Segment Feedback

- How learned about the Domes
- Frequency of visits
- Intent to return
- Reasons to return (or not)
- Satisfaction with attributes

  Note: Satisfaction surveys should be used to look for aberrations of patterns; i.e note areas that deviate from the general satisfaction trends.

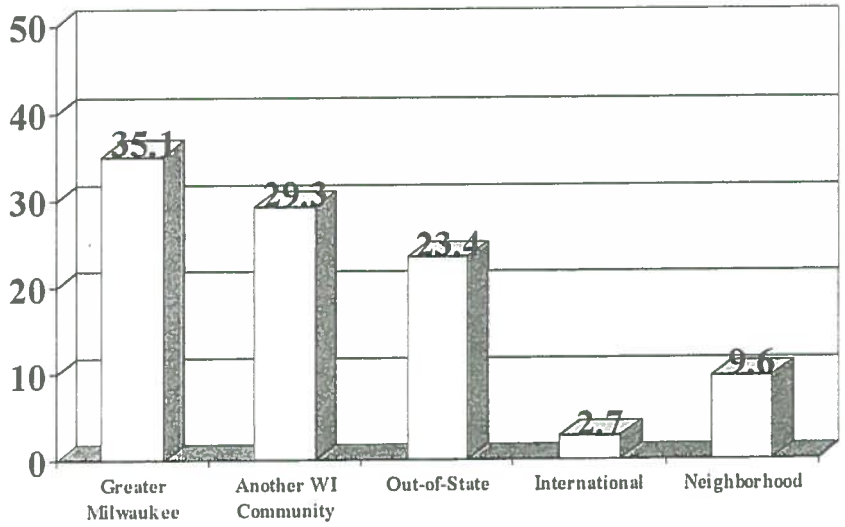
- Importance of proposed concepts
- Relationships to park
- Importance of park concepts.

  (The following charts are based on a survey of 200 Domes visitors conducted between 7/19 and 7/27/98. Surveys were randomly administered at exit doors. Total sample represents approximately 10% of period traffic)

DOMES VISITOR CATEGORIES

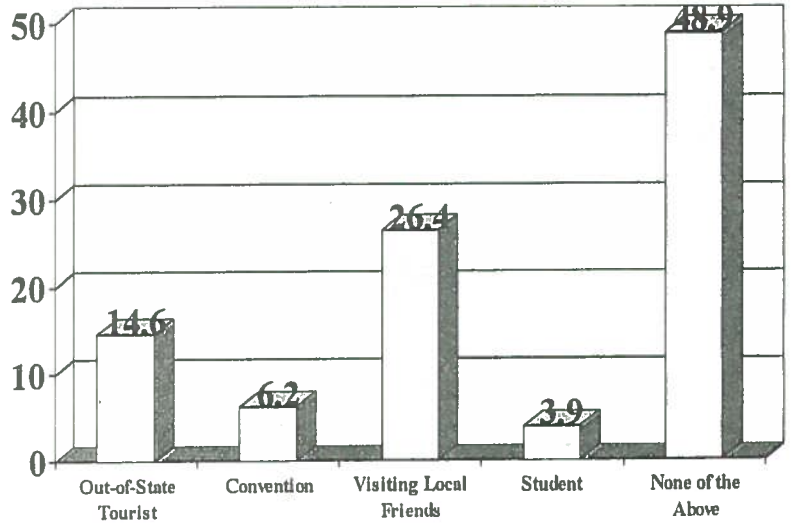
Percentages

Residency Status



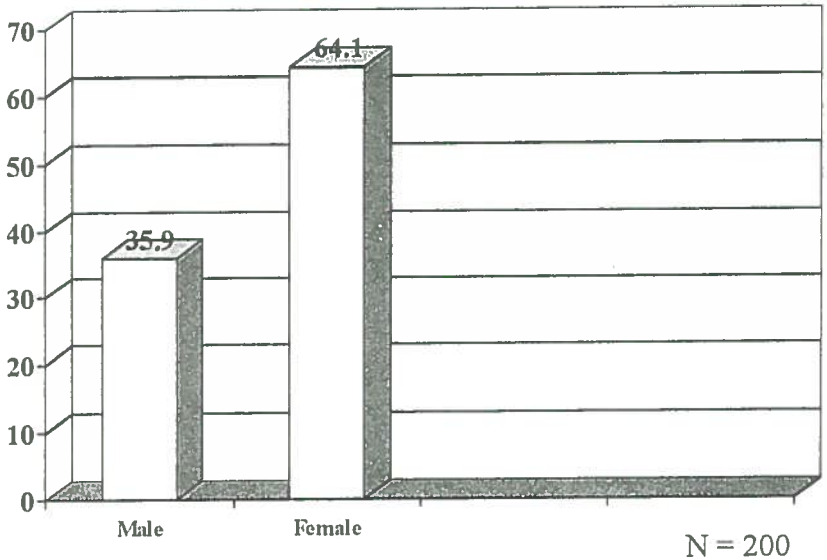
N = 200

Visitor Category



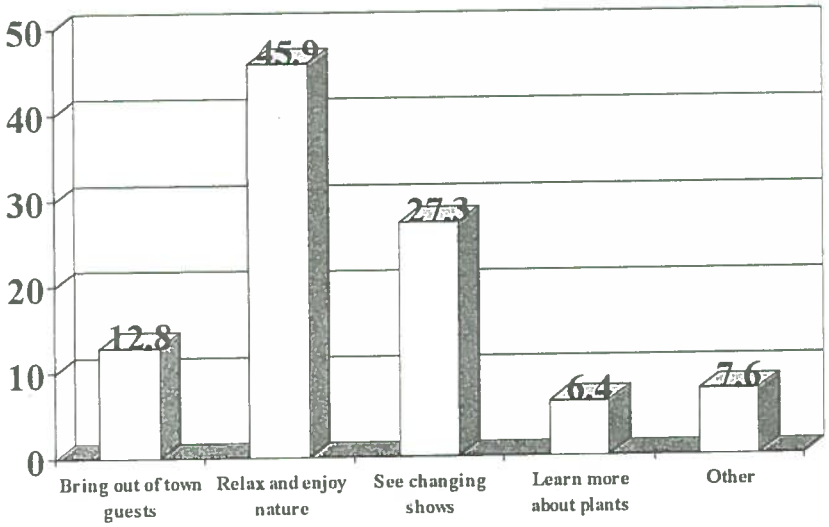
N = 200

Sex



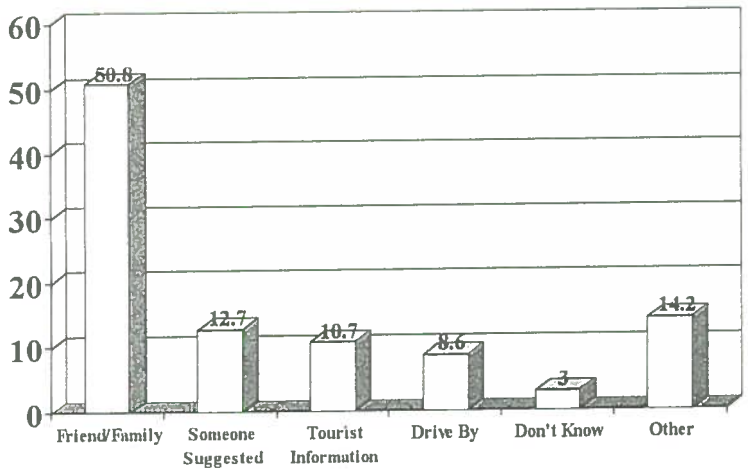
N = 200

If yes, what is the major reason you will return?



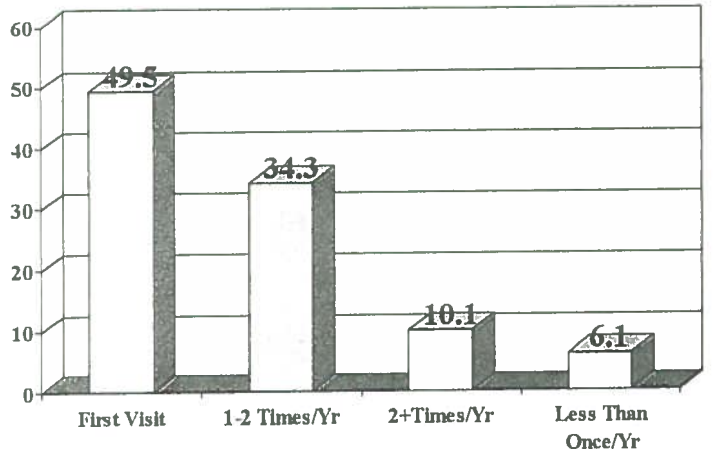
N = 172

How did you first find out about the Domes?



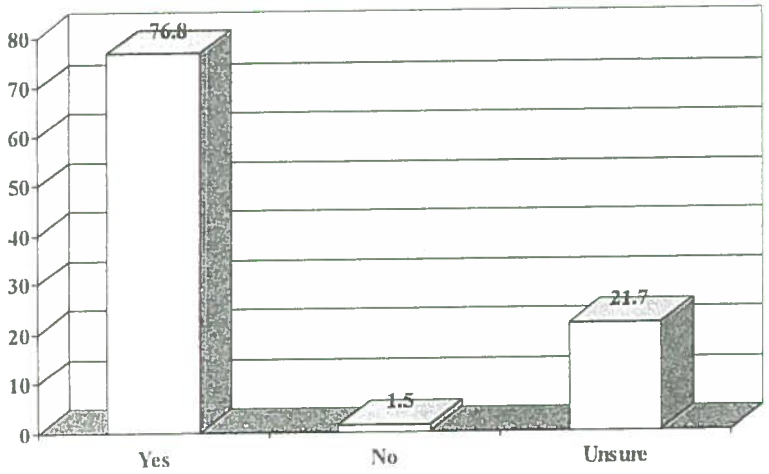
N = 197

How often do you visit?



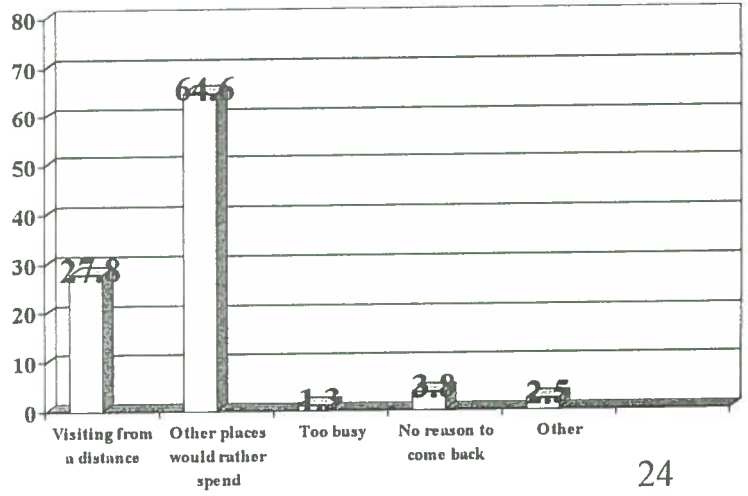
N = 198

Do you plan to return?



N = 198

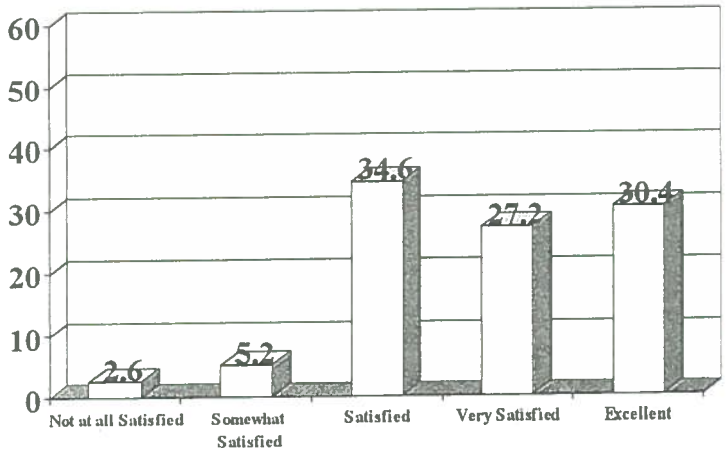
If not, what is the most important reason you will not return?



N = 79

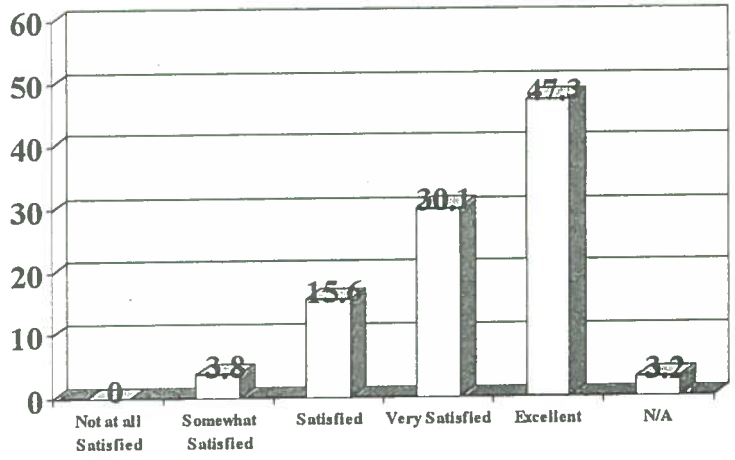
General Satisfaction With Domes Attributes

How satisfied are you with the price?



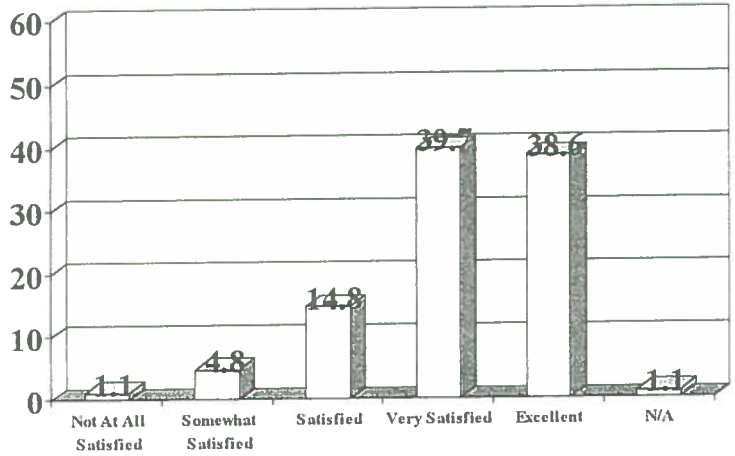
N = 191

How satisfied are you with the floral show?



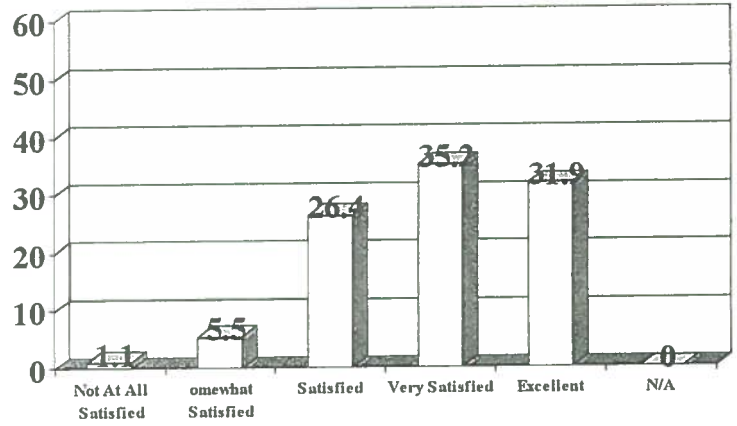
N = 186

How satisfied are you with the comfort of the surroundings?



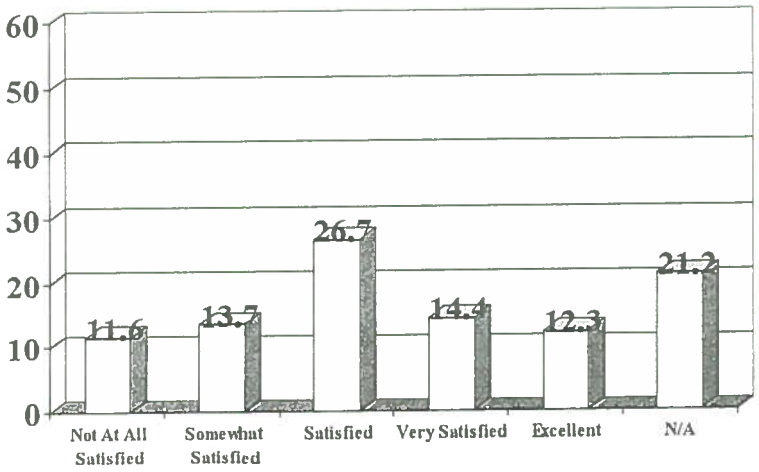
N = 189

How satisfied are you with the opportunity to learn about plants?



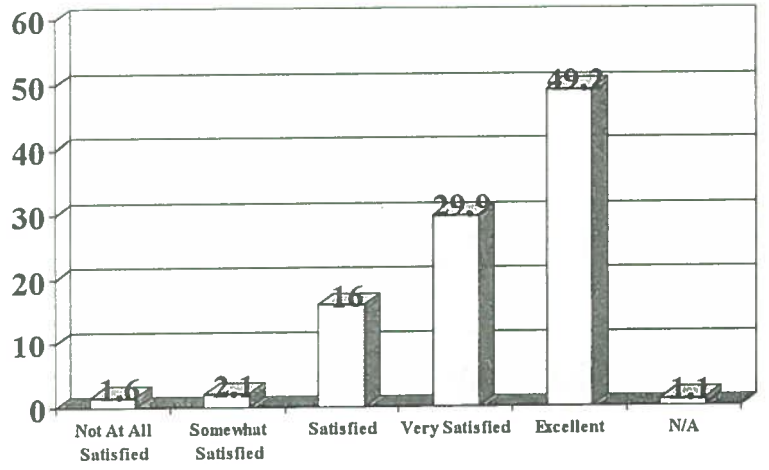
N = 182

How satisfied are you with the food service?



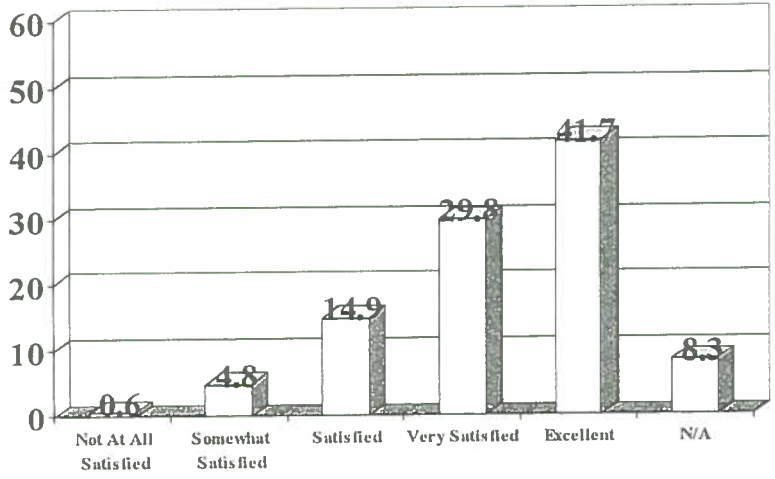
N = 146

How satisfied are you with the parking?



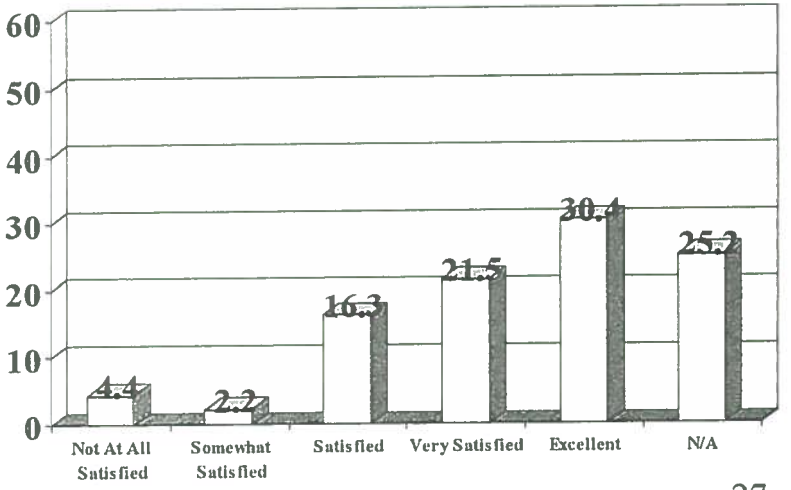
N = 187

How satisfied are you with the restrooms?



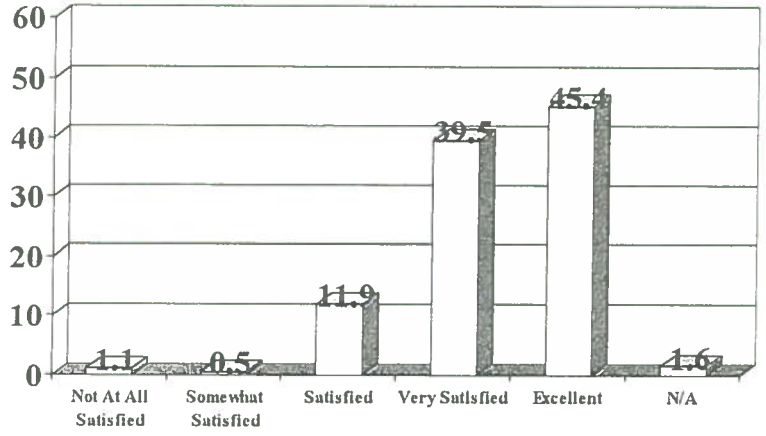
N = 168

How satisfied are you with the handicapped facilities?



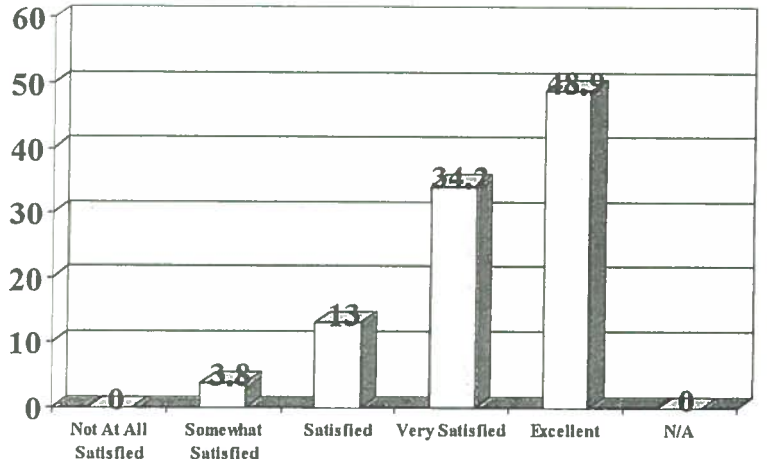
N = 135

How satisfied are you with the traffic flow within the buildings?



N = 185

How satisfied are you with the general appeal?



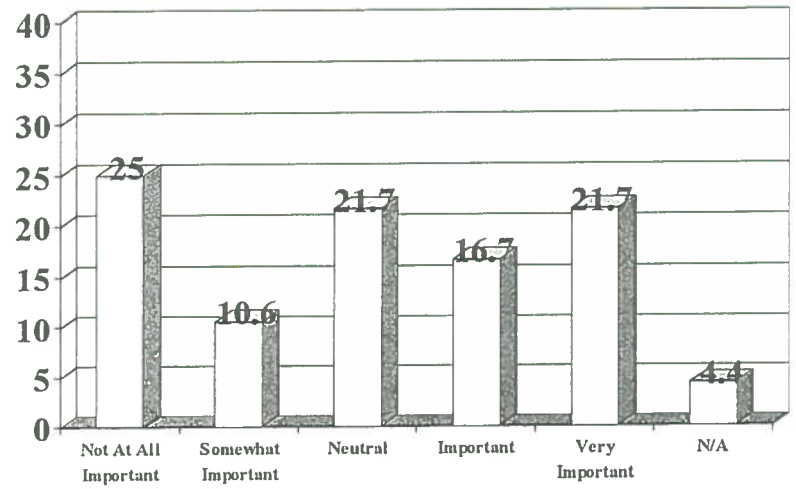
N = 184

How satisfied are you with the gift shop?

N = 175

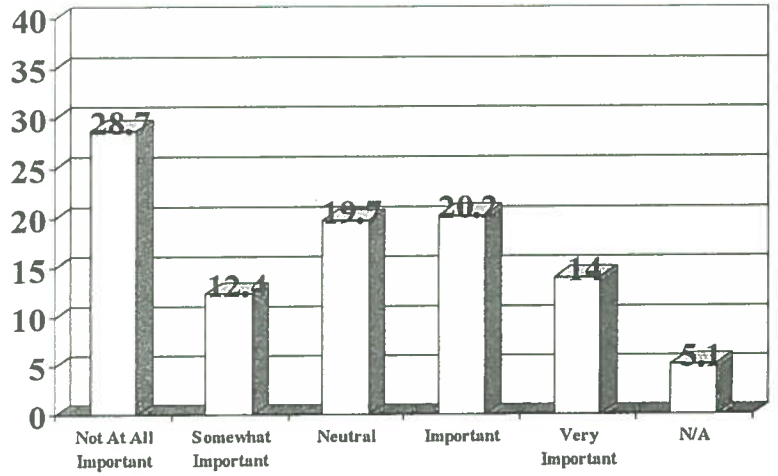
General Importance of Domes Concepts to Visitors

Importance of a sit-down restaurant



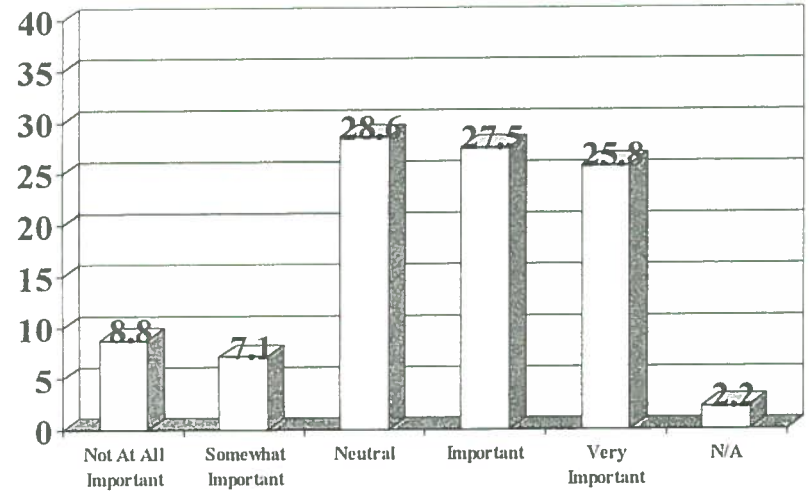
N = 180

Importance of fast food or deli service



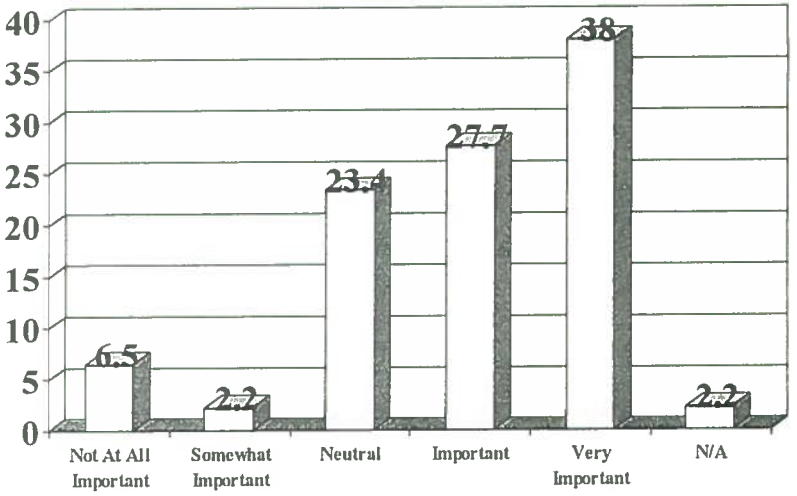
N = 178

Importance of a gift shop



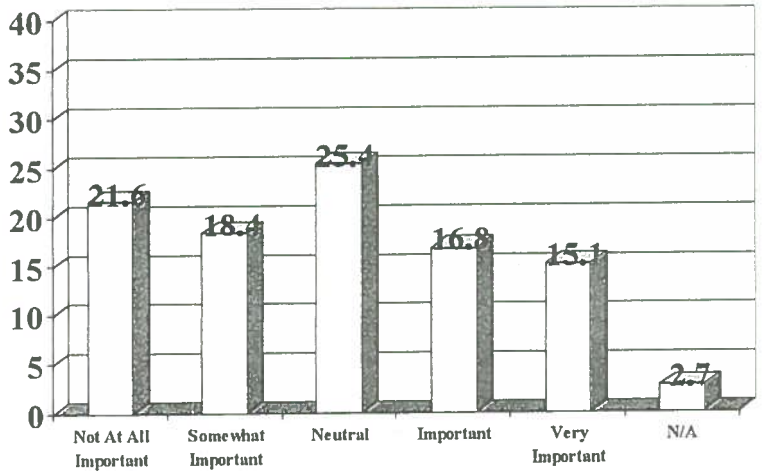
N = 182

Importance of Audio/Visual Learning



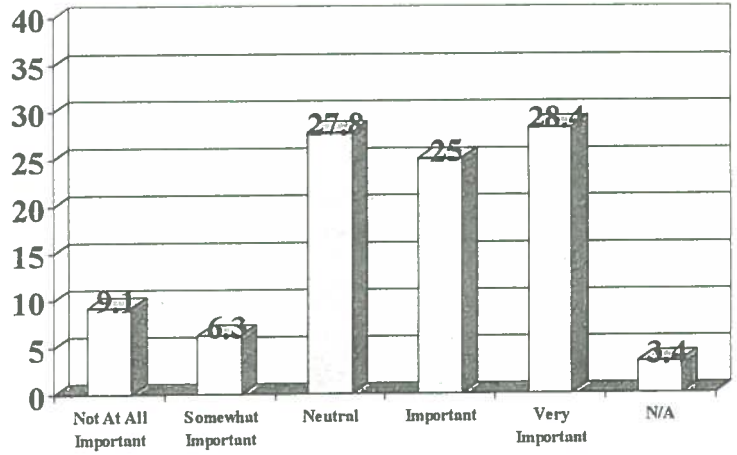
N = 184

Importance of more convenient parking



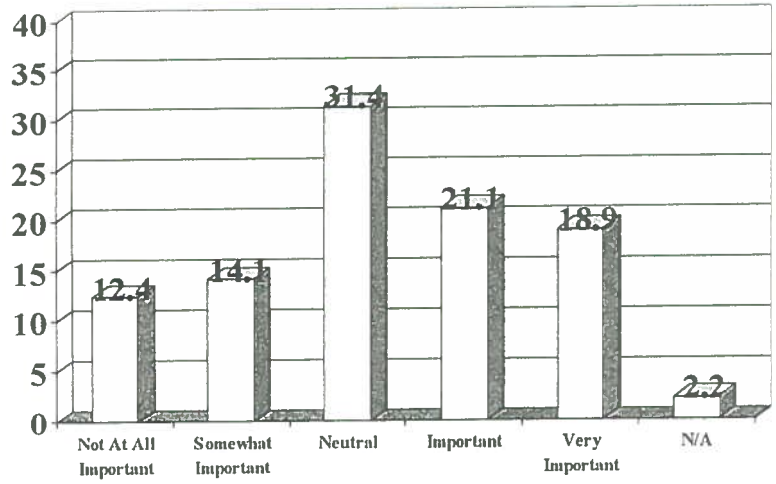
N = 185

Importance of gardening or botany classes



N 176

Importance of more benches or conversation areas

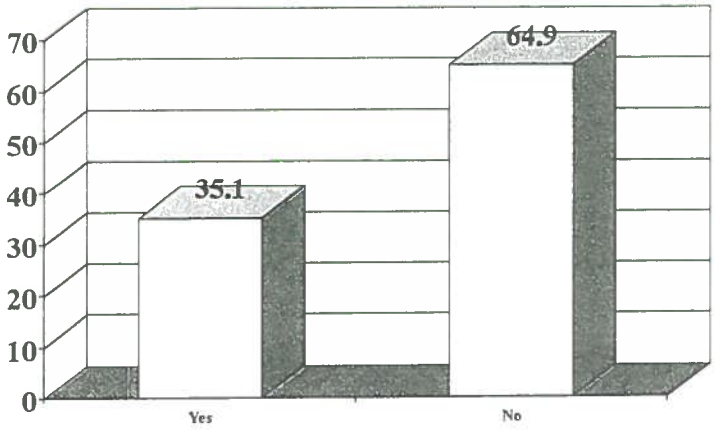


N = 185

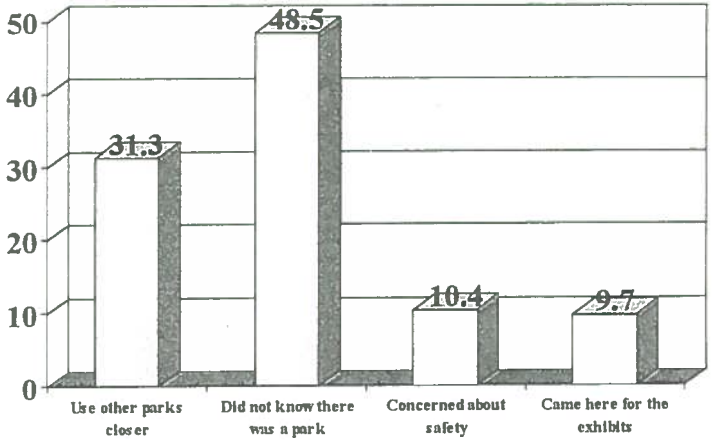
SUMS OF *"IMPORTANT/VERY IMPORTANT"* SCORES OF INTERNAL CONCEPTS IN RANKED ORDER

	Important/Very Important
Importance of Audio/Visual Learnings	65.7%
Importance of Gardening/Botany Classes	53.4
Importance of Gift Shop	53.3
Importance of More Benches or Conv.Areas	40.0
Importance of Sit Down Restaurant	38.4
Importance of Fast-Food or Deli Service	34.2
Importance of More Convenient Parking	31.9

Do you ever visit the park surrounding the Domes?

