

PRESERVING WORLD'S FAIR PARKS: THE CASE OF KNOXVILLE,  
TENNESSEE'S 1982 ENERGY EXPOSITION

by

JENNIFER KAY BAILEY

(Under the Direction of Mark Edward Reinberger)

ABSTRACT

There have only been six world's fairs in the United States since the end of World War II. Each of the cities that hosted a fair between 1945 and 1984 used it for civic improvements in their urban cores, the funding for which came partially from the United States federal government. The legacies of these fairs exist in either urban parks or civic center complexes and are becoming historically, culturally, and aesthetically significant. This thesis discusses the Knoxville World's Fair Park and Festival Center as a case study for the preservation of post-World War II world's fairs in the United States. It explores the planning and implementation of the 1982 Energy Expo in a national context with other United States world's fairs as urban renewal initiatives in the post-World War II era. Considering that the sites of these world's fairs as rare and worthy of preservation in their current states as public improvement projects in urban settings, the preservation community must consider their significance as cultural landscapes and categorize them as park-plaza landscape types for historic designation as sites or districts in the National Register of Historic Places. Finally, this thesis recommends the Knoxville Public Building Authority use the Sustainable Sites Initiative (SITES) as a guideline for future management of the World's Fair Park and Festival Center located in Downtown Knoxville, Tennessee.

INDEX WORDS: Knoxville International Energy Exposition, Energy Expo '82, Knoxville World's Fair Park and Festival Center, world's fair, urban renewal, urban parks, cultural landscapes, Sustainable Sites Initiative (SITES), Knoxville, Tennessee

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BA, Louisiana Tech University, 2007

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A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial  
Fulfillment of the Requirements for the Degree

MASTER OF HISTORIC PRESERVATION

ATHENS, GEORGIA

2013

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## DEDICATION

I dedicate this thesis to Knoxville, Tennessee.

I dedicate this thesis to world's fairs, past, present, and future, and their tangible and intangible legacies.

I dedicate this thesis to Amanda J. DeCort, preservation planner for the City of Tulsa, and Derek H. Lee, Interim Director of the Tulsa Foundation for Architecture, and Dr. William S. Bryans, Associate Professor of History at Oklahoma State University. These three individuals helped me to discover historic preservation. They have become not only colleagues, but also dear friends, who I am honored to have in my life.

Finally, I dedicate this thesis to my parents, John and Susan Bailey, and my brothers, Andrew and Jack Bailey, for always believing in me and my abilities and for always encouraging me to trust my instincts and follow my dreams. I love you.

## ACKNOWLEDGEMENTS

My committee members, Mark Reinberger, Wayde Brown, Stephen Ramos, and Amber Eskew provided guidance, advice, and patience throughout the research and writing of this thesis. I would also like to acknowledge Donna Gabriel and Melissa Tufts for their encouragement and facilitation throughout the writing process.

Ian P. Shanklin of the National Park Service Midwest Regional Office in Omaha, Nebraska scheduled my weekend in Knoxville during my work with the Eastern Legacy Special Resource Study as a NCPE intern, without which I never would have found the inspiration to use the Knoxville World's Fair Park as a case study for a topic on world's fairs and their residual site uses.

The research for this thesis would not have been possible without the help from the staff at the University of Tennessee's Special Collections Library and the staff at the McClung Collection at the East Tennessee Historical Society in Knoxville, Tennessee. They helped me to navigate the material available on the Knoxville International Energy Exposition and helped me with missing information. Finally, the staffs at the Knoxville-Knox County Metropolitan Planning Commission and at the Knoxville Public Building Authority allowed me to use their resources, library, and original site plans for my research purposes. Kaye Graybeal, Mike Carberry, Lisa Williams, and Chris Gallop will forever be in my debt because of their generosity, kindness, and accommodation.

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## CHAPTER 1

### INTRODUCTION

The United States hosted six international exhibitions, or world's fairs, after World War II. Although the theme and city varied, each city planned to use the fair for the purpose of downtown revitalization using funding from the United States federal Urban Renewal Program. Urban renewal is sometimes seen as an enemy of preservation and is considered controversial in most cities' planning histories because of the amount of the historic urban fabric the program destroyed. However, world's fairs in the United States after World War II left physical, cultural, and aesthetic legacies on the urban landscape of their host cities, and these legacies are becoming historic. Knoxville, Tennessee's 1982 Energy Expo '82's legacy exists in the form of the Knoxville World's Fair Park and Festival Center, and it provides a viable case study for the preservation of these world's fair sites of the post-World War II era as urban cultural landscapes.

The Knoxville International Energy Exposition (KIEE) was the first world's fair after World War II to be held in the southeastern United States. Also known as the 1982 World's Fair, or Energy Expo '82, the exposition brought eleven million visitors to Knoxville, Tennessee. The increased interest and investment in alternative energy sources after the energy crisis of the 1970s inspired the theme of the fair: energy and its effects on the environment. After Stewart Evans, a member of Knoxville's Downtown Businessmen's Association (DBA), heard a presentation highlighting the positive residual effects of the 1974 Spokane world's fair, he suggested to the DBA that Knoxville submit

a proposal to host its own world's fair.<sup>1</sup> The DBA saw the fair as an opportunity to increase jobs and revitalize a blighted, seventy-acre, railroad site known as the Second Creek Valley that separated the University of Tennessee campus and the Knoxville Central Business District. What resulted was the Knoxville International Energy Exposition of 1982 (KIEE), the last successful world's fair to be held in the United States.

Energy Expo '82 was deemed successful because it made a profit, but the lack of a plan for the site's residual use after the fair's closing overshadowed the fair's success.<sup>2</sup> The Sunsphere (which served as the fair's symbol of energy), an amphitheater, and an exhibit hall with an attached hotel were the only remaining new structures from the fair, besides the siting itself, which included a passive water feature, a gated railroad track (both running the length of the park), and an aging viaduct that bisected the site. The United States pavilion was demolished in the early 1990s. Knoxville then used the site of Expo '82 for city events, festivals, and concerts. Because of this recreational use, Knoxville developed a master plan to convert the site into a park in the early 1990s. Then, in 1998, the city decided to use the centralized location of the World's Fair Park as the inspiration for siting and design of a new convention center.

This thesis explores the Knoxville World's Fair Park and how the transformation of the world's fair site into an urban park helped to preserve urban renewal in Knoxville. This thesis focuses on residual uses of the resources from the 1982 Knoxville International Energy Exposition, and how the siting layout, and design of the fair itself as

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<sup>1</sup> Program from the International Downtown Executives Association (IDEA) 20<sup>th</sup> National Conference, 29 September-2 October 1974, Fairmont Mayo Hotel, Tulsa, OK, *W. Stewart Evans Collection*, MS 2062, Hodges Library, University of Tennessee, Knoxville, TN.

<sup>2</sup> Approximately \$55.

a means of revitalizing a blighted, underutilized area of downtown Knoxville informed the creation of the current World's Fair Park and Festival Center.

Chapter 2 reviews the existing scholarship available on the history of world's fairs in general, paying special attention to those fairs held in the United States after World War II. It analyses scholars' exploration of world's fairs and why some fairs receive more attention than other fairs. This analysis of the scholarship sets up the treatment and availability of information regarding world's fairs and their effect on the urban fabric of the cities that hosted them, especially in terms of fairs hosted in the United States in the post-World War II era. Chapter 2 also helps to establish where Knoxville's Energy Expo '82 fits into the available literature the thesis transitions into Chapter 3's discussion of the International Bureau of Expositions and how the world's fairs in the United States after World War II were affected by this international governing body. Chapter 3 also examines the fairs in Seattle, Washington, San Antonio, Texas, and Spokane, Washington and how each fair influenced subsequent fairs, in terms of using it as a planning tool for downtown revitalization. Chapter 3 discusses the direct influence of Spokane's Expo '74 on Knoxville's Energy Expo '82 through the use of King Cole, Expo '74's president, as a paid consultant for the planning and implementation of the 1982 fair.

The Knoxville International Energy Exposition of 1982 is the focus of Chapter 4. This chapter discusses Energy Expo '82's siting and fair layout, theme, planned residual uses, and preservation efforts. This chapter also discusses Knoxville in the 1970s and the studies conducted by the city of Knoxville during that time to determine the focus areas for eventual redevelopment. It then discusses how the city chose the site for the fair based on these studies and how the location of the fair in Knoxville determined the theme

of “Energy Turns the World” as appropriate for this particular fair. Chapter 4’s discussion of how Energy Expo ‘82 demolished very few buildings and rehabilitated the site’s surrounding existing historic buildings overshadows Chapter 4’s discussion of the failed residual use plan for the United States Pavilion. The fair’s siting, layout, successful preservation efforts, and failed residual use plans are important because they helped to inform the development and implementation of the current World’s Fair Park and Festival Center.

Chapter 5 focuses on the development of the Knoxville World’s Fair Park and Festival Center as a means of revitalizing a blighted, underutilized area of downtown Knoxville. The irony is that by the time the Park and Festival Center came to fruition, the site remained blighted and under-utilized. The chapter discusses the time between 1982 and 1990, during which the Energy Expo ‘82 site was the topic of much speculation from developers hoping to fulfill the area’s highest and best use as a high-density, mixed-use housing project. The developers were many, but the funding was non-existent. At the same time, the site was being used for civic festivals and as an open park space. The citizens of Knoxville finally banded together and insisted upon more park space in the downtown area. As a result, the City of Knoxville created the World’s Fair Park and Festival Center as an interim solution to the lack of funding for a mixed-use housing development. The city decided to preserve the positive aspects of the fair, which was an event that brought international attention to an otherwise overlooked area of the United States.

Chapter 6 discusses the preservation of world’s fair sites and parks in terms of their classification as cultural landscapes in urban environments. This chapter looks at

park-plazas as a way to categorize world's fair sites for historic designation. Knoxville's World's Fair Park and Festival Center provides a case study for defining world's fair sites as cultural landscapes and how a Cultural Landscapes Inventory could be conducted in conjunction with listing in the National Register of Historic Places. Preserving and protecting post-World War II world's fair sites must be done on a case-by-case basis, and the Chapter 7 explores the use of the Sustainable Sites Initiative (SITES) as a possibility specifically for the Knoxville World's Fair Park and Festival Center. This chapter discusses the park's current maintenance plan in terms of its sustainability. It then provides suggestions for ways in which the Knoxville Public Building Authority can implement SITES as a tool for making the Knoxville World's Fair Park and Festival Center more energy efficient and sustainable in the future.

### *Methodology*

The Knoxville World's Fair Park and Festival Center is the primary case study to address the complexities related to the preservation of world's fair sites as post-World War II cultural landscapes in an urban environment and to explore options for their preservation and use for future generations. This thesis does not attempt to do full empirical justice to the events. Rather, this thesis looks at the preservation of world's fair sites as rare cultural landscapes in urban settings. Research utilized archival sources from the University of Tennessee's Special Collections Library and the McClung Collection at the East Tennessee Historical Society. Sources include letters, reports, plans, and maps regarding the planning of Energy Expo '82 and the current park. The world's fairs in Seattle, San Antonio, and Spokane are discussed as a framework for Knoxville's, and they were researched using articles found in peer-reviewed journals and in books.

The research for the preservation of world's fair sites as urban parks and plazas was conducted through the use of archival research at the Knoxville-Knox County Metropolitan Planning Commission and through the use of peer-reviewed journal articles and books. For this section's research, the Knoxville Public Building Authority allowed access to its digital copies of the landscape architecture plans prepared by Ross and Fowler, the landscape architecture firm responsible for the World's Fair Park and Festival Center's renovations in the mid-2000s. Any confusion about the maintenance of the World's Fair Park and Festival Center was clarified by Chris Gallop, Zone Supervisor for the Knoxville Public Building Authority.

The stories of individual world's fairs exist most extensively in the archives and libraries of the cities in which they were held. Through the use of the archives at the University of Tennessee, the McClung Collection at the East Tennessee History Center, and Knoxville-Knox County Metropolitan Planning Commission's library in Knoxville. In these archives, the public can access letters, newspaper articles, master plans, maps, drawings, photographs, and numerous other sources about Energy Expo '82 and the subsequent world's fair park that now exists on the fair site. It allows one to put the 1982 World's Fair into contexts that involve local, state, regional, national, and international politics, planning, and preservation efforts. The residual uses of world's fairs' sites and buildings do not exist in a vacuum; in fact the residual uses are part of the initial planning, as will become apparent in the following chapters.

It is important to understand the scale and intent upon which world's fairs are discussed, of which Chapter 2 provides an overview. Most of the literature discussed in Chapter 2 consists of either comprehensive histories of all world's fairs or histories of the

most famous, individual world's fairs. Fewer histories address those fairs after World War II in the United States. If literature does exist about these fairs, it addresses them on an individual basis. However, most of the literature either ignores or mentions in passing, the common thread that all of the cities that hosted post-World War II fairs used an exposition to revitalize an urban portion of the city.



## CHAPTER 2

### REVIEW OF THE EXISTING SCHOLARSHIP AVAILABLE ON WORLD'S FAIRS

The existing scholarship available about world's fairs is relatively new and falls into several different categories ranging from general, comprehensive histories to publications and reports about specific fairs. The literature has gained momentum since the mid-1970s, with the most numerous publications providing histories of world's fairs, over the last 163 years. The majority of the comprehensive histories exist in book form, while in-depth discussions of individual fairs are more prevalent in journals such as *Architectural Forum* and the *AIA Journal*. Regardless of where the articles occur, these publications provide information about the theme, purpose, and major impacts of each fair since their beginning.

One of the most comprehensive presentations of world's fairs is John E. Findling and Kimberly D. Pelle's *Encyclopedia of World's Fairs and Expositions*. This publication provides an overview of each major world's fair from the first one in 1851 in London to the most recent in 2010 in Shanghai. It brings together in one volume the information that exists about world's fairs and to provide ~~the~~ most comprehensive bibliographic information we could find to assist scholars in their research endeavors."<sup>3</sup> Findling is a professor of history at Indiana University, and Pelle is an admissions counselor at Indiana University. They have edited several books together that focus on subjects related to sports or large, temporary events, such as the Olympics and world's

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<sup>3</sup> John E. Findling and Kimberly D. Pelle, Eds, *Encyclopedia of World's Fairs and Expositions*, (Jefferson, NC: McFarland and Company, Inc., 2008), 5.

fairs, and their historical and cultural impact.<sup>4</sup> Findling and Pelle state in the *Encyclopedia*'s preface that the fact that the book is in its second edition, is an indication of "the increased scholarly interest in fairs and expositions" since its initial publication.<sup>5</sup>

*The Encyclopedia of World's Fairs and Expositions* serves two purposes. First, it presents a collection of essays and various appendices on individual world's fairs and gives a "collective body of basic information on more than 95 fairs held in more than 20 countries between 1851 and 2005."<sup>6</sup> Second, it provides both annotated and general bibliographies on individual fairs; where the information is located; and commentary on archival collections, collective and thematic works, and active websites. In addition to these two main goals, the *Encyclopedia* also affords information on fair statistics, officials, fairs that were not included in the main body of the text, and fairs that were planned but never held. This publication makes a useful reference for initial information to identify and compare overall trends in world's fairs that could render more research.

The *Encyclopedia* also provides a brief pre-history of world's fairs and defines the differences between "world's fair," "exhibition," and "exposition." Just as it uses these terms interchangeably, they are used interchangeably in this thesis when addressing general information about the subject. When discussing a specific fair, the term for which it is known is used. Generally, however, an individual exposition falls into the overall cannon of world's fairs. For example, the 1982 World's Fair in Knoxville, Tennessee was also known as "Energy Expo '82;" however, it is still the world's fair that

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<sup>4</sup> Publications by Findling and Pelle as editors also include *The Encyclopedia of the Modern Olympic Movement*, (Westport, CT: Greenwood Press, 2004) and the *Historical Dictionary of the Modern Olympic Movement*, (Westport, CT: Greenwood Press, 1996); with Robert W. Rydell, *Fair America: World's Fairs in the United States*, (Washington, D.C.: Smithsonian Institution, 2000).

<sup>5</sup> Findling and Pelle, *Encyclopedia of World's Fairs*, 5.

<sup>6</sup> Findling and Pelle, *Encyclopedia*, 8.

occurred in 1982. This follows a trend that began in the 1960s when the term “expo,” a shortened form of “exposition,” became part of the formal name for some fairs.<sup>7</sup> Finally, one of the defining features of a world’s fair in the United States is significance for the host city. For this discussion, Findling and Pelle refer to Reid Badger’s *The Great American Fair*, a book discussing Chicago’s Columbian Exposition in 1893. Reid suggests that for early American cities, hosting a fair is “a great and obvious symbol of urban achievement and a matter of civic pride to the host city, and many of the earlier American fairs witnessed intense competition among cities vying to host them.”<sup>8</sup>

Another category of literature discusses a selection of world’s fairs based specifically on their architectural or social impacts. Good examples of these histories are, Paul Greenhalgh’s *Fair World: A History of World’s Fairs and Expositions, From London to Shanghai, 1851-2010*, Erik Mattie’s *World’s Fairs*, and Robert W. Rydell’s *World of Fairs: The Century-Of-Progress Expositions*.<sup>9</sup> Greenhalgh is the director of the Sainsbury Centre for Visual Art at the University of East Anglia in England and has

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<sup>7</sup> Ibid; according to their *Encyclopedia*, Findling and Pelle define an international event of this type as a “world’s fair” in the United States, an “exhibition” in the United Kingdom, and an “exposition” in France and other parts of the world. Findling and Pelle state that the term “exposition,” etymologically bridges the gap between a fair and an exhibition. “Exposition” means to put something on show, but, as Findling and Pelle point out, “in contemporary usage, its meaning has become indistinguishable from that of fair, except in a connotative sense that an exposition is larger, more extensive, and perhaps more formally organized than a fair.” For more information on the difference between a fair, exposition, and exhibition, and the evolution of local, country fairs to large, international cultural events, please see pages 7 and 8 of Findling and Pelle’s *Encyclopedia*.

<sup>8</sup> Ibid, 7; This intense competition though occurred in the later American fairs too, as Findling and Pelle are quick to point out, which is probably a flaw in Badger’s publication, considering it was published in 1979, during the controversial planning phases for the 1982 fair in Knoxville, TN. To completely negate the competition that still exists between cities to host world’s fairs is reckless on Badger’s part, especially considering the intense bid from Philadelphia to host an exposition for the United States’ Bicentennial in 1976, three years before the publication of Badger’s book. Findling and Pelle’s *Encyclopedia of World’s Fairs and Expositions* does justice to this culture of competition between cities throughout the presentation of world’s fairs by individual scholars.

<sup>9</sup> Paul Greenhalgh, *Fair World: A History of World’s Fairs and Expositions from London to Shanghai, 1851-2010*, (Winterbourne, U.K.: Papadakis Publisher, 2011); Erik Mattie, *World’s Fairs*, (Princeton, NJ: Princeton Architectural Press, 1998); Robert W. Rydell, *World of Fairs: The Century-Of-Progress Expositions*, (Chicago: University of Chicago Press, 1993).

written on the social and cultural impacts of visual arts. His *Fair World* discusses the fairs through 2010, and his purpose is to study how the events engaged, how they gained legitimacy as a medium of national expression, and how they maintained it through one of the most traumatic periods of world history.”<sup>10</sup> He focuses on expositions held in Britain, France, and the United States because these nations were responsible for defining the shape and scope of events everywhere.”<sup>11</sup> *Fair World* also differentiates between the terms for these events based on country: “Great Exhibitions” in Britain, “World’s Fairs” in America, and “Expositions Universelles” in France. Like the *Encyclopedia of World’s Fairs and Expositions*, *Fair World* is in its second manifestation and was originally published in the early 1990s around the same time as the *Encyclopedia*. The first manifestation of *Fair World* was entitled *Ephemeral Vistas*, and instead of re-issuing it, Greenhalgh decided to readdress some of the issues raised and look again at the material in light of twenty years of development in the field.”<sup>12</sup>

Based on the *Encyclopedia of World’s Fairs* and *Fair World*, we can determine that world’s fairs and expositions are a newer topic of cultural history, and that comprehensive discussions of fairs over the last 160 years are not only difficult, but also daunting. No wonder Findling and Pelle had experts on individual fairs submit essays for their *Encyclopedia*. Greenhalgh, though, does not rely on other people to write about each fair. He admits that his text does not “move through time evenly” and chooses rather to focus on fairs in Britain, France, and the United States, with minimal discussion of fairs in other parts of the world. Greenhalgh organizes his book into seven chapters,

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<sup>10</sup> Greenhalgh, Introduction to *Fair World: A History of World’s Fairs and Expositions from London to Shanghai, 1851-2010*, 12-13.

<sup>11</sup> Greenhalgh, Introduction, 13.

<sup>12</sup> Ibid.

the titles of which become themes around which Greenhalgh categorizes the repertoire of world's fairs. The forty years between 1875 and 1915 is considered the Golden Age of Expositions, during which an average of 1.25 international expositions occurred every year. After a short hiatus during World War I, expositions were back in full swing with most between 1925 and 1970 embracing "grand visions of progress" of life in the future.<sup>13</sup> Greenhalgh defines this as the age of "Futuropolis," after which occurred an age of "confusion and decline within the expo medium."<sup>14</sup> This Post-Modern age of confusion is where all but two fairs held in the United States after World War II fall; it was an age where "all the pretensions of the earlier tradition were in essence little more than theme parks fused with trade fairs."<sup>15</sup>

In terms of post-World War II world's fairs in the United States, Greenhalgh's book examines the ones in Seattle and New York City held in 1962 and 1964-65, respectively. However, Greenhalgh does not mention Spokane's world's fair in 1974 and mentions the expos in San Antonio (1968), Knoxville (1982), and New Orleans (1984) on the same page under the subtitle "Cold War Ways and Post-Modern Methods." The only difference between these fairs and those previously is the "steady opening up of the space between public and private funding, which became decisive during the 1980s."<sup>16</sup> In fact, Greenhalgh dismisses the fairs in San Antonio, Spokane, Knoxville, and New Orleans as "little more than programmatically marketed theme parks" because of their "commercialism, populism, and impoverished condition of cultural and educational

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<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> Greenhalgh, Introduction, 13; *Fair World* trumps the *Encyclopedia of World's Fairs and Expositions* in terms of its use of photographs and visual references. The *Encyclopedia* uses mainly black and white images, whereas *Fair World* uses photographs, plans, renderings, engravings, and reprinted magazine covers in both black and white and color. *Fair World* is a much more visually engaging text, and visual imagery and experiences are integral to the overall experience of a world's fair.

<sup>16</sup> Greenhalgh, "Money, Politics and the Masses," *Fair World*, 68.

facilities.”<sup>17</sup> He determines that Seattle’s 1962 Expo was the most ~~sa~~satisfying and effective American fair,” while the ~~loudest~~ and visually most impressive was certainly New York” in 1964-65. Perhaps Robert Moses’s demonstration of absolute planning prowess and control over the 1964-65 world’s fair and blatant disregard for the Bureau of International Expositions fooled even the most objective of scholars.<sup>18</sup>

In his book *World’s Fairs*, Erik Mattie also reduces post-World War II fairs in the United States to that of mere entertainment.<sup>19</sup> In the introduction, Mattie, co-editor of the book, *Architectural Competitions: 1792-Today*, states that, ~~—~~while the world’s fair remains a venue for new products, it is their entertainment value that is now preeminent.”<sup>20</sup> Mattie categorizes fairs, but not based on terminology, but rather by type, and he identifies five types of fairs: international, national, thematic, multilateral, and colonial.<sup>21</sup> This publication too is a comprehensive approach, but focuses only on international, universal expositions because he finds them to be the ~~—~~most interesting” architecturally.<sup>22</sup> Mattie’s reasoning is that in these larger international world’s fairs, designing individual and representative pavilions was expected of participating countries.<sup>23</sup> Mattie then discusses the architecture of world’s fairs, and he describes the fairs as a ~~—~~powerful stimulus for engineering and construction.”<sup>24</sup> In the nineteenth century, the projection of large numbers of attendees forced architects to use new construction methods and materials. To build cheaply and quickly was paramount in

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<sup>17</sup> Ibid.

<sup>18</sup> Robert Moses helped shaped New York City in the twentieth century, especially during the post-World War II period.

<sup>19</sup> Erik Mattie, *World’s Fairs*, (Princeton, NJ: Princeton Architectural Press, 1998).

<sup>20</sup> Mattie, *World’s Fairs*, 8; Mattie and Ceres de Jong, Eds., *Architectural Competitions: 1792-Today* (New York: Taschen, 2000).

<sup>21</sup> Mattie, *World’s Fairs*, 8.

<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> Mattie, *World’s Fairs*, 9.

world's fair planning, and glass, iron, and steel were essential to achieving wider spanning to accommodate larger visitor numbers. Mattie suggests that, by the end of the nineteenth century and up until World War II, "the architect appeared to have the edge over the engineer," but that after World War II experimentation in new building forms using glass and steel became not only accepted, but also celebrated. More importantly, Mattie identifies the exhibition pavilion as a modification of the multinave basilica, and explains that this reference to a basilica disappeared in the twentieth century when "world's fairs became the spawning grounds for hyperindividual architecture."<sup>25</sup>

Mattie's *World's Fairs* has its advantages and its strength and weaknesses. The strength is Mattie's inclusion of statistical information and archival photographs, plans, maps, and advertisements that allow him to illustrate the complexity and scale of world's fairs. For each fair, Mattie includes the year, location, surface area, number of visitors, participating nations, number of exhibitors, the architect, the architectural supervisor, the contractor or contracting company, and a list of novelties that made their debut.

However, *World's Fairs* is flawed in Mattie does not include any of the other world's fairs hosted in the United States after the discussion of New York City's world's fair in 1964-65. This is ironic considering the fact that New York's world's fair in 1964-65 had the least amount of international participation because it was not sanctioned by the Bureau of International Expositions (BIE) as an official world's fair because of Robert Moses. The BIE set special conditions for Robert Moses because of the size and time frame between the New York and Seattle world's fairs, but Robert Moses refused to comply with these conditions. Because Mattie focuses on the architectural feats of universal, international expositions, and because of the expectation that countries have a

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<sup>25</sup> Ibid.

unique and innovatively designed pavilion, his argument becomes questionable due to the fact that he includes a fair that has minimal international participation, regardless of how innovative the architecture at the 1964-65 World's Fair in New York City.<sup>26</sup> Mattie, thus, sells short the architectural significance and local impact of the subsequent United States fairs held in San Antonio, Spokane, Knoxville, and New Orleans.

Other sources available on the topic on the history of world's fairs include those dedicated to individual fairs that occurred during a certain period of time. A good example is Robert W. Rydell's book, *World of Fairs: The Century-of-Progress Expositions*. Published in 1993, this book's inspiration came from the author's father's personal accounts of having attended Chicago's 1933 Century-of-Progress Exposition. He then continues to define the "world of fairs" as the interwar period of 1920 and 1942 in the United States and Europe.<sup>27</sup> Rydell is a professor of history at Montana State University, is the director of the Montana Humanities Institute, and has written or edited two books on world's fairs in the United States.<sup>28</sup> *World of Fairs* raises a necessary question in the discussion of world's fairs: what is the motivation to hold one? The answer to this question is as varied and complex as the fairs themselves. The reasoning behind hosting a fair differs based on the era and the host city's goals. Some cities use world's fairs as part of their city planning initiatives. Others hosted them to show off their importance or the latest advances.

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<sup>26</sup> Andrew V. Uroskie, "New York 1964-1965," *Encyclopedia of World's Fairs and Expositions*, (Jefferson, NC: McFarland and Company, Inc., 2008), 330.

<sup>27</sup> Robert W. Rydell, *World of Fairs: The Century-of-Progress Expositions*, (Chicago: University of Chicago Press, 1993): 3.

<sup>28</sup> With Findling and Pelle: *Fair America: World's Fairs in the United States*, (Washington, D.C.: Smithsonian Institution, 2000).



Rydell states that holding a fair during the 1930s was a powerful commitment and that it was a medium used to lend “legitimacy to [cities’] positions of authority,” that businessmen, politicians, and intellectuals “recast the medium of the world’s fair in modernistic architectural forms and restored fairs to their former level popularity by offering millions of people the prospect of salvation from [economic] depression.”<sup>29</sup> *World’s Fairs’* two parts discuss the Victorian-era roots of the Century-of-Progress expositions and America’s depression-era fairs of the 1930s, specifically “their historical significance as sites for advancing several specific projects.”<sup>30</sup> The intent was to revitalize earlier visions of the American empire through modernistic designs as conditional constructs of how architects, planners, industrial designers, and business leaders came together to devise various “world of tomorrow” utopias.<sup>31</sup>

Rydell offers his own review of the available literature on inter-war fairs, stating that they need further study. He focuses on the fairs in the United States because “little has been written about the significance of America’s depression-era expositions for a ‘culture in crisis.’”<sup>32</sup> He also states that too much has been written about the 1939 New York World’s Fair out of context of the others held in the United States during the Great Depression. This focus on one fair and the neglect of the others causes an imbalance in “the historical record by simultaneously overvaluing the symbolic grandeur of the New York fair and underestimating the source of its cultural power in the cumulative strength of the century-of-progress exposition movement.”<sup>33</sup> In this respect, Rydell positions himself well in the available literature, as scholars have also neglected the post-World

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<sup>29</sup> Rydell, *World of Fairs*, 6.

<sup>30</sup> Rydell, *World of Fairs*, 10.

<sup>31</sup> Ibid.

<sup>32</sup> Rydell, *World of Fairs*, 8.

<sup>33</sup> Rydell, *World of Fairs*, 9.

War II fairs in the United States, focusing instead on the 1962 Seattle Expo and 1964-65 New York Expo because of their architecture and size. The 1964-65 New York World's Fair was also one of the most controversial, and it marked the city's third time as a host. Also, the 1964-65 fair was held on Flushing Meadows Corona Park, the same site as the 1939 World's Fair, one of the biggest ever held. However, our love affair with size and quantity tends to skew the perception of importance of these fairs at the local level. Extensive scholarship discussing the San Antonio, Spokane, Knoxville, and New Orleans world's fairs has become apparent and necessary as these sites reach and surpass their fifty year age.

The next set of literature on world's fairs in the United States discusses individual fairs in the post-World War II era. These sources exist in book, journal and magazine article, and archival source formats. As stated above, the majority of the widely available scholarship that exists on these fairs focuses on the 1964-65 world's fairs in New York City. At this point the available research becomes more difficult to obtain, as the sources for individual fairs during this period exist in archives in the cities themselves. The second most researched fair of the post-World War II period is the Seattle World's Fair in 1962. This is due mainly to the fact that it was the first fair to be held in the United States after the end of World War II.<sup>34</sup> It also marked a trend in world's fair planning that would continue throughout the post-war era in the United States: the use of world's fairs as a means for revitalizing "blighted" areas or "slums" in downtown areas.

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<sup>34</sup> There was a fair planned for St. Louis in 1953 to commemorate the 150 year anniversary of the Louisiana Purchase, but it was never held; See John M. Findlay's article "The Off-Center Seattle Center: Downtown Seattle and the 1962 World's Fair," *The Pacific Northwest Quarterly*, 80, no. 1 (January 1989): 2-11. JSTOR [www.jstor.org/stable/40491017](http://www.jstor.org/stable/40491017). (Accessed 30 August 2012).

The scholarship associated with the world's fairs in San Antonio, Spokane, Knoxville, and New Orleans is limited at best. Of these four fairs, however, Spokane's Expo '74 is the most researched because it was the "first international exposition dedicated to an environmental theme" and because Spokane is the smallest city to date to have hosted a world's fair.<sup>35</sup> J. William T. Youngs, professor of history at Eastern Washington University, wrote a book entitled *The Fair and the Falls: Spokane's Expo 1974, Transforming an American Environment*, which remains the only book to comprehensively discuss Spokane's Expo '74. *The Fair and the Falls* discusses Spokane as a wilderness town located on the Spokane River and how the fair "brought about a new phase in the city's relationship to its natural setting."<sup>36</sup> Youngs admits that the *Fair and the Falls* is an oral history because the extensive archival sources "hide the tensions and emotions underlying the fair."<sup>37</sup> This is generally the case with the archival sources available at the University of Tennessee and the East Tennessee History Center regarding the 1982 Energy Expo in Knoxville. The official records and documents can only reveal so much, most of which is celebratory in nature. It is through newspaper articles and documented interviews with those who created and attended the fairs that the human aspects of these events are revealed. The legacy of Spokane's Expo '74 lives on through Knoxville's Energy Expo in 1982, as King Cole, a key figure in Spokane's world's fair, was a paid consultant for the Knoxville International Energy Exposition, Inc, the non-profit organization and planning force behind the 1982 fair. Although there is a pamphlet

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<sup>35</sup> J. William T. Youngs, Preface to *The Fair and the Falls: Spokane's Expo '74, Transforming an American Environment* (Cheney, WA: Eastern Washington University Press, 1996), ix.

<sup>36</sup> Youngs, Preface to *The Fair and the Falls*, x.

<sup>37</sup> Youngs, xi.

outlining the background to Expo '74, Youngs's book remains the only comprehensive publication about Expo '74's planning, implementation, and impact.<sup>38</sup>

In regards to the San Antonio world's fair, HemisFair '68, there have only been a handful of articles and one book.<sup>39</sup> The book, *HemisFair '68 and the Transformation of San Antonio* was published in 2003 as a means to outline the fair's legacy in San Antonio and how the current manifestation of certain parts of the downtown area never would have happened without the fair. In other words, the book celebrates HemisFair '68 through "edited oral history interviews" with key politicians, businessmen, and other direct and indirect stakeholders about how the fair spurred economic development.<sup>40</sup> Unfortunately, the few photographs included are in black and white give the reader more information about those interviewed or those involved with the fair than they give information about the fair itself.

What *HemisFair '68 and the Transformation of San Antonio* leaves out, Roger Montgomery's article, "HemisFair '68: Prologue to Renewal," illustrates. In this article, Montgomery, former dean and emeritus professor of the University of California, Berkeley's College of Environmental Design and the first urban designer for the U.S. Housing and Home Financing Agency (forerunning of the Department of Housing and Urban Development), outlines exactly what HemisFair '68 did for the development potentialities in San Antonio. Montgomery states that, "From conception to construction HemisFair took less than six years," going "faster than the average urban renewal

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<sup>38</sup> Willis B. Merriam, "Spokane: Background to Expo '74," (Pullman Washington, Willis Merriam, 1974).

<sup>39</sup> Peter G. Arnold, "HemisFair: New Park Plan Welcomes Pedestrians," *Urban Land*, 44, no. 12 (December 1985): 26; James L. MacKay, "HemisFair '68 and Paseo Del Rio," *AIA Journal*, 49 (April 1968): 48-58; Roger Montgomery, "HemisFair '68: Prologue to Renewal," *Architectural Forum*, 129, no. 3 (October 1968): 84-89; "Portfolio: Performance Spaces," *Texas Architect*, 62, no. 4 (July-August 2012): 65-66, 69.

<sup>40</sup> Sterlin Holmesly, *HemisFair '68 and the Transformation of San Antonio*, (San Antonio, TX: Maverick Publishing Company, 2003), vii.

project.”<sup>41</sup> This article outlines well the initial renewal plans for San Antonio and how the fair helped the city to fulfill its goals for revitalization in the Central Business District (CBD). HemisFair ‘68 provides an excellent case study for the flawless integration of urban renewal and world’s fair residual use planning, because ~~the~~ urban renewal process provided the vehicle that made possible the land assembly and the clearance necessary to get the fair up on time” and ~~the~~ fair provided impetus that picked up the pace of public development action.”<sup>42</sup> The residual use plans for the site converts it into an urban park, extending the Works Progress Administration’s (WPA) 1930s river walk project with shopping and dining, which allowed for the park to become a tourist attraction. HemisFair ‘68 deserves more attention in the literature of world’s fairs in the United States, especially with the progression in the historic preservation movement to consider urban renewal projects as historic resources.

Just as HemisFair 68’s published literature exists mainly in architectural journals highlighting the experimental, temporary structures erected for the fair, published literature about Knoxville’s world’s fair is equally scant. However, instead of one book, Knoxville’s world’s fair is the subject of two books, which serve two separate purposes. The first book is part of the ~~Images of America~~” series, and its purpose is to provide a snapshot of the fair’s legacy through archival photographs and captions. Martha Rose Woodward’s *Knoxville’s 1982 World’s Fair* was published in 2009 and mainly celebrates the fair. However, Woodward includes a chapter entitled ~~The Problems~~,” which features photographs and political cartoons that criticize the fair’s inadequate accommodations and corrupt financial backers, and a chapter that briefly addresses the

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<sup>41</sup> Roger Montgomery, ~~HemisFair ‘68: Prologue to Renewal~~,” *Architectural Forum*, 129, no. 3 (October 1968): 85.

<sup>42</sup> *Ibid.*

fiasco of the world's fair site and the lack of plan for the residual uses of the site and its buildings. There is little information about the multitude of proposed plans from various firms around the world to turn the site into a mixed-use residential area, and there is no mention of how the current world's fair park was originally intended as a temporary solution. It also does not give justice to the United States Pavilion, the multi-level, cantilevered building that was intended to become an energy research center, but instead was razed after ten years of sitting empty due to the difficulties and expense its rehabilitation posed to prospective developers.

The second book about the Knoxville's world's fair is Joe Dodd's *World Class Politics: Knoxville's 1982 World's Fair Redevelopment and the Political Process*. This scathing criticism is two books combined to provide a more comprehensive study of the fair. The first book, *Expose: The Real Story Behind the World's Fair* was published in 1982, provides a first-hand account of the Knoxville International Energy Exposition, Inc.'s lack of public inclusion in both the planning process and the residual use of the fair site and its buildings. The second book, *The World's Fair and After*, was written in 1987 as an analysis of the Energy Expo '82's legacy. Both books were then published as one book with two parts in 1988.

There have been hundreds of world's fairs and expositions. As Greenhalgh states, "No individual text could do full empirical justice to this enormous phenomenon."<sup>43</sup> The legacy of world's fairs as a historic, aesthetic, and cultural resources are just now being addressed by preservationists, as indicated at the 2012 National Preservation Conference in Spokane, Washington with the inclusion of an educational session specifically about the preservation of world's fair parks and urban landscapes that resulted from a world's

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<sup>43</sup> Greenhalgh, Introduction, 11.

fair. The following chapter, Chapter 3, will address the use of world's fairs in post-World War II United States as a means for downtown revitalization. It will outline the federal Department of Housing and Urban Development's Urban Renewal program and what parts of the program allowed cities to use it for hosting world's fairs. It will also explain the International Bureau of Expositions (BIE) and its process and regulations for sanctioning world's fairs and expositions around the globe. Finally, Chapter 3 highlights the fairs in Seattle, Washington, San Antonio, Texas, and Spokane, Washington, and how these fairs' downtown revitalization efforts influenced each other and Knoxville's Energy Expo '82.

## CHAPTER 3

### UNITED STATES WORLD'S FAIRS AFTER WORLD WAR II AND THE ROLE OF URBAN RENEWAL

World's fairs cannot be discussed without an examination of the Bureau of International Expositions (BIE), its history, and its regulations. This is imperative because the BIE status determines the scale and planning of expositions in the post-World War II era. In light of these regulations, a discussion of each world's fair in the United States leading up to Knoxville's is also imperative, because each fair influenced subsequent fairs' planning and development. This chapter discusses the BIE and the pertinent aspects of its regulations that determine the scale and frequency of different fair categories. Also, this chapter outlines the Urban Renewal program in the United States and how it made hosting a world's fair more appealing for cities that needed large public works projects completed in a short amount of time. Finally, this chapter will highlight the fairs in Seattle, Washington, San Antonio, Texas, and Spokane, Washington, as each one is culturally, aesthetically, and historically significant in its own right, in addition to influencing, directly or indirectly, the planning and implementation of the world's fair in Knoxville, Tennessee.

#### *The Bureau of International Expositions*

The Bureau of International Expositions (BIE) was established in 1928 at a conference in Paris where thirty one countries signed ~~the~~ "the first international treaty governing the organization of international exhibitions." Known as the 1928 Convention of Paris or the International Convention of 1928, this agreement continues to govern the



regulatory framework for all World and International Expos.”<sup>44</sup> This treaty actually had its origins in 1912, when the German government hosted the Berlin Conference and initiated the search for interested governments to lay the foundations of regulations governing the planning and implementation of a world’s fair. However, the outbreak of World War I stymied the treaty, which could not be considered until over a decade later.<sup>45</sup> The BIE was then established to ensure adherence to the 1928 convention, and it started its regulatory powers in 1931.

According to Vicente Gonzalez Loscertales, Secretary General of the BIE, the International Convention of 1928 brought order to the world exhibitions’ situation by regulating their frequency and outlining the rights and obligations of the exhibitors and organisers.”<sup>46</sup> The BIE defines an exposition if it meets three requirements. First it must be a display which, whatever its title, has as its principal purpose the education of the public.”<sup>47</sup> To fulfill the first requirement, the exposition may exhibit the means at man’s disposal for meeting the needs of civilisation, or demonstrate the progress achieved in one or more branches of human endeavour, or show prospects for the future.”<sup>48</sup> Secondly, an exhibition or exposition is international” when more than one nation-state (in this case, country) participates. Thirdly, participants are comprised of exhibitors of states/countries, international organisations or exhibitors from countries which are not officially represented,” and those who are authorised in accordance with the regulations

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<sup>44</sup> History,” Official Site of the Bureau International des Expositions, <http://www.bie-paris.org/site/en/main/history.html>. (Accessed 1 November 2012).

<sup>45</sup> Ibid.

<sup>46</sup> Vicente Gonzalez Loscertales, Appendix A: The International Bureau of International Expositions,” *Encyclopedia of World’s Fairs and Expositions*, (Jefferson, NC: McFarland and Company, Inc., 2008), 412.

<sup>47</sup> Article I, *1928 Convention of Paris*, <http://www.bie-paris.org/site/en/main/convention.html>. (Accessed 1 November 2012).

<sup>48</sup> Article I, *1928 Convention of Paris*.

of the exhibition to carry on some other activity, in particular those granted concessions.”<sup>49</sup>

The 1928 International Convention has been amended twice since its adoption (1948 and 1966) in order to address exhibition frequency. According to Loscertales, the BIE has always differentiated between two types of expositions. At first, the BIE differentiated between fairs that had a theme of a general nature and those that had a more precise theme and therefore were “smaller, more economical” events.<sup>50</sup> With the 1965 overhaul of the Convention (signed in the early 1970s), though, the BIE recognized “the need for the exhibition medium to adapt to changing international circumstances,” to include faster rates of progress, decreased travel times, and the appearance of new countries.<sup>51</sup> These new regulations on frequency once again categorized exhibitions into two different types: registered and recognized.

Although the BIE regulations consist of almost forty articles, only the first ten articles need to be discussed at length for the purpose of this thesis, as they define the different categories of fairs and the scale and frequency of fairs. The latest regulations on exhibition frequency are found in Articles 2, 3, and 4 of the Convention. An event cannot be defined as an exposition if it lasts less than three weeks, is a fine arts exhibition, or is commercial in nature.<sup>52</sup> Articles 3 and 4 differentiate between “registered” and “recognized” expositions. To be a “registered” exposition, the event must be at least six weeks long, but no more than six months. The registered expositions are long, expensive, and extravagant. The acreage required to be a registered exposition

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<sup>49</sup> Ibid.

<sup>50</sup> Vicente Gonzalez Loscertales, 412.

<sup>51</sup> Ibid.

<sup>52</sup> Article 2, *1928 Convention of Paris*

is unlimited and the participating states design and build their own pavilions on site. They are known as “universal” expositions, or Category I expositions, and promote universal themes. Also, the rules governing the exhibition buildings used by the participating States shall be laid down in the general regulations of the exhibition.” All taxes are paid by the inviting state, and the BIE will only reimburse “services actually rendered in accordance with the regulations.”<sup>53</sup> The last step to being a “registered” exhibition goes back to frequency. As of 1995, the official, standard interval between two registered exhibitions became five years.<sup>54</sup>

Article 4 outlines the requirements for “recognized” exhibitions, which are smaller in scale and more specific in theme. For the exhibition to be recognized by the BIE, it must be more than three weeks, but no more than three months. The exhibitions must illustrate a definite theme with a total surface area not to exceed 25 hectares (1600 acres).<sup>55</sup> The organizer must construct the premises for the participating States, and the organizer cannot charge rents, taxes, or expenses “other than those representing services rendered.”<sup>56</sup> The largest space allocated for a recognized exhibition is 1,000 [sic] square meters, though the BIE may “authorize a derogation from the requirement that premises be allocated free of charge if the economic and financial situation of the organizing State justifies it.”<sup>57</sup> Finally, the BIE will only authorize one “recognized” exhibition to occur between two “registered” exhibitions.

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<sup>53</sup> Article 3, *1928 Convention of Paris*.

<sup>54</sup> *Ibid.*

<sup>55</sup> Article 4, *1928 Convention of Paris*.

<sup>56</sup> *Ibid.*

<sup>57</sup> *Ibid.*

	<b>REGISTERED</b>	<b>RECOGNIZED</b>
<b>FREQUENCY</b>	Every 5 years	Between 2 registered exhibitions
<b>MAXIMUM DURATION</b>	6 months	3 months
<b>PARTICIPATION</b>	States, International Organizations, Civil Societies, companies	States, International Organizations, Civil Societies, companies
<b>CONSTRUCTION</b>	Participants design and build their pavilions	The organizers provide space at the participants' disposal
<b>SITE SIZE</b>	Unlimited	25 ha (1600 acres) maximum

Articles 2, 3, 4 and 5 of the Convention make up Part II which covers the general rules. Part III outlines the procedure for application and registration of expositions to the BIE for consideration and approval and consists of Articles 6, 7, 8, and 9. The government of a "Contracting Party" must submit an application for registration or recognition to the BIE.<sup>59</sup> Whichever office of the government responsible for international relations must submit this application. The BIE has the final say on the reserved dates and duration, the documents to be submitted, and the amount paid for filing. Finally, registration or recognition is granted only if exhibition "fulfills the conditions of this Convention of the regulations laid down by the Bureau."<sup>60</sup> Article 7 outlines the procedure when two or more countries compete for the registration or

<sup>58</sup> "Rules," *Official Site of the Bureau International des Expositions*, <http://www.bie-paris.org/site/en/main/rules.html>. (Accessed 1 November 2012). It is interesting to note that the BIE will grant recognition to the Milan Triennial Exhibition of Decorative Arts and Modern Architecture because of historical precedence and only if it retains its original features (though the Convention fails to outline what the precedence or the original features are). The BIE will also grant recognition to A1 horticultural exhibitions as long as they have the approval of the International Association of Horticultural Procedures and if there is an interval of at least two years between such exhibitions in different countries and at least ten years between events in the same country." This is outlined in Article 4 of the Convention.

<sup>59</sup> Article 6, *1928 Convention of Paris*.

<sup>60</sup> *Ibid.*

recognition of an exposition and they cannot reach agreement,” and then the BIE gives priority in this case to those countries who are contracted members of the BIE.<sup>61</sup> Article 8 outlines how to make changes to an already-approved application in regards to changing the date of the exposition.<sup>62</sup>

Finally, Article 9 outlines the behavior of those states contracted with the BIE if an exposition is not registered or recognized by the BIE. These states are to refuse participation and patronage, but they are also free to not take part in a registered or recognized exposition.<sup>63</sup> These states are also expected to use whatever means it considers most appropriate to act against the organisers of false exhibitions or exhibitions to which participants might be fraudulently attracted by false promises, notices or advertisements.”<sup>64</sup> In other words, in order for a city to host an exhibition, that city’s government must make the application. However, recognition and registration is given priority to those governments who have signed the Convention. Also, those contracted governments are expected to only participate in officially registered or recognized expositions and to discourage participation in those that do not have official BIE status.

The United States’ involvement in the BIE has been erratic and precarious. The BIE manages a competitive process where countries/cities submit a bid to the BIE to host in a given year. Preference is always given to BIE-member nations, though non-member nations also compete to host exhibitions. The benefit of hosting an international exhibition is exclusivity anywhere in the world for a particular period of time.” A BIE-sanctioned exhibition does not guarantee participation by other member countries;

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<sup>61</sup> Article 7, *1928 Convention of Paris*.

<sup>62</sup> Article 8, *1928 Convention of Paris*.

<sup>63</sup> Article 9, *1928 Convention of Paris*.

<sup>64</sup> *Ibid*.

however, ~~its~~ members are prohibited from taking part in any exposition *not* approved by the Bureau.”<sup>65</sup> Thus, endorsement by the BIE ~~has~~ always been a key factor in the participant recruitment efforts of any sponsor.”<sup>66</sup> The BIE does, though reluctantly, extend its privileges to exposition organizers in nonmember nations ~~willing~~ to abide by its rules and procedures.”<sup>67</sup> The United States government refused membership in the BIE until 1969 due to the BIE’s “hands off” posture regarding expositions in the U.S. As a result, ~~previous~~ exposition sponsors in the U.S. who were successful in obtaining BIE approval (the New York World’s Fair of 1939; Century 21 in Seattle in 1962; Hemisfair in San Antonio in 1968) had to do so on their own.”<sup>68</sup> Some cities who obtained BIE approval later failed to carry out their projects (Long Beach, California in 1966 and Philadelphia, Pennsylvania in 1976).<sup>69</sup> Other cities, most notoriously New York City (New York World’s Fair 1964-65) blatantly ignored the BIE, ~~leaving~~ the American “track record” with that organization a spotty one at best.”<sup>70</sup>

Before 1968, the United States government had to prove to the BIE that it was committed to hosting a fair according to BIE regulations. This required the United States Congress to develop and adopt its own legislation regarding governmental participation and cooperation when a city wants to host a world’s fair. As a result:

one of the first pieces of business for any embryonic exposition sponsor was to petition the Congress directly to provide authority and funds for a U.S. pavilion. If adequate support could be generated through the intercession of state and regional Senators and Representatives, the end result was money appropriated for

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<sup>65</sup> J. William Nelson, Director, Office of Expositions, “Study For the U.S. Commissioner General On The Role Of The Federal Government In ~~Expo~~ 74” (Summer 1970 Through June 1973),” 23 October 1974, 2, *1982 Knoxville International Energy Exposition Collection*, MS.2071, University of Tennessee Libraries, Special Collections, Knoxville.

<sup>66</sup> Nelson, “Study for the U.S. Commissioner General,” 2.

<sup>67</sup> Ibid.

<sup>68</sup> Ibid.

<sup>69</sup> Ibid.

<sup>70</sup> Ibid.

the construction of the U.S. Pavilion. By virtue of having approved the presence of the U.S. Government at a developing exposition, the Congress had also – in effect – give tacit sanction to the exposition itself.<sup>71</sup>

San Antonio, Texas's HemisFair '68 in 1968 helped to solidify the United States government's understanding of ~~the~~ importance of this implication."<sup>72</sup> By the time Spokane, Washington hosted its world's fair in 1974, Congress had developed and adopted its own application process for host cities hoping to receive governmental support. Otherwise, the cities were left to their own devices to convince the BIE to sanction their fair without the extra funding for a U.S pavilion.

#### *Civic Improvements, Urban Renewal, and World's Fairs*

The purpose for hosting a world's fair has shifted over the last 150 years; however, fairs always been a great tool for a city to use in order to redefine itself and make improvements to the city's infrastructure. The 1893 Columbian Exposition in Chicago is one of the best examples of this trend. It not only helped to bring needed civic improvements, but also helped to solidify Chicago as a viable city in the mid-western United States. In fact, the Columbia Exposition helped to spawn the City Beautiful movement which resulted in urban planning becoming a profession in the United States. Daniel Burnham's ~~White City~~" helped steer the planning profession in America on a path that focused on civic beauty and order through building parks, civic centers, and boulevards. The City Beautiful Movement emphasized the health and welfare of the city and its residents and helped to catapult world's fairs as a means for civic improvement.<sup>73</sup> This trend continued throughout the twentieth century, as world's fairs became a stage for

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<sup>71</sup> Nelson, "Study for the U.S. Commissioner General," 1.

<sup>72</sup> Ibid.

<sup>73</sup> James Peters, "After the Fair: What Expos Have Done for Their Cities," *Planning*, 48, no. 7 (July-August 1982): 13.

architects and planners to present to the world their utopian ideas of city living. At the 1939 World's Fair in New York City, the Futurama exhibit housed the City of Tomorrow, and the Seattle world's fair in 1962 provided its visitors with a look into the space-age conveniences that the world would have by the twenty-first century.

Regardless of the date of the world's fair, host cities were creating fairgrounds on which to hold the world's fair, thus actively carrying-out visions for development at the site on which the fair was held. Part of this planning included what are known as "residuals," or redevelopment plans for the buildings and site after the end of the fair. Some of the most common "residuals" have included model cities, museums and parks, gathering places, college campuses, and improvements to public works. The advantage to hosting a world's fair is that public works and city infrastructure improvements can be completed in a shorter amount of time than they would normally. Some of these civic improvements were extremely successful, such as Riverfront Park in Spokane (1974), San Diego's Balboa Park (1915 and 1953), and the campus improvements to the University of Washington (1909).<sup>74</sup> In the context of world's fairs after World War II, civic improvements continue to be a driving factor for cities in the United States to host world's fairs. Urban renewal was to post-World War II America what the City Beautiful was to the turn of the twentieth century. Just as the City Beautiful movement used improved infrastructure and sanitation in shaping the layout of cities in the early twentieth century, urban renewal used the eradication of "slums" and "blight" in urban areas to reshape cities as a means of ameliorating the housing shortage during the Great Depression and after World War II.

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<sup>74</sup> Peters, "After the Fair," 13-19.



With the increased domestic production during and in the wake of World War II, the federal government once again addressed the shortage of housing that had ensued since the Great Depression and the passage of the *Housing Act of 1937*. The slums had not disappeared, but the population boomed in the late 1940s. Congress passed the *Housing Act of 1949*. This Act still emphasized that increased housing and the elimination of “substandard and other inadequate housing through the clearance of slums and blighted areas” not only provided a “home and suitable living environment for every American family,” but also contributed “to the advancement of the growth and redevelopment of communities and to the advancement of the growth, wealth, and security of the Nation.”<sup>75</sup> This language adds another facet to United States housing policy: urban growth and expansion through slum and blight elimination was a national defense issue. How was this defense goal to be accomplished? The government proclaimed that private enterprise would “be encouraged to serve as large a part of the total need it can” and mandated federal assistance be used where feasible in order to “serve as large a part of the total need as it can.”<sup>76</sup> Section 2 gave the “appropriate local public bodies” the authority to “undertake positive programs of encouraging and assisting the development of well-planned, integrated residential neighborhoods, the development and redevelopment of communities, and the production, at lower costs, of housing of sound standards of design, construction, livability, and size for adequate family life.”<sup>77</sup> If a locality’s slum clearance, community development and redevelopment, and housing

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<sup>75</sup> Sect.2 of the *United States Housing Act of 1949*, Pub. L. 171-81, Statute 1070 (1949).

<sup>76</sup> *Ibid.*

<sup>77</sup> Title I of the *United States Housing Act of 1949*, Pub. L. 171-81, Statute 1070 (1949); please note that “integrated” here does not imply a mixture of races in the same area. *Brown v. The Board of Education of Topeka* passes in 1954, five years after the *Housing Act of 1949*, but the same year as the 1954 amendments to the *Housing Act of 1949* and *Berman v. Parker*.

needs were not being met solely through private enterprise, then the use of government funding could be used to provide adequate housing for urban and rural nonfarm families with incomes so low that they are not being decently housed in new or existing housing.”<sup>78</sup>

The most important aspect of Title I of the *Housing Act of 1949* is that it made slum clearance and redevelopment a locally initiated, planned, and managed activity for which the government provided assistance. It also gave the locality the authority to “condemn” a property through eminent domain in accordance with an approved urban redevelopment plan. The federal government did not mandate that the cleared slum had to be reused for housing. In fact, the law states that land acquired or held by the local public agency can be sold or leased to private developers as long as those developers “devote such land to the uses specified in the redevelopment plan for the project area.” The local government only needs to provide a “feasible method” for the “temporary relocation of families displaced from the project area” to a “decent, safe, or sanitary” dwelling place in the vicinity of the project area or in another area close to public and commercial facilities “at rents or prices within the financial means of the families displaced from the project area.”<sup>79</sup>

The only thing that curbed local governments’ indiscriminate clearance of slums was Section 105 (d) of Title I mandating “that there shall be no demolition of residential structures in connection with the project assisted under contract prior to July 1, 1951, if the local governing body determines that the demolition thereof would reasonably be

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<sup>78</sup> Sect.2 of the *United States Housing Act of 1949*, Pub. L. 171-81, Statute 1070 (1949).

<sup>79</sup> Section 105 (c), Title I of the *United States Housing Act of 1949*, Pub. L. 171-81, Statute 1070 (1949).

expected to create undue housing hardship to the locality.”<sup>80</sup> It is important to note that federal assistance was only available for acquiring and clearing the slum area and redevelopment site preparation.<sup>81</sup> The government did not provide assistance for “building construction on the cleared sites” except in the form of a temporary loan for schools or other public facilities. Thus, the decision to actually build housing for those displaced by slum clearance was up to the locality and submitted as part of the plan. However, by requiring that the local plan only provide a “feasible method” for relocation, the legislation released the local governing agency from all responsibility in ensuring that those people displaced by slum clearance were actually placed in a “decent, safe, or sanitary” environment. If the relocation plan was adequate on paper, then approval became inevitable.

Knowing the goals and process of the Urban Renewal program in the United States is important to the history of world’s fairs in the country because it changed the way cities executed their master plans. As a result, Seattle, San Antonio, New York City, Spokane, and Knoxville saw downtown areas subject to urban renewal as the ideal places for locating their world’s fairs because these places could be included in cities’ overall master plans and receive federal assistance for carrying out that plan. Ironically, many of these cities based their world’s fair plans on suburban planning models, such as theme parks and shopping malls. Part of this is due to the fact that the world’s fairs in the United States after World War II were merely “recognized,” second category fairs that required the host city to provide the land and exhibit space for those countries

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<sup>80</sup> Section 105 (d), Title I of the *United States Housing Act of 1949*, Pub. L. 171-81, Statute 1070 (1949).

<sup>81</sup> U.S. Senate, *Housing Act of 1949: Summary of Provisions of the National Housing Act of 1949*, Committee on Banking and Currency (Washington D.C.: United States Government Printing Office, 1949): 3639.

participating in the fair. The individual world's fairs must be discussed within the contexts of the Bureau of International Expositions and each city's individual downtown revitalization goals for hosting a world's fair.<sup>82</sup>

*Seattle's Century 21 Exposition: "The model for American world's fairs, as long as they lasted."*<sup>83</sup>

Seattle's world's fair took place in 1962 with a theme of science, technology, and the prospects of outer space. Its name was the Century 21 Exposition, and it was the first world's fair to be held in the United States after World War II. It is also known as the Cold War World's Fair and the Space Age World's Fair because the United States banned communist states' participation and because its planning occurred simultaneously with the launching of *Sputnik I* in the early 1950s. The Century 21 Exposition marked the turn from "sprawling" expositions in major cities to more "focused events in smaller cities in the southern and western states." Seattle was the first city to use a world's fair for urban renewal purposes and to foster outside investment in the city. Boeing's plant on the outskirts of the city had exacerbated suburban flight; thus, Seattle used the world's fair to "counteract the effects of suburban development on downtown, particularly on retail trade and property values."<sup>84</sup> As a result, fair organizers located the fair near the central business district in an attempt to "direct greater attention and resources to a part of the city that seemed to be getting passed by."<sup>85</sup>

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<sup>82</sup> The 1964-65 world's fair will not be discussed individually due to its size and the fact that it was not a BIE sanctioned fair. Although it was used to further Robert Moses's plans for improving New York City, it was actually a continuation of the Moses plan for which the city hosted the 1939 World's Fair. Any discussion of Moses's plan in detail would require the discussion of two separate world's fairs, for which this thesis's scope is too small.

<sup>83</sup> John M. Findlay, "Seattle 1962," *Encyclopedia of World's Fairs and Expositions*, (Jefferson, NC: McFarland and Company, Inc., 2008), 329.

<sup>84</sup> Findlay, "Seattle 1962," 323.

<sup>85</sup> *Ibid.*



Property of MSCUA, University of Washington

**Figure 1: Aerial view of grounds, Century 21 Exposition, 1962, Seattle Photograph Collection, University of Washington Libraries, Special Collections Division**



Figure 2: Map of Seattle World's Fair



Property of Special Collections, University of Washington Libraries

**Figure 3: Aerial view of downtown Seattle with Century 21 Exposition fairgrounds outlined in red, 1960, Seattle Photograph Collection, University of Washington Libraries, Special Collections Division**

Originally titled “Festival of the West,” Seattle’s world’s fair eventually became the Century 21 Exposition due to the Soviet Union’s launching of *Sputnik I* in the mid-1950s. The sudden international political situation in regards to space travel and exploration changed the original vision of the fair as a means to counteract suburbanization; Boeing’s presence caused the fair to —become, among other things, a monument to the aerospace industry.”<sup>86</sup> As a result, science and space became the major attraction for greater United States government participation, and attracted international attention, especially when the Bureau of International Expositions sanctioned the fair as a recognized, Category II exhibition. This designation meant that Seattle was expected to provide the infrastructure needed for hosting exhibits; the city could build one larger

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<sup>86</sup> Findlay, “Seattle 1962,” 324.

center in a more concentrated area instead of having to provide acreage for each country/participant to design and build its own pavilion.<sup>87</sup> Fair planners then adopted an agenda for downtown Seattle. John M. Findlay, professor of American History at the University of Washington specializing in the American West and author of *Magic Lands: Western Cityscapes and American Culture After 1940*, has written extensively about Seattle's 1962 exposition.<sup>88</sup> According to his article, "The Off-Center Seattle Center: Downtown Seattle and the 1962 World's Fair," fair planners wanted to reduce the growing regional dependence on suburban aerospace plants, "reinforce the people's attachment to the central business district" for the future.<sup>89</sup> Planners and city leaders viewed Century 21 as a means with which to accomplish these goals; it was "the key to a series of efforts to sustain economic expansion while channeling urban growth into directions that would better serve their interests."<sup>90</sup>

The Century 21 Exposition was located approximately one mile north of the central business district on a seventy-four-acre site in the Warren neighborhood. This location was just outside the central business district, but the specific neighborhood was chosen because it included land and structures that were already owned by municipal and state governments.<sup>91</sup> It also helped that the Warren neighborhood showed signs of blight, which lent credence to planners' claims that development for a fair represented a

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<sup>87</sup> Findlay, "Seattle 1962," 324.

<sup>88</sup> Findlay, *Magic Lands: Western Cityscapes and American Culture after 1940*, (Berkeley, CA: University of California Press, 1993). Findlay dedicates an entire chapter of *Magic Lands* to the Seattle's 1962 world's fair its relationship to Seattle's downtown and its suburbs in the early 1960s.

<sup>89</sup> Findlay, "Seattle 1962," 323-324; John M. Findlay, "The Off-Center Seattle Center: Downtown Seattle and the 1962 World's Fair," *Pacific Northwest Quarterly*, 80, no. 1 (January 1989): 6-7. *JSTOR* <http://www.jstor.org/stable/40491017>. (Accessed 30 August 2012).

<sup>90</sup> Findlay, "The Off-Center Seattle Center," 7.

<sup>91</sup> Findlay, "Seattle 1962," 323-324; "The Off-Center Seattle Center," 5.



kind of urban renewal.”<sup>92</sup> Local supporters of the fair also saw it as a means to improve urban needs and to “experiment with urban renewal.”<sup>93</sup> The ultimate goal of the fair was “to improve the appearance of downtown, protect property values, and prevent the spread of ‘slum conditions’ that threatened to make Seattle like eastern cities.”<sup>94</sup> Some of these signs were higher crime and unemployment rates, fewer owner-occupied homes, older and more unattractive housing, and elderly and low-income residents with fewer school-aged children.<sup>95</sup> The slightly decentralized location brought the monorail, a new form of urban transit that connected the fair to the central business district.

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<sup>92</sup> Findlay, “Seattle 1962,” 324.

<sup>93</sup> Findlay, “The Off-Center Seattle Center,” 5.

<sup>94</sup> Ibid.

<sup>95</sup> Ibid.



**Figure 4: Warren Neighborhood, from John Findlay, "Off-Center Seattle Center: Downtown Seattle and the 1962 World's Fair," *Pacific Northwest Quarterly*, 80, no. 1 (January 1989): 8.**

After the fair ended, the fairgrounds became a district known as Seattle Center, envisioned to provide Seattle with a “cultural infrastructure” for the performing and visual arts and professional sports.<sup>96</sup> Unfortunately, it fell short of the expectations planned for its residual use. For example, several of the structures built were intended to become permanent buildings meant to last until 2000. However, by 1989, Seattle Center had become rundown or obsolete. Findlay blames the failure of Seattle Center on the

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<sup>96</sup> Findlay, “Seattle 1962,” 328.

original design plan and those responsible for it. City leaders envisioned the fair as a catalyst for attracting suburbanites back into the central business district. Unfortunately, the leaders brought in experts from Disney, planners who were just off the success of Disneyland in Anaheim, California. Disneyland's plan was based on a suburban model, not an urban one, and they used this same form of suburban planning for a fair located in urban Seattle. Findlay claims that, although the fair was urban in scale, it failed to fulfill the intent to rejuvenate downtown investment because the fair's plan did not follow the traditional urban form of the downtown Seattle area; —the district was shaped . . . along the guidelines suggested by such suburban models as the shopping center and the theme park.”<sup>97</sup> The result was a fairgrounds area that was —neither in need of nor inclined toward a merger with the central business district.”<sup>98</sup> The irony of the Century 21 Exposition lies in the fact that, although it marked the turn from —sprawling expositions” in major cities, it used a —sprawling” planning model: the suburban shopping mall. As Findlay points out, the suburban model attracted a suburban crowd, resulting in a second, less central Seattle Center than the CBD.<sup>99</sup>

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<sup>97</sup> Findlay, —The Off-Center Seattle Center,” 8.

<sup>98</sup> Findlay, —The Off-Center Seattle Center,” 9.

<sup>99</sup> Findlay, —The Off-Center Seattle Center,” 2.



Property of Special Collections, University of Washington Libraries

**Figure 5: Science Pavilion arches and the World's FAir Information Booth (right), Seattle Center, 1963, Seattle Photograph Collection, University of Washington Libraries, Special Collections Division**

Of course, the most iconic building from the Century 21 Exposition was the Space Needle, which has become the internationally recognized symbol for Seattle. The Space Needle was designed by John Graham and Co. and Victor Steinbrueck and was originally known as the “Space Cage” because it utilized a “futuristic” architectural style.<sup>100</sup> Made of concrete and steel, the Space Needle stands 605 feet tall, while its foundation is thirty feet deep and 120 feet wide. It was located on the only portion of the fairgrounds that was not owned by the city, thus allowing it to defy the height restrictions of the other exhibits

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<sup>100</sup> Findlay, “Seattle 1962,” 325.

and pavilions.<sup>101</sup> It only took eight months to construct, between April and December of 1961, and it offered visitors a revolving restaurant at the top.<sup>102</sup>



Property of Museum of History & Industry, Seattle

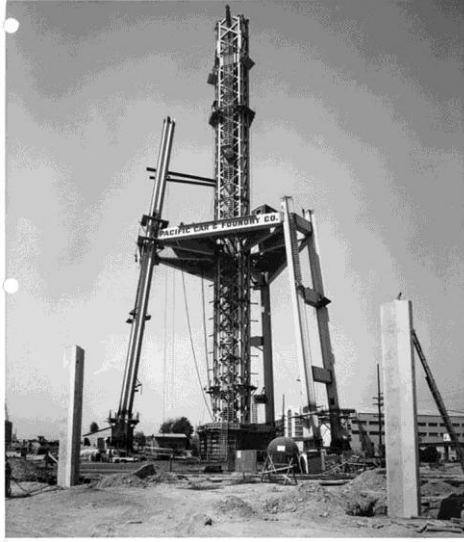
**Figure 6: Image 2005.6.9, Robert Dudley, Space Needle Foundation Under Construction, June 6, 1961, Museum of History and Industry Photograph Collection, University of Washington Libraries, Special Collections Division**

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<sup>101</sup> Caption for the photograph, —Century 21 Exposition (Seattle, Wash.), design for the Space Needle, cross section of restaurant,” Architecture Collection, University of Washington Libraries, Special Collections Division (accessed 10 March 2013).

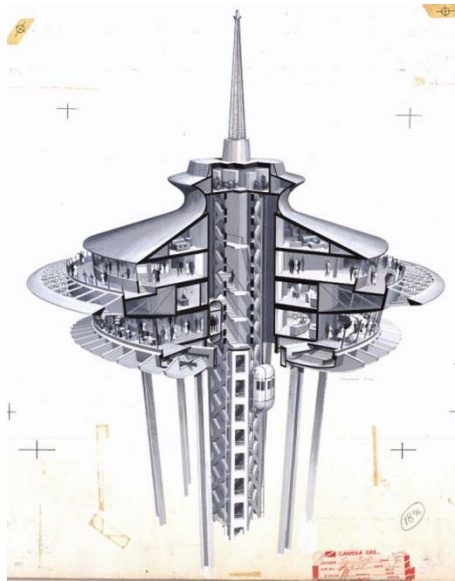
[http://content.lib.washington.edu/cdm4/item\\_viewer.php?CISOROOT=/ac&CISOPTR=1002&CISOBX=1&REC=7](http://content.lib.washington.edu/cdm4/item_viewer.php?CISOROOT=/ac&CISOPTR=1002&CISOBX=1&REC=7)

<sup>102</sup> Findlay, —Seattle 1962,” 325.



Property of Museum of History & Industry, Seattle

**Figure 7: Roger Dudley, Core and Legs of the Space Needle Under Construction, August 14, 1961, Museum of History and Industry Photograph Collection, University of Washington Libraries, Special Collections Division**



**Figure 8: John Graham and Company, Century 21 Exposition (Seattle Wash.), design for the Space Needle, Cross Section of Restaurant, Architecture Collection, University of Washington Libraries, Special Collections Division**



**Figure 9: Alweg Monorail Train En Route Below the Space Needle during the Century 21 Exposition, Seattle, 1962, Seattle Digital Collection, University of Washington Libraries, Special Collections Division**

*HemisFair '68: San Antonio's Successful Combination of Public Works and Private Investment*

HemisFair '68 was the official name of the 1968 World's Fair held in San Antonio, Texas.<sup>103</sup> It marked the first international exposition to be held in the southwestern United States, and the theme was —“Influence of Civilizations in the Americas,” which served two purposes: to celebrate the various ethnic groups that settled the western hemisphere and the 250<sup>th</sup> anniversary of San Antonio's founding in 1718. The site was ninety two acres along the San Antonio River and only a few blocks from the Paseo del Rio, the city's river and walkway system constructed as a Works Progress Administration project in the 1930s. HemisFair '68 ran for five months between April and September, and provided much needed public works improvements to a downtown area whose city felt as though it had been stagnating since having lost its position as the largest city in Texas in the 1930 census.<sup>104</sup>

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<sup>103</sup> —“HemisFair” is a very creative play on the word —hemisphere.”

<sup>104</sup> Sterlin Holmesly, *HemisFair '68 and the Transformation of San Antonio*, (San Antonio, TX: Maverick Publishing Company, 2003), 1; San Antonio marks the second city in the Post-World War II era to host a fair in order to help an inferiority complex.





**Figure 10: View of Hemisfair '68 in Downtown San Antonio, from Roger Montgomery, "Hemisfair '68: Prologue to Renewal," *Architectural Forum* (October 1968): 84.**

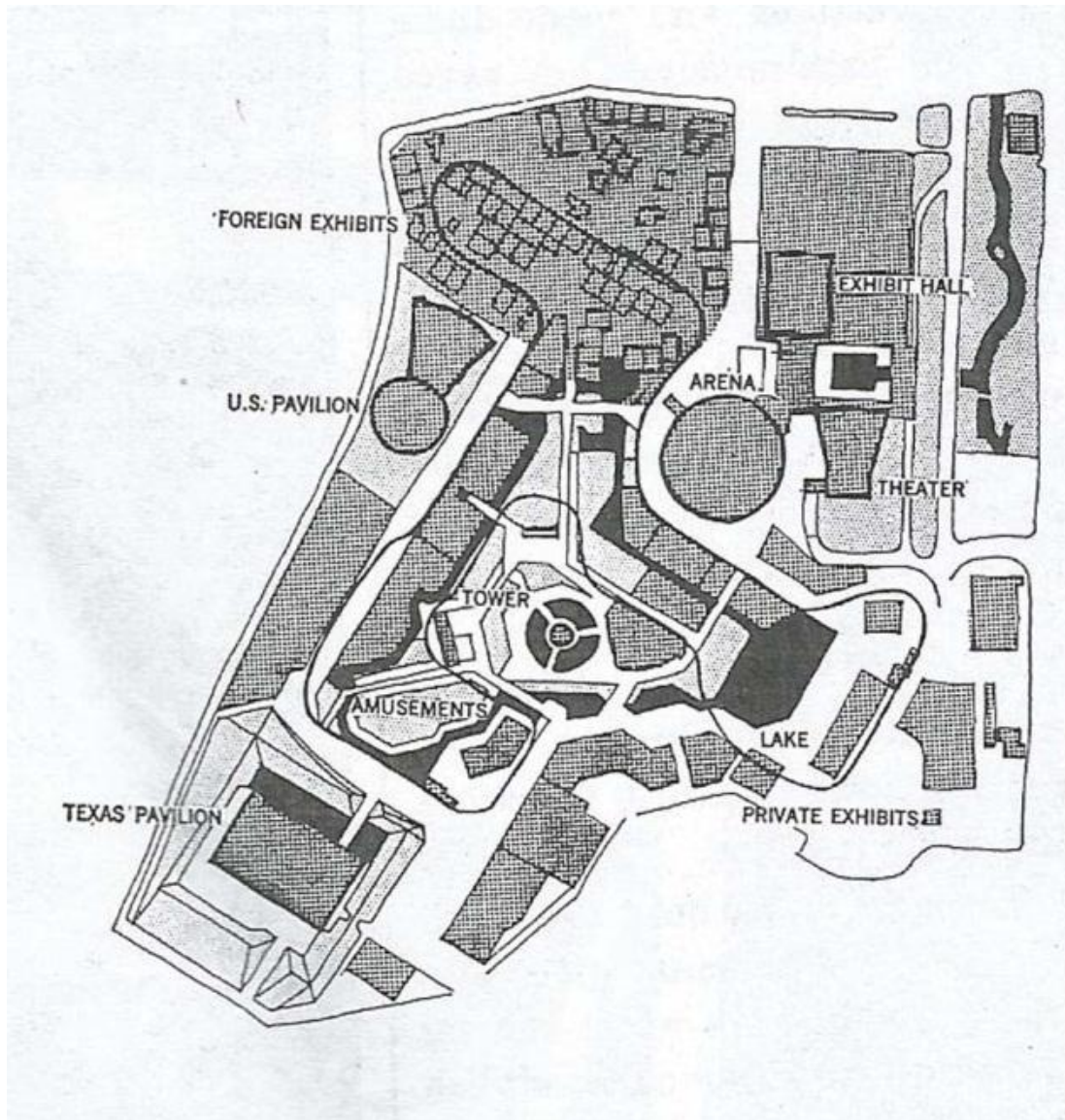


Figure 11: Detail of Hemisfair Plan, from Roger Montgomery, "Hemisfair '68: Prologue to Renewal," *Architectural Forum*, 129, no. 3 (October 1968): 85.

HemisFair '68 replaced a rundown neighborhood close to the Paseo del Rio, the city's river walk, in the heart of downtown San Antonio. Located on the east side of the central business district (CBD), the area redeveloped for the fair was considered blight; thus, the city was able to qualify for funding under the Federal Urban renewal program to

build an exhibit hall-arena-theater complex.”<sup>105</sup> In a previous planning study of downtown San Antonio, this area located southeast of the CBD had previously been identified as dilapidated and earmarked for clearance and renewal. It provided the perfect setting for the fair because of its proximity to the core’s central anchors: the largest department store, the horseshoe bend of the San Antonio River and its Paseo del Rio and La Villita, (a carefully preserved fragment of the original Spanish Settlement”) and the Alamo (the city’s largest tourist attraction).<sup>106</sup> The vision for the fair’s site plan was a Tivoli Garden-type of setting in the middle of downtown San Antonio that would eventually provide permanent development dedicated to the amusement, edification, and education of both citizen and visitor.”<sup>107</sup> The main objective was an open-space, pedestrian link for the three important spaces already existing in the central business district—the Alamo Plaza, La Villita and Main Plaza, the latter closely linked to Military Plaza which contains the City Hall and the Spanish Governor’s Palace.”<sup>108</sup>

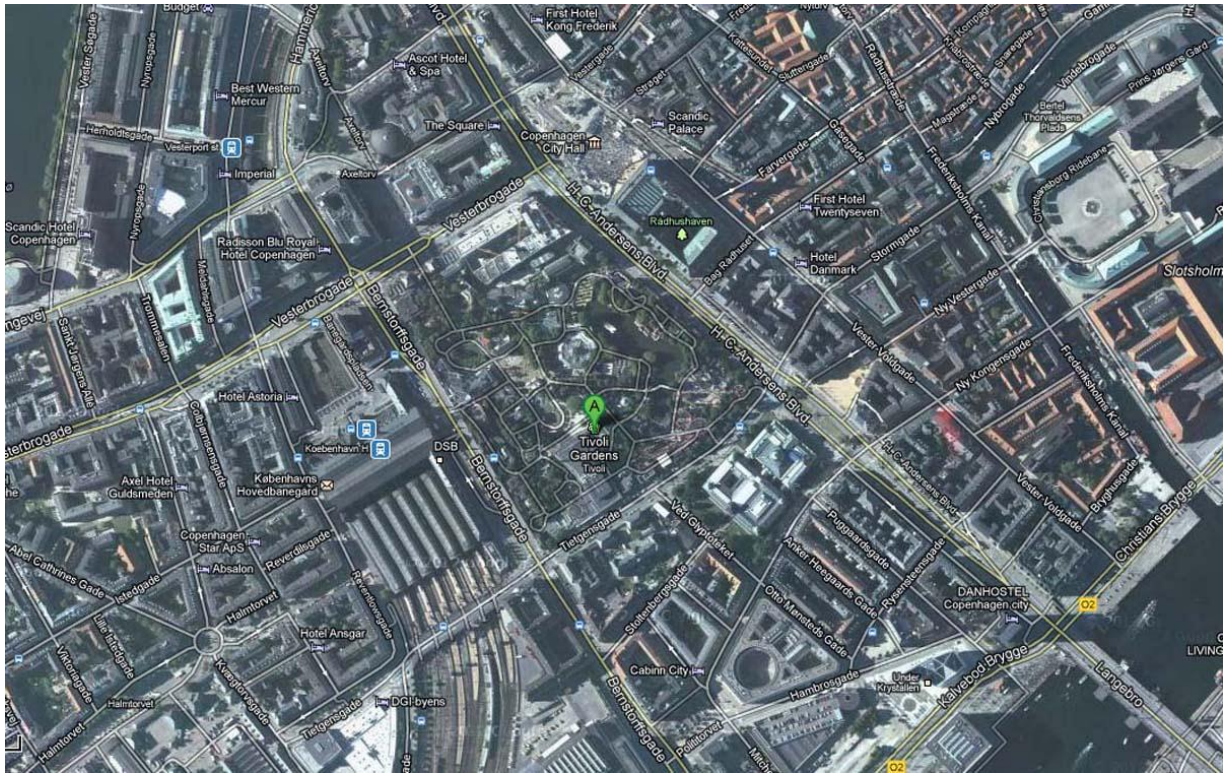
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<sup>105</sup> Holmesly, *HemisFair '68*, 1.

<sup>106</sup> Roger Montgomery, “HemisFair ‘68: Prologue to Renewal,” *Architectural Forum*, 129, no. 3 (October 1968): 85.

<sup>107</sup> Montgomery, “HemisFair ‘68: Prologue to Renewal,” 85.

<sup>108</sup> Montgomery, “HemisFair ‘68: Prologue to Renewal,” 85.



**Figure 12: Setting of Tivoli Gardens in Downtown Copenhagen, Denmark**



Figure 13: Tivoli Gardens, Copenhagen, Denmark, from Tivoli website, <http://www.tivoli.dk/en/>

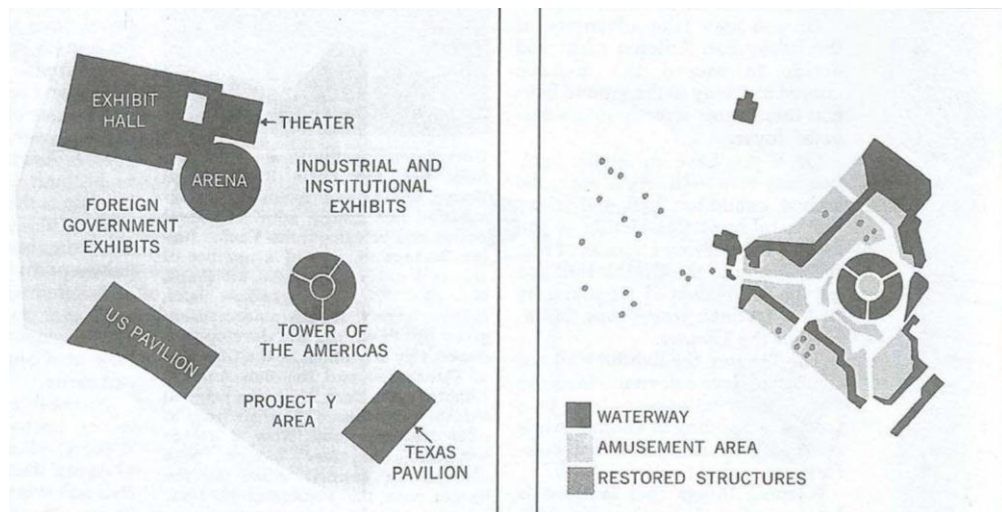


Figure 14: Hemisfair '68 Site Layout, from MacKay, "Hemisfair '68 and the Paseo del Rio," AIA Journal (1968): 55.

Because of the close proximity to the Alamo and the celebration of 250 years of local history as expressed in La Villita, San Antonio took into consideration its more historic resources and restored two-dozen historic homes, which highlighted the city's picturesque character."<sup>109</sup> The thirty historic buildings that were restored were systematically chosen more for "evoking nostalgic charm of early San Antonio" than they were because of their local historical significance.<sup>110</sup> Those homes that were of utmost importance historically were moved to another location and then restored at the new setting. For example, the O. Henry House was moved and restored on the grounds of the Lone Star Brewery.<sup>111</sup> Three other houses, the Navarro, Ruiz, and Twohig, were moved and restored at the Witte Museum.<sup>112</sup> Not all historic buildings were leveled or even moved. Because the BIE categorized HemisFair as a "recognized or second category fair, San Antonio had to provide the exhibit space for the countries and exhibitors participating in the fair. As a result, San Antonio's first school building was used as HemisFair headquarters and the McAllister home was used for the Bell Telephone Company's exhibit space. Another building, the Schultze Store housed the Humble Oil and Refining Company's exhibit. These buildings provide good examples of urban renewal funding being used for historic preservation purposes, even though those moved buildings have since taken on another level of significance because of their relocation.

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<sup>109</sup> Holmesly, *HemisFair '68*, 1; La Villita was the site of San Antonio's original settlement, and then at the time of the fair had been a residential neighborhood for 175 years.

<sup>110</sup> James L. MacKay, "HemisFair '68 and Paseo del Rio '38," *AIA Journal*, 49 (April 1968): 55.

<sup>111</sup> MacKay, 55.

<sup>112</sup> *Ibid.*

Another public works project that the fair allowed for was the expansion of the Paseo del Rio. HemisFair designers and planners understood the importance of the river to the city's history. As a result, they cut a quarter mile channel to connect the existing river walk area to the lagoon that was in the heart of the convention center. This extended the river under four streets —and thus required as many bridges.”<sup>113</sup> This new path takes the visitor from —national and regional architecture, gas lights and sidewalk cafes, to the frankly meant-to-impress arches, curving stairways and murals of the imposing buildings surrounding the Convention Center lagoon.”<sup>114</sup>

HemisFair '68 took several a cues from Seattle's Century 21 Exposition. First, the HemisFair organizers developed its own answer to the Space Needle: The Tower of the Americas. According to Boone Powell, the Tower's project architect, the Tower was 750 feet tall, and —probably was the tallest observation tower in the Western Hemisphere at that time.”<sup>115</sup> It rose from the central plaza, —the lagoon-encircled Island of Fiesta.”<sup>116</sup> Like the Space Needle, the Tower of the Americas provided visitors with an observation deck and restaurant, and it was made out of concrete and steel.<sup>117</sup> The first twenty-two feet of the tower included twelve buttresses, while the next 526 feet were constructed of concrete and steel. The construction of the second portion required a schedule of eight hours per day for steel work and sixteen hours per day for concrete work. The twelve cantilevered buttresses supported the tophouse, which provided the observation deck and restaurant. Secondly, HemisFair offered visitors several options for navigating the

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<sup>113</sup> Ibid, 52.

<sup>114</sup> Ibid, 53.

<sup>115</sup> Boone Powell, —*Building the Tower of the Americas*,” from Holmesly's *HemisFair '68 and the Transformation of San Antonio*, (San Antonio, TX: Maverick Publishing Company, 2003), 12.

<sup>116</sup> MacKay, 52.

<sup>117</sup> Ibid, 53.

fairgrounds. If they did not want to walk along the bridges and elevated walkways radiating from the tower,<sup>118</sup> then visitors could take the mini-monorail to get a leisurely overview” of the fair, or they could accomplish the same task by taking a gondola cruise on the lagoon.<sup>119</sup> The Tower of the Americas is now a fine dining and entertainment venue.<sup>120</sup>



**Figure 15: Tower of the Americas from HemisFair '68 and the Transformation of San Antonio, 18.**

From conception to implementation, HemisFair '68 took less than six years to plan and execute. Roger Montgomery, first urban designer for the U.S. Housing and

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<sup>118</sup> Ibid, 53.

<sup>119</sup> Holmesly, *HemisFair '68*, 8; this mini-monorail system was another cue from Seattle; however, San Antonio's was never meant to be a permanent transportation option for residents after the fair like Seattle's was.

<sup>120</sup> *Tower of the Americas*, Landry's Inc., 2013, <http://www.toweroftheamericas.com/>. (Accessed 1 January 2013).



Home Financing Agency (forerunner of the Department of Housing and Urban Development), wrote that the “public works, which dovetailed together, made the fair possible, also made renewal possible.”<sup>121</sup> William R. Sinkin, president of Texas State Bank and the first president of HemisFair ‘68, said the fair

was a watershed of economics and tourism growth for San Antonio. It’s a permanent legacy that will be hard to match, because for the first time there was a confluence not only of civilizations, which was our theme, but there was a true confluence in the community. There was a very, very minimum of disgruntlement or criticism of HemisFair. It was truly a cooperative symphony of harmony for San Antonio.<sup>122</sup>

HemisFair ‘68 helped to catapult the San Antonio River into a tourist attraction that is still very popular,<sup>123</sup> and the United States Urban Renewal program helped to convert the southeastern part of the CBD into a fairgrounds. However, it also helped San Antonio gain a convention center-arena complex and a basketball team (San Antonio Spurs) to use it, a right-of-way for a needed freeway link, a “city-built services plant” that supplied heating and cooling to the CBD, and a “focus for long-range educational development essential to the uplift of a population still caught in the trap set by Spanish colonialism.”<sup>124</sup> Municipal bonds financed the convention center, and represented largest piece of capital invested in the project.<sup>125</sup> Urban renewal funding provided the money needed to extend the Paseo del Rio into the fair site.

San Antonio also gained the Hilton Palacio del Rio, a \$7.5 million, 21- story prefabricated concrete hotel.<sup>126</sup> This was likened to Moshe Safdie’s Habitat from Expo

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<sup>121</sup> Montgomery, “HemisFair ‘68: Prologue to Renewal,” 85.

<sup>122</sup> William R. Sinkin, “Organizing HemisFair,” from Holmesly’s *HemisFair ‘68 and the Transformation of San Antonio*, 7.

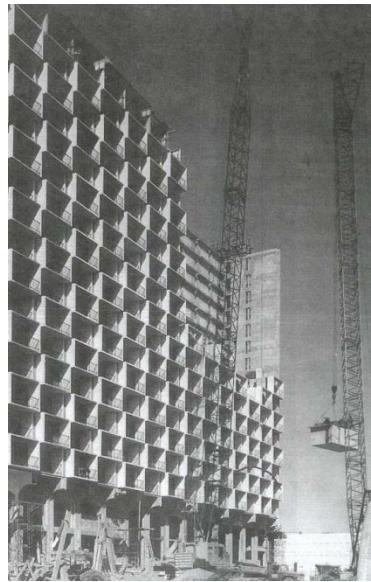
<sup>123</sup> MacKay, “HemisFair ‘68,” 58.

<sup>124</sup> Montgomery, “HemisFair ‘68: Prologue to Renewal,” 85.

<sup>125</sup> Ibid.

<sup>126</sup> Ibid.

'67 in Montreal, Quebec, as the units of the hotel were prefabricated offsite of reinforced concrete and then stacked together on-site at a rate of ten per day. The Hilton Palacio Del Rio is still in use today and is one of downtown San Antonio's premiere lodging options. In many ways, perhaps the Palacio del Rio has become more San Antonio's answer to Seattle's Space Needle than the Tower of the Americas, since the hotel is still occupies a prominent place in the core urban fabric of the CBD.



**Figure 16: Hilton Palacio del Rio under construction, Zintgraff Collection, University of Texas Institute of Texan Culture at San Antonio, cover photo to *HemisFair '68 and the Transformation of San Antonio***

In his article, Roger Montgomery praises HemisFair '68, not because of its contribution to the repertoire of world's fairs, but because it provided the catalyst for downtown redevelopment. He asks, —~~w~~ere else in America has as much been done to create humane public space in the center of a city? Where has urban renewal done

more?”<sup>127</sup> San Antonio was the third city within a decade to host a world’s fair in the United States (New York City hosted the second fair in 1964-65). The next world’s fair in the United States would not occur for another six years, when Spokane decided to continue the trend of using world’s fairs as a catalyst for redevelopment in its central business district. However, Spokane had bigger plans for its world’s fair; it used it to restore the Spokane River and to raise national and international awareness about the environment.

*Expo '74: Spokane's Answer to Environmental Stewardship*

Spokane, Washington’s Expo ‘74 was the “International Exposition on the Environment,” and it marked the first time that the environment was the main focus of a world’s fair. It was a Category II, recognized, fair and was the first fair to obtain BIE sanctioning since the United States formally joined in 1968.<sup>128</sup> In addition to the being the first fair with an environmental focus, it was also the first time a Folklife Festival and an African-American pavilion were featured, which only added to the fair’s “global village” appeal and format. The city officials responsible for this fair used it as a means to restore the Spokane River and its falls, which became the setting for the fair itself, in celebration of Spokane’s centennial. This made the environmental theme that much more ubiquitous and allowed exhibitors to address “ecological concerns from their own particular, sometimes problematic perspectives.”<sup>129</sup> The “ecological ethos” of the fair was unparalleled at the time, and the United Nations recognized the role Expo ‘74 played in “promoting ecological awareness by designating the fair the center for World

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<sup>127</sup> Ibid, 88.

<sup>128</sup> Arlin C. Migliazzo, “Spokane 1974,” *Encyclopedia of World’s Fairs and Expositions*, (Jefferson, NC: McFarland and Company, Inc., 2008), 350.

<sup>129</sup> Migliazzo, 351.

Environment Day activities” in June of that year.<sup>130</sup> It also marked the beginning of the country’s bicentennial celebrations in that the entire United States was on the brink of celebrating the nation’s 200<sup>th</sup> anniversary. Thus, the Spokane world’s fair provided the catalyst for future celebrations that would begin to take place over the next two years.



**Figure 17: Expo 74 Site, 1960**

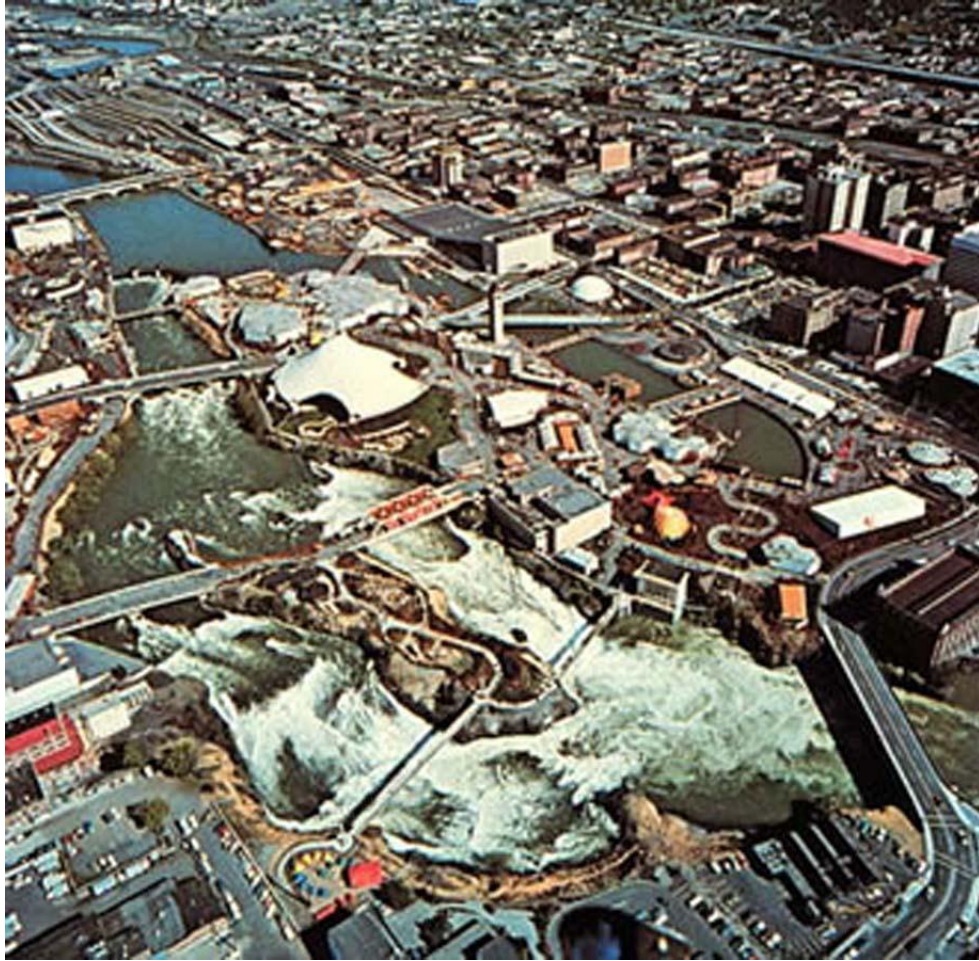
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<sup>130</sup> Ibid.

The fair originally began as an idea for a riverfront park and the establishment of a national monument to bolster tourism in downtown Spokane and to restore the Spokane River to an improved ecological state, much like the restoration of the Mississippi River waterfront restoration that the Gateway Arch spawned in St. Louis at the time. Spokane is located within a day's drive of four national parks: Mount Ranier, Yellowstone, Glacier, and Grand Teton. Thus, a national monument dedicated to the outdoor recreation opportunities in the northwestern United States would have funded the recovery of the Spokane River waterfront and would have provided an information center for visitors to Spokane and the surrounding national parks, forests, and monuments.<sup>131</sup> Although the monument never came to fruition, it laid the formal groundwork for using Department of Housing and Urban Development (HUD) and Urban Renewal funding as a planning tool that would allow for the city to purchase property along the river.

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<sup>131</sup> J. William T. Youngs, *The Fair and the Falls: Spokane's Expo '74, Transforming an American Environment* (Cheney, WA: Eastern Washington University Press, 1996), 155.



**Figure 18: Expo '74, 1974**

Like San Antonio, Spokane used the fair as a faster way to bring much needed revitalization to the central business district. The CBD grew around the Spokane River and its falls; thus, the restoration of the Spokane River itself was integral to downtown Spokane's revitalization. Expo '74 occupied one hundred acres, three of which were on Havermale Island in the Spokane River. The acquisition of this site and the subsequent acreage initially began with the intention of creating a park along the banks of the river. The city was able to use federal Urban Renewal funding to acquire the properties along the river, but not without some struggle, as the Open Spaces Grant the city had applied

for through the HUD was meant for renewal in the poorest urban neighborhoods, not to create parks in a prosperous community.”<sup>132</sup> However, because of political clout in Washington D.C. from Senator Warren “Maggie” Mangnuson, a native Spokaneite, the city was able to receive the funding from HUD for the acquisition of lands along the river. The next step was to hasten the renewal process.



Figure 19: Spokane's Riverfront Park, Site of Expo '74

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<sup>132</sup> Youngs, *The Fair and the Falls*, 158.



**Key to Map Numbers**

**Concessions and Rides**

- 1 Great Northwest Motorway
- 2 Bismillah Restaurant
- 3 Tavern Restaurant
- 4 Fish Fly Shop
- 5 Expo Souvenirs
- 6 Slinkers
- 7 Beer Bar
- 8 A & W Food
- 9 International Bazaar
- 10 Photo Framing
- 11 India Restaurant
- 12 Thailand Imports
- 13 United Nations Shop
- 14 Mexican Boutique
- 15 Portuguese Imports
- 16 Ice Cream
- 17 Expo Souvenirs
- 18 Lanes Imports
- 19 African Imports
- 20 American Indian Gifts
- 21 Japanese Imports
- 22 Clock Tower Restaurant
- 23 Canadian Mounted Police Records
- 24 Handbags, Authentic Foods of India, Souvenirs
- 25 Souvenirs
- 26 French Food
- 27 Souvenirs
- 28 Indian Imports
- 29 Monogrammed T-Shirts
- 30 Jewelry
- 31 Specialty Souvenirs, Expo Souvenirs, Ice Cream
- 32 Pops, Handbags, Korean Imports
- 33 Ride Over The Falls
- 34 A & W Food Bar
- 35 Food Fair
- 36 Chinese
- 37 Indian Food
- 38 Philippine Food
- 39 Canadian Food
- 40 Mexican Food
- 41 Bargain Staffs
- 42 Mexican Food
- 43 Japanese Food
- 44 Chinese Food
- 45 Hamburgers and Hot Dogs
- 46 Pizza Parlor
- 47 Baked Fruit Juices
- 48 Drive Steering and Cutting
- 49 Coin Jewelry
- 50 American Indian Handbags
- 51 Far East Corner
- 52 Leather Shop
- 53 Pearl and Cyster Shop
- 54 Great Restaurant
- 55 Buffet Restaurant
- 56 Sandwich Shop
- 57 Ice Cream Shop
- 58 Candy Shop
- 59 Expo Souvenirs
- 60 Hamburgers and Fish & Chips
- 61 United Nations Shop
- 62 Expo Souvenirs
- 63 Philippine Imports
- 64 Steak Imports
- 65 Holland Imports
- 66 Expo Souvenirs
- 67 Candy and Ice Cream
- 68 Japanese Restaurant
- 69 Jewelry Shop
- 70 Pizza Parlor
- 71 Photo Framing
- 72 Indian Imports
- 73 Expo Souvenirs
- 74 Souvenirs
- 75 Ice Cream, Hamburgers
- 76 Water Falls Restaurant
- 77 Gallery Restaurant

**Services**

- 1 Restrooms - 7 locations
- 2 Travel Terrace
- 3 Highway Access
- 4 Pacific Northwest Travel Association
- 5 Souvenirs From Exhibitors
- 6 Currency Exchange
- 7 U.S. Postal Service
- 8 American Association of National Parks
- 9 Child Care Center
- 10 Lost and Found
- 11 First Aid
- 12 Safety Information Center - 2 locations

**Pavilions and Exhibits**

- 1 The Art Gates: Our Land, Our Sky, Our Water
- 2 Kinshasa/Cote d'Ivoire
- 3 Denmark
- 4 Washington State Exhibit
- 5 Washington State Opera House
- 6 Northwest Coast Art and Culture Exhibit
- 7 Ford Pavilion
- 8 The Great Northern Clock Tower
- 9 Berne from Switzer Pavilion
- 10 Montana and California Pavilion
- 11 Idaho and Oregon Pavilion
- 12 Vancouver Annual Pavilion
- 13 General Motors Pavilion
- 14 Energy Pavilion
- 15 Alcoa-Aluminum Pavilion
- 16 Toyota Pavilion
- 17 Japan Pavilion
- 18 American Forest Pavilion
- 19 Arctic Pavilion
- 20 Boca of Texas
- 21 High Pavilion
- 22 Republic of China Pavilion
- 23 Expo '74
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PO Box 317, Seattle, Washington 98101

Official Guide Book, Souvenir Program, Map - 5 Locations

## SHARE A RIDE WITH US.

**Expo '74 World's Fair Site Map**

**FLY HUGHES AIRWEST.**

The Hughes Aircraft Company is proud to sponsor the new Airwest service between Seattle and Los Angeles. Airwest's new Boeing 747-200 will be flying to Seattle from Los Angeles on a regular basis starting on September 11, 1973.

Expo '74 is the most recent of the great World's Fairs. It is the largest fair ever held in the Pacific Northwest, and the largest fair ever held in the United States. It is the largest fair ever held in the history of the World's Fair.

The Republic of China pavilion is the pride of this pavilion. It is a new creation of the site designed by the Republic of China Pavilion Committee. It is a masterpiece of modern architecture by the Chinese architect Hsiao Hsiang-shan.

This pavilion is a great success in a 200-year history. The pavilion is a masterpiece.

From Taipei, provisional capital of the Republic of China, comes this message: NO VISIT TO EXPO '74 IS COMPLETE WITHOUT A VISIT TO THE REPUBLIC OF CHINA PAVILION.

## OFFICIAL SITE MAP

World's Fair '74

50' SCALE

Figure 20: Expo 74 Map



Hosting an international exposition became the answer. Because the BIE classified Expo '74 as a Category II fair, Spokane had to provide all of the exhibition space for participants, which was the catalyst that Spokane needed. According to J. William T. Youngs, "In the process of staging a fair about the environment, Spokane would be able to find the solution to its urban renewal problem, and at the same time, recapture the natural setting of the falls."<sup>133</sup> Expo '74 provided the groundwork to celebrate Spokane's "creative environmentalism" in its use of urban renewal funding for environmental stewardship, and as a result, the fairgrounds would themselves be a living example of ecological virtue."<sup>134</sup>

The plan worked. The one hundred acre fair site became Spokane's Riverfront Park, and the Washington State Pavilion became the convention and performing arts center. The United States Pavilion has become an IMAX theatre and the city's ice skating rink, both of which are still in use today. Before the fair, there were several railroad yards occupying the site, as well as, the 1902 Great Northern Railroad Depot, of which only the clock tower remains. The park also includes the 1909 Loeff Carousel and the Spokane Falls Skyride. One of the major attractions of Riverfront Park is the Garbage Goat. Designed for Expo '74 by a local nun as an environmental statement, the Garbage Goat is a steel sculpture that will eat small pieces of trash using its vacuum digestive system. Riverfront Park also offers a sculpture walk and incorporates the downtown section of the Spokane River Centennial Trail, which begins at the Idaho state line and ends at Nine Mile Falls, Washington. This trail is contiguous with the Northern Idaho Centennial Trail, and, together, these two trails cover over sixty miles, connecting

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<sup>133</sup> Ibid, 174.

<sup>134</sup> Ibid.

Spokane and Coeur d'Alene, Idaho. The park continues to host public events and festivals and is used regularly by running groups and other recreationists. It is also a major attraction for tourists and conventions. For example, the National Trust for Historic Preservation hosted its annual conference in Spokane in October 2012. Spokane still holds the title for the smallest city to ever host a world's fair.



**Figure 21: United States Pavilion and Ice Skating Rink, Spokane Riverfront Park, 2012**



**Figure 22: Riverfront Park, Spokane Washington; Washington State Pavilion (Left; now the Spokane Convention and Performing Arts Center) and the Clock Tower of the Great Northern Railroad (Right).**

The world's fairs in Seattle, San Antonio, and Spokane set the stage for the world's fair in Knoxville, Tennessee. The fairs in San Antonio and Knoxville both had their own answers to Seattle's Space Needle, which became the Eifel Tower of the late twentieth century. However, it was Spokane's world's fair that had the greatest influence on Knoxville's world's fair, as Expo '74's president, King Cole, became a paid consultant for the 1982 Knoxville International Energy Exposition. Like the American fairs before it, Knoxville looked to hosting a world's fair as a means to bring much-needed public works improvements to the city in an attempt to connect the University of Tennessee to the central business district. Although the idea for Knoxville's fair was more a combination of the fairs in Spokane and Seattle in terms of themes, the residual uses of the site and buildings associated with the Energy Expo were not as thought-out as in previous fairs.



**Figure 23: Loeff Carousal, Spokane Riverfront Park, 2012**

*The Influence of Expo '74 on Energy Expo '82*

Expo '74 in Spokane, Washington directly influenced the 1982 world's fair in Knoxville, mainly because Expo '74 was a milestone world's fair for the United States in terms of domestic policy and in terms of its relationship with the BIE. The world's fair in Spokane was the first to organize under the provisions of Public Law 91-269 (May 27, 1970) which provided for a new Federal Government role in these events.<sup>135</sup> Also, Expo '74 was the first to be registered by the BIE —with the United States Government participating in the negotiations as a full-fledged member.”<sup>136</sup> Expo '74 was also the first exposition to come under the provisions of the National Environmental Policy Act of 1969 and, thus, expected to comply through the completion of a comprehensive environmental impact study.<sup>137</sup> Finally, Spokane's world's fair was the first to have a Commissioner General of the U.S. Government appointed with —substantial

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<sup>135</sup> Nelson, —Study For the U.S. Commissioner General,” 1; Public Law 91-269 is found in Appendix B.

<sup>136</sup> Nelson, 1.

<sup>137</sup> Ibid.

responsibilities for the overall conduct and success of the event.”<sup>138</sup> It was the first time that the Department of Commerce was directly involved in the planning, implementation, and execution of a BIE-sanctioned fair under the new federal law.<sup>139</sup>

Another reason for the passing of Public Law 91-269 was for the United States to host an exposition in the bicentennial era. Philadelphia and Boston vied for this esteemed position, and Philadelphia became the recommended (and obvious) location because it successfully hosted the centennial celebration in 1876. The BIE even held a special session to approve Philadelphia’s bicentennial exposition in January 1971.<sup>140</sup> After approval, officials in Philadelphia set out to make a plan. Eventually a site location was chosen in an empty marshy area north of the airport. To carry out the proposal on this site, Philadelphia would need a \$1 billion federal investment. In June 1972, the United States asked the BIE to withdraw the bicentennial exposition registration, to much shock and awe of the international community. This did not bode well for the international perception and credibility of the United States because as the BIE’s newest member, it was —~~sc~~aving up another abortive exposition project,” causing the BIE to question the seriousness with which the United States submitted bids for exposition sanctioning.<sup>141</sup> Spokane received BIE sanctioning in 1971; however, the —~~i~~important special rules” for the fair had yet to be approved. Thus, atmosphere both in the United States and in Paris during which Spokane bid for the total BIE sanction and approval for the fair was rather

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<sup>138</sup> Ibid.

<sup>139</sup> Ibid.

<sup>140</sup> Ibid, 5.

<sup>141</sup> Ibid, 6.

fragile and precarious because of the withdrawal of the bid for the 1976 world's fair in Philadelphia.<sup>142</sup>

The Spokane world's fair marked a milestone in the history of world's fair planning in the United States. According to J. William Nelson, Director of the United States Office of Expositions, Spokane was the first fair to operate under the new United States federal law, which required the federal government to recognize the plan as a ~~an~~ worthy one."<sup>143</sup> Once the federal government approved, the real objective could be sought: federal participation and thus funding.<sup>144</sup> Spokane then had to face the BIE, which did not view the United States favorably because of its lack of BIE sanctioning for past expositions. Thus, Spokane ~~emerged~~ emerged on the BIE scene at a time when the attitude there towards expositions in the U.S. was at an all-time low."<sup>145</sup>

Residual uses of world's fair sites and buildings became a major concern for the United States federal government and became part of the reason for abstaining from joining the BIE until the late 1960s. According to Section 3 of Public Law 91-269, the federal government will only provide funding for the construction of a federal pavilion if the government determines a need for a permanent structure in the vicinity of the exposition. If that's the case, then the Secretary of Commerce recommends federal participation under the condition that ~~the~~ Government should be deemed a satisfactory site for the Federal pavilion, in fee simple and free of liens or other encumbrances."<sup>146</sup> According to this law, the Federal Government neither sponsors nor finances expositions in this country because the cities and private investors usually have an ulterior motive:

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<sup>142</sup> Ibid.

<sup>143</sup> Ibid.

<sup>144</sup> Ibid.

<sup>145</sup> Ibid..

<sup>146</sup> Section 3(c), *Public Law 91-269*, 27 May 1970.

—their exposition is developed as the catalyst for achieving other worthwhile community objectives.”<sup>147</sup> In other words, the only way for the United States government to finance a federal building is if 1) the federal government owns it out-right and 2) there is a viable planned residual use for it after the exposition ends. The federal government wants a guarantee on its investment; the historical, cultural, and aesthetic value of the event is not enough for it to be stuck with the entire bill in the end.

J. William Nelson, Director of the United States Office of Expositions, explains in the *Study for the U.S. Commissioner General on the Role of the Federal Government in “Expo ’74*, that cities must have their own reasons for hosting a world fair in order for the federal government to decide to help finance it. For Seattle, the goal was a post-fair legacy in the form of a new cultural and civic center.<sup>148</sup> Also, Seattle benefited from the international recognition that transformed the city into the principal metropolis and trading center of the far Northwest.<sup>149</sup> San Antonio was no different in that the tourism that resulted from Hemisfair ‘68 helped to change the city from “a sleepy ‘stand pat’ town” into one of the most dynamic communities in Texas.<sup>150</sup> In addition to widening the city’s economic base and transforming it into a major tourist destination, Hemisfair ‘68 allowed San Antonio to improve a blighted area and acquired much-needed civic facilities, to include a new convention and exhibition center, a tower, and a theatre for the performing arts.<sup>151</sup> Knoxville’s Energy Expo ‘82 drew from Spokane just as Spokane drew from both Seattle and San Antonio: —Spokane saw the proposed exposition as the

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<sup>147</sup> Nelson, 7.

<sup>148</sup> Ibid.

<sup>149</sup> Ibid.

<sup>150</sup> Ibid.

<sup>151</sup> Ibid.

impetus for a giant step toward completion of its long dreamed of riverfront redevelopment project.”<sup>152</sup>

Spokane’s Expo ‘74 directly influenced Knoxville’s Expo ‘82 because of one key person: King Cole. King Cole was the president of Expo ‘74, and, just days after the closing of Spokane’s fair, he spoke at a 20<sup>th</sup> annual International Downtown Executives Association conference in Tulsa, Oklahoma. It was during this conference that Stewart Evans, the Executive Director of the Downtown Knoxville Authority (DKA), heard Cole speak about the success Spokane had with recapturing the Spokane River and its Falls and redeveloping the waterfront of Downtown Spokane. Evans was so impressed, that by winter 1975, Kyle Testerman, Mayor of Knoxville and a group known as the Mayor’s Task Force traveled to Spokane to assess the impact of Expo ‘74 and to see if it could provide a plan for Knoxville’s own redevelopment.<sup>153</sup> The Mayor’s Task Force was convinced, and it hired King Cole as a paid consultant for Knoxville’s fair. Chapter 4 presents Energy Expo ‘82 and a discussion of its highlights, siting and layout, residual site plans, and preservation efforts.

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<sup>152</sup> Ibid.

<sup>153</sup> King Cole, “Background of Report,” *Feasibility Study for the International Exposition, Knoxville, Tennessee*, (15 August 1975), 1. *Knoxville International Energy Exposition Collection*, MS. 2071, Hodges Library, University of Tennessee, Knoxville, TN.



## CHAPTER 4

### THE KNOXVILLE INTERNATIONAL ENERGY EXPOSITION

The Knoxville International Energy Exposition (Energy Expo '82) in Knoxville, Tennessee was the first exposition in the United States since Expo '74 in Spokane. Energy Expo '82's theme, "Energy Turns the World," also marked the first time a world's fair was dedicated to an international discussion of energy's worldwide role and use. Like the world's fairs in Seattle, San Antonio, and Spokane, the BIE categorized Energy Expo '82 as a "recognized," Category II exposition, meaning the city of Knoxville had to provide the exhibitors with the exhibition space. Also, like the other fairs, Knoxville used the world's fair as a means to bring much-needed public works improvements to the city in an attempt to connect, linearly and spatially, the central business district with the campus of the University of Tennessee. This chapter will discuss energy as a theme for the fair and then analyze the siting and fair layout, the proposed residual uses of Energy Expo buildings, specifically the United States Pavilion, and the preservation efforts that were incorporated into the initial planning and development of the fair.

The Knoxville International Energy Exposition or Energy Expo '82 took place between May and October 1982. The fair was deemed a success both in terms of attendance and participation. There were eleven million attendees over a five month period for an event that hosted twenty two countries, which was more than each of the

fairs in Seattle, San Antonio, and Spokane.<sup>154</sup> Energy Expo '82 was the "biggest event ever to hit Knoxville," and President Ronald Reagan traveled to the city to for the opening ceremonies.<sup>155</sup> Large, yellow canopies indicating merchandise vendors lined the Clinch Avenue Bridge, and the man-made Waters of the World allowed visitors the opportunity for paddle-boating or canoeing. One of the most popular sights was the large-scale, revolving model of the Rubik's Cube. Another popular attraction was the "Home of the Future," a 2300-square foot home filled with all the modern conveniences and powered by a reflective roof and skylights, which allowed the home to increase its passive solar and photovoltaic capabilities. The vendors, pavilions, and attractions ran the entire length of the Lower Second Creek Valley, from Western Avenue to the Tennessee River. Visitors had access to amusement parks, food and culture from all over the world, and exhibitions and displays of the most innovative designs in energy use and production.

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<sup>154</sup> Martha Rose Woodward, *Knoxville's 1982 World's Fair* (Charleston, SC: Arcadia Publishing 2009), 21.

<sup>155</sup> Woodward, 23.



**Figure 24: City Scope of Knoxville during Energy Expo '82 Construction, from Ivy, "Energy As a Theme of a World's Fair," AIA Journal, (Jan 1982): 57.**

### *Energy as a Theme for Knoxville's World's Fair*

Energy made sense as a theme for Knoxville's world's fair geographically and historically. Knoxville is located in eastern Tennessee and is the headquarters of the Tennessee Valley Authority (TVA), the major energy provider to the region since the 1930s. It is also located southeast of Oak Ridge National Laboratory, the first nuclear reactor to be built as part of the Manhattan Project. Finally, Knoxville is the home of the University of Tennessee, which has long conducted extensive research in energy. Thus, Knoxville is a hub of both electrical and nuclear energy production and research. As a result, Knoxville provided an ideal place for addressing the issue of energy use nationally and internationally. Knoxville is also located just west of Smoky Mountain National Park, the most highly visited national park in the United States. Because of the proximity to this popular natural landmark, energy's effects on the environment also made sense for

the fair's adoption of energy as a theme. Knoxville could, therefore, be considered the ideal crossroads for environmental protection and energy technology and use, thus making the Energy Expo a combination of both Seattle's and Spokane's world's fairs' themes: science-technology and the environment.

According to the *Official Guide Book of the 1982 World's Fair*, the energy theme was chosen to counter the "doom and gloom projection" of the future associated with the Energy Crisis in the 1970s.<sup>156</sup> The goal of the energy theme was to provide the public with a new understanding of energy through its wiser use and more efficient production.<sup>157</sup> Energy was also chosen as a theme as means to "promote new and higher standards of life in less developed countries while maintaining high standards in nations that now enjoy them."<sup>158</sup> As part of the fair, the University of Tennessee, the TVA, and Oak Ridge partnered with the United States Department of Energy to hold a three-part international symposium series designed to discuss and create new solutions to the world's energy problems.<sup>159</sup> This series brought together leading experts from around the world to "analyze and define energy problems, to consider energy options and to reach a consensus on those with greatest promise for the future."<sup>160</sup> Each symposium was three days long and occurred over a three year period, the last of which corresponded to the opening of Energy Expo '82. The first symposium, held in October 1980, addressed four fundamental issues related to defining the nature and extent of the world energy problem: 1) world energy productivity and production: the nature of the problem; 2) improving

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<sup>156</sup> Steve Kruse, ed., *The 1982 World's Fair Official Guidebook*, Knoxville International Energy Exposition, Inc., (Knoxville, TN: Exposition Publishers, 1982), 13.

<sup>157</sup> Kruse, *Official Guidebook*, 13.

<sup>158</sup> Ibid.

<sup>159</sup> Ibid.

<sup>160</sup> Ibid.

world energy productivity and production; 3) the role of technology; and 4) toward an efficient energy future: critical plans, conflicts and constraints, and alternative policies for improved energy productivity and production.

The second symposium was held in November 1981 and provided participants of 35 nations the opportunity to conduct an in-depth analysis and discussion of the topics identified to be of world significance in Symposium I.”<sup>161</sup> These countries discussed the four issues from the first symposium as they related to the market and non-market economies of industrialized nations, energy surplus and deficient industrialized nations, nuclear energy, biomass energy, and energy for rural development. These issues then laid the groundwork for the third symposium, which took place in May 1982. During the third symposium, findings of symposia I and II were ratified and the series as a whole identified global energy commonalities and an agenda for continuation of the deliberations.”<sup>162</sup>

#### *Fair Siting and Layout: Second Creek Valley*

In 1970, Knoxville issued the *Initial Program for Community Improvement, 1970-1976*, a six-year schedule of activities that was to serve as a bridge between urban renewal and comprehensive planning.”<sup>163</sup> It used urban renewal as a means of social and economic action and as a means for a logical and coordinated plan to ameliorate slum and blight in certain areas of Knoxville through the use of funding from government and private investors.<sup>164</sup> This official urban renewal plan intended to create a schedule that met the most pressing current needs of Knoxville and took advantage of the clearest

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<sup>161</sup> Ibid, 17.

<sup>162</sup> Ibid, 17.

<sup>163</sup> *Initial Program for Community Improvement, 1970-1976*, Knoxville, TN (15 November 1970): 1.

<sup>164</sup> *Initial Program for Community Improvement*, 2.

present opportunities as a means of offering ~~the~~ optimum balance between meeting current needs and anticipating future trends.”<sup>165</sup> Also, this schedule was created because the Urban Renewal Authority required that cities implement an improvement plan and identify problem areas in order to be eligible for funding under the federal Urban Renewal program. (Appendix C: World’s Fair Site in Proximity to Downtown Knoxville and University of Tennessee)

Knoxville’s *Initial Program for Community Improvement, 1970-1976* identified forty three areas in Knoxville that would be eligible for renewal. Of these forty three, only three received the greatest priority: Tenth Street, Mechanicsville, and the City Hall Site.<sup>166</sup> Interestingly, the plan states that, ~~In~~ any renewal project, the elimination of blight requires the removal of dilapidated buildings.”<sup>167</sup> The federal Urban Renewal program did not dictate how dilapidated buildings had to be removed, as funding could be used for the rehabilitation of those buildings. However, Knoxville interpreted the *Housing Acts* requirement of ~~removal~~” as complete demolition. Also, because HUD required that ~~more~~ more than 50 percent of the net acreage of any urban renewal project shall be devoted to housing for low and moderate income families,” Knoxville decided to prioritize those areas that would best be suited for reuse as housing.<sup>168</sup> The most important of the three priority areas for the scope of this research is priority number one: Tenth Street.

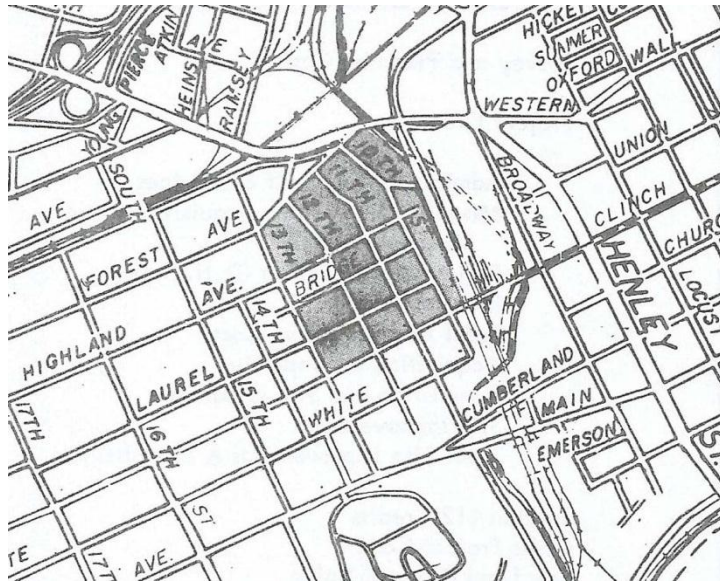
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<sup>165</sup> Ibid.

<sup>166</sup> Ibid, 3; 5-9.

<sup>167</sup> Ibid, 3.

<sup>168</sup> Ibid, 4.



**Figure 25: Urban Renewal Priority Area #1, 10th Street, from *Initial Program for Community Improvement, 1970-1976* (15 November 1970): 6**

The Tenth Street priority area consisted of twenty one acres in the Fort Sanders Neighborhood, between downtown Knoxville and the University of Tennessee campus. The Program for Community Improvement recommended that this site be redeveloped “exclusively” for low- to moderate-income housing, high density housing.<sup>169</sup> The report also recommended renewal for the Fort Sanders neighborhood, but because the residents of the neighborhood decided to undertake individual rehabilitation of the homes in the area, the scope of the area was reduced to west of 13<sup>th</sup> Street, which contains the “worst conditions in the area.”<sup>170</sup> This area is located west of what was known as Lower Second Creek, which is the lower portion of Second Creek just before it flows into the Tennessee River. Also located on this site was a train yard that acted as a major route for transporting goods through Knoxville. After Steward Evans returned from the I.D.E.A.

<sup>169</sup> Ibid, 5.

<sup>170</sup> Ibid.

conference in Tulsa, Oklahoma in 1974, Knoxville shifted its focus and the priority area a few blocks east to Second Creek, and it is this site that eventually received the funding for redevelopment as fairgrounds for the 1982 World's Fair with the intent for residual uses as high-density, mixed use housing.

One of the reasons for Knoxville (and Seattle, San Antonio, and Spokane) hosting a world's fair comes from the city suffering from an identity crisis. According to a 1972 planning study conducted by the Mayor's Downtown Task Force entitled *Prospectus for Central Knoxville*, the city as a whole identified itself as a local, regional, and national hub. This report said that Central Knoxville was the "historical and physical center of the immediate urbanized areas," the "western gateway to the Great Smoky Mountains National Park and its eight million annual visitors," a "regional retail center" for East Tennessee and parts of Kentucky, Virginia, and North Carolina," and a major crossroads and terminus for two major interstate highways.<sup>171</sup> This report also identified Knoxville as government, office, and financial center, and therefore an "ideal location for new in-town housing for downtown employees, U.T. students and faculty, and those generally desiring a more urbane life style."<sup>172</sup>

Knoxville wanted to capitalize on these assets as a regional trade and tourist center and used them to frame the 1972 report and its plans for "revitalization and development of the central area over the next twenty five years."<sup>173</sup> The concept that resulted was a central urban core that involved mixed uses, to include varied housing types, regional shopping and services, finance-office district, night time activities, and

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<sup>171</sup> *Prospectus for Central Knoxville: A Conceptual Framework for the Development and Continued Growth of a New Community in the Heart of Knoxville*, Mayor's Downtown Task Force (August 1972): ii.

<sup>172</sup> *Prospectus for Central Knoxville*, ii.

<sup>173</sup> *Ibid*, 1.



light industrial and wholesaling activities. These mixed uses were to be made possible through the implementation of an auto-free pedestrian core with a perimeter parking wall, an open space system, and the facilities for a city-county government complex, new centralized office buildings for the TVA, consolidated state offices, and major bank/office buildings that were planned or already under construction.<sup>174</sup> These plans for mixed-use development were influenced by several factors, including the development of a pedestrian mall/open space area at Market Square, the potential views of the University of Tennessee and the Smoky Mountains from a rapid transit system, and a centralized transportation center offering bus services, auto rentals, and airport and limousine services.<sup>175</sup> For the purposes of the fair, shifting the target area a few blocks east and focusing on Second Creek allowed Knoxville to realize its identification process as a local, regional, and national hub for energy and commerce.

Using the Second Creek Valley for the fair site required the city government to acquire the land. A major impediment to this was the fact that twelve active railroad lines ran the length of this site. Until 1960s, this valley had been an important storage yard for the Louisville and Nashville and Southern Railroad, and these lines provided the L & N Station and Depot with their namesake.<sup>176</sup> However, by the time of Knoxville's 1974 City Center Plan, railroad freight traffic had dwindled to only a few trains a day, causing "abandoned buildings and marginal businesses" in an area of central Knoxville that was now considered an "eyesore."<sup>177</sup> Having the tracks remain active during the fair site was most inconvenient. Removal of the tracks was most ideal, but Knoxville did not

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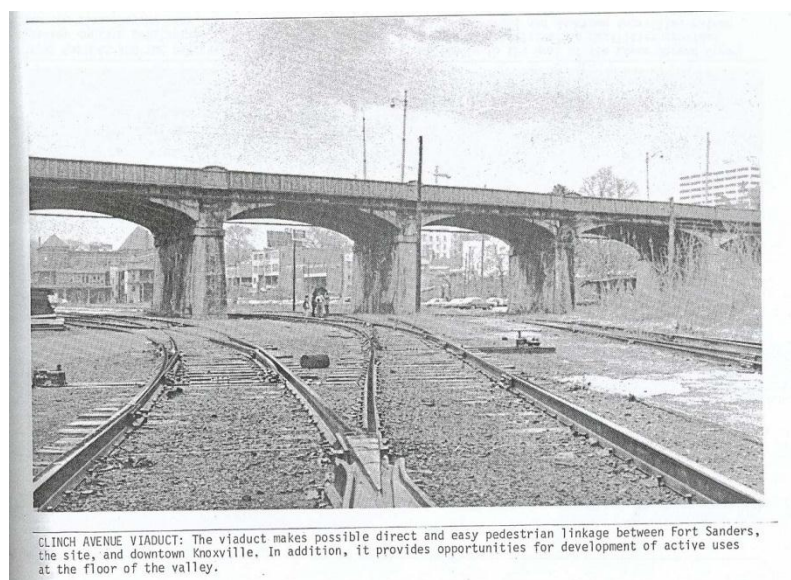
<sup>174</sup> Ibid, 7-9.

<sup>175</sup> Ibid,, 9.

<sup>176</sup> Ruth Eckdish Knack, "Knoxville's Redevelopment Ploy: Will the world's fair be the vehicle for downtown revitalization that its promoters promised?," *Planning*, 48, no. 7 (July-Aug 1982): 8.

<sup>177</sup> Knack, "Knoxville's Redevelopment Ploy," 8.

have the funds to pay the railroads for all of the tracks' removal. As a result, the city and the railroads came to an agreement that only one track would remain and trains would not run during the day for the duration of the fair. This agreement further solidified the linear layout of the fair. The fair boundaries were Henley and 11<sup>th</sup> Streets to the east and west, respectively, and the north side of West Summit Hill Drive and Neyland Drive to the north and south respectively. The southern boundary of the fair stretched further west along Neyland Drive, between the railroad tracks and the west side of the University of Tennessee's Neyland Stadium, and included activities on the Tennessee River. The total site of the fair was a narrow, seventy-two acre strip of land: it was a quarter-mile wide at the widest point and two hundred feet wide at the narrowest point, with slopes of up to sixty feet to the east and west.<sup>178</sup> (Appendix D: Map of Energy Expo '82).



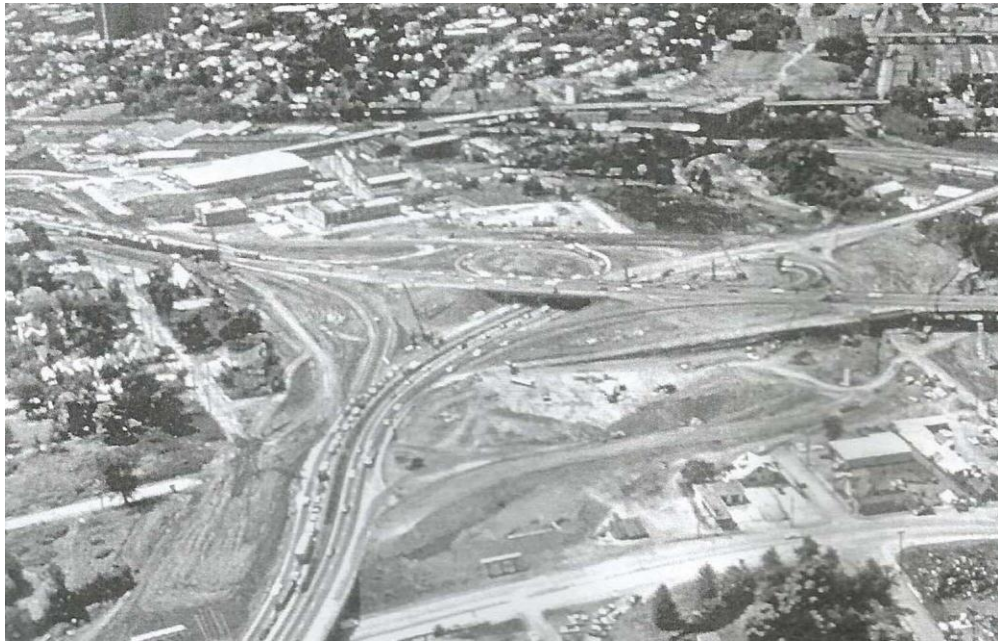
**Figure 26: Plate 8 from After Expo (1979) depicts the Clinch Avenue Viaduct and the railroad tracks in the Lower Second Creek Valley.**

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<sup>178</sup> Ibid, 10.



**Figure 27: Railroad Yard in Second Creek Valley, from *Knoxville's 1982 World's Fair*, 11.**



**Figure 28: Cleared Expo Site, from *Knoxville's 1982 World's Fair*, 10**

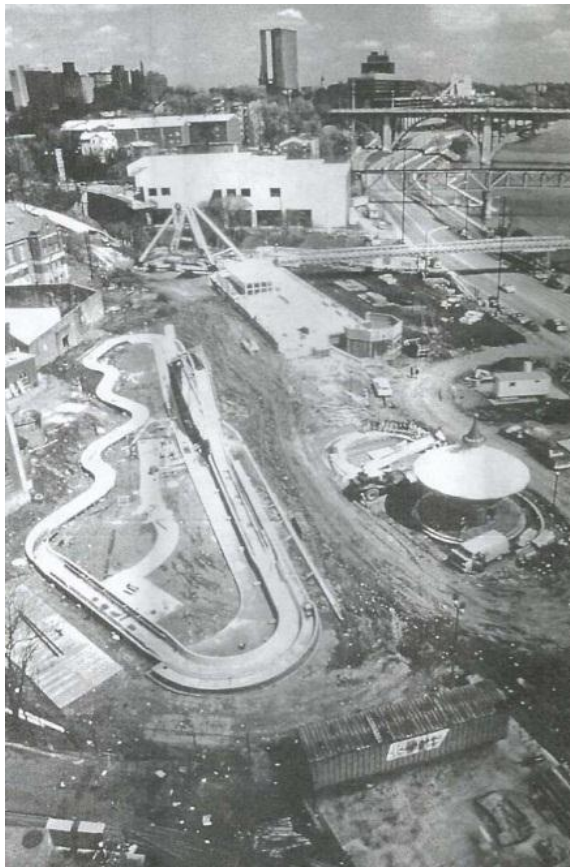
Other than the railroad tracks and the Tennessee River, the pavilions for the United States and the state of Tennessee were the dominant organizational elements for Energy Expo '82's layout. Bruce McCarty (of the firm, McCarty, Bullock & Holsaple) was the fair's Executive Architect/Planner, and he based his design on the best locations for the United States Pavilion, the Tennessee State Pavilion, the amusement area, and problems in connection with Miller's store, KUB substation, and Church Street United Methodist Church."<sup>179</sup> Based on the map from the *Official Guidebook*, the United States Pavilion built just north of Cumberland Avenue connected the east and west sides of the fair. Clinch Avenue also provided an above grade pedestrian connection between the east and west sides of the fair and allowed access to both merchandise shops and the Sunsphere, Knoxville's answer to Seattle's Space Needle. International pavilions spanned the length of the fair on the west side of the tracks, and mainly corporate pavilions and other exhibits spanned the eastern side of the fair up to just south of Cumberland Avenue (Appendix D: Map of Energy Expo '82).

One of the most striking elements of the fair's layout, which dictated the organization of the fair, was the use of the valley floor for water features. United States Pavilion overlooked a lake at the heart of the fair, called the Water of the Worlds. This lake also provided the backdrop for the International Court of Flags and the entertainment held in the State of Tennessee Amphitheatre. Based on the map of the fair, the lower part of the creek valley provided fair visitors with a green space and for respite from fair activities and included the Second Creek Gazebo. The pavilions for the People's

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<sup>179</sup> Minutes of the Board of Directors for the Knoxville International Energy Exposition, Inc, (1 September 1977), 1 *Knoxville International Energy Exposition Collection*, MS. 2071, Hodges Library, University of Tennessee, Knoxville, TN.

Republic of China, Egypt, and Peru connected themselves to the amusement area along Neyland Drive with a footbridge over the Creek. This amusement area included food services and merchandise shops, in addition to access to rides, games, and the TVA (The Valley Adventure) located on the Tennessee River. Finally, a visitor returning from the exhibits at the TVA could take a gondola ride from just south of the Federal Express Pavilion to the center of the fair at Clinch Avenue. Then one could take another gondola from Clinch Avenue all the way to the north end of the fair at the L & N Hotel. (Figure 27)



**Figure 29: Construction of amusement park along the Tennessee River, from Knoxville's 1982 World's Fair, 18**

It is important to note that at the time the fair was being planned, a reuse plan did not exist, despite the oft-stated emphasis on redevelopment as the fair's entire *raison d'être*.<sup>180</sup> As a result, the Knoxville International Energy Exposition, Inc. (the non-profit organization that planned and executed the fair), in conjunction with the planning department at the University of Tennessee, hosted a charrette during the fair in 1982. The design requirements for the charrette were based on several reports published in the late 1970s that identified low- to moderate-income housing and high-density mixed use development as the most ideal redevelopment strategy for pursuing a world's fair and placing it in Lower Second Creek.

In 1978, the Knoxville Community Development Corporation (KCDC) and the Knoxville International Energy Exposition had a report prepared that discussed specifically the redevelopment of Lower Second Creek as an important catalyst for the revitalization of the CBD of Knoxville and using a world's fair to accomplish the task. The report was entitled *Development Potential of Lower Second Creek* and it was prepared by Economics Research Associates (ERA). This report outlines the major residual uses of the fair site after Energy Expo '82's end. According to the study, the fair site would best support office buildings, hotels, apartments, and retail facilities.<sup>181</sup> ERA came to this conclusion because of a trend line analysis based on population and employment projects developed by the Metropolitan Planning Commission.<sup>182</sup> The report also assessed the impact of the Expo itself and concluded that major benefits of the

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<sup>180</sup> Knack, 10.

<sup>181</sup> Economics Research Associates, *Development Potential of Lower Second Creek*, report prepared for Knoxville International Energy Exposition and the Knoxville Community Development Corporation (1 February 1978): II-1.

<sup>182</sup> Economics Research Associates, III-1.

fair would be the proposed Energy Research Center, —general spin-off benefits from the Exposition,” and the —leverage provided potential developers and investors by the construction of Expo and the residual site improvements.”<sup>183</sup>

*Planned Residual Uses: United States Pavilion as an Energy Research Center*

The Energy Research Center mentioned in the *Development Potential of Lower Second Creek* was the proposed residual use for the United States Pavilion, which was located at the center of the 72-acre fair site and cost \$12.4 million to erect. It was a six-story, cantilever-ended building that was designed by Atlanta firm Finch, Alexander, Barnes, Rothschild, and Paschal, Inc (FABRAP).<sup>184</sup>



**Figure 30: Main Facade of United States Pavilion at Energy Expo '82**

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<sup>183</sup> Economics Research Associates, III-4.

<sup>184</sup> Kruse, *Official Guidebook*, 22-23.

It was constructed as a permanent structure out of foam-filled steel panels and insulating glass.<sup>185</sup> The north façade sloped into the Waters of the World and consisted of operable glazing, designed to admit ambient light and to filter available breezes through the whole.”<sup>186</sup> The southern façade of the building incorporated an exposed steel inset with escalators, stair towers, elevator shafts, balconies, and office pods.<sup>187</sup> The open southern facade of the pavilion was meant to recall Paris’s Centre Pompidou and connote process, “becoming” and to allow sunlight to enter the main exhibit space during cool winter days while providing some summer shade.”<sup>188</sup>



**Figure 31: Southern Facade of United States Pavilion, Energy Expo '82**

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<sup>185</sup> Allen Freeman, “In Knoxville, More Festivity Than Energy,” *AIA Journal*, 71, no. 7 (June 1982): 53.

<sup>186</sup> Robert A. Ivy, Jr., “Energy as the Theme of a World’s Fair: Knoxville’s 1982 Expo Rises Determinedly from the Mud,” *AIA Journal*, 71, no. 1 (January 1982): 59.

<sup>187</sup> Freeman, 53.

<sup>188</sup> Ivy, 59.



The west end of the building incorporated three cantilevered floors, whereas the east side only incorporated one. (Figure 29) During the fair, the building provided five levels of exhibit space that included “talk back” computers and a \$1.2 million IMAX film projected onto a screen 65 feet tall and 90 feet wide that showed the “big picture” of America’s energy resources and technology.”<sup>189</sup>

Knoxville wanted to reinvent itself as the “energy capital of the world” due to its “strength and heritage of energy development,” as represented by presence of the Tennessee Valley Authority, Oak Ridge National Laboratory, and the University of Tennessee.<sup>190</sup> The main function of the fair as a whole, according to *After Expo*, a report issued by the Regional/Urban Design Assistance Team in conjunction with the East Tennessee Chapter of the American Institute of Architects and the Knoxville-Knox County Metropolitan Planning Commission, was “the demonstration of energy making, energy usage and conservation of energy. The physical elements for or used at Expo should in so far as possible serve as models of these goals.” Although the *Development Potential of Lower Second Creek* recommended office buildings, retail facilities, hotels, and apartments, *After Expo* states that the Knoxville needs to go a step further and not just provide housing for inner-city residents. The city needs to develop a “concept of a residential community designed to demonstrate a new attitude toward architecture and urban development based on an energy consciousness.”<sup>191</sup> The ideal situation for the Regional/Urban Design Assistance Team would be a mixed-use housing development demonstrating a variety of housing types and densities where each maximizes energy

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<sup>189</sup> Kruse, *Official Guidebook*, 22.

<sup>190</sup> Regional/Urban Design Assistance Team, *After Expo*, East Tennessee Chapter of the American Institute of Architects and the Knoxville-Knox County Metropolitan Planning Commission, (23-26 March 1979): 5.

<sup>191</sup> Regional/Urban Design Assistance Team, 10.

efficiency. The goal for the fair site's residual use should stay in line with the fair's theme and partner with the TVA to —maximize energy self-sufficiency, minimize the use of energy consuming transportation systems and provide operating examples of urban development for a new era of city growth.”<sup>192</sup>

The anchor of this vision of a mixed-used, high-density development that allowed an energy-efficient lifestyle in downtown Knoxville was the development of an Energy Research Center in the United States Pavilion. The Energy Research Center housed in the United States Pavilion made logical sense because it not only recognized the overall intent of the exposition, but also solidified ~~the~~ the unequalled base of energy research and development in the East Tennessee area.”<sup>193</sup> The proposed Energy Research Center would have focused the separate, energy-related work of four existing centers: the Energy Opportunities Consortium, Inc., Environment Center, Transportation Research Center, and Water Resources Center.<sup>194</sup> The Energy Research Center would have added three new units, to include a Tennessee Mining and Minerals Resources Research Institute, an International Energy and Resource Development Center, and a Special Energy/Resource Development Reference Library.<sup>195</sup> The Energy Research Center intended to incorporate several special research laboratories that would focus on high voltage; fusion research; energy application instrumentation; vehicle maintenance and testing; chemical, metallurgical, and polymer engineering; and multidisciplinary projects. Finally the center

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<sup>192</sup> Ibid, 10.

<sup>193</sup> Letter from Edward J. Boling, President of the University of Tennessee, to S.H. Roberts Jr., President of the Knoxville International Energy Exposition, 21 December 1978, included as part of *Energy Research Center: The Expo '82 Federal Pavilion Residual Use Facility Program*, (Knoxville, TN: University of Tennessee, 1978).

<sup>194</sup> *Energy Research Center: The Expo '82 Federal Pavilion Residual Use Facility Program*, (Knoxville, TN: University of Tennessee, 1978): 7.

<sup>195</sup> *Energy Research Center*, 7.

would incorporate a nuclear reactor simulation facility.<sup>196</sup> These laboratories and testing facilities all had common targets: energy production, conservation, and utilization.<sup>197</sup>



**Figure 32: Interior of United States Pavilion, Energy Expo '82**

Even the United States Pavilion failed to live up to its proposed plan and purpose during the fair. The original vision was that the pavilion would be a completely self-sufficient power source, a sort of ‘energy umbilical’ to which exhibits would be plugged.”<sup>198</sup> However, budgetary constraints caused the function and programming of

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<sup>196</sup> Ibid, 7-8.

<sup>197</sup> Ibid, 13.

<sup>198</sup> Ivy, 59.

the pavilion to change. According to Robert Ivy's article in *AIA Journal*, "When it was found that total energy self-sufficiency would cost twice the original estimates or more, a biomass generator and a power tower were cut from the program and the underground theatre saw the light of day above ground."<sup>199</sup> Thus, the only way the pavilion addressed the energy theme of the fair was solely in terms of organization: —the structure [demonstrated] that a combination of technology and common sense design can contribute greatly to the energy needs of building."<sup>200</sup> The United States Pavilion provided visitors with five levels of exhibits focusing on how the United States and its citizens could improve energy consumption. It was essentially an educational tool that used the most innovative technology; the pavilion building itself was not representative of energy conservation. Perhaps that proved prophetic for the building's future.

By the fair's opening in 1982, the University of Tennessee abandoned its plans for the redevelopment of the United States Pavilion for the Energy Research Center, citing the projected \$5 million renovation cost as the main reason. According to a 2 June 1981 article in the *Knoxville Journal*, the energy and utility systems in the building were designed for fair use only and would have to be supplemented by as much as 50 percent, even though the federal government set aside \$21.3 million to build and operate a permanent building instead of a temporary one.<sup>201</sup> The Department of Energy considered this an embarrassment, considering that, in a "World's Fair," which carries the title of "Energy Expo '82," the U.S. pavilion should be an exemplary model of the wise use of energy in buildings."<sup>202</sup> Unfortunately, a plan or consensus could never be reached by

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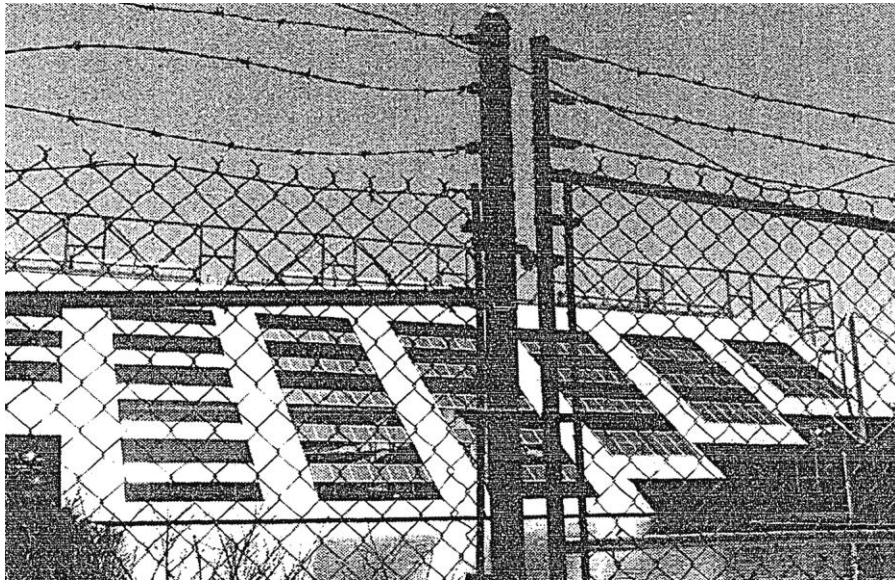
<sup>199</sup> Ibid.

<sup>200</sup> Ibid.

<sup>201</sup> "UT Nixes Pavilion Takeover," *Knoxville Journal*, 2 June 1982.

<sup>202</sup> Ibid.

city or federal governmental officials. In 1984, the General Services Administration sold the United States Pavilion to the City of Knoxville for \$1 because no one else wanted to buy it.<sup>203</sup> Unfortunately, the pavilion was never used for anything; it sat empty for approximately a decade before being demolished in the early 1990s.



**Figure 33: United States Pavilion, from William E. Schmidt, “The Desolate Legacy of Knoxville’s World’s Fair,” *New York Times*, 18 May 1984.**

*Preservation Efforts: Candy Factory, L&N Station and Depot, and Foundry*

As with Seattle, San Antonio, and Spokane, Energy Expo ‘82 reutilized several buildings in the fair site for fair purposes. In fact, the majority of the buildings directly surrounding Lower Second Creek were rehabilitated. In comparison to the other world’s fairs, Lower Second Creek had the least demolition of existing structures because of the

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<sup>203</sup> —U.S. Fair Pavilion Sold In Knoxville for \$1,” *New York Times*, 4 February 1984.

very nature of the site: a railroad yard (Figure 25). These buildings exist and are still being used today. As a result, they are considered a great effort of preservation for Knoxville. These buildings include the L&N Station and Depot, the Candy Factory, and the Victorian houses. Other buildings built for the fair, such as the Tennessee Amphitheatre and the Sunsphere still exist and are being used for administrative, museum, and entertainment spaces.

The Candy Factory and the L&N Station and Depot were the most visible rehabilitation and renovation projects of the fair. Known as Miller's Warehouse, the building known as the "Candy Factory" was originally the Littlefield Steer Candy Company until it went out of business in the late 1930s. Miller's bought the building in the mid-1940s and used it as a drapery, upholstery, and storage facility until December 1979, when the Knoxville Community Development Corporation (KCDC) acquired it for the expo's use.<sup>204</sup> For the Energy Expo, The Candy Factory provided the setting for a number of European-themed events, exhibits, and dining opportunities. An Italian street festival, complete with the antics of acrobats, mimes and an organ grinder, offered visitors entertainment while they dined on pasta, wine, and beer on terraces and under colorful umbrellas on the first floor.<sup>205</sup>

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<sup>204</sup> "Miller's Warehouse to be Renovated," *Knoxville Free Press*, 12 June 1980.

<sup>205</sup> Kruse, *Official Guidebook*, 119.



Figure 34: Candy Factory before restoration, from *Knoxville's 1982 World's Fair*, 14.

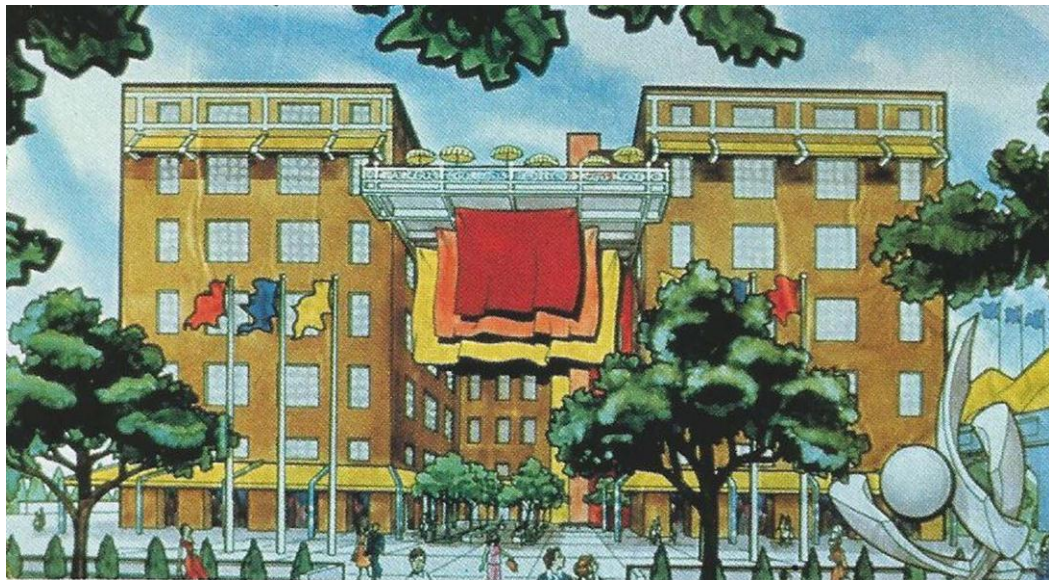


Figure 35: Candy Factory Illustration from the *Energy Expo '82 Official Guidebook*, 118

The second floor was dedicated to European fast food varieties with adornments of express trains, jets, speedboats and rockets.<sup>206</sup> The third floor had a buffet space for

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<sup>206</sup> Ibid.

large groups and an event space that could be booked for special occasions. This was the only floor that offered a space inspired by the rustic atmosphere of frontier days in Tennessee.<sup>207</sup> The top floor offered the Crow's Nest, a bar offering exotic island drinks in a romantic, Hawaiian atmosphere.<sup>208</sup> The highlight of the Candy Factory was the opportunity for visitors to watch the confection of candy with original candy-making machines.<sup>209</sup> Although the Candy Factory provided a multitude of dining, entertainment, and leisure activities during the Expo, its use after the fair was still uncertain by the time the fair closed in late 1982.<sup>210</sup> Today, the Candy Factory has been rehabilitated into luxury condominiums with retail space on the bottom floor. Visitors to the building can still purchase candy made on-site at the Chocolate Factory. The building as a whole fulfills, somewhat, the original vision for mixed-use, high-density development; however, these are not intended for low- to moderate-income families, as the current price range for a two-bedroom, two-bathroom unit is \$290,000.

During the fair, the original station for the Louisville & Nashville & Southern Railroads was the site of a restaurant, lounge, and office space. The *Official Guidebook* describes the station as having a regal façade, ornate décor and stained glass windows.<sup>211</sup> It was renovated as part of a \$65.5 million, eight part project of which \$9.9 million was obtained through an action-grant from the Department of Housing and Urban Development (HUD).<sup>212</sup> The eight part project also included a 550-space subterranean parking garage, office-exhibition center with 230,000 square feet of space, a 330-room

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<sup>207</sup> Ibid.

<sup>208</sup> Ibid.

<sup>209</sup> Ibid.

<sup>210</sup> Charles Siler, "Candy Factory Won't Be Razed: KCDC Is Unsure of Future Use," *Knoxville News-Sentinel*, 23 October 1982.

<sup>211</sup> Kruse, *Official Guidebook*, 119.

<sup>212</sup> "Grant to Spark Redevelopment Expected Soon," *Knoxville News-Sentinel*, 2 July 1980.



Holiday Inn, and a restaurant for the Sunsphere.<sup>213</sup> There was also encouragement for a 200,000 square foot office tower and parking garage in another area close to the exhibition site. These projects were administered through the Station Eight-Two joint venture, and, in addition to the HUD grant, they were funded through the Knoxville International Energy Exposition (KIEE), Inc., J. C. Brandford Co. of Nashville, and Lehman Brothers Kuhn Loeb of New York. These companies either financed their contributions through charging rents or through redevelopment bonds.



Figure 36: L&N Depot (built in 1917) before restoration for Energy Expo '82, from *Knoxville's 1982 World's Fair*, 13.

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<sup>213</sup> Ibid.

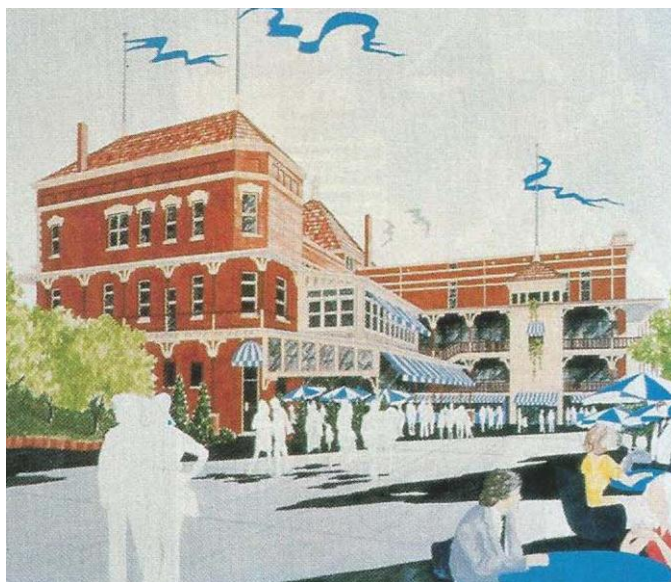


Figure 37: L&N Depot illustration from the *Energy Expo '82 Official Guidebook*, 118.

These HUD grants were crucial to the funding of these projects, as this particular “action grant” were awarded to cities to create an incentive for redevelopment or new development,” which meant new jobs and added prosperity in economically distressed areas.<sup>214</sup> In other words, these action grants were similar to the federal Urban Renewal program in that they encouraged speculative developments. Because the original reuse plan for the site after the fair incorporated low- to moderate-income housing, HUD was more inclined to fund these ventures for the Energy Expo. According to the 2 July 1980 issue of the *Knoxville News-Sentinel*, the Holiday Inn was scheduled to open in early 1982, while the office and exhibition hall were completed in late 1981.<sup>215</sup> The L&N Station renovation was also completed in early 1981. Except for the restaurant in the Sunsphere, all of the buildings associated with the Station Eight-Two venture still exist

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<sup>214</sup> Ibid.

<sup>215</sup> Ibid.

and are in use today. During the Expo, the renovated L&N Station offered three different restaurant options that included a Ruby Tuesday's, the L&N Fish Market, and fine French cuisine by Chef Pierre Parker. It also offered visitors "a new world of electronic wizardry" where "exciting computer games will provide fascination for hours."<sup>216</sup>

One of the larger restaurant and entertainment spaces was the Strohaus (also Stroh Haus or Stroh's Haus), which was housed in the renovated 120-year-old Knoxville Foundry and was named after the fair's official beer sponsor, Stroh's. It offered visitors a 700-seat, indoor-outdoor space for the enjoyment of Bavaria-inspired music, cuisine, and beer. It was operated by those seasoned in the operations of Oktoberfests in Munich, Stuttgart, and Dusseldorf, Germany. The building used to be a foundry that "more than 100 years ago rang with the sounds of iron-forming hammers."<sup>217</sup> It was transformed into a restaurant, entertainment, and leisure area for fair visitors to enjoy the Bavarian Bell Ringers' show, the "mighty Oom-pah Band tuba and the gala tunes of Oktoberfest."<sup>218</sup>

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<sup>216</sup> Kruse, *Official Guidebook*, 119.

<sup>217</sup> Ibid.

<sup>218</sup> Ibid.



Figure 38: Knoxville Foundry before restoration for Energy Expo '82, from *Knoxville's 1982 World's Fair*, 15.



Figure 39: Illustration of Strohaus during fair, from the *Energy Expo '82 Official Guidebook*, 118.

In explaining the direct and indirect influences of the fairs in Seattle, San Antonio, and Spokane on Knoxville's Energy Expo '82, the progeny of world's fairs in the United States after World War II becomes that much more complex and intricate. It also adds legitimacy to these sites as culturally, aesthetically, and historically significant both individually and as part of an overall history of world's fairs in this country. It is interesting to note that the majority of the buildings from Energy Expo '82 that still exist provided food services to fair visitors. The seventeen acres that composed the southern end of the fair, from Cumberland Avenue to the Australian Pavilion and Amusement Park, were eventually acquired by the University of Tennessee for parking and the expansion of university facilities. This was the only reuse of the site that was completed according to any sort of reuse plan. The 1 May 1983 issue of the *Knoxville News-Sentinel* states that the parking area would include eight hundred spaces and would be completed by the beginning of the fall term. The parking plan excluded the landscaped area along Lower Second Creek.

The northern section of the fair that hosted the Folklife Festival was used for improvements to I-40. Known as —~~the~~ "function junction," interstate improvements were another reason for hosting a world's fair, as long-needed improvements to the I-40 and I-275 interchanges were made possible in a shorter amount of time than otherwise would have been possible. Unfortunately, the reuse plans for the rest of the fair site were never completely developed. As we'll see in the next chapter, the current World's Fair Park has been a twenty-year, improvement project that, originally, provided only a temporary, interim solution to the stagnant fair site. Although the United States Pavilion never saw the glory of reuse as an Energy Research Center, the site as a park has provided the

population of Knoxville a much-needed, centrally-located, and highly-utilized public, urban green space.



**Figure 40: "Malfunction Junction," (I-40 and I-275 Interchange) from *Knoxville's 1982 World's Fair*, 17.**

## CHAPTER 5

### KNOXVILLE WORLD'S FAIR PARK AND FESTIVAL CENTER

Energy Expo '82 made a profit of approximately \$55, and it was considered successful even at that miniscule amount. However, the Knoxville International Energy Exposition (KIEE), Inc. suffered a major public relations set-back when its main financial backer, Jake Butcher, went to federal prison for the money laundering he did in order to finance the Expo. With residual use plans for the United States Pavilion never finalized or even realized, the World's Fair site suffered from neglect. This chapter will discuss the Knoxville World's Fair Park and Festival Center and the twenty-year journey it took to reach its current manifestation.

The world's fair site in Knoxville experienced a ten-year period between 1982 and 1992, when multiple redevelopment studies and developers' plans created hope for the site but failed to deliver on carrying-out and implementing plans for redevelopment as a mixed-use, high-density area offering a combination of commercial and residential options for Knoxville's Central Business District. At first, it seemed as though the citizens of Knoxville lost the potential long-term revitalization benefits of the Expo because of the lack of residual use plans for the site as an entirety. However, we will see that the site's redevelopment as an urban park for the public and convention center ultimately gave the citizens of Knoxville an urban oasis for festivals, entertainment, and leisure activities. This reuse as an urban park also allowed Knoxville to preserve Energy Expo 82's legacy.

*The 1982 ASCA Charrette, Private Redevelopment Schemes, and the Working Group for the Planning of the World's Fair Park*

As part of Energy Expo '82, the Association of Collegiate Schools of Architecture (ASCA) hosted a four-day design charrette that focused on energy issues in architecture and urban design. Funding by the National Endowment for the Arts, the Brick Institute of America, and the United States Department of Energy allowed five schools to participate, including the Universities of Florida, Tennessee, Southern California, Michigan, and the New York Institute of Technology (Figures 41-45). Each team's leader was required to be a widely known and recognized for either his excellence in design and/or his expertise in energy.<sup>219</sup> For the charrette, the schools' design teams were expected to develop detailed design proposals for future uses for the 1982 World's Fair site in Knoxville, Tennessee.<sup>220</sup> The framework for the teams' designs included a master plan and development goals, for which they examined a range of potential uses and design strategies, emphasizing approaches to energy-conserving development solutions.<sup>221</sup> They were expected to pay particular attention to the potential for residential development in the designated area, which was the area north of Cumberland Avenue and South of the L&N Station.<sup>222</sup>

The majority of the conceptual design took place during the four-day period held during the last weeks of the world's fair in October of 1982. Although the teams were allowed to retain their drawings, they were required to bring back their work to their

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<sup>219</sup> Richard E. McCommons, ed, "1982 ASCA Charrette: Knoxville," Association of Collegiate Schools of Architecture (June 1983): 3.

<sup>220</sup> McCommons, "1982 ASCA Charrette," 3.

<sup>221</sup> Ibid.

<sup>222</sup> Ibid.



home campus for further elaboration and refinement.<sup>223</sup> The focus on residential development came from expressions of interest and qualifications statements [that] had been sought from prospective developers and were being evaluated by officials in Knoxville.<sup>224</sup> The charrette was to provide decision makers with more design ideas to consider that took into account the Knoxville community as a whole, the surrounding neighborhoods, and the city center.<sup>225</sup> The criteria for each team was to consider and incorporate the site choice, development phasing, fair site reuse, linkage between the Fort Sanders neighborhood and the downtown area across the valley, the relationship between the University and the riverfront, the railroad right-of-way, the relationship between the architectural vocabulary and the materials, community, and vernacular design needs, and the integration of energy-conscious design factors.<sup>226</sup>

Of the five design concepts submitted (all of which focused on creating high-density housing with underground parking and a pedestrian system linking the west and east sides of the site), only two, one from the University of Michigan and the other from University of Southern California, encroached minimally into the valley where the Waters of the World were situated. (Figures 41 and 42) They used the topography and the railroad line as boundaries for their housing developments on the west and then connected them to the convention center and downtown Knoxville through a network of pedestrian-friendly circulation systems that used the Clinch Street footbridge as its main

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<sup>223</sup> Ibid., 2; the designs that were developed by the charrette teams were based on a predetermined plan for the site that required high-density, mixed-use development. None of the ideas that any of the charrette teams or the developers ever came to fruition, as no one was willing to finance these ideas. Also, it is uncertain as to whether or not the developers' schemes took into consideration the charrette designs.

<sup>224</sup> Ibid, 3.

<sup>225</sup> Ibid, 2.

<sup>226</sup> Ibid.

east-west axis. The University of Michigan's design removed the railroad tracks (Figure 41), while the University of Southern California's design did not (Figure 42).

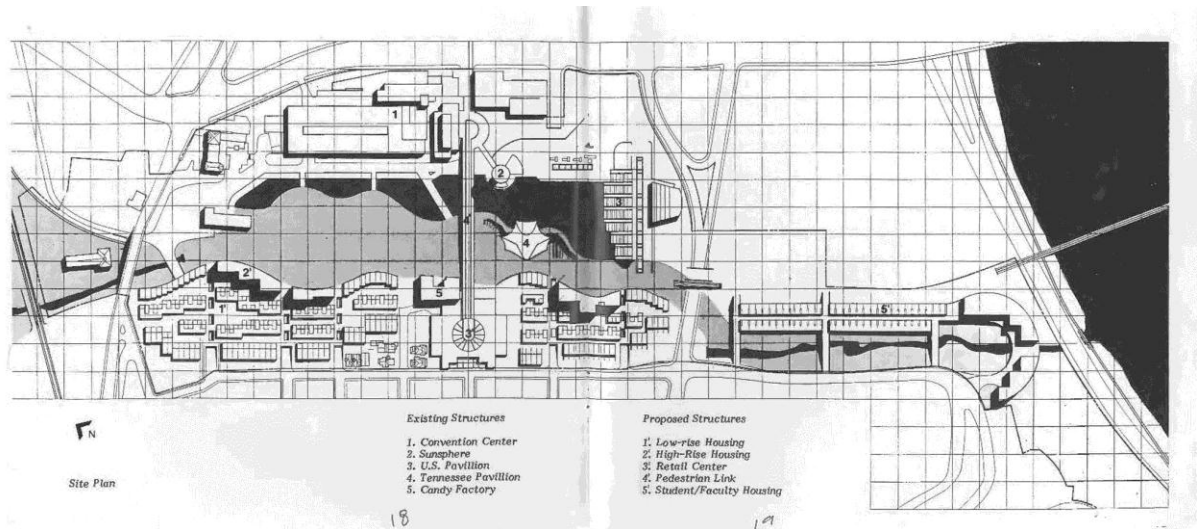


Figure 41: Plan from the University of Michigan, 1982 ASCA Charrette

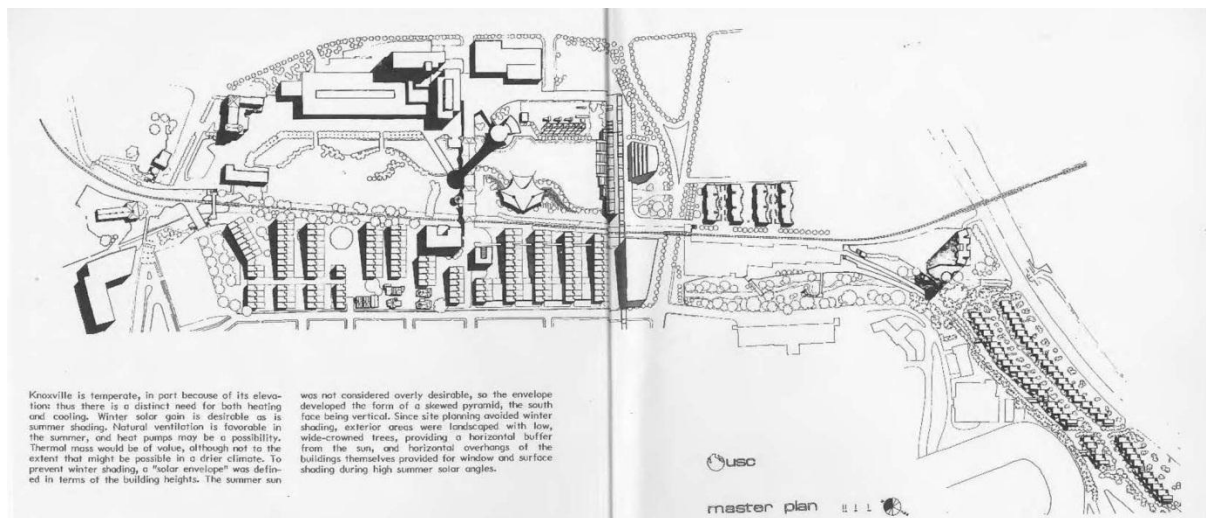
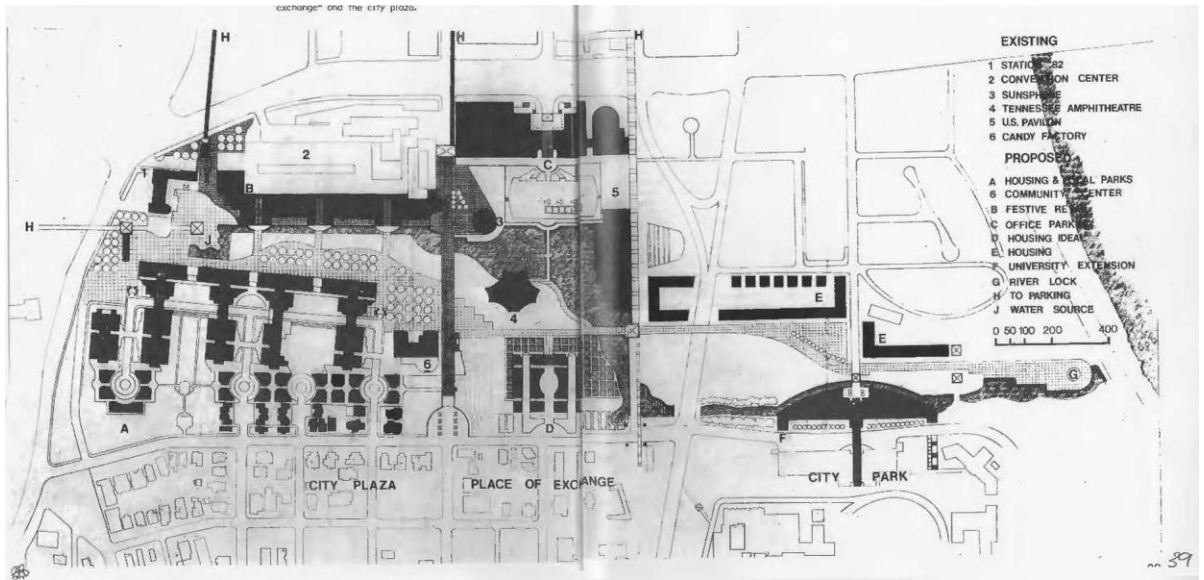
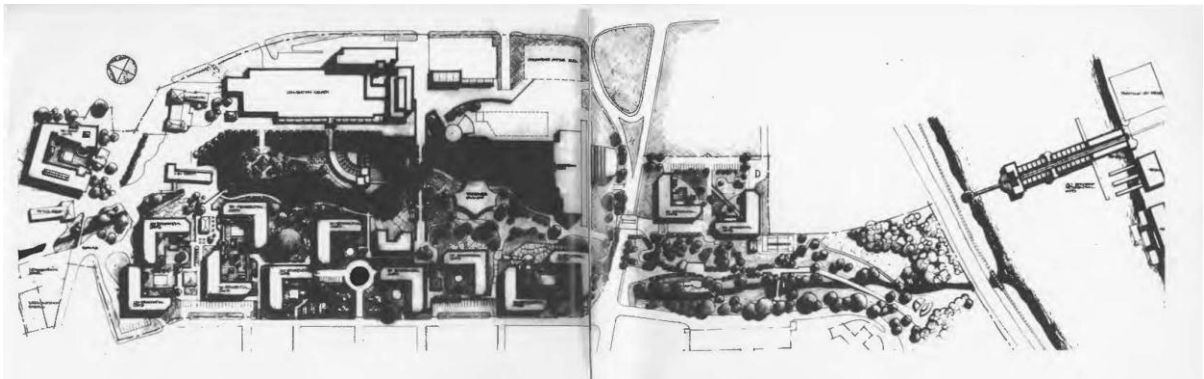


Figure 42: Plan from the University of Southern California, 1982 ASCA Charrette

The University of Tennessee's design, though it removed the tracks and encroached into the valley, incorporated all of the major permanent structures from the fair into its design while maintaining a centralized park with a water source that ran the length of the valley (Figure 43). The designs from the University of Florida and the New York Institute of Technology did incorporate green space, but these two designs were the most invasive to the valley and original world's fair site (Figures 44 and 45). Although all of the designs celebrated the Sunsphere and the Tennessee Amphitheatre, the original integrity of the fair site and layout were lost in the Florida and New York Institute plans. Also, it is important to note that all of the plans incorporated a development for the southern portion of the fair, between Cumberland Avenue and the Tennessee River. At the time of the charrette, although it was known that the University of Tennessee would acquire that land after the fair, it was not known until 1983 that the plans called for the 800-space parking lot. The charrette plans either ignored the area completely (as did the New York Institute of Technology) or the area was fully developed for student housing, as in the plans from the University of Michigan and the University of Southern California (though Southern California's student housing development is concentrated along the Tennessee River with a large green space between it and Cumberland Avenue).



**Figure 43: University of Tennessee Plan, 1982 ASCA Charrette**



**Figure 44: University of Florida Plan, 1982 ASCA Charrette**

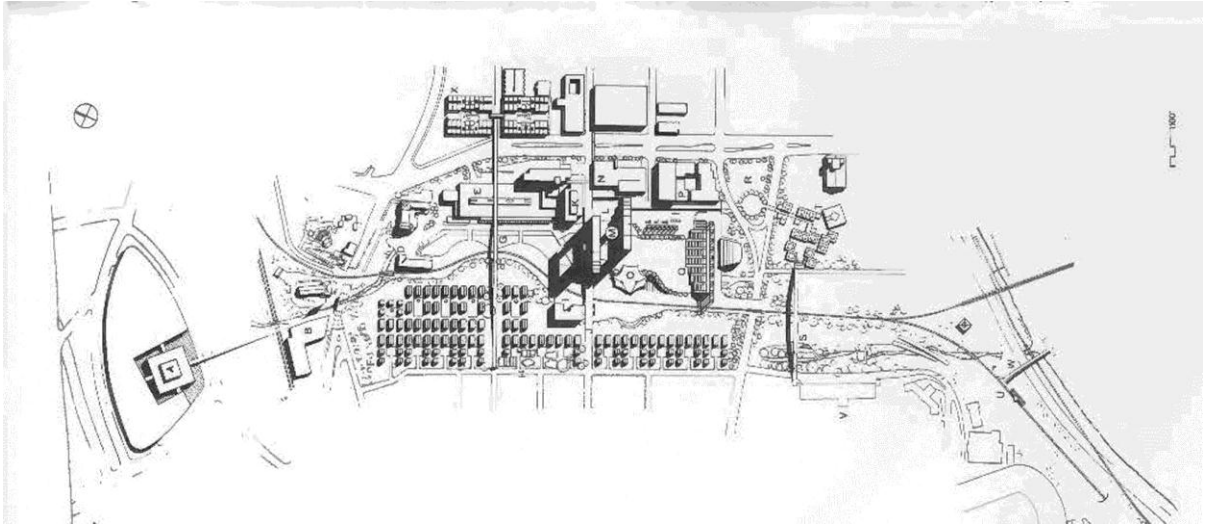


Figure 45: New York Institute of Technology Plan, 1982 ASCA Charrette

Throughout Energy Expo '82's planning, development, and implementation, studies always indicated that the highest and best use of the site after the fair was high-density, mixed-use development. Several developers throughout the 1980s submitted plans for reuse in addition to the plans developed through the charrette process. One was George Donovan, president of Fairfield Communities. His site redevelopment plan turned the site "into a bustling residential and commercial complex," but it hinged on the city convincing the Southern Railway to tear up the tracks.<sup>227</sup> Donovan insisted in an article from the 10 September 1982 issue of the *Knoxville News-Sentinel* that "tearing up the tracks is vital" because they "essentially split the site in two. It gives you a western half and an eastern half and just doesn't allow for good comprehensive development where it all ties together."<sup>228</sup> Donovan also insisted that "the maximum development

<sup>227</sup> Donovan, quoted in Roger Harris, "Fair Site Tracks Hinder Developer," *Knoxville News-Sentinel*, 10 September 1982.

<sup>228</sup> Ibid.

potential will only be reached” if the Clinch Avenue bridge is closed to vehicular traffic.<sup>229</sup>

At the same time that the city and Donovan were negotiating with the railroad company about the tracks, initial work began on cleaning-up and preparing the world’s fair site to host events. Between the closing of Energy Expo ‘82 in October of 1982 and the Spring of 1983, “Already, additional parking has been added on the site around the lake at the north end of the site near the L&N Depot.”<sup>230</sup> A group of local businesses formed an organization to promote events on the site, and this group included Miller’s Department Store, Ruby Tuesday’s and Fish Market restaurants in the old L&N Depot, the Sunsphere, Strohaus, Station ‘82, and a design and printing company called Graffix. This organization also included the Knoxville city government, Knoxvisit, Holiday Inn World’s Fair, Hilton Hotel, Quality Inn, and Donovan’s Fairfield Communities, “the company contracted [at the time] by the city to develop a plan for the fair site.” This organization was not named at this time, but it helped to spur the use of the area as a festival and entertainment space.

By the spring of 1985, Donovan’s plan had fallen through the cracks and another developer, Harrison Price, president of Harrison Price, Co., a small Los Angeles firm, conducted a “recreational and real estate economics analysis” for the Knoxville world’s fair site.<sup>231</sup> Harrison’s client list at the time included Walt Disney, for whom Harrison had already completed 120 studies, to include the siting of Disneyland in Anaheim, California and the location of Disneyworld in Orlando, Florida. By 1982, he had been

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<sup>229</sup> Ibid.

<sup>230</sup> “Events on Former Fair Site to be Promoted,” *Knoxville News-Sentinel*, 3 February 1983.

<sup>231</sup> Tom Williams, “Festive Fair Site Complex Urged: Proposal Includes Retail Shops, Amusement Complex,” *Knoxville Journal*, 5 March 1985.

doing downtown revitalization projects. According to Price, “We try to find out how we can keep em from flitting out to the suburbs, so that downtown isn’t dark at night.”

Price’s analysis included consideration of an amusement park on the scale of Six Flags, but the analysis later determined that a shopping center with an anchor department store would better serve the community than an amusement park. The reasoning Price gave for this determination was that “Theme parks are not as efficient as festive retail centers in attracting people, and are capital-intensive land hogs that gravitate to suburban areas.”<sup>232</sup> Price’s analysis also offered reasoning for Donovan’s failed plan two years before; it was “unmarketable” because a “Fairfield-type plan” calling for residential and office development “would be a further drain on existing, under-utilized downtown development, because residences and offices don’t attract tourists and others in their own right.”<sup>233</sup>

Like San Antonio’s residual use plan was based on the Tivoli Gardens in Copenhagen, Denmark, Price based his plan on the Tivoli Gardens with a focus on a shopping center with an anchor department store.<sup>234</sup> This “festive retail center,” called “Knoxville Place,” incorporated over fifty stores that would have generated a projected \$174.6 million in direct taxable retail sales and another \$36.5 million in included sales over a ten year period.<sup>235</sup> Amusement park rides, a hotel, and entertainment were also included in the plan. The retail center would have generated \$15.4 million in state and local taxes, amusements would have added another \$3 million, and the hotel another \$4.8 million in taxes. Property taxes also would have pumped approximately \$500,000

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<sup>232</sup> Tom Williams, “Festive Fair Site Complex Urged.”

<sup>233</sup> Ibid.

<sup>234</sup> Ibid.

<sup>235</sup> Roger Harris, “Fair Site Redevelopment: \$290 million in taxable retail sales potential over 10 years,” *Knoxville News-Sentinel*, 6 March 1985.

annually into the city's general fund. Price said that over forty cities had revitalized downtowns with similar projects, citing one he worked on in Milwaukee, Wisconsin that took over twenty years to complete.<sup>236</sup> The plan for the United States Pavilion was to convert it into an atrium, lobby, or exhibit center for a proposed 300-room hotel to be built around it.<sup>237</sup> Near the intersection of Cumberland Avenue and Henley Street, Price's plan called for the construction of a parking garage and office building that would be connected to the Holiday Inn and the Sunsphere by a network of enclosed walkways.<sup>238</sup>

Throughout the whole fair and residual planning phases, Knoxvilleians were on edge over the funding and this was partly why Price's plan, like Donovan's, was never realized. By September of 1986, Price's plan had grown to include an enlarged Tennessee Amphitheatre, a railroad museum, and more specialty shops. However, for either project, funding would have had to have been raised through a public-private partnership, and this put the public on its guard after the unclear financing of the Expo itself, especially in the aftermath of Jake Butcher's federal conviction for laundering Energy Expo funds.<sup>239</sup> Throughout these development proposals, the public continued to insist that more park and green space be incorporated into the design.

In a 30 September 1986 issue of the *Knoxville Journal*, Tom Williams reported that downtown residents liked the festivals and other public events that had been held on the site since the summer of 1983. In fact, the residents advocated for more park space at the world's fair site than the master plan called for, and the only thing holding back the

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<sup>236</sup> Ibid.

<sup>237</sup> Tom Williams, "Festive Fair Site Complex Urged," *Knoxville Journal*, 5 March 1985.

<sup>238</sup> Ibid.

<sup>239</sup> "Fair Site's Exciting Plans," *Knoxville News-Sentinel*, 6 March 1985.



idea was empty, speculative office space near the river. By this time, a downtown revitalization group known as City People had been created, and it recommended that Price change his plan so that the northeast corner of 11<sup>th</sup> Street and Cumberland Avenue incorporate —quality park space.<sup>240</sup> City People actually endorsed Price’s “Knoxville Place” idea for festive retail and entertainment in the area of the L&N Station. However, it also wanted more pedestrian, bicycle, and light vehicle pathways.<sup>241</sup>

In the summer of 1988, after five proposed developments since the closing of the fair in 1982, the City of Knoxville heeded the public desires for a park space on the Expo site.<sup>242</sup> By a unanimous vote, the Knoxville Downtown Organization approved a two-phase park program to be finished in 1989. This plan was developed by the staff at the Knoxville-Knox County Metropolitan Planning Commission at no extra cost to the public. According to the “Report of the Working Group on Phase I Planning of Knoxville’s World’s Fair Park,” the City of Knoxville’s annual budget survey for 1988-1989 indicated that the residents of Knoxville preferred recreational facilities and museums over theatres, restaurants, and retail shops for the world’s fair site.<sup>243</sup> Taking the Knoxville’s wants and needs into consideration, the Planning Commission decided to make the site a park as an interim, temporary use. In order to complete Phase II of the plan, the mayor of Knoxville asked a dozen representatives of organizations which were —involved in making decisions about the World’s Fair site to work together to define a management structure for the World’s Fair Park.”<sup>244</sup> This became known as the Working

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<sup>240</sup> Tom Williams, —City People want more park space in Fair site proposal,” *Knoxville Journal*, 30 September 1986.

<sup>241</sup> Ibid.

<sup>242</sup> Only the plans with the most newspaper coverage are discussed.

<sup>243</sup> Introduction to the *Report of the Working Group on Phase I Planning of Knoxville’s World’s Fair Park*, (June 1988), 1.

<sup>244</sup> Introduction to the *Report of the Working Group*, 1.

Group and in the summer of 1988, they met with Bot Whittaker, Manager of Operations and Programming at Opryland to help come to a consensus about the management structure of the park.<sup>245</sup>

The Working Group developed six overall goals for the World's Fair Park and Festival Center. First and foremost, the park was to provide the residents of Knoxville with high-quality green space in the downtown area. The second goal was to increase the use of the park space, and the Working Group decided that the first step to this achieve this was to build on existing programming to achieve regularly recurring, magnet events. These magnet events would make the park an attraction, thus increasing the use of the site by local and regional residents. In order to sustain these visitors, a full range of amenities, to include parking, was needed. However, the Working Group suggested that these amenities be appropriate to the park's concept. Finally, the only way to increase use by attracting local and regional visitors with events was if the park was marketed effectively.<sup>246</sup>

The Working Group also developed marketing, programming, and facility maintenance objectives for the park. They also set standards and expectations of each park decision maker, as well as a park management structure for the marketing, programming, and operations/maintenance of the park. The implementation of these goals and strategies composed the second phase of the project. This second phase only cost \$500,000 for ~~am~~ among other things, fence removal at the Fair site, better parking and

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<sup>245</sup> It seems more appropriate for Knoxville to consult with theme park experts after it was developing its own park space for the Energy Expo Site. Price was an expert in developing suburban theme parks for Disney, and was then using that ideal to plan commercial ventures in downtown and urban settings. Seattle had done this for the Century 21 Exhibition in the early 1960s, and it resulted in a somewhat disjointed city center. Consulting with suburban park planners for developing high-density urban retail and residential centers does not make sense, since urban cores and suburban sprawl require different planning approaches.

<sup>246</sup> "Goals and Objectives for World's Fair Park," *Report of the Working Group on Phase I Planning of Knoxville's World's Fair Park*, 2.

access, development of a parcours fitness trail,” where a path is outfitted with obstacle courses at certain intervals.<sup>247</sup> Phase II was financed through a local sales tax increase, and the nature of the improvements were designed to —maximize the site’s use and enjoyment as a park during the period that proposals are being developed according to the master development plan approved between Riverfronts of Knoxville, Inc., The downtown Organization and the City.”<sup>248</sup>

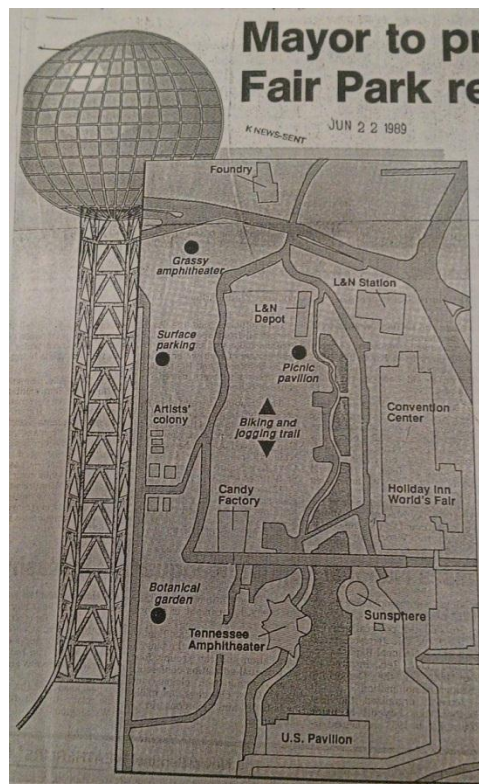


Figure 46: Map of the Proposed World's Fair Park and Festival Center, *Knoxville News-Sentinel*, 22 June 1989.

<sup>247</sup> Tom Willaims, “500 Downtown Jobs, Fair Park Endorsed,” *Knoxville Journal*, 17 May 1988.

<sup>248</sup> Introduction to the *Report of the Working Group*, 1

The physical plan of the park called for a grassy area at the core of the site with parking and private developments to be added on the site's edges.<sup>249</sup> Short range improvements included 1) preserving the United States Pavilion and using it for the three-year Christopher Columbus Quincentenary Jubilee to begin in 1989, 2) installing bike and jogging trails that ran the length of the site, 3) developing a grassy amphitheater that could accommodate as many as 3,500 people on the north end of the park.,<sup>250</sup> 4) building a surface parking lot in the area north of the 11<sup>th</sup> Street Artists' Colony, which was also being viewed for private development in the future as a possible parking garage,<sup>251</sup> and 5) completing 10<sup>th</sup> Street with a loop off of 11<sup>th</sup> street that would provide access to the Candy Factory and the Knoxville Museum of Art. This new road would complement the larger Henley Street Connector project, which a number of planners have endorsed for its direct access to 11<sup>th</sup> Street from Interstate 40/275.<sup>252</sup> Long-range projects included the construction of a picnic pavilion and a colonnade connected to L&N Depot. This proposed pavilion moved the Court of Flags closer to the Depot, establishing botanical gardens, grass terraces, short waterfalls and reflection pools on the southwest side of the park near the Candy Factory.<sup>253</sup>

The Knoxville-Knox County Metropolitan Planning Commission decided on a large, dedicated green space for the site as a means of preserving the positive legacy of Energy Expo '82. The commission envisioned the park as a positive reminder of a six-month period when Knoxville played host to the world and made some history for itself.

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<sup>249</sup> "Settling the Park Status," *Knoxville News-Sentinel*, 26 June 1989.

<sup>250</sup> Ibid.

<sup>251</sup> Ibid.

<sup>252</sup> Ibid.

<sup>253</sup> Ibid.

The fair's preservation had been a chief focus for two city administrations.<sup>254</sup> The city was still considering residential and retail projects from private developers at the time, but the idea behind the World's Fair Park and Festival Center was a two-year solution to what had become a seven year problem: what to do with the world's fair site. The World's Fair Park and Festival Center represented a "doable" city project that did not depend on the actions of an outside developer."<sup>255</sup> Knoxville took into its own hands the fate of their city rather than relying on other people to decide what economic analyses said was best.

*The 1991 Knoxville World's Fair Park and Festival Center Master Plan*

To serve the goal of a park, Knoxville created a World's Fair Park Department and created the World's Fair Park Policy Committee, which by 1991 had developed the World's Fair Park and Festival Center Master Plan. This plan outlines the goals for the park and the responsibilities of the Policy Committee, the Downtown Organization, the University of Tennessee, the Mayor and Council for implementing the plan. According to the master plan document, "World's Fair Park and Festival Center Master Plan: An Element of the Downtown Knoxville Plan," the park was to serve the public's day-to-day activities as well as provide a regional festival center. The most important concept underlying the master plan was the development of core park space that extended from the river to the north end of the grounds and served a variety of uses for the promotion of the park's vitality, as well as the vitality of the downtown, the University of Tennessee,

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<sup>254</sup> Ibid.

<sup>255</sup> Ibid.

and the Fort Sanders area.<sup>256</sup> As a result, the plan limited the park's land use to five categories: Park and Open Space, Institutional, Parking, Private, and Institutional/Private.<sup>257</sup> Park and Open Space refers to all land retained for recreational and aesthetic purposes. Institutional is that land which is reserved for museum space, fine arts, performing arts, education, a convention center, and conference facilities. Parking is limited to two facility types: surface and underground. Private areas are those either currently under private use or reserved for potential sale. Institutional/Private land use refers to existing uses that serve dual private/public purposes and areas which could be developed for either purpose or as mixed public-private uses.<sup>258</sup> Figures 47-50 illustrate some of the strengths, weaknesses, and opportunities for the world's fair site:

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<sup>256</sup> Knoxville/Knox County Metropolitan Planning Commission and Bullock Smith and Partners, "World's Fair Park and Festival Center Master Plan: An Element of the Downtown Knoxville Plan," City of Knoxville World's Fair Park Department (August 1991): 4.

<sup>257</sup> Knoxville/Knox County Metropolitan Planning Commission and Bullock Smith and Partners, 4.

<sup>258</sup> Ibid.

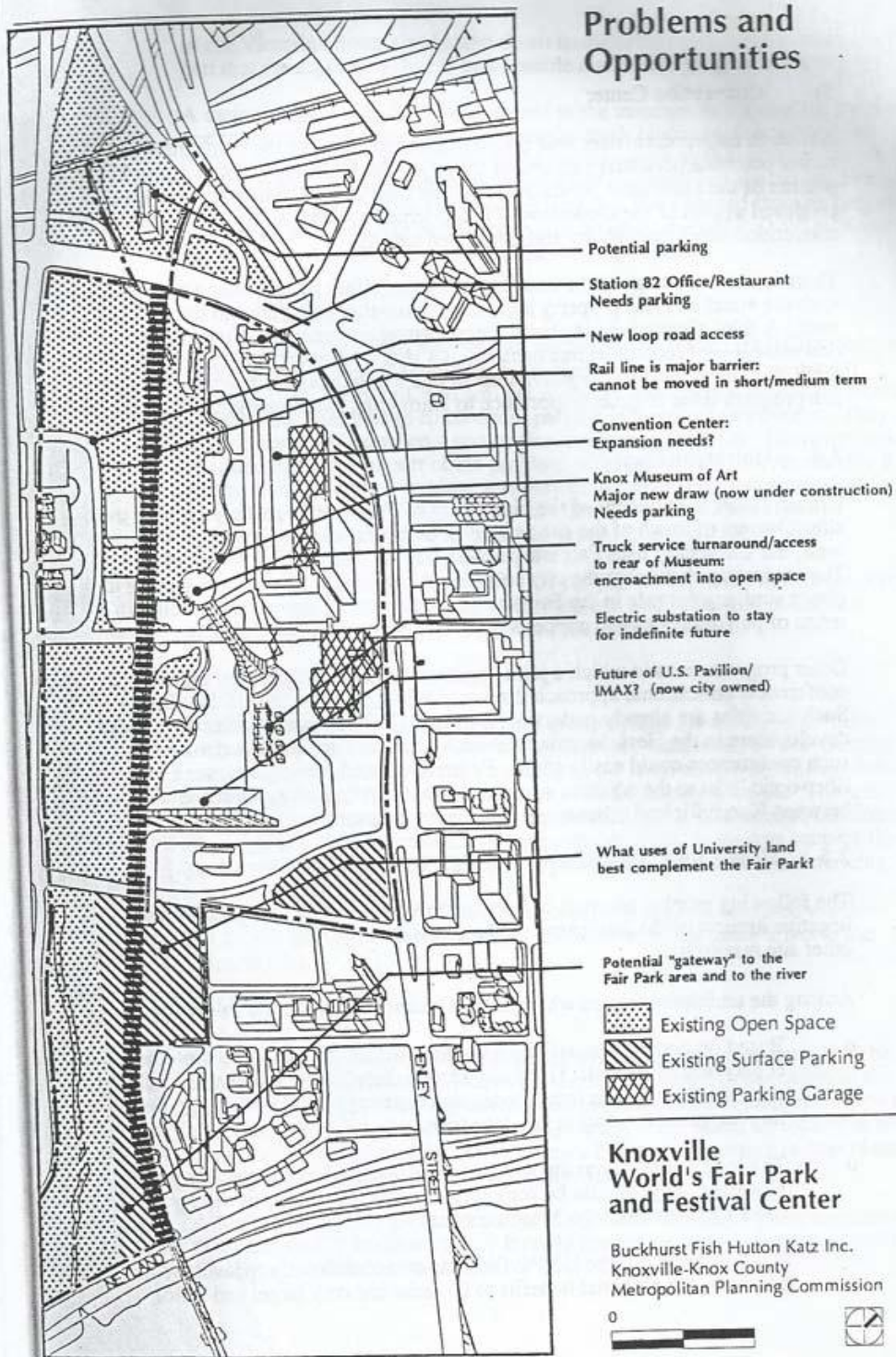
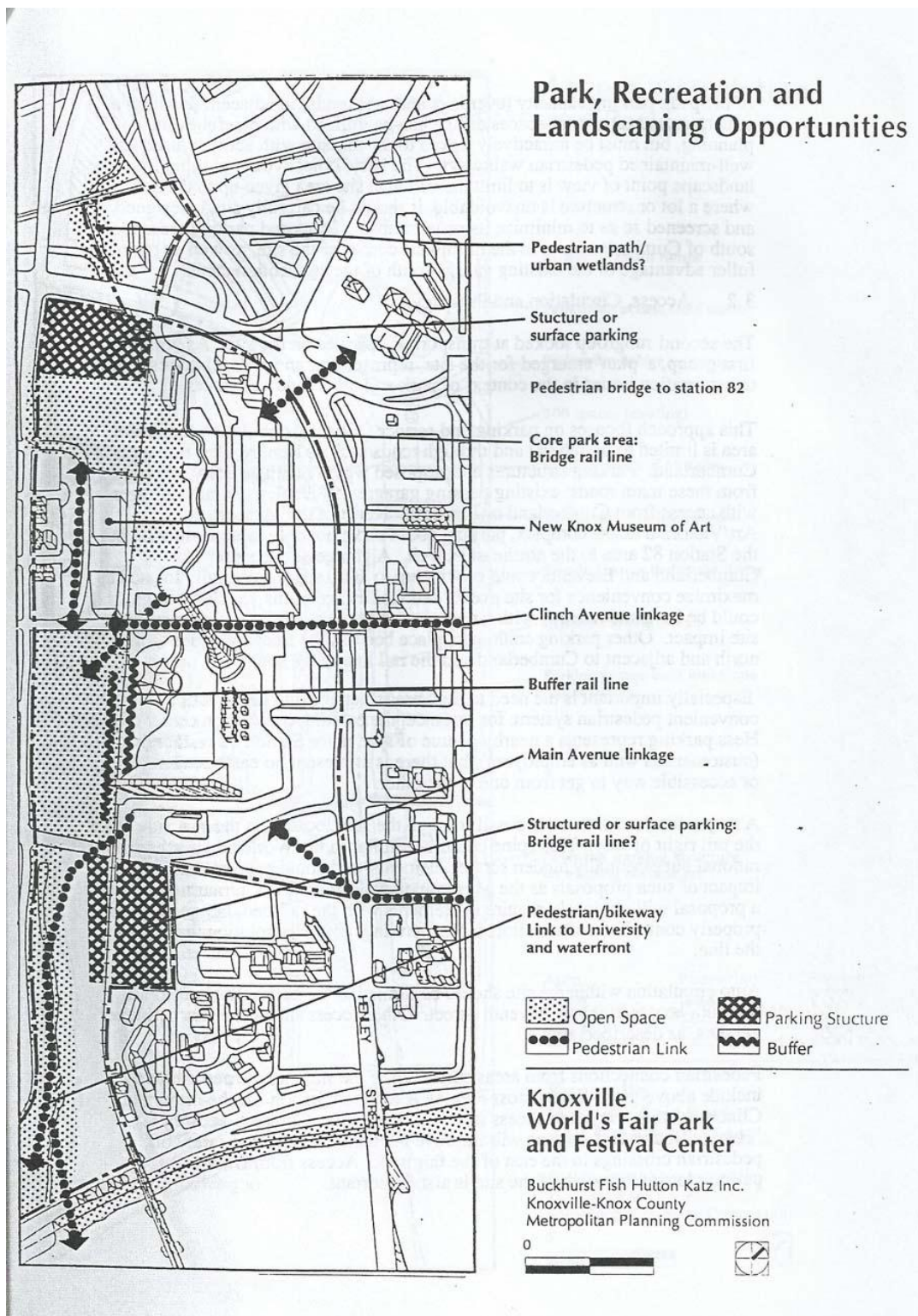


Figure 47: Site Problems and Opportunities, from *Knoxville's World's Fair Park and Festival Center, Current Status/Site Problems and Opportunities/Preliminary Design Concepts*, 10



**Figure 48: Park, Recreation, and Landscaping Opportunities, from, *Knoxville's World's Fair Park and Festival Center, Current Status/Site Problems and Opportunities/Preliminary Design Concepts 13.***



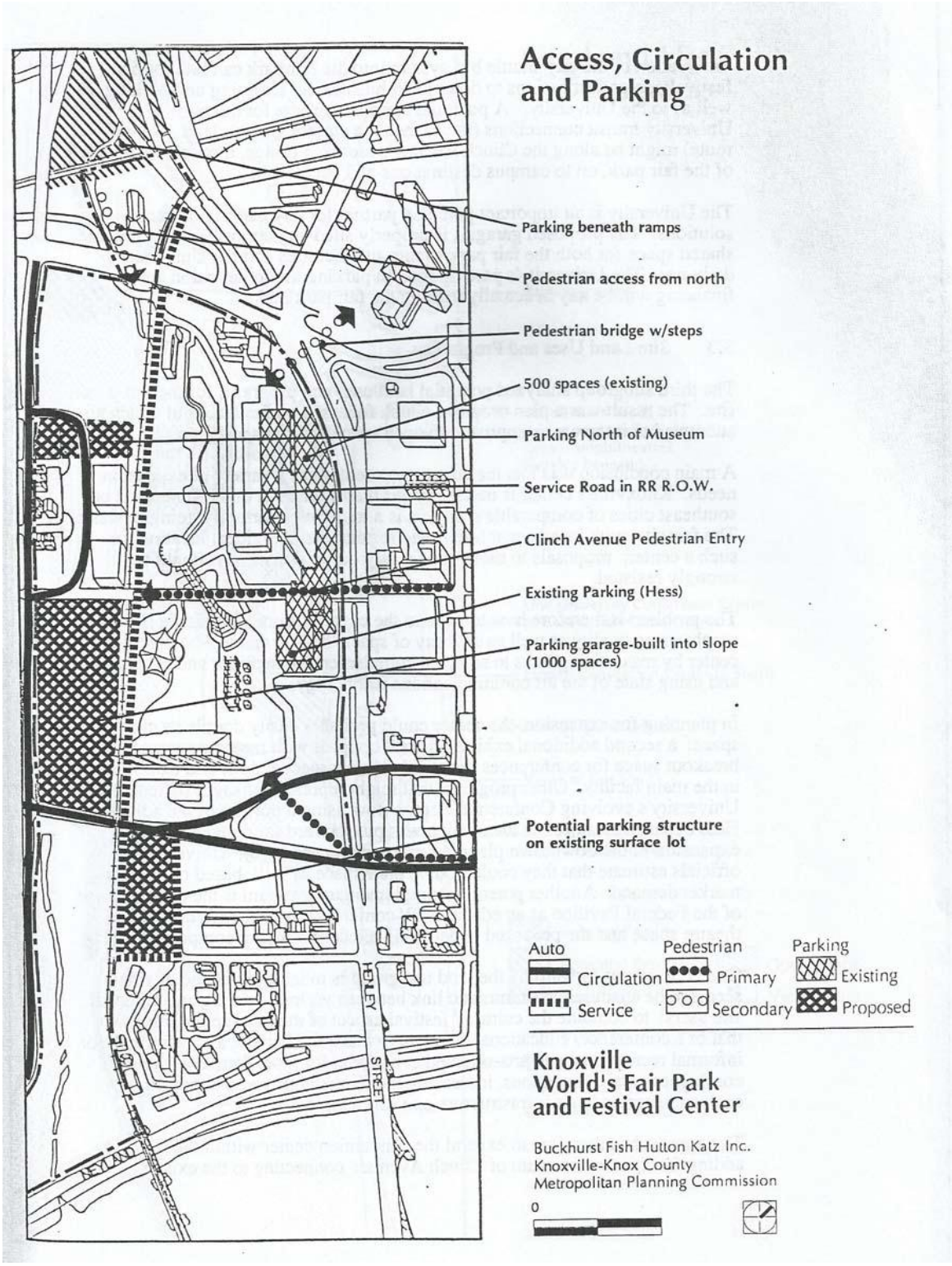


Figure 49: Access, Circulation, and Parking, from *Knoxville's World's Fair Park and Festival Center, Current Status/Site Problems and Opportunities/Preliminary Design Concepts*, 15.

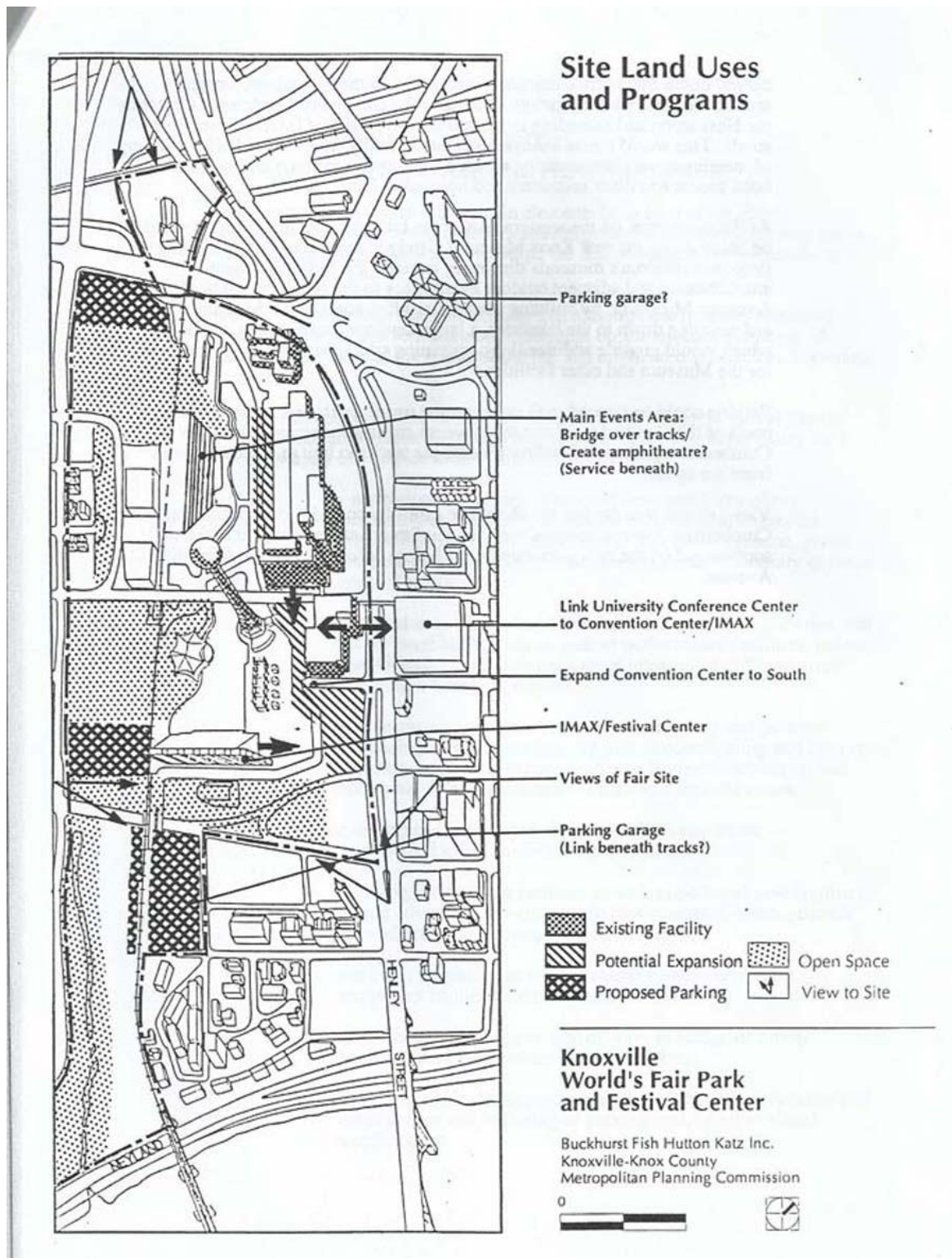


Figure 50: Site Land Uses and Programs, from *Knoxville's World's Fair Park and Festival Center, Current Status/Site Problems and Opportunities/Preliminary Design Concepts*, 17

The World's Fair Park and Festival Center Master Plan outlined long-term land use, pedestrian circulation, and overall vehicular circulation and parking. In order to define the park, the long-range land use plan called for the use of green space and water along the valley floor of the world's fair site. As a means to help improve water quality and to provide both pedestrian and bicycle access, the linear park's greenway was to run along the site, from north to south, in order to protect trees and riparian groundcover for Upper Second Creek. The Court of Flags was modified to frame the north end of a large area of open space. The railroad tracks remained a part of the park, but would provide a right of way for access to the Knoxville Art Museum. The redevelopment of the United States Pavilion limited continuous access around the Waters of the World; thus, landscaped access around the Waters and to Cumberland Avenue would be available when the pavilion was redeveloped. The Tennessee Amphitheater and an open-air amphitheater on the northwest side of the park provided entertainment venue space. The plan also called for botanical gardens, a midway park corridor across Cumberland Avenue, a lower greenway connecting Cumberland Avenue to the River, and a River gateway at the lower end of the park at Neyland Drive.<sup>259</sup> (Figures 51 and 52). The major feature of the park was the United States Pavilion because of its location in the center of the park. The plan called for a private use though it also considered the structure for the development of convention center facilities.

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<sup>259</sup> Ibid, 6-7.

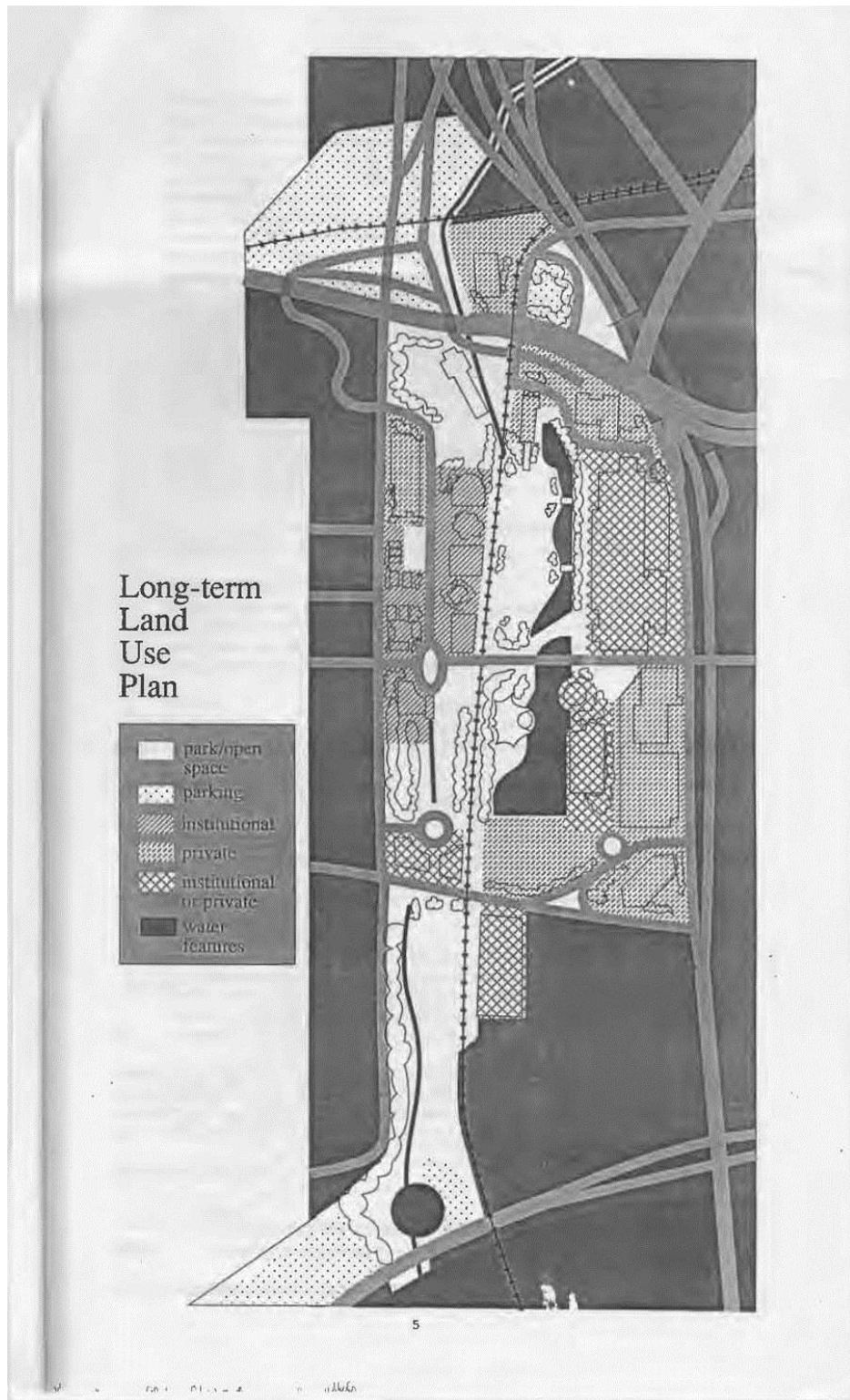


Figure 51: Long-Term Land Use Plan, from *Knoxville World's Fair Park and Festival Center Master Plan*, 5.

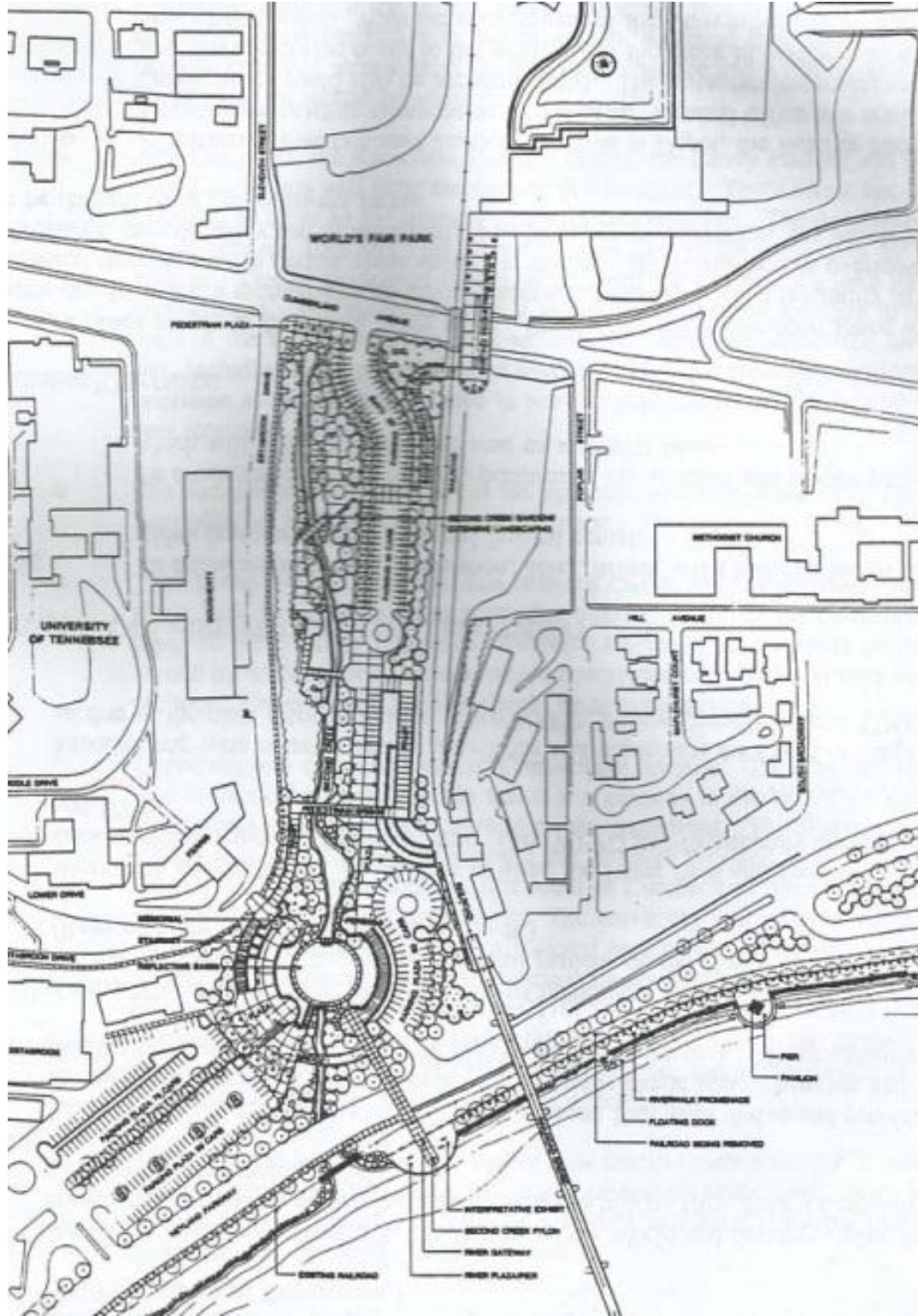


Figure 52: Second Creek area in the Waterfront Master Plan, from *Knoxville World's Fair Park and Festival Center Master Plan*, 7.

New institutional development on the periphery of the park included the Arts Complex, which was composed of the Knoxville Museum of Art, the Candy Factory, and the Victorian Houses as its core (Figure 53). Tenth Street was extended to provide preliminary access to this complex, and the plan recommended that design guidelines reflecting ~~the~~ needs to be sensitive to the scale of the Victorian houses . . . including appropriately scaled housing” be prepared for the complex’s long-term development.<sup>260</sup> Based on the current surroundings of the complex, the design guidelines were either not developed or not strong enough to prevent apartment housing in an appropriate scale to ~~pop up~~” in the vicinity of the Victorian Houses (Figures 54 and 55). (Appendix E: Current World’s Fair Park and Festival Center)

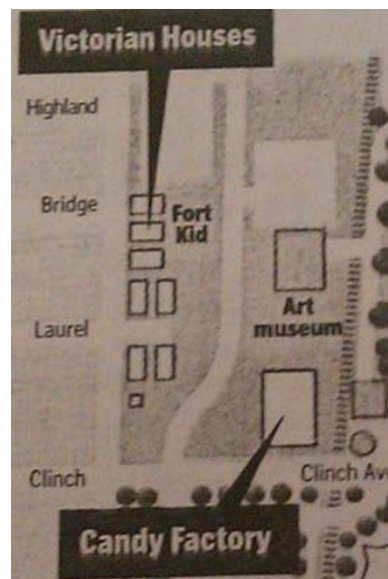


Figure 53: Arts Complex, from *Knoxville News-Sentinel*, 26 January 2005.

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<sup>260</sup> Ibid, 9.



**Figure 54: Victorian Houses located on 11th Street, March 2013**



**Figure 55: Apartment complexes across the street from the Victorian Houses on 11th Street, March 2013**

### *Current Manifestation and Building Uses*

The World's Fair Park and Festival Center's current manifestation has taken twenty years to accomplish. The United States Pavilion was torn down in the early 1990s after numerous attempts and plans to rehabilitate it for another use. In 1998, the Urban Land Institute conducted a study to determine the feasibility and best placement for a convention center at the World's Fair Site, which called for more redevelopment on the site. Originally, the Knoxville Public Building Authority suggested that the Convention Center be located at the corner of 11<sup>th</sup> Street and Cumberland Avenue (Figures 56 and 58). However, the Urban Land Institute determined that the railroad track needed to be removed in order for the convention center to be placed at that location. The Urban Land Institute also determined that this site was a major obstacle to naturally connecting the park to other parts of the downtown area. According to the Urban Land Institute's report on the topic, the best site for the convention center was at Henley Street, between Cumberland and Clinch Avenues (Figure 57).<sup>261</sup> Knoxville erected the convention center on this suggested site, as it better facilitated pedestrian movement between most of the hotels and the downtown.<sup>262</sup>

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<sup>261</sup> Urban Land Institute, *World's Fair Site, Knoxville, Tennessee: Strategies for the Development of a Convention Center and the Redevelopment of the World's Fair Site*, (27-31 July 1998): 29.

<sup>262</sup> Urban Land Institute, 29.



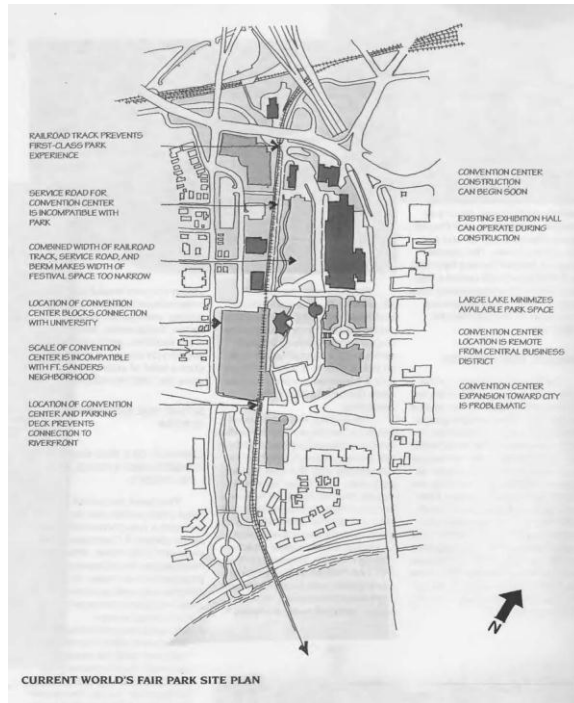


Figure 56: Current World's Fair Site Plan, from Urban Land Institute Report, 1998, 26.

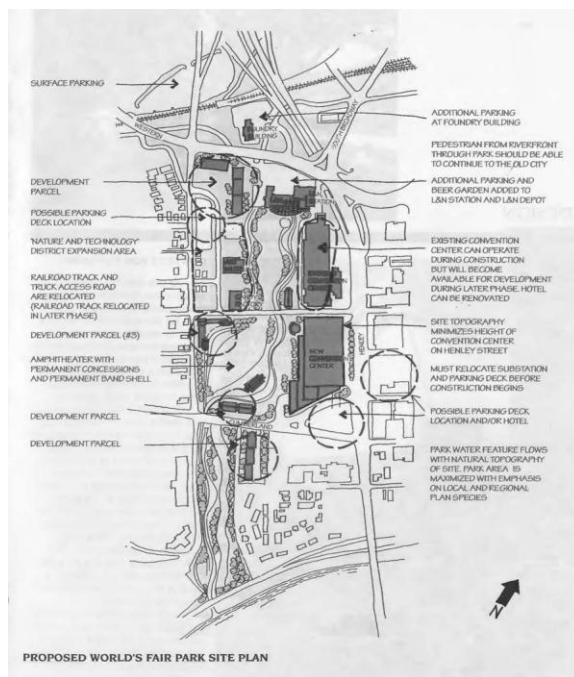
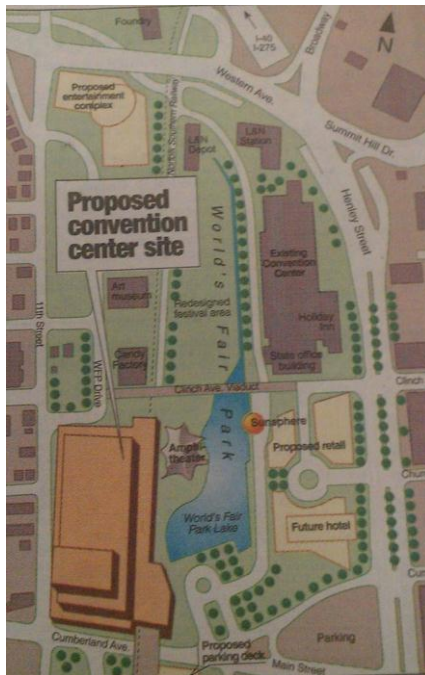


Figure 57: Proposed World's Fair Site Plan, from Urban Land Institute Report, 1998, 27.



**Figure 58: "Image from *Knoxville News-Sentinel* showing the originally proposed convention center site at Cumberland Avenue and 11th Street**

In February 1999, Knoxville held a design workshop/charrette that helped to establish another master plan for the World’s Fair Park and related areas. Held on the sixth floor of the Sunsphere, this workshop developed long- and short-term goals for the park and the new convention center. The short-term goals that were established included pedestrian linkage between the convention center and the World’s Fair Park, as well as pedestrian traffic linkage between both sites and the rest of the downtown. The workshop also addressed the issue of pedestrian access at Henley Street and Clinch

Avenue, park character, parking, and water.<sup>263</sup> Long-term goals included expansion options, the existing convention center, and regulating private development.

The current boundaries that make up the World's Fair Park and Festival Center essentially match the footprint of the original fair, except for the southwestern extension along the Tennessee River. The current boundaries are the railroad tracks on the northwest, Henley Street on the northeast, Cumberland Avenue on the southwest and south east, and 11<sup>th</sup> Street on the southwest and northwest. The railroad tracks that provided the northern boundary of the Energy Expo and then stymied development in years past still run the length of the park. The tracks are still active, and a concrete barrier and trees provide a buffer that hides the tracks from park visitors' view. (Figure 65) The buildings on the park periphery include all of the buildings preserved in preparation for the Energy Expo: the foundry, the L&N Station and Depot, the Candy Factory, and the Victorian Houses. The permanent structures built for the Energy Expo—including the exhibition hall and Holiday Inn, the Sunsphere, and the Tennessee amphitheater—are all still in existence and in use. Several new buildings, including the Knoxville Museum of Art and the convention center, were built in conjunction with the 1991 and 1999 master plans. The Candy Factory, the Knoxville Museum of Art, and a surface parking lot line the western side of the park, while the exhibition center, Holiday Inn, Sunsphere, and Convention Center line the east side. (Appendix E: Current World's Fair Park and Festival Center).

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<sup>263</sup> Thompson Ventulett Stainback and McCarty Holsaple McCarty, *World's Fair Park and Related Areas Master Plan: Design Workshop*, Knoxville Convention Center Architects Joint Venture (2-4 February 1999): 6.



**Figure 59: Holiday Inn and Exhibition Center from the Court of Flags on the valley floor, March 2013**



**Figure 60: Tennessee Amphitheater, March 2013**



**Figure 61: Knoxville Museum of Art and Festival Lawn from the Holiday Inn, July 2012**

On the valley floor, just south of the L&N Station, park visitors have a playground, the Veterans' Memorial, an active water feature, and the Court of Flags. Further south is a large green space known as the Festival Lawn that was where the Waters of the World made up the east side of the valley floor. An information booth provides visitors with restrooms and maps, and it directs them under the Clinch Avenue Bridge to the Tennessee Amphitheatre and the Sunsphere. Each of these structures flanks a preserved section of the Waters of the World. The railroad tracks still run the entire length of the park. Visitors can head west from the Waters of the World or from the cascading fountain feature, across the tracks, where they will find access to the Performance Lawn and to the University of Tennessee Campus. World's Fair Park Drive also allows motorized vehicular access to the park's valley floor and to the Knoxville

Museum of Art on the north end of the park. Because of the railroad tracks, there is no direct pedestrian access from the valley floor to the Knoxville Museum of Art.



**Figure 62: Fountain at the Court of Flags, July 2012**



**Figure 63: Veteran's Memorial, March 2013**

The southern end of the Waters of the World, where the United States Pavilion used to stand, is a rock and water feature that gradually descends into a pool. This and the other water features were implemented as part of the 1999 master plan as a means to provide the illusion of a continuous water presence throughout the park based upon the characteristics of a mountain stream – flowing water, still pools, cascades, rills, etc.”<sup>264</sup> These cascading waters found between the Waters of the World and Cumberland Avenue are surrounded by more green space and paths for visitors to utilize in their leisure time. The southwestern portion has sidewalks that lead visitors further south, across a pedestrian bridge at Cumberland Avenue, to a surface parking lot for visitors. Visitors have the choice to walk or bike north to the Waters of the World or south to access the trails along the riverfront that lead to Volunteer Landing. The World’s Fair Park is part of

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<sup>264</sup> Thompson Ventulett Stainback and McCarty Holsaple McCarty, “Water,” *World’s Fair Park and Related Areas Master Plan*, 11

the Knoxville Knox County Greenway System, though the city only maintains the Greenway aspects, such as benches and sidewalks south of Cumberland Avenue. The creek bed is part of the University of Tennessee's campus.



**Figure 64: Cascading Fountain at Cumberland Avenue, March 2013**





**Figure 65: View of Railroad Tracks blocking direct access from the Festival Lawn to the Knoxville Museum of Art and the Candy Factory, March 2013**



**Figure 66: Aerial view of Knoxville World's Fair Park and Festival Center**

Today, the foundry building contains an event space and up-scale restaurant known as the Foundry on the Fair Site.<sup>265</sup> The Foundry on the Fair Site used the L&N Station for another building to hold events, but in 2011, the Knox County School System renovated it and turned it into its School for Science, Technology, Engineering, and Mathematics. Known as the L&N STEM Academy, this public school is a professional laboratory school with a focus on creating problem solvers and critical thinkers ready for the challenges of the 21<sup>st</sup> century workforce.”<sup>266</sup> The Candy Factory provides downtown living in upscale lofts with retail and the Chocolate Factory on the ground floor. The Knoxville Museum of Art offers exhibits and a permanent collection at no charge to visitors. The Tennessee Amphitheatre is still used for events, but the most prominent building and now symbol for Knoxville is the iconic Sunsphere.

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<sup>265</sup> *Foundry on the Fair*, website, <http://www.foundonfair.com>. (Accessed 28 February 2013).

<sup>266</sup> STEM website <http://knoxcountysystemac.knoxschools.org/>. (Accessed 1 March 2013).



**Figure 67: Knoxville Foundry in 2013**



**Figure 68: L&N Station in 2013**



**Figure 69: L&N Depot in 2013**

### *The Sunsphere*

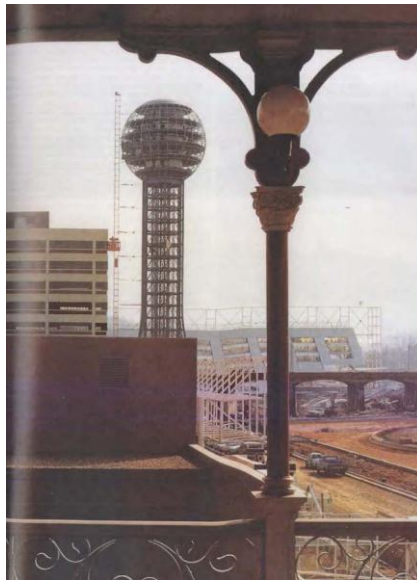
Like San Antonio's Tower of the Americas, Knoxville's Sunsphere was the Energy Expo's answer to Seattle's Space Needle. Designed by Community Techtonics, the Sunsphere was constructed specifically for the 1982 World's Fair and provided the fair with its symbol. It looks like a sun in order to harness the association with the sun as the ultimate source of the world's energy. This symbolism accords with the fair's theme, "Energy Turns the World," because the sun's energy literally and figuratively turns the world. The Sunsphere rises 266 feet in the air. Energy Expo visitors accessed the structure through its base, which projected into the lake and provided an attractive outdoor eating space.<sup>267</sup> They ride 192 feet in an elevator in order to reach the 74 foot glazed sphere.<sup>268</sup> Despite its dramatic form, the Sunsphere had its fair share of criticisms.

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<sup>267</sup> Allen Freeman, "In Knoxville, More Festivity Than Energy," *AIA Journal*, 71, no. 7 (June 1982): 52.

<sup>268</sup> Ivy, "Energy as the Theme of a World's Fair," 58.

Some criticized it as an after-thought, as it was not in the Expo's original architectural plans.<sup>269</sup> Also, the Sunsphere was made of steel and glass, which are energy-intensive materials, making it less appropriate as a symbol for energy as a windmill might have been.<sup>270</sup> Some people also claimed that its scale was "impossible," because code requirements mandated that the steel shafts be enclosed, thus adding bulk and a rather "cumbersome" appearance.<sup>271</sup>



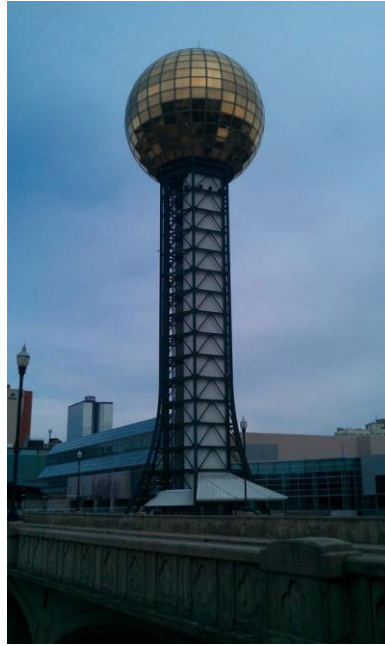
**Figure 70: View of the Sunsphere (under construction) from L&N Depot in 1982, from Ivy, "Energy As a Theme of a World's Fair," *AIA Journal* (Jan 1982): 61.**

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<sup>269</sup> Knack, "Knoxville's Redevelopment Ploy," *Planning*, 48, no. 7 (July-August 1982): 9-10.

<sup>270</sup> Knack, 9-10.

<sup>271</sup> Ivy, 52.



**Figure 71: Sunsphere in 2013**

During the fair, the Sunsphere acted an amusement device and provided visitors with an observation deck and a full-service, gourmet restaurant operated by the Hardee's Corporation. It closed when the fair closed in 1982 and remained either vacant or underutilized for most of its post-fair life. Other than the Tennessee Amphitheater, the Sunsphere is the only surviving structure built specifically for the Expo. In 2005, the Sunsphere found new life with a renovation done without tax payer dollars.<sup>272</sup> It now provides World's Fair Park visitors with an observation deck, where they can view an exhibit on the Energy Expo, and a restaurant. From the observation deck on the fourth

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<sup>272</sup> "Sunsphere," *World's Fair Park and Festival Center*, website, <http://worldsfairpark.org/worlds-fair-sunsphere.html>. (Accessed 12 December 2012).

floor, a person has a 360-degree view of the Smoky Mountains, the Tennessee River Valley, the University of Tennessee, and downtown Knoxville.<sup>273</sup>



**Figure 72: Construction of SunSphere, from *Knoxville's 1982 World's Fair*, 96.**

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<sup>273</sup> "SunSphere," *World's Fair Park and Festival Center*, website.



**Figure 73: View of Tennessee River and the University of Tennessee Campus from the Sunsphere Observation Deck, July 2012.**

The Knoxville World's Fair Park and Festival Center provides the city with an urban green space and plaza. It also provides East Tennessee with an entertainment and festival venue. The City of Knoxville has worked diligently over the last twenty years to make a space that lay dormant for almost a decade into a vibrant and essential space for recreational and leisure activities that also preserves the positive legacy of the 1982 International Energy Exposition. When Knoxville decided to turn the space into a park as an interim solution to its redevelopment problems, the city preserved an urban renewal project in a positive and useful way. Spokane, San Antonio, and Seattle did the same thing with their fair sites.

Creating an urban park out of these world's fair sites allows preservationists to look differently at urban renewal in general: perhaps urban renewal and preservation are not as antithetical as once thought? In light of this, the transformation of these urban



renewal projects into urban parks and plazas as helped to preserve their legacy. Because there has not been a world's fair in the United States since 1984 (New Orleans), and because there have only been six total in the United States since 1950, world's fair sites in the United States are a rare and an important resource historically, aesthetically, and culturally. Thus, the preservation field must look at how to further preserve the world's fair legacies by looking at creative ways to preserve their current manifestations as urban parks and plazas. Because these parks belong to the post-World War II era, they fall into the categories of modern landscapes. Thus, what is the best approach to the preservation of these park spaces? Chapter 6 will explore this further as it looks at the preservation of Modernist urban parks and plazas in general and their role in the city after World War II. It will then explore the Sustainable Sites Initiative (SITES) as one an approach for making the Knoxville's World's Fair Park and Festival Center more sustainable and therefore better preserving the legacy of Energy Expo '82.

## CHAPTER 6

### THE PRESERVATION OF WORLD'S FAIR PARKS AND SITES AS CULTURAL LANDSCAPES

Post-World War II world's fair sites in the United States are historically and culturally important. There were only six world's fairs held in the United States in the post-war era, thus establishing their legacies as fairly rare and worth consideration. Their most lasting legacies are the physical changes they brought to the urban landscapes of their host cities. The host cities all used the fairs for urban renewal and major infrastructure improvements with the intent of revitalizing their cities' urban cores. We must consider how best to preserve these sites for future generations.

This chapter will discuss the preservation of world's fair sites as urban parks and plazas. It will consider the role of the urban park in the post-World War II built environment, including major changes between pre- and post- World War II urban parks, their role in society, and the functional and material obsolescence of these sites as resources of a more Modernist aesthetic. It will then consider the Sustainable Sites Initiative (SITES) and how the program as a whole can be used as a tool for the preservation of urban parks. Increasing the sustainability of the World's Fair Park and Festival Center will better preserve, both figuratively and literally, the intent of Energy Expo '82. Finally, this chapter will discuss recommendations for the Knoxville World's Fair Park and Festival Center through consideration of the City of Knoxville's current general management plan for its city parks and how SITES can be applied specifically to increase the park's sustainability.

### *Urban Parks and Plazas and Their Role in the Community*

When someone thinks of the word, “landscape,” he might consider the physical features of the land—mountains, prairies, forests, and water ways, best known as natural landscapes. There is also what is known as a “cultural landscape.”<sup>274</sup> According to the Cultural Landscape Foundation, a cultural landscape is defined as sites that provide “a sense of place and identity; they map our relationship with the land over time; and they are part of our national heritage and each of our lives.”<sup>275</sup> The Cultural Landscape Foundation identifies four types of cultural landscapes: designed, vernacular, historic, and ethnographic.<sup>276</sup> These types can include sites that are associated with a significant event, activity, person, or group of people. They range in size from thousands of acres (such as national forests) to small, historic homesteads or share cropping farms. They can be grand estates, farmlands, public gardens and parks, college campuses, cemeteries, scenic highways, and industrial sites. Finally, they are “art, narratives of cultures, and expressions of regional identity.”<sup>277</sup> Urban parks and plazas are cultural landscapes. World’s fair sites are cultural landscapes, and the residual use of sites associated with world’s fairs qualifies them as cultural landscapes in an urban setting. Thus, we should approach the preservation of world’s fair sites as cultural, designed landscapes.

Our idea of an urban park and its role in society emerged in the mid-nineteenth century with the evolution of the city itself as a “new urban landscape.”<sup>278</sup> During this time, the city opened up. According to David Schuyler, the “idea of creating a more

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<sup>274</sup> “What are Cultural Landscapes,” *Cultural Landscape Foundation*, Website, 2012, <http://tclf.org/landscapes/what-are-cultural-landscapes>, (Accessed 3 March 2013).

<sup>275</sup> “What are Cultural Landscapes,” *Cultural Landscape Foundation*.

<sup>276</sup> Ibid.

<sup>277</sup> Ibid.

<sup>278</sup> David Schuyler, Introduction to *The New Urban Landscape: The Redefinition of City Form in Nineteenth-Century America* (Baltimore: Johns Hopkins University Press, 1986), 3.

openly built urban environment began as a repudiation of the commercial city.”<sup>279</sup> As the city became more and more industrialized, it became more and more vilified; thus, Americans began to decentralize their cities, marking the American city at the time as a distinctly different form than its centralized counterpart in Western Europe. This new “openly built urban environment” was also distinctly middle-class and seen as more stable: —With the rise of urban property values . . . , the density of building and stress of apartment and tenement life seemed to undermine traditional values associated with family and community.”<sup>280</sup> As a result, public park promoters “created communal spaces where the naturalistic landscape offered relief from cramped, dark, poorly ventilated dwellings.” These spaces provided respite and escape from the congestion associated with dense, urban life. These spaces became a sort of domestic refuge.<sup>281</sup>

These less dense cities of nineteenth century America also differed from their predecessors in attempting to differentiate between space and land use within the metropolis.<sup>282</sup> Thus, with the creation of zoning laws, the city was better able to incorporate more soft surfaces into the urban core than previously allowed.<sup>283</sup> These spaces first emerged between 1830 and 1850 and built upon the idea that the country was superior to the city. Naturalistic landscapes emerged in urban areas modeled on the rural cemeteries at the time that incorporated naturalistic scenery and a curvilinearity not associated with the gridiron of the city.<sup>284</sup> As a result, large, recreational grounds, or parks, emerged as “repositories of monuments and cultural institutions” that shut out the

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<sup>279</sup> Schuyler, Introduction, *The New Urban Landscape*, 3.

<sup>280</sup> Ibid.

<sup>281</sup> Ibid.

<sup>282</sup> Ibid, 4.

<sup>283</sup> Ibid.

<sup>284</sup> Ibid. 2.

urban environment surrounding it. Frederick Law Olmsted's work led the way for this type of urban oasis, especially his New York City's Central Park, the first major attempt at such an urban, recreational form.

Another traditional European urban open space was the plaza. According to the Cultural Landscape Foundation, a plaza is a paved public space for citizens to gather for civic, religious, or commercial reasons.<sup>285</sup> With origins in Spain and Italy and transferred to the Americas during colonization, traditionally, prominent government and civic buildings, such as court houses, city halls, churches, performing arts centers, and markets, often fronted an urban plaza.<sup>286</sup> The primary feature of a plaza is a carefully graded and paved floor, but plazas are spatial volumes as much as they are paved surfaces; —they bring light and air to the city.<sup>287</sup> In that sense, the traditional European plaza functioned much like the American urban park did in the nineteenth century. But what happens when a landscape architect combines the park and the plaza? The park plaza typology is born. While the new urban landscape of the nineteenth century consisted of a combination of urban streets and blocks with a recreational green space, the new urban landscape of the twentieth century combined the park and the plaza. This new typology is a distinctly post-World War II phenomenon. Landscape architects such as Lawrence Halprin and M. Paul Friedberg helped to adapt the plaza to new infrastructure required by commuting to spaces such as the roofs of buildings, as seen in Dan Kiley's Nations Bank Plaza (Figure 72), as well as urban sites that emerged out of

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<sup>285</sup> "Plaza," Cultural Landscape Foundation, website, 2012, [www.tlcf.org/content/plaza](http://www.tlcf.org/content/plaza). (Accessed 3 March 2013).

<sup>286</sup> "Plaza," Cultural Landscape Foundation, website, 2012.

<sup>287</sup> Ibid.

the demolition of urban renewal.<sup>288</sup> Similar to the function of pedestrian malls, courtyards, atria, and roof gardens, Modern urban plaza parks extend ~~the~~ functional landscape into the built environment, significantly enriching the visitor experience.”<sup>289</sup>



**Figure 74: Dan Kiley's Nations Bank Plaza, Tampa, FL, was completed in 1988. This image depicts the plaza after years of neglect by the City of Tampa (Photo by Sue Thompson, ASLA) from <http://landarchives.asla.org/landsearch/archive/2006/0306/kiley.html>**

A good example of a Modern urban park plaza is Peavey Plaza in Minneapolis, Minnesota. (Figure 73) Peavey Plaza is located on Nicollet Mall, a central commercial street that Lawrence Halprin transformed into a pedestrian corridor, the first of its kind in the country. The Plaza itself was constructed as an event space and was the brainchild of

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<sup>288</sup> Ibid.

<sup>289</sup> Ibid.

New York landscape architect, M. Paul Friedberg.<sup>290</sup> Peavey Plaza's namesake comes from a local granite merchant, Peavey Company, who donated the granite used to erect the plaza.<sup>291</sup> It opened in 1975 and the central focus was a 140' x 200' pool at an elevation ten feet below the grade of the adjacent streets.<sup>292</sup> According to Charlene Roise, Peavey Plaza is the progenitor of the park plaza typology in that it mixes American green space and European hard space. As seen in Figure 74, Peavey Plaza has amphitheater-like seating oriented around a sunken plaza, which also serves as a pool basin, while cascading and spraying fountains animate the space, lawn, terraces, and many sculptural objects.<sup>293</sup> The fountains' waterfalls also masked the noise from the surrounding traffic of Nicollet Mall, while groves of honey locusts created small garden rooms, offering "a sense of human intimacy that softened the modern angular surfaces."<sup>294</sup>

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<sup>290</sup> Charlene Roise, "The Unfinished Saga of Peavey Plaza," *Forum Journal*, 27, no. 2 (Winter 2013): 21. [http://tclf.org/sites/default/files/Forum-Journal\\_Winter-2013.pdf](http://tclf.org/sites/default/files/Forum-Journal_Winter-2013.pdf). (Accessed 3 March 2013).

<sup>291</sup> Roise, "The Unfinished Saga of Peavey Plaza," 21.

<sup>292</sup> Ibid.

<sup>293</sup> Ibid, 20.

<sup>294</sup> Ibid, 22.



Figure 75: Peavey Plaza's pool, from *Forum Journal* (Winter 2013): 22.



Figure 76: Fountains in Peavey Plaza, *Forum Journal* (Winter 2013): 21.



*Site or District?: Defining the Energy Expo '82 Site as a Resource for Historic Designation*

Based on the fact that park plazas incorporate the green space of parks and the hard space of plazas, and can include buildings and other structures, how do we classify them for historical designation? Modernist urban landscapes could be classified as either a site or a district by definitions set by the National Register of Historic Places program. The more simple classification would be a site, considering the National Register includes parks and plazas individually as sites. According to *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, a site is ~~the~~ location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.<sup>295</sup> A site can possess associative significance or information or both, and it can be significant under Criteria A, B, C, or D.<sup>296</sup> A site may be a natural landmark, such as a rock formation having cultural significance, or it may be a designed landscape, such as a cemetery, a campsite, or a village site. Sites also include trails, shipwrecks, and ruins of a building or structure. The sites associated with worlds' fairs in the United States would qualify simply for their associations with the event, but for those sites that

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<sup>295</sup> Rebecca H. Shrimpton, Ed., "Section IV: How to Define Categories of Historic Properties," *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, National Park Service, (Washington D.C.: United States Department of the Interior, 1990), n.p.  
[http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15\\_4.htm#site](http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_4.htm#site). (Accessed 4 March 2013).

<sup>296</sup> Shrimpton, "Section IV: How to Define Categories of Historic Properties," *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*; Listing under Criteria A is for the resources contribution to events or patterns in history, while listing under Criteria B means that the resource is important for its association with a specific person. A resource that represents a good example of an architectural style or engineering method can be listed under Criteria C, and Criteria D is reserved for those resources that can yield more information, and is usually reserved for archaeological sites.

hosted the world's fairs after World War II, especially considering their current uses as parks, plazas or retail centers, they would be categorized as ~~des~~igned landscapes."<sup>297</sup>

The Knoxville World's Fair site and its remaining buildings associated with the fair, such as the Sunsphere, the Tennessee Amphitheatre, the Exhibition Center, and the Holiday Inn, could also be classified as a district. According to *National Register Bulletin 15*, a district ~~poss~~esses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development."<sup>298</sup> Those buildings that were rehabilitated or renovated in order to house Energy Expo activities, such as the Candy Factory, the L&N Station and Depot, and the Knoxville Foundry were eligible for listing in the National Register of Historic Places in the 1970s, but they all took on new associations and meanings because of their role in the world's fair. Even Second Creek was a locally historic waterway that was diverted when the railroad industry decided to locate its industry in the valley, and one track associated with this industry still remains intact. The landscaping and buildings on and surrounding the Second Creek Valley would be part of the district as a whole because the district's identity results from the interrelationship of its resources.

The most important part of designating a district is determining the boundaries. What might be called the ~~Energy Expo~~ '82 National Register District" would probably only encompass the site north of Cumberland Avenue, and not include the rest of the park between Cumberland Avenue and the Tennessee River. This would be the most logical southern boundary because the land between Cumberland Avenue and the Tennessee River is state property associated with the University of Tennessee. City of Knoxville

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<sup>297</sup> Shrimpton, ~~Section~~ "Section IV: How to Define Categories of Historic Properties," *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*.

<sup>298</sup> Ibid.

only maintains the elements (sidewalks, trash cans, and park benches) associated with the Second Creek Greenway.

It is important to consider too, that regardless of the National Register classification (site or district), the Knoxville World's Fair site and all of its associated buildings are reaching their fifty-year marks. The Energy Expo celebrated its thirtieth anniversary in 2012. However, even though Energy Expo '82 was the last successful world's fair in the United States, its significance is that of "exceptional importance," and would need to be listed under Criteria Consideration G of the National Register of Historic Places because it is less than fifty-years old. This does not mean that the site needs to be listed immediately; however, it does need to be put on a local or state register of sites of importance with the intent of listing it closer to its fifty-year mark. Some of the buildings on the park site, such as the L&N Station and Depot, the Candy Factory, and the Foundry, could be listed in the National Register individually, because they pre-date Energy Expo '82 and were preserved as part of the fair.

#### *The National Park Service's Cultural Landscapes Inventory*

Since world's fair sites in the United States are complex and unorthodox resources, their preservation needs to be approached as a cultural landscape and included in the Cultural Landscapes Inventory. In 1992, the Olmsted Center for Landscape Preservation, an organization dedicated to the stewardship of significant landscapes through research, planning, and sustainable preservation maintenance, partnered with the National Park Service NPS to strengthen the preservation of cultural landscapes through planning, maintenance, and education and training. The Olmsted Center for Landscape Preservation helped the NPS to develop categories, criteria, and procedures for

documenting cultural landscapes.<sup>299</sup> Documentation has been achieved through the creation of the Cultural Landscapes Inventory (CLI), which is a ~~an~~ evaluated inventory of all landscapes having historical significance that are listed on or eligible for listing [in] the National Register of Historic Places, or are otherwise managed as cultural resources through a public planning process in which the NPS has or plans to acquire any legal interest.”<sup>300</sup>

According to the *National Park Service Cultural Landscapes Inventory Professional Procedures Guide*, the framework for a developing a standardized inventory of cultural landscapes in the national park system was based on three major challenges. The first challenge was the range and diversity of the resources, while the second challenge was the need to identify the scope of landscapes in a park or region, establish priorities, and be responsive to management. The third challenge was the lack of baseline data and contextual information for cultural landscapes, ~~which~~ which presents difficulties in determining the significance of these resources.” As a result, the CLI provides the flexibility to address diverse landscapes, serves as a tool for defining programmatic needs, respond to park needs, and ~~facilitate~~ facilitate the collection of basic information on cultural landscapes . . . in order to obtain concurrence on their significance eligibility.”<sup>301</sup> This inventory consists of a hierarchy that allows for the subdivision of complex landscapes into identifiable components and features. This hierarchy adheres to a

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<sup>299</sup> *Olmsted Center for Landscape Preservation*, website, <http://www.nps.gov/oclp/index.htm>. (Accessed 4 April 2013).

<sup>300</sup> Jerry Killion, Gretchen Hilyard, and Robert R. Page, Eds, Introduction to *National Park Service Cultural Landscapes Inventory Professional Procedures Guide*, National Park Service, (Washington D.C.: Department of the Interior, 2009), IN-2.

<sup>301</sup> Killion, Hilyard, and Page, IN-3.

particular method and coding system in order for the landscape to be entered into the NPS's automated CLI.

When assessing a cultural landscape according to CLI guidelines, the resource as a whole is considered the "inventory unit" and then the landscape's features and characteristics are used to provide information on the unit. Landscape Characteristics for a CLI describe the unit's tangible and intangible aspects of the unit which have "either influenced the history of the development of the landscape, or are products of the development." Landscape characteristics "must be uniquely identified for each inventory unit according to the type of landscape, and the nature of its historical development" and must be chosen from the following list: archaeological sites, buildings and structures, circulation, cluster arrangement, constructed water features, cultural traditions, land use, natural systems and features, land use, natural systems and features, other, small scale features, spatial organization, topography, vegetation, views and vistas.<sup>302</sup> Then the landscape features for each characteristic would have to be categorized as contributing, non-contributing, undetermined, or managed as a cultural resource.<sup>303</sup>

Although the CLI is used mainly for the cultural landscapes within the NPS system, the documentation can be applied to non-federally-owned cultural landscapes, such as world's fair parks and sites. For example, Knoxville's World's Fair Park and Festival Center's landscape characteristics, at the very least, would include buildings and structures, constructed water features, land use, and natural systems and features. Then each of these characteristics would have its own set of features. For example, the characteristics would have to be addressed according to a certain sequence, such as

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<sup>302</sup> Killion, Hilyard, and Page, 7-4.

<sup>303</sup> Ibid, 7-4, 7-5

building and structures, and then the Sunsphere, the Candy Factory, the Holiday Inn and Exposition Center, the Tennessee Amphitheater, and the L&N Station and Depot would all be listed in the CLI as to whether or not they are contributing or non-contributing to the National Register eligibility of the inventory unit.<sup>304</sup> Then, the features of the next characteristic, constructed water features, would be addressed and so on.

Structuring the CLI in this respect helps to develop an analysis and evaluation of the integrity of the site as a whole. The analysis and evaluation of integrity for the CLI is based on the seven aspects of integrity used for the evaluation of a historic resource for listing in the National Register of Historic Places: location, design, setting, materials, workmanship, association, and feeling. Just as the resource must display all or a majority of these aspects of integrity, each inventory unit's landscape features must display a majority of these aspects in order for the landscape characteristic to be considered relevant or valid for inclusion in the CLI. In fact, a National Register nomination must be completed in conjunction with a CLI for a resource.

The case for the historical, cultural, and aesthetic importance of the Knoxville International Energy Exposition on the local level needs no more discussion or convincing. However, for world's fair parks as a whole, what is the best way to preserve the current state of these parks in a manner that does not alter its historic integrity? This is a question being asked by preservationists and those interested in modern landscapes. In fact, the preservation of Post-World War II Modern landscapes is an up-and-coming issue in the preservation field. *Forum Journal* dedicated its Winter 2013 issue specifically to modern landscapes: *Modern Landscape Architecture: Presentation and*

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<sup>304</sup> Ibid, 7-5

*Preservation.*<sup>305</sup> In the year 2000 the field witnessed significant changes in the visibility of modern landscape architecture.<sup>306</sup> For the first time, the National Historic Landmark (NHL) program completed a thematic study recognizing the contributions of a living landscape architect, Dan Kiley, whose Miller Garden, part of the Miller House in Columbus, Indiana, was designated as an NHL as part of the study. (Figure 75). Also, the National Register of Historic Places program designated as a historic district Thomas Church's General Motors Technical Center campus in Warren, Michigan (Figure 76). 2000 also saw the first steps in founding the Historic American Landscapes Survey (HALS), which became essential to documenting modern landscape architecture.



**Figure 77: Miller House Gardens, Columbus, Indiana (photo by 2005) Cultural Landscape Foundation, <http://tclf.org/blog/dan-kiley-almost-famous>**

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<sup>305</sup> According to Charles A. Birnbaum, director of the Cultural Landscape Foundation, this issue of *Forum Journal* is a follow-up on the Fall 2000 issue in which broader issues of post-war heritage were addressed.”

<sup>306</sup> Charles A. Birnbaum, “Expanding the Field,” *Forum Journal*, 27, no. 2 (Winter 2013): 4, [http://tclf.org/sites/default/files/Forum-Journal\\_Winter-2013.pdf](http://tclf.org/sites/default/files/Forum-Journal_Winter-2013.pdf). (Accessed 3 March 2013).



Figure 78: Postcard of the General Motors Technical Center, Warren, Michigan (from cardcow.com)

In 2003, the first landscape to be documented as Modernist in HALS and the first landscape to be designated in Colorado was Denver’s Skyline Park, a Lawrence Halprin design that has since been largely demolished.<sup>307</sup> (Figure 77) Since 2003, at least two more Modernist landscapes in the United States have been documented in HALS, while twice as many have been demolished or significantly altered. Birnbaum brings up a very interesting point later in the essay. He asks, —What additional tools are needed for evaluating and valuing our authentic Modernist landscape heritage?”<sup>308</sup> One of the suggestions he offers is the Cultural Impact Statement. Since an Environmental Impact Statement is required by law for certain actions that —significantly affect the quality of human environment,” should preservation professionals require that Cultural Impact

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<sup>307</sup> Ibid, 5.

<sup>308</sup> Ibid, 6-7.



Statement be developed and required by law?<sup>309</sup> Even if the demolition of a Modern landscape is determined to have a negative cultural impact, what solutions exist for the rehabilitation or the renovation of these landscapes?



**Figure 79: Skyline Park, Denver, Colorado**

Upon further review of the literature on Modern landscape architecture, some of the post-World War II world's fair sites and parks might be classified as modern landscapes. In order to know how to preserve world's fair sites, we need to know how to classify their physical integrity and design in order to know how to approach their preservation. How do we as preservationists approach these resources in a way that complies with the Secretary of the Interior's Standards? Does the National Park Service

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<sup>309</sup> Ibid, 7.

need to develop a separate set of suggestions that addresses both the soft- and hard-scapes involved in these resources? The planning for residual use of the Knoxville Energy Expo site was less thought-out than other fairs and took longer to resolve than the fairs before it; however, the current use as an urban park and public green space works for Knoxville and East Tennessee. The park underwent renovations in 2006, partly due to the fact that it lacked a residual use plan for after the fair. How does Knoxville approach future renovations and rehabilitations of the site in a way that will preserve the physical historical integrity of the site? The Sustainable Sites Initiative (SITES) might offer one solution.

## CHAPTER 7

### *The Sustainable Sites Initiative (SITES) as a Guide for Future Use and Preservation of World's Fair Parks*

The Sustainable Sites Initiative Program (SITES) is the sustainable landscape design rating system equivalent to the Leadership in Energy and Environmental Design Green Building Rating System (LEED). The SITES program takes an ecosystem services approach to landscape design and management in that it considers the support and engagement of natural processes. Like LEED, the idea behind SITES is based on the definition of sustainable development from the United Nations World Commission on Environment and Development's Bruntland Report, *Our Common Future* (UNWCED, 2007). SITES is dedicated to fostering a transformation in land development and management practices that will bring essential importance of ecosystem services to the forefront.<sup>310</sup>

Any site, with or without buildings, can qualify for SITES certification. These sites include open spaces, such as local, state, and national parks, or places with conservation easements and buffer zones. Also, transportation rights of way can qualify. A site with buildings includes, but is not limited to, those areas with the following functions: industrial, retail and office parks, military complexes, airports, botanical gardens, streetscapes and plazas, residential and commercial developments, and public and private campuses. The current SITES program is a partnership between the

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<sup>310</sup> Sustainable Sites Initiative, Introduction to *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks*, (2009), 5.  
[http://www.sustainablesites.org/report/Guidelines%20and%20Performance%20Benchmarks\\_200.pdf](http://www.sustainablesites.org/report/Guidelines%20and%20Performance%20Benchmarks_200.pdf).  
(Accessed 3 February 2013).

American Society of Landscape Architects, the Lady Bird Johnson Wildlife Center, and the United States Botanical Garden (USBG). A major stakeholder in SITES is the United States Green Building Council (USGBC), which is incorporating SITES into the new version of LEED due out later in 2013.

According to Meg Calkins, who is an associate professor of landscape architecture at Ball State University, founding member of the American Society of Landscape Architecture's Sustainable Design Professional Practice Network, and member of the Sustainable Sites Initiative Materials Technical Committee since 2006, humans must fundamentally shift their way of thinking about the Earth and its resources when we design sustainable sites; we must shift ~~from~~ the extractive mind-set of viewing the Earth's resources as abundantly available for human consumption to the understanding that Earth's resources and ecosystems are the sustainers of life on this planet and must be protected."<sup>311</sup> This requires us to begin not only designing sustainable sites, but also to start living a lifestyle that meets the needs of today's society without jeopardizing the needs of the future. This sustainable lifestyle is crucial in today's living experience. However, this lifestyle is doubly important for those who live in urban environments because of the lack of natural settings available. The urban setting offers ~~a~~ vast opportunity to be a productive place, particularly in the public realm."<sup>312</sup>

Applying SITES to world's fair settings is relevant because the role of sustainable sites in

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<sup>311</sup> Meg Calkins, Introduction to *The Sustainable Sites Handbook: A Complete Guide to the Principles, Strategies, and Best Practices for Sustainable Landscapes* (Hoboken, NJ: John Wiley & Sons, Inc., 2012), 9.

<sup>312</sup> Calkins, Introduction to *The Sustainable Sites Handbook*, 9.

cities is threefold: to provide ecosystem services and habitat, to be productive places, and to sustain cultural connections to nature.<sup>313</sup>

There are nine SITES prerequisites and credits, and they follow ten guiding principles.<sup>314</sup> The nine prerequisites and credits consist of fifty-one total credits based on a 250-point system. The credits and points breakdown is below:<sup>315</sup> These prerequisites and credits were designed to complement the prerequisites and credits of LEED and other green building rating systems.<sup>316</sup>

<b>Table 6.1: SITES Credits and Total Possible Points</b>		
<b>Credit Name</b>	<b>Credit Amount</b>	<b>Points</b>
Site Selection	3	21
Predesign, Assessment, and Planning	1	4
Site Design: Water	7	44
Site Design: Soil and Vegetation	10	51
Site Design: Materials Selection	9	36
Site Design: Human Health and Well-Being	9	32
Construction	4	21
Operations and Maintenance	6	23
Monitoring and Innovation	2	18

<sup>313</sup> Ibid.

<sup>314</sup> Ibid, 24.

<sup>315</sup> Ibid, 24; Sustainable Sites Initiative, "Index of Prerequisites and Credits," *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks*, (2009), 12-14. [http://www.sustainablesites.org/report/Guidelines%20and%20Performance%20Benchmarks\\_200.pdf](http://www.sustainablesites.org/report/Guidelines%20and%20Performance%20Benchmarks_200.pdf). (Accessed 3 February 2013).

<sup>316</sup> Sustainable Sites Initiative, "How to Use the Guidelines and Performance Benchmarks," 9.

As with LEED, Exemplary Performance points can be awarded for those projects that go above and beyond the minimum requirements for certain credit categories. The 2009 Rating System awards from one to five stars for projects that reach a certain level of sustainability. SITES awards a one star rating to projects that have met all of the prerequisites (100 points = 40% of the total 250 points possible). A breakdown of the stars is in the table below:

<b>Table 6.2: SITES Rating System 2009</b>	
<b>2009 Rating System</b>	<b>250 Points Possible</b>
One Star	100 points (40% of total points)
Two Stars	125 points (50% of total points)
Three Stars	150 points (60% of the total points)
Four Stars	200 points (80% of the total points)

The Sustainable Sites Initiative’s intent is to promote “sustainable site planning and design, construction, and maintenance practices,” and, also as with LEED, require an interdisciplinary approach to achieve this goal. SITES’s central message is that any landscape has potential to contribute to ecosystem services and can address urgent environmental issues, such as global climate change, loss of biodiversity, and resource consumption, “if properly designed and maintained.”<sup>317</sup> However, SITES strives to go beyond just the environmental aspect of sustainability. It also strives to address sustainability on the economic and social fronts, explaining why credits are dedicated to Human Health and Well-Being as a component of a healthy ecosystem.<sup>318</sup>

<sup>317</sup> Calkins, 24.

<sup>318</sup> Sustainable Sites Initiative, “How to Use the Guidelines and Performance Benchmarks,” 7.

The application of SITES particularly to the Energy Expo '82 site is recommended because making the site more sustainable and energy efficient would help to align it with both the Expo's original theme and intent. A more sustainable World's Fair Park and Festival Center would also help it to better preserve both the Expo's cultural and physical legacies. However, applying SITES to an already existing designed landscape brings with it its own set of problems, since the actual design of the project has already been done. Thus, we must ask ourselves two more questions: Does historic significance trump making the park more sustainable? Will making it more sustainable damage or alter the site's historic integrity? After a review of the current maintenance plan of the World's Fair Park and Festival Center, the rest of this chapter will recommend that SITES be applied in a way that facilitates the most appropriate steps to be taken in the future.

*Current Maintenance Plan for the Knoxville World's Fair Park and Festival Center*

Currently, the Knoxville Public Building Authority (PBA) maintains a *General Maintenance Policy and Procedure Manual* for all buildings and sites owned or administered by the City of Knoxville. The PBA does not have an individual maintenance plan for any of the city parks in Knoxville, let alone the World's Fair Park and Festival Center. The PBA uses this document as a general guideline for all its properties. Maintenance of the World's Fair Park and Festival Center would fall under "Routine Maintenance," which the manual describes as routine tasks that "contribute to the curb appeal and marketability of the property." The number one priority for routine maintenance is pest control and extermination. The second priority is landscaping and

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grounds, which is maintained for continued attractiveness and marketability. According to the manual, routine grounds maintenance includes: first and foremost, litter control, followed by total lawn care; maintenance of driveways, sidewalks, and parking lots; care of flower and shrubbery beds and trees, including pruning; maintenance of playgrounds, benches, and fences; winter snow/ice removal and safety hazard prevention; and administering lawn chemicals and lawn treatments.<sup>319</sup>

The PBA also tries to achieve efficiency and cost-effectiveness through ensuring that all of its buildings are decent, safe, sanitary, and in good repair. Inspection encompasses occupied units, building exteriors, building systems, common areas, site (grounds), and health and safety. Inspections are done at minimum on a yearly basis, but zone supervisors are responsible for developing a unit inspection program mandating the scheduling and frequency of inspections. Other than a statement about how the zone and department supervisors will know the condition of each unit at all times, the Manual does not incorporate the process of inspection for the above areas.<sup>320</sup>

According to the PBA's website, the Knoxville World's Fair Park and is owned by the city and operated by the PBA, which provides management, maintenance, landscaping, and security services. All of these are done by PBA employees, who are responsible for mechanical, plumbing, and electrical components of the park and its adjoining facilities. There is also a grounds/horticulture staff responsible for the lawns and grounds of the park, including the seasonal flower and bulb planting. Whenever the PBA staff does not have the proficiency, it contracts out for services.<sup>321</sup>

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<sup>319</sup> Knoxville Public Building Authority, *Maintenance Policy and Procedures Manual*, (May 2012): 13.

<sup>320</sup> Knoxville Public Building Authority, 11.

<sup>321</sup> "Property Management," Knoxville Public Building Authority, website, <http://www.ktnpba.org/index.php/about/departments-staff/property-management> (accessed 1 March 2013).



*Recommendations for Knoxville's World's Fair Park and Festival Center:  
Application of SITES*

The biggest set-back for the World's Fair Park and Festival Center is that it was not designed with sustainability in mind; thus, these recommendations are for future management purposes only. Because the PBA does not currently have a separate maintenance plan for the World's Fair Park and Festival Center, it is highly recommended that it develop one using SITES as guidance for those aspects of the park that the PBA can change without initiating a significant amount of construction and damage to what is already in place. The PBA will have to break up the park into zones. These zones would be separated in terms of their function (turf/grass, wooded/forested areas, pavements/rooftops, and parking) and by their materials (pervious or non-pervious pavements) and water features. For each of these zones, an analysis of the zone's strengths, weaknesses, opportunities, and threats (SWOT analysis) would have to be done in terms of developing best management practices for increasing the sustainability of the park as a whole.

It is recommended that the SITES credit for Site Design: Water, the PBA adopt a storm water management system that collects storm water for the operation of these designed water features. Storm water can also be collected and stored for the landscaping and grounds irrigation purposes. Gallop said that he researched implementing a storm water harvesting system, but that several logistical issues have prevented him from convincing his supervisors to do so. One of the major set-backs is the fact that the health department requires the lake to be chlorinated.

An example of this type of management system is Atlanta, Georgia's Historic Fourth Ward Park. Fourth Ward Park began as the first park associated with the Atlanta

Beltline Project. The park combines green space with a high density urban neighborhood. The implemented design maintained a focus on the quality of life of the residents and the relationships between the properties and the park. This interface between the properties and the green space marks the beginning of Atlanta incorporating sustainability into its city policy. In terms of the park layout and water systems, the Historic Fourth Ward Park incorporates a splash pad and an urban forest recirculating stream at the parks' heart.



Figure 80: Map of Historic Fourth Ward Park, from the Historic Fourth Ward Park Conservancy

The park is a passive park that addresses storm water as an amenity in connecting communities from Ponce de Leon to Freedom Parkway. It consists of seventeen acres that originally contained contaminated soils. The central feature of the park is the storm water retention pond that helps to reduce neighborhood flooding. The fountain in the middle of the pond uses storm water that enters it through nearby streams. Historic Fourth Ward Park and the Knoxville World's Fair Park and Festival Center share similarities—both include an amphitheater for event space and informal gatherings. Also, like Second Creek, the stream channel in the south plaza of the Historic Fourth Ward Park pays tribute to Clear Creek, which once flowed through the site. Unlike the World's Fair Park, Fourth Ward Park helps to maintain the wildlife and ecosystems of the surrounding community.<sup>322</sup> The architecture, flora, fauna, and wildlife all reinforce the recirculating stream and the innovative storm water management practices implemented in an urban park setting.

These recommendations intend to be practical for the future management of the World's Fair Park and Festival Center. There is much asphalt and concrete used in the design of this park. It is not recommended that the current pavement types be demolished or altered for the use of more sustainable, porous pavement materials. However, the majority of the concrete and asphalt are used for parking purposes. Thus, it is recommended that the PBA not construct any more surface parking lots for the World's Fair Park use. It is also recommended that the PBA try to work out a partnership with the University of Tennessee where those utilizing the park and the festival center have access to the parking garages adjacent to the site.

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<sup>322</sup>Historic Fourth Ward Park Conservancy, website, <http://www.h4wpc.org/map.htm>. (Accessed 4 March 2013).

### *Current Sustainability and Energy Efficiency Efforts*

The Second Creek Valley upon which the World's Fair Park sits has been deemed a brownfield, and the park helps to reclaim this brownfield for a productive use. According to Chris Gallop, Zone Supervisor for the World's Fair Park, Second Creek is contaminated due to decades of leakage from poorly maintained and cracked sewage lines and from railroad yard operations.<sup>323</sup> Because of the high levels of bacteria found in the creek, it supplies none of the water for the park's water features, to include the fountains and lake. Also, according to Gallop, to his knowledge, Second Creek was most likely diverted when the railroad yard was installed in the valley, and the creek was not used for water features during Expo '82 because of the contamination. Thus, the fact that the park is a reclaimed brownfield would allow it to receive some points for Site Selection. However, because the creek is contaminated, water management has been completed using well water. Also restoring the creek to a safe contamination level would also prove difficult and expensive.<sup>324</sup> The contamination level of the creek has also prevented its use for irrigation purposes in other parts of the park. (Appendix F: World's Fair Park Composite Site Plan with Culvert Highlighted).

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<sup>323</sup> Conversation between Chris Gallop and author on 15 March 2013, Knoxville, Tennessee. Gallop has a horticulture degree from the University of Tennessee and became zone supervisor in 2001, after the park had already been designed.

<sup>324</sup> Gallop stated in conversation that he would like to try using ultraviolet lighting to kill the bacteria in the creek water.



**Figure 81:** This image illustrates the amount of garbage currently in Second Creek



**Figure 82:** Erosion control from University of Tennessee construction site on the banks of Lower Second Creek



**Figure 83: Proximity of Second Creek to the railroad track; Sunsphere stands in the distance**

The water features are operated on two wells located at the north and the central sections of the park. The lake and the cascading fountain are on the same well. Gallop stated that the lake water is used for some irrigation purposes but not all of the irrigation systems are off of the well. Because the water features are used by the public for recreational purposes, the health department requires that the water used be chlorinated with unstabilized chlorine and that the water be circulated. Thus, the water is essentially swimming pool water. Eventually, Gallop would like to implement a dechlorination system that would allow the city to use the same amount of water in the lake and fountains that it puts back into the well. In order to do this, water would be pumped into the lake from the well, then used for irrigation, and then put back into the well in order to replenish the aquifer. An obstacle to this idea is that the city needs to bore another well near the fountain at the Court of Flags. Unfortunately, Gallop states that he cannot bore

underneath the railroad tracks because it is extremely cost-prohibitive (another flaw in the initial design of the park). Gallop acknowledges that original design did implement scrubber valves to be used for pond irrigation, but that they are not used.

The PBA has implemented more sustainable and high-performance materials into the Performance Lawn (between the rail road tracks and the parking deck) along 11<sup>th</sup> Street) and the Festival Lawn. The PBA has retrofitted the lower section of the Performance Lawn (between the north end of the parking garage to Cumberland Avenue) with grass pave. The Performance Lawn is dedicated to the local and regional performance and the PBA sets up stages for this purpose. Although grass pave is a more porous turf option that is great for breaking large loads, the PBA must use skid steers with the stages; otherwise, the stages push up the grass pave. For the Festival Lawn incorporates Patriot Bermuda, which is a more aggressive and regenerative turf material. Since the Festival Lawn is used more often, the Patriot Bermuda holds the soil better and proves more cost-effective for this high-traffic area. However, vendors pose a problem to all of the turf, especially in the Performance Lawn area that does not employ the grass pave. Vendors should be on a hard surface, and the weight of their equipment causes damage to the turf in the Performance Lawn area. Luckily, the PBA dedicates this lawn for performances and restricts public access when it is not in use for this purpose, thus reducing the amount of erosion in the area.

Another more sustainable effort the PBA has implemented is in its use of subsurface drainage systems and alternating pump systems. In this system, the water all drains into one area where it is then percolated and reintroduced into the groundwater. The festival Lawn saw the implementation of this system two years ago. There are plans

for this system to be implemented at the Performance Lawn, but the cost estimates at this point is \$500,000, which is proving cost-prohibitive at this point in time. However, when this system can be implemented, Gallop would like to also incorporate a storm water management system that allows for the redirection of the water into a cistern for storage.

The PBA has attempted to save money by installing more energy efficient water pumps. At the moment the water features run on two pumps. One pumps water at a rate of 750 gallons per minute, while the other pumps at a rate of 1500 gallons per minute. The original system was only sixty-six percent efficient. The PBA switched to a system where the water pumps alternate at peak times in order to circulate the chlorine. This has increased the overall efficiency to ninety percent. This alternating system is scheduled to be implemented at the lake next year. At the moment those pumps run at sixty percent efficiency. Because of the amount of water involved in filling the lake, however, the best efficiency achievement possible for the lake will only be eighty percent.

There are also other opportunities for transitions from traditional to renewable energy sources at the Knoxville World's Fair Park and Festival Center. The Exhibition Center and Holiday Inn both have flat roofs, which could incorporate a vegetation program. The Convention Center and the Knoxville Art Museum also have flat roofs, which could be adapted for green roof purposes. Another option for all of these buildings is to incorporate solar panels on the flat roofs if it is determined a green roof could not be structurally supported. The Convention Center has installed a few of solar panels, though it could install more. These buildings could also incorporate a combination of both solar panels and green roofs. The most obvious transition from traditional to renewable energy would be to start with the Sunsphere, as the glazing could be replaced (as needed) with



solar panels. All of these photovoltaics could help to power aspects of the park, such as the lighting and water pumps. Some of the lighting features have already made the transition to LED light bulbs to increase overall energy efficiency.

The installation of solar panels on the Sunsphere brings up the issue of historic integrity versus sustainability. The integrity of the Sunsphere, architecturally, stems from its bright gold panels that reflect the sun. However, these panels could also generate power. There would have to be a way for the panels to stay while contributing to a more sustainable building. Perhaps replacing the panels with gold solar panels would actually be a better way to preserve the intent and legacy of the Energy Expo. However, the current panels are the ones that are becoming history. At what cost must preservationists sacrifice the intent versus the authenticity? This is a typical Ruskin versus Viollet le Duc (scrape/anti-scrape) question for preservationists.

One of the major problems the PBA would face would be funding and management. One way to implement this is for the Knoxville-Knox County Metropolitan Planning Commission and the PBA to partner with various organizations in the region and the community. One local partnership could be with the Knoxville County Public Schools to allow an educational program where the L&N STEM Academy helps to implement some of the SITES (or even LEED) criteria in the landscape or the existing buildings on the park. Other partnerships to take advantage of are the University of Tennessee's Landscape Architecture Program, Outdoor Knoxville, Legacy Parks, the Cultural Landscape Foundation, and the Trust for Public Land. Another organization would be the Urban Land Institute, the very organization that helped them to develop the potential for the current convention center. If nothing else, the PBA could implement

another charrette focusing on the creation of a master plan that implements sustainable practices through design guidelines.

Another company that the PBA could approach is Home and Garden Television (HGTV) Network, as its headquarters is in Knoxville. HGTV already has a garden in the World's Fair Park, and although Gallop is reluctant to reach-out to them due to their less-than-efficient practices, HGTV is still a partnership opportunity that could be beneficial if there was an understanding that sustainability and energy efficiency was the ultimate goal. The network could be a very relevant stake-holder in a charrette process. To ignore this very prominent company altogether could possibly be another detrimental public relations action involving Energy Expo '82's legacy.

#### *Conclusion*

World's Fairs in the United States after World War II are historically, culturally, and aesthetically important. The fairs in Seattle, San Antonio, Spokane, and Knoxville contributed to the history of expositions in this country and abroad. Each of these fairs was based either directly or indirectly on the one before it. All of them share a common bond: their host cities used the world's fair as a means for downtown revitalization and urban renewal. Some of these expositions were iconic and their legacies have transcended the generations that experienced them. The best examples of this are Seattle's Space Needle and San Antonio's River Walk. The legacies of the other fairs proved to be more meaningful on a smaller, more local scale. Spokane used its world's fair to restore both the falls of the Spokane River its riverfront. The legacy remains as the River Front Park. Knoxville modeled its world's fair directly on Spokane's. Although Knoxville used the world's fair to revitalize an old railroad yard as a means for

reconnecting the central business district with the adjacent university, its physical legacy remained in limbo for approximately ten years until the citizens pressed for and received an urban park space.

The Knoxville World's Fair Park and Festival Center occupies the exact location of Energy Expo '82 and combines both hard and soft surfaces through the use of festival lawns, memorials, play grounds, and water features. It also incorporates most of the buildings either rehabilitated or constructed specifically for the fair in 1982. Only one permanent structure, the United States Pavilion, was lost due to the lack of a residual use plan. The World's Fair Park was originally intended to be an interim solution for a space that was intended for high-density, mixed-use housing and retail development. However, the space's use as an urban park allows for Knoxvilleans to constructively preserve the positive aspects of a very important historical event for the city.

The residual use of world's fair sites always poses a problem because of United States federal policy. The United States government is expected to contribute funding for the construction of the United States' pavilion at any registered world's fair it participates in. This is exceptionally important when the country hosts a fair. One caveat that the federal government wrote into the legislation is that it would not endorse a fair unless the United States pavilion was to be a permanent structure with a distinct residual use. In Spokane, the United States Pavilion holds the ice skating rink while the Washington State Pavilion became the convention and performing arts center. Unfortunately, this was not the case for Knoxville. Instead, the United States Pavilion lay empty for nearly a decade before it was finally demolished to lay the ground work for the current World's Fair Park and Festival Center.

What is the best way to preserve these transitory, temporary events that have brought such dramatic change to these few cities in the United States? Because each place is so different and each city had very different goals for hosting a world's fair, preservationists cannot create a master plan for these fairs' legacies. Each city must preserve these fairs' unique impact on the local urban environment. The Knoxville World's Fair Park and Festival Center, just as with many historic resources of the recent past, faces two very real problems: functional and material obsolescence. Many publically-owned modern landscapes suffer from these two problems and are facing demolition due to neglect, and Peavey Plaza in Minneapolis is good example of this situation. When Peavey Plaza first opened in the mid-1970s, it was meant to be an outside event space. The large pool functioned as an ice-skating rink in the winter and the city drained it in the summer months to provide more space for larger events.<sup>325</sup> Known as the Markt-platz (German for "market place" or "market plaza" or "market square"), Peavey Plaza has "served its intended purpose admirably for decades."<sup>326</sup> Materials used in Peavey Plaza include concrete, stainless steel, and granite, and over the last decade, Peavey Plaza has experienced deterioration due to the city's own neglect of routine maintenance.

The plaza gained national attention in 2012 when it was the feature of a heated local debate between the Minneapolis Heritage Preservation Commission (HPC) and the City of Minneapolis. The city wanted to demolish the resource for something newer, even though the historic significance of the plaza had been determined and supported in several previous studies. The city claimed that the cost for rehabilitation was too

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<sup>325</sup> Roise, "The Unfinished Saga of Peavey Plaza," 21-22.

<sup>326</sup> Roise, 23.

expensive, even though the city was at fault for the plaza's state of deterioration. The HPC denied the city's application for demolition while the M. Paul Friedberg, the plaza's original architect, concurrently designed cost-effective rehabilitation solutions for the site. The city appealed the HPC's denial of the demolition permit, which was later overturned by the Minneapolis City Council. Peavey Plaza's fate is still uncertain, as the HPC has filed a lawsuit under the Minnesota Environmental Rights Act, because the city council ignored the HPC's recommendation for interim protection while the HPC sought local landmark designation.

At the moment, the Knoxville World's Fair Park and Festival Center is not under threat of demolition due to the city's neglect. In fact, the Knoxville-Knox County Metropolitan Planning Commission and the Knoxville Public Building Authority are dedicated to the park's maintenance, as is indicated by both agencies' dedication to routine inspection and regular improvements (as the recent park renovations indicate). As stated in Chapter 4, the Energy Expo was the most significant event in Knoxville's history up to that point. Thus, for Knoxville, the World's Fair Park and Festival Center maintains a significant role in the community.

Knoxville must seek the park's preservation as an urban park plaza, and the city must do so in a way that is more congruent with the energy theme of the 1982 world's fair. In order to do this, the City of Knoxville must create an individual maintenance plan for the World's Fair Park that focuses on increasing its sustainability. The Sustainable Sites Initiative is a good starting-point for achieving this. Also, the Public Building Authority has already employed the appropriate staff for achieving this goal, as Zone Supervisor, Chris Gallop, is interested and dedicated to introducing new ideas to better

improve the park's efficiency. If Knoxville looks to creating a more sustainable park, then it will help to improve the health and well-being of Knoxvillians, thus connecting the University of Tennessee to the Central Business District of downtown Knoxville in a way that no world's fair or urban renewal project ever could.

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APPENDIX A

*1928 CONVENTION OF PARIS*

**CONVENTION**

**RELATING TO INTERNATIONAL EXHIBITIONS  
SIGNED AT PARIS ON NOVEMBER 22<sup>ND</sup>, 1928,  
AND SUPPLEMENTED BY THE PROTOCOLS OF MAY 10<sup>TH</sup>, 1948,  
NOVEMBER 16<sup>TH</sup>, 1966, NOVEMBER 30<sup>TH</sup>, 1972  
AND THE AMENDMENT OF JUNE 24<sup>TH</sup>, 1982  
AND THE AMENDMENT OF MAY 31<sup>ST</sup>, 1988**

**PART I - Definitions and Objectives**

**ARTICLE 1**

1. An exhibition is a display which, whatever its title, has as its principal purpose the education of the public: it may exhibit the means at man's disposal for meeting the needs of civilisation, or demonstrate the progress achieved in one or more branches of human endeavour, or show prospects for the future.

2. An exhibition is international when more than one State takes part in it.

3. Participants in an international exhibition comprise on the one hand exhibitors of States which are officially represented grouped into national sections, on the other hand international organisations or exhibitors from countries which are not officially represented and lastly those who are authorised in accordance with the regulations of the exhibition to carry on some other activity, in particular those granted concessions.

**ARTICLE 2**

This Convention applies to all international exhibitions except:

- a) exhibitions lasting less than three weeks;
- b) fine Arts exhibitions;
- c) exhibitions of an essentially commercial nature.

"Whatever title may be given to an exhibition by its organisers, this Convention recognises a distinction between registered exhibitions and recognised exhibitions."

## **PART II - General Conditions governing the Organisation of International Exhibitions**

### **ARTICLE 3**

International exhibitions presenting the following features shall be eligible for registration by the International Exhibitions Bureau referred to in Article 25 below:

- A) Their duration may not be less than six weeks nor more than six months;
- B) The rules governing the exhibition buildings used by the participating States shall be laid down in the general regulations of the exhibition. If a tax is chargeable on property under the legislation of the inviting State, the organisers shall be responsible for paying it. Only services actually rendered in accordance with the regulations approved by the Bureau shall qualify for reimbursement;
- C) From January 1<sup>st</sup>, 1995 the interval between two registered exhibitions shall be at least five years; the first exhibition may be held in 1995. The International Exhibitions Bureau may nevertheless accept a date not more than one year earlier than the date resulting from the above provision, to allow celebration of a special event of international importance, without however altering the five-year interval laid down in the original calendar.

### **ARTICLE 4**

A) International exhibitions presenting the following features shall be eligible for recognition by the International Exhibitions Bureau:

- 1. their duration may not be less than three weeks nor more than three months;
- 2. they must illustrate a definite theme;
- 3. their total surface area must not exceed 25 ha;
- 4. they must allocate to the participating States premises constructed by the organiser, free of all rents, charges, taxes and expenses other than those representing services rendered ; the largest space allocated to a State must not exceed 1.000 m<sup>2</sup>. The International Exhibitions Bureau may however authorise a derogation from the requirement that premises be allocated free of charge if the economic and financial situation of the organising State justifies it;

5. only one recognised exhibition, pursuant to this paragraph A, may be held between two registered exhibitions;

6. only one registered exhibition or exhibition recognised pursuant to this paragraph A, may be held in the same year.

B. The International Exhibitions Bureau may also grant recognition to:

1. the Milan Triennial Exhibition of Decorative Arts and Modern Architecture, on grounds of historical precedence, provided that it retains its original features;

2. All horticultural exhibitions approved by the International Association of Horticultural Producers, provided that there is an interval of at least two years between such exhibitions in different countries and at least ten years between events held in the same country;

due to be held in the interval between two registered exhibitions.

#### **ARTICLE 5**

The opening and closing dates of an exhibition and its general features shall be laid down at the time of registration or recognition and may be changed only with the agreement of the BIE

### **PART III - Registration**

#### **ARTICLE 6**

1. The Government of a Contracting Party in whose territory an exhibition coming within the scope of the Convention is planned (hereinafter referred to as "the inviting Government") shall send to the Bureau an application for registration or recognition indicating the laws, regulations or financial measures it proposes to make for the exhibition. The Government of a non-contracting State wishing to obtain registration or recognition of an exhibition may apply to the Bureau in the same way provided that it undertakes to comply with the provisions of the Convention set out in Parts I, II, III and IV and the regulations made for their implementation.

2. The application for registration or recognition shall be made by the Government responsible for the international relations of the place in which the exhibition is planned to be held (hereinafter referred to as "the inviting Government") even if this Government is not the organiser of the exhibition.

3. The Bureau shall in its compulsory regulations determine the maximum period for which a date for an exhibition may be reserved and the minimum period for receipt of an application for registration or recognition; it shall also specify the documents which must accompany such an application. It shall also fix by compulsory regulation the amount of the contribution to be paid for the costs of examination of the application.

4. Registration or recognition shall be granted only if the exhibition fulfils the conditions of this Convention and of the regulations laid down by the Bureau.

#### **ARTICLE 7**

1. When two or more countries compete for the registration or recognition of an exhibition and cannot reach agreement they shall ask the General Assembly of the Bureau to arbitrate. In arriving at its decision the General Assembly shall take into account the considerations put forward and, in particular, any special reasons of an historical or ethical nature, the period which has elapsed since the last exhibition, and the number of displays already organised by the competing countries.

2. Except in exceptional circumstances the Bureau shall give preference to an exhibition organised in the territory of a Contracting Party.

#### **ARTICLE 8**

A State which has been granted the registration or recognition of an exhibition shall lose all rights arising from the registration or recognition if it changes the date reserved for the exhibition except in the circumstances provided for in Article 28 d). If it wishes to organise the exhibition at another date, the Government concerned shall make a fresh application, and if necessary, submit to the procedure laid down in Article 7 for resolving competing claims.

#### **ARTICLE 9**

1. In the case of any exhibition which has not been registered or recognised, Contracting Parties shall refuse their participation and their patronage as well as any Government subsidy.

2. Contracting Parties are quite free not to take part in an exhibition which has been registered or recognised.

3. Each Contracting Government shall use whatever means it considers most appropriate under its own legislation to act against the organisers of false exhibitions or exhibitions to which participants might be fraudulently attracted by false promises, notices or advertisements.



**PART IV - Obligations of Organisers of Registered Exhibitions and of Participating States**

**ARTICLE 10**

1. The inviting Government shall ensure that the provisions of this Convention and of the regulations made for its implementation are observed.
2. If the said Government does not itself organise the exhibition it shall officially recognise the organisers for this purpose and it shall guarantee the fulfilment of the obligations of the organisers.

**ARTICLE 11**

1. All invitations to participate in an exhibition, whether they are addressed to member States or to non-member States, shall be sent through diplomatic channels by the Government of the organising country to the Government of the country invited for that country and for the other parties in that country to be invited. The replies shall be forwarded to the inviting Government by the same channel, as well as any requests by non-invited parties to participate. The invitations shall observe the intervals prescribed by the Bureau and shall state that the exhibition in question has been registered. Invitations to organisations of international character shall be sent to them direct.
2. No Contracting Party may organise or sponsor participation in an international exhibition if the above-mentioned invitations have not been sent in accordance with the provisions of this Convention.
3. Contracting Parties undertake neither to address nor accept any invitation to participate in an exhibition, whether on the territory of a Contracting Party, or of a non-member State, in case where such invitation does not cite a registration or recognition approved according to the provision of this Convention.
4. Any Contracting Party may require the organisers not to send invitations to addressees in its territory other than itself. It may also refrain from forwarding invitations or requests to participate from parties who have not been invited.

**ARTICLE 12**

The inviting Government shall appoint a Commissioner-General of the Exhibition in the case of a registered exhibition or a Commissioner of the Exhibition in the case of a recognised exhibition who shall be authorised to represent the Government for all purposes in connection with the Convention and in all matters concerning the exhibition.

### **ARTICLE 13**

The Government of any country participating in an exhibition shall appoint a Section Commissioner-General in the case of a registered exhibition or a Section Commissioner in the case of a recognised exhibition to represent it with the inviting Government. The Section Commissioner-General or the Section Commissioner shall have sole responsibility for the organisation of his country's exhibit. He shall inform the Commissioner-General of the Exhibition or the Commissioner of the Exhibition of the content of this exhibit and shall see that the rights and obligations of exhibitors are respected.

### **ARTICLE 14** (abrogated)

### **ARTICLE 15** (abrogated)

### **ARTICLE 16**

The Customs regulations for international exhibitions shall be those set out in the Annex, which forms an integral part of this Convention.

### **ARTICLE 17**

At an exhibition only the sections constituted under the authority of Commissioners-General or Commissioners appointed in accordance with Article 13 by the Governments of the participating countries shall be considered as national and consequently be entitled to bear this name. A national section comprises all the exhibitors of the country in question but not the concession-holders.

### **ARTICLE 18**

1. At an exhibition a participant or a group of participants may use a geographical title relating to a participating Party only with the authorisation of the Section Commissioner-General or the Section Commissioner of the Government of the Party concerned.

2. If a Contracting Party is not participating in an exhibition, the Commissioner-General or the Commissioner of the exhibition shall prohibit such usage as envisaged in the preceding paragraph, on behalf of the Contracting Party.

### **ARTICLE 19**

1. Anything exhibited in a national section must have a close connection with the country exhibiting it (for example, articles having their origin in the territory of the participating Government, or articles created by nationals of the country).

2. With the authorisation of the Commissioners-General or Commissioners of the other States concerned, other articles or products may be presented provided they serve only to complete the exhibit.

3. In case of dispute between participating Governments concerning paragraphs 1 and 2 above, the matter shall be referred to the college of Section Commissioners-General or Commissioners who shall decide by a simple majority of those present. Their decision is final.

#### **ARTICLE 20**

1. Unless there are provisions to the contrary in the laws of the organising country, no monopoly of any kind shall be granted at an exhibition. However, a monopoly for a common service may be authorised by the Bureau at the time of registration or recognition. In that case the following conditions shall be observed by the organisers:

a) the existence of such monopoly or monopolies shall be indicated in the regulations of the exhibition and in the participation contract;

b) the services subject to monopoly shall be made available to exhibitors under the conditions normally existing in the State;

c) the powers of the Commissioners-General or Commissioners in their respective sections shall not in any case be subjected to any limitation.

2. The Commissioner-General or Commissioner of the exhibition shall take all steps to ensure that the charges made to participating Governments are not higher than those made to the organisers of the exhibition or in any case than the normal local charges.

#### **ARTICLE 21**

The Commissioner-General or Commissioner of the Exhibition shall do everything in his power to ensure the proper and efficient functioning of the public utility services inside the exhibition area.

#### **ARTICLE 22**

The inviting Government shall make every effort to facilitate the participation of Governments and of their nationals, especially as regards transport charges and conditions of admission of persons and things.

### **ARTICLE 23**

1. The general regulations of an exhibition shall state whether or not prizes are to be awarded to the participants irrespective of the certificates of participation which may always be granted. If prizes are to be given their allocation may be limited to certain categories.
2. If participants do not wish to compete for prizes they shall make a declaration to this effect before the opening of the exhibition.

### **ARTICLE 24**

The International Exhibitions Bureau as defined in the following Article, shall draw up regulations to determine the general conditions for the composition and functioning of juries and to decide how prizes shall be awarded.

## **PART V - Institutional Arrangements**

### **ARTICLE 25**

1. The International Exhibitions Bureau was established to supervise and ensure the application of this Convention. Its members shall be the Governments of the Contracting Parties. The headquarters of the Bureau shall be in Paris.
2. The Bureau shall have legal personality. In particular, it shall have the capacity to contract, acquire and dispose of movable and immovable property and to participate in legal proceedings.
3. The Bureau shall be entitled to conclude with States and International Organisations agreements relating to such Privileges and Immunities as are necessary for the exercise of the functions entrusted to it by this Convention.
4. The Bureau shall comprise a General Assembly, a President, an Executive Committee, specialised committees, as many Vice-Presidents as there are committees and a Secretariat under the authority of a Secretary General.

### **ARTICLE 26**

The General Assembly of the Bureau shall be composed of delegates appointed by the Contracting Parties on the scale of from one to three delegates per country.

## **ARTICLE 27**

The General Assembly shall hold regular meetings and may also hold extraordinary meetings. It shall decide all questions which under this Convention come within the competence of the Bureau of which it is the highest authority. In particular the General Assembly shall:

- a) discuss, adopt and publish regulations relating to the registration or recognition, classification and organisation of international exhibitions, and to the proper functioning of the Bureau. Within the limits of the provisions of this Convention the General Assembly may lay down compulsory regulations and also model regulations to serve as a guide to the organisers of exhibitions;
- b) draw up the budget, check and approve the Bureau's accounts;
- c) approve the reports of the Secretary General;
- d) establish committees as necessary, and appoint members of the Executive Committee and of the other committees and establish the duration of their mandate;
- e) approve any international agreements entered into in accordance with Article 25 (3) hereof;
- f) adopt draft amendments in accordance with Article 33;
- g) appoint the Secretary General.

## **ARTICLE 28**

1. The Government of each Contracting Party, whatever the number of its delegates, shall have one vote in the General Assembly. This voting right shall be suspended if the sum of the subscriptions owed by a Contracting Government under Article 32 of this Convention exceeds the sum of the subscriptions due by it for the current year and the previous year.

2. The General Assembly shall be qualified to exercise its functions when the number of member States represented is at least two-thirds of the number of member States entitled to vote. If this quorum is not reached, the General Assembly shall be convened again with the same agenda after an interval of at least a month. In that case the quorum required shall be reduced to half the number of Contracting Parties entitled to vote.

3. Decisions shall be by a majority of the delegations present voting for or against, except that a majority of two-thirds shall be required in the following cases:

- a) the adoption of proposals for amendments to this Convention;
- b) the drawing up and amendment of the regulations;

- c) the adoption of the budget and approval of the amount of the annual subscriptions of the Contracting Parties;
- d) the authorisation for a change of opening or closing dates of an exhibition in accordance with Article 5 above;
- e) the registration or recognition of an exhibition in the territory of a non-member State which is in competition with an exhibition in the territory of a Contracting Party;
- f) the reduction of the intervals stipulated in Article 3 of the present Convention;
- g) the acceptance of reservations to an amendment presented by a Contracting Party; such amendment being adopted in accordance with Article 33, by a four-fifths majority, or unanimously as the case may be;
- h) the approval of any draft international agreement;
- i) the appointment of the Secretary General.

#### **ARTICLE 29**

1. The President shall be elected by secret ballot of the General Assembly for a period of two years from among the delegates of the Governments of the Contracting Parties. He may not represent the State to which he belongs during his period of office. He may be re-elected.
2. The President shall call and conduct meetings of the General Assembly and ensure the proper functioning of the Bureau. In the President's absence his functions shall be exercised by the Vice-President in charge of the Executive Committee or, in the event of his incapacity, by one of the other Vice-Presidents in the order of their election.
3. The Vice-Presidents shall be elected from among the delegates of the Contracting Parties by the General Assembly which shall determine the nature and duration of their office and in particular the Committees of which they shall be given charge.

#### **ARTICLE 30**

1. The Executive Committee shall consist of delegates of twelve Contracting Parties, each nominating one representative.
2. The Executive Committee:
  - a) shall establish and keep up-to-date a classification of human endeavour as it may be portrayed in an exhibition;

- b) shall examine all application for the registration or recognition of an exhibition and submit them with advice for the approval of the General Assembly;
- c) shall discharge such tasks as are given to it by the General Assembly;
- d) may seek the opinion of other Committees.

### **ARTICLE 31**

1. The Secretary General, who shall be appointed in accordance with the provisions of Article 28 of this Convention, shall be a national of the country of one of the Contracting Parties.
2. The Secretary General shall be responsible for attending to the current business of the Bureau in accordance with the instructions of the General Assembly and of the Executive Committee. He shall draw up a draft budget, present accounts and submit reports on his activities to the General Assembly. He shall represent the Bureau, especially in legal matters.
3. The General Assembly shall decide the other duties and responsibilities of the Secretary General as well as his terms of service.

### **ARTICLE 32**

The annual budget of the Bureau shall be adopted by the General Assembly in accordance with the provisions of paragraph 3 of Article 28. The budget shall take account of the financial reserves of the Bureau, of revenue of all kinds, and also of the debit and credit balances carried forward from previous financial years. The expenses of the Bureau shall be met from these sources and from the subscriptions of Contracting Parties calculated on the basis of the number of parts falling to each Party according to the decisions of the General Assembly.

### **ARTICLE 33**

1. Any Contracting Government may make a proposal for amendment of the Convention. The text of the said proposal and the reasons for it shall be communicated to the Secretary General who shall transmit them as soon as possible to the other Contracting Governments.
2. The proposal for amendment shall be included in the agenda of an ordinary session or of an extraordinary session of the General Assembly to be held at least three months after the date of its despatch by the Secretary General.
3. Every proposal for amendment adopted by the General Assembly in accordance with the provisions of the previous paragraph and of Article 28 shall be submitted by the Government of the French Republic for the acceptance of all the Governments Parties to this Convention. It shall come into force with regard to all Parties on the

date on which four-fifths of them have notified their acceptance to the Government of the French Republic, except that a proposal for amendment of the present paragraph, of Article 16, or of the Annex referred to in that Article shall not come into force until all Parties have notified their acceptance to the Government of the French Republic.

4. Any Government which wishes to enter a reservation to its acceptance of an amendment shall inform the Bureau of the terms of this proposed reservation. The General Assembly shall give a decision concerning the admissibility of this reservation. It shall allow reservations which are conducive to the protection of established positions with regard to international exhibitions and reject those which would have the effect of creating privileged positions. If the reservation is accepted, the Party which had submitted it shall be included among those which are counted as having accepted the amendments for the purpose of calculating the above-mentioned four-fifths majority. If it is rejected, the Government which had submitted it shall choose between refusal to accept the amendment and its acceptance without reservation.

5. When the amendment comes into force, in the circumstances envisaged in the third paragraph of the present article, any Contracting Party which had refused to accept it may, if it sees fit, avail itself of the provisions of Article 37 below.

#### **ARTICLE 34**

1. Any dispute between two or more Contracting Governments concerning the application or the interpretation of this Convention, which cannot be settled by the authorities invested with powers of decision in pursuance of the provisions of this Convention, shall form the subject of negotiations between the Parties in dispