concept #2: Suspended Globe

#3 re-adaptation theme

#8 big investments in space & money in fairly large, static exhibits; too much “art”

Mean Response (n=13): 3.30

Exhibit Concept #3: Wall-Mounted Globe

*#3 adaptation theme??
#8 depends on programming*

Mean Response (n=13): 3.0

Exhibit Concept #4: Relief Map

#3 adaptation theme?

Mean Response (n=13): 4.33

Exhibit Concept #5: X-Ray Ceiling

*#3 maybe modified to adaptation theme
#11 sounds cool, but not sure the reality will be interesting*

Mean Response (n=13): 4.33

Other Comments - Workshop

Do you have any comments on the exhibit concepts, or would you like to suggest ideas for exhibits you would like to see? Please use the space below.

#7 Since DDC is place-specific, I would focus on Sonoran Desert, rather than all the deserts of the world, for the major (most expensive) exhibit.

Focus on native species (native to the Sonoran Desert).

The biggest (most expensive) exhibit should be about biodiversity, which is what makes the Sonoran Desert special, as the most biodiverse desert in the world.

Exhibits must teach along theme of desert adaptation, and conservation.

How about a large touchscreen that shows complex food webs/food chains, and what will happen if you remove a species; how many species can be lost (declining biodiversity) until the web/chain collapses. Interactive technology could teach that losing biodiversity is irreversible.

How about a geologic exhibit-walk through replica of rock layers (inside a huge mound)—see all the critters that live underground.

#10 The exhibit concepts are great. I really like the opportunity to use technology to provide interesting & unique opportunities to convey what is special about the Sonoran Desert and the McDowell Sonoran Preserve.

Open House (Only) Summary of Responses to Exhibit Concepts Survey

Following is a summary of the Exhibit Concepts written responses and comments received at the March open house. Surveys were numbered arbitrarily; written comments from the surveys are transcribed in this document by number *in a blue italic font*.

“Please let us know whether you like or dislike the various exhibit concepts you see displayed here.”

#9 Exhibit Concept #1: Giant Rattlesnake

at) snakes scare me

#10 Exhibit Concept #2: Suspended Globe

m) not enough focus on local uniqueness

#11 Exhibit Concept #3: Wall-Mounted Globe

None

#12 Exhibit Concept #4: Relief Map

None

#13 Exhibit Concept #5: X-Ray Ceiling

None

Other Comments – Open House

Do you have any comments on the exhibit concepts, or would you like to suggest ideas for exhibits you would like to see? Please use the space below.

b) My favorite concept is the giant rattlesnake-I think that would be the draw for this center...the “must see.” The relief map is also something that would get a lot of attention-but it need not be high-tech-adults and children love to run their fingers over a tactile map of a mountain range to really “get a feel” for the geological structures on a large scale.

I believe the DDC could be a destination for local schools to take a field trip to—the exhibits are designed so that they can stand alone or be used as part of a guided interpretive program. Well-designed!

m) I think you should not forget to include part of the west culture-cowboys, horses, Indians-not the art aspect but the part kids & adults expect from old John Wayne movies. Kids love horses-a place for grandparents to show a “ranch”

*o) People like computer-generated stuff & interactive
live animals*

s) Perhaps some well-placed, carefully planned dioramas of Archaic and recent native peoples depicting natural habitats/living structures/environmental interactions

t) I like the idea of a Planetarium. I think it adds to the total impact of the DDC by focusing on the Desert Sky. I believe we should have dioramas & exhibits of the Native Peoples of the Preserve and the surrounding areas.

u) Live fauna should be a component.

w) Must have exhibits of the history of the McDowell Mountain area-not just archaeology. Need exhibits about the post-Hohokam Indians, U.S. Army usage, 20th Century ranching, etc.

x) Giant rattlesnake would keep away people who have a fear or phobia about snakes.

aa) If I want artificial interfaces, I'll go to Disneyland. The preserve is real. These exhibits are a barrier to the desert experience, are complex and expensive to maintain, are needlessly expensive and counterproductive.

ab) What we are creating here is a high-tech, high-maintenance virtual world. This is not the image of Scottsdale I or my neighbors want. Too much money! I can enjoy the serenity of the desert without spending millions of dollars.

ak) The globe idea may work with a big projector which instantly transports people to other deserts in the world for comparisons.

ar) An interactive map of where, what, who lives in that habitat.

au) How about something about a saguaro? There are a lot more saguaros out in the preserve than rattlesnakes. Many people have misconceptions about these giants of the Sonoran Preserve than only grow here. There should be more about the Sonoran Desert & McDowell Mountains.

az) Thank you so much! This was a wonderful opportunity to see our wildlife on exhibit. We are so happy the Preserve/Gateway is actually going to happen. Thank you Mayor Manross and the Council for making this happen!

ba) Activities that can be engaged in the preserve-hiking, biking, equestrian, volunteerism, etc....

bh) Exhibit concepts are wonderful; however, they are expensive and will be breaking down on a regular basis. Yes, I have exhibit experience.

High-tech exhibits are not necessary.

-exhibit on different types of rocks in desert-have one type of each rock that people can touch with an explanation of what it is-example is at Kartchner Caverns State Park.

-collection of wildflowers in case under glass (individual panels)

-pictures of birds w/ their names
-pictures of cacti, plants with their names, especially more common plants, animals

bi) I prefer more natural exhibits-not so much high tech

bj) flash flood display

bl) while the interactive laser-gun exhibits sound interesting, I would be concerned about individuals spending a lot of time using them, preventing many others from using them for large stretches of time. There would need to be enough “guns” to accommodate expected crowds. Also, there’s nothing sadder than “high tech” exhibits that are out of order and useless. It would be important to have plenty of educational info accessible even if the power went out.

Conceptual Role of the DDC in the Community Survey Instrument and Results

Respondents indicated the extent to which they agreed or disagreed with statements about the DDC’s potential roles in the community on a five-point scale (1=strongly disagree, 2=disagree, 3=neutral; neither agree nor disagree, 4=agree, 5=strongly agree). Data in **Appendix Table 6** presents the results of this survey, organized from highest overall ranking to the lowest. The statements that tend to suggest a larger facility (“size-positive”) are shown in a blue font in Table 6. Statements that tend to suggest a smaller facility (“size-negative”) are shown in a green font in Table 6. The statements considered “size-neutral” are not colored.

Appendix Table 6
Input on the DDC’s Role in the Community from March Workshop & Open House

Statement Regarding DDC’s Potential Role in the Community	Overall Mean Response (n=76)	Workshop Mean Response (n=13)	Open House Mean Response (n=63)
The DDC should be a place that is high on the list of places where Scottsdale residents want to take out-of-town guests to see exhibits and displays.	4.77	5.0	4.73
The built environment at the DDC should conform to the highest possible standards of green building and be a teaching tool for sustainable building practices (and lifestyles) in and of itself.	4.69	4.92	4.65
The DDC should be a place that provides convenient access to the outdoor recreation opportunities on the trails of the McDowell Sonoran Preserve.	4.67	4.83	4/65
The DDC should be a place where people can spend an hour or so learning about the natural communities of the Sonoran Desert.	4.63	4.50	4.63
The DDC should be a place where kids can get outside and experience the natural world.	4.58	4.75	4.55
The DDC should be a place where school kids go on a regular basis to learn about the natural world and environmental issues.	4.49	4.67	4.45
The DDC should be a signature Scottsdale attraction that attains a nationwide reputation as a “don’t-miss” opportunity for Scottsdale visitors.	4.43	4.92	4.39
The DDC should be a place where even inexperienced visitors	4.40	4.45	4.38

Statement Regarding DDC's Potential Role in the Community	Overall Mean Response (n=76)	Workshop Mean Response (n=13)	Open House Mean Response (n=63)
can get the advice and equipment they need to have a safe, enjoyable outdoor experience in the McDowell Sonoran Preserve.			
The DDC should be a place that strives to establish a reputation for excellence in ecological research, and that supports inquiry into the natural communities of the Sonoran Desert through a scientist-in-residence program.	4.37	4.33	4.33
The design of the buildings at the DDC should set impeccable standards for innovative architecture and engineering.	4.37	4.83	4.33
The DDC should be a place primarily focused on encouraging responsible use of Preserve trails, facilitating outdoor recreation and offering a modest level of interpretation of Sonora Desert resources.	4.15	3.25	4.28
The DDC should be a place where people can escape the heat of a summer day and enjoy a variety of exhibits and audiovisual programs, including large-format and 3D films.	3.96	4.75	3.80
The DDC should be a place where people can spend a half-day or so viewing exhibits and films, attending lectures and programs, and enjoying amenities such as a café, gift shop and reading library.	3.89	4.67	3.73
The DDC should be a place that provides convenient food service to on-site visitors, and also offer a café/bistro setting that becomes a local destination to which people are drawn to get together with friends and family.	3.66	4.25	3.54
The DDC should be a place where people can enjoy a concert of acoustic (unamplified) music, a play or dance performance in a scenic outdoor venue.	3.49	4.17	3.36
The DDC should be a place where visitors can get information about everything there is to do in Scottsdale in addition to information about outdoor recreation opportunities in the McDowell Sonoran Preserve.	3.28	3.58	3.23
The DDC should be a place that celebrates the unique artistic heritage of Scottsdale; exhibits and programs focused on the fine arts should be a part of the visitor experience.	3.13	3.50	3.05
The DDC retail shopping experience should be of a high enough scale and quality so that it becomes a destination for shoppers seeking specialty merchandise that reflects Sonora Desert themes and the unique culture of Scottsdale.	2.89	3.58	2.76

Summary of Responses to Role in the Community Survey (Workshop Only)

Following is a summary transcription of the written comments obtained from the survey that was administered to participants in the March planning workshop. Also provided is a summary of the quantitative data obtained from the survey. (This survey was also completed by open house attendees.)