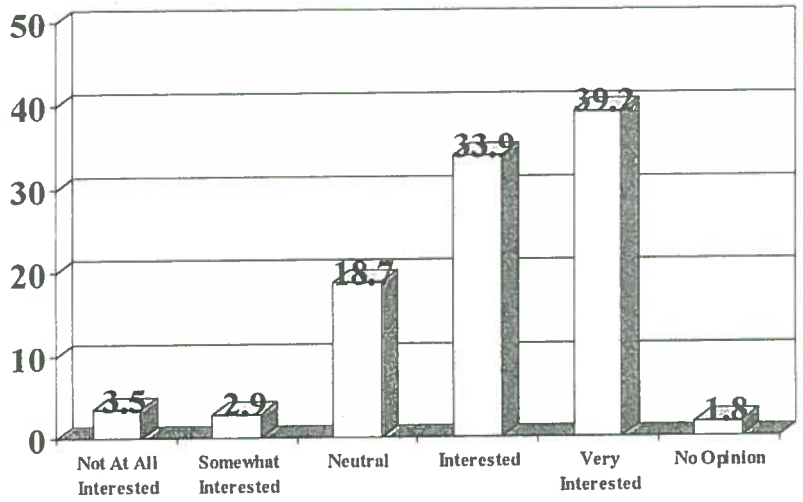


If no, what is the most important reason?

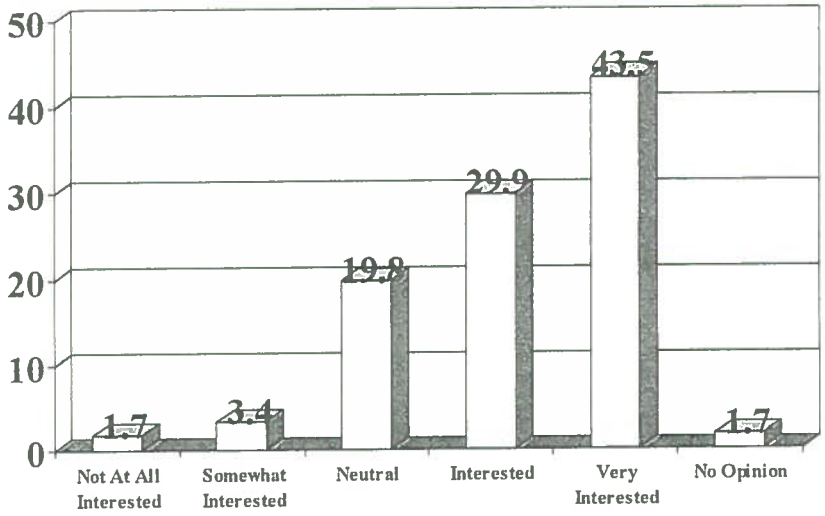


General Interest in Mitchell Park Concepts Among Domes Visitors

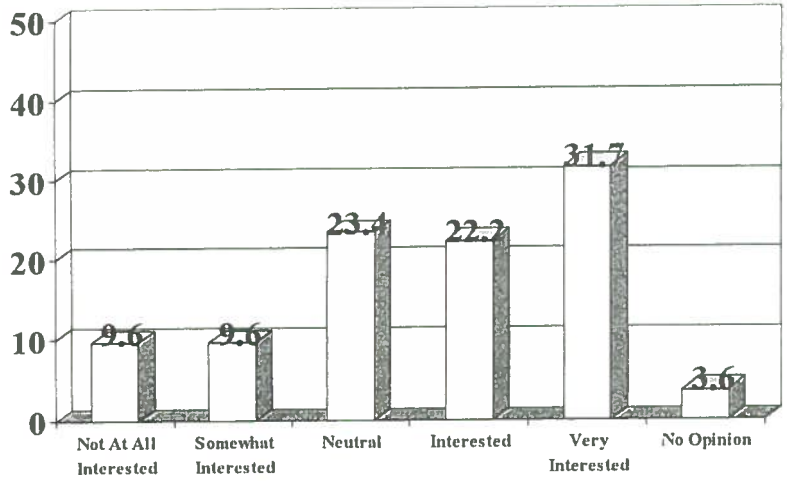
How interested are you in an outdoor horticultural display?



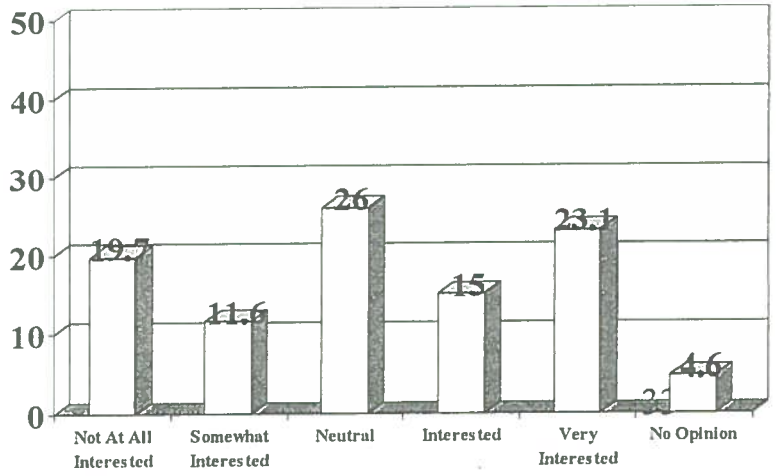
How interested are you in outdoor walking paths?



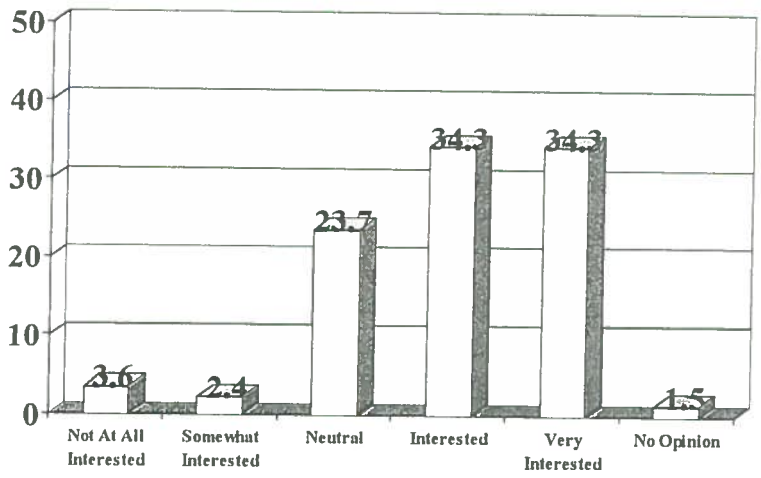
How interested are you in outdoor picnic facilities?



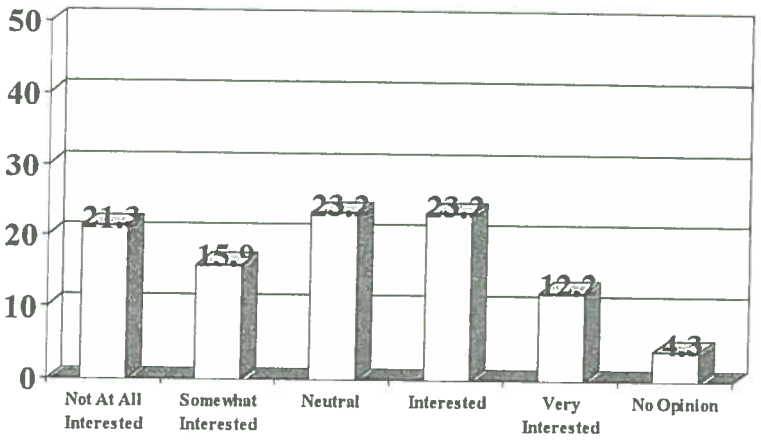
How interested are you in a restaurant in the park?



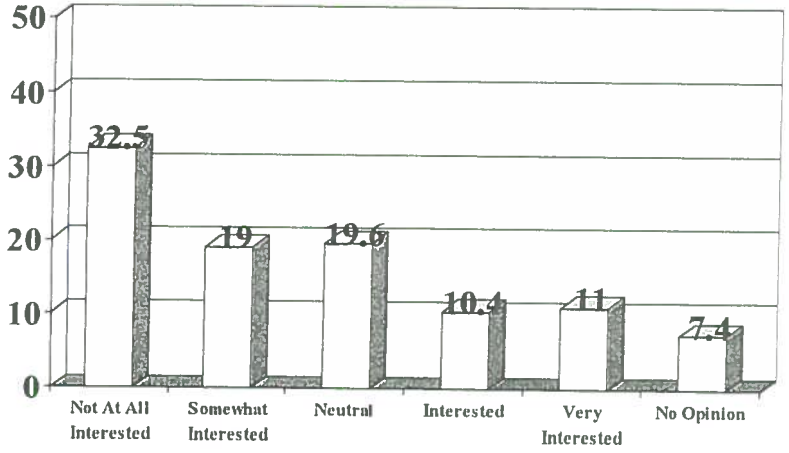
How interested are you in outdoor changing floral shows?



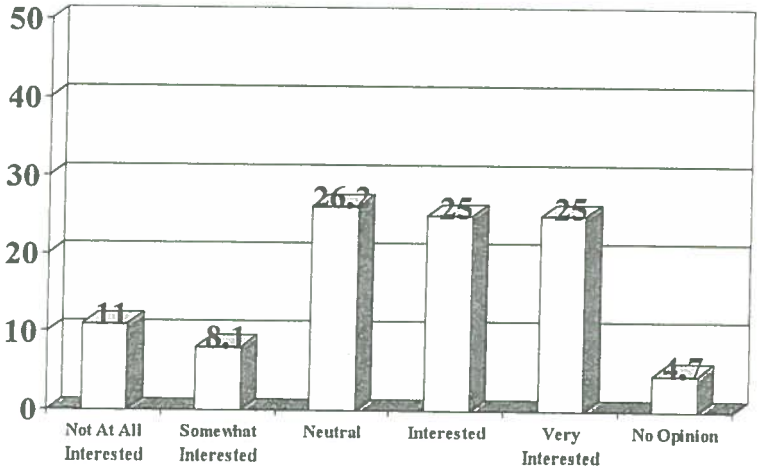
How interested are you in a community services building in the park?



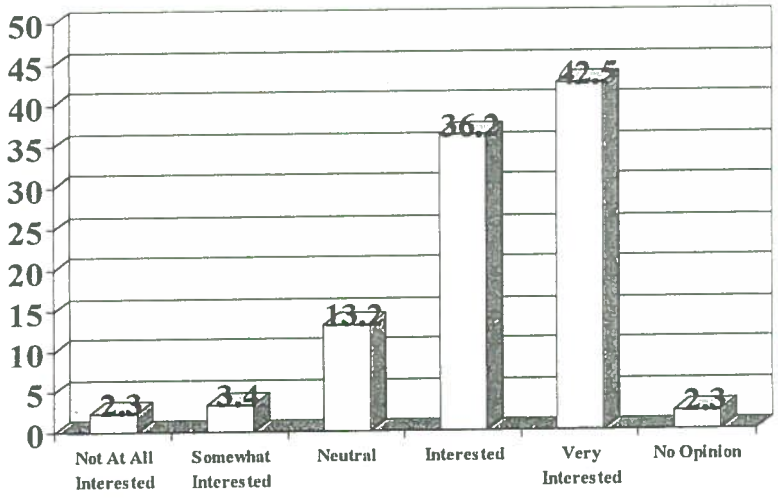
How interested are you in enhanced sports facilities in the park?



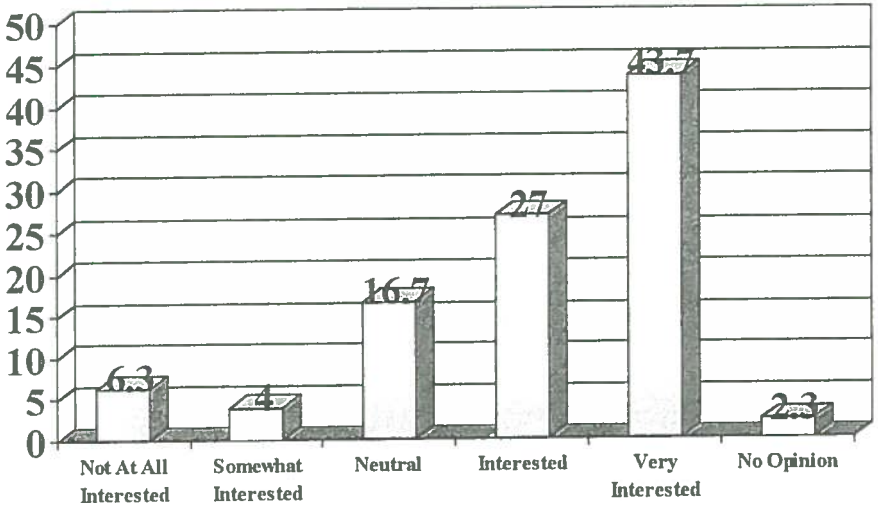
How interested are you in outdoor musical programs?



How interested are you in outdoor fountains or special water features?



How interested are you in an outdoor area where children can have fun and learn about plants?



SUMS OF "INTERESTED/VERY INTERESTED" SCORES OF OUTDOOR CONCEPTS IN RANKED ORDER (Domes Visitors)

•Outdoor fountains/special water features	78.7
•Outdoor walking paths	73.4
•Outdoor horticultural displays	73.1
•Outdoor area where children can have fun and learn about plants	70.7
•Outdoor changing floral shows	68.6
•Outdoor picnic facilities	53.9
•Outdoor musical programs	50.0
•Restaurant in the park	38.1
•Community service bldg.	35.4

Note: Among neighborhood residents, this percentage jumps to 53.3

•Enhanced sports facilities	21.4

Neighborhood residents rate this concept 34.7% important to very important.

Market Analysis -- Overview of Similar Local Attractions

- Comparative Benchmarks:

  Milwaukee County Zoo

  Betty Brinn Children's Museum

  - attendance trends
  - segments
  - programming
  - rentals
  - funding support
  - role of Friends organization

Betty Brinn Children's Museum

- Target audience: Children 10 and under
- Interactive, hands-on educational play
- Annual Attendance: 134,000 (3rd year in operation)
- Annual operating budget: $1.3 million
- Financial Base

  Private support:

  – grants/sponsorships 60%: "Development Director" -- full time individual responsible for all fund-raising including grant-writing. Executive Director shares grant-writing/fundraising responsibilities. Donor base is growing. Over 900 donors of $100+. All exhibits are sponsored.

  – self-support 35 - 40% "earned income":

22%	Admissions
5%	Group
4%	Donated admissions
4%	Memberships
1%	Rentals
2%	Gift Shop
3%	Special Events (Gala)

Betty Brinn (Continued)

- Staff:
  - 12-13 full time administrative staff
  - 12-13 part-time staff
- Marketing Budget:

  $80K excluding payroll.

  Marketing budget applied toward:

Advertising/promotion:	$47,800
PR:	7,200
Membership Drive:	25,000

- **Total marketing cost per response:** **60 cents each plus co-marketing contribution**
- Admission Price: $4.00/person over the age of 2; under 2 free
- Market Segmentation: Registers capture zip codes. This information yields demographics which are used to attract sponsor participation.

Betty Brinn (Continued)

- Programs/Promotions: Changing exhibits draw repeat as well as new audiences. Best exhibits are those that have national "names"; e.g. Jim Hensen, Magic School Bus, Richard Scarry. These shows are expensive to license (approx. $25K for 6 weeks) and require approximately $18Keach to market, but have drawn up to 200% attendance goals for period. Shows are underwritten by private or corporate grants.
- Rentals: Birthday Parties, Corporate Functions (emphasizing the "family" in afterhour functions). Rental rate: $700 (1-5 hours). After 5:00 p.m.
- Space: 10,000 square feet for 120 kids (maximum accommodation)

Milwaukee County Zoo

- Annual Attendance: 1.35 million annual attendance goal (single most visited tourist attraction in Wisconsin) Attendance trends are stable.
- Financial Base

  Admissions/rentals/corporate support/tax levy
- Operating Budget: $14 million+
  - approximately $11-12 million self-supporting (79%)
  - $2-3 million tax levy (21%)
- Marketing Budget: Running image campaign targeted to core audience demos -- intellectual humor. "Education does not attract -- major reason for visit is entertainment."

Total marketing budget excluding salaries	*$400K*
Including salaries	*$1 million*
Events (20/yr)	$100K
PR (includes printing)	$75/80K
Advertising	$200K
Special Programs/Group Sales	$20K

  - Zoological Society Marketing Budget $400K+

Total marketing cost per response: **60 cents each plus co-marketing contribution**

Milwaukee County Zoo (Continued)

- Programs/Promotions: Sponsors are solicited for special events/exhibits; e.g. Ameritech: "Bats: Master of the Night"; Chinet, Pick 'n Save: Father's Day; City National Bank: Sunset Zoofari.
- Some programs carry special fees; e.g. Aquatic Adventures -- 75 minutes training and feeding seals and sea lions -- $65/person.
- Friends Support: Zoological Society has 52,000 family memberships, 50 paid staff positions, larger marketing budget than the zoo. Zoological Society acts as non-profit arm for solicitation of grants, corporate and private donations. The accountability is important to donors. Cost of Friends membership: $35 - $40 - $45 - $60 - $75 - $100 - $200 - $300 - $400.
- Zoological Society manages many fund-raising initiatives; e.g. "sponsor an animal", "Kids 'n Critters Club", guided behind-the-scenes zoo tours, tie-ins with local retailers; e.g. Harry Schwartz donates 15% of selected purchases.
- Zoological Society has a volunteer speakers bureau available for public functions.

Milwaukee County Zoo (Continued)

- Admission Price/Parking: Adults: $8, Seniors 60+ $7; juniors (3-12) $6 2 and under free. Milwaukee residents $1.50 off any day. Wednesdays $3.50 for adults, $2.00 for juniors.
  - Parking $5
- Rentals: Each building has separate rental rates ranging from $200 - $800 plus a per person rate of $1.50 - $2.50. Picnic rates $200 - $400/site plus per person rate.
- Food Service/Gift Shop: County-run. Fast food counter. Ice cream/popcorn stands. Food service is profitable -- operations department runs concessions. Other options for food service: Concessionaires (ex.Saga), Franchises (ex.McDonald's).

Market Analysis -- Benchmark Facilities

NEW YORK BOTANICAL GARDEN

- Founded in 1891 -- Situated on 250 acres in the Bronx. Includes 27 outdoor gardens and plant collections, a Victorian conservatory and a 40 acre forest.
- Annual attendance -- 500,000 visitors a year.
- In 1993 NYBG launched a $200 million master plan to include scientific research, special events and new visitor amenities. Included among these is the restoration of the conservatory, building of a new Plant Studies Center and opening of a Garden Café and Terrace Room.
- Everett Children's Adventure Garden opened in May, 1998 at a cost of $9 million. The Garden is a 12-acre site serving as the centerpiece of a $15 million Children's Adventure Project. The site includes eight acres of exploration activities, trails, picnic areas and amenities including an indoor center for hands-on learning.
- Goals:
  - Improve general science education for children
  - Integrate environmental education into school curriculum
  - Improve public understanding of environmental issues.
- Funding support received from major corporations, national foundations and individual contributors.

BROOKLYN BOTANIC GARDEN

- Situated on 52 acres in New York City.
- Attendance -- 750,000 a year.
- $10 million operating budget -- 31% City funds, 10% Contributions, 15% Grants, 8% Membership Dues, 9% Parking/Special Fees, 3% Admissions
- Admission Fees: Adults $3.00, Students/Seniors $1.50, Children 50 cents, Tuesday free for all visitors
- Children's Discovery Garden designed for three to six-year olds and their families.
- Discovery Garden has four zones
  - Children's Discovery Zone -- safe independent play including a meadow, a maze made up of hedges, a weeping tree and a sandbox/latticework weaving wall.
  - Family Nature Trail
  - Orientation area
  - Toddler space
- Friends Membership 18,315 in all 50 states and 52 countries. Membership begins at $25

OLBRICH BOTANICAL GARDENS

- Located in Madison, WI. Fourteen acres of outdoor gardens (free admission) and 50 ft. glass tropical conservatory (admission $1).
- 1997 Attendance -- 200,000
- Operating Budget:
  - 50% Friends
  - 5% Admissions
  - 45% Public Support (City)
- Private foundation contributions supported building of two new gardens in 1997.
- Friends organization
  - 5,000 members
  - 500 volunteers contributing 23,000 hrs./yr.
  - Friends organization raised $1,800,000 in 1997 to fund acquisition of additional real estate for gardens.
  - Operates gift shop which generated $229,000 in 1997 gross sales.

- COMO PARK CONSERVATORY St. Paul, MN
- Attendance: 370,000 - 490,000/year
- Metro Population: 2.5 million
- Location: Geographic center of city. Moderate to upper moderate income residential.
- Built in 1915. Indoor area includes sunken garden, palm house, North house (edible/medicinal plants), fern room and plant/art gallery. Outdoor area includes one acre fenced Japanese garden.
- Conservatory is located within very popular park and zoo which draws an estimated 2.5 million visitors per year.
- Visitor base is mainly local. Marketing outreach to tourism segment through tie-ins with Mall of America.
- Financial Base: Operating budget: $2.4 million. Admission 4.5%, Gift shop 8%, Rentals 4% (approximately 300 weddings/year), Gifts 1.5%, Grants 1%, City Tax Support 46.4%, In-Kind Support 7%, Friends Support 3%. Admission fee is $1 adults/50 cents students/seniors.
- Approximately $3,000 spent on marketing -- primarily local TV and radio PR coverage. St. Paul Foundation provided funds for marketing consultant. Full-time staff includes a government relations staff manager who specializes in PR with politicians.
- Because it is located within a regional park, the conservatory is eligible for capital dollars through the legislature. A recent contribution of $1.4 mm was received through the Grants from State sources. Funds are also available from the State Park and Open Spaces commission which is administered through a metropolitan council. Hence the importance of the government relations liaison position.
- Executive Director, Roberta Sladsky comments that, though capital dollars are relatively easy to come by, operating monies are not. Her challenge is to find the funding to support the operational expenses.

FOELLINGER-FREIMANN CONSERVATORY Ft. Wayne, Indiana

Attendance: Approximately 70,000/year

Metro Population: 375,000

Location: Downtown business district across from convention center. Four acres total -- plans to add 1/2 acre children's Adventure Garden.

- Facility: Built in 1983 through $4 mm in private donations. Land was free. Indoor area includes three different houses: Floral showcases (changes 6 times/year), tropical environment and a Sonoran Desert environment. An outdoor Terrace Garden features a cascading waterfall and is paved and planted with perennials and annuals. Rental capacity is provided by three rooms: 85 person, 50 person and banquet facility for 200. A new atrium and gift shop were recently constructed with funds from Foellinger Foundation ($1 mm and city bond $400K).
- Financial Base: Operating Budget of $400,000 - $500,000 is covered as follows:
  - Admissions 25%
  - Sponsorships: 4%
  - Endowment: 15%
  - Friends: 14%
  - City: 33%
- Admission Price: $2.75 adults/$2.00 students 6 - college/ $1.50 4 years +
- Marketing and Programming: Two new staff positions were recently provided by a Foellinger Foundation grant of $500,000 over 5 years plus $40,000 to cover marketing activities.
- Ten year master plan created in 1994. Facility is in third year of capital program. Recently installed first set of display recommended in the Educational Master Plan at a cost of $185,000.
- Friends organization operates gift shop, front desk, conducts spring plant sale, provides show changes, flower groomers and conducts fund raisers. Friends contribute $60K/year to operating budget, $20K/year to endowment fund.
- CHALLENGES: Working hard to reach new audiences. Direct targeting to kids and teachers. Offering workshops/events/birthday parties/sleep-overs, etc.
- Beginning tourism targeting. Developed co-op marketing package. Hotel room/tickets/week-end package --Zoo, conservatory, etc.

Mitchell Park Horticultural Conservatory

- 1997 Attendance: 202,223
- 1997 Earned Revenues: $582,311
- Operating Budget: $1,317,546
  - 56% Public Support $735,235
  - 44% Self-Support $582,311
    - Admissions 77.47%
    - Rentals 9.92%
    - Friends Contract 5.81% (Gift shop)
    - Bar Service 2.41%
    - Gift Inventory 1.60%
    - Photos 1.19%
    - Ceremonies 1.01%
    - Donations .32%
    - Golf .28%

      » 100% of $582,311
- Total Marketing Budget: $9,000 marketing communications, $6,000 graphics account, $7,000 brochure. Total $22,000 (11 cents per response)
- Friends Organization
  - Friends run the gift shop and contribute 10% of total sales to Domes operating budget.
  - Additionally, the Friends contributed total of $21,450 in 1997 to cover construction of Education Center, costs of lobby furniture, staff education, library needs, internet access, etc.
  - 400+ members
    - $15 - $20 - $25 - $35 - $100
- Financial Model not self-contained. 100% of revenues pass through to County Treasurer.
- Rentals:
  - 50 rentals in 1997 contributed $57,756 or $1,155 average per rental. 1998 is on track for 75 rental events.
  - Rental fee is flat rate plus per person ($415 + 4.25 weekdays, $465 + $525 weekends) Average group size 140.
  - Currently turning down approximately 50-60 rentals per year because of size and timing limitations
  - Additional 50 rentals averaging 350 people yields $95,125 in new revenue.
  - Plus projected revenue of $90,000 based on existing capacity
  - Total revenue potential without additional marketing $185,125 (Total 125 evenings)
  - Rental Capacity Based on Calendar: 364 potential evening rentals (260 weeday, 104 weekend days)
  - Additional rental capacity for luncheons, mid-day meetings, etc. with dedicated rental space.
- Corporate Support -- None currently

MITCHELL PARK DOMES:		MILWAUKEE COUNTY ZOO		BETTY BRINN MUSEUM	
Attendance:	202,223	Attendance	1,350,000	Attendance	134,000
Operating Budget:	$1,317,546	Operating Budget:	$14,000,000+	Operating Budget:	$1,300,000
Public Support:	56%	Public Support:	21%	Private Support:	60%
Revenue Contribution to County:	44%	Self-Support:	79%	Self-Support:	40%
Admissions	77.47%			Admissions	22%
Rentals	9.92%			Group	5%
Friends	5.81%			Donated Admissions	4%
Misc.	12.6%			Memberships	4%
				Rentals	1%
				Gift Shop	2%
				Special Events	3%
Marketing Budget	$22,000	Marketing Budget:	$400,000	Marketing Budget:	$80,000
(1.6% Operating Budget)		2.8% Operating Budget)		(6.2% Operating Budget)	
		Zoological Society Mktg Budget	$400,000+		
Total marketing cost per visitor:	11 cents	Total marketing cost per visitor:	60 cents *(plus value of co-marketing contribution)*	Total marketing cost per visitor:	60 cents *(plus value of co-marketing contribution)*
(No co-marketing contribution)					

PRELIMINARY FINANCIAL PROJECTIONS BASED ON INCREASED MARKETING SPENDING

Assumptions:

- Target increase of 15% in attendance 1999 and again in 2000
  - 1999 target -- 232,300
  - 2000 target -- 267,145
- Marketing budget based on 60 cents per attendee (1997 attendance figures) - $121,200 (not including salaries)
- Average revenue from admissions: $2.25 each (based on 1997 figures)

- Total Marketing Expenditures 1999 - 2000: $242,400

- New Revenues Generated from Admissions:

$71,563	1999
$149,963	2000
$221,526	Total new revenues not including revenues saved by stemming the current attendance decline.

- Additional Benefits:
  - Increased attendance results in increased revenues to snack bar operation
  - Increased attendance results in likelihood of rental revenue increases.

SWOT ANALYSIS

Strengths:

- Strong linkage to Milwaukee's history
- Physical visibility of the site
- Committed/enthusiastic staff
- Reputation of the conservatory among horticultural professionals
- Recuperative value of the Domes "experience"
- Extraordinary view of the city
- Attendance remains strong despite declining trends.

Weaknesses:

- Lack of financial resources to support growth
- Lack of marketing resources to support growth
- Current facility does not support future growth -- rental space, audio-visual learning needs, outdoor horticultural interests

Opportunities:

- Alliances to reach/strengthen segment attendance.
- Solicitation of private/public funds sources
- Attract/strengthen (appropriate) market segments through focused marketing strategies.
- Strengthen Friends organization to provide arm for private/public fund-raising.
- Additional staff to support growth; e.g. education coordinator, additional marketing staff
- Integration of outdoor/indoor horticultural elements

Threats:

- Declining attendance trends threaten extinction
- Crime trends may ultimately discourage growth
- Without close accountability of return on investment, tax-levyfunding may diminish.

