Throughout the history of the Exploratorium, there have been many attempts to bridge this discontinuity, either by breaking out of the box or bring the outdoors inside. (Senior Artist and Outdoor Exploratorium Principal Investigator Peter Richards’ iconic Wave Organ, a series of resonant tubes projecting into San Francisco Bay from a lonely jetty, was one such attempt.) But the need to press on this relationship between our exhibits and the outdoor environment was a key factor driving a process of institutional architectural change. Starting in the mid 1990s, the museum developed a plan to renovate and expand its Palace of Fine Arts home. As this plan encountered practical and political obstacles, we began investigating and designing for several new sites. This process has culminated in the museum’s proposed new location on San Francisco’s Embarcadero, currently projected to open to the public in 2012.

It was with this process of architectural change that the Outdoor Exploratorium project began. As the renovation plans for our long-time home became more complex, excitement grew around the idea of a permanent outdoor site more substantial than a series of installations scattered throughout the area. In 1996, early in the process of developing architectural plans, community research indicated strong support for outside exhibits, and the Outdoor Exploratorium’s original proposal to the National Science Foundation was built on the notion of a west-facing outdoor exhibit park at the Palace of Fine Arts.

Since submitting and receiving this grant, however, the Exploratorium’s broader institutional shifts have forced the Outdoor Exploratorium team to fundamentally rethink its plans. As the sites began to change, so the plans for the Outdoor Exploratorium had to follow.

An historical overview of the Outdoor project captures what was in part a series of false starts, with project teams and museum leadership changing and numerous location-specific plans requiring alteration or abandonment. But this process, frustrating though it was, eventually led us to Fort Mason, and few of us now doubt that a stronger location (both in terms of its unique history and its breadth of explorable natural phenomena) or a more supportive and insightful partner could have been chosen.

In the end, we learned a number of key lessons from this long yet ultimately deeply rewarding project:

- Site selection and related negotiations are critical project phases carrying substantial risk. Perhaps this goes without saying; yet it is a lesson well known to architects and developers who carefully balance the resources they invest in a project before they have fully secured the site. Any institution developing work for a site that has not yet been fully secured is taking significant risks. Although all of the research we did on natural phenomena contributed to our final exhibit experiences, more than half of the Outdoor Exploratorium’s project time was spent on researching locations other than Fort Mason.

- Partner sites require substantial time for collaboration and learning. Compared to installing outdoor exhibits on land adjacent to (and preferably owned by) the museum, partner sites come with the need for additional research, consultation, negotiation, and approvals. Our collaboration...
With the Fort Mason Center and GGNRA was one of the project’s great successes, but it did require a great deal of learning about the historic site and the integration of our own exhibit design procedures with the standards for designing in National Parks. It also came with the challenges inherent in prototyping at a distance from our machine shop, and the need to contextualize exhibits for visitors who, unlike those at a museum, aren’t expecting exhibits in the outdoor landscape.

However, it’s important to note that these difficulties can also be seen as the source of some of the project’s breakthroughs, such as:

- The extended period of exhibit brainstorming and iterative concept development for new sites allowed the maturation of a clear exhibit pedagogy embodied in the final exhibits and articulated throughout this publication. It also has generated a large list of other exhibit program ideas that will contribute to the outdoor site at the Exploratorium’s new location.

- The project’s many site investigations across the region contributed to a vision for collaborative site-specific environmental education across multiple sites in the Bay area. The Exploratorium is now pursuing collaborative projects with several institutions across the region as a result. This regional perspective will also be a strong element at the new Exploratorium at the Embarcadero.

- The historic National Park context and GGNRA collaboration helped introduce innovation and heighten potential future impact. The blending of two distinct interpretive cultures—the interactive science museum and the National Park Service—has led to a distinctive exhibit style that draws attention to the science inherent in built and natural environments. This new style has the potential for broader influence on other sites through GGNRA’s and the National Parks Services network.

- Experience with offsite investigations and partner negotiations has substantially grown the capacity of Exploratorium staff at multiple levels in the need and ability to collaborate with future potential partners. These skills will be especially useful as we prepare to become long-term partners with the Port of San Francisco and other waterfront agencies at our new location.

With these specific challenges and benefits in mind, it may be useful to take a wider view of the Exploratorium and its changing relationship to its site, the City, and the broader region. The Outdoor Exploratorium began with and paralleled the Exploratorium’s process of outgrowing its current location and finding a new home. The fact that the institution’s relocation was not ready in time for us to implement the Outdoor project as originally envisioned led to the need for close collaboration with a new partner. We were lucky enough to find a location that mirrored many of the characteristics of our new site, effectively giving us a prototype for many conditions and relationships and expanding the institutional vision that we are building for the new location.

For its first four decades, the Exploratorium has existed with little reference to its specific location. Through a combination of accident and temperament, the museum has functioned as almost placeless—a prototypical laboratory filled with demonstrations that could be airlifted to anywhere in the world. As we prepare for our move, both to a new site and into an era in which environmental education is taking center stage, the new Exploratorium is moving from being primarily such a laboratory to becoming a combination of laboratory and observatory. Most broadly, observatories are site-specific windows onto the universalities of science. At our new site, the Exploratorium will, both literally and figuratively, have many more open windows than it ever has—windows onto the Bay, the City, and additional outdoor installations, certainly, but also windows providing views of the museums growing collection of connections with the local community and our regional collaborators. The Outdoor Exploratorium has been a crucial step in this evolution; the process we followed, and the experiences the team and our partners created, have allowed us to learn as we do best: by experimenting, by trying new things (and, in a few cases, failing at them), and by imagining new ways of connecting people with the world around them.

### Timeline:

- **2003**
  - Project concentrates on Explo’s planned relocation to Baker-Hamilton building (south of Market)

- **2004**
  - Project shifts to research on one or more partner sites (Baker Hamilton site falls through and OE is de-coupled from the Explo relocation)

- **2005**
  - Major OE site focus on Brannan Street Wharf (BSW) site in collaboration with the Port of San Francisco

- **2006**
  - BSW project is delayed by the Port and search for new OE site begins.
  - Ft. Mason Center collaboration is developed and finalized.

- **2007**
  - Exhibit development and GGNRA/ Ft. Mason collaboration begins

- **2008**
  - Exhibit development continues and installations and evaluation begins.

- **2009**
  - Outdoor Exploratorium opens at Fort Mason, February 16.