Surveys were numbered arbitrarily; written comments from the surveys are transcribed in this document by number *in a blue italic font*. The numbers assigned to the theme/concept/scale surveys do NOT correspond to the numbers that were randomly assigned to the strategic recommendations

surveys. Readers are cautioned not to make conclusions based on these data, particularly given the small sample size from the workshop (n=13).

Role in the Community Rating Scale:

- 1=strongly disagree
- 2=somewhat disagree
- 3=neither agree nor disagree
- 4=somewhat agree
- 5=strongly agree

14) The design of the buildings at the DDC should set impeccable standards for innovative architecture and engineering.

Mean Response (n=13): 4.83

15) The DDC should be a place where school kids go on a regular basis to learn about the natural world and environmental issues.

#8 don't flood DDC with kids everywhere, all the time

Mean Response (n=13): 4.67

16) The DDC should be a place that celebrates the unique artistic heritage of Scottsdale; exhibits and programs focused on the fine arts should be a part of the visitor experience.

#8 and architecture, which is directly related to adaptation theme

Mean Response (n=13): 3.50

17) The DDC should be a place where people can spend a half-day or so viewing exhibits and films, attending lectures and programs, and enjoying amenities such as a café, gift shop and reading library.

#8 and/or come back, again & again

Mean Response (n=13): 4.67

18) The DDC should be a place that provides convenient food service to on-site visitors, and also offer a café/bistro setting that becomes a local destination to which people are drawn to get together with friends and family.

#8 more emphasis on Preserve users & visitors; less as destination dining

Mean Response (n=13): 4.25

19) The DDC should be a place that is high on the list of places where Scottsdale residents want to take out-of-town guests to see exhibits and displays.

#10 (in reference to “strongly agree” response): Absolutely!

Mean Response (n=13): 5.0

20) The DDC should be a place where people can enjoy a concert of acoustic (unamplified) music, a play or dance performance in a scenic outdoor venue.

#8 question is scale

Mean Response (n=13): 4.17

21) The DDC should be a place where people can escape the heat of a summer day and enjoy a variety of exhibits and audiovisual programs, including large-format and 3D films.

#6 if consistent w/ purpose of DDC

Mean Response (n=13): 4.75

22) The DDC should be a place where visitors can get information about everything there is to do in Scottsdale in addition to information about outdoor recreation opportunities in the McDowell Sonoran Preserve.

*#8 Underlined “information about outdoor recreation opportunities in the McDowell Sonoran Preserve” and added comment: primary
Added “and related cultural opportunities” after “outdoor recreation opportunities”
Circled “everything” and added comment: probably not*

Mean Response (n=13): 3.58

23) The DDC retail shopping experience should be of a high enough scale and quality so that it becomes a destination for shoppers seeking specialty merchandise that reflects Sonora Desert themes and the unique culture of Scottsdale.

*#8 should primarily serve DDC & Preserve users; less as destination shopping
#9 (in reference to “strongly agree” ranking): if it’s going to help sustain attraction
#10 (in reference to “somewhat agree” ranking): as long as it could be done profitably*

Mean Response (n=13): 3.58

24) The DDC should be a place that strives to establish a reputation for excellence in ecological research, and that supports inquiry into the natural communities of the Sonoran Desert through a scientist-in-residence program.

Mean Response (n=13): 4.33

25) The DDC should be a place where kids can get outside and experience the natural world.

Mean Response (n=13): 4.75

26) The built environment at the DDC should conform to the highest possible standards of green building and be a teaching tool for sustainable building practices (and lifestyles) in and of itself.

#2 If affordable

Mean Response (n=13): 4.92

27) The DDC should be a place where people can spend an hour or so learning about the natural communities of the Sonoran Desert.

#10 Hopefully, an hour would be the shortest amount of time someone would spend there.

Mean Response (n=13): 4.50

28) The DDC should be a place that provides convenient access to the outdoor recreation opportunities on the trails of the McDowell Sonoran Preserve.

Mean Response (n=13): 4.83

29) The DDC should be a signature Scottsdale attraction that attains a nationwide reputation as a “don’t-miss” opportunity for Scottsdale visitors.

#8 I'd focus on being strong local/regional attraction, rather than national
*#12 *Most Important!*

Mean Response (n=13): 4.92

30) The DDC should be a place where even inexperienced visitors can get the advice and equipment they need to have a safe, enjoyable outdoor experience in the McDowell Sonoran Preserve.

Mean Response (n=13): 4.45

31) The DDC should be a place primarily focused on encouraging responsible use of Preserve trails, facilitating outdoor recreation and offering a modest level of interpretation of Sonora Desert resources.

#8 Crossed out “primarily”
#9 Crossed out “primarily”
#10 (in reference to “neither agree nor disagree” ranking): This statement represents the lowest, most basic level of what should be offered. I'd like to see its scope be much larger than this.

Mean Response (n=13): 3.25

Summary of Responses to Role in the Community Survey (Open House Only)

Following is a summary of the Role in the Community written responses and comments received at the March open house. Surveys were numbered arbitrarily; written comments from the surveys are transcribed in this document by number *in a blue italic font*.

General Comments

- ac) depends*
- ay) I just don't know*

Please indicate the extent to which you agree or disagree with the following statements.

#14 The design of the buildings at the DDC should set impeccable standards for innovative architecture and engineering.

- f) can't speak to this issue*
- m) Depends on how "weird" the innovation looks*
- v) What does this mean? There are many examples of horrific but innovative architecture!*
- aa) How can one argue with this statement? It's a non sequitor.*
- al) Not like Arabian Library*

#15 The DDC should be a place where school kids go on a regular basis to learn about the natural world and environmental issues.

- q) crossed out "regular" and added "occasional" (response was "somewhat agree")*
- bi) Very important!*

#16 The DDC should be a place that celebrates the unique artistic heritage of Scottsdale; exhibits and programs focused on the fine arts should be a part of the visitor experience.

- m) circled "focused on the fine arts" and added: no, the rest of it yes-including cowboys & horses*
- aa) This is about the natural world and its beauty.*
- ac) performance not exhibit*
- ak) More of an Arizona Sonoran Desert focus is appropriate*
- al) heritage-yes, arts-no*

#17 The DDC should be a place where people can spend a half-day or so viewing exhibits and films, attending lectures and programs, and enjoying amenities such as a café, gift shop and reading library.

- c) mainly-let's take a hike!*
- aa) What about the desert?*
- ak) & guided hike!*

#18 The DDC should be a place that provides convenient food service to on-site visitors, and also offer a café/bistro setting that becomes a local destination to which people are drawn to get together with friends and family.

c) I want to be out in Nature-not at Burger King! I'm sure most snow birds feel the same way.

bl) circled "convenient food service" and added comment: YES; also circled "café/bistro" and added comment: NO

#19 The DDC should be a place that is high on the list of places where Scottsdale residents want to take out-of-town guests to see exhibits and displays.

None

#20 The DDC should be a place where people can enjoy a concert of acoustic (unamplified) music, a play or dance performance in a scenic outdoor venue.

c) I all ready have West World making noise, fireworks, etc. to my S/East. Do not need more noise from my North West!

aa) Call it a theater, then.

ak) Well, DBG does this, but it could be better here.

al) Use WestWorld

#21 The DDC should be a place where people can escape the heat of a summer day and enjoy a variety of exhibits and audiovisual programs, including large-format and 3D films.

c) I'll go to the museum.