RECOMMENDATIONS:

Invest in targeted advertising: Based on 60 cents per response, current attendance of 200,000 would justify a $120,000 marketing budget. Use at least half of this for general advertising targeted to benefits according to segment feedback. Invest remainder in printing, PR and promotion.

Establish measurement baselines and track effectiveness of expenditures: Establish goal for paid attendance increase (10% increase would represent approximately $80,000 new revenue.) Modify as tracking becomes more fine-tuned. *(In the Domes own experience from 1985 - 1987 an increase in advertising and PR resulted in an attendance increase of 21% and revenue increase of $81,000.)*

Add staff to support future growth: Get education coordinator on-board as quickly as possible. Increase marketing staff -- ideally create a marketing director position which would oversee rental coordinator, create special programs/promotions, secure marketing alliances, determine and oversee advertising tactics, solicit private and corporate funding.

Diversify marketing approach -- target tourism as well as local market segments. Market rental opportunities to businesses, convention groups, etc. Work with hotels, bus lines, travel agents, etc. to develop distribution channels.

Move forward with plans for building addition: There is clearly a need for audio/visual learning space (including an auditorium/theater) as well as increased and more flexible rental facilities. Increase amount of space dedicated to gift shop (a consumer priority) and include capability to provide live plant sales. Ensure that gift shop design "forces" traffic through entire space. Provide "classroom" facilities for interactive learning as well as involving environments for learning about botany and gardening

Do not invest in a restaurant until attendance justifies expense. Customer research indicates that this is not a priority for visitors. Economics of restaurant operation do not appear to support investment. *(Profitability formulae varies according to food service options. On-going analysis of feasibility of snack bar/vending options.)*

Vending machine	6 - 19 cents/person	$12,000 - $38,000 gross revenue opportunity
Snack bar	up to $1.25/person	$250,000 gross revenue opportunity
Table/cafeteria	62.5 cents - $4.38	$125,000 - $876,000 gross revenue opportunity

Pursue private and corporate funding to support programs and events: Although there are some significant obstacles to success in this area today (space, staff resources, lack of solid demographic information for co-marketing programs), an effort should be made to prioritize and approach potential sources as possible. Define the program objectives, funding requirements and target grant sources or sponsorships appropriately.

Strengthen the Friends organization: Aggressively invest in growth of Friends group through promotion as well as training. *(Milwaukee Foundation has an arm -- Management Cornerstone/Nonprofit Management Group -- that provides consulting services to non-profit groups. Deadline for application 10/1/98.)* Ultimately the Friends organization should play a major role in fund-raising.

Simplify Mission Statement: All that is done from a marketing, facilities and fund-raising perspective should tie back to a clear, simple mission statement that every individual can recite by memory. One that is broad and exciting enough in its implications to inspire programming, advertising, specific fund-raising goals, graphics, gift shop merchandise etc. For example: "Our mission is to demonstrate the ways plants improve the quality of the environment in which we live."

This particular mission statement could lead to:

•an exploration of the ways medical research is experimenting with plants to find solutions to biological problems *(funding possible through the Wisconsin Medical College)*

•an examination of the similarities between weeds in a neglected environment and sociological dysfunction

•an examination of the recuperative/restorative benefits of nature

•a comparison of the real world of the plant kingdom and the "virtual" world of the future -- the importance of the first to sustain the survival of the latter, etc.

(Current mission statement points would fall as strategies under this type of umbrella statement.)

Create a mechanism for tracking segment attendance and demographics of visitors. This is critical to success in obtaining corporate sponsorships. Although an automated system is preferable, in the short-term this information can be manually tracked.

Add outdoor horticultural elements to the indoor experience. The relaxation benefits of the Domes is the single most important draw. Market research indicates a strong interest in extending this experience out-of-doors. Include water elements.

Keep prices in line with value received. An all-day experience at the Zoo costs $8, $5.50 at the Public Museum, a two-hour experience at the Children's Museum costs $4. Guard against increasing prices indiscriminately as ultimately visitors will determine it's not worth the price. *(Continue customer research relative to price/value and reasons for decision not to return.)*

Institute a customer feedback discipline in all areas of operation -- attendance, rentals, Friends membership. Focus should not be on "satisfaction", but on value perception.

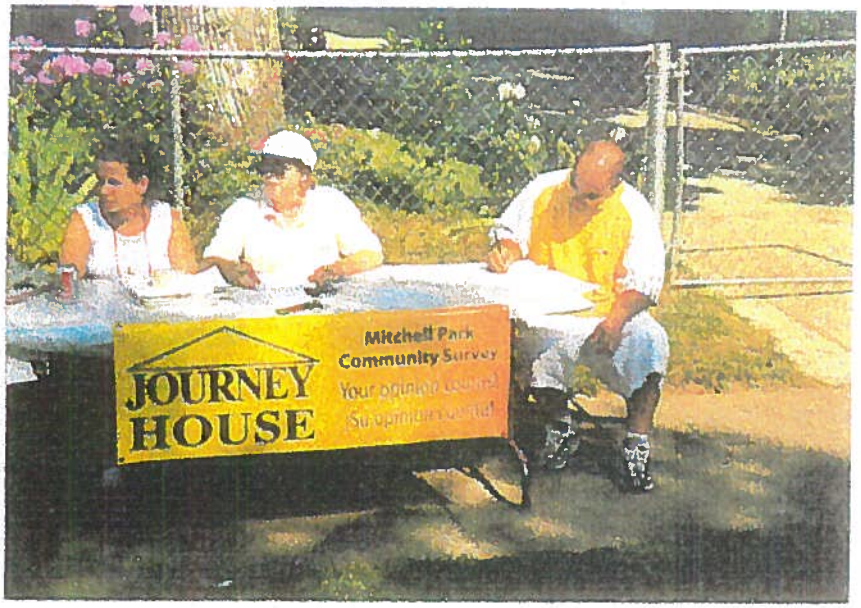
Create an internal communication program to keep staff apprised of customer feedback. Incentives for exceptional service.

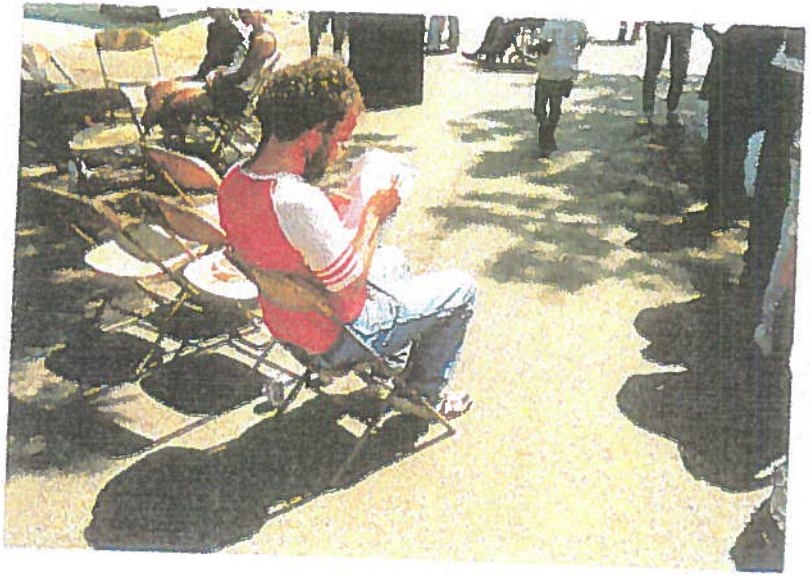
Market Analysis -- The Park

COMMUNITY SURVEY RESULTS

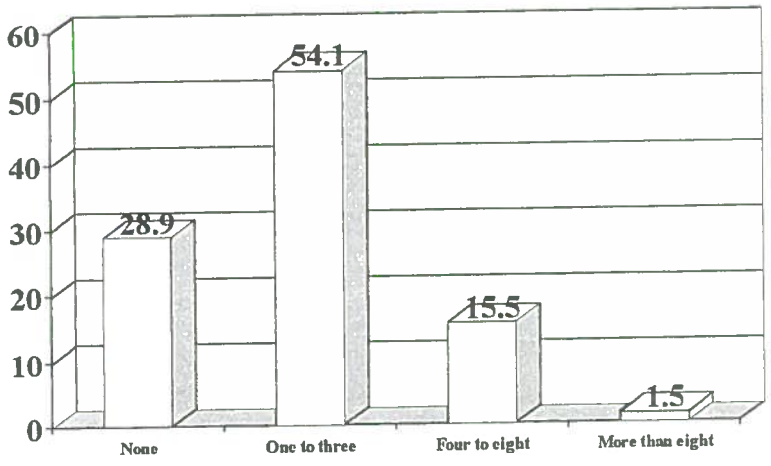
Total number of surveys represented -- 198

All surveys randomly administered at a number of near southside community venues between 7/18/98 and 8/7/98


JOURNEY
HOUSE
Mitchell Park
Community Survey

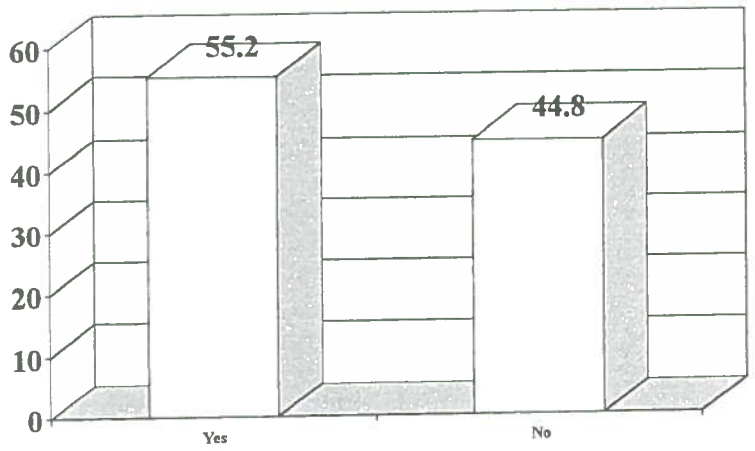


Number of children under 18 in household



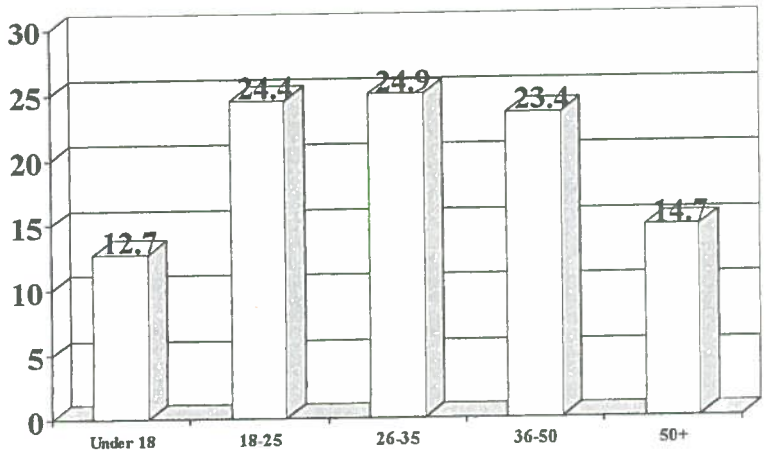
N = 194

Are you the head of the household?



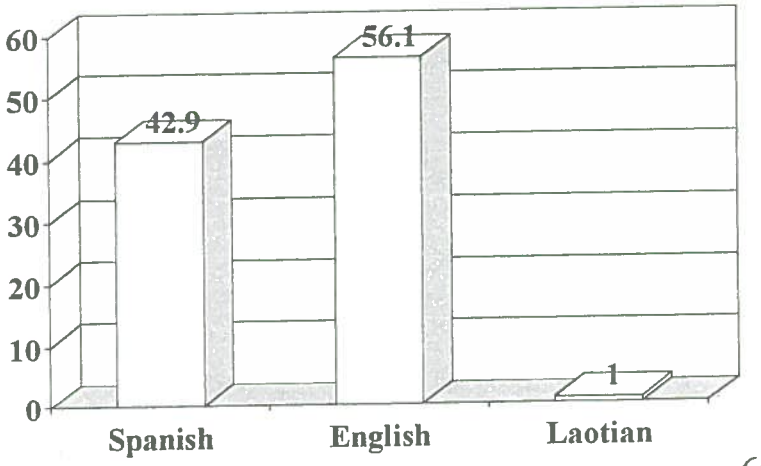
N = 192

Which age category do you fall into?



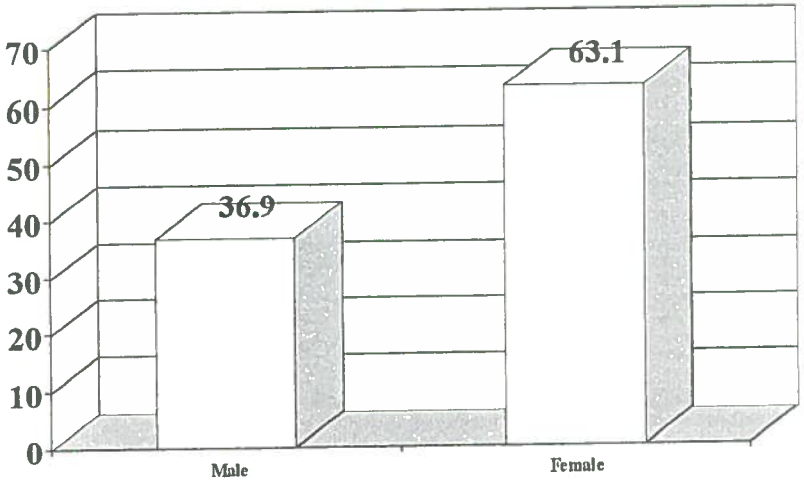
N = 197

What is the primary language in your household?



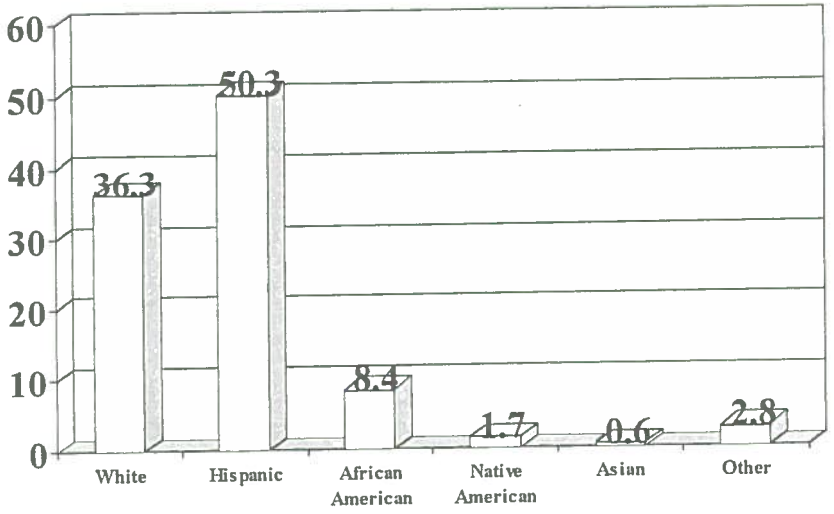
N = 196

Sex



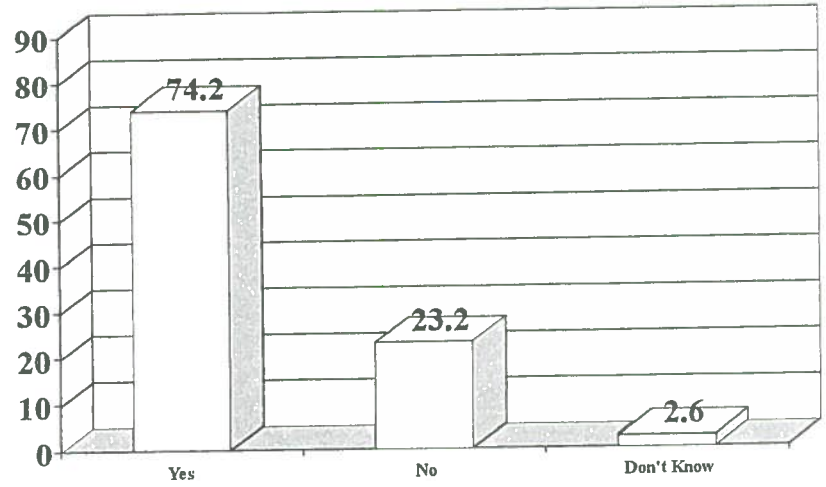
N = 198

Ethnicity



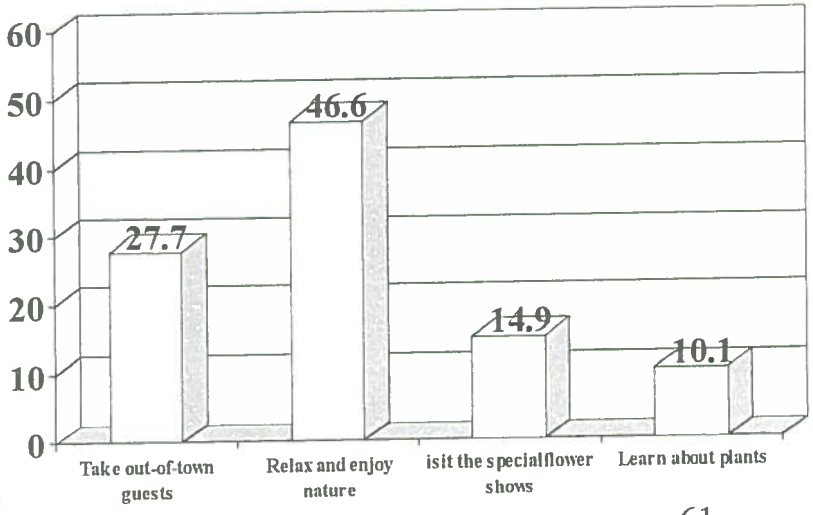
N = 179

Has anyone in your household ever visited the Domes?



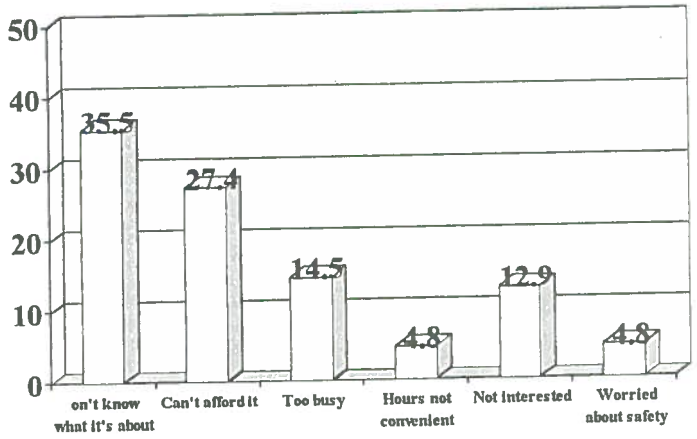
N = 190

If yes, what is the primary reason for visiting?



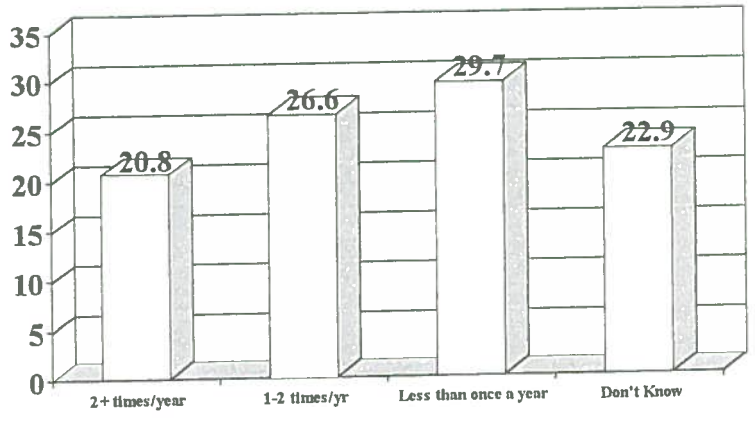
N = 148

If no, please indicate the primary reason why not



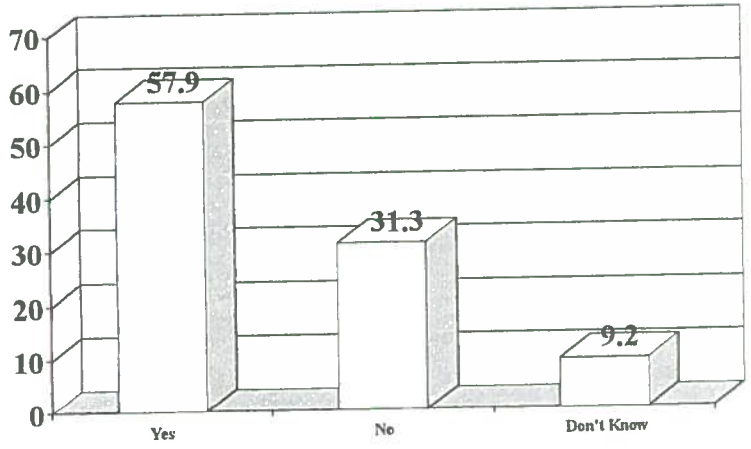
N = 62

How often does someone from your household visit the Domes?



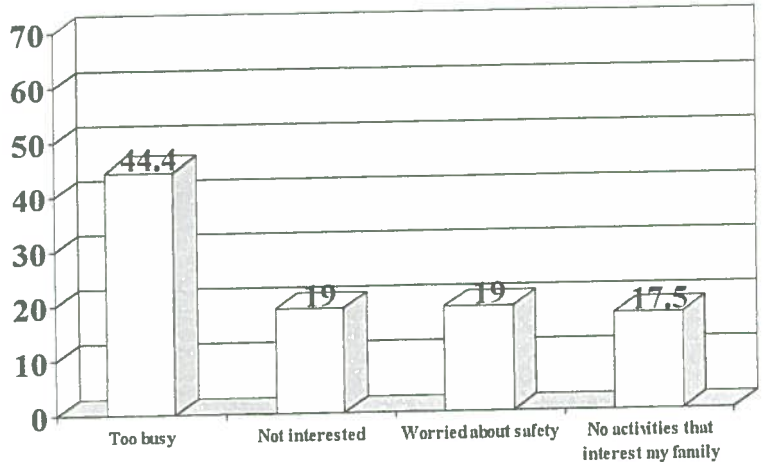
N = 192

Does anyone in your household use Mitchell Park?



N = 195

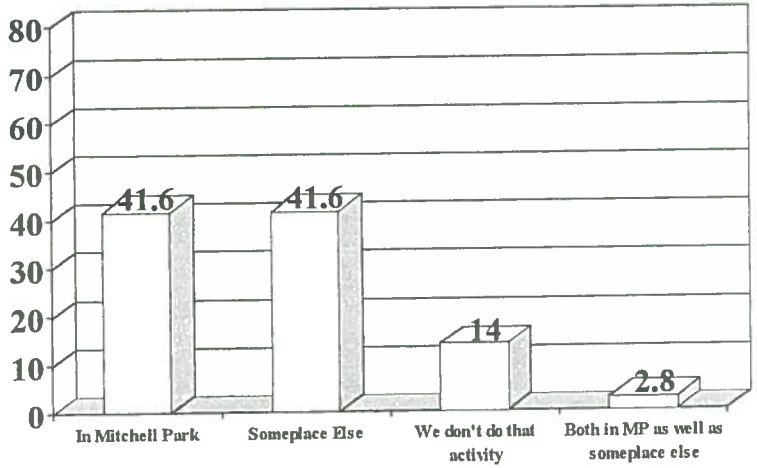
If not, why not?



N = 63

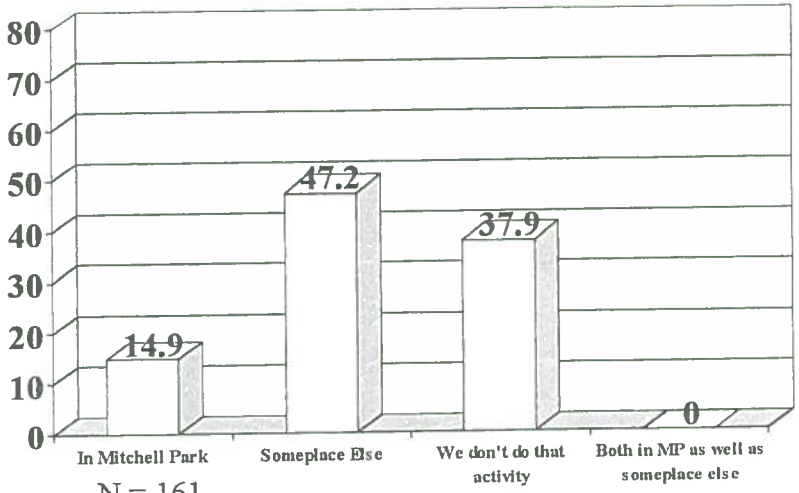
Household Usage of Mitchell Park By Activity

Household participation in walking/jogging



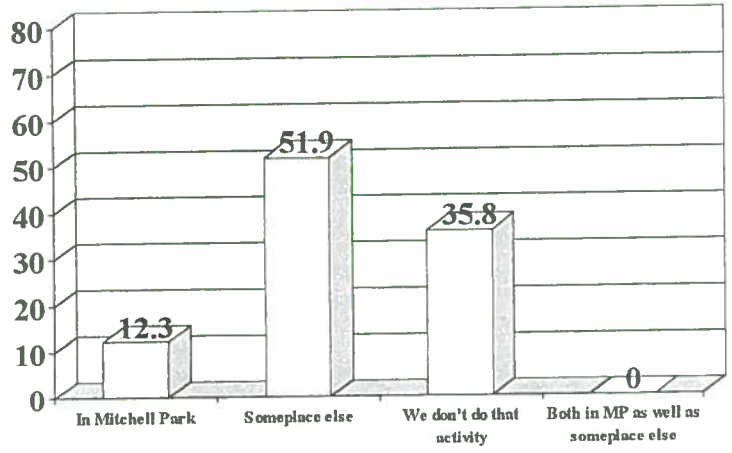
N = 178

Household participation in biking



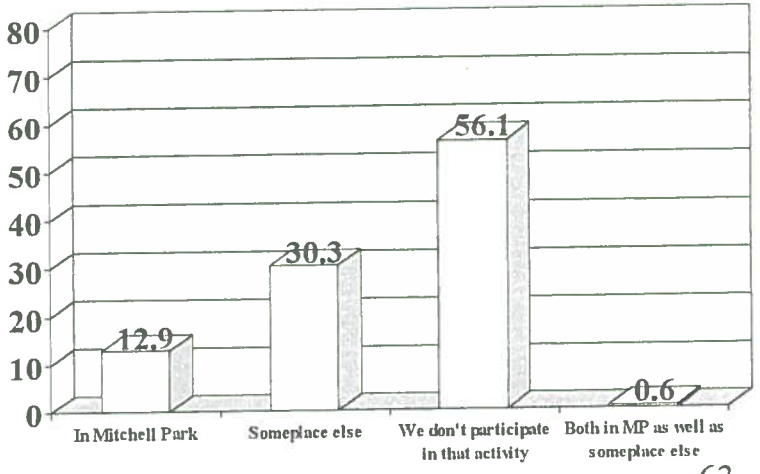
N = 161

Household participation in swimming



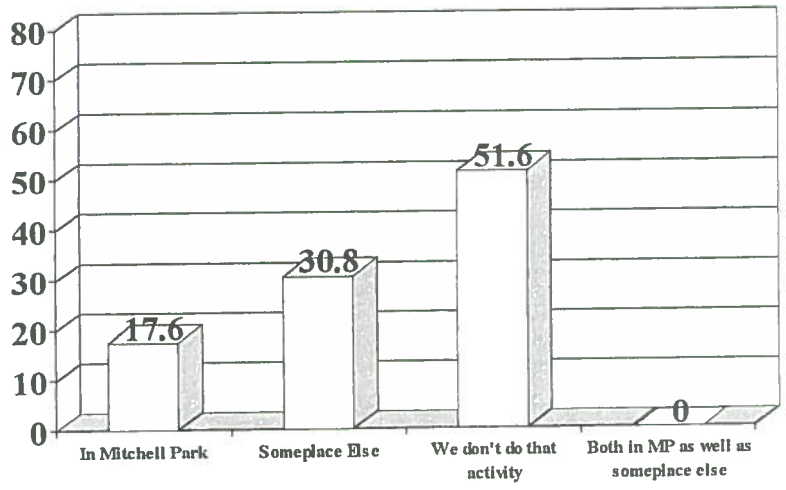
N = 162

Household participation in baseball/softball



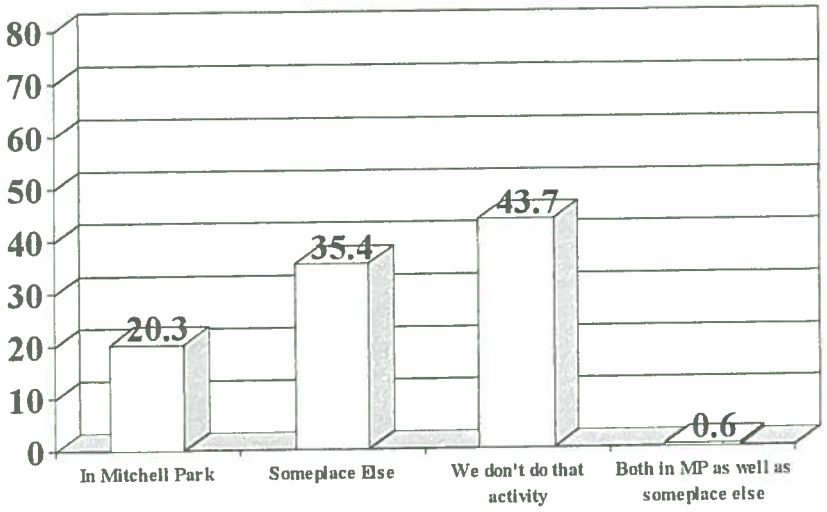
N = 155

Household participation in basketball



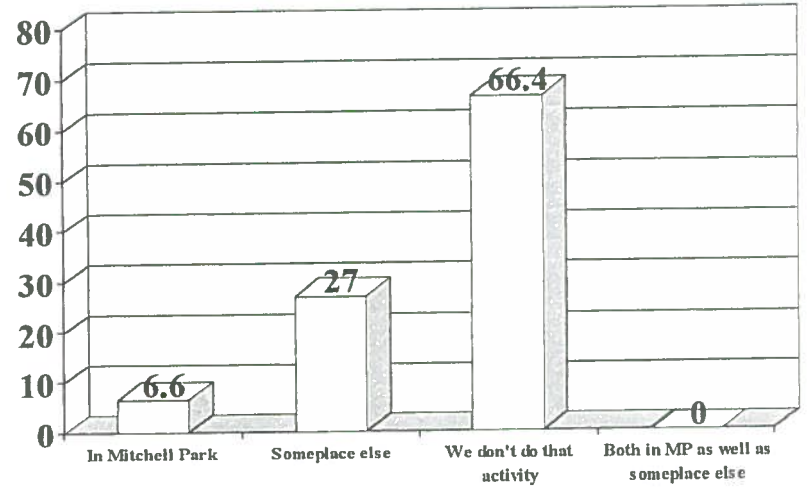
N = 159

Household participation in sledding



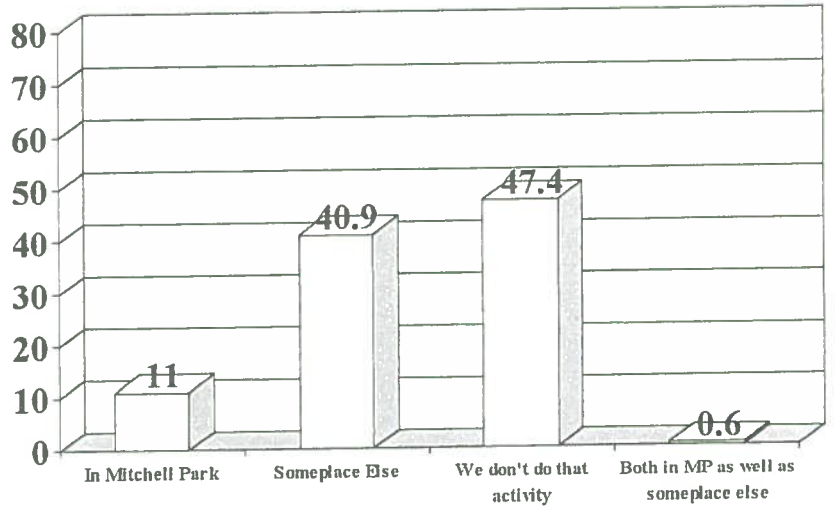
N = 158

Household participation in ice skating



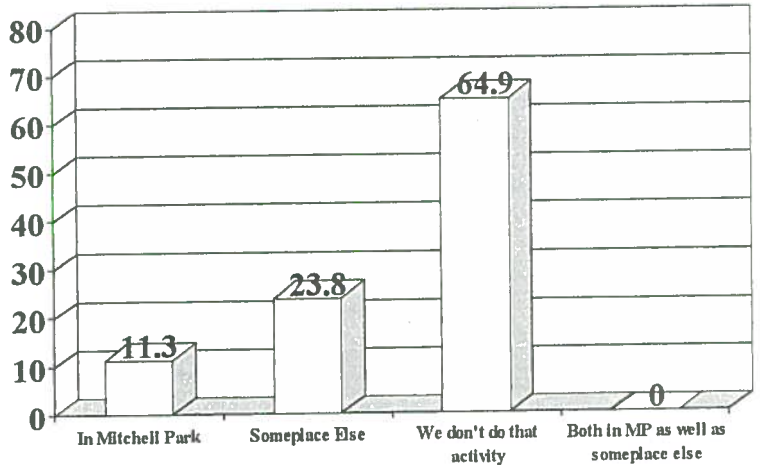
N = 152

Household participation in volleyball



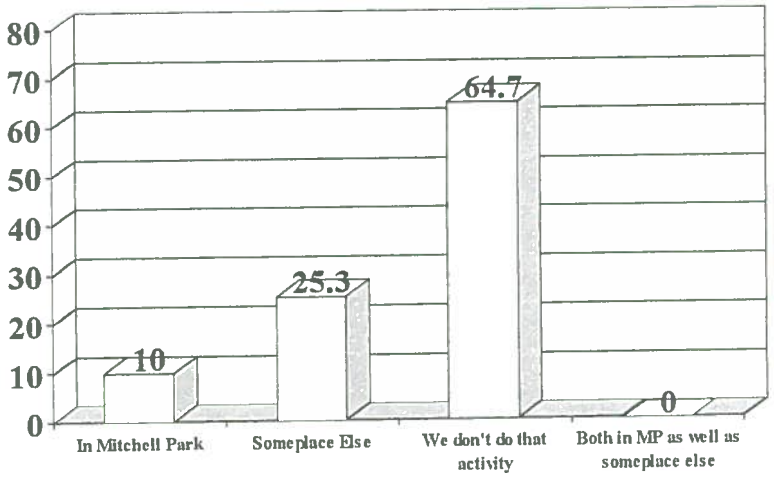
N = 154

Household participation in American football



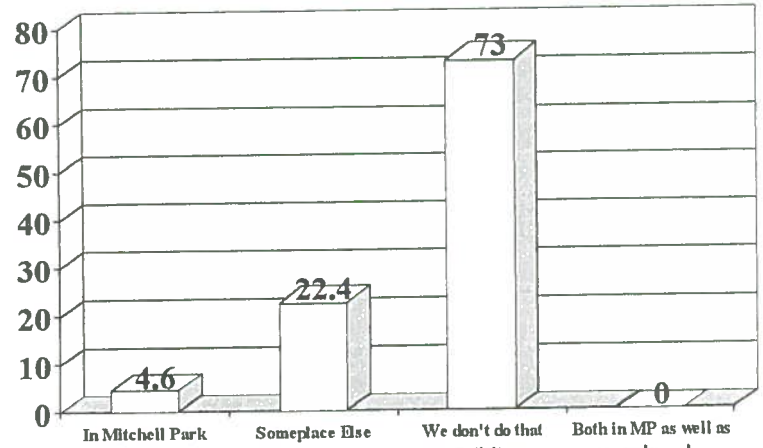
N = 151

Household participation in rollerblading



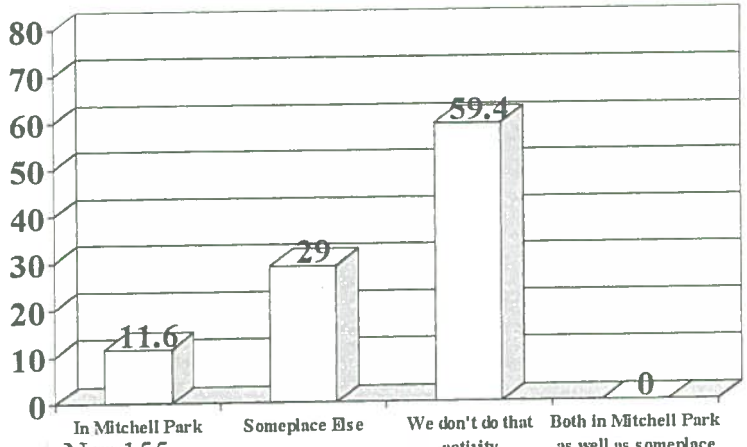
N = 150

Household participation in tennis



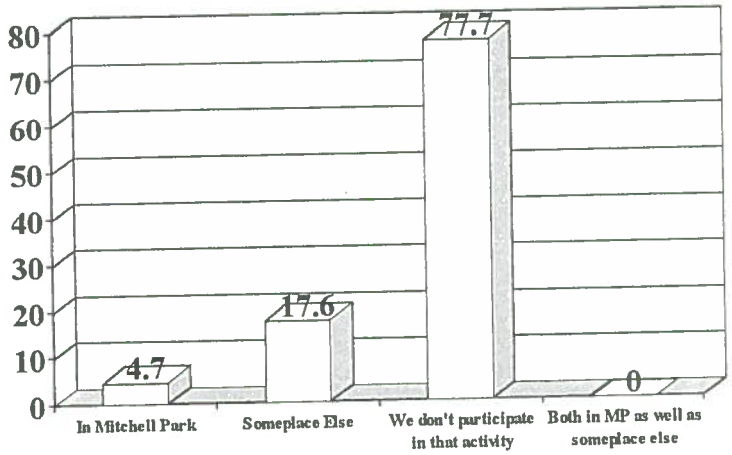
N = 152

Household participation in soccer



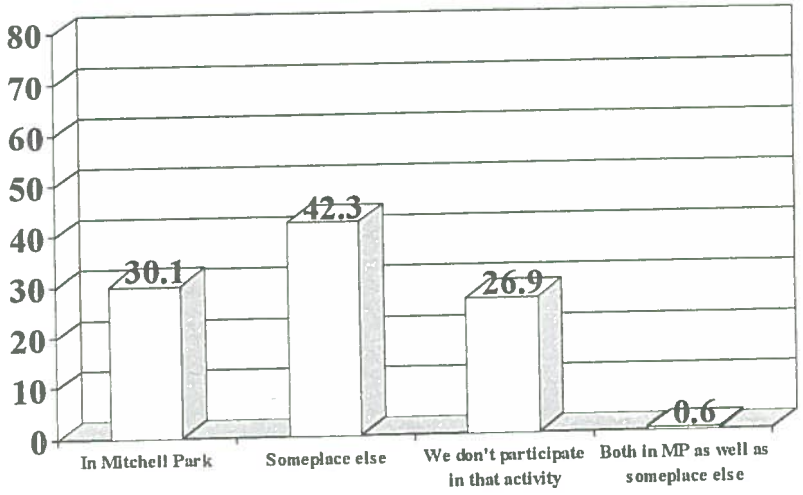
N = 155

Household participation in skiing



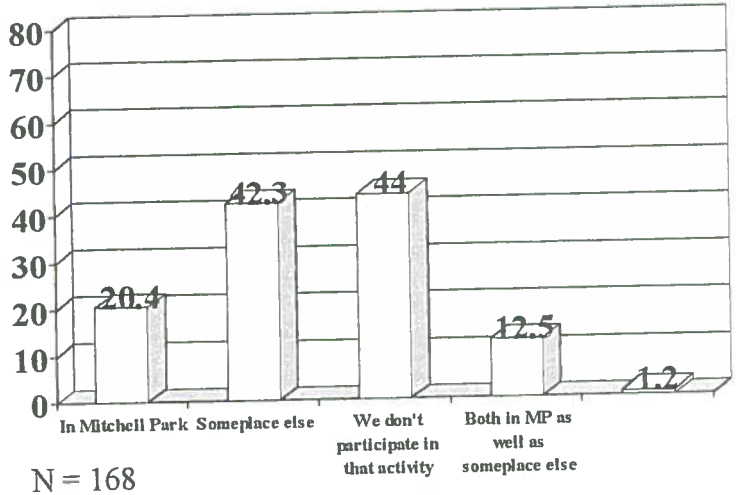
N = 148

Household participation in playground



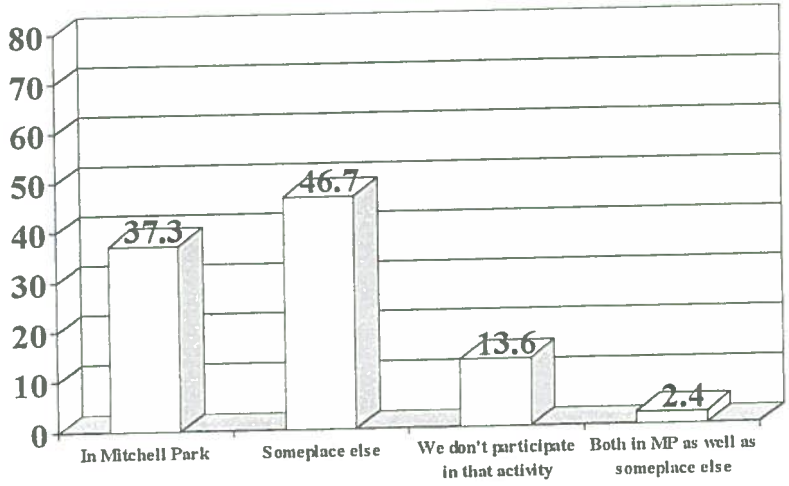
N = 156

Household usage of park for relaxation



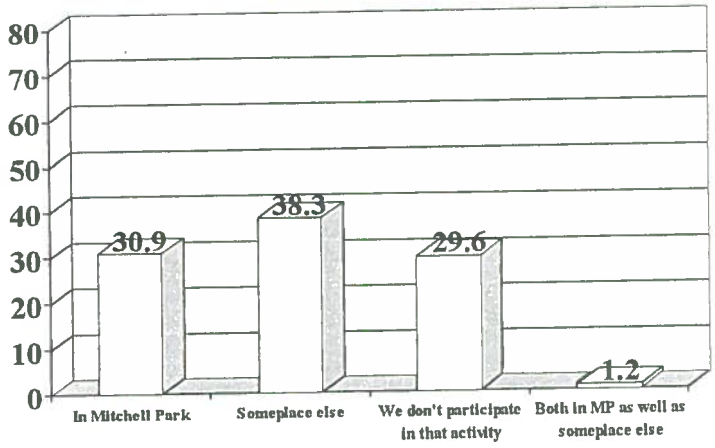
N = 168

Household usage of park for picnics



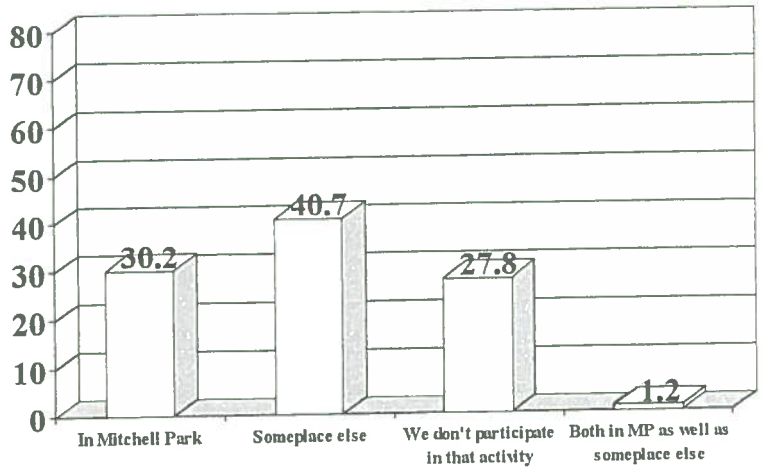
N = 169

Household usage of park for musical events



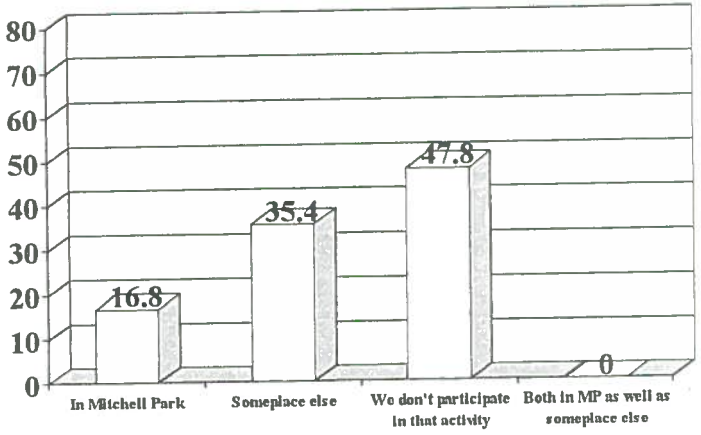
N = 162

Household usage of park for watching ducks



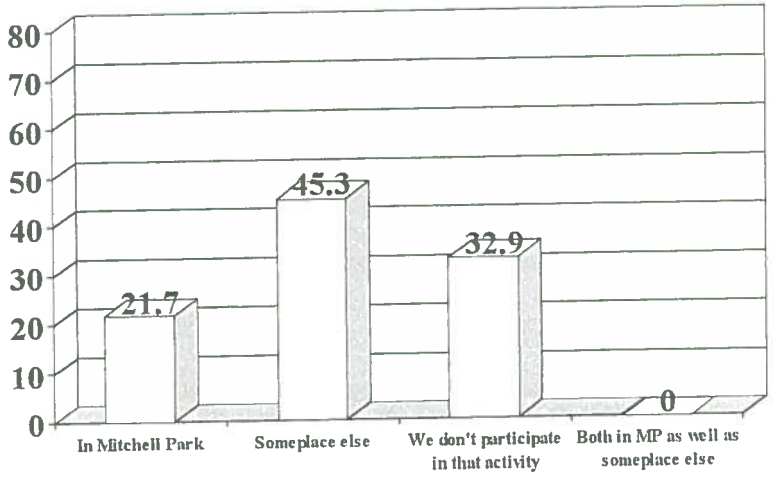
N = 162

Household usage of park for fishing



N = 161

Household usage of park for reunion



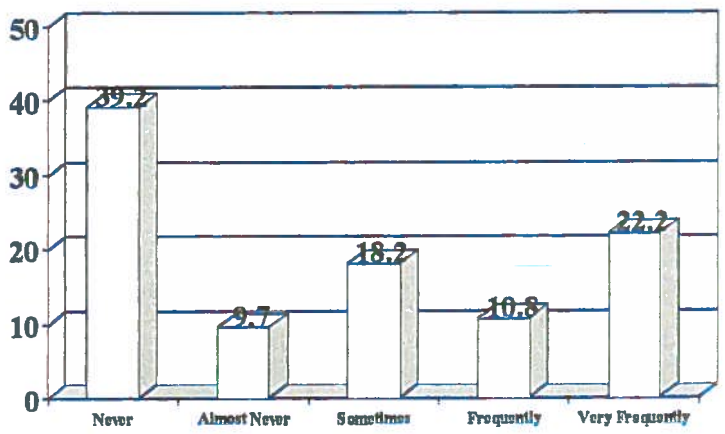
N = 161

HOUSEHOLD USAGE OF MITCHELL PARK (IN RANK ORDER)

• Walking/Jogging	44.4%
• Relaxation	43.5
• Picnics	39.7
• Musical Events	32.1
• Playground	30.7
• Reunions	21.7
• Sledding	20.9
• Basketball	17.6
• Fishing	16.8
• Biking	14.9
• Baseball/Softball	13.6
• Swimming	12.3
• Soccer	11.6
• Volleyball	11.6
• American Football	11.3
• Rollerblading	10.0
• Ice Skating	6.6
• Skiing	4.7
• Tennis	4.6

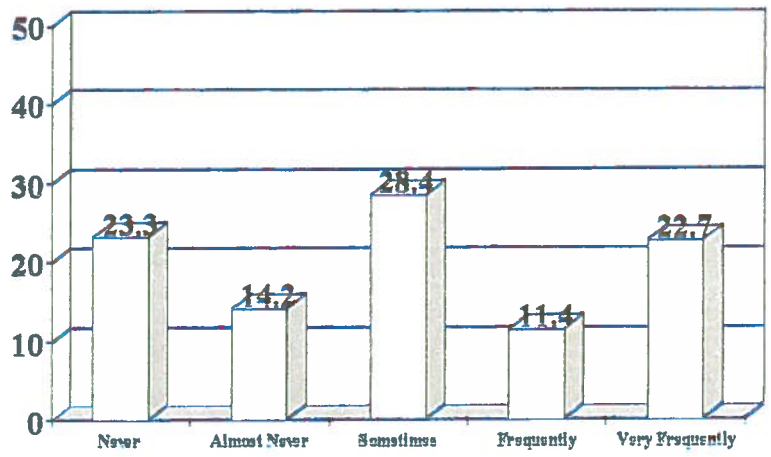
Household Likelihood of Utilizing Proposed Concepts

Household likelihood of using day camps for kids



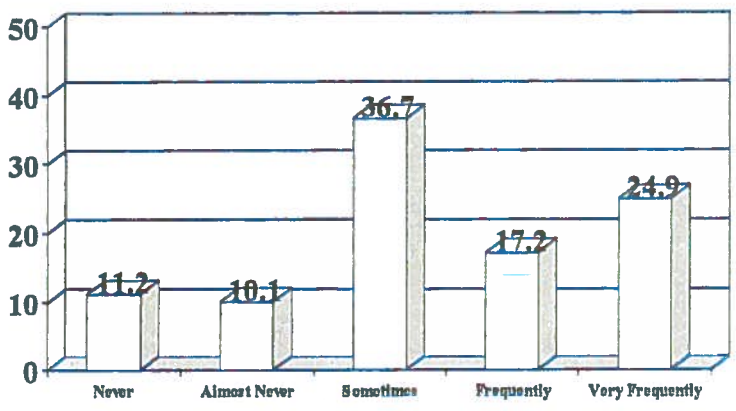
N = 176

Likelihood of household participation in evening concerts



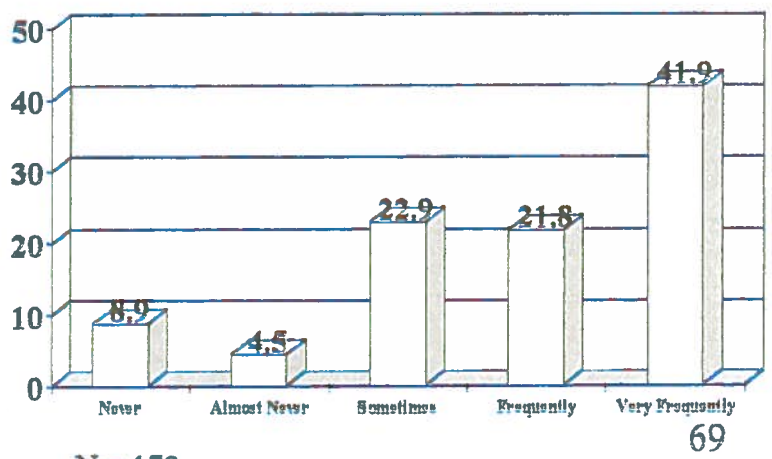
N = 176

How likely would you or someone in your family be to use a restaurant in the park?



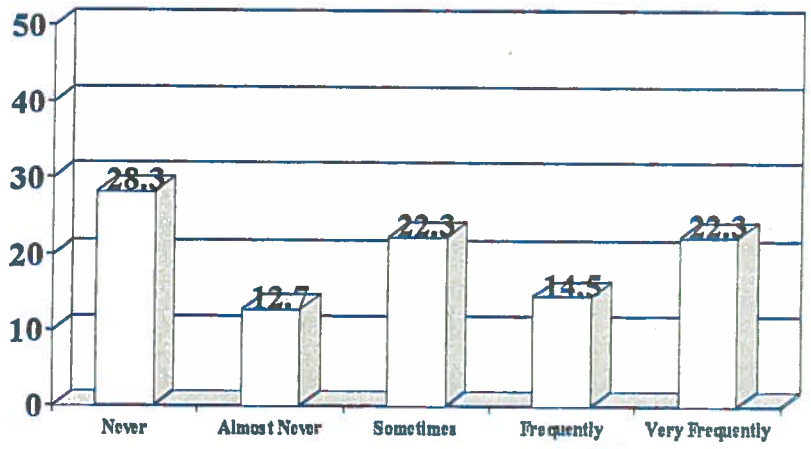
N = 169

How likely would you or someone in your household be to use the park for picnics?



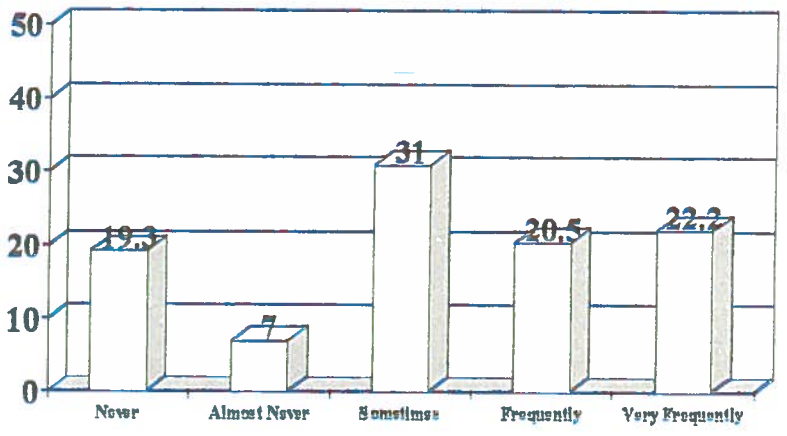
N = 179

How likely would you or someone in your family be to use sports leagues in the park?



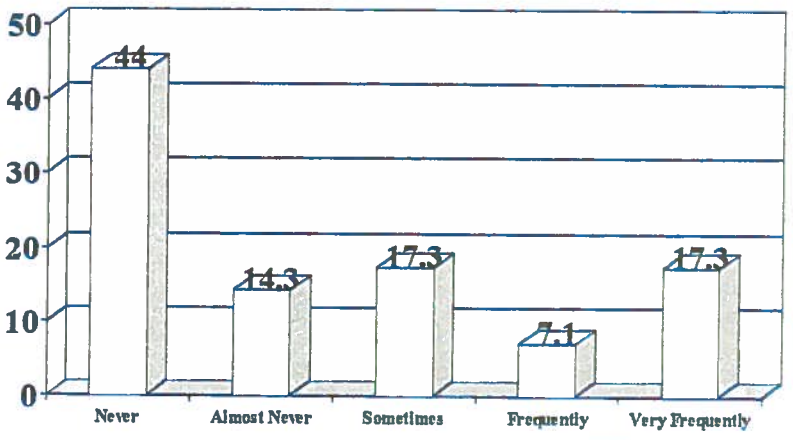
N = 166

How likely would you or someone in your family be to use a farmers market in the park?



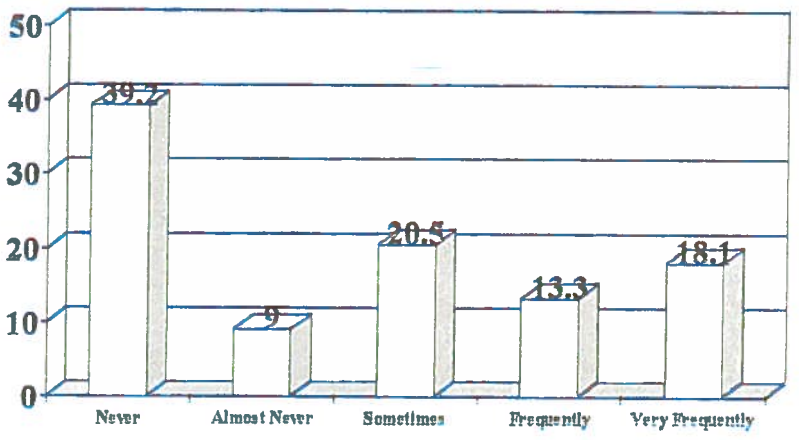
N = 171

How likely would you or someone in your family be to use space to garden or plant your own food in the park?



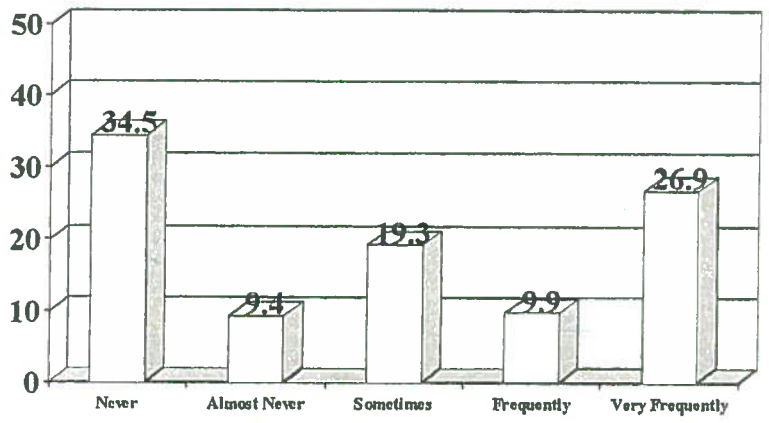
N = 168

How likely would you or someone in your family be to participate in job training opportunities in the park?



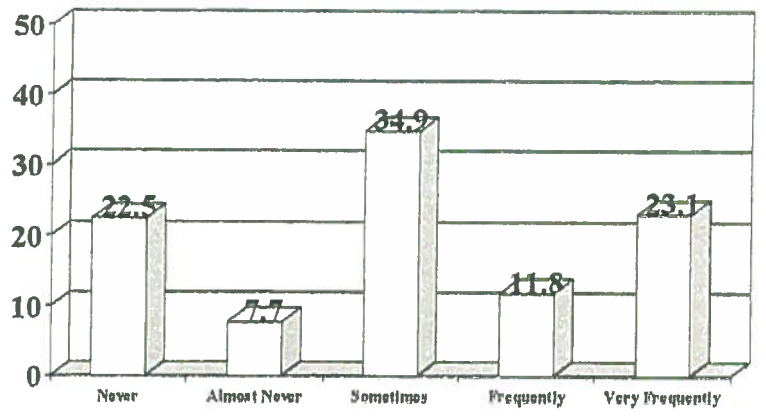
N = 166

How likely would you or someone in your family be to participate in adult or youth dances in the park?



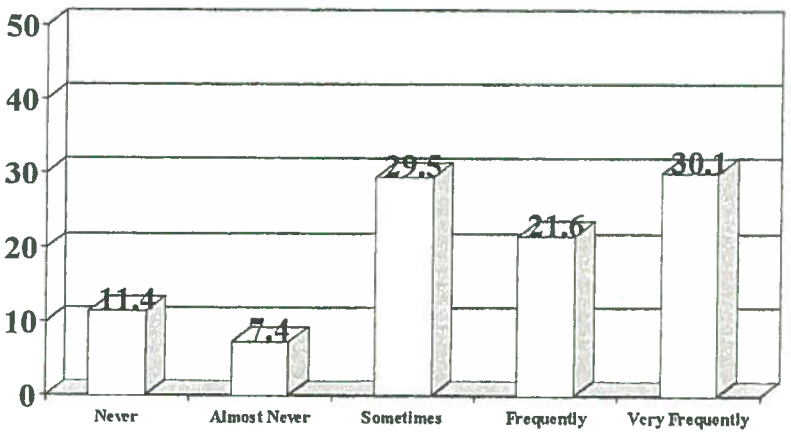
N = 171

How likely would you or someone in your family be to participate in craft markets in the park?



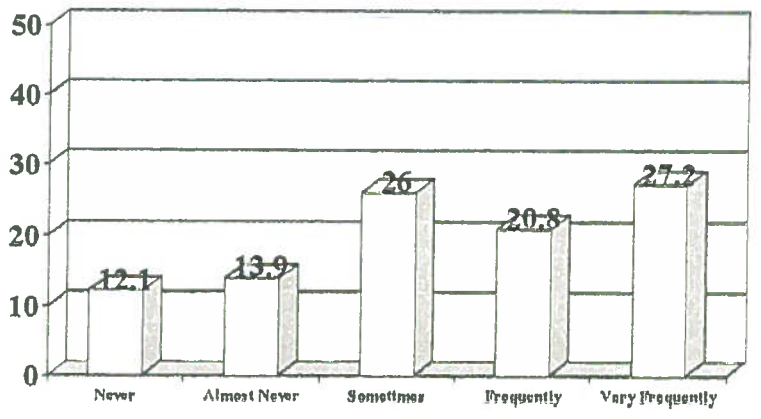
N = 169

How likely would you or someone in your family be to participate in carnivals in the park?



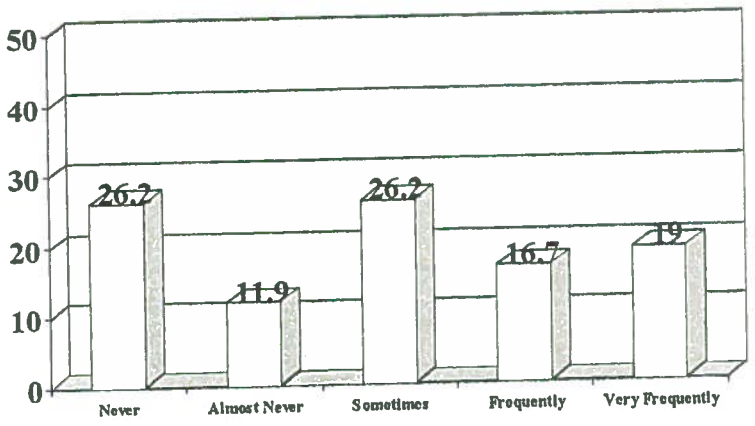
N = 176

How likely would you or someone in your family be to use ice cream/snack vendors in the park?



