CHICAGO SPORTS!
You Shoulda Been There

A Summative Evaluation Study for the
Chicago Historical Society

by Serrell & Associates
February 2004
New York ain’t the only place with a great sports history.

Quote from a visitor
Sports are a big part of the culture in Chicago.

Quote from a visitor
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Figure 1. Entry graphic

The panel, Chicago Sports! You Shoulda Been There, marked the entrance to the exhibition to the right at the top of the stairs coming up from the lobby. Photos from the exhibition lined both walls in the atrium.
INTRODUCTION

About Chicago Sports! You Shoulda Been There

This 6,000-square-foot temporary exhibition ran from March 2003 to January 2004 and was located in two galleries on the second floor, connected by a “bridge” across the atrium.

The exhibition contained 55 elements grouped in six sections by sports venue and community settings: neighborhoods, Soldier Field, Comiskey Park, Wrigley Field, the Chicago Stadium/United Center, and school sports. The main message of the exhibition was, “In a city of strangers, sports brings people together.”

The 55 elements included two large video theaters (one in the south gallery, one in the north), four large wall-mounted timelines with multiple stories and graphics depicting major events as well as some real artifacts, several iconographic objects, e.g., Comiskey pinwheel, turnstiles, Cubs on-deck circle, Walter Payton’s Super Bowl ring, and a case with the six golden championship trophies won by the Bulls. The bridge between the two halves of the exhibition contained murals of the Wrigley and Addison CTA train stations and a tableau of the inside of a CTA ‘L’ train car between them.

The summative evaluation study was structured to answer a variety of questions, including What did visitors like?, What did they learn?, Did they perceive the exhibit’s conceptual organization?, How did design contribute to understanding?, How long did they stay?, What were the most popular elements?, and Who came?
The exhibits were divided between two galleries, connected by a bridge on the west side of the atrium. Two theaters dominated the rooms, which were lined with graphics, timelines, artifacts and contained multiple freestanding cases with more artifacts, graphics and exhibit labels. Numbers correspond to the 55 exhibit elements listed on the facing page.
Numbered exhibit elements corresponded to the 55 components on the floor plan of Chicago Sports. Six “section introductions” identified the themes of neighborhoods, stadiums, and schools. Fifty-five elements in a 6,000-square-foot space gave a feeling of a dense and diverse collection without being overwhelming.
Evaluation Equipment

• For Tracking and Timing:
  Stopwatch
  Clipboards
  Data sheets
  Pencils
  Highlighter pens
  Tape, scissors

• For Cued Questionnaires and Exit Interviews:
  Laminated numbers
  Pencils
  Questionnaire and interview forms
  Gifts for participants
  Table and chairs

EVALUATOR’S COMMENT ABOUT CUED VISITORS:

Cued visitors are people who have been recruited to participate in a discussion with evaluators after they have seen an exhibition. As such, they provide feedback from more highly motivated individuals. Visitors are under no obligation to learn anything from exhibits, but exhibit professionals should be held accountable for making exhibits that are clear and comprehensible. Cued visitors help answer the question, If a visitor pays attention, will they understand? If cued visitors show evidence of misunderstandings or a lack of comprehension, this is a fairly strong indicator that many other visitors out there are probably missing something too.
Evaluation Methods

A total of 158 visitors participated in the summative evaluation study, which included three different methods of collecting data. (Sample data sheets are included in the appendix.) Each method focused on different aspects of what visitors did, what they thought about, and what they noticed in the exhibition.

Tracking and Timing (T&T)
Data collectors unobtrusively observed 57 randomly selected exhibition visitors, noting each subject’s path, stops at elements, time spent at the videos, behaviors (e.g., reading, talking, sitting down) and total time spent in the exhibition. Also recorded were demographic data, including gender, approximate age and group composition.

Cued Questionnaires (CQ)
Data collectors randomly selected and recruited 61 visitors (not the same people who were tracked) as they entered Chicago Sports to participate in the study after they had seen the exhibits. Subjects completed a questionnaire that solicited what they gleaned from the exhibition, as well as their gender and age. The questionnaire also identified first-time CHS visitors and inquired about visitors’ interests in sports.

Exit Interviews (EI)
Forty other visitors participated in a brief interview with a data collector who asked three questions related to design aspects of the exhibition. First-visit and interest level were also noted for these subjects.

Tracked visitors did not know they were being observed, but visitors who partipated in the questionnaires and interviews were cued, that is, they knew they would be talking to data collectors after their visit. For full details on the methods for tracking and timing, cued questionnaires and recruiting strategies for interviews, see the workbook section of Paying Attention: Visitors and Museum Exhibitions (Serrell 1998).

Data collectors spent more than 120 hours watching visitors in Chicago Sports and interacting with other visitors after they left the exhibition. The data collectors’ comments provide another form of feedback about the visitor experience.
The history of Chicago is a history of sports.

Quote from a visitor

During our data collection, I found that most people were willing to take part as long as it didn’t take very long. The responses were incredibly varied, both in level of observation and detail of responses.

Data collector’s comment

In general, those I questioned enjoyed the exhibit and were cooperative, courteous, and personable (although I had a Lakers fan and a Broncos fan who were quite vocal in their preferences).

Data collector’s comment
Themes, Exhibition Goals and Audiences

The CHS exhibition planning document identified themes and exhibition goals for Chicago Sports that stressed making connections between sports and communities; reflecting on issues of gender, ethnicity and race in sports; and showing the importance of sports in Chicago.

Exhibit developers intended that visitors would experience how sports affected the city, the players and themselves, as well as appreciate some of the great moments in the history of Chicago sports and the artifacts that represented those events.

Chicago Sports was not just a history of sports. Rather, the sports stories told in it were all related to the idea of sports as identity—self, religion, gender, age and community.

The audiences for Chicago Sports were sports fans and visitors with a casual interest in sports. It was intended to appeal to visitors of all ages and cultural backgrounds.
Figure 4. Demographics of the samples (N=158)
The number of visitors sampled, their gender ratios and the group types observed are listed by Tracking and Timing (T&T),
Cued Questionnaire (CQ), and Exit Interview (EI). Gender ratios were surprisingly male-dominated, and the number of first-
time visitors was relatively high.

<table>
<thead>
<tr>
<th>Method</th>
<th>N=</th>
<th>%M/%F</th>
<th>%Group type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adults only</td>
</tr>
<tr>
<td>T&amp;T</td>
<td>57</td>
<td>68/32</td>
<td>Adults with children</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>%First visit</td>
</tr>
<tr>
<td>CQ</td>
<td>61</td>
<td>57/43</td>
<td>61</td>
</tr>
<tr>
<td>EI</td>
<td>40</td>
<td>60/40</td>
<td>72</td>
</tr>
</tbody>
</table>

During the data collection, of note were a gentleman from Tanzania who wants to become a professional soccer player;
a semi-pro basketball player; a couple from Ohio and a couple from Los Angeles,
who just happened to come to the Chicago Historical Society, doing “tourist-y things.”

Data collector’s comment
F I N D I N G S

Demographics

Who came to see Chicago Sports?

Data collectors unobtrusively recorded the gender and group types for the T&T samples and obtained gender, interest and
first-visit information from the CQ and EI subjects through face-to-face contact.

Of the 158 visitors in the samples collected for the summative evaluation, the audience was predominantly males who were
making their first visit to CHS and had a special interest in sports. Most were visiting with other adults or alone, not with groups
that included children.

Visitors expressed their special interests in sports as:

- sports fan, enthusiast
- player (family, amateur, varsity, semi-pro and pro)
- former athlete
- coach, personal trainer, referee
- history of sports
- general interest
- “love the Cubs”
- out-of-town museum professional who is planning a sports exhibit

And people specifically mentioned interests in following activities:

- basketball, softball, 16-inch softball, volleyball, football, baseball,
- water sports, skateboarding, golf, track, skiing, hockey,
- gymnastics, soccer, horseback, tennis, handball

Due to an omission on the data sheets, group types were not recorded for CQ and EI. It is fairly safe to generalize, based on
the random sampling, that the demographics of group types for the cued samples were similar to that of the tracked sample,
just as we assume that the majority of the tracked subjects probably had a special interest in sports and were making their
first visit to CHS.
What I was completely blown away by in the exhibit was how much reading and discussing took place. I’ve never seen visitors so engaged with label copy. Granted, there were very few children in the exhibit halls, and the only noise was coming from the two film units, but even barring those distractions it seemed like an unusual amount of reading was going on. But it wasn’t just that the visitors were reading, but that they were truly engaged with the exhibit text. Numerous times I heard groups saying (after reading label text), “I remember when this happened...” or “We saw this!” and going on to talk about events or venues and their memories of them as they moved from element to element. There was a lot of reading aloud and calling over taking place. It was very inspiring to see the level of introspection taking place.

Data collector’s comments
Figure 5. Comiskey timeline

There were four large timelines, one for each stadium (Soldier Field, Comiskey Park, Wrigley Field and the Chicago Stadium/United Center), that contained images, artifacts and stories, marked by historical dates. Given their size and complexity, they were hard to miss.
Figure 6. Scattergram of time and stops
Each dot on the scattergram represents one tracked-and-timed visitor, showing the number of minutes spent in Chicago Sports and the number of elements he or she stopped at. (Visitors who spent less than 1 minute or did not make any stops were not included in the sample.)

Average # stops = 20
Average time = 23 minutes

Figure 6. Scattergram of total time spent and number of stops made by 57 visitors to Chicago Sports. Each dot represents one visitor. Lines show average stops and average time for sample. There were no significant “outliers.”
Behaviors

Unobtrusive T&T observations revealed what visitors did in Chicago Sports. Data collectors watched 57 randomly selected people as they used the exhibition, noted where they went, who they were with, how much time they spent and other observable behaviors. From these observations, we can see which exhibits were most-visited, whether people went to both galleries and what the patterns of video watching were.

Time and Stops
Visitors spent, on average, 23 minutes in Chicago Sports. The median time spent in the exhibition was also 23 minutes, and times ranged from 2 to 64 minutes. (Visitors who spent less than 1 minute were not included in the analysis.) Chicago Sports broke the “20-minute time barrier” in that the average time exceeded 20 minutes—typically the average time spent in museum exhibitions (Serrell 1998).

The average number of stops visitors made at elements was 20, out of the 55 elements in the exhibition. That is, on average visitors stopped at a little more than one-third of the exhibits in Chicago Sports, which is not unusual. Exhibitions are typically not thoroughly explored by visitors (Serrell 1998).

Figure 6—a scattergram plot of the data according to how much time each tracked visitor spent and how many elements he or she stopped at—shows a trend for people who stayed the longest time to make the most stops. That is, the more time subjects spent in the exhibition, the more they tended to do. Each dot on the scattergram represents one tracked-and-timed visitor. Subjects who stayed longer and stopped at more exhibits are in the upper right quadrant; these subjects used the exhibition more thoroughly.

The person (a man with a child) who stayed the longest (64 minutes) made 33 stops, that is, he used 60% of the elements. For more details on the long-time and short-time visitors, see Figures 13 and 14.
Figure 7. Element attraction rates—high to low

Element attraction rates ranged from a high of 70% to a low of 5%. Eleven exhibit elements attracted more than 50% (which is relatively high, a “very good” attraction rate); and only five attracted less than 10% (which is relatively low, a “poor” attraction rate). Low attraction rates for elements indicated that few visitors were drawn to them, and these exhibits would play a role in the experience of a smaller percentage of the audience.
Exhibit “Popularity”

Attraction rates, or “popularity,” are measured by counting the number of visitors who stopped at each exhibit element. The more people who stopped, the higher the percentage of attraction for that element.

As the exhibit developers predicted, the most popular element in Chicago Sports was the case with the six Bulls’ championship trophies. The two-sided viewing opportunity attracted 70% of the visitors observed in the tracking study. Seeing the real thing is impressive: “Are these the real trophies? I think so, that’s what it says.”

The next most popular stop was at the Golden Gloves case, which was directly inside the entrance and facing it, making it a logical first stop. Also attracting more than half the visitors’ attention were the timelines (except for the school timeline, #53, which was located near the north gallery exit). Most timelines were large and multifaceted, which might account for their popularity and the extended times some visitors spent at them.

The first video theater (#9), the Black Sox case (#21), Bill Veeck (#18) and Walter Payton (#12) attracted more than half the visitors. The Black Sox case was notable in that some visitors spent extended time there.

The fewest stops were recorded for the two murals of the ‘L’ stations, Comiskey (#27) and Addison (#29). These two exhibits were counted in the total of 55 elements in the exhibition, but clearly they were functioning more as decoration than as interpretive displays. The murals were not labeled, which may account for their lack of drawing power: Visitors were not invited to stop and look at them more closely.

The introductory panel for the whole exhibition (which describes the main message) attracted 25% of the visitors. Nine other elements attracted less than 20% of the visitors. These include four section introduction labels (Schools, United Stadium, Wrigley, and Neighborhoods). When visitors skip conceptual orientation elements, which they often do, they miss information that can help them understand the exhibition’s intent.
Figure 8. Bulls’ trophies
As predicted by the exhibit development team, the Bulls’ trophy case was the most popular element in Chicago Sports. This case did not require an extended viewing time to appreciate the objects, and some visitors posed next to it for a photo op.

EVALUATOR’S COMMENT ABOUT ATTRACTION RATES:

With tracking-and-timing data, any exhibit element at which 50% or more of the sample stopped is an exceptionally attractive element. Any element that attracts less than 10% of the audience is underperforming for some reason.

When half of an exhibition’s elements attract more than 50% of the visitors, that’s evidence of a very engaging exhibition. A high number of elements with an attraction rate below 10% indicates one or more problems:

The exhibition has too many elements; a large number of elements were intended for “the more interested visitor”; or those elements were important to the curators but not engaging to the visitors. Exhibitions should strive to be thoroughly used: Every element should have the potential to be attractive to the majority of the audience.
While the timelines were a strong attractive feature in Chicago Sports, by the time visitors saw three of them, the text-heavy elements may have started to look daunting. People spent more time in the south gallery, where they were closer to the entrance and thus fresher in their visit.
Figure 10. Element attraction rates—by gallery

Attraction rates in the north gallery of Chicago Sports were lower than the south gallery, since 11 people did not continue into the north gallery. It could be argued that the number of stops should be divided by the number of people who actually entered the north gallery instead of the total number of the tracked sample (n=57). But even if all of the element stops are divided by 46 instead of 57, the trend for fewer stops is still there.
Attraction Rates by Gallery

The entry to the exhibition was into the south gallery, and the numbers on the floor plan (Figure 2) flow from south to north. We observed and tracked visitors starting at the entrance.

Figure 7 showed element attraction power from the most to the least. Figure 10 on the opposite page shows the attraction percentages arranged by the layout of the galleries in approximately the order they would be encountered when visitors entered the south gallery.

The south gallery had more elements that attracted more visitors. Ten elements with more than 50% attraction rate are found in the south gallery, the first gallery where visitors were tracked.

The north gallery had three elements that attracted more than 40% of the visitors, including the most popular element, the Bulls’ trophies.