#22 The DDC should be a place where visitors can get information about everything there is to do in Scottsdale in addition to information about outdoor recreation opportunities in the McDowell Sonoran Preserve.

bi) underlined "everything there is to do in Scottsdale" and added comment: No; also underlined "recreation opportunities in the McDowell Sonoran Preserve" and added comment: Yes

bl) circled "everything there is to do in Scottsdale" and added comment: NO; also circled "outdoor recreation opportunities in the McDowell Sonoran Preserve and added comment: YES

#23 The DDC retail shopping experience should be of a high enough scale and quality so that it becomes a destination for shoppers seeking specialty merchandise that reflects Sonora Desert themes and the unique culture of Scottsdale.

c) mainly let's go for a hike or horse ride. Scottsdale already too many strip malls!

aa) Ridiculous!

ab) Can I purchase a rattlesnake or gila monster here?

#24 The DDC should be a place that strives to establish a reputation for excellence in ecological research, and that supports inquiry into the natural communities of the Sonoran Desert through a scientist-in-residence program.

- aa) The Center is immaterial in this mission. Researchers & scientist don't need "plastic" interfaces.*
- bh) Need policies as to what type of research & how many projects can be researched or desert will be overrun.*

#25 The DDC should be a place where kids can get outside and experience the natural world.

- c) Yeah let them go for a hike.*
- aa) Absolutely*
- ab) They can do that without the DDC.*

#26 The built environment at the DDC should conform to the highest possible standards of green building and be a teaching tool for sustainable building practices (and lifestyles) in and of itself.

- m) so long as the buildings are not "too weird." (Response was "somewhat agree")*
- aa) Depends on cost. Making traffic move more easily through S'dale would make orders of magnitude more improvement.*

#27 The DDC should be a place where people can spend an hour or so learning about the natural communities of the Sonoran Desert.

- q) circled "natural communities" and added: "plants and animals"*

#28 The DDC should be a place that provides convenient access to the outdoor recreation opportunities on the trails of the McDowell Sonoran Preserve.

- m) Equestrian/horse trail parking & access*
- af) Unnecessary: Gateway Trailhead will handle this*

#29 The DDC should be a signature Scottsdale attraction that attains a nationwide reputation as a "don't-miss" opportunity for Scottsdale visitors.

- aa) This goal drives "hype" not related to the mission of the Center.*
- al) Trail parking separate from museum parking*

#30 The DDC should be a place where even inexperienced visitors can get the advice and equipment they need to have a safe, enjoyable outdoor experience in the McDowell Sonoran Preserve.

- af) will be handled at Gateway Trailhead*
- al) MSC Stewards!*
- aw) circled "equipment" and added "?"*

#31 The DDC should be a place primarily focused on encouraging responsible use of Preserve trails, facilitating outdoor recreation and offering a modest level of interpretation of Sonora Desert resources.

- m) Circled "primarily" and added: not necessarily*

#32 The DDC should probably not be built on land that the citizens of Scottsdale bought with their tax dollars to preserve for recreational use and environmental protection.

None

33) The DDC should be a place that offers an experience of such compelling quality that visitors stay in the building or its immediate vicinity, thereby relieving pressure on protected landscapes.

Additional Comments.

*b) Please let me know if you need an additional “team member.” I have experience working with exhibit designers as a liaison who can do the “on-site” work required with this sort of relationship—where the exhibit designers are working remotely (out-of-state). The DDC will be literally in my backyard—I am excited about the possibilities of what this center could become. Let me know how I can help. Amy Ford, Supervisor, Cave Creek Regional Park and NAI Region 8 (Southwest) Director
480-235-5356*

amy@interpretnature.com

c) Would like to see a deck facing east-with chairs or benches that would be open maybe 9 P.M. where you could sit + watch the moon rise over the mountains or maybe just to view the stars.

Will need to have a very large parking lot (unpaved) as the Bell + 104th St. parking lot is always full. People are now parking on the median on weekend.

Many more people living here now then 6 or 7 years ago.

Large Parking lot will be needed.

f) As you can tell, our family found this event so interesting. We just loved the whole event. (Smiley-face emoticon added).

h) I would suggest building in phases,

First parking lot

Next rest rooms

Next small buildings

Wait and see the money situation and the public interest before deciding on the larger buildings.

i) Exhibit mostly should rotate with a small permanent exhibit on the themes.

There should be permanent office space for McDowell Sonoran Conservancy, since the MSC will be so involved in providing volunteers.

m) I would hope the exhibit would meld both “inside” stuff w/ “outside” stuff as a place to park & hike & horse back ride.

n) This facility should have some live desert animals on display for educational purposes. Kids have a tendency to retain the importance of conservation when they can see the animals in their natural environment and understand the role they (animals) play in the desert.

o) Check out the arboretum outside Chicago-very cool!! near Downer's Grove

p) Provide area to purchase H₂O. No food. Other sites close by to go & eat.

q) Re: Food Services

Some visitors may need to eat or rest so a café of good quality - i.e. similar to what is at the Phoenix Art Museum or Heard Museum-would be good.

r) The center should be the ultimate place for education about the Sonoran Desert. It should cater to families and serious hikers. The place should be a "must see" place on every resident and tourist list. It should not be an upscale fashion hub that caters to wealthy people. It should serve the community, preserve the desert and have a bottom line motive to educate the public about everything in the desert.

s) Research space, getting the school kids to the DDC (esp. K-8) and adjacent, easy trails, and interpretation/introduction to the uniqueness of the Sonoran ecosystem are paramount. And, bizarre as it may seem, a fine, yet simple, dining facility (think Arcadia Farms at the Art Museum and Heard) will only add to the DDC's attractiveness.

t) The potential of the DDC to our community as an educational and tourist destination is unlimited. It is important we get it right the first 1st time.

v) #14 There are many examples of innovative, yet poorly designed building-ugly or non-functional-innovation should NOT be the priority!

#31 The Primary focus needs to be a wide variety of purposes-as reflected in the survey-

w) The building design, though incorporating "impeccable standards of innovative architecture & engineering" must fit seamlessly into its Sonoran Desert setting. It must fit as well in 45 or 50 years as it does on opening day. No faddish, avant-garde designs. No repeat of the Arabian Library monstrosity. It must look like it belongs in the desert.

z) This area will no longer be as wilderness of the project is too large.

aa) This questionnaire is a failed opportunity to collect public opinion on trade offs between alternative DDC concepts. It is strongly biased toward generating popular support for the pre-packaged DDC design. Surveys of this type give the City a poor image of willingness to seek real input from the public.

*ab) Visitors don't need to be spoon-fed on desert flora and fauna. The discovery of the desert should be a personal experience, not a digital/virtual one. How many staff will be hired to maintain all the proposed high-tech equipment?
A facility like the one at Lost Dog Wash would fit the needs of the community.*

ad) This is a very important part of Scottsdale Culture. It's time to get the people out!! in the desert.

Learn about the beautiful Sonoran Desert and have fun doing it.

Lots of Guided Hikes!!!

Make it BIG!!

Make it Great!!

ae) consider canopy for parking—screens

al) Entertain & educate

Retail is minor interest-for visitors

Will DDC close when WestWorld events need additional parking? Need to keep trail open.

am) 1) Cover/screen the parking like AJ's has done at Pinnacle Peak & Pima

2) Lots of 3D displays & interactive exhibits

3) Think big-even if we can't build it for 30 years

ar) It is important to maintain the preserve as it has been intended for the wildlife, plant life and human beings to cohabitate a successful livelihood.

au) There should be more about the trails and what you might see when you go into the Preserve. Point out how the plants and animals have adapted to the desert. Explain how the native people survived-an ethnobotany exhibit.

ay) Can Scottsdale afford a restaurant? This is a short season facility (5-6 mo.), it would have to pay for itself.

If \$ is available infrastructure can be put in & buildings added later if need presents itself. Or bare wall building or rooms made & finished as needed.

This gateway will be a great asset to Scottsdale. Thank you.

bd) DDC needs to provide for both #27 and #17.

bi) This valley will continue to grow and Scottsdale needs to step up to the plate with a public facility that matches the grandeur and unique ecology of the McDowell Mountains. So many of the public buildings in the Valley were never built for the future and are already over maxed.

bl) I envision the DDC serving as a "focal point" for the preserve with educational/interpretive exhibits; short, handicapped-accessible nature trails & info on trails & preserve activities. Small-scale snack service, gift/book shop would be a plus. It is important to remember that this is a "preserve"-not a public park. It should serve the purpose of helping residents & visitors appreciate what is here without altering the natural experience with too many glitzy distractions. It would seem wise to start small, but leave room for future expansion/development as appropriate.