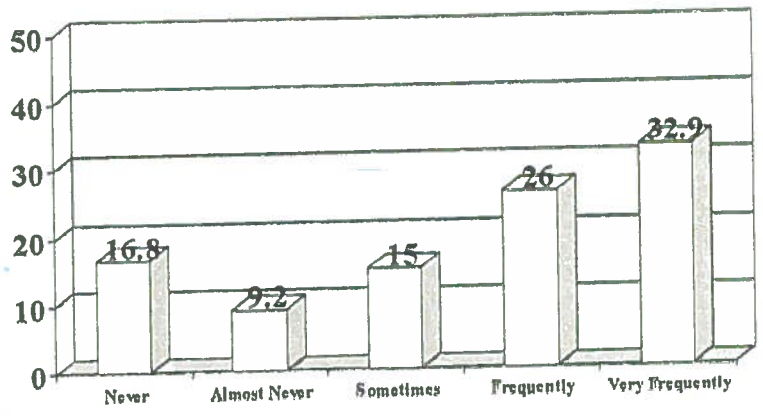
N = 173

How likely would you or someone in your family be to use a miniature golf course in the park?



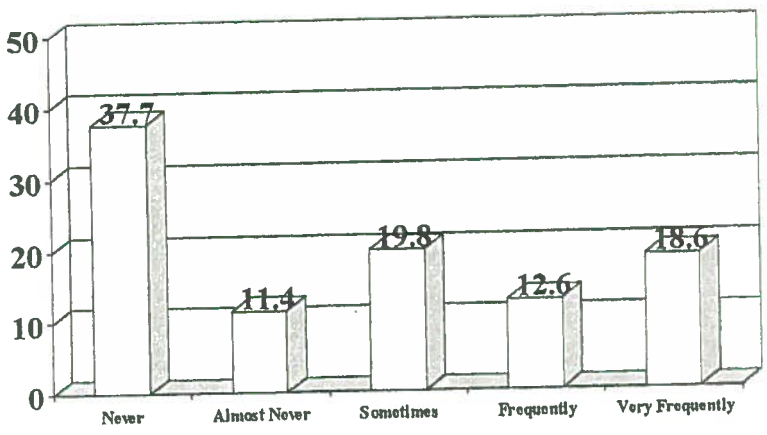
N = 168

How likely would you or someone in your family be to use safe bking/jogging trails in the park?



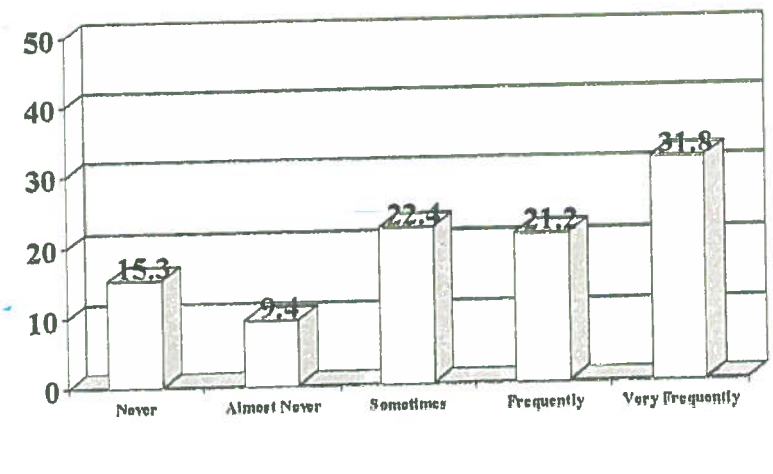
N = 173

How likely would you or someone in your family be to use motorized carts for the elderly in the park?



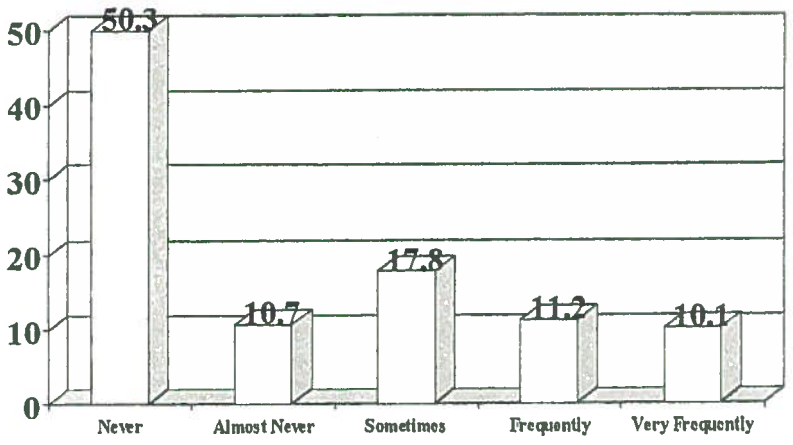
N = 167

How likely would you or someone in your family be to use playgrounds in the park?



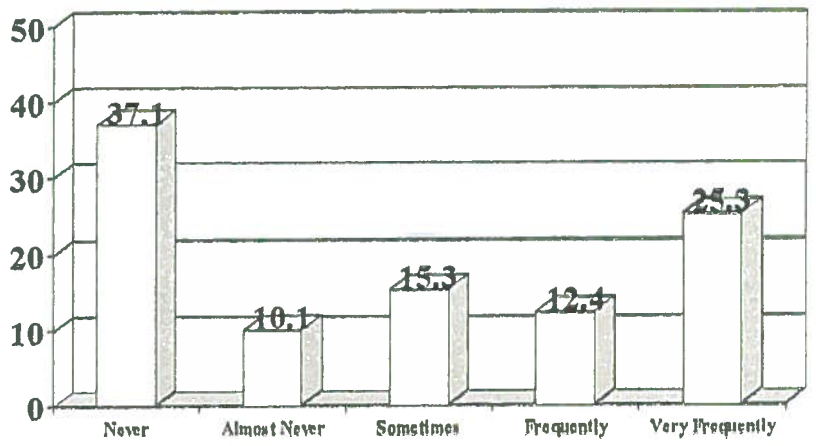
N = 170

How likely would you or someone in your family be to use skateboarding areas in the park?



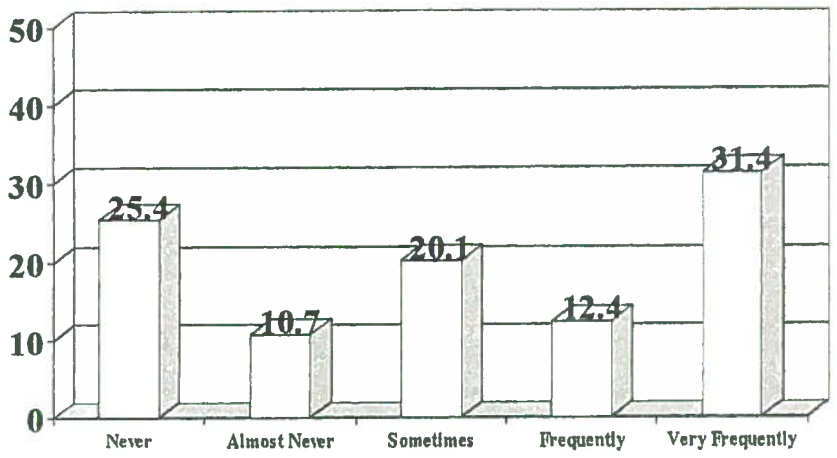
N = 169

How likely would you or someone in your family be to use soccer fields in the park?



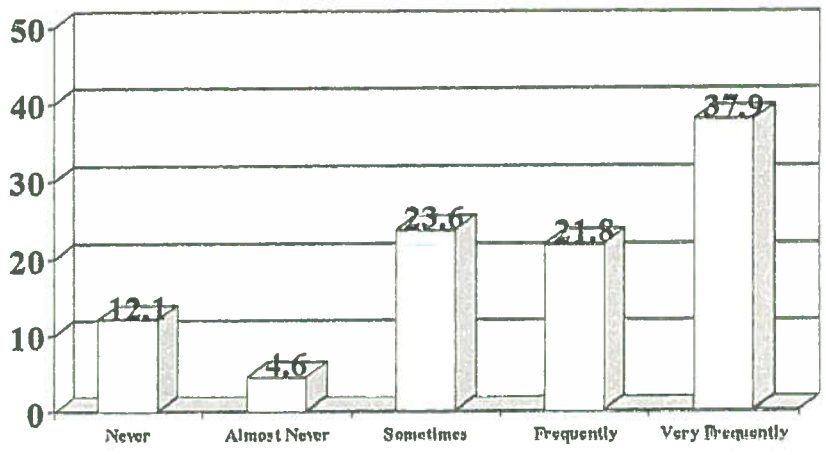
N = 170

How likely would you or someone in your family be to use basketball courts in the park?



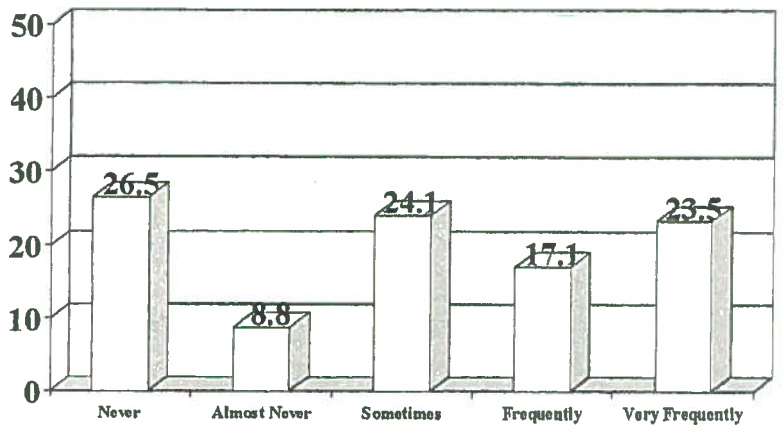
N = 169

How likely would you or someone in your family be to use the park for its beautiful scenery?



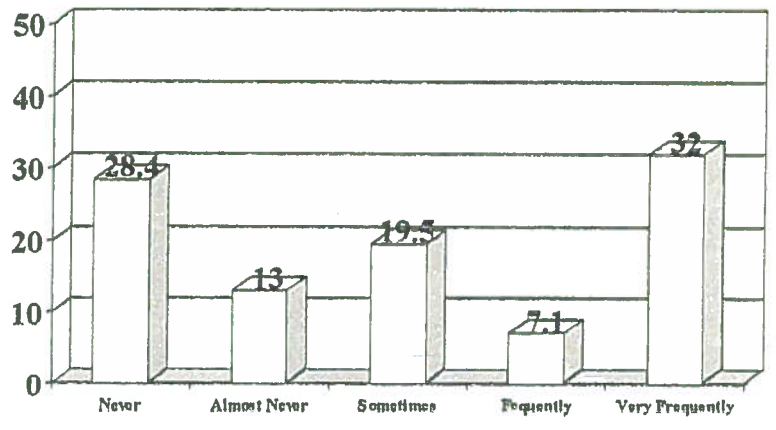
N = 174

How likely would you or someone in your household be to use the park for volleyball?



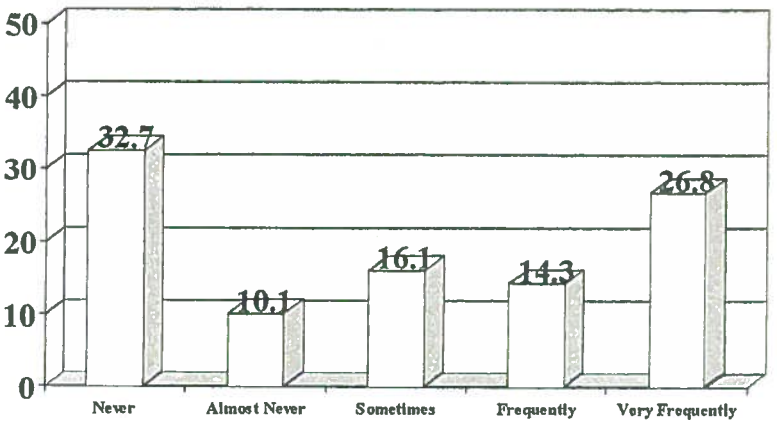
N = 170

How likely would you or someone in your household be to use the park for baseball or softball?



N = 169

How likely would you or someone in your household be to use exercise stations along the trails?



N = 168

PERCENT OF HH'S INDICATING FREQUENT OR VERY FREQUENT LIKELIHOOD OF UTILIZING PARK CONCEPTS

		Anglo	Hispanic	AfrAm	NatAm	Asian	Other
		n=65	n=90	n=15	n=3	n=2	n=5
• Picnics	63.7	43.6	73.5	76.9	100	50	60
• Scenery	59.7	48.4	66.3	46.2	100	100	40
• Safe Biking/Jogging	58.9	49.2	65.1	63.7	100	0	40
• Carnivals	51.7	41.2	53.8	66.7	66.7	0	100
• Ice Cream Vendors	48.0	35.0	58.0	75.0	33.3	100	40
• Playgrounds	53.0	31.7	68.4	45.5	66.7	0	40
• Restaurant in Park	42.1	38.3	36.3	66.6	100	100	20
• Exercise Stations	41.1	25.4	51.3	41.6	100	0	20
• Volleyball	40.6	30	43.1	58.6	0	0	20
• Baseball/Softball	39.1	22	46.9	50	50	0	20
• Basketball	43.8	25	51.3	72.7	100	0	0
• Soccer	37.7	18.3	48.1	50	50	0	0
• Farmers Market	42.7	41.2	44.4	36.4	100	0	80
• Sports Leagues	36.8	20.7	45	41.7	50	0	25
• Dances	36.8	18.7	42	50	50	0	60
• Miniature Golf	35.7	28.3	42.9	41.7	0	0	0
• Day Camps for Kids	33.0	18	36.5	50	50	0	40
• Craft Markets	34.9	29.5	40.3	33.3	50	0	20
• Evening Concerts	34.1	27	30.5	63.6	66.7	50	0
• Job Training	31.4	11.6	38.8	33.3	100	0	40
• Motorized Carts	31.2	15	39.5	45.1	50	0	40
• Space to Garden	24.4	18.7	26.6	33.3	50	100	60
• Skateboard Areas	21.3	10	29.5	8.3	0	50	20

ETHNIC PRIORITIES

ANGLO n=65	
Safe Biking/Jogging Trails	49.2
Scenery	48.4
Picnics	43.6
Carnivals	41.2
Farmers Market	41.2
Restaurant in the Park	38.3
Ice Cream/Snack Vendors	35.0
Playgrounds	31.7
Volleyball	30.0
Craft Markets	29.5
Miniature Golf	28.3
Evening Concerts	27.0
Exercise Stations	25.4
Basketball	25.0
Baseball/Softball	22
Sports Leagues	20.7
Space to garden/grow food	18.7
Dances	18.7
Soccer	18.3
Day Camps for Kids	18.0
Motorized Carts	15.0
Job Training	11.6
Skateboard Area	10

HISPANIC n=90	
Picnics	73.5
Playgrounds	68.4
Scenery	66.3
Safe Biking/Jogging Trails	65.1
Ice Cream/Snack Vendors	58.0
Carnivals	53.8
Basketball	51.3
Exercise Stations	51.3
Soccer	48.1
Baseball/Softball	46.9
Sports Leagues	45.0
Farmers Market	44.4
Volleball	43.1
Miniature golf	42.9
Dances	42.0
Craft Market	40.3
Motorized Carts	39.5
Job Training	38.8
Day Camps for Kids	36.5
Restaurant in the Park	36.3
Evening Concerts	33.0
Skateboard Area	29.5
Space to Garden/Grow Food	26.6

AFRICAN AMERICAN n=15	
Picnics	76.9
Ice Cream/Snack Vendors	75
Basketball	72.7
Carnivals	66.7
Restaurant in the Park	66.6
Safe Biking/Jogging	63.7
Evening Concerts	63.6
Volleyball	58.6
Baseball/Softball	50
Soccer	50
Dances	50
Day Camps for Kids	50
Skateboard Areas	48.3
Scenery	46.2
Playgrounds	45.5
Motorized Carts	45.1
Sports Leagues	41.7
Miniature Golf	41.7
Exercise Stations	41.6
Farmers Market	36.4
Job Training	33.3
Craft Markets	33.3
Space to Garden/Grow Food	33.3

NATIVE AMERICAN n=3	
Picnics	100
Scenery	100
Safe Biking/Jogging	100
Restaurant in the Park	100
Basketball	100
Farmers Market	100
Job Training	100
Exercise Stations	100
Carnivals	66.7
Playgrounds	66.7
Evening Concerts	66.7
Baseball/Softball	50
Soccer	50
Sports Leagues	50
Miniature Golf	50
Day Camps for Kids	50
Craft Markets	50
Motorized Carts	50
Space to Garden/Grow Food	50
Ice Cream/Snack Vendors	35.3
Volleyball	0
Dances	0
Skateboard Areas	0

PARK RECOMMENDATIONS

- **Incorporate security considerations into park design** -- work with city/county specialists to ensure continued safety of park. Balance aesthetic, security and economic considerations.
- **Consider differences in concept priorities by ethnicity.** Survey results indicate that the Hispanic population is much more likely to use the park (in all concept categories) than the White population. Programming and park design priorities should be planned according to greatest opportunity for use.
- **Concepts that rank high among all ethnic groups should clearly be given strong consideration**; e.g. picnic areas, biking/jogging trails, scenic elements, etc. Concepts ranking in the lower ranges should be considered relative to required investment and potential return.
- **The concept of the restaurant in the park requires further research** -- comparative draw of restaurants in other parks, economic analysis of various restaurant options, etc. This research should be conducted by a food service specialist. Consider releasing an RFP to potential restaurant contractors.

MITCHELL PARK HORTICULTURAL CONSERVATORY SURVEY

Hello, my name is _____ and I am conducting a survey to help determine future plans for the Domes and Mitchell Park. We are very interested in your opinion about possible improvements to this facility. Would you spend approximately 5 – 10 minutes answering a few questions for me? Thank you!

I'd like to start by asking you your opinion of the Domes then ask you a few questions about the surrounding park.

Office Use Only

Q.1 How did you first find out about the Domes? **(Choose only one.)** ☐ 1.

a) Friend/family brought me
b) Someone suggested I would enjoy this place
c) I learned about it from tourist information
d) I drive by the buildings and was curious
e) Don't know
f) Other _____

Q2. How often do you visit? ☐ 2.

a) This is my first visit
b) One to two times a year
c) More than twice a year
d) Less than once a year

Q3. Do you plan to return? ☐ 3.

a) Yes
b) No
c) Unsure

Q4. If no, what is the most important reason you will not return? ☐ 4.
(Choose only one)

a) I am visiting from a distance
b) There are other places I would rather spend my time/ money
c) The hours are not convenient
d) I am too busy
e) There is no reason to come back after you've seen it once.
f) Other _____

Q5. If yes, what is the major reason you will return? **(Choose only one)** ☐ 5.

a) Bring out of town guests
b) Relax and enjoy nature
c) See the changing shows
d) Learn more about plants
e) Other _____

Q6. Please rank your visit according to the following criteria — 1 is not at all satisfactory, 5 is excellent.

a)	Price	1	2	3	4	5	N/A
b)	Floral show	1	2	3	4	5	N/A
c)	Comfort of surroundings	1	2	3	4	5	N/A
d)	Opportunity to learn about plants	1	2	3	4	5	N/A
e)	Food service	1	2	3	4	5	N/A
f)	Parking	1	2	3	4	5	N/A
g)	Restrooms	1	2	3	4	5	N/A
h)	Handicapped facilities	1	2	3	4	5	N/A
i)	Traffic flow within building	1	2	3	4	5	N/A
j)	General appeal	1	2	3	4	5	N/A
k)	Gift shop	1	2	3	4	5	N/A

Office Use Only

6.
a ___
b ___
c ___
d ___
e ___
f ___
g ___
h ___
i ___
j ___
k ___

Q7. Please rank the following concepts according to their importance to you. Number 1 means not at all important — Number 5 means very important.

a)	More benches or conversation areas	1	2	3	4	5	N/A
b)	A sit-down restaurant	1	2	3	4	5	N/A
c)	Fast food or deli service	1	2	3	4	5	N/A
d)	Gift shop	1	2	3	4	5	N/A
e)	Audio/visual learning	1	2	3	4	5	N/A
f)	More convenient parking	1	2	3	4	5	N/A
g)	Gardening or botany classes	1	2	3	4	5	N/A

7.
a ___
b ___
c ___
d ___
e ___
f ___
g ___

Q8. Do you ever visit the park surrounding the Domes?
a) Yes b) No

8. ☐

Q9. If no, what is the *most important* reason? **(Choose only one)**
a) I use other parks closer to where I live
b) I did not know there was a park here
c) I am concerned about security in the park
d) I came here for the horticultural exhibits and do not see what that has to do with the park.

9. ☐

Q10. Please rank according to your interest in the following Mitchell park concepts. One means not at all interested, five means very interested.

Office use only

10.

a)	An outdoor horti-cultural display	1	2	3	4	5	No opinion	a ___
b)	Outdoor walking paths	1	2	3	4	5	No opinion	b ___
c)	Outdoor picnic facilities	1	2	3	4	5	No opinion	c ___
d	A restaurant in the park	1	2	3	4	5	No opinion	d ___
e)	Outdoor changing floral shows	1	2	3	4	5	No opinion	e ___
f)	A community services building	1	2	3	4	5	No opinion	f ___
g)	Enhanced sports facilities	1	2	3	4	5	No opinion	g ___
h)	Outdoor musical programs	1	2	3	4	5	No opinion	h ___
i)	Fountains or special water features	1	2	3	4	5	No opinion	i ___
j)	Outdoor area where children can have fun and learn about plants	1	2	3	4	5	No opinion	j ___

Q11. Which of the following best describes you? **(Choose only one.)** 11.

a) Greater Milwaukee resident
b) Resident of another Wisconsin community
c) Out of state resident
d) International resident
e) Resident of surrounding neighborhood

Q12. Which of the following best describes you? **(Choose only one.)** 12.

a) Out of state tourist
b) Convention visitor
c) Visiting local friends/family
d) Here as a student
e) None of the above.

Q13. Are you a) Male b) Female 13.

Q14. How old are you? _____ 14.

THANK YOU VERY MUCH FOR YOUR TIME. YOUR OPINION IS VERY IMPORTANT TO US!

INTERVIEW NUMBER INTERVIEWER INTIALS

MITCHELL PARK COMMUNITY SURVEY
July, 1998

Hello, my name is _____ and I am from Journey House. We are conducting a survey to help determine future plans for Mitchell Park and the Domes. We are very interested in your opinion about possible improvements to the park. Would you spend approximately 5 – 10 minutes answering a few questions for me? Thank you!

Please circle your answers.

FOR OFFICE USE ONLY

Q1. Has anyone in your household ever visited the Domes? 1.
a)Yes b)No c) Don't Know

Q2. If no, please indicate the primary reason why not. (***Only Choose One***) 2.
a) Don't know what it's about
b) Can't afford it
c) Too busy
d) Hours not convenient
e) Not interested
f) Worried about safety

Q3. If yes, please indicate your primary reason for visiting. ***(Only Choose One)*** 3.
a) Take out-of-town guests
b) Relax and enjoy nature
c) Visit the special flower shows
d) Learn about plants

Q4. How often does someone from your household visit the Domes? 4.
a) More than twice a year
b) Once or twice a year
c) Less than once a year
d) Don't know

Q5. Does anyone in your household use Mitchell Park? 5.
a) Yes
b) No
c) Don't Know

Q6. If no, why not? Choose only the ***most important*** reason from this list.

a) Too busy
b) Not interested
c) Worried about safety
d) Park does not have recreational facilities that interest my family.

Office Use Only

☐ 6.

Q7. Do you or does anyone in your household do any of the following? ***Check all the boxes that apply.***

	In Mitchell Park 1	Someplace else 2	We don't do that activity 3	
a) Walking/Jogging				A ___
b) Biking				B ___
c) Swimming				C ___
d) Baseball/Softball				D ___
e) Basketball				E ___
f) Sledding				F ___
g) Ice Skating				G ___
h) Volleyball				H ___
i) Football				I ___
j) Rollerblading				J ___
k) Tennis				K ___
l) Soccer				L ___
m) Skiing				M ___
n) Playground				N ___
o) Relaxation				O ___
p) Picnicking				P ___
q) Musical events				Q ___
r) Watching ducks				R ___
s) Fishing				S ___
t) Reunions				T ___

8) Please rank the following park concepts according to how likely you or someone in your household would be to use it. *Circle your answer*

	Never	Almost Never	Some-times	Frequently	Very Frequently	*Office Use Only*
a) Day camps for kids	1	2	3	4	5	A___
b) Evening concerts	1	2	3	4	5	B___
c) A restaurant	1	2	3	4	5	C___
d) Sports leagues	1	2	3	4	5	D___
e) Farmers market	1	2	3	4	5	E___
f) Space to garden or plant your own food	1	2	3	4	5	F___
g) Job training	1	2	3	4	5	G___
h) Adult or youth dances	1	2	3	4	5	H___
i) Craft markets	1	2	3	4	5	I___
j) Carnivals	1	2	3	4	5	J___
k) Ice cream/snack vendors	1	2	3	4	5	K___
l) Miniature golf course	1	2	3	4	5	L___
m) Safe biking/jogging trails	1	2	3	4	5	M___
n) Motorized carts for the elderly	1	2	3	4	5	N___
o)Playgrounds	1	2	3	4	5	O___
p) Skateboarding Areas	1	2	3	4	5	P___
q) Exercise stations along bike trails	1	2	3	4	5	Q___
r) Soccer fields	1	2	3	4	5	R___
s) Basketball courts	1	2	3	4	5	S___
t) Beautiful scenery	1	2	3	4	5	T___
u) Volleyball courts	1	2	3	4	5	U___
v) Baseball/softball fields	1	2	3	4	5	V___
w) Picnic areas	1	2	3	4	5	W___

Q9. Now, just a couple of questions about you and your household. How many people under the age of 18 live in your household? 9

a) None
b) 1-3
c) 4-8
d) more than 8

Q10. Are you the head of the household? 10

a) Yes
b) No

Q11. Which age category do you fall into? 11

a) under 18
b) 18 – 25
c) 26 – 35
d) 36 – 50
e) 50 +

Q12. Which language is the primary language in your household? 12

a) Spanish
b) English
c) Hmong
d) Laotian
e) Other

Q13. Are you 13

a) Male
b) Female

Q14. Are you 14

a) White
b) Hispanic
c) African American
d) Native American
e) Asian
f) Other

Thank you very much for your time. Your opinion is very important as plans are being considered for the future of Mitchell Park and the Domes.

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A DIRECTORY

Print Edition

1996

❖ FIFTEENTH EDITION

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Vilter Fdn.
Vogel Fdn.
Vogt Fam. Fdn.
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Wagner (E.R.) Manufacturing Co.
Wagner (Melvin F.) Fdn. Tr.
Wallach Fdn.
Waterman (Selma B. & Blade)
Wausau Area Community
Wausau Paper Mills Fdn.
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Weather Shield Mfg. Fdn.
Webcrafters - Frautschi Fdn.
Werner (Dorothy E.) Fam. Char.
West (Ruth St. John & John...
West Allis Savings Bank Fdn.
Wicor Fdn.
Wigwam Mills Fd.
Winter (Elmer & Nannette) Fam.
Wisconsin Centrifugal Char. Fdn.
Wisconsin Energy Corp. Fdn.
Wisconsin Power & Light Fdn.
Wisconsin Public Service Fdn.
Wood (Lester G.) Fdn.
Ziegler Fdn.

Children and Youth Services

Abbot Machine Co. Char. Fdn.
Acherman (Joseph & Alice B.)
Ahern (J. F.) Co. Fdn.
Alexander (Judd S.) Fdn.
Alexander (Walter) Fdn.
Alexander Char. Fdn.
Alexandra Char. Tr.
American Appraisal Tr.
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Arnold (Milton & Elsie) Comm...
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Findley (Ralph F. & Gertrude S.)
First Financial Fdn.
Firstar Milwaukee Fdn.
Follett Fam. Fdn.
Fond Du Lac Area Fdn.
Foster (Sadie) Fdn.
Frankenthal (Howard & Nancy)
Frautschi (John J.) Fam. Fdn.
Freeman (Michael & Susan) Fam.

Peterson (Ellsworth & Clara)
Peterson (Fred J.) Fdn.
Pettit (Jane & Lloyd) Fdn.
Pflugradt Fdn.
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Phillips (L.L.) Charities
Pick (Melitta S.) Char. Tr.
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Pugh (W.H.) Fdn.
Quirk (Earl & Eugenia) Fdn.
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Rankin (Lila D.) Tr.
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Ross (Will) Mem. Fdn.
Ruhar
Rutledge (Edward) Charity
S.C. Johnson Wax Fd.
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Sampson (Scott & Peggy) Char.
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Schlegel (Oscar C. & Augusta)
Schlueter (Clyde F.) Fdn.
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Schoenleber Fdn.
Schroeder (Walter) Fdn.
Schwartz Fdn.
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Seippel Fam. Fdn.
Sentry Fdn.
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Shattuck (Ruth H.) Char. Tr.
Shattuck (S.F.) Char. Tr.
Shomos Fam. Fdn.
Siebecker Fdn.
Siebert (Ellamae) Fdn.
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Smith (David & Katherine) Fdn.
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SNC Fdn.
South Wood County Community
Split Rail Fdn.
St. Francis Savings Fdn.
Stackner Fam. Fdn.
Stahmer (Albert H.) Fdn.
Stanek Fdn.
Stangel (Jane & Arthur) Fdn.
Stearns (Roswell & Leona B.)
Stein (Jack & Joan) Fdn.
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Taylor (Jack Deloss) Charity Tr.
Telly Fdn.
Thompson Fdn.
Thousand Hills Fdn.
Time Insurance Fdn.
Trane Fam. Fdn.
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Trostel Fdn.
U.S. Oil/Schmidt Fam. Fdn.
Uihlein (Henry H. Sr. & Marion...
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United Wisconsin Services Fdn.
Universal Foods Fdn.
Usinger Fdn.
Vanden Wymelenberg (John...
Verhulst (Jacob P.) Fdn.
Vilter Fdn.
Vogel Fdn.
VPI Fdn.
Wagner (E.R.) Manufacturing Co.
Wagner (The) Fdn.
Wallach Fdn.
Walter (Byron L.) Fam. Tr.
Wausau Area Community
Wausau Paper Mills Fdn.
Wauwatosa Savings Bank Fdn.
Webcrafters - Frautschi Fdn.
Werner (Anthony M. & Mary B...
Werner (Dorothy E.) Fam. Char.
West Allis Savings Bank Fdn.
Westra Char. Fdn.
Wicor Fdn.
Winter (Elmer & Nannette) Fam.
Wisconsin Centrifugal Char. Fdn.
Wisconsin Energy Corp. Fdn.
Wisconsin Power & Light Fdn.
Wisconsin Public Service Fdn.
Wood (Lester G.) Fdn.
Wuethrich Fdn.
Young (Irvin L.) Fdn.
Youth Fdn. of Milwaukee...
Ziegler Fdn.
Ziemann Fdn.

Boys and Male Youth

Abbot Machine Co. Char. Fdn.
Ahern (J. F.) Co. Fdn.
Alexander (Judd S.) Fdn.
Alexander Char. Fdn.
Ann Marie Fdn.
Apple Fam. Fdn.
Appleton Mills Fdn.
Ariens Fdn.
Bachhuber (Ted & Grace) Fdn.
Bader (Helen) Fdn.
Banc One Wisconsin Fdn.
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Batterman (Theodore W.)
Beloit Fdn.
Bemis (F. K.) Fam. Fdn.
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Bolz (Eugenie Mayer) Fam. Fdn.
Borisch Fam. Fdn.

