Smithsonian Institution
National Museum of Natural History

Map Project

Part I - Summary Report of Visitor Research

Office of Policy and Analysis
Smithsonian Institution
May 16, 2011
Goals of the project

- To provide information and ideas in support of improved wayfinding in NMNH, including:
  - Printed maps
  - Digital device maps
  - Content for digital displays
  - Brochure-map guides

- To deepen understanding of what visitors seek at NMNH and how they find it
Methods

- Visitor Research
  - Joint OP&A and NMNH teams interviewed visitors bi-weekly and discussed findings
  - Summaries of findings for each session
  - Summary meetings compiled and categorized NMNH wayfinding weaknesses and suggestions
Report Outline

- Visitor Research
  - Session foci
  - Findings
  - Weaknesses and Suggestions
VISITOR RESEARCH

• Five sessions February-March, 2011

• OP&A Team (interviewers and discussants):
  ◦ Sarah Block, Lance Costello, Zahava Doering, Claire Eckert, Jarrid Green, Lindsey Haslebacher, Bethany Miller, Andrew Pekarik, Michelle Troubleyn

• NMNH Team (note-takers and discussants):
  ◦ Younis Alhashemi, Donna Attaway-Dancy, Harold Banks, Samir Bitar, Kara Blond, Dennis Hasch, Dave Lopez, Kim Moeller, Tania Mansour
SESSION FOCI

1. Entering visitors’ use of wayfinding aids
2. Exiting visitors’ navigation experience, choices, and preferences
3. In-depth interviews on reasons, expectations, and benefits of visiting
4. Asking visitors to retrace their visits on a map
5. Visitors’ map comprehension and experiences at decision points
FINDINGS

1. Wayfinding can be improved
2. “Wandering” is especially common
3. Visitor expectations vary
4. Lack of clarity on Ground Fl and 2nd Fl
5. Problems finding services
6. Map use varies
7. There is interest in new visit aids
I. Wayfinding Can Be Improved

- A few complaints
- Some visitors say wayfinding in NMNH is “easy,” “logical,” “intuitive”
- Many visitors guide themselves by signs
- Rotunda elephant is an orientation point
- Mall entrance visitors had few orientation problems
55% rate directions Excellent/ Superior
But that is lower than Overall Experience

Directions on how to get around the museum

Overall Experience in NMNH

Source: Dec '10 – Jan '11 IMAX Study
2. “Wandering” is Especially Common

- In both slow season (winter) and busy season (spring), many visitors are wandering without aims – “browsing” “free style” “exploring”

- “Wandering” visitors follow rotunda signs, other signs, light, color, attract objects, flow of visitors

- Aims vary from “seeing everything” to “getting a taste”

- Some have a systematic approach; some ask staff where to go

- When separated they use phones to re-group
Aspects of Wandering
3. Visitor Expectations Vary

- Some expect what they saw at other natural history museums (e.g., fossils, Egypt); others do research
- Some look for icons and/or things seen here before
- Some expect “dead things,” and/or “real things”
- Some expect chronological order
- Some do not expect cultural exhibitions
- Some expect interactives, “touch and feel”
- Visitors come to see “amazing things,” to learn, to remember, to see new exhibits, to see IMAX, to bond, to complete assignments, to have an emotional connection, to learn about other cultures, to see things from “Night at the Museum”
Aspects of Expectation

NMNH Wayfinding
Session 3
Expectations
ANALYTIC SUMMARY
March 16, 2011

Contents:
- Expectation
- Presentation

Expectation:
- Prior visit
- Recommendation
- Source of expectation
- Interest in nature/outdoors
- Visiting museums of this type elsewhere

Presentation:
- Chronology/history
- Large scale (lots of exhibits)
- Things to touch
- "Hands-on education" i.e., live demos/interactions
- Young people want this

Desire:
- Meet requirement - assigned task
- Bond - time with family/friends
- Feel - Emotional connection
- Learn - about "old times", science
- Remember - things seen before (Diamond/bees)
- See - amazing things - not seen before

Emphasize what's LIVE
- "Real", i.e. authentic things
- "nature-made" things
- Fossils, Dinos
- Egypt, Old things
- NOT cultures
- Remembered things
- Blue whale
- "Hands-on" education i.e., live demos/interactions

Counteract:
- "flashing"/"bells and whistles"
- NOT "Hands-on" education
- Opposing expectations
- Things to touch
- Young people want this

Office of Policy and Analysis 5/16/11
4. Lack of Clarity on Ground Fl & 2nd Fl

- Second Floor is more confusing and more visitors are lost there (especially West side) and some think it is not “child/family-friendly”
- Some visitors who enter from the Mall never realize there is a Ground Floor
- Some don’t know there is a café in the museum; some have confusion with G, 1st and 2nd floor
- Those who enter on Constitution have more difficulty orienting; signs misleading; think they are entering the “back-door”
5. Problems Finding Services

- Some have trouble finding:
  - Escalators
  - Elevators
  - Restaurants
  - Stores
  - Imax theater
  - Restrooms
  - Trash cans

- Some have problems moving floor to floor
## 6. Map Use Varies

- Not all visitors want maps
- Some take maps but don’t use them ("in case"/souvenirs)
- Some take maps but don’t expect them to help
- Some find the maps difficult to use
- Some use maps extensively (including to plan the visit)
- Some are good map readers; others not
- Some children were better at map use than the adults
- Many visitors could locate themselves on the map
- Some visitors use map to mark where they’ve been
- Some found it hard to use stationary maps that weren’t oriented in the direction they faced
- Visitors were more likely to accurately locate themselves when content of nearby areas differed
7. There is Interest in New Aids

- Kid-friendly guides and scavenger hunts
- Highlights and “check-off lists” (e.g., “top ten”)
- Tie-ins to films (e.g. “Night at the Museum”)
- Audio tours
- More stationary “you-are-here” maps
- “Routes” – for skimming, for highlights, for chronology, etc.
- Floor arrows or colored footprints as guides
- Easier-to-read printed map
- More directional arrows within galleries to point towards Rotunda
- Information on what is new and upcoming
WEAKNESSES AND SUGGESTIONS

Based on interviews with visitors, team members constructed a list of current weaknesses and suggestions for improvements.

By category of wayfinding aid:

A. Printed Maps
B. Stationary Maps
C. Electronic signs/maps
D. Signs
E. Handheld Electronic devices
F. Brochures/guides
G. Other methods

(Complete list of weaknesses and suggestions available separately)
A. Printed Maps

- **Weaknesses** – Small, cluttered, icons unclear, lacks color, shows areas only, no highlights, availability not obvious, not coordinated/updated

- **Suggestions** – Larger paper and larger map, isometric version, icons that match landmarks in actual locations and orientations, color coding based on topic, route options, highlights
B. Stationary Maps

- **Weaknesses** – Placement not ideal, orientation not intuitive, content incomplete, visibility low, not consistent

- **Suggestions** – More maps at decision points, maps at entrances to all exhibits, egocentric orientation, add landmarks, larger text and icons, better color scheme
C. Electronic Signs/Maps

• **Weaknesses** – Design not appealing, content inadequate, image cycling hard to use, not consistent with other wayfinding aids

• **Suggestions** – Brighter colors, include exhibit/program listings, highlight beautiful objects, use touch-screens for visitor control or keep screen image constant, convert into touch-screen kiosks
D. Signs

- **Weaknesses** – Design and visibility issues, not clear enough, placement issues, content inadequate

- **Suggestions** – Larger type, eye-catching color, bold text, better placement, arrows to Rotunda, prominent listing of all exhibits, signs within exhibits, more signs to services, listing of location of interactives
E. Handheld Electronic Devices

- **Weaknesses** – Lack of public awareness, no clear demand, might interfere with experience, few offerings

- **Suggestions** – Use for added content, for GPS-enabled floor plan, for routes and tours, to locate specific items, to provide directions, to “favorite” exhibits, use QR codes that enable visitors to download a color map, provide audio guides upon request
F. Brochures/Guides

- **Weaknesses** – Might not be used, require content judgments, not currently available

- **Suggestions** – Guides for specific interests (e.g., for people with kids), to specific exhibits, routes based on length of stay, highlights tour (e.g., rare, big/small, surprise, link to famous people, etc), creative tours (e.g., “Deep Content,” “Evolution,” “Lovers Tour,” “Secret Places”)
G. Other Methods

- **Weaknesses** – Website not used much, not clear what’s kid-friendly, orientation difficult, museum content unclear, staff could help more

- **Suggestions** – Re-number floors (1-2-3, rather than G-1-2), more arrows pointing to Rotunda, orientation film, description of halls, training for security officers in visitor services, “Visitor Experience Ambassadors,” re-orient/re-organize/relocate information desks, train info desk personal on direction-giving, integrate all wayfinding aids, complete lighting audit of the museum
NEXT STEP

Drawing on this research the NMNH team will create prototype map designs and prototype brochure/tour designs that will be tested by joint OP&A-NMNH teams in four sessions during Fall 2011.
Thanks

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