Facility Scale Survey Instrument and Results

Respondents were asked to indicate what size facility they considered appropriate, using the guidelines on graphical figures providing possible facility scale information (As shown in **Figure III-8** and **Figure III-9**). The survey instructions were:

“The purpose of this set of questions is to get an idea of how big you feel facility should be, and what its role in the community should be. There is a numerical scale on the wall chart. At either end of the two-headed arrow are descriptions of the scenarios which are being considered.”

Responses were given on a seven-point scale (1=smallest, 7=largest). Results from that question are shown in **Appendix Table 7**.

Appendix Table 7
Input on the DDC’s Appropriate Facility Scale from March Workshop & Open House

Facility Scale Statement	Overall Mean Response (n=76)	Workshop Mean Response (n=13)	Open House Mean Response (n=63)
There is a numerical scale on the wall chart titled “A Question of Scale.” At either end of the two-headed arrow are proportionally-sized schematic representations of the scenarios which are being considered. Please circle the number below that corresponds to the number that you think represents an appropriate size for the facility (1=smallest, 7=largest).	4.82	5.75	4.62

Summary of Responses to Facility Scale Survey (Workshop Only)

Following is a summary transcription of the written comments obtained from the survey that was administered to participants in the March planning workshop. Also provided is a summary of the quantitative data obtained from the survey. (This survey was also completed by open house attendees.)

Surveys were numbered arbitrarily; written comments from the surveys are transcribed in this document by number *in a blue italic font*. The numbers assigned to the theme/concept/scale surveys do NOT correspond to the numbers that were randomly assigned to the strategic recommendations surveys. Readers are cautioned not to make conclusions based on these data, particularly given the small sample size from the workshop (n=13).

Role in the Community Rating Scale:

- 1=strongly disagree
- 2=somewhat disagree
- 3=neither agree nor disagree
- 4=somewhat agree
- 5=strongly agree

#1 It needs to be as big as it needs to be to get the job done.

#5 Let the fundraising feasibility study OR the political polling determine the viability/desirability of the amphitheatre. DO NOT dismiss it now. I think there is lots of synergy there.

#7 Bottom line: entertainment is okay as long as it's helping to educate. Intrinsic value: education. Instrumental value: entertainment.

I like the rattlesnake exhibit a lot, because even though I come from a conservation point of view, the rattlesnake is attention-grabbing. Once you get people's attention, you can educate them...about desert species and their unique adaptations (e.g. infrared vision of snake). People will only conserve what they can name (what species they know about). How about an iconic saguaro cactus, which you can walk into?

#8 -greater integration of indoor & outdoor environments (e.g. all theme-lines literally end outside)

-observatory/planetarium are only remotely related to "adaptation" (most native peoples observed sun/moon, not stars); also, this is very expensive

-more emphasis on remote sensing & integration into interior environment

-desert climatology & meteorology are interesting, important themes to explore

-mines & mining history (maybe part of geology/cultural geography) could be explored

-how about remote interpretive centers at access areas?

-DDC should be a jump-off point for variety of hikes:

guided/unguided on interpretive trails

"every 2 hours" guided hike on a "real" but easy trail

#12 The DDC should look other destination attractions as a guide i.e.

Monterrey Aquarium

San Diego Harbor Marina

Colorado Springs Garden of the Gods

Hartford, CT-Mark Twain House/Museum

San Antonio-Riverwalk/Alamo

Mean Facility Scale Rating (n=13): 5.75 on a scale of 1-7

Appendix E

MARCH SURVEY INSTRUMENTS

Workshop and Open House Survey

Desert Discovery Center Design Survey **March 2008**

Thank you for taking the time to give us your input on various ideas for development of an interpretive facility at the McDowell Sonoran Preserve. There are three sets of questions on this survey. The first set of questions asks your opinion about the draft interpretive themes that could eventually guide the development of exhibits and programs. The second set of questions asks your opinion on some preliminary exhibit concepts. The final set of questions relate to the role of the facility in the community.

Interpretive Themes

There are eight draft interpretive themes displayed on the tables, as well as a central theme that is the overarching theme for the entire facility. Interpretive themes guide the development of exhibits and programs by articulating concepts in a way that suggests universal meaning and facilitates human connection to place. Please indicate how you feel about the relative importance of each theme by checking the appropriate box below.

Primary Interpretive Theme

The diverse adaptations that allow native plants and animals to survive in the harsh environment of the Sonoran Desert are a continual source of wonder to the careful observer, and a wellspring of ideas and inspiration to those who accept the challenge of reshaping human society so that future generations will have adequate resources to meet their needs, as well as the opportunity to experience the magic and mystery of the natural world.

not at all important	only a little important	moderately important	very important	extremely important
()	()	()	()	()

Biodiversity

Despite the biological diversity of the Sonoran Desert (home to 2000 native plants, 60 mammals, 30 fish, 20 amphibians, 100 reptiles and more than 350 birds), many people still perceive the desert as a wasteland; overcoming this perception may be the last best hope for conserving large enough landscapes to allow ecosystem processes to continue on a genetically-meaningful scale.

not at all important	only a little important	moderately important	very important	extremely important
()	()	()	()	()

Sustainability

The vision of the people of Scottsdale to preserve open space in the McDowell Mountains requires striking a delicate balance between economic development, recreational access and resource protection that confers, on those who manage and interpret the resource, a responsibility to set impeccable(appropriate?) standards for sustainable development and environmental education.

not at all important	only a little important	moderately important	very important	extremely important
()	()	()	()	()

Are there any themes or topics not represented here that you think should be? Please feel free to write suggestions for additional themes or topics on your survey. You can also talk to a member of the consultant team or City of Scottsdale staff if want to make comments in person (or if you have any questions).

Exhibit Concepts

Please let us know whether you like or dislike the various examples of possible exhibit concepts you see displayed here.

Exhibit Concept #1: Giant Rattlesnake

dislike it very much	dislike it	neither like nor dislike	like it	like it a lot
()	()	()	()	()

Exhibit Concept #2: Suspended Globe

dislike it very much	dislike it	neither like nor dislike	like it	like it a lot
()	()	()	()	()

Exhibit Concept #3: Wall-Mounted Globe

dislike it very much	dislike it	neither like nor dislike	like it	like it a lot
()	()	()	()	()

Exhibit Concept #4: Relief Map

dislike it very much	dislike it	neither like nor dislike	like it	like it a lot
()	()	()	()	()

Exhibit Concept #5: X-Ray Ceiling

dislike it very much	dislike it	neither like nor dislike	like it	like it a lot
()	()	()	()	()

Do you have any comments on the exhibit concepts, or would you like to suggest an idea? Please use the space below.

Facility Scale and Role in the Community

The purpose of this set of questions is to get an idea of what you feel the role of the proposed facility in the community should be. Please indicate the extent to which you agree or disagree with the following statements.

The design of the buildings at the DDC should set impeccable standards for innovative architecture and engineering.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place where school kids go on a regular basis to learn about the natural world and environmental issues.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place that celebrates the unique artistic heritage of Scottsdale; exhibits and programs focused on the fine arts should be a part of the visitor experience.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place where people can spend a half-day or so viewing exhibits and films, attending lectures and programs, and enjoying amenities such as a café, gift shop and reading library.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place that provides convenient food service to on-site visitors, and also offer a café/bistro setting that strives to be destination where locals get together with friends and family.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place that is high on the list of places where Scottsdale residents want to take out-of-town guests to see exhibits and displays.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place where people can enjoy a concert of acoustic (unamplified) music, a play or dance performance in a scenic outdoor venue.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place where people can escape the heat of a summer day and enjoy a variety of exhibits and audiovisual programs, including large-format and 3D films.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place where visitors can get information about everything there is to do in Scottsdale in addition to information about outdoor recreation opportunities in the McDowell Sonoran Preserve.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC retail shopping experience should be of a high enough scale and quality so that it becomes a destination for shoppers seeking specialty merchandise that reflects Sonora Desert themes and the unique culture of Scottsdale.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place that strives to establish a reputation for excellence in ecological research, and that supports formal scientific inquiry into the natural communities of the Sonoran Desert.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place where kids can get outside and experience the natural world.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The built environment at the DDC should conform to the highest possible standards of green building and be a teaching tool for sustainable building practices (and lifestyles) in and of itself.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place where people can spend an hour or so learning about the natural communities of the Sonoran Desert.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a place that provides convenient access to the outdoor recreation opportunities on the trails of the McDowell Sonoran Preserve.

strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
()	()	()	()	()

The DDC should be a signature Scottsdale attraction that attains a nationwide reputation as a “don’t-miss” opportunity for Scottsdale visitors.

strongly agree somewhat agree neither agree nor disagree somewhat disagree strongly disagree
() () () () ()

The DDC should be a place where even inexperienced visitors can get the advice and equipment they need to have a safe, enjoyable outdoor experience in the McDowell Sonoran Preserve.

strongly agree somewhat agree neither agree nor disagree somewhat disagree strongly disagree
() () () () ()

The DDC should be a place primarily focused on encouraging responsible use of Preserve trails, facilitating outdoor recreation and offering a modest level of interpretation of Sonora Desert resources.

strongly agree somewhat agree neither agree nor disagree somewhat disagree strongly disagree
() () () () ()

There is a numerical scale on the wall chart titled “A Question of Scale.” At either end of the two-headed arrow are proportionally-sized schematic representations of the scenarios which are being considered. Please circle the number below that corresponds to the number that you think represents an appropriate size for the facility (1=smallest, 7=largest).