- B) Foodservice Recommendations

98773
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JOSEPH BAUM & MICHAEL WHITEMAN CO., INC.

ENGBERG ANDERSON

SEP 4 1998

RECEIVED

TO: **Charles Engberg**
FROM: **Michael Whiteman**
DATE: **August 31st 1998**

Here is a summary of my meeting in your office on July 16th to discuss The Domes.

GENERAL IMPRESSION

1. Park has conflicting uses. It wants to be a neighborhood park on the one hand, but The Domes can flourish only as a destination.

2. The Domes sits in isolation. It is not near other traffic generators, nor to other cultural, educational or retail complexes. It therefore faces a difficulty of having to draw its own attendance at a time when consumers are gravitating to complexes that provide multiple attractions.

3. The Domes' exhibits are fairly primitive and static at a time when museums and educational ventures are all focussing on state-of-the-art "edutainment" technology.

4. The Domes is not user-friendly. It entry zones are confusing and un-welcoming; they are extremely static; the retail shop is ill-located; refreshment possibilities are miserable.

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5. The Domes has been losing annual attendance at an alarming rate and could find itself in an unsustainable position unless this trend is reversed.

6. Public spaces, which in many institutions are important sources of rental revenue, are ill-formed and inadequately sized.

7. On the plus side, The Domes themselves are architecturally significant and memorable and could, if sufficiently enlivened, provide a welcome marketing symbol for the city of Milwaukee.

RECOMMENDATIONS

The purpose of my one-day visit was to provide general recommendations rather that any form of market analysis. Therefore, what follows is based purely on observation and upon my experience with other cultural institutions and public space issues.

1. *Ideally,* from a macro standpoint, the area should be invested with supplemental destinations. Also, ideally, a large factory building on one edge of the park should be recycled into an attraction such as a festival market, an entertainment center, a museum or aquarium, or some combination of these.

Looking at this as a retail and amenities planner, such a development would relieve The Domes of trying to create its own level of critical mass. It also might provide employment opportunities in great number to the surrounding area.

2. Assuming that the "ideal" will never occur, The Domes therefore needs to strengthen its own gravitational pull, and I do not believe this can be accomplished by horticulture alone, nor by architecture alone, not simply by park improvements...nor, in fact, by a combination of all three factors. The Domes needs major improvement to all of these elements, but also some new expressions of "personality" that will attract fresh faces. *These are dealt with below.*

3. **RETAIL/RESTAURANT ELEMENTS:** Dining and shopping no longer represent marginal consumer activities, and this is being discovered by institutions across the country. People want to buy, to eat, to learn and to be entertained all in one go - - which is why theme parks have become increasingly educational and increasingly competitive with educational institutions. And why museum across the country are beefing up the shops and restaurants. The Domes needs to respond in a spectacular manner.

   We pointed during our meeting to another important trend, which is the co-mingling of retail and food. Examples include cafes in Virgin Records and Old Navy stores, Starbucks in Barnes & Noble, etc.

We believe The Domes could beneficially merge retail and dining forms into a single design, and perhaps single operating entity: A spectacular horticulture store combined with a spectacular restaurant.

It would resemble Wisconsin's greatest garden shop cross-bred with Tavern on the Green! Programmatically, such a venture would have up to 150 dining seats plus private dining/party space for 50; it should overlook the park; it might look into The Domes, but not necessarily; it could have an outdoor component; it must be at The Domes' entry sequence so that it is encountered by patrons moving in and out of the project; it should be adjacent to parking; it could have a snack-bar element for certain segments of The Domes users.

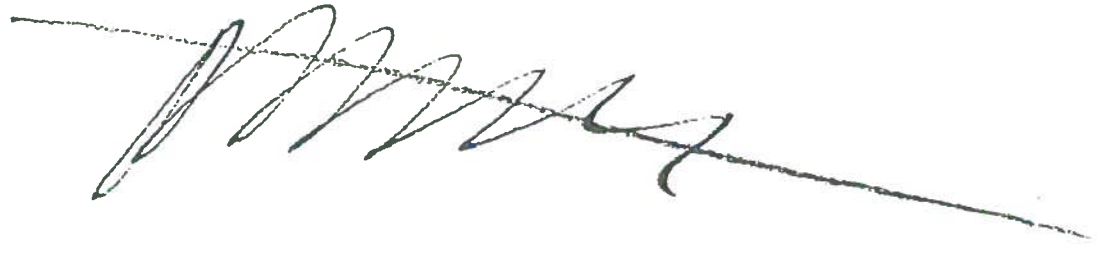
The restaurant portion might total 7,000 square feet to 8,000 square feet. I express no opinion about the horticulture retail space. Nor do I express any opinion regarding the restaurant's economic feasibility, for this depends upon a long list of uninvestigated issues.

4. **PRIVATE PARTY SPACES:** I have no specific information regarding corporate, political and private parties in Baltimore, but it is clear that The Domes does not have proper facilities to capture its fair share of such events. Rentals of space for events is becoming a major revenue source for public institutions and, in fact, the arts museum in Milwaukee is going after this very market.

The Domes needs to re-think and reconfigure its public spaces to fulfill the following criteria: sit-down space in a single room for up to 200 people; strong thematic esthetics that reinforce the *idea* of the location; good acoustic properties; available space for prefunctions and receptions of at least 3000 square feet reasonably adjacent to the sit-down area.

Inevitably there are conflicts between public and private use of these spaces that need to be resolved, such as: are wedding ceremonies allowed?, can such ceremonies be held within the park, weather permitting?; what about daytime affairs on weekends?; can the restaurant be closed two nights a week *(say every Monday and Tuesday)* for events; if so, will The Domes still need other large party spaces?; will the restaurant operator be the exclusive caterer for The Domes?, if not, where will caterers set up and serve banquets without interfering with the restaurant operator?

The Domes also might explore getting more deeply into the party *planning* business. In New York, museums such as The Metropolitan Museum of Art and the Museum of Modern Art not only charge for their spaces but also have liquor licenses so they can resell wine at a profit to party-givers; they also arrange for all rentals of furniture and control all the billing, for which they extract a fee.



- C) Cost Analysis

PART C • COST ANALYSIS

Conceptual Cost Estimate Approach

Central City Construction, Inc. under the direction of Engberg Anderson Design Partnership, Inc. in association with Buettner & Associates has developed a conseptual cost estimate for the Mitchell park Horticultural Conservatory Master Plan. The Master Planning Team views this cost estimate as conceptual or preliminary based on the current project information known at this time. Given the limited amount of definition of the project at this stage, the accuracy of the estimate will be less than that of a detailed estimate.

The attached estimate is considered to be a Level II conceptual estimate based on the preliminary design and concepts. Such estimates might be accurate within +25 and -5 percent. Central City Construction has identified consistent Work Breakdown Structures (WBS) that reflect the cost allocation index as presented by the Team.

As a baseline, the identified costs are based on 2001 construction dollard and include general conditions, direct cost, overhead and profit normally associated with projects of this nature.

Project costs have also been extended through 2007/2008 with inflation added (at the assumed rate of 3% per year) to account for phased implementation of the overall Master Plan Project. The identified Design Phase Expenses include Standard Milwaukee county DPW Soft Cost Percentage allowance for fees and a 15% Design Phase Contingency.

Page number one of the Conceptual Cost Estimate presnets the Total Project Summary. Pages two through five provide the Detailed Costs for each Master Plan component.

MITCHELL PARK HORTICULTURAL CONSERVATORY
MASTER PLAN

Central City Construction, Inc
Milwaukee, WI 414-224-7793

Conceptual Cost Estimate - Project Summary dated May 2000

Priority		Costs Based on 2001 Construction Dollars Amount	PHASED IMPLEMENTATION 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 SUBTOTAL	
	A. Primary Dome Structures & Associated Buildings												
1	1. Upgrades to Existing Buildings ***	$5,182,526	$0	$1,805,178	$1,354,332	$397,875	$2,317,390	$0	$65,250	$0	$0	$0	$5,940,025
7	2a. New Building Addition & Propagation House - 48,904 SF	$6,159,450	$0	$0	$0	$0	$6,732,279	$0	$0	$0	$0	$0	$6,732,279
10	3. New Collection Greenhouses - 15,000 SF	$1,285,000	$0	$0	$0	$0	$0	$0	$1,490,600	$0	$0	$0	$1,490,600
	B. Feature Garden												
9	2b. Feature Garden	$3,215,845	$0	$0	$0	$0	$0	$3,621,041	$0	$0	$0	$0	$3,621,041
	C. Parking Lots, Pavilion & Pond												
8	4a. Central Parking Lot	$471,640	$0	$0	$0	$0	$0	$531,067	$0	$0	$0	$0	$531,067
8	4b. South Parking Lot	$112,165	$0	$0	$0	$0	$0	$126,298	$0	$0	$0	$0	$126,298
4	10b. North Parking Lot	$36,380	$0	$0	$37,471	$0	$0	$0	$0	$0	$0	$0	$37,471
5	5a. Pavilion & Terrace	$220,500	$0	$0	$0	$233,951	$0	$0	$0	$0	$0	$0	$233,951
6	5b. Pond	$28,046	$0	$0	$0	$29,757	$0	$0	$0	$0	$0	$0	$29,757
	D. Tot Play Area, Amphitheater, Playing Fields, Park Lighting & Plant Material												
11	6. Tot Play Area	$121,240	$0	$0	$0	$0	$0	$0	$0	$144,761	$0	$0	$144,761
12	7. Amphitheater	$433,300	$0	$0	$0	$0	$0	$0	$0	$517,360	$0	$0	$517,360
3	8. Playing Fields	$44,500	$0	$0	$45,835	$0	$0	$0	$0	$0	$0	$0	$45,835
2	9. Lighting & Paths (not include in specific allocation index)	$458,800	$0	$0	$472,564	$0	$0	$0	$0	$0	$0	$0	$472,564
2	10a. Plant Material	$59,400	$0	$0	$61,182	$0	$0	$0	$0	$0	$0	$0	$61,182
	Total Cost of Construction	**$17,828,792**	$0	$1,805,178	$1,971,384	$661,582	$9,049,669	$4,278,406	$1,555,850	$662,121	$0	$0	**$19,984,191**
	Design Phase Expenses												
	Milwaukee County Soft Cost												
	Project Management - 1.5%	$267,432	$0	$0	$18,626	$0	$226,822	$54,316	$0	$0	$0	$0	$299,763
	Owner Services - 1%	$178,288	$0	$0	$12,417	$0	$151,214	$36,210	$0	$0	$0	$0	$199,842
	A & E Fees - 8%	$1,426,303	$0	$1,598,735	$0	$0	$0	$0	$0	$0	$0	$0	$1,598,735
	DPW Fees - 4%	$713,152	$0	$0	$49,668	$0	$604,858	$144,842	$0	$0	$0	$0	$799,368
	Construction Management - 4%	$713,152	$0	$0	$49,668	$0	$604,858	$144,842	$0	$0	$0	$0	$799,368
	DBE - 1.5%	$267,432	$0	$0	$18,626	$0	$226,822	$54,316	$0	$0	$0	$0	$299,763
	Design Contingency - 15%	$2,674,319	$0	$0	$186,255	$0	$2,268,217	$543,156	$0	$0	$0	$0	$2,997,629
	Total Design Phase Expenses	**$6,240,077**	$0	$1,598,735	$335,259	$0	$4,082,791	$977,681	$0	$0	$0	$0	**$6,994,467**
	TOTAL	**$24,068,869**	$0	$3,403,913	$2,306,644	$661,582	$13,132,460	$5,256,087	$1,555,850	$662,121	$0	$0	**$26,978,657**

Notes:
Inflation is assumed at 3% per year
*** Excluding costs associated with:
A) Repairs identified in GAS Report dated February 7, 1994
B) Movable staging for Domes glazing maintenance
Design Contingency Includes:
Construction - 12.5% of Construction Cost
Project Management - 1.5% of Construction Contingency
Owner Services - 1% of Construction Contingency
A & E Fees - 8% of Construction Contingency
DPW Fees - 4% of Construction Contingency
Construction Management - 4% of Construction Contingency
DBE - 1.5% of Construction Contingency

MITCHELL PARK HORTICULTURAL CONSERVATORY
MASTER PLAN

Central City Construction, Inc
Milwaukee, WI 414-224-7793

Conceptual Cost Estimate dated May 2000

Priority		QTY	Unit	Unit Price	Amount	Costs Based on 2001 Construction Dollars	PHASED IMPLEMENTATION 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 SUBTOTAL	
	A. Primary Dome Structures & Associated Buildings																
1	1. Upgrades to Existing Buildings																
	a. Exterior Rear Grading/Landscaping	11,250	SF	$ 5.00	$56,250								$65,250				
	b. Infrastructure Upgrades ***	1	LS	$ 200,000.00	$200,000					$212,200							
	c. Interior Finishes and Upgrade to Existing Lobby Space	5,000	SF	50.00	$250,000						$273,250						
	d. Mechanical Upgrades	1	LS	175,000.00	$175,000					$185,675							
	e. Mechanical Upgrades (PSJ Engineering Report) TOTAL	1	LS	3,161,276.00	$3,161,276												
	Priority 1 - 2000 Construction Dollars	1	LS	949,600.00				$978,088									
	Priority 2 - 2000 Construction Dollars	1	LS	803,000.00				$827,090									
	Priority 3 - 2000 Construction Dollars	1	LS	841,200.00					$1,354,332								
	Priority 4 - 2000 Construction Dollars	1	LS	68,400.00							$77,018						
	Priority 5 - 2000 Construction Dollars	1	LS	407,000.00							$458,282						
	f. Electrical Upgrades (Venture Electrical Contractors' Report)	1	LS	1,300,000.00	$1,300,000						$1,463,800						
	g. Temporary Public Entrance	1	LS	40,000.00	$40,000						$45,040						
	Subtotal Upgrades to Existing Buildings					$5,182,526	$0	$1,805,178	$1,354,332	$397,875	$2,317,390	$0	$65,250	$0	$0	$0	$5,940,025
7	2a. New Building Addition & Propagation House - 48,904 SF																
	a. Administrative Offices & Horticultural Staff	6,485	SF	$ 110.00	$713,350												
	b. Facility Rental Space & Catering/Food Area	18,300	SF	143.00	$2,616,900												
	c. Educational Programming, Gift Shop & Visitor Amenities	6,200	SF	135.00	$837,000												
	d. Additional Building Facilities & Circulation Space	15,519	SF	100.00	$1,551,900												
	e. Service Drive for New Administration Building	1,500	SF	10.00	$15,000												
	f. Earth Berm with Garden Wall & Water Feature	450	LF	130.00	$58,500												
	g. Private Sunken Gardens (2 ea.)	8,500	SF	20.00	$170,000												
	h. Propagation House & Corridor	2,400	SF	82.00	$196,800												
	Subtotal New Building Addition & Propagation House					$6,159,450					$6,732,279						$6,732,279
10	3. New Collection Greenhouses - 15,000 SF																
	a. Greenhouse Buildings (2 ea.)	15,000	SF	$ 75.00	$1,125,000												
	b. Infrastructure Improvements	1	LS	160,000.00	$160,000												
	Subtotal New Collection Greenhouses					$1,285,000							$1,490,600				$1,490,600
	Total Cost of Construction					$12,626,976	$0	$1,805,178	$1,354,332	$397,875	$9,049,669	$0	$1,555,850	$0	$0	$0	$14,162,904
	Milwaukee County Soft Cost:																
	Project Management - 1.5%			$189,405							$212,444						
	Owner Services - 1%			$126,270							$141,629						
	A & E Fees - 8%			$1,010,158				$1,133,032.34									
	DPW Fees - 4%			$505,079							$566,516						
	Construction Management - 4%			$505,079							$566,516						
	DBE - 1.5%			$189,405							$212,444						
	Design Contingency - 15%			$1,894,046.40							$2,124,435.64						
	Total Design Phase Expenses				$4,419,442		$0	$1,133,032	$0	$0	$3,823,984	$0	$0	$0	$0	$0	$4,957,016
	Total Primary Dome Structures & Associated Buildings					**$17,046,418**	$0	$2,938,210	$1,354,332	$397,875	$12,873,653	$0	$1,555,850	$0	$0	$0	$19,119,921

Notes:
Inflation is assumed at 3% per year
*** Excluding costs associated with:
A) Repairs identified in GAS Report dated February 7, 1994
B) Movable staging for Domes glazing maintenance
Design Contingency includes:
Construction - 12.5% of Construction Cost
Project Management - 1.5% of Construction Contingency
Owner Services - 1% of Construction Contingency
A & E Fees - 8% of Construction Contingency
DPW Fees - 4% of Construction Contingency
Construction Management - 4% of Construction Contingency
DBE - 1.5% of Construction Contingency

MITCHELL PARK HORTICULTURAL CONSERVATORY
MASTER PLAN

Central City Construction, Inc.
Milwaukee, WI 414-224-7793

Conceptual Cost Estimate dated May 2000

Priority	B Feature Garden			Costs Based on 2001 Construction Dollars				PHASED IMPLEMENTATION							
		QTY	Unit	Unit Price	Amount			2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 SUBTOTAL
9	2b Feature Garden																
	Rough Grading	1	LS	$ 33,000.00	$33,000												
	Infrastructure Improvements	1	LS	50,000.00	$50,000												
	Concrete Walks, 8' width	17,600	SF	3.25	$57,200												
	Arbor Pedestrian Bridge, 12' width & 4 piers	230	LF	1,070.00	$246,100												
	Metal Pedestrian Bridges, 8' x 20'	6	EA	4,400.00	$26,400												
	Metal Pedestrian Bridges, 8' x 72'	1	EA	11,000.00	$11,000												
	Arbors, concrete	5	EA	5,500.00	$27,500												
	Banquet Terrace, interlocking brick pavers	2,100	SF	15.00	$31,500												
	Picnic Terrace																
	sod	490	SF	5.50	$2,695												
	concrete seatwall	230	LF	44.00	$10,120												
	electrical service for functions	1	LS	11,000.00	$11,000												
	surface drainage	1	LS	3,800.00	$3,800												
	Waterfalls	1	EA	26,000.00	$26,000												
	Vortex, @ banquet terrace	1	EA	33,000.00	$33,000												
	Artesian Fountain	1	EA	165,000.00	$165,000												
	Geologic Stream, 4' width	700	LF	33.00	$23,100												
	Fill, 1' to 3' width	350	LF	22.00	$7,700												
	Pond A	8,860	SF	16.00	$141,760												
	Pond B	3,080	SF	16.00	$49,280												
	East Entrance Floral Feature	1,400	SF	5.50	$7,700												
	Perimeter Fence, 6' Metal	1,650	LF	41.00	$67,650												
	Gates, 6' x 6'	2	EA	420.00	$840												
	Ice Age Garden, with variable height retaining walls	22,600	SF	11.00	$248,600												
	American Garden	8,700	SF	11.00	$95,700												
	Millennium Garden	29,400	SF	11.00	$323,400												
	Latin Garden	13,300	SF	11.00	$146,300												
	Asian Garden	21,500	SF	11.00	$236,500												
	African Garden	15,000	SF	11.00	$165,000												
	Children's Garden	21,700	SF	11.00	$238,700												
	European Garden	14,500	SF	11.00	$159,500												
	World Grains Garden	10,800	SF	11.00	$118,800												
	Courtyard Gardens	17,000	SF	22.00	$374,000												
	Service Area	1	EA	22,000.00	$22,000												
	Electrical Service & Lighting	1	LS	55,000.00	$55,000												
	Subtotal Feature Garden				$3,215,845							$3,621,041					$3,621,041
	Milwaukee County Soft Cost:																
	Project Management - 1.5%	$48,238										$54,316					
	Owner Services - 1%	$32,158										$36,210					
	A & E Fees - 8%	$257,268					$289,683										
	DPW Fees - 4%	$128,634										$144,842					
	Construction Management - 4%	$128,634										$144,842					
	DBE - 1.5%	$48,238										$54,316					
	Design Contingency - 15%	$482,376.75										$543,156.22					
	Total Design Phase Expenses				$1,125,546	$0	$289,683	$0	$0	$0	$977,681	$0	$0	$0	$0	$1,267,365	
	Total Feature Garden				**$4,341,391**	$0	$289,683	$0	$0	$0	$4,598,723	$0	$0	$0	$0	$4,888,406	

Notes:
Inflation is assumed at 3% per year
Design Contingency includes:
- Construction - 12.5% of Construction Cost
- Project Management - 1.5% of Construction Contingency
- Owner Services - 1% of Construction Contingency
- A & E Fees - 8% of Construction Contingency
- DPW Fees - 4% of Construction Contingency
- Construction Management - 4% of Construction Contingency
- DBE - 1.5% of Construction Contingency

MITCHELL PARK HORTICULTURAL CONSERVATORY
MASTER PLAN

Central City Construction, Inc
Milwaukee, WI 414-224-7793

Conceptual Cost Estimate dated May 2000

Costs Based on 2001 Construction Dollars

PHASED IMPLEMENTATION

Priority		QTY	Unit	Unit Price	Amount		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 SUBTOTAL
	C. Parking Lots, Pavilion & Pond															
8	4a. Central Parking Lot															
	Demolition, Grading, and Utilities	1	LS	$ 70,000.00	$70,000											
	Asphalt Paving, roads & parking 4" mat on 8" base	52,600	SF	4.50	$236,700											
	Concrete Curb, with gutter @ roadway	2,650	LF	13.00	$34,450											
	Concrete Sidewalk, 5" thick variable width	1,520	SF	3.25	$4,940											
	Connections (2 ea) to South Layton, with signals	1	LS	50,000.00	$50,000											
	Pole Lights	6	EA	3,300.00	$19,800											
	Uplights	26	EA	550.00	$14,300											
	Sod & Shrubs	1	LS	21,000.00	$21,000											
	Shade Trees, 3" Cal.	33	EA	450.00	$14,850											
	Ornamental Trees Along Drive, 2" Cal.	28	EA	200.00	$5,600							$531,067				$531,067
	Subtotal Central Parking Lot					$471,640										
8	4b. South Parking Lot															
	Demolition, Grading, and Utilities	1	LS	$ 19,000.00	$19,000											
	New Striping, per stall	205	EA	5.00	$1,025											
	Concrete Curb, with asphalt patching	150	LF	18.00	$2,700											
	Concrete Sidewalk, 5" thick variable width	4,480	SF	3.00	$13,440											
	Pole Lights	20	EA	3,300.00	$66,000											
	Sod & Shrubs	1	LS	10,000.00	$10,000							$126,298				$126,298
	Subtotal South Parking Lot					$112,165										
4	10b. North Parking Lot															
	Seal Coating	9,100	SY	$ 1.00	$9,100											
	New Striping, per stall	220	EA	4.00	$880											
	Pole Lights	8	EA	3,300.00	$26,400											
	Subtotal North Parking Lot					$36,380			$37,471							$37,471
5	5a. Pavilion & Terrace															
	Upgrades to Existing Facility	1	LS	$ 55,000.00	$55,000											
	Pergola, metal 25' x 120	1	LS	33,000.00	$33,000											
	Lighting for Pergola	1	LS	16,500.00	$16,500											
	Café Terrace															
	foundation and dockwall	1	LS	27,500.00	$27,500											
	fence, 4' metal	250	LF	39.00	$9,750											
	gates, 4' x 6' metal	2	EA	400.00	$800											
	special paving	5,700	SF	13.00	$74,100											
	Floral Feature	700	SF	5.50	$3,850											
	Subtotal Pavilion & Terrace					$220,500				$233,951						$233,951
6	5b. Pond															
	Jet	1	LS	$ 4,400.00	$4,400											
	Bank Restoration															
	stone, 360' length x 5' wide	1,800	SF	1.00	$1,800											
	vegetation, 1324' length x 5' wide	6,620	SF	3.30	$21,846											
	Subtotal Pond					$28,046				$29,757						$29,757
	Total Cost of Construction					$868,731	$0	$0	$37,471	$263,707	$0	$657,364	$0	$0	$0	$0	$958,543
	Milwaukee County Soft Cost:										$14,378					
	Project Management - 1.5%	$13,031									$9,585					
	Owner Services - 1%	$8,687						$76,683								
	A & E Fees - 8%	$69,498									$38,342					
	DPW Fees - 4%	$34,749									$38,342					
	Construction Management - 4%	$34,749									$14,378					
	DBE - 1.5%	$13,031									$143,781.47					
	Design Contingency - 15%	$130,309.65														
	Total Design Phase Expenses					$304,056	$0	$76,683	$0	$0	$258,807	$0	$0	$0	$0	$335,490
	Total Parking Lots, Pavilion, & Pond					$1,172,787	$0	$76,683	$37,471	$263,707	$258,807	$657,364	$0	$0	$0	$1,294,033

Notes:
Inflation is assumed at 3% per year
Design Contingency includes:
- Construction - 12.5% of Construction Cost
- Project Management - 1.5% of Construction Contingency
- Owner Services - 1% of Construction Contingency
- A & E Fees - 8% of Construction Contingency
- DPW Fees - 4% of Construction Contingency
- Construction Management - 4% of Construction Contingency
- DBE - 1.5% of Construction Contingency

MITCHELL PARK HORTICULTURAL CONSERVATORY
MASTER PLAN

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Milwaukee, WI 414-224-7793

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Priority	D. Tot Play Area, Amphitheater, Playing Fields, Park Lighting & Plant Material	QTY	Unit	Unit Price	Amount	Costs Based on 2001 Construction Dollars	PHASED IMPLEMENTATION 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 SUBTOTAL
11	6. Tot Play Area															
	Infrastructure Upgrades	1	LS	$ 22,000.00	$22,000											
	Demolition, Grading, and Utilities	1	LS	27,500.00	$27,500											
	Oval-Special Paving, 4" concrete	1,400	SF	7.00	$9,800											
	Guardian Shelter	1	EA	17,500.00	$17,500											
	Climbing Station, Swing Station, & Rest Rooms (Existing)	1	EA	-	$0											
	Balance Station	1	EA	11,000.00	$11,000											
	Floral Feature, 240 sf of annuals	1	EA	1,300.00	$1,300											
	18" concrete seatwall	70	LF	44.00	$3,080											
	Creativity Station	1	EA	5,500.00	$5,500											
	Tunnel Station, sand & 3 concrete tunnels	1	EA	4,600.00	$4,600											
	Sand Castle Station, sand & curbing	1	EA	4,000.00	$4,000											
	Tricycle Track, 4" concrete paving	1,800	SF	3.50	$6,300											
	Perimeter Fence, 4' metal	670	LF	38.00	$25,460											
	Gates, 4' x 6' metal	2	EA	400.00	$800											
	Spray Pool, new spray feature	1	EA	4,400.00	$4,400											
	Subtotal Tot Play Area					$121,240								$144,760.56		$144,761
12	7. Amphitheater															
	Remove and Replace Stage Facility	3,000	SF	$ 130.00	$390,000											
	Regrading	1	LS	17,500.00	$17,500											
	Floral Feature, 175 sf of annuals	4	EA	950.00	$3,800											
	Sod	1	LS	22,000.00	$22,000											
	Subtotal Amphitheater					$433,300								$517,360		$517,360
3	8. Playing Fields															
	Regrading, sledding hill	1	LS	$ 20,000.00	$20,000											
	Baseball, Soccer, Little League, & Softball (Existing)	1	LS	-	$0											
	Basketball, rebuild	1	LS	17,000.00	$17,000											
	Picnic Shelter, major detail	1	EA	27,500.00	$27,500											
	Subtotal Playing Fields					$44,500			$45,835							$45,835
2	9. Lighting & Paths (not include in specific allocation index)															
	Pole Lights	19	EA	$ 3,300.00	$62,700											
	Pedestrian Lights	59	EA	3,300.00	$194,700											
	Asphalt Paths															
	removals & regrading	60,000	SF	0.60	$36,000											
	10' wide x 4" thick	45,000	SF	2.20	$99,000											
	10' wide x 3" thick	30,200	SF	2.00	$60,400											
	landscape patching	10,000	SF	0.60	$6,000											
	Subtotal Lights & Paths					$458,800			$472,564							$472,564
2	10a. Plant Material															
	Shade Trees, 3" Cal	135	EA	$ 440.00	$59,400											
	Subtotal Plant Material					$59,400			$61,182							$61,182
	Total Cost of Construction					$1,117,240	$0	$0	$579,581	$0	$0	$0	$0	$662,121	$0	$0	$1,241,702
	Milwaukee County Soft Cost															
	Project Management - 1.5%	$16,759							$18,626							
	Owner Services - 1%	$11,172							$12,417							
	A & E Fees - 8%	$89,379						$99,336								
	DPW Fees - 4%	$44,690							$49,668							
	Construction Management - 4%	$44,690							$49,668							
	DBE - 1.5%	$16,759							$18,626							
	Design Contingency - 15%	$167,586							$186,255.26							
	Total Design Phase Expenses				$391,034		$0	$99,336	$335,259	$0	$0	$0	$0	$0	$0	$434,596
	Total Tot Play Area, Amphitheater, Playing Fields, Park Lighting & Plant Material					**$1,508,274**	$0	$99,336	$914,840	$0	$0	$0	$0	$662,121	$0	$0	$1,676,297

Notes:
Inflation is assumed at 3% per year
Design Contingency includes:
- Construction - 12.5% of Construction Cost
- Project Management - 1.5% of Construction Contingency
- Owner Services - 1% of Construction Contingency
- A & E Fees - 8% of Construction Contingency
- DPW Fees - 4% of Construction Contingency
- Construction Management - 4% of Construction Contingency
- DBE - 1.5% of Construction Contingency

- D) Existing Facilities Analysis

Introduction

Engberg Anderson Design Partnership, Inc., in association with Pujara, Wirth, Torke, Inc., was retained by Milwaukee County Department of Parks to develop the Mitchell Park and Conservatory Master Plan. Pujara Wirth Torke Inc's approach was to visually inspect the three buildings located within the park. They are the Mitchell Park Horticultural Conservatory, the lagoon pavilion and the swimming pool bathhouse. The Mitchell Park Horticultural Conservatory is composed of in part, a vestibule, central lobby, gift shop, toilet rooms, offices, transition greenhouse, shipping/receiving dock, basement and three conoid structures (referred to as the 'domes'). The Lagoon Pavilion consists of a lobby, assembly hall, custodian office, men's and women's toilet rooms, an office and a basement. The swimming pool bath house consists of boy's and girl's toilet/changing rooms, breakroom and basement. The purpose of this inspection is to identify current and future building material deficiences and assess handicap accessibility per the Americans with Disabilities Act (ADA). Pujara, Wirth, Torke, Inc. performed the architectural and accessibility inspections, while specialized project team professionals inspected the facilities mechanical and electrical systems. The conditions observed during the inspections are reported in the following manner:

Building Identification
Exterior locations
- material deficiencies observation
- handicap accessiblity observation

Interior locations
- material deficiencies observation
- handicap accessibility observation

Since most of the same material deficiencies occur in numerous locations, exact locations will not generally be identified. A photograph of many of the deficiencies will be provided when appropriate. In addition to identifying a problem area, a suggested correction measure will also be described. There may be other solutions to correct the problem other than the one as stated. It's the owners perogative to determine which solution they feel may be most appropriate for this condition.