Exhibit traffic flow
Most people (77%) went to both the south and north galleries. About 20% of the tracked sample entered the south gallery, and then left by the entrance, without crossing the bridge into the north gallery. Fewer people (4%) went only to the north gallery. During data collection however, it was apparent that many visitors came up the stairs and turned to the left, into the north gallery. Visitors getting off the elevator were likely to turn left into the exhibition also. Thus, the percentage of visitors only using the north gallery may have been higher than we recorded.
Systematic Observations

Data collectors noted if visitors read labels or read them out loud to another person in their group, if they talked among themselves about the displays, and if they called each other to “come over here and look at this,” sat down, or watched a video. Most of these behaviors take time, and therefore these behaviors tend to occur more frequently among visitors who stayed longer in the exhibition.

The majority of visitors read labels, talked, sat down and watched a video,

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read</td>
<td>89%</td>
</tr>
<tr>
<td>View video</td>
<td>72%</td>
</tr>
<tr>
<td>Talk</td>
<td>65%</td>
</tr>
<tr>
<td>Sit</td>
<td>56%</td>
</tr>
</tbody>
</table>

and a significant percentage of visitors engaged in social interactions of calling or reading to each other.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call over</td>
<td>30%</td>
</tr>
<tr>
<td>Read out loud</td>
<td>28%</td>
</tr>
</tbody>
</table>

Reading behavior is defined as looking in the direction of a label for 2 to 3 seconds or more. Given the close juxtaposition of objects and labels in the cases—which made it hard to determine exactly what visitors were looking at—data collectors were able to note when visitors looked at a graphic panel with mostly text on it (although visitors could have been just looking at the photos that often accompanied the text). Reading behavior was most obvious when visitors stopped at panels with text only, such as the introductory labels.

Reading out loud is an observed behavior and is, like talking about the displays, indicative of visitors’ involvement with the exhibit content. Reading aloud is especially significant because it shows that visitors are interacting with the voice of the exhibition directly, not just carrying on their own conversation about their own prior knowledge or personal memories.

Cartoon label-reading and demographics of readers

Sixteen subjects read a cartoon label (28% of the tracked sample). Of these, all but two were adults. In the two samples consisting of adults with children, one was noted reading the cartoons aloud to others.
Incidental Observations

Data collectors tracked and timed the behavior of one visitor at a time, but also noted how many other people he or she was with and what their behaviors were in relationship to the tracked subject. These and other behaviors were noted under the “comments” section on the data sheet. Behaviors noted informally in the comments section that were not covered in the systematic tracking included the following:

Subject took brochure from wall pocket.
Pushed emergency button on ‘L’ train car.
Read the exhibit credit panel.
Took photo of friends at the Bulls’ trophies. Had them take photo of her.
Wearing Cubs T-shirt and hat.
Overheard subject say, “This is so sad that Comiskey Park is U.S. Cellular.”
Kids touched turnstile.
Overheard subject say that he used to do security for Michael Jordan.
Couple had a discussion at the Special Olympics display:
“Aren’t these guys too out of shape to play baseball?”
Guard started movie for visitor.
Wondered “Are these the real trophies?” at #47.

A complete transcription of the tracker’s incidental comments is in the appendix.

EVALUATOR’S COMMENT ABOUT READING BEHAVIOR IN HISTORY MUSEUMS:

I think that in general visitors in history museums read more than visitors in other types of museums. But that does not mean that exhibit developers in history museums should feel free to write longer labels or put up more information in their exhibitions, especially if the museum is interested in appealing to a broader audience—one that is not made up of history-reading buffs.
Figure 11. Cartoon label
There were seven cartoon labels (element #7), and a total of 16 visitors were counted reading one or more. The most anyone read was four—a lone male. Two people read three cartoon labels—one was another lone male and the other an adult male-female pair who read many labels out loud to each other (but did not go to the north gallery where other cartoon labels were located). Ten people read two, including two adult/child groups that read them out loud. Two people read only one. So even though there were not many cartoon readers, the fact that most of those (adults and families) who did read more than one testifies to their attractiveness.
The back-to-back juxtaposition of the Negro League (element #23) and the Black Sox (element #21) was a confusing logic to me. Not being a sports fan or having much prior knowledge about Chicago sports, myself, my naive question (as a visitor) was, “Was there actually a team of African Americans called the Black Sox?” But after I read about the scandal, I was still a little confused, and it took me a while to figure out that it was White Sox gone bad. Maybe the people spending extended time at the Black Sox case were having the same experience.

Data collector’s comments
### Figure 13. Top 10 long-time visitors in Chicago Sports (T&T data)

<table>
<thead>
<tr>
<th>Day of week</th>
<th>Sample#</th>
<th>Time spent (min)/#Stops</th>
<th>Video watcher/#videos</th>
<th>ROL</th>
<th>Group size</th>
<th>Sat down?</th>
<th>Comments on sheet:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat</td>
<td>41</td>
<td>64/33</td>
<td>Y/1</td>
<td>Y</td>
<td>2</td>
<td>Y</td>
<td>Man and kid. Talked to guard briefly</td>
</tr>
<tr>
<td>Sat</td>
<td>48</td>
<td>60/35</td>
<td>Y/2</td>
<td>N</td>
<td>1</td>
<td>Y</td>
<td>Lone male in 40s</td>
</tr>
<tr>
<td>Mon</td>
<td>26</td>
<td>57/30</td>
<td>Y/2</td>
<td>Y</td>
<td>2</td>
<td>Y</td>
<td>Talked together, former MJ security guard</td>
</tr>
<tr>
<td>Sat</td>
<td>12</td>
<td>56/31</td>
<td>Y/2</td>
<td>N</td>
<td>2</td>
<td>Y</td>
<td>Couple “paced themselves”</td>
</tr>
<tr>
<td>Mon</td>
<td>27</td>
<td>53/24</td>
<td>Y/1</td>
<td>N</td>
<td>1</td>
<td>N</td>
<td>Spent whole time in south room; room empty except for him; lone male.</td>
</tr>
<tr>
<td>Mon</td>
<td>9</td>
<td>45/32</td>
<td>Y/1</td>
<td>N</td>
<td>1</td>
<td>Y</td>
<td>Lone male in 60s</td>
</tr>
<tr>
<td>Mon</td>
<td>50</td>
<td>49/25</td>
<td>Y/1</td>
<td>Y</td>
<td>4</td>
<td>Y</td>
<td>Two couples, men stayed together discussing things</td>
</tr>
<tr>
<td>Sun</td>
<td>38</td>
<td>47/38</td>
<td>Y/2</td>
<td>Y</td>
<td>4</td>
<td>Y</td>
<td>Talked a lot, reminiscing; really “got” the ‘L’ train car</td>
</tr>
<tr>
<td>Sun</td>
<td>2</td>
<td>45/43</td>
<td>N</td>
<td>N</td>
<td>2</td>
<td>N</td>
<td>Lots of reading and talking (but no ROL) and “calling over”; even read credit panel</td>
</tr>
<tr>
<td>Sat</td>
<td>39</td>
<td>44/29</td>
<td>Y/1</td>
<td>N</td>
<td>1</td>
<td>Y</td>
<td>Lone male, read every timeline</td>
</tr>
</tbody>
</table>

**Trends among the long-time visitors:**

- The average time spent by these 10 visitors was 52 minutes.
- The average number of stops was 32, or 58% of the total elements.
- There was a high percentage of lone males.
- There was a high percentage of video watchers and most of them sat down to watch.
- There was a high percentage of people who read out loud (ROL) if they were not alone.

The time-and-stops behavior of visitors in the cued questionnaire and exit interviews was probably more like these long-time visitors in the tracking sample, because cueing has an effect on people’s motivation to pay attention. In Chicago Sports, cued visitors (subjects of CQ and EI) on average stayed longer. Typically this is true. (Serrell 2000).
Figure 14. Under-10-minute visitors in Chicago Sports (T&T data)

<table>
<thead>
<tr>
<th>Day of week</th>
<th>#</th>
<th>Time (min) and Stops</th>
<th>Video watch +1min</th>
<th>ROL read</th>
<th>Group of</th>
<th>Sat Comments on sheet: down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat</td>
<td>32</td>
<td>9/10</td>
<td>N</td>
<td>Y</td>
<td>2</td>
<td>N</td>
</tr>
<tr>
<td>Sat</td>
<td>29</td>
<td>8/2</td>
<td>Y/1</td>
<td>N</td>
<td>2</td>
<td>Y</td>
</tr>
<tr>
<td>Mon</td>
<td>8</td>
<td>8/14</td>
<td>N</td>
<td>N</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Sun</td>
<td>21</td>
<td>7/14</td>
<td>N</td>
<td>Y</td>
<td>3</td>
<td>N</td>
</tr>
<tr>
<td>Sun</td>
<td>23</td>
<td>7/14</td>
<td>N</td>
<td>N</td>
<td>2</td>
<td>N</td>
</tr>
<tr>
<td>Sun</td>
<td>24</td>
<td>7/2</td>
<td>Y/1</td>
<td>N</td>
<td>4</td>
<td>Y</td>
</tr>
<tr>
<td>Sat</td>
<td>16</td>
<td>7/14</td>
<td>N</td>
<td>N</td>
<td>2</td>
<td>N</td>
</tr>
<tr>
<td>Sun</td>
<td>1</td>
<td>7/8</td>
<td>N</td>
<td>N</td>
<td>5</td>
<td>Y</td>
</tr>
<tr>
<td>Sun</td>
<td>54</td>
<td>6/16</td>
<td>N</td>
<td>N</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Fri</td>
<td>47</td>
<td>6/17</td>
<td>N</td>
<td>N</td>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>Sat</td>
<td>51</td>
<td>5/4</td>
<td>Y/1</td>
<td>N</td>
<td>2</td>
<td>Y</td>
</tr>
<tr>
<td>Sat</td>
<td>39</td>
<td>4/7</td>
<td>N</td>
<td>N</td>
<td>2</td>
<td>N</td>
</tr>
<tr>
<td>Sat</td>
<td>30</td>
<td>2/2</td>
<td>N</td>
<td>Y</td>
<td>3</td>
<td>N</td>
</tr>
</tbody>
</table>

Trends among under-10-minute visitors:
- Fewer video watchers.
- More groups with children.
- Average time per stop is less than with long-time visitors.
- Still lots of lone males.
Figure 15. Video watchers at south and north video theaters (out of 57 tracked visitors)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of tracked visitors who stopped at a video</td>
<td>41</td>
</tr>
<tr>
<td>Number of visitors who stopped at each video</td>
<td>34 (South) 21 (North)</td>
</tr>
<tr>
<td>Number of tracked visitors who stopped at both videos</td>
<td>14</td>
</tr>
<tr>
<td>Number of visitors who stayed a minute or more at a video</td>
<td>30</td>
</tr>
<tr>
<td>Number of visitors who stayed a minute or more at each video</td>
<td>25 (South) 13 (North)</td>
</tr>
<tr>
<td>Number of visitors who stayed a minute or more at both videos</td>
<td>8</td>
</tr>
<tr>
<td>Number of visitors who stayed for 10 minutes or more</td>
<td>15</td>
</tr>
<tr>
<td>Number of visitors who watched all of each video</td>
<td>12 (South) 4 (North)</td>
</tr>
<tr>
<td>Number of tracked visitors who watched all of both videos</td>
<td>1</td>
</tr>
</tbody>
</table>
Time Spent with Videos—A Closer Look

Out of the 57 tracked visitors, 41 of them (72%) stopped at a video.

Thirty-four visitors stopped at the video in the south gallery and 21 stopped at the video in the north gallery. Fourteen people stopped at both videos.

More people watched more of the first video. Twelve visitors who stopped at the south video watched the whole thing. Four of the visitors at the north video stayed for all of it.

Looking more closely at the data, we find some other trends. First, if we define “watched the video” as watching it for at least one minute (videos lasted 10 minutes each), the overall number drops to 30 people out of 57 (56%).

Of the 30 people who stayed for at least a minute or more, half of them stayed for the whole running time of the video. One person watched both videos all the way through.

It should be noted that video watchers spent more time than non-watchers looking at other elements in addition to spending time in the theaters. That is, if the time spent watching videos is subtracted from the total time spent by video watchers, their average time is still greater than the average time spent in the galleries by non-watchers.
Figure 16. Theater #1
The video in the south gallery featured real stadium seats.
Comparisons with other video data

Compared to studies of video-watching behaviors in other museum exhibitions, the numbers for Chicago Sports were higher than average (Serrell 2002). Typically, videos attract about a third of the visitors to an exhibition. Video watchers, on average, watch about a third of the program, regardless of the length, although shorter videos may have slightly higher holding power. The video in the south gallery was relatively high in its attracting and holding power, especially for a 10-minute video.

I think that sports fans are used to watching TV, so watching long videos in the Sports exhibition was not surprising to me.

Data collector’s comments
During the interviews and questionnaires that I either conducted or witnessed, the visitors were often overwhelmed with excitement about what they had just seen. They recounted numerous specific items that they had looked at and read about in detail.

Data collector’s comment
Visitor Outcomes

Findings from this summative evaluation include abundant evidence that visitors understood many of the exhibition’s themes and goals and achieved the intended outcomes. Their answers on the questionnaire showed that most people learned new things and had vivid recollections of what they saw and read in Chicago Sports.

The theme of sports as identity—self, religion, gender, age and community—was supported by many people’s comments. The majority, however, saw it mainly as a history of sports, with emphasis on variety and accomplishments.

The following pages will document visitors’ new ideas, most memorable exhibits and the words they used to describe their experiences.

The CQ code numbers after quotes refer to the subject’s data sheet. A full transcription of all the CQ responses is in the appendix.
Understanding the Messages

On the questionnaire, visitors were asked to tell what they thought the exhibition was about and what impact it was intended to have on visitors. Specifically, the first question said, “What would you say is the main purpose of the displays in these galleries?” followed by two prompts: “To show...” and “To make people... .”

Many respondents said that the exhibition was to show the history of Chicago sports. Forty-four of 61 people (72%) used the word history in their comments.

- To show the different types of popular sports that have a significant history in Chicago (CQ1)
- To show the great history of Chicago sports no matter what side of town or where you’re from (CQ17)

Others talked about the accomplishments of Chicago sports teams, such as great moments, “firsts,” championships, or highlights:

- To show the great accomplishments of Chicago sports teams and its players (CQ34)
- To show the long history of sports in Chicago and the role that Chicago played in great moments in sports (CQ8)
- To show all of the prestigious moments in Chicago sports history (CQ44)
- To show the history, development of various sports, great achievements, inspiration (CQ50)
- To show the rich tradition of all Chicago sports, professional and amateur (CQ15)

Some people echoed the main message’s intent:

- To show all of the history, time, and energy put into sports—how sports have generated a sense of community—team spirit (CQ6)
- To show the connection between sports and the social fabric of Chicago (CQ24)
- To show nostalgia, and a way to show that sports and events bring people together (CQ38)

Five respondents mentioned that the exhibits showed stadiums, facilities, or locations for sports:

- To show Chicago sports highlights organized by stadiums where they took place (CQ27)
- To show the success of Chicago professional and amateur teams, coupled with historical data on stadiums and other complexes (CQ35)
In response to the prompt “To make people...,” the most common word used was “aware.” Many people referred to issues and topics that resonated with the themes:

- To make people aware of how much sports has been a prominent place in Chicago—the neighborhoods, etc. (CQ21)
- To make people become a cohesive community by bonding with the teams (CQ30)
- To make people more conscious of the social aspects of sport (CQ53)

Besides making people aware, other responses included making people think, learn, remember, or be interested in sports:

- To make people think about those who opened the doors for others (CQ5)
- To make people reminisce, appreciate, join the spirit of the “game,” become a cohesive community by bonding with the teams (CQ30)
- To make people understand how sports have been part of Chicago society (CQ20)

Pride was a common feeling:

- To make people proud to be Chicagoans (CQ7)
- To make people realize pride in the city sports team (CQ29)
Figure 17. Roller Derby case
More people recalled learning about the roller derby than any other element in Chicago Sports.

EVALUATOR’S COMMENT ABOUT SUCCESS RATE FOR CUED:

While difficult to quantify, the open-ended responses on the cued questionnaire can tell exhibit developers what visitors thought the exhibits were about and where they had meaningful and memorable experiences. The more the visitors’ feedback on the cued questionnaire resonates with the goals of the exhibition, the better. Exhibitions should strive to be meaningful to all their visitors in unexpected, surprising and emotional ways.
New Ideas Visitors Took Away

In answer to the question, “What is one new idea you are taking away with you?”, visitors listed a variety of things, from specific facts about teams or artifacts to broader issues that dealt with the theme of identity.

The most often-mentioned new idea was about roller derby, which was cited by seven people.

- I didn’t know Chicago had its own roller derby (sic) team called the Pioneers. (CQ22)
- I never knew about Roller Derby. Never realized that was a real sport. (CQ28)
- I didn’t know roller derby had such a large following. (CQ45)

Several people mentioned that they hadn’t known that certain teams were from Chicago, such as the Harlem Globetrotters and Cardinals, and that women's baseball, 16-inch softball and Spalding originated here, or that professional boxing was held here.

These ideas were each mentioned by four people:

- The Bears played at Wrigley Field!
- Jackie Robinson’s #42 was retired.

Three people noted that they learned the reason for the “curse of the goat.”

Three respondents gave answers that resonated strongly with the main themes of the exhibition:

- I didn’t know just how many ideas in sports/stadiums/venues originated here in Chicago. (CQ9)
- I didn’t realize sports were such a big part of the heart of Chicago. (CQ56)
- I didn’t know sports has the power of bringing people of different backgrounds together, relax, enjoy and forget their differences. (CQ50)
Figure 18. List of memorable exhibit elements

Visitors recalled many exhibit elements by name. The only surprising missing element names, considering the number of people who stopped to look at them, were Bill Veeck, United Center and DuSable.

<table>
<thead>
<tr>
<th>The majority of elements were mentioned by name, including:</th>
<th>Elements not mentioned by name in CQ or EI included:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhoods</td>
<td>Cartoons*</td>
</tr>
<tr>
<td>Golden Gloves</td>
<td>Hull House</td>
</tr>
<tr>
<td>Ethnic</td>
<td>Bill Veeck</td>
</tr>
<tr>
<td>Spalding</td>
<td>Turnstile</td>
</tr>
<tr>
<td>Soldier Field</td>
<td>Sammy Skobel</td>
</tr>
<tr>
<td>Walter Payton</td>
<td>Louis/Johnson</td>
</tr>
<tr>
<td>Chicago Fire</td>
<td>Addison ‘L’ Station</td>
</tr>
<tr>
<td>Super Bowl</td>
<td>Red Grange</td>
</tr>
<tr>
<td>Bears</td>
<td>United Center</td>
</tr>
<tr>
<td>Foul pole</td>
<td>Blackhawks’ goal and stencil</td>
</tr>
<tr>
<td>Comiskey</td>
<td>DuSable</td>
</tr>
<tr>
<td>Negro League</td>
<td>Title IX</td>
</tr>
<tr>
<td>Black Sox</td>
<td></td>
</tr>
<tr>
<td>Roller Derby</td>
<td></td>
</tr>
<tr>
<td>‘L’ train car</td>
<td></td>
</tr>
<tr>
<td>Wrigley</td>
<td></td>
</tr>
<tr>
<td>Rivalry</td>
<td></td>
</tr>
<tr>
<td>Girls’ pro baseball</td>
<td></td>
</tr>
<tr>
<td>Cubs</td>
<td></td>
</tr>
<tr>
<td>Blackhawks</td>
<td></td>
</tr>
<tr>
<td>Bulls</td>
<td></td>
</tr>
</tbody>
</table>

* While not mentioned by name (“the cartoon”), one of the most-often mentioned new ideas was about Jackie Robinson’s #42 being retired, which was discussed on one of the cartoon panels.
What People Were Reminded Of

In addition to what they thought about the purpose of the displays and what new things they learned, visitors also gave feedback on the questionnaire about what the exhibits reminded them of.

The prompt, “It reminded me...” elicited many personal and emotive comments. Many people were reminded of the greatness of Chicago’s sports, pride and the value of sports:

- We are lucky to live in a great city. (CQ17)
- Chicago has a lot to be proud of with respect to sports. (CQ45)
- The growth of Chicago is quite extensive. (CQ5)
- Sports is a team effort. Players win as a team. (CQ7)
- Chicago really has a lot of pride in their city. (CQ11)
- Chicago is a city of tremendous diversity with common passions. (CQ42)
- It reminded me how hard people worked for the goals that they reached. (CQ44)
- Achievement is a result of great work and dedication. Sports break all barriers—you name them. (CQ50)

Several people mention the more controversial issues in sports:

- It reminded me of the continuing but improving inequality of women in sports, e.g. the fact that girls were banned from the Chicago public school sports for 60+ years. (CQ8)
- Sports has been a sexist and racist industry throughout history with the exception of Roller Derby and continues to be. (CQ27)
- Sports teams have a long and complex history. (CQ39)
- Jim Crowe (sic) law played a major factor in sports. (CQ60)

Some people were reminded of actions they wished to take:

- I should go to many sports games and know more history behind them i.e., Cubs, Chicago Bulls. (CQ1)
- I need to spend more time playing recreational sports. (CQ28)
- I should bring my nephew here to see it. (CQ58)
There were a small number of groups that commented on their confusion about seeing some venues in multiple locations (such as Wrigley Field and Soldier Field both being featured in multiple time line elements). They thought that they understood the exhibit layout and had developed expectations, and were confused when they came across recurring items.

**Data collector’s comments**

**EVALUATOR’S COMMENT ON CONFUSION ABOUT ORGANIZATION:**

When the data collectors are confused, so are visitors.

**EVALUATOR’S COMMENT ABOUT MAKING THE LAYOUT MORE APPARENT:**

I consciously crave orientation, and studies have shown that visitors who are well-oriented have better learning experiences. Some people don’t feel the need for lots of orientation, but they can benefit from it anyway. Orientation is often a weak point in an otherwise excellent exhibition.

If there is no floor plan showing the layout of the exhibition, people are less likely to be able to budget their time wisely. The pattern often seen is more time spent by visitors in the beginning, less time spent and stopping as they move toward the exit. Give visitors more control over their experience and the tools to make good choices of what to do in an exhibition through better orientation devices.
Visitors’ Impressions of the Layout

Chicago Sports exhibit developers were curious to know if certain design features were noticed by visitors. Did visitors see that the exhibition was organized by stadiums, neighborhoods and schools? Did they understand what the ‘L’ train car was supposed to mean? Did they make a connection between the photos in the lobby and Chicago Sports?

Questions that related to the three issues above were asked by data collectors during a face-to-face exit interview (EI) with visitors after they’d seen the exhibition. Participants had been “cued,” that is, they were recruited as they entered the exhibition to agree to an interview afterward. Thus, these visitors had somewhat heightened motivation to pay attention to the exhibits to prepare for the interview.

The first question, “Did you notice if the exhibition was designed to have different sections or areas?” was answered “Yes” by the vast majority of respondents. But 60% of them then listed the sections as “football, basketball, Negro League, womens sports, baseball,” that is, by sport. The next most common response (8 of 40, or 20%) was that it was grouped by stadium, park, field, or venue—the appropriate answer.

Others said the sections were by teams or time periods, but some people commented that there were “no breaks between sections” or that it “needs portals.” Several people commented about seeing the same sport more than once, “laid out sporadically,” “repeated.” The intended organization was not apparently obvious, but it was noticeable: “[There were] different sports, intermingled...stadiums now that I think about it.”(EI3) No one mentioned color coding or the use of the ticket motif in the graphics.

Nevertheless, many people offered compliments that the exhibition was “well organized,” “nice” and a “good mixture.”
Figure 19. ‘L’ train car
The majority of visitors got the significance of the ‘L’ train car as a link between the South and North Sides of Chicago, the Chicago Sports galleries, or transportation to the games.
The ‘L’ Train Car Transition

The second question regarding design was the placement of the ‘L’ train car on the bridge going from the south gallery to the north gallery. Visitors were told, “The area that connects the two galleries (north and south) was designed as an ‘L’ train car,” and asked, “What was that supposed to mean?”

In the analysis of responses, a fairly strict criteria was used that matched the exhibit developers’ intent: The ‘L’ train car was a link between Comiskey Park on the South Side and Wrigley Field on the North Side. It was a transition, and the train took you between the two parks. If visitors said something to that effect, they got credit. If they only mentioned transportation to a game, they didn’t get credit for the appropriate answer. Most people got the point fully or partially, but some missed it.

Almost half (47.5%) of the respondents got it...

  - Connection between White Sox and Cubs. More Wrigley Field though. (EI12)
  - Riding the el, leads right into Comiskey exhibit, a good segue. (EI6)

35% thought it had to do with transportation...

  - Takes you to different sections of town, from Chicago Bulls to Sox Park. (EI35)
  - Because there’s a train that goes to Wrigley Field. (EI7)

and 17.5% didn’t get the intended message.

  - The picture through the window is a stadium. We just thought it was cool. (EI32)
  - Sponsorship. (EI18)

One data collector had noted overhearing a visitor’s right-on comment during the tracking study:

  - Oh that’s cute—look we got on the train with the Sox and off with the Cubs. It really makes you feel like you’re moving. (TT38)

And one participant in the cued questionnaire sample volunteered this information:

  - Didn’t understand significance of the transit hallway. (CQ27)
Most people noticed the photos on the walls of the lobby and linked them to the Chicago Sports exhibits.
Noticing Photos in the Lobby

The third question in the exit interview about design aspects was, “When you entered the Historical Society, did you notice anything in the lobby area that referred to the Chicago Sports exhibition?”

More than two-thirds (67.5%, or 27 out of 40) said yes, that they’d noticed the photos on the walls.

- Pictures in lobby. Kids tried to identify each sport while we waited for my husband to park. (EI9)
- Couldn’t miss the great big walls of photos! Michael is in a number other than 23—don’t like that! Where is Ernie out there? (EI11)

Another 32.5% noticed signs at the top of the stairs and signs outdoors or banners and brochures related to Chicago Sports.

- Banners outside. No attention paid to lobby. We just wanted to get to the exhibit and “dig right in.” (EI33)

12.5% did not notice anything or didn’t make the reference.

- Signage—can’t remember what it said. (EI4)
- No, I wasn’t really paying attention because I was helping an elderly lady up the stairs. (EI40)
- No, I saw photos as I came up the stairs, but didn’t connect them to the exhibit. (EI34)

One visitor had a comment that indicated an important misunderstanding:

- Lobby and outside were not that informative. Thought you had to be a member of the Historical Society, didn’t realize that it was a museum. (EI26)
On the last day an “artiste” (in his youth he had painted landscapes; now he used a digital camera) had several suggestions while his friend answered the questionnaire: he suggested that the exhibit become “permanent,” that there be a mechanism for exhibit attendees to be photographed with a trophy (possibility for “fundraising”) or put their heads in a photograph of their favorite sports (Cubs/Bears/Bulls/Sox uniform (another possibility for fundraising). Also, the two films should be combined into ONE videotape and sold in the Gift Shop, another fundraising possibility.

Data collector’s comment
Comments, Criticisms and Compliments from Visitors

Visitors who participated in the cued questionnaire and the exit interview were asked a final question, “Anything else?” to give them a chance to say what was on their minds. Most visitors did not make any final comments, but a few took the opportunity to make a suggestion, offer a complaint, or give a compliment, which included the following:

Believe in sportmanship instead of American competitions and aggressiveness. Sports should be more self-satisfying. (CQ48)

It's great fun to be involved in sports, but there are a lot of things out there to which one can still go for entertainment. Above all, sports is behind everything esp. in terms of commercials and business. (CQ50)

Not interactive, no buttons for kids to push. (El24)

 Thoughts because this was a Chicago exhibit it would be bigger, badder and bolder—found it pretty flat. (El25)

European eyes have a hard time—need more specific separation to distinguish between different sports—White Sox, etc. (El26)

I thought the (video) sound in the first room was a bit loud. It was hard to concentrate on reading. I like the color coordination in the second room more than the first. (CQ1)

Movies were good—but the second one should have come first. (CQ27)

I liked seeing close up items I have seen from a distance: Bulls championship flag (banner), Comisky (sic) Park, fireworks wheel, etc. (CQ2)

I would have liked to have seen more about the Girls’ Professional Baseball League in Chicago during the 1940s and 1950s. Overall though, the exhibit was very interesting! (CQ8)

Very interesting even for someone not very interested in sports. (CQ25)

Excellent exhibit. (El23)

Good job addressing race and sex discrimination. (El31)

Enjoyed the films. (CQ24)

Movie is good—takes you in-depth with the character. (El35)

Immigrants section was interesting. Ethnic sports exhibit was great. (El7)

The brochure was excellent. (CQ42)
Figure 21. Meta-scattergram of SRI and %DV

The meta-scattergram plots the SRI and %DV for 104 exhibitions of various sizes and subjects. Each dot represents one exhibition. The X is where Chicago Sports falls in the spread. Lines are approximate averages for SRI and %DV for the whole sample. Chicago Sports, with SRI 261 and 28%DV, was very close to the averages.
Meta-analysis of Tracking and Timing: Sweep Rates and Diligent Visitors

This section of the summative evaluation report takes another look at the visitor data on tracking and timing. Data will be analyzed beyond average time and average stops to find patterns in the data and to compare it to several benchmarks of tracking-and-timing findings at other institutions.

Time spent by visitors in an exhibition is an objective, non-trivial measure. Time is a good indication of engagement. Visitors who are not engaged usually leave. While time spent and stops made are observable behaviors by visitors in museum exhibitions, exhibits vary in size and the number of elements, so the raw numbers of average time and average stops are not comparable. Comparisons are possible by converting the data to a square-feet-per-minute “sweep rate” and using data on stops as a percentage of possible stops, or “diligent visitors.”

Sweep Rate Index
Ten minutes spent in a small exhibition is not the same as 10 minutes in a large one. Data on time spent can be compared among exhibitions of different sizes by calculating the “sweep rate.” The Sweep Rate Index (SRI) is obtained by dividing the exhibition’s square footage by the average time spent. The lower the SRI, the more time visitors are spending in the exhibition.

The SRI for Chicago Sports was 261 (6,000 square feet divided by 23 minutes).