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Feel free to use the space below to make additional comments.

Thank you for taking the time to give us your input. Your opinions are highly-valued.

Strategic Recommendations Survey for March Workshop

Input Form for Strategic Recommendations for Interpretive Media and Facilities Development

March 2008

First: do no harm.

Developing facilities with zero environmental impact is not possible. But maintaining focus on limiting development (and eventually containing a high proportion of visitor use) within a strictly-defined development area should be an absolute priority.

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Create a distinctive, place-identified brand.

Both Scottsdale and the Sonoran Desert are unique. Call the place something that, at a minimum, creates a region-specific identity. Try to use the word “Scottsdale.”

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Focus on natural history and ecology...

...with a central theme of adaptation. Do one thing, do it well. View the interpretation of human cultures through the lens of adaptation to environment. Phoenix already has a museum interpreting Native American culture, a botanical garden and a zoo. Scottsdale already has an art museum. Facilities interpreting cowboy culture (Museum of the West) and architecture (joint project between the Frank Lloyd Wright Foundation and Guggenheim Museum) are proposed. In the words of Dizzy Dean: “Hit it where they ain’t.”

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Reach out to the local community, early and often.

Many Scottsdale residents were visitors first, who liked what they experienced and eventually chose the Scottsdale lifestyle fulltime. Although visitors are a critical target market, the DDC will not thrive without robust local support. This criterion implies a nimble management approach with dynamic programming and lots of space for changing exhibits that stimulate repeat local visitation. Community-focused programming such as day camps for kids and a robust environmental education outreach is a critical part of this vision.

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

What's the WOW!?

It's the landscape of the McDowell Sonoran Preserve itself.

A primary objective should be the encouragement (and facilitation) of low-impact recreation on the Preserve trail system. Buildings should be low-profile to allow visual connection to the landscape. Enjoyable, safe outdoor experiences help visitors understand and appreciate the value of the lands their tax dollars help to protect.

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

The WOW! is the built environment, too.

Do not be afraid to go Hollywood. There is no reason why facilitation of outdoor recreational experiences has to be mutually exclusive from using cool exhibits to entertain, educate and inspire. Just because an exhibit experience might be labeled by some as “not authentic” because it does not take place on the landscape does not mean it is not honest or meaningful. If the DDC fails as a stand-alone destination attraction, it will also probably fail in its education/preservation mission. This last sentence is troublesome to me ...could be interpreted as presumptive....i.e. it has to be a destination attraction in order to be successful at any level; sounds contradictory to our “continuum” idea; am I off base??

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Dig. Go down.

For example, build an underground theatre as one of the WOW!'s. Create a talisman, an icon, with cutting-edge architecture and engineering that allows visitors to enter the earth in much the same way desert animals burrow to survive climatic extremes.

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Be a national leader...

...in the treatment of nature deficit disorder. Make programming for kids and creating opportunities for nature-based free play the highest priority. Strive to build the strongest possible ties with local school districts by providing not only a setting for environmental education, but also curriculum materials and logistical support.

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Don't be a zoo.

But remember that wildlife is a huge attraction and potent emotion-generator. Look to partners to provide wildlife demonstrations, use remote cameras to bring animals inside in real-time and consider innovative exhibitry that displays small live animals (bugs, for instance) in ways that create memorable visitor experiences.

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Involve local kids in planning.

Conduct focus groups composed of local schoolchildren (at the elementary, middle and high school levels) to get input on exhibit and program concepts.

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Size matters!

A large amphitheatre should be a part of the DDC vision.

A performing arts venue with capacity of up to 1500 people should be an integral part of the DDC facility. The experience of acoustic performances in a scenic outdoor setting will make an important contribution to the suite of activities available to Scottsdale residents and visitors.

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

A large amphitheatre should not be a part of the DDC vision.

The DDC can achieve its preservation/education objectives *without* such a venue. The problems of parking, noise and traffic make a strong case against a large amphitheatre. But facilities to accommodate up to 200-300 people for weddings, corporate parties and so forth should be available upon rollout, because a special-events revenue stream is needed (60% of Scottsdale visitors are in a group of some sort).

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Be the halo...

...that floats over the “best of the best” that the Phoenix metro area has to offer. Build partnerships with the Heard Museum, Taliesin West, Phoenix Zoo, Desert Botanical Garden and Arizona Science Center by providing temporary exhibit space and hosting programs. Staying thematically-focused on adaptation will create the synergy of a complementary, not competitive, experience.

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Support science...

...on every possible level, including everything from sponsoring formal academic research to offering programs that allow amateur scientists, volunteers and students to participate in field research and digs.

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Go green.

Structures should be built to the highest possible LEED standards (platinum).

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Build the “commons.”

Many times during the course of preliminary research, words like “linger, congregate, gather and hangout” were heard. Whether exterior (gardens, patio, playground) or interior (internet café, coffee shop, bookstore, library, great room), it will be important to provide spaces that invite visitors to spend time in a setting that encourages a feeling of community, shared ownership and personal belonging. If successful, many local residents may be stimulated to buy annual passes/memberships for casual access (i.e. to meet friends for coffee and a walk).

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Exploit fear.

People’s fear of the desert can be turned into a WOW! factor by using typical fear-generators (snakes, scorpions, bats, bugs) as major, even iconic, exhibit/architectural features. Gigantic, larger-than-life sculptures big enough for people to enter could function at once as art objects, teaching tools and vehicles to demystify the animal and empower the visitor through understanding.

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Think summer.

Providing an extensive suite of inside (or morning/evening) summer activity options could endear the DDC to the local community and help boost summer tourism. In addition to multimedia offering such as films, summer day camps targeted at local youth would probably be well-attended (parents in desert climates are often challenged to find summer activities for their kids for obvious reasons).

Some local resorts have successfully increased summer occupancy rates by building water parks and targeting the family market. Some of the concierges who were interviewed, though, noted that kids get bored after a few hundred times down the water slide, and that alternatives to pool-related activities would probably be welcomed by summer guests.

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Blur the line between inside and outside.

To accommodate different types of groups (doing different things) throughout the year, and to encourage repeat local visitation, a high degree of flexibility in spaces is desirable (i.e. patio space that can be cooled in summer and warmed in winter through the use of adjustable shade structures and moveable walls).

strongly agree
()

agree
()

neither agree or
disagree; neutral
()

disagree
()

strongly disagree
()

Be entrepreneurial, not commercial.

Nobody wants Starbucks and McDonalds. Everybody wants revenue. A quality, mid-range food service (i.e. bakery/coffeehouse/deli) is acceptable to most stakeholders, and so is a bookstore/gift shop. Gift shops at similar locations in the Southwest generate huge per-square-foot revenues by focusing on marketing items designed by local artists (i.e. t-shirts with graphics). The executive director's job description might include something along the lines of "impresario of tasteful marketing."

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Sell Planet Scottsdale.