Pujara, Wirth, Torke Inc. was given a list of building conditions that Milwaukee County has identified as items that require correction. The exact scope of work, along with the status of these smaller individual projects, have not been clearly defined to Pujara, Wirth, Torke Inc. Therefore, all visible building deficiencies will be identified regardless of their future under other maintenance projects.

In addition to maintenance projects, a major two phase report was submitted by Graef, Anhalt, Schloemer and Associates, Inc. These two reports were issued February 7, 1994 and November 7, 1997. The basis of these reports was to examine the Mitchell Park 'Domes' and "to quantify the nature and extent of deterioration, determine feasible methods for performing repair work, and provide data necessary to develop a reasonable plan/schedule for doing the repair work." The analysis from these Graef, Anhalt, Schloemer and Associates, Inc. reports will superceed our glass dome system observations. However, the extent of the obvious deficiences of these domes were included to ensure their current condition has not been overlooked.

The following observations, along with corresponding photographs when provided, will highlight obvious building deficiencies. The extent of these individual problems is unknown. Further examination in detail under other studies may be warranted. In addition, an extensive review of Handicap accessibility would be suggested. Along with determining conditions of non-compliance, a schedule of modifications that corresponds to ADA priorities should be implemented.

ADA Compliance

Throughout this analysis of the Domes, Lagoon Pavilion and Pool Bath House, many items will address ADA Compliance. The following is a brief synopsis of the Americans with Disability Act (ADA). This overview of the ADA is intended to do no more than highlight how this Federal (and State) law affect's these facilities.

HANDICAPPED/DISABLED - The typical perception is that someone who is disabled is someone confined to a wheelchair. This interpretation is correct only on a very limited basis. The definition of disabled as it applies to accessibility is much more broad. Someone who is disabled can be wheelchair bound or on crutches, or uses a cane, or is blind, or is deaf, or has a heart problem, etc. The reason the definition of disabled is so important, is those areas that would not appear to have to comply to the ADA, in fact still has to. Examples, like the basement or a second floor that does not have wheelchair access, still has to comply because of the other types of disabilities. There is no delineation in size or requirements regarding disability. It may be by someone in a wheelchair or someone who has a heart problem. In all cases, the same restrictions and design requirements apply.

USE BY DISABLED - When thinking of public buildings, it is normally thought that the person who is disabled will be a visitor, guest, customer, etc. Although this may be the case, it is not an accurate assessment. An employee, service person, tradesman, etc, can also be disabled. The result is that basically all spaces must be accessible because anyone could have a disability.

COMPLIANCE - The goal of the ADA is to try to provide accessibility to as many disabled persons as possible. Not all buildings can be totally accessible, but many can. Accessibility standards fall under two criteria, new buildings and existing buildings. Since new buildings can be built so they are totally accessible, they must comply with all ADA accessibility standards. Existing buildings are more difficult to make accessible and therefore fall into two categories, existing buildings to be remodeled and existing buildings to remain 'as is'.

COMPLIANCE/REMODELING - When buildings are remodeled, the intention is accessibility will be addressed at this time. If fifty percent or more of the building is remodeled, the entire building must be brought up to current codes. This is critical to keep in mind when evaluating the domes. If with an addition and remodeling, fifty percent of the total new and existing floor area has been affected, many existing conditions do not comply and must be changed. If less than fifty percent of the total floor area has been affected, only those areas within the remodeling, or on the path to the remodeled area, must comply. There is a limit on expenditures for accessibility when the remodeling affects less than fifty percent of the floor area, and that is twenty percent of the architectural remodeling costs.

COMPLIANCE/'AS IS' - Leaving a building 'as is' does not eliminate addressing ADA accessibility. An existing building may remain 'as is' until someone identifies an accessibility problem and complains. That can be done by verbally telling the owner of the problem, or filing a written complaint. Once this problem has been brought to the owners attention, the owner must do something in good faith to address this situation. The preferred solution is to modify whatever the problem is until this condition conforms to the ADA. If that is not possible, a compromise solution that best addresses the problem and satisfied the complainant is acceptable. If this problem can not be satisfactory resolved, an alternate solution that addresses another accessibility problem and is acceptable to the complainant is also acceptable. If no solutions are acceptable to the complainant, or the owner does nothing to address the problem, the complainant can retain legal representation and pursue this issue in the court system. If justified, either the state or federal government will also represent the complainant. It should be noted that the complainant may be an employee, as well as a visitor.

General Buildings Overview

Horticultural Conservatory

This complex appears to be in generally sound condition, but is in need of extensive maintenance repairs. Many of the items defined in the following listing is the result of insufficient maintenance. If these conditions would have been addressed as they were developing, they wouldn't be the problem they are today. Other problems, such as the repair of the domes glass framing system, is a severe situation that could only probably best be repaired as a major project. Whatever the case may be, if many of these conditions are not rectified in a timely manner, the cost and scope of these repairs will continue to escalate. One issue that requires individual recognition is the lack of painting and sealing of building materials. The entire building, inside and out, should be painted and sealed. This is not as much as an aesthetic concern as it is a basic level of protection. Many metal components throughout the entire complex are rusted to the point where they may no longer be repairable. In some cases, not only will the metal item itself require replacement, but the adjacent materials are also damaged. In other instances, such as the concrete structural system, moisture has penetrated the concrete and is rusting the reinforcing steel. These are interior conditions. The interior has as many problems with rusting and deteriorating as the exterior has.

The other issue this complex will need to address is handicap accessibility throughout the building. When this building was originally built, handicap accessibility was not really an issue. Today, the current building code places much emphasis on making the entire building accessible. That doesn't mean the original construction was wrong, just that it no longer complies with the current code. Does that mean everything must be changed to meet the ADA? The answer is yes and no. If the building experiences a major remodeling, the entire complex will have to be remodeled to comply with the ADA. If the building is not remodeled, but just repaired, it does not have to comply with the current accessibility codes. However, even if the building doesn't have to comply with the ADA, if someone files a complaint that some aspect of the complex is not accessible, that situation will need to be addressed on an individual basis.

Lagoon Pavilion

The Pavilion is a brick veneer building that appears to be in good condition for it's age. Like the Horticultural Conservatory, this building suffers from lack of maintenance. The exterior woodwork has not been painted in some time and is badly peeling. The remainder of the building could be painted, but it's not in the same poor condition as the exterior. The interior woodwork needs varnishing. Since this building was also constructed prior to implementation of building codes that dealt with accessibility, it does not comply with the ADA. The comments directed to handicap accessibility under Horticultural Conservatory also apply to this building.

Swimming Pool Bath House

This building is similar in condition to the Lagoon Pavilion. The exterior woodwork also has not been stained and painted in some time. The remainder of the building could also use painting. There is one additional major problem that the Pavilion does not experience, and that is interior water damage. Since this building is basically toilet rooms for the pool, the users are tracking water into the building. The floor is commonly wet and this condition is causing interior damage. The wood doors and frames are decaying at the floor lines. The ceramic tile base is falling off the wall. This could mostly be attributed to the excessive moisture on the floors from the pool area. Not only will these materials require repair and replacement, but additional care will be necessary to minimize the floor wetness. The handicap accessibility issue is the same as the other buildings. Refer to the Horticultural Conservatory for ADA compliance.

Horticultural Conservatory

Exterior

Reflecting Pools

Item #1

Photograph Reference #1

Problem Description:

Major cracking in floor slab around perimeter of reflecting pool.

Possible Consequences:

Reflecting pool leaks and will not retain water. These cracks are substantial and appear to contribute to the leaking problem.

Corrective Measure:

Remove the broken areas of concrete slab and repair concrete. Paint.

Reflecting Pools

Item #2

Photograph Reference #1

Problem Description:

Floor slab is pitting.

Possible Consequences:

The pitting areas collect dirt and may contribute to pool leaking.

Corrective Measure:

Patch holes with concrete. Paint.

Reflecting Pools

Item #3

Problem Description:

Weeds are growing in the cracks between the concrete floor slab and concrete side walls.

Possible Consequences:

Plant roots can contribute to cracking and moving of concrete. In addition, as these weeds die, their decomposing stems will leave holes for water to drain through.

Corrective Measure:

Kill weeds and caulk perimeter of pool.

The following observations basically applies to all three domes, the north dome (show door), the east dome (arid dome) and south dome (tropical dome). Observations that apply to only one specific dome, will identify that dome. In addition, there are conditions that occur on several or all of the domes, but are worst or most prevalent on one particular dome. In that case, that dome will also be identified.

There have been several studies done by Graef, Anhalt, Schloemer & Associates that have explored the weather tight conditions of the glass domes. The results and recommendations of those reports have been and are currently being implemented in the repairs of the North (show) Dome. Refer to those reports for specifics on how the domes shall be repaired. This section or this report will identify some obvious materials that may already have been identified in other studies for repair or replacement.

Domes
Item #4
Photograph Reference #2 & 3
Problem Description:
Joints between cost stone/concrete wall panels below glazing and vents is missing and/or lost its bond.
Possible Consequences:
Water, bugs, dirt, etc; will get behind these panels and cause leaking and contribute to possible premature failure of anchors and/or panels.
Corrective Measure:
Clean, rod and caulk.

Domes
Item #5
Photograph Reference #4 & 5
Problem Description:
Concrete sills below and along side of louvers are missing, cracked or breaking apart.
Possible Consequences:
Water, bugs, cold air, etc; will enter into both the wall system and building through these openings. The result is leaking and possible premature failure of wall panels and anchors. In addition is the penetration of unwanted bugs and cold air into the door.
Corrective Measure:
Remove and replace all damaged concrete sills. Tuck point mortar joints and caulk.

Domes
Item #6
Photograph Reference #6
Problem Description:
Glass panels are cracked throughout the dome.
Possible Consequences:
May cause water leaking, could be future safety problems.
Corrective Measure:
Caulk minor cracks in glass panels and replace panels with large or multiple cracking.

Domes
Item #7
Problem Description:
Glass panels contain bullet holes.
Possible Consequences:
May cause water leaking, will probably crack extensively in future.
Corrective Measure:
Caulk hole and minor cracks, replace panels with large or multiple cracking.

Domes
Item #8
Photograph Reference #7
Problem Description:
Joint covers and gaskets are missing screws and not properly sealed.
Possible Consequences:
May cause water leaking.
Corrective Measure:
Replace gaskets and missing screws. Caulk.

Domes
Item #9
Photograph Reference #8
Problem Description:
Insect screens over louvers are missing or torn.
Possible Consequences:
Insects will enter into the dome through the louvers.
Corrective Measure:
Replace all damages and missing screening.

Domes
Item #10
Photograph Reference #9
Problem Description:
Mortar joint at wall below cast stone/concrete wall panels at trench has fallen out.
Possible Consequences:
Water will collect in trench prior to draining. The spalling occurs at the wall/trench floor line. Water from the trench will run into the wall system and cause leaking and possible premature failure of wall panels and anchors.
Corrective Measure:
Remove damaged concrete, tuck point and caulk.

Domes
Item #11
Problem Description:
Caulking is missing and/or lost its bond around louver frames.
Possible Consequences:
Water will penetrate into the wall system through these gaps causing leaking.
Corrective Measure:
Remove failed sealant and caulk.

Domes
Item #12
Photograph Reference #10
Problem Description:
Drains within trench are covered with leaves and debris.
Possible Consequences:
The longer the water remains in the drainage trench, the more possibility that water will seep into the wall.
Corrective Measure:
Occasionally inspect these drains and remove all debris around drains. Remove drains and clear piping where necessary.

Domes
Item #13
Photograph Reference #11
Problem Description:
Joints at coping cap covers on cast stone/concrete wall panels are not tightly closed.
Possible Consequences:
The gaps at both the ridge and valleys of the coping caps may allow water to get into the wall system. The valleys pose a worse problem because water drains to these points.
Corrective Measure:
Caulk joints.

Domes
Item #14
Photograph Reference #12
Problem Description:
Cost stone/concrete wall panels adjacent to wall louvers are spalling.
Possible Consequences:
The spalling areas adjacent to the louvers allow water to get into the wall system by entering behind the trim of the louver.
Corrective Measure:
Patch coast stone/concrete wall panels to original configuration and caulk.

Domes
Item #15
Photograph Reference #13
Problem Description:
Leaves are trapped between the louver and screen.
Possible Consequence:
As the leaves increase in quantity, they block more screen area. Since these are exhaust fans, the trapped leaves act as a sail pushing against the screens. Eventually, the screens will tear or become permanently distorted.
Corrective Measure:
Occasionally inspect these fan units and remove all debris.

South Dome
Item #16
Photograph Reference #14
Problem Description:
Drain within perimeter trench is missing strainer.
Possible Consequences:
Leaves, debris, etc. will flow into drain and plug, causing possible water leaking into the domes.
Corrective Measure:
Install strainers and periodically inspect for clogging.

South Dome
Item #17
Photograph Reference #15 & 16
Problem Description:
Receiving dock entrance concrete wall is spalling and peeling.
Possible Consequences:
If not repaired, wall will get worse and require extensive repairs.
Corrective Measure:
Repair broken, cracked and missing concrete. Scrape, prime and paint walls.

South Dome
Item #18
Photograph Reference #17
Problem Description:
Trench drain has vegetation growing in and around grate. Drain is higher that adjacent concrete walk on north side.
Possible Consequences:
Drain will not drain properly, if at all, and water can enter through overhead door floor gasket.
Corrective Measure:
Remove all vegetation from and around trench drain. Clean out drain and storm sewer as necessary. Either replace or patch area around drain to promote positive drainage.

South Dome
Item #19
Problem Description:
Metal trim around overhead door is rusting.
Possible Consequence:
The rusting of these materials are not only aesthetically displeasing, but will hasten premature replacement.
Corrective Measure:
Clear off all rust, prime and paint.

South Dome
Item #20
Problem Description:
Gutter is sloped away from downspout.
Possible Consequence:
The gutter may overflow on heavy rain storms due to the strong slope. This condition could have contributed to the wall damage below the end of the gutter.
Corrective Measure:
Remove gutter and reinstall pitching toward downspout.

South Dome
Item #21
Photograph Reference #18
Problem Description:
Moss is growing between screens and louvers.
Possible Consequence:
The growth of moss reduces the efficiency of the louvers and the screening. In addition, it is gradually placing undo stress on the screens.
Corrective Measures:
Remove all moss. Apply anti-fungal treatment to louvers.

South Dome
Item #22
Problem Description:
Dome wall above roof of dock is cracking and peeling.
Possible Consequences:
If left unrepaired, this wall will continue to deteriorate and possibly cause interior water damage.
Corrective Measure:
Scrape walls, patch cracks, clean, prime and paint.

Gift Shop Exterior
Item #23
Problem Description:
Synthetic plaster is damaged adjacent to receiving doors caused by delivery vehicles.
Possible Consequences:
Without protection, the plaster will continue to be damaged.
Corrective Measure:
Install steel pipe bollards near receiving doors to provide barrier between delivery vehicles and building.

Gift Shop Exterior
Item #24
Photograph Reference #19
Problem Description:
A section of roof flashing is missing.
Possible Consequences:
The missing flashing could allow rain to enter below the roofing membrane and cause leaking.
Corrective Measure:
Install new flashing.

Gift Shop Exterior
Item #25
Problem Description:
There are various holes in the synthetic plaster that has not been repaired. Some repairs have not been repaired according to manufacturer's requirements.
Possible Consequences:
Exposed insulation will absorb moisture and cause premature failure.
Corrective Measure:
Repair holes using techniques and materials meeting manufacturer's specifications.

East Dome
Item #26
Photograph Reference #20
Problem Description:
Drains within trench are almost completely covered with debris and clogged.
Possible Consequences:
The longer the water remains in the drainage trench, the more possibility that water will seep into the wall.
Corrective Measure:
Occasionally inspect these drains and remove all debris around drains. Remove drains and clear piping where necessary.

East Dome
Item #27
Photograph Reference #21
Problem Description:
Securing nuts from hub covers are missing.
Possible Consequences:
The missing nut results in a large hole susceptible to water penetration. In addition, the hub cover is not properly secured.
Corrective Measure:
Install missing hub cover nuts.

East Dome
Item #28
Photograph Reference #22
Problem Description:
Critters have burrowed under a concrete wall.
Possible Consequences:
The tunnels underneath are undermining the concrete walls and could cause future cracking.
Corrective Measure:
Remove the critters and mudjack the cavity solid.

East Dome
Item #29
Photograph Reference #23
Problem Description:
The poured concrete dock walls are cracking and allowing moisture to seep into the cracks.
Possible Consequences:
Moisture in the walls is causing efflorescence and possibly rusting of the reinforcing bars.
Corrective Measure:
Thoroughly clean the walls, repair the cracks, prime and paint.

East Dome
Item #30
Photograph Reference #24
Problem Description:
The concrete around the exit doors has shifted and cracked.
Possible Consequences:
Some missing concrete has been patched with asphalt. These irregular surfaces can cause potential tripping hazards.
Corrective Measure:
The broken concrete should be removed and replaced with new paving.

East Dome
Item #31
Photograph Reference #25
Problem Description:
The concrete curbs are cracking and breaking away and in some cases exposing reinforcing bars.
Possible Consequences:
This is a safety hazard.
Corrective Measure:
Remove broken concrete curb. Clean off rust form reinforcing bars where applicable. Install new concrete curbing in areas where curb is missing and/or has been removed.

East Dome
Item #32
Problem Description:
Some exposed aggregate wall panel sections have been replaced with new. It would appear that the metal tiles that secure these panels to the structural wall are rusting. The failure of the metal ties is causing the wall panels to break away from the structural wall.
Possible Consequences:
Without some maintenance (which might be too late), the remainder of the panels may continue to break away form the structural wall.
Corrective Measure:
Remove wall panels, replace metal wall ties and reinstall wall panels. A less effective and shorter term solution would be to remove all existing sealant between and around wall panels. Clean and re-caulk. Treat surface with water repellant coating.

Transition House
Item #33
Photograph Reference #26
Problem Description:
The steel angles that support the brick veneer is rusting. In addition, it appears that the anchor bolts that secure the angles to the wall may also be rusting.
Possible Consequences:
The brick veneer is cracking near the brick angles. This is probably caused by the build up of rust on the angles and the rusting of threads on the anchor bolts, causing the bolts to pull out of the wall. This condition will continue until the bolts eventually rust to the point where they pull out of the wall. Without the support of the angles, the brick will crack and fall off the wall.
Corrective Measure:
Replace the failing brick angles with new steel brick angles and anchor bolts. Replace brick as necessary to gain access to failing angles and anchors. Remove rust, prime and paint angles in good condition. Prime and paint new angels. All new steel should be galvanized.

Transition House
Item #34
Photograph Reference #27
Problem Description:
The steel frames around the overhead doors are rusting.
Possible Consequences:
Without maintenance, the frames will continue to rust until they need replacement.
Corrective Measure:
Remove all rust, prime and paint.

Transition House
Item #35
Problem Description:
Panels on the overhead door are damaged.
Possible Consequence:
The door experiences additional wear because it does not operate as smoothly as designed.
Corrective Measure:
Replace damaged door panels.

Transition House
Item #36
Problem Description:
The down spout at the north service door drains to grade. The water pitches down the drive and is directed back toward the building and down the sidewalk.
Possible Consequence:
This condition creates a potential safety hazard on the sidewalk. In addition, water draining back to the building contributes to possible leaking at the door and wall.
Corrective Measure:
Extend downspout through grade and into service garage of transition house. Connect new extended roof leader to existing storm sewer.

Transition House
Item #37
Photograph Reference #28
Problem Description:
Stone jambs around door and window openings are breaking apart.
Possible Consequences:
Once the stone is cracked, water can penetrate into the crack and cause additional deterioration. Once the stone is severally cracked or missing, water can seep into the wall and cause additional damage.
Corrective Measure:
Replace broken and/or missing stone jambs with new stone jambs.

Transition House
Item #38
Photograph Reference #29
Problem Description:
The hollow metal doors and frames are rusting.
Possible Consequences:
If the doors and frames continue to rust, they will eventually require replacement.
Corrective Measure:
Clean off the rust, prime and paint. Replace those doors and frames that can longer be repaired.

Transition House
Item #39
Photograph Reference #30
Problem Description:
Stone trim between brick sections are cracking and falling off the building.
Possible Consequences:
The missing stone allows water to penetrate directly into the interior of the wall system. Over time, this will contribute to the rusting of interior steel, possible breakdown of brick veneers and leaking into the building.
Corrective Measure:
Replace broken and/or missing stone trim with new stone trim and anchors.

Transition House
Item #40
Photograph Reference #31 & 32
Problem Description:
Some brick veneer is either cracked or broken.
Possible Consequences:
The cracked and broken brick allows water to penetrate into the wall. This will contribute to further deterioration of the brick wall and leaking into the building.
Corrective Measure:
Replace cracked and broken brick with new brick and anchors.

Transition House
Item #41
Photograph Reference #33
Problem Description:
Existing sealant has either lost it's bond, is cracked and dried out, or missing.
Possible Consequences:
The failure of sealant allows water to penetrate into the wall and cause material failures and leaking into the building.
Corrective Measures:
Remove all failed sealant. C lean, prime and recaulk.

North Door Receiving
Item #42
Photograph Reference #34
Problem Description:
Plaster overhang is cracked and weathered.
Possible Consequences:
The cracked and weathered plaster will allow the penetration and absorption of water into the soffit. This condition can contribute to additional cracking of the soffit.
Corrective Measure:
Repair cracks and paint.

North Dome Receiving
Item #43
Problem Description:
The overhead door lintels are rusting.
Possible Consequences:
As the lintels continue to rust, they will gradually lose some of their strength. This could cause future cracking in the brick the lintels support.
Corrective Measure:
Clean off rust, prime and paint.

North Dome Receiving
Item #44
Photograph Reference #35
Problem Description:
Metal trim, flashing, etc are rusting and/or peeling.
Possible Consequences:
The rusting and failing paint will cause these metal components to fail prematurely. In addition to early replacement, their failure will compromise the integrity of the buildings weather tightness.
Corrective Measure:
Remove rust, clean, prime and paint.

North Dome Receiving
Item #45
Photograph Reference #36
Problem Description:
Concrete retaining wall along dock is cracking and breaking apart in several areas.
Possible Consequences:
Unless failing areas are repaired, wall may continue to deteriorate until it can no longer be repaired.
Corrective Measure:
See structural section.

North Dome Receiving
Item #46
Photograph Reference #37
Problem Description:
Guardrail on top of retaining wall is bent and not structurally sound.
Possible Consequences:
This railing is required by code and needs to comply with the building code requirements.
Corrective Measure:
Remove railing and reinstall members so the posts are vertical to the ground and the rail is parallel to the top of the wall. If this is not possible, replace the entire railing with new.

North Dome Receiving
Item #47
Photograph Reference #38
Problem Description:
There are some areas that are covered with graffiti.
Possible Consequences:
Not only is the graffiti destructive to the appearance of the domes, if not removed, it can attract additional graffiti.
Corrective Measure:
Remove graffiti and seal wall.

Entrance
Item #48
Photograph Reference #39
Problem Description:
The metal flashings and window frames are peeling and rusting.
Possible Consequences:
If not addressed, this metal will rust through and require replacement. In addition, as these materials continue to rust, they not longer will be watertight.
Corrective Measure:
Remove all rust, scrape, prime and paint. Replace all materials that are rusting to severely to be repaired.

Entrance
Item #49
Photograph Reference #39
Problem Description:
Window glazing panels are cracked.
Possible Consequences:
Cracked glass may let in water and cold winter air.
Corrective Measure:
Replace glass.

Entrance
Item #50
Photograph Reference #40
Problem Description:
The roofing membrane has small holes in it, may be due to concrete aggregate popping.
Possible Consequences:
The roofing membrane is no longer monolithic and watertight. These holes will be locations for water penetration.
Corrective Measure:
Patch holes and remainder of roof as necessary.

Entrance
Item #51
Problem Description:
Plaster type finish or wall adjacent to exterior stair wall is spalling.
Possible Consequences:
The finish is not aesthetically attractive. In addition, the spalling finish may contribute to water leaking into the building.
Corrective Measure:
Remove all loose finish and replaster wall surface.

Entrance
Item #52
Photograph Reference #41
Problem Description:
The sealant in the bottom joint of the wall panels has fallen out.
Possible Consequences:
This opening allows water to penetrate into the wall system, which could result in rusting of interior steel and water leaking into the building.
Corrective Measure:
Remove all sealant, clean, caulk.

Entrance
Item #53
Photograph Reference #42
Problem Description:
Steel reinforcing within a wall panel is rusting and staining the exterior of the wall panel.
Possible Consequences:
Left untreated, the steel will continue to rust and possibly spread. The rusting will continue to stain the face of the wall panel.
Corrective Measure:
Should blast the trust of the wall panel. Find the reinforcing that is rusting, clean and epoxy coat. Repair face of wall panel as necessary.

Entrance
Item #54
Photograph Reference #43
Problem Description:
Calcium is leaking out the face of the concrete base that supports the curved concrete structural system.
Possible Consequences:
The leaking is spalling off the textured wall finishes and is aesthetically unattractive.
Corrective Measure:
Remove the build-up of calcium. Apply new texture and coat entire area with waterproofing coating. Water may be getting into the wall system from another source, which would also need to be sealed.

Entrance
Item #55
Problem Description:
Sealant is cracking and dried out.
Possible Consequences:
Water can penetrate through the failing sealant.
Corrective Measure:
Remove failed sealant and recaulk.

Entrance
Item #56
Photograph Reference #44
Problem Description:
This concrete paving contains holes and chips.
Possible Consequences:
These holes pose a possible safety hazard, especially for someone with a disability.
Corrective Measure:
Repair holes and fill construction joints with sealant.

Dome/Lobby Service Walkway
The following items apply to all three exterior walkways that occur between the three domes and the lobby. Specific locations that differ will be identified.
Item # 57
Photograph Reference #45
Problem Description:
The metal trim and components are peeling and rusting.
Possible Consequences:
Without protection, these materials will eventually rust and require premature replacement. In addition, continued rusting could cause water leaking into the building.
Corrective Measure:
Remove rust, prime and paint. Replace items that can not be repaired.

Dome/Lobby Service Walkway
Item #58
Photograph Reference #46
Problem Description:
The down spout form the adjacent roofs are draining onto the walkway deck.
Possible Consequences:
The north and south walkways only have one deck drain each. If this drain is plugged due to snow or debris, the enclosed area can flood over.
Corrective Measures:
Reroute the down spout so they discharge outside the building. Another option could be to tie the down spout into the existing storm sewer.

Dome/Lobby Service Walkway
Item #59
Problem Description:
The joint between the floor deck and the wall is not watertight (note in some cases these decks are roofs for the spaces below).
Possible Consequences:
Any water that gets into those joints could cause leaking into the basement below.
Corrective Measure:
Remove all sealant, clean do caulk joints.

Dome/Lobby Service Walkway
Item #60
Problem Description:
The wood doors and frames are nicked and peeling.
Possible Consequences:
If the exposed wood is not protected, it will weather and eventually deteriorate, resulting in premature replacement.
Corrective Measure:
Scrape, patch and fill holes, prime and paint.

East Dome/Lobby Service Walkway
Item #61
Photograph Reference #45
Problem Description:
The deck drains are missing strainers.
Possible Consequences:
Without strainers, the drains could get plugged somewhere within the storm sewer line, which would be more difficult to dislodge.
Corrective Measure:
Install strainers. Set up a schedule to make sure all strainers are kept open and clean.

East Dome/Lobby Service Walkway
Item #62
Photograph Reference #45 & 46
Problem Description:
Vegetation is growing in the joint between the floor deck and the wall.
Possible Consequences:
Vegetation growing in these areas compromises the water tightness of the joint.
Corrective Measure:
Remove all vegetation and recaulk joint as defined in Item #59.

Ease Dome/Lobby Service Walkway
Item #63
Photograph Reference #46
Problem Description:
The concrete floor deck does not slope toward the deck drains.
Possible Consequences:
Since areas of the deck appear to slope away form the drains, there will be areas of standing water, until it evaporates. The longer the water remains on the deck, the more likely it can penetrate below the deck and leak into the building.
Corrective Measure:
Install a thin cementitious topping that slopes to the deck drain.

Transition House Walkway/Plaza Deck
Item #64
Photograph Reference #47
Problem Description:
Miscellaneous steel around the deck is rusting.
Possible Consequences:
If the existing steel is not protected, it will continue to rust until it will require premature replacement.
Corrective Measure:
Remove rust, prime and paint. Replace steel beyond the point of repair.

Transition House Walkway/Plaza Deck
Item #65
Photograph Reference #48
Problem Description:
Steel vent pipes and flashings is rusting.
Possible Consequences:
If the existing steel is not protected, it will continue to rust until it will require premature replacement.
Corrective Measure:
Remove rust, prime and paint. Replace steel beyond the point of repair.

Transition House Walkway/Plaza Deck
Item #66
Photograph Reference #49
Problem Description:
The waterproof deck membrane is wearing through at construction joints.
Possible Consequences:
Since this area can be lower than the adjacent deck, it can trap and hold water. The failed membrane allows the waters to seep through the membrane and directly into the construction joints.
Corrective Measure:
Remove all joint material, clean rod, caulk and coat with waterproof membrane.

Transition House Walkway/Plaza Deck
Item #67
Photograph Reference #50
Problem Description:
The waterproof deck membrane has worn through to the concrete deck.
Possible Consequences:
The holes in the membrane allow water to seep into the concrete deck.
Corrective Measure:
Clean off area with holes and recoat with waterproofing membrane.
Note that the entire plaza deck should be tested to ensure watertightness. If not, recoat deck areas as necessary to ensure a watertight deck.

Transition House Walkway/Plaza Deck
Item #68
Photograph Reference #51
Problem Description:
The deck drain is higher than the adjacent plaza deck. In addition, the concrete around the drain is cracked and spalling.
Possible Consequences:
The deck drain does not properly drain and the adjacent concrete has failed.
Corrective Measure:
Remove failed deck around drain and install new concrete to flush with drain.

Roof
Item #69
Photograph Reference #52
Problem Description:
Metal ductwork is rusting.
Possible Consequences:
If this ductwork continues to rust, it will eventually rust through and require premature replacement.
Corrective Measure:
Remove the rust, prime and paint. Replace rusted sheet metal that is beyond repair.

Roof
Item #70
Problem Description:
The clear plastic skylights are fractured but not broken.
Possible Consequences:
It appears a heavy snow load or just time may cause this glazing to fail.
Corrective Measure:
Replacing the skylight system with a new energy efficient skylight would eliminate a future failure. If not, these skylights should be periodically inspected.

Roof
Item #71
Photograph Reference #53
Problem Description:
The roof areas around the roof drains are soft and may be leaking.
Possible Consequences:
If these areas are leaking, the longer it takes to repair these areas, the more the extent of the water damage.
Corrective Measure:
All the areas around the roof drains should be tested and repaired as necessary. It should be noted that generally the roofing membrane appears sound, but if the roofing around the drains are failing, the entire roof should be closely examined and tested.

Roof
Item #72
Problem Description:
The flashings are peeling.
Possible Consequences:
If the metal is not protected, it will continue to rust until it prematurely needs replacement.
Corrective Measure:
Clean off rust, prime and paint. Replace rusted metal that is beyond repair.

Roof
Item #73
Photograph Reference #54 & 55
Problem Description:
The curb roofing membrane appears worn.
Possible Consequences:
The curb membrane appears thin and possibly leaking. If it is not leaking, it could in the near future.
Corrective Measure:
All the curb roofing membranes should be tested and repaired as necessary. The condition of these curbs may be indicative to the condition of the general roof.

Roof
Item #74
Photograph Reference #56
Problem Description:
Glazing gaskets around the clear story windows are either missing or falling out.
Possible Consequences:
Without those gaskets properly installed, the windows may leak both air or water.
Corrective Measure:
Remove damaged gaskets. Install gaskets where removed or missing.

Roof
Item #75
Problem Description:
There are areas on the roof where moss is growing.
Possible Consequences:
This is probably caused by flat areas on the roof that result in standing water. Both growth and standing water is detrimental to a built up roof.
Corrective Measure:
Install additional tar and pea gravel as necessary and pitch toward drains to eliminate flat areas.

HORTICULTURAL CONSERVATORY

Interior
Vestibule
Item #A1
Photograph Reference #57
Problem Description:
Locks on the outside doors are located on bottom of door near the threshold. Possibly due to their location, they require occasional service.
Possible Consequences:
Because of the way they are installed, they can not be removed from the door for servicing. The entire door must be removed in order to repair the lock cylinders. These doors are extremely heavy and this is an inappropriate method of repairing a lock cylinder.
Corrective Measure:
Replace locking mechanism with one serviceable without requiring the removal of the doors.

Note: The hardware throughout the building is not ADA compliant. This mechanism, along with the remainder of the hardware should be replaced with ADA compliant hardware.

EDUCATIONAL CENTER

Item #C1 (ADA Compliance)
Photograph Reference #66
Problem Description:
Drinking fountains are not handicap compliant.
Possible Consequences:
A complaint may be filed by someone in a wheelchair stating they have difficulty using either one of the drinking fountains.
Corrective Measure:
Remove one drinking fountain and install an ADA complaint drinking fountain per ADA requirements.

GIFT STORE

No Comments

OFFICES

Item #D1 (ADA Compliance)
Photograph Reference #67
Problem Description:
The doors from the lobby into offices do comply with minimum ADA door width and accessibility requirements.
Possible Consequences:
Someone attempting to enter the offices in a wheelchair, especially unassisted, would have a very difficult, if not impossible time getting through these openings. They could file a complaint that these rooms are unaccessible.
Corrective Measure:
The configuration of these walls will not accommodate ADA accessible doors. Either a new door in another location will be required, or rebuild the office layout to be accessible.

Offices
Item #D2 (ADA Compliance)
Problem Description:
Door closer required too much force to open.
Possible Consequences:
Someone with a disability could have a problem opening up this door. They could file a complaint that this door is not accessible.
Corrective Measure:
Adjust the door closer so it complies, or if it can not, remove it or replace it.

Offices
Item #D3 (ADA Compliance)
Photograph Reference #68
Problem Description:

The service counter from the office to the lobby is too high for use by either a disabled visitor or employee.

Possible Consequences:

A wheelchair bound person would not be easily seen from either side. They also could not use the counter because it is too high and does not provide wheelchair access. They could file a complaint that this counter is not accessible.

Corrective Measure:

If this counter would be used for information, the counter would need to be lowered and the top could be extended out for the convenience of a wheelchair user. If this counter is no longer used for information, all signage and literature should be removed (from the lobby side), or the glass should be removed and unfilled with a wall or fixed opaque panel.

Offices
Item #D4 (ADA Compliance)
Photograph Reference #69
Problem Description:

There is a lavatory in the office. This lavatory does not comply with ADA requirements.

Possible Consequences:

Someone in a wheelchair might have difficulty using the lavatory. If so, they could file a complaint that this lavatory is not accessible.

Corrective Measure:

Replace the lavatory with one that is ADA compliant. Install the lavatory so it conforms to ADA clearance requirements. If a lavatory is not necessary, it could be removed.

Offices
Item #D5 (ADA Compliance)
Photograph Reference #70
Problem Description:

The ticket office is on a platform and is not handicap accessible for use by a handicap employee.

Possible Consequences:

Someone with a disability could file a complaint that the room is not accessible to them.

Corrective Measure:

Rebuild the ticket off so it's use is floor area, counter height, door width, etc. is ADA accessible.

Women's Toilet Room
Item #E1 (ADA Compliance)
Photograph Reference #71
Problem Description:
The bottom of the mirror above the lavatories are mounted too high per ADA requirements.
Possible Consequences:
Someone in a wheelchair could not conveniently use these mirrors. They could file a complaint that these mirrors are not accessible.
Corrective Measure:
Lower one mirror above an ADA compliant lavatory to ADA requirements.

Women's Toilet Room
Item #E2 (ADA Compliance)
Photograph Reference #71
Problem Description:
None of the lavatories comply with ADA requirements.
Possible Consequences:
The existing installation is close to being ADA compliant, but is not. Someone in a wheelchair could file complaint that the lavatories are not accessible.
Corrective Measure:
Cut-out and remove one lavatory and install an ADA compliant lavatory. Install lavatory per ADA clearance requirements.

Women's Toilet Room
Item #E3 (ADA Compliance)
Photograph Reference#72
Problem Description:
The handicap toilet stall is not ADA accessible.
Possible Consequences:
Someone in a wheelchair would have a difficult time using this toilet stall. They could file a complaint that this stall is not accessible.
Corrective Measure:
This toilet stall would require a completely new installation. The watercloset, grab bars, toilet partitions, etc. are not ADA compliant.

Women's Toilet Room
Item #E4
Photograph Reference#73
Problem Description:
There are some holes in the ceramic floor tile.
Possible Consequences:
These holes can fill with dirt and breed bacteria. This condition would violate the Health Department Code.
Corrective Measure:
Replace ceramic floor tile with holes with new ceramic floor tile.

Women's Toilet Room
Item #E5
Problem Description:
There are cracks in the ceramic floor tile.
Possible Consequences:
These cracks discolor with dirt. They appear unsightly.
Corrective Measure:
Replace cracked ceramic floor tile with new ceramic floor tile.

Women's Toilet Room
Item #E6
Problem Description:
A small portion of the plaster ceiling is peeling away.
Possible Consequences:
The problem is aesthetically unpleasant and may get worse.
Corrective Measure:
Repair and paint damaged area on ceiling.

Men's Toilet Room
Item #F1 (ADA Compliance)
Photograph Reference #74
Problem Description:
The bottom of the mirror above the lavatories are mounted too high per ADA requirements.
Possible Consequences:
Someone in a wheelchair could not conveniently use these mirrors. They could file a complaint that these mirrors are not accessible.
Corrective Measure:
Lower one mirror above an ADA compliant lavatory to ADA requirements.

Men's Toilet Room
Item #F2 (ADA Compliance)
Photograph Reference #74
Problem Description:
None of the lavatories comply with ADA requirements.
Possible Consequences:
The existing installation is close to being ADA compliant, but is not. Someone in a wheelchair could file complaint that the lavatories are not accessible.
Corrective Measure:
Cut-out and remove one lavatory and install an ADA compliant lavatory. Install lavatory per ADA clearance requirements.

Men's Toilet Room
Item #F3 (ADA Compliance)
Photograph Reference #75
Problem Description:
The handicap toilet stall is not ADA accessible.
Possible Consequences:
Someone in a wheelchair would have a difficult time using this toilet stall. They could file a complaint that this stall is not accessible.
Corrective Measure:
This toilet stall would require a completely new installation. The watercloset, grab bars, toilet partitions, etc. are not ADA compliant.

Men's Toilet Room
Item #F4 (ADA Compliance)
Problem Description:
The accessible route to the handicap stall does not comply with minimum ADA width requirements.
Possible Consequences:
Access to the handicap stall is tighter than ADA requirements and maybe more difficult for someone in a wheelchair. They could file a complaint that circulation to the handicap stall is not accessible.
Corrective Measure:
Remodel the room so both the access route and handicap stall are ADA compliant and accessible.

Men's Toilet Room
Item #F5
Photograph Reference #76
Problem Description:
There are cracks in the ceramic floor tile.
Possible Consequences:
These cracks discolor with dirt. They appear unsightly.
Corrective Measure:
Replace cracked ceramic floor tile with new ceramic floor tile.

Men's Toilet Room
Item #F6
Photograph Reference #77
Problem Description:
Top of urinal is cracked (may be covered in plumbing inspection).
Possible Consequences:
This crack can breed bacteria and in violation of the Health Department Code.
Corrective Measure:
Repair crack with impervious material if possible or replace with new.

Men's Toilet Room
Item #F7
Photograph Reference #77
Problem Description:
Grout is missing between ceramic wall tile.
Possible Consequences:
Cracks between ceramic tile trap dirt and breed bacteria.
Corrective Measure:
Remove all loose and failing grout and regrout.

Men's Toilet Room
Item #F8
Photograph Reference #78
Problem Description:
There is missing ceramic floor tile around the urinals.
Possible Consequences:
Missing ceramic floor tile, especially around urinals, breed bacteria and trap dirt.
Corrective Measure:
Replace missing ceramic floor tile and caulk.

Men's Toilet Room
Item #F9
Photograph Reference #79
Problem Description:
Bottom of door frame from lobby is rusting.
Possible Consequences:
If the door frame is not cleaned down to bare metal, it will eventually rust through.
Corrective Measure:
Sandblast rust to bare metal, fill holes where rusted through, prime and paint. Replace frame if not repairable.

NORTH DOME (Show Dome)

Item #G1
Photograph Reference #80
Problem Description:
Concrete is spalling away from the concrete structure at the steel reinforcing bar locations.
Possible Consequences:
The exposed steel reinforcing bars within the concrete structure is rusting. As they rust, the spalling of concrete will expand along the reinforcing bar. In addition, the strength of the reinforced concrete will weaken in proportion with degree of rust.
Corrective Measure:
Exposed reinforcing bars should be sandblasted, primed, painted and patched.

North Dome
Item #G2
Photograph Reference #81
Problem Description:
Concrete is spalling away from the concrete structure.
Possible Consequences:
The holes allow water to penetrate the concrete closer to the reinforcing steel. If the steel keeps getting wet, it will start to rust.
Corrective Measure:
Clean out holes and patch.

North Dome
Item #G3
Photograph Reference #82
Problem Description:
The concrete structure is cracking and paint is peeling.
Possible Consequences:
Besides looking aesthetically unpleasant, the existing paint is not protecting the concrete structure. Water and condensation can penetrate the cracks and contribute to the concrete spalling.
Corrective Measure:
Scrape the concrete structure, clean out the cracks and patch, prime and paint.

North Dome
Item #G4
Photograph Reference #83
Problem Description:
Existing steel members, brackets, pipes, etc. are rusting.
Possible Consequences:
The rusting steel is not only aesthetically objectionable, but also reduces the life and strength of steel. The rusting steel is also staining the walls and possibly contributing to cracking in the walls.
Corrective Measure:
All rusting steel should be cleared, replaced if necessary, primed and painted.

North Dome
Item #G5
Photograph Reference #84 & 85
Problem Description:
The interior screens at the fresh air louvers are either torn or missing.
Possible Consequences:
There are screens on the outside of the louvers. Insects are able to get through the exterior screen openings and get into the dome. Installation of interior screen would help prevent insects from getting into the domes while at the same time filtering out debris from getting sucked into the fan.
Corrective Measures:
Install new screens at those louver locations that were originally designed for them.

North Dome
Item #G6
Photograph Reference #86
Problem Description:

The pipe service tunnel is so humid that the paint is peeling off the walls, ductwork and piping.

Possible Consequences:

Without the protection of paint, the concrete walls are absorbing water and contributing to the dampness. Most of the steel materials are rusting.

Corrective Measure:

The entire tunnel should be scraped, primed and painted. Damaged materials should be replaced.

North Dome
Item #G7
Photograph Reference #87, 88, & 89
Problem Description:

The floor of the pipe service tunnel is partially underwater.

Possible Consequences:

This condition presents numerous problems. First, a safety issue. Anyone who walks on that wet floor could easily slip and hurt themselves. A more serious problem is existence of numerous electrical panels. It would be quite possible for someone to become electrocuted while standing in water and reaching for an electrical panel. Secondly, the constant presence of water is contributing to paint failure. Thirdly, this water is causing the metal materials within the tunnel to rust. Fourth, the moist environment is a breading ground for mold and bacteria.

Corrective Measures:

Besides water getting into the trench through the grates above, there are several plumbing pipes that are broken and draining into the trench. All plumbing should be repaired. The floor should be thoroughly cleaned and a new topping should be poured on top of the existing floor. The new topping should be pitched toward the existing floor drains to eliminate all standing water.

North Dome
Item #G8
Photograph Reference #89
Problem Description:

The floor in the pipe service tunnel is littered with unused electrical wiring, debris and leaves. These materials impede drainage to the floor drains.

Possible Consequences:

Water does not drain well in this tunnel to start with. This damming around the drains contributes to the water/moisture problems of the pipe service tunnel.

Corrective Measure:

All debris must be regularly cleaned out from the pipe trench.

North Dome
Item #G9
Photograph Reference #90
Problem Description:
Moss is growing between the rubber gasket and the dome glass.
Possible Consequences:
The build up of moss behind the gasket is destroying the weather seal.
Corrective Measure:
Remove all moss and apply an anti-fungal treatment to the area.

North Dome
Item #G10
Photograph Reference #91
Problem Description:
Calcium is leaking out of the ceiling and running down the wall. The stain is gold colored instead of white, and appears to be colored due to possible rust run off.
Possible Consequences:
This leaking is probably due to water getting through the roofing membrane and soaking into the concrete deck. The moisture has probably penetrated the concrete down to the reinforcing bars. This would cause the reinforcing bars to rust, which could cause cracking and leak concrete salts and rust through the crack. If left uncorrected, this condition will get worse.
Corrective Measure:
Locate the cause of the leak, most likely a roofing problem. Repair the leak. Clean off the calcium from the wall and ceiling. Patch wall, prime and paint.

North Dome
Item #G11
Problem Description:
The closers on the doors to the north dome require too much force to open.
Possible Consequences:
Someone in a wheelchair would have a difficult time trying to open these doors. They could file a complaint that this area is not ADA accessible.
Creative Measure:
The closers could be adjusted to ADA compliant. If this is not obtainable, the closers should be replaced.

North Dome
Item #G12
Problem Description:
Metal Door frame exiting from dome to exterior near receiving has rusted through at the base.
Possible Consequences:
The frame is continuing to rust and will create openings to the exterior, which will allow for passage of weather and insects.
Corrective Measure:
Replace door frame, prime and paint.

North Dome
Item #G13 (ADA Compliance)
Photograph Reference #92
Problem Description:

The walkway that meanders through the dome is not ADA accessible. The concrete walk exceeds 1 in 20 and is therefore a ramp. The remainder of the walkway is soil and wood chips, it should be paved.

Possible Consequences:

Someone in a wheelchair, especially unassisted, may have trouble circulating through the dome. They could file a complaint stating that the paved area that is actually a ramp does not have handrailings as required by ADA. Once they got into the wood chips, they found the soil was not 'stable, firm, slip-resistant' as also required by ADA requirements.

Corrective Measure:

Modify the existing ramp to conform to ADA standards. Install a hard surface walkway that also conforms to ADA requirements.

North Dome Receiving
Item #He
Photograph Reference #93
Problem Description:

Pipe wrap is peeling and is torn.

Possible Consequences:

Without paint protection, the pipe insulation will deteriorate. If the pipe wrap deteriorates, it will not longer properly insulate the pipes.

Corrective Measures:

Repair or replace damages pipe wrap. Paint pipe wrap when complete. If pipe wrap is too badly deteriorated, replace pipe wrap.

North Dome Receiving
Item #H2
Photograph Reference #94
Problem Description:

Metal pipe and materials are rusting.

Possible Consequences:

If metal items continue to rust, they will eventually require premature replacement.

Corrective Measure:

Clean off rust, replace damaged materials, prime and paint.

North Dome Receiving
Item #H3 (ADA Compliant)
Photograph Reference #94
Problem Description:

The drinking fountain is not ADA accessible.

Possible Consequences:

Someone in a wheelchair could have a problem using this drinking fountain. If they did, they could file a complaint that this drinking fountain is not accessible.

Corrective Measure:
Install an ADA compliant drinking fountain. Clearances to comply with ADA requirements. If a new drinking fountain is not installed, the existing one could be removed and capped.

North Dome Receiving
Item #H4
Problem Description:
Metal door frame has rusted through at the base.
Possible Consequences:
Frame is continuing to rust and will create openings to the exterior, which will allow for passage of weather and insects.
Corrective Measure:
Replace door frame, prime and paint.

North Dome Receiving
Item #H5
Photograph Reference #95
Problem Description:
Concrete joints in floor are wide and deep and not caulked.
Possible Consequences:
These joints are filled with dirt and other items that get stuck in them (note that this photo shows several sharp pieces of glass dangerously protruding from them). As an open joint, water and salt from vehicles can seep into and under the concrete. This can contribute to a breakdown of the concrete slab.
Corrective Measure:
All the joints should be thoroughly cleaned, rodded and caulked.

EAST DOME (Arid Dome)

The same conditions that were discovered in the North Dome also apply in the East Dome. See Items #G1 thru #G12.
In addition,

Item #J1
Photograph Reference #96
Problem Description:
The stair on the wood siding and trim is wearing off.
Possible Consequences:
The wood looks worn and aesthetically objectionable.
Corrective Measure:
Either paint or stain the siding and trim.

East Dome
Items #J2
Photograph Reference #97
Problem Description:
There is a large hole in one of the glass dome panels.
Possible Consequences:
The hole will allow water and snow to enter the dome while at the same time allowing heat to escape in the winter.
Corrective Measure:
Replace glass panel.

East Dome
Items #J3
Problem Description:
The asphalt walkway that meanders through the dome at times exceeds a slope of 1 in 20.
Possible Consequences:
A slope greater than 1 in 20 but less than 1 in 12 is considered a handicap ramp. Someone in a wheelchair and unassisted could file a complaint that this walkway does not contain the features required for a ramp by the ADA.
Corrective Measure:
The existing walkway should be removed and replaced with an ADA compliant ramp and sloped walk.

South Dome (Tropical)
The same conditions that were discovered in the north dome also apply in the south dome. See Item #G1 thru G12.
In addition,
Item #K1
Photograph Reference #98
Problem Description:
Algie is growing on all interior surfaces not subject to direct sunlight due to the excessive amount of moisture in the dome.
Possible Consequences:
The algie contributes to the failure of paint and rusting of metals.
Corrective Measure:
All algie should be thoroughly removed. All areas, especially all lower areas, should be treated to prevent future growth. A regular cleaning schedule should be developed and implemented.

South Dome
Item #K2
Photograph Reference #99
Problem Description:
The paint is peeling badly from the concrete structure that supports the dome glazing.

Possible Consequences:

The excessive paint peeling, a lot more than the other domes, is due to the humid atmosphere. The paint is not only for aesthetic appearances, but also protects the concrete. There appears to be a substantial quantity of cracks throughout the concrete webs. Left unprotected, moisture may penetrate these cracks to the reinforcing bars, causing these bars to rust.

Corrective Measure:

All the webs would be scraped, cleaned, primed and painted.

South Dome
Item #K3
Photograph Reference #100
Problem Description:

The walkway throughout the dome is rough in areas. In addition, areas have been patched that did not flush with the adjacent pavement. Both these conditions are potential tripping hazards.

Possible Consequences:

It would be very easy for someone to be fixated on the flowers and not notice the path irregularities and trip.

Corrective Measure:

The asphalt patch should be covered in a new layer of exterior grade asphalt paving. A maintenance schedule for top coating should be developed and implemented. (See following item regarding walkway.)

South Dome
Item #K4 (ADA Compliance)
Problem Description:

Problem Description:

The asphalt walkway that meanders through the dome at times exceeds a slope of 1 in 20.

Possible Consequences:

A slope greater than 1 in 20 but less than 1 in 12 is considered a handicap ramp. Someone in a wheelchair and unassisted could file a complaint that this walkway does not contain the features required for a ramp by the ADA.

Corrective Measure:

The existing walkway should be removed and replaced with an ADA compliant ramp and sloped walk.

South Dome
Item #K5
Photograph Reference #101
Problem Description:

Due to an excessive amount of moisture in the tropical dome, a substantial amount of steel is rusting.

Possible Consequences:

Normally, if steel has been painted in the past, it will be protected. In this case, there is a lot of moisture trapped in this building on a constant basis that it has penetrated the old paint. Without new protection, the thinner metals are already losing some of their strength and may prematurely require replacement.

Corrective Measure:

All metal should be thoroughly cleaned of rust. Weakened or failed materials should be replaced. All bare metal should be primed and then all metal should be painted. A maintenance schedule should be implemented that treats rusting metal with the above steps as soon as it is noticed.

Transition House

Item #L1

Photograph Reference #102

Problem Description:

The ceramic tile base around the perimeter of the building is losing it's bond to the wall.

Possible Consequences:

It could be assumed that the ceramic tile base was installed to protect the wall from water. Water could penetrate the joint between the floor and wall or lay alongside and be absorbed into the concrete wall. If water gets into the wall, it could negatively effect the exterior brick veneer.

Corrective Measure:

Remove all loose ceramic tile base, clean reinstall and grout. If the ceramic tile base is not to be re-installed, the wall should be thoroughly cleaned, primed, painted, and caulk wall/floor joint.

Transition House

Item #L2

Problem Description:

The paint is peeling off the walls.

Possible Consequences:

The paint helps protect the concrete walls. The peeling paint compromises that protection.

Corrective Measure:

Scrape off all peeling paint, clean, prime and paint. Almost all the metal within this building is galvanized. All the metal that is not galvanized should be primed and painted.

Transition House

Item #L3

Photograph Reference #103

Problem Description:

Glass is cracked throughout the glazing system. The worst cracking occurs in the operable ventilation units.

Possible Consequences:

The cracked glass can allow water to penetrate into the building. In addition, sections of glass cracked, as badly as some of these are, could be a safety problem (even if this is wire glass).

Corrective Measure:

Cracked glass panels should be replaced. The broken glass within the ventilation units may have developed due to the malfunction of the operating mechanism. All the ventilation units should be inspected, adjusted and lubricated for proper operation.

Transition House
Item #L4
Photograph Reference #104
Problem Description:
Moss is growing on the top of the metal framing system.
Possible Consequences:
The moss could be deteriorating the effectiveness of the weathertight joints. In addition, the buildup of moss between the framing and the glass could be asserting undue stress on the glass.
Corrective Measure:
Remove all moss, clean thoroughly, and treat with anti-fungal coating.

Transition House
Item #L5
Photograph Reference #105
Problem Description:
The concrete is spalling off at the ends of the floor slab.
Possible Consequences:
Water maybe getting into the floor/wall joint and possibly freezing. This recess now provides an opportunity for water to penetrate behind the concrete wall.
Corrective Measure:
Remove all spalling concrete, clean and patch.

Transition House
Item #L6
Photograph Reference #106
Problem Description:
The 'ENVIRO-MIST' is discharging on the concrete floor.
Possible Consequences:
The constant puddling of water is causing the growth of algae, which makes the floor slippery. The floor drain, which can and was partially clogged, could cause extensive wet areas. Some of this water is getting absorbed in the concrete floor. This may result in future leaking to the floor below and possible rusting of the concrete slab reinforcing.
Corrective Measure:
Extend the discharge lines directly to floor drain. In addition, thoroughly clean the concrete floor slab and apply concrete sealer.

Transition House
Item #L7
Problem Description:
Metal door frame has rusted through at the base.
Possible Consequences:
Frame is continuing to rust and will create openings to the exterior, which will allow for passage of weather, insects and vermin.
Corrective Measure:
Replace door frame, prime and paint.

Transition House
Item #L8 (ADA Compliance)
Photograph Reference #
Problem Description:
Stair handrails do not comply with ADA requirements.
Possible Consequences:
Anyone who is disabled could file a complaint that these handrails are harder to use because they don not comply with the ADA heights and extensions.
Corrective Measure:
Replace the handrails with ADA compliant handrails.

Lower Level Corridor
Item #M1
Problem Description:
The exits form this level are not identified.
Possible Consequences:
Someone unfamiliar with this area may not know how to exit this area in case of an emergency (this is a building code requirement).
Corrective Measure:
Analyze the exit paths required by code and install exit lights.

Lower Level Corridor
Item #M2
Photo Reference #108
Problem Description:
Tape has been applied to smoke detector to render detector inoperative (assumed since this occurs outside the women's toilet/locker room, it's a result of cigarette smoking).
Consequences:
This is not an architectural issue, but the by pass of this detector could cause serious safety problems in case of a fire on a floor with no exit signage.
Corrective Measure:
Remove tape and regularly monitor fire alarm system.

Lower Level Corridor
Item #M3
Problem Description:
Plumbing pipes are rusting.
Possible Consequences:
The useable life of the plumbing will be decreased by the effects of the rusting.
Corrective Measure:
Clean off rust, prime and paint pipe.

Lower Level Corridor
Item #M4
Problem Description:
Stair handrails are not ADA compliant.
Possible Consequences:
Someone could file a complaint that these handrails are not ADA compliant and are difficult to use.
Corrective Measure:
Remove handrails and install new handrails that are ADA compliant.

Men's Toilet/Locker Room
Item #N1
Photo Reference #109
Problem Description:
Plaster has fallen away from wall and ceiling (could have been caused by water leak).
Possible Consequences:
This is not a maintainable sanitary wall finish for a toilet room according to the building code. This is also aesthetically unpleasant.
Corrective Measure:
Repair the leak if that caused the damage and has not been repaired. Remove loose plaster, scrape, replaster, prime and paint wall.

Men's Toilet/Locker Room
Item #N2
Photo Reference #109
Problem Description:
Plumbing pipes are rusting.
Possible Consequences:
The useable life of the plumbing will be decreased by the effects of the rusting.
Corrective Measure:
Clean off rust, prime and paint pipe.

Men's Toilet/Locker Room
Item #N3
Photo Reference #110
Problem Description:
The floor is missing a section of ceramic tile.
Possible Consequences:
The missing tile collects dirt and does not provide a maintainable sanitary floor.
Corrective Measure:
Install new ceramic tile and grout.

Men's Toilet/Locker Room
Item #N4
Problem Description:
There are holes in the walls.
Possible Consequences:
It's aesthetically unpleasant.
Corrective Measure:
Repair holes and paint.

Women's Toilet/Locker Room
Item #P1
Photo Reference #111
Problem Description:
Plaster and paint has fallen away from the ceiling (could have been caused by water leak).
Possible Consequences:
This is not a maintainable sanitary finish for the ceiling in a toilet room. This is also aesthetically unpleasant.
Corrective Measure:
Repair the leak if that caused the damage and hasn't been repaired. Remove loose plaster, scrape, replaster, prime and paint wall.

Women's Toilet/Locker Room
Item #P2
Problem Description:
Metal ceiling access panel is rusting.
Possible Consequences:
The useable life of the access panel will be decreased by the effect of the rusting.
Corrective Measure:
Remove rust, prime and paint.

Lower Level Office
Item #Q1
Problem Description:
Window is cracked, screen is broken.
Possible Consequences:
Cracked glass may let in water and cold winter air.
Corrective Measure:
Replace glass and repair screen.

Lower Level Office
Item #Q2
Problem Description:
Pipes are rusting.
Possible Consequences:
The rusting is not only aesthetically displeasing, it also decreases the useable life of piping.
Corrective Measure:
Clear off all the rust and prime and paint.

Lower Level Office
Item #Q3
Photograph Reference #112
Problem Description:
Leaks have damaged the wall and caused the paint to peel.
Possible Consequences:
The leaking has not been repaired.
Correct Measure:
Eliminate the leak, repair the plaster and prime and paint the wall.

Lower Level Office
Item #Q4
Problem Description:
Bottom of door frame is rusted.
Possible Consequences:
The rusted out section of door frame may allow the passage of water, weather and insects.
Corrective Measure:
Replace the rusted door frame with a new frame.

Conference Room
Item #R1
Photograph Reference #113
Problem Description:
Air conditioner is poorly installed in a rated wall and interferes with the closure of fire shutters.
Possible Consequences:
If a fire starts in the service garage, a rolling fire shutter will automatically close to secure this opening. The air conditioner blocks the closure of this shutter and will allow fire to spread into the remainder of the building. This is a code violation.
Corrective Measure:
Mount the air conditioner in a position that won't interfere with the fire shutter. If this isn't possible, remove the air conditioner all together. The cardboard and tape should be replaced with a closure panel that's aesthetically more pleasing, especially for a conference room.

Basement Receiving/Service/Storage
Item #S1
Photo Reference #114
Problem Description:
Pipes are rusting.
Possible Consequences:
The rusting is not only aesthetically unpleasant, it also decreases the useable life of piping.
Corrective Measure:
Clear off all the rust and prime and paint.

Basement Receiving/Service/Storage
Item #S2 (ADA Compliance)
Photograph Reference #115
Problem Description:
The drinking fountain does not comply with ADA requirements.
Possible Consequences:
A complaint may be filed by someone in a wheelchair stating they have difficulty using the drinking fountain.
Corrective Measure:
Remove the existing drinking fountain and install one that's ADA compliant.

Basement Receiving/Service/Storage
Item #S3
Photograph Reference #113
Problem Description:
Air conditioner is interfering with the closure of the fire shutter. See Item #R1.

Basement Receiving/Service/Storage
Item #S4 (ADA Compliance)
Problem Description:
There is no handrailing on the right side of the stairway and the handrail on the left side does not comply with ADA.
Possible Consequences:
Someone with a disability could file a complaint that the existing handrail, and lack of one, makes using the stairway difficult.
Corrective Measure:
Replace the left handrail with one that is ADA compliant and install another on the right side that is also compliant.

Basement Boiler Room Office
Item # T1 (ADA Compliance)
Problem Description:
Toilet Room is not ADA accessible.
Possible Consequences:
Someone with a disability, may file a complaint that the toilet room plumbing fixtures are not easily accessible.
Corrective Measure:
The toilet room would require reconstruction to meet the building code, which would dramatically downsize the existing office. The other alternative would be to eliminate the toilet room altogether.

Basement Boiler Room
Item #T2 (ADA Compliance)
Photograph Reference #116
Problem Description:
The stairway handrailings do not comply with ADA requirements.

Possible Consequences:
Someone with a disability could file a complaint that the handrailing is difficult to use because it does not have the proper extensions.
Corrective Measure:
Replace the handrailing with an ADA compliant handrailing.

Basement Boiler Room
Item #T3
Problem Description:
Steel floor plates are rusting.
Possible Consequences:
IF the steel is not protected it will continue to rust. The rusting will shorten the life of these panels and possibly stain the adjacent concrete floor.
Corrective Measure:
Clean off rust, prime and paint.

Basement Boiler Room
Item #T4
Problem Description:
The locksets on the exit doors are keyed operable on both the inside and outside of the door.
Possible Consequences:
By code, a key can not be required to exit through an exit door. If this door is locked from the inside and there is a fire, someone could be trapped. This is a code violation.
Corrective Measure:
Replace the lockset with one that does not require a key to open from the inside.

Basement Boiler Room
Item #T5
Photograph Reference #117
Problem Description:
The fire door is not automatically maintained in the closed position.
Possible Consequences:
If there is a fire or explosion in the boiler room, the fire could spread into the storage room through the opening.
Corrective Measure:
Remove all obstructions and adjust or replace door hardware as necessary for smooth and automatic door operation.

Basement Storage
Item #T6
Problem Description:
The stairway handrailings do not comply with ADA requirements.
Possible Consequences:
Someone with a disability could file a complaint that the handrailing is difficult to use because it doesn't have the proper extensions.
Corrective Measure:
Replace the handrailing with an ADA compliant handrailing.