Diligent visitors
The concept of diligent visitors measures the degree to which the exhibition was thoroughly used by visitors. A diligent visitor is a person whom data collectors observed stopping at more than half of the elements in the exhibition; the percent of diligent visitors is the number of diligent visitors divided by the number of visitors in the tracked sample. Thorough use is a positive value for exhibitions because it indicates a higher level of engagement with the exhibition by more visitors.

In Chicago Sports, if a visitor used (that is, stopped at) more than one-half of the elements (half of 55 = 28), he or she was a diligent visitor. There were 16 diligent visitors in Chicago Sports, which was 28% of the tracked sample (16 divided by 57 total tracked subjects), or 28%DV.
Figure 22: Table of SRI and %DV comparisons

<table>
<thead>
<tr>
<th>Exhibition</th>
<th>Institution</th>
<th>SRI</th>
<th>%DV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago Sports</td>
<td>Chicago Historical Society</td>
<td>261</td>
<td>28</td>
</tr>
<tr>
<td>Average for 20 history exhibitions in Paying Attention database</td>
<td></td>
<td>286</td>
<td>30</td>
</tr>
<tr>
<td>From Bustles to Bikinis</td>
<td>San Diego Historical Society</td>
<td>206</td>
<td>77</td>
</tr>
<tr>
<td>Old South Meeting House</td>
<td>OSMH (Boston)</td>
<td>250</td>
<td>45</td>
</tr>
<tr>
<td>Motor City</td>
<td>Detroit Historical Museum</td>
<td>296</td>
<td>28</td>
</tr>
<tr>
<td>On the Trail of History</td>
<td>Kalamazoo Valley Museum</td>
<td>250</td>
<td>9</td>
</tr>
</tbody>
</table>
Comparing Chicago Sports to Other Exhibitions

While findings from tracking and timing showed that visitors to Chicago Sports spent an unusually high average time of 23 minutes, the exhibition had a sweep rate index (SRI) of 261 and 28% diligent visitors (%DV)—data that were not unusual or exceptional when compared to other exhibitions.

Figure 22 compares Chicago Sports to the summary data for 20 history museum exhibitions, along with data from four other history exhibitions. From Bustles to Bikinis was an exceptionally thoroughly used exhibition with its low SRI and high %DV.

The lower the SRI the more time visitors were spending in the exhibition, and the higher the %DV, the more exhibit elements visitors stopped at. Data on figures 21 and 22 come from Paying Attention: Visitors and Museum Exhibitions, a database of 110 exhibitions’ tracking-and-timing research (Serrell 1998). (If the average time for Chicago Sports had been under 20 minutes, the SRI would have been more than 300—and would have suggested that visitors were using the 6,000-square-foot exhibition for a relatively brief time.)

EVALUATOR’S COMMENT ABOUT EXHIBITION SIZE, DENSITY AND DILIGENT VISITORS:

Chicago Sports contained lots of text, and it probably would take at least two and a half hours to read everything. The evaluators agreed that there was plenty to do; it was not a sparse layout.

Exhibitions should be doable in 20 minutes: Visitors should be able to see objects, read text, watch a video, do an interactive, talk with their friends about the exhibits and leave after stopping at 51% or more of the elements feeling energized and satisfied. “Less is more” is a good mantra.
DISCUSSION AND RECOMMENDATIONS

In this section the strengths and weaknesses of Chicago Sports are discussed, based on the cumulative information from the three evaluation methods (T&T, CQ and EI), informal comments by the data collectors, as well as discussions between the Serrell & Associates evaluators and the CHS staff during the evaluation planning and the summary of the findings presented in January 2004. Recommendations for improving orientation are offered.

Weaknesses and Strengths of Chicago Sports

Weaknesses

Two-gallery layout—Tracking data showed that about 20% of the sample exited through the south entrance, skipping the bridge and the north gallery. Data also suggested that visitors spent less time in the north gallery than on the south side. Some visitors may have not been aware that the exhibition had two sections, and they either missed one entirely, or they did not budget enough time to see both halves.

No interactives—Although Chicago Sports was intended for a multigenerational audience, there were very few things to appeal directly to children. Even the cartoon labels were at an adult content level and were not used exclusively by groups with children.

Not enough orientation—the majority of the visitors who participated in the questionnaires and interviews did not see the conceptual organization of the exhibition or get the social impact message of “sports bring people together.” Suggestions for improvements in orientation are discussed in the Recommendations section.

Low visitation—Chicago Sports was rarely crowded, and it was not unusual to have only one or two people at a time in the entire exhibition. Low visitation can be considered an exhibition weakness in that either CHS marketing efforts were not reaching potential visitors well enough or that people who did come did not spread enough positive word-of-mouth advertising to increase visitation.
Strengths

Collections—Many visitors enjoyed seeing “the real things”—uniforms, jerseys, flags, the fireworks wheel—and seeing artifacts in perspective: the actual size of early football pads, the laces in an old-style basketball. Seeing real artifacts created an emotional connection for people. “I get choked up seeing Michael Jordan and Chicago White Sox photographs and objects worn or used by athletes.” (CQ15)

Films—The number of people attracted to the videos and the amount of time they spent watching them was strong evidence of people’s engagement with the theaters.

Audience—Chicago Sports brought in a large percentage of first-time visitors, people with special interests in sports and lone males, not a usual demographic of the historical society. Data collectors noticed many visitors from outside the United States: “The museum seemed to attract a large number of foreign visitors during the time I was monitoring. They were from all over the world, too: Africa, Japan, India, Italy, and elsewhere in Europe. I do not know whether there was an international convention in town that might account for what I observed.”

High average time, low sweep rate, lots of reading and sharing—This exhibition broke the “20-minute barrier” in that the average time for the tracked sample was 23 minutes. In the benchmark data, 80% of 110 exhibitions had average times of under 20 minutes. The low Sweep Rate Index (square footage of the exhibition divided by the average time) was evidence that visitors were spending a relatively long time at the exhibits. Visitors read many of the labels and discussed them and their memories with others.

No “dud” exhibits—None of the exhibit cases containing text, photos and objects attracted less than 18% of the visitors. Twenty-five of the 27 cases attracted 22% to 70% of the visitors. The two cases (Chicago Fire and DuSable) that attracted less than 20% were located out of the major line of sight. A majority of the 55 elements were memorable to visitors, as they recalled them specifically in the evaluations.

Messages communicated—Although most visitors saw Chicago Sports primarily as a lesson in history rather than social history, they felt the affective impact of the value of sports, excitement in the accomplishments and struggles, and pride in the city.
Wish they’d said “what is where” before you went in.

Quote from a visitor
Improving Orientation

Orientation is a very important feature of any exhibition, but it is often the thing ignored or left to chance by exhibit developers. Most visitors need and appreciate orientation, and research has shown that people who are well-oriented to the experience are more likely to get more out of it. Orientation can take many forms, and the more modalities employed, the more likely visitors will find a style that communicates to them. These include: exterior signage and banners outside the museum, directional signage and banners inside, an information desk, arrows, floor plans and introductory panels. Many of these strategies were used for Chicago Sports, such as banners and the intro label, but there was no information about how big the exhibition was (two galleries) and what the thematic layout was (neighborhood, stadiums, schools).

Make the exhibition entry point more obvious and inviting
Although we did not plan to systematically record which entry point was used (because it was assumed that visitors would enter the exhibition from the right-hand side, where we began our observations), it became apparent that many visitors came up the stairs and turned to the left. Visitors getting off the elevator were likely to turn left into the exhibition also. Chicago Sports could be viewed “in reverse” just as easily as the “right” way, except for the fact that the introductory label was at the entrance, and if people stopped and read it, they were likely to understand the main message of the exhibition.

Clarify the sections of the exhibition with more physical design clues
Design clues, such as structural transitions or portals, floor covering changes, greater contrasts of wall and case color, and lighting could all be used to signal different sections. Visitors who paid attention to the clues that were in Chicago Sports (labels, photos and subtle color changes) could see the sections, but more people were not aware of them and thought that things blended together and repeated the same sports for no apparent reason (except to note that the Bears played in Wrigley).
The introductory label was well-written and attractively designed, but its location and text could perhaps be changed slightly to increase its attractiveness to visitors so that they stop and read this important orientation statement.

Label text:

Sports bring us together

We freeze at Soldier Field cheering on the Bears. We complain about the Sox or Cubs while watching from the bleachers. At neighborhood taverns, we relive the Bulls and Blackhawks glory years. In city parks and school gyms, we root for our neighborhood teams.

While sports unite us, divisive issues often simmer near the surface—funding for women’s athletics, racial tensions, conflicts between players and owners. Still sports remain a powerful social glue. Our games help transform us from a city of strangers into fellow Chicagoans. As players and fans, sports help us forge communities and find our place in the city.

Out of thousands of great Chicago sports stories, we can tell only a fraction of them here. We hope this sampling conveys the richness of the city’s sports history.
Make the introductory label more attractive and clear

Writing

Visitors to the CHS are coming in with the expectation that the exhibits are about history. For Chicago Sports, the obvious assumption is that this will be an exhibit about the history of Chicago sports. But the exhibition was intended to communicate themes beyond that. Therefore, visitors need multiple signals to help them see beyond their assumptions, and the introductory label is one place to start.

The first paragraph subtly identifies the exhibition's thematic sections: the stadiums, neighborhoods and schools. The title and second paragraph reinforce the main message of the social and cultural impacts of sports. But while the information in the label clearly states the deeper themes, the final sentence dilutes the first two paragraphs and reinforces the simplistic notion that this is just a history of sports exhibit.

The introductory label's last sentence is the shortest, and it is the one most likely to catch visitors' eyes because, as research has shown, shorter texts are more attractive and easier to read, and visitors don't necessarily read things in order (Serrell 1996). Without that last sentence, the exhibit organization and themes are undiluted.

Location and design

The introductory text might have worked better in the location of the Golden Gloves case. It is far enough beyond the entrance for visitors to feel like they are inside the exhibition, but not too far in to be overwhelmed with objects and information yet. The addition of one or more real objects with the introductory information (carefully chosen to reinforce the major themes) would help make it more attractive to visitors. Formative evaluation of the introductory label text and design during development would have helped reveal and overcome any problems or misunderstandings by visitors of this important "what's it all about" information.
Figure 24. Girls’ baseball case
Two visitors mentioned that they would have liked to see more about girls’ baseball. One thought that information about women’s softball was missing. Did they skip this case, element #37? Because the exhibit layout was nonlinear, some cases might have been inadvertently missed, although the impression was that they’d seen everything.

EVALUATOR’S COMMENT ABOUT EXHIBITION SIZE, DENSITY, AND DILIGENT VISITORS:
Visitors did not report being overwhelmed by the number of elements, and they clearly enjoyed the exhibits and were engaged with them. If the exhibition had been larger or contained more elements, I do not believe that the average time would have been higher. I think if there had been slightly fewer elements and less text, the number of diligent visitors would have gone up.
I collected data on each of the four possible days of the week (Friday, Saturday, Sunday, Monday) and I found weekdays to be slightly busier than weekends during the hours I was there.

Only once during the whole time I was monitoring did I see all of the seats in the theater filled. Additionally, it seemed that there was not steady traffic through the exhibit—groups or waves of people arrived together and then the exhibit could be empty for quite some time (even hours). It was not unusual to have only 1 or 2 people at a time in the entire exhibit.

Data collector’s comment

EVALUATOR’S COMMENT ON LOW VISITATION:
The lack of visitors may have caused some problems with the evaluation methods where data collectors were supposed to remain unobtrusive. They reported that some of their subjects may have felt rushed, for example, across the ‘L’ train bridge since the only other person in the exhibition was close behind them. Data collectors observed more people stopping to push the emergency button by people who were not being tracked.
Chicago Sports! You Shoulda Been There, a 6,000-square-foot temporary exhibition, ran from March 2003 to January 2004 at the Chicago Historical Society (CHS). The summative evaluation study by Serrell & Associates answered questions about Chicago Sports, including What did visitors like?, What did they learn?, Did they perceive the exhibit’s conceptual organization?, How did design contribute to understanding?, How long did they stay?, What were the most popular elements? and Who came?

The targeted audiences for Chicago Sports were sports fans and visitors with a casual interest in sports, and the exhibition was designed to appeal to visitors of all ages and cultural backgrounds. More than half of the evaluation sample consisted of males; more than half of the people were making their first visit to CHS; and a majority had a special interest in sports. Most visitors were alone or with other adults, not with groups that included children. Low visitation was noted during the evaluation data-collection period.

A total of 158 visitors participated in the study, which employed three different methods of collecting data: tracking and timing, cued questionnaires and exit interviews. Data collectors spent more than 120 hours observing visitors move through the exhibit and interacting with other visitors afterwards. The data collectors’ comments provided another layer of feedback about the visitor experience.

Visitors enjoyed the exhibits, especially icons like the Bulls’ trophies and Walter Payton’s Super Bowl ring, along with theater presentations and timeline displays. Many people read beyond the history of sports in Chicago to grasp the exhibit themes of identity and bringing people together. They mentioned the variety, diversity, breadth, rich tradition, accomplishments, “firsts,” passion and importance of sports, teams’ impact on and value to the culture of Chicago and sports’ “contribution to the spirit of our great city.”

Visitors spent, on average, 23 minutes in Chicago Sports. Exact times ranged from 2 to 64 minutes, breaking the “20-minute time barrier” — that is, the average 20-minute stay typically afforded museum exhibitions. On average, visitors stopped at a little more than one-third of the exhibits in Chicago Sports, which is not unusual.

Data indicated that visitors did not have enough orientation to fully use the exhibition: 25% of visitors stopped at the introductory label; visitors made more stops in the south gallery than in the north; and 20% of visitors did not go to both galleries (that is, they entered and exited in the south gallery). Although most visitors were not aware that the layout was largely organized by stadiums, many got the symbolism of the ‘L’ train car connection between the two galleries and the south/north playing fields.

The most often-mentioned new idea visitors took away was about Roller Derby, which was cited by seven people. Several people mentioned that they hadn’t known that certain teams were from Chicago, such as the Harlem Globetrotters and Cardinals; that women’s baseball, 16-inch softball and Spalding sporting goods originated here; and that professional boxing matches were held here. Four people mentioned that the Bears played at Wrigley Field and that Jackie Robinson’s #42 was retired. Three people noted that they learned the reason for the “curse of the goat.”

Many people made personal and emotive comments. They felt (in their words) lucky, proud, choked up, nostalgic and awesome. Compared to other exhibitions, Chicago Sports was close to the average in terms of the “sweep rate” (number of square feet visitors covered per minute) and the percentage of “diligent visitors” (people who stopped at more than half of the 55 elements in the exhibition). These data suggest that Chicago Sports should not have been any denser in terms of number of objects, cases, labels, videos, etc. Perhaps with better orientation and even fewer elements, more visitors might have made use of a larger percentage of the exhibit experiences.

See the full report for details; the appendices contain complete transcriptions of the evaluation data from visitors and data collectors.
References to Articles and Books by Serrell:

Exhibition Labels: An Interpretive Approach, AltaMira Press, 1996.
“Does cueing visitors significantly increase the amount of time they spend in a museum exhibition?” in Visitor Studies Today, July 2000.
Thanks to the visitors who agreed to participate in the evaluation and to the data collectors and the staff at CHS.