It is vital that the DDC be perceived by its management as part of the "Scottsdale experience," which already has considerable cachet and significant market appeal. A permanent exhibit to provide information on other Scottsdale experiences should be prominent in the exhibit mix. This might be integrated with the "desert concierge" function by creating something along the lines of an upscale "guide shack" where visitors could get information, hire outfitters, rent/buy equipment and so forth.

strongly agree	agree	neither agree or disagree; neutral	disagree	strongly disagree
()	()	()	()	()

Appendix F

LIST OF INTERVIEWEES

Dan Gruber	McDowell Sonoran Conservancy
Ruthie Carll	Executive Director, McDowell Sonoran Conservancy
Leonard Marcisz	Chairman of the Board, McDowell Sonoran Conservancy
Ron McCullagh	Scottsdale City Council
Jim Lane	Scottsdale City Council
Betty Drake	Scottsdale City Council
Tony Nellssen	Scottsdale City Council
Mary Manross	Mayor, City of Scottsdale
Erik Filsinger	Vice-Chair, McDowell Sonoran Preserve Commission
Frank Jacobson	Frank Jacobson Consulting
Jerry Miller	McDowell Sonoran Preserve Commission
Art DeCabooter	Chair, McDowell Sonoran Preserve Commission; President, Scottsdale Community College
Solange Whitehead	McDowell Sonoran Preserve Commission
Carla	community activist
Paul Audley	Arizona State Director, Trust for Public Lands
Rand Hubbell	Superintendent, McDowell Mountain Regional Park
Melinda Gulick	McDowell Sonoran Preserve Commission
Rachel Sacco	President & CEO, Scottsdale Convention & Visitors Bureau
Lauren Simons	Vice-President of Marketing, Scottsdale Convention & Visitors Bureau
Lynee Brownd	Concierge, Scottsdale at Troon North
Phil Weddle	Principal, Weddle-Gilmore, Architects
Shannon McCallum	Concierge, Fairmont Scottsdale Princess
Karen Kapinos	Concierge, Scottsdale Plaza Resort
Phillip Alsopp	Chief Executive Officer, Frank Lloyd Wright Foundation
John Holdsworth	Tourism Development Commission
Tom Morrow	Tourism Development Commission
Tom Silverman	McDowell Sonoran Preserve Commission
Florence Nelson	Originator of Desert Discovery Center Concept
Virginia Korte	McDowell Sonoran Preserve Commission
Greg Woodall	archaeologist, community activist
LeAnn Gast	Director of Education, Arizona Science Center
Jeff Williamson	CEO/President, Phoenix Zoo
Gabrielle Hebert	Director of Visitor Experiences, Phoenix Zoo
Megan Mosby	Executive Director, Liberty Wildlife
Bob Fox	Executive Director, Wild At Heart
Sam Campana	Vice-President & Executive Director, Audubon Arizona
Sarah Porter	Vice-President & Rio Salado Center Director, Audubon Arizona
Kathy Wise	Education Program Coordinator, Audubon Arizona
MaryLynn Mack	Director of Education, Desert Botanical Garden
Tina Wilson	School Program & Curriculum Manager, Desert Botanical Garden
Xanthe Skjelfjord	Grants and Projects Coordinator, Center for Native and Urban Wildlife
Roy Barnes	Executive Director, Center for Native and Urban Wildlife

Jean Ridgen	Education Coordinator, Center for Native and Urban Wildlife
Linda Searles	Executive Director, Southwest Wildlife
Debby Gibson/Daniel Marchand	Phoenix Herpetological Society
Angela D. Garcia-Lewis, NAGPRA Coordinator	Salt River Pima Maricopa Indian Community
Chris “_____”	Salt River Pima Maricopa Indian Community
Barnaby Lewis	Salt River Pima Maricopa Indian Community
Shane Antone, Acting Cultural Preservation Program Supervisor	Salt River Pima Maricopa Indian Community

Appendix G

PRELIMINARY FUNCTIONAL DESCRIPTION OF POSSIBLE PROJECT ELEMENTS

Preliminary Functional Description of Possible Project Elements
Desert Discovery Center in Scottsdale, AZ
Draft - Subject to Further Refinement

Project Element	Size Range			Location		Potential Function				Revenue Potential			Notes	
	Low	High	Units	In	Out	Program	Rental	Interpretive	Information	Amenity	Admission	Rental		Purchase
Reception														
Veranda / Deck	1,000	2,500 square feet			x		x		x	x				Info kiosks, casual gathering
Lobby	650	1,800 square feet		x			x		x					Ticketing function may be combined with info desk
Includes In Lobby				x										
Public Space (Ticketing)														
Information Desk/Concierge				x					x	x		x		Preserve and Scottsdale Orientation, event sales, tour sales, GPS/handheld device rental etc.
Coat and /or lockers	50	100 square feet		x										
Desert Great Room	800	1,200 square feet		x		x	x	x		x			x	Framed views, pre-tour assembly, pre-function
Flexible Events Space	500	2,500 square feet		x	x									Internal / external events, subdividable, quality space
Café/Restaurant/Kitchen	20	80 seats		x	x		x			x		x		Catering and restaurant functions
Retail/Gift Shop	500	1,200 square feet		x						x			x	
Restrooms	scaled to facility requirement			x						x				
Exhibits														
Indoor Exhibits	5,000	20,000 square feet		x		x	x	x			x	x		
Outdoor Exhibits, Trails etc.	0.5	5 acres		x		x	x				x	x		Demonstration gardens, natural habitats, geology etc.
Observatory / Planetarium	1,000	2,000 square feet												One or both
Gathering Areas														
Large Amphitheater	1,000	1,500 seats		x		x	x					x		Shaded, covered
Small Amphitheater	100	200 seats		x		x	x				x	x		Shaded, covered
Large Format Theater	60	120 seats		x		x	x	x	x		x			May be IMAX or digital
Classrooms	scaled to program requirement			x		x	x	x		x		x		Need / design may depend on use of other flexible spaces
Kids Play Area	2,000	3,000 square feet		x		x		x						
Landscape / Public Art / Site Treatments	scaled to facility requirement			x		x				x				Entire site to enhance visitor experience and demonstrate / interpret themes and sustainable development
Operations/Back of House														
Offices	scaled to facility requirement			x										
Research labs	scaled to facility requirement			x										
Research library	scaled to facility requirement			x										
Storage	scaled to facility requirement			x										
Custodial	scaled to facility requirement			x										
Maintenance	scaled to facility requirement			x										
Restrooms	scaled to facility requirement			x										
Building Systems	scaled to facility requirement			x										
Staff Breakroom	scaled to facility requirement			x										
Volunteer Area/Restrooms	scaled to facility requirement			x										
Parking	scaled to facility requirement			x										

Source: Concept/Econ. Inc. and Exhibit Design Associates

Source: ConsultEcon, Inc. and Exhibit Design Associates.

Appendix H

Scottsdale Ordinance 3321 – McDowell Sonoran Preserve

ORDINANCE NO. 3321

AN ORDINANCE OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, AMENDING THE SCOTTSDALE REVISED CODE TO ADD CHAPTER 21, RELATING TO THE MCDOWELL SONORAN PRESERVE, ENACTING RULES, REGULATIONS AND POLICIES, ESTABLISHING THE MCDOWELL SONORAN PRESERVE COMMISSION; AND REPEALING ORDINANCE NO. 2630, RELATING TO THE MCDOWELL SONORAN PRESERVE COMMISSION.

BE IT ORDAINED by the Council of the City of Scottsdale as follows:

Section 1. The Scottsdale Revised Code is hereby amended to add Chapter 21, relating to the McDowell Sonoran Preserve, which shall read as follows:

ARTICLE 1. IN GENERAL.

Sec. 21-1. Scope.

(a) The provisions of this chapter shall apply exclusively to the McDowell Sonoran Preserve, which shall be referred to in this chapter as the *preserve*. *Preserve* as used in this chapter, unless the context otherwise requires, means real property designated by the Scottsdale city council as the McDowell Sonoran Preserve.

(b) In the event of a conflict between the provisions of this chapter and any provision of this Code, the provisions of this chapter shall control.

Sec. 21-2. Purpose of the preserve.

(a) The purpose of the McDowell Sonoran Preserve is to establish in perpetuity a preserve of Sonoran desert and mountains to maintain scenic views, as a habitat for wildlife and desert plants; to protect archaeological and historical resources and sites, while providing appropriate public access for educational purposes; and to provide passive outdoor recreational opportunities for residents and visitors.

(b) The preserve will be left in as pristine a state as possible to maintain for this and future generations, in perpetuity, a nearby natural desert refuge from the rigors of urban life.

(c) The preserve will not contain traditional facilities or improvements associated with a public park, but may contain facilities or improvements that the city determines are necessary or appropriate to support passive recreational activities.

Sec. 21-3. Management objectives.

The management objectives for the preserve are consistent with the purpose of the preserve and will guide the development and establishment of rules, regulations, strategies, policies, a master plan and administrative guidelines for the preserve. The management objectives are to:

- (1) Preserve the local plants, wildlife and natural resources to maintain the biological diversity and long-term sustainability of the area's ecology.
- (2) Maintain scenic views to preserve the aesthetic values of the area for all to enjoy and for its contribution to the quality of life of the community.
- (3) Protect historical and archaeological resources, such as petroglyph sites.
- (4) Provide a superior opportunity for people to experience and enjoy the magnificent Sonoran desert and mountains.
- (5) Provide a variety of opportunities for passive outdoor recreation, such as hiking, wildlife viewing, mountain bicycling, horseback riding and rock climbing.
- (6) Support tourism in the community by providing public outdoor educational opportunities for visitors.
- (7) Provide opportunities for education and research on the Sonoran desert and mountains.
- (8) Provide enough access areas of sufficient size and with adequate amenities for appropriate public access.
- (9) Develop a non-paved public trail system for hiking, mountain biking, bicycling and horseback riding and link these trails, where appropriate, with other city and regional trails.
- (10) Restore habitat in degraded areas of the preserve to its undisturbed condition, including diverse plant species and natural ecological processes.

**ARTICLE II. MCDOWELL SONORAN
PRESERVE COMMISSION.**

Sec. 21-4. Established.

- (a) The McDowell Sonoran Preserve Commission is hereby established.
- (b) The provisions of article V, chapter 2 of this Code shall apply to the McDowell Sonoran Preserve Commission.

Sec. 21-5. Membership.

The McDowell Sonoran Preserve Commission shall be composed of eleven (11) citizens appointed by the City Council, including citizens with specific skills and experience to carry out the tasks the Commission is charged to carry out.

Sec. 21-6. Procedures; establishment of rules and regulations; etc.

The McDowell Sonoran Preserve Commission shall:

(1) Establish rules, regulations and procedures that shall govern its affairs, including provision for such officers, in addition to the chairman and vice-chairman, as may be deemed reasonably necessary for the effective and efficient operation of the commission. The commission shall determine the time and manner of election for such officers as well as the term of office and powers and duties of each respective officer.

(2) Establish the time, place and manner of notice of all regular and special meetings.

(3) Establish the manner of adoption, amendment and repeal of rules and regulations of the commission.

Sec. 21-7. Purpose; powers and duties.

(a) The McDowell Sonoran Preserve Commission, with the assistance of city staff, shall be responsible for making recommendations to the city council on the following matters:

(1) Developing a preservation strategy for an integrated mountain and desert open space system to guide and prioritize public actions, which recognizes existing development pressures and identifies the most important land for public purposes.

(2) Developing a realistic funding plan for the envisioned preserve and Sonoran Desert Preservation Program, including an estimate of the level of funding needed, recommended funding sources, the potential timing/availability of funding and the actions necessary to implement the funding plan.

(3) Serving as the citizen's oversight committee for the implementation of preserve land acquisitions that use fund from the voter-approved privilege and use tax increase

(4) Developing an educational/promotional program implementing a comprehensive and integrated mountain and desert open space system and gaining public support from various sources.

(5) Preparing a conceptual master plan for a comprehensive integrated mountain and desert open space system and a management plan for any public lands and/or public access areas.

(6) Developing a detailed action plan for preserving the open space system that defines a series of steps or specific actions that need to be taken, when actions are needed, the public process leading up to any recommended actions, and who will take the action.

(7) Responding to other requests of the city council relating to the preserve and issues relating to the preserve.

(8) Reporting to the city council on a quarterly basis on its progress regarding the tasks identified in this subsection and on any other specific requests of the city council relating to the preserve and issues relating to the preserve.

(b) The McDowell Sonoran Preserve Commission shall have the authority to form committees as needed to accomplish the tasks identified in subsection (a), above, and may include additional participants in the planning process, including citizens representing other jurisdictions and public agencies. Appointment of nonmembers of the commission to serve on committees or subcommittees shall be subject to the approval of the city council, as provided in subsection 2-241(f) of this Code.

Secs. 21-8—21-10. Reserved.

ARTICLE III. GENERAL RULES

Sec. 21-11. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Access area means that area within the preserve that is utilized for parking vehicles, interpretive displays, information, and minor amenities such as restrooms. Major trailheads will be located at the access areas in the preserve.

Commission means the McDowell Sonoran Preserve Commission.

Designated and posted means identified by appropriate signs; or by established physical barriers, including, but not limited to posts, branches or rocks; or by other means reasonably calculated to give notice to the public of areas open or closed to the public.

Passive recreation activities means non-motorized recreational activities such as hiking, wildlife viewing, mountain bicycling, horseback riding and rock climbing.

Person means a corporation, firm, partnership, association, organization and any other group acting as a unit, as well as an individual.

Preserve director means the city manager, or the city manager's designee.

Spirituuous liquor, includes alcohol, brandy, whiskey, rum, tequila, mescal, gin, wine, porter, ale, beer, any malt liquor or malt beverage, absinthe, a compound or mixture of any of them with any vegetable or other substance, alcohol bitters, bitters containing alcohol, any liquid mixture or preparation, whether patented or otherwise, which produces intoxication, fruits preserved in ardent spirits, and beverages containing more than one-half percent of alcohol by volume.

Trail means an area or areas of the preserve that have been designated and posted as trails, including historical trails if designated and posted.

Trailhead means areas which have been designated and posted as trail access points for the preserve.

Sec. 21-12. General rules for use.

(a) All persons using the preserve shall comply with all federal and state laws, and county and city ordinances, rules and regulations.

(b) All persons using the preserve shall comply with the following, except as may be specifically authorized by a permit or permits issued as provided in this section, or in sections 21-22 or 21-23 of this chapter:

- (1) No person shall possess a deadly weapon, or an air rifle, air pistol or slingshot in the preserve, or a firearm in any developed or improved area, as defined in A.R.S. § 13-3108, except as otherwise permitted by law.
- (2) No motorized vehicles shall be allowed in the preserve, except in designated parking areas. This provision shall not be construed, however, to prevent the use and operation of a motorized wheelchair by a person who ordinarily uses such equipment, when the person is engaged in activities otherwise permitted in the preserve.
- (3) No camping shall be permitted in the preserve.
- (4) No person shall discharge a firearm, air rifle, air pistol, or slingshot in the preserve, except as otherwise permitted by law.
- (5) No fires are allowed in the preserve, except as otherwise provided in this chapter. Cooking with charcoal or camp stoves may be allowed, however, but only in designated areas. The fire department, in cooperation with the preserve director, may institute more restrictive policies if required by emergency or other conditions.

- (6) All preserve users must remain on designated and posted trails to prevent damage to the land and all other areas shall be considered "off limits" for any use.
- (7) No person shall use any preserve facility, or any area in the preserve which has been declared "closed" and which has been so designated and posted by the city,
- (8) No person shall remain in the preserve after the hours established for public use by this chapter.
- (9) The sale of food, beverages or other merchandise is prohibited.
- (10) No person shall possess or shoot a bow and arrow in the preserve, except as permitted by the Arizona Game and Fish Department hunting rules and in locations designated for that purpose. All persons engaging in such lawful hunting shall have a valid and current Arizona hunting license in their possession.
- (11) No smoking shall be permitted in the preserve.
- (12) No person shall possess or consume any spirituous liquor, including beer, in or from an open container, in the preserve, except that that beer in an open container may be consumed or possessed pursuant to a permit issued by the preserve director, as provided in section 21-23, below.
- (13) No person shall remove, deface, damage, disturb or excavate any materials from or in the preserve, or any historical, prehistorical, archaeological, paleontological, or geologic site or feature situated within the preserve, including, but not limited to, plants, rocks, any other earth material, historical or other archaeological resources, such as petroglyphs and dead and/or decaying plant materials.
- (14) No person shall deface, damage or inscribe a message, slogan, sign or symbol upon any natural feature in the preserve, including the ground itself, using any material, including paint or markers of any kind.
- (15) No person shall destroy, dig up, mutilate, collect, cut, harvest or remove any live or dead tree or plant material in or from the preserve.
- (16) No person shall dig, remove or excavate any sand, gravel, rocks or soil from within the preserve.
- (17) No person shall knowingly, intentionally or recklessly litter, or throw, toss or otherwise propel, or break any glass, ceramic or breakable container in the preserve.

- (18) No person shall feed, threaten, harass, disturb or collect wildlife in the preserve.
- (19) No person shall remove any wildlife from the preserve, or release, abandon, place, bury or otherwise dispose of any animal, carcass or remains of an animal in the preserve.
- (20) No person shall erect any temporary structures, including tents, tarps and canopies, in the preserve.
- (21) No person shall undertake mechanical repair or maintenance of any vehicle in the preserve, including but not limited to automobile oil changes and engine tune-ups, except in the case of any emergency when the vehicle is inoperable. No washing or waxing of vehicles shall be permitted in the preserve.
- (22) Gas powered model aircraft and incendiary model rockets are prohibited in the preserve.
- (23) Possession or use of fireworks in the preserve is prohibited.
- (24) No person shall collect firewood in the preserve.
- (25) No person shall tether, launch or land a hot air balloon in the preserve, except in the case of emergency.
- (26) No glass, ceramic or breakable plastic food or beverage containers are permitted in the preserve, except within a motor vehicle in a designated parking area.
- (27) Dogs are restricted to access areas and designated trails, except dogs assisting in official search and rescue activities or dogs assisting physically challenged individuals.
- (28) Dogs must be secured on a leash at all times while in the preserve. The owner or custodian of a dog is responsible for the acts and conduct of the dog at all times when the dog is in the preserve.
- (29) The owner or person in custody of a dog shall immediately pick up all dog droppings (fecal matter), place them in a closed or sealed container and deposit them into a trash receptacle or remove them from the preserve. The owner or person in custody of a dog must carry/have in their possession a waste container for pick up purposes.
- (30) No person shall operate any sound amplification system in the preserve. A "sound amplification system" as used in this subsection means any device, instrument or system, whether electrical or mechanical or otherwise, for amplifying sound or for producing or reproducing sound,

including, but not limited to any radio stereo, musical instrument, phonograph, or sound or musical recorder or player.

- (31) No person shall throw, deposit or place any commercial or non-commercial handbill in or upon any attended or unattended vehicle parked or located in the preserve, or upon any structure within the preserve trailhead, access or parking areas.
- (32) All motor vehicles operated in the preserve trailhead/access/parking areas must have current legal registration, display number plates for the current registration year and be operated only by properly licensed drivers.

(d) The provisions of this section shall not apply to persons or groups which have been issued a permit by the preserve director, as provided in sections 21-22 and 21-23, below, to engage in such activities. below. Also, the provisions shall not apply to: city police personnel or other law enforcement officers, fire department personnel and other city employees, in the course of their official duties; or others authorized by the city to perform inspection, repair or maintenance work, persons providing emergency, search and rescue, medical or veterinary services; vendors or others on preserve related business, when authorized by the preserve director.

Sec. 21-13. Preserve hours; use.

Hours for public use of the preserve, including access areas, parking areas, trailheads and trails, shall be from sunrise to sunset, as determined by the United States Weather Service, unless authorized by permit issued by the city, or as otherwise provided by the preserve director.

Sec. 21-14. Penalties

(a) A violation of any of the provisions of subsection (b)(1) through (b)(3) of section 21-12 above shall be punishable as class one (1) misdemeanors are punishable under state law.

(b) A violation of any of the provisions of subsection (b)(4) through (b)(25) of section 21-12 above shall be punishable as class two (2) misdemeanors are punishable under state law.

(c) A violation of any of the provisions of subsection (b)(26) through (b)(31) of section 21-12 above shall be punishable as class three (3) misdemeanors are punishable under state law.

(d) A violation of subsection (b)(32) of section 21-12 above shall constitute a civil offense, which shall be punishable by a civil sanction in the amount of two hundred fifty dollars (\$250.00).

Secs. 21-14—21-20. Reserved.

ARTICLE IV. RULES, REGULATIONS, PERMITS AND FEES

Sec. 21-21. Rules and regulations.

The preserve director shall have the authority to make such rules and regulations as are necessary to manage, use, preserve and govern the preserve and the activities that are the subject of this chapter and shall do so with the assistance of the commission. Copies of such rules and regulations shall also be maintained on file in the office of the preserve director and at such preserve facilities, as applicable, to which the resolutions and rules and regulations apply.

Sec. 21-22. Permits and procedures for special uses of the preserve.

(a) The preserve director, with such assistance of the commission as may be necessary and appropriate, is authorized to determine what activities may be allowed in the preserve, subject to obtaining a permit issued by the preserve director. The activities for which a permit may be issued may include some activities that would otherwise be prohibited by this chapter, when in the reasonable judgment of the preserve director, the activities serve or further a legitimate public, civic or educational purpose, and they are not inconsistent with the purpose of the preserve or preserve management objectives, as set forth in this chapter.

(b) Examples of such activities, for illustrative purposes only, might include: scientific research, including collecting any specimens such as plants, rocks, wildlife or artifacts; Non-fee educational activities or outdoor classes not conducted by the City; educational activities or outdoor classes, not conducted by the City, with fees charged to participants; camping (special use permit only), erecting temporary structures, including tents, tarps and canopies, ground fires, using a loud speaker, or public address system or amplifier, selling food, beverages or other merchandise, off-trail use and other uses of the preserve when it is closed to the public or involves using an area of the preserve posted as closed.

(c) The preserve director shall establish administrative procedures and criteria for permits to insure that a fair and equitable process will be used to review and issue or deny permits. The preserve director may establish fees for permits in the preserve.

(d) All permits shall require that the permit holder and those using the facility pursuant to the permit comply with the provisions of this chapter, such other rules and regulations promulgated by the preserve director, and any other special conditions. All permits shall be in writing and be kept on the person of the permit holder when using preserve pursuant to it.

(e) As a condition of the permit, the permit holder shall comply with any insurance and indemnification requirements determined by the risk manager of the

city to be reasonably necessary, given the nature of the activity and other circumstances.

(f) To the maximum extent allowed by law, the permit holder shall agree to defend the city for, from and against all demands, claims, losses, damages and expenses that are attributable to bodily injury, personal injury, accident, illness, death or impairment, damage, destruction or loss of use of property (the city's or the property of others) arising or resulting from the permit holder's use of the preserve. The permit holder shall obtain, maintain and evidence insurance, as reasonably determined by the risk manager of the city, for the duration of the permit period. The required insurance certificates and documentation, including coverages and limits shall name the city as additional insured and the permit holder's coverage shall be designated as primary.

(g) The preserve director or any City of Scottsdale police officer may revoke a permit for a violation of its terms or any violation of rules, regulations, ordinances or state statutes by the permit holder, or any person using the facility pursuant to the permit. In the event of revocation under this provision, the permit holder shall cease the permitted activities immediately. A permit holder who has a permit revoked pursuant to this subsection shall not be entitled to a refund of any fees paid.

Sec. 21-23. Beer permits.

(a) The preserve, except such areas as may be otherwise designated and posted, shall be considered a public recreation area for purposes of Title 4 of the Arizona Revised Statutes, relating to alcoholic beverages.

(b) No person or members of a group or organization shall consume beer from an open container, or possess an open container of beer, in the preserve without first having obtained a permit pursuant to this section. *Beer* means any beverage obtained by the alcoholic fermentation, infusion or decoction of barley, malt, hops, or other ingredients not drinkable, or any combination of them.

(c) A condition of any permit shall be that the person or member of a group subject to the permit shall comply with all state liquor laws. The person to whom the beer permit has been issued must be present for the permit to be valid and the permit must be displayed at the request of any preserve employee or police officer. A permit is invalid in any preserve areas where the consumption or possession of beer is prohibited by the city.

(d) Application for a beer permit shall contain the applicant's name, address, telephone number, date of birth and age and the number of persons to which the permit will apply. The applicant shall show proof of age in one of the following forms: (i) an unexpired driver's license issued by any of the United States or Canada, provided such license includes a picture of the licensee; (ii) a nonoperating identification license issued by the State of Arizona; (iii) an armed forces identification card; or (iv) a valid unexpired passport. When applying for a permit

by phone or other means, the only acceptable form of identification is an unexpired driver's license issued by any state or a nonoperating identification license issued by the State of Arizona. The applicant must provide the number and any additional license information to the reservation agent.

(e) An application for a beer permit shall be accompanied by a fee of \$5.00. Upon the satisfaction of the terms and conditions of this section, the city shall issue a permit, which shall be valid for one day only, which shall be shown on the permit.

(f) The beer permit shall be revocable by the preserve director for any violation of this article, any provision of the state liquor laws, or any other condition of the permit. Any person who has had a permit revoked by the city shall not be entitled to apply for another such permit until the expiration of sixty (60) days from the date such revocation occurred.

Section 2. Ordinance No. 2630, passed and adopted on January 14, 1994, relating to the McDowell Sonoran Preserve Commission, is hereby repealed. To the extent that article II of this Ordinance 3321 relates to the same subject matter as Ordinance No. 2630, it shall be construed as a restatement and a continuation and not as a new enactment.

PASSED AND ADOPTED by the City Council of the City of Scottsdale this ~~15th~~ ^{23rd} day of May, 2000.

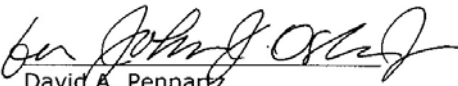
ATTEST:


Sonia Robertson
City Clerk

CITY OF SCOTTSDALE, an
Arizona municipal corporation


Sam Kathryn Campana
Mayor

APPROVED AS TO FORM:


David A. Pennartz
City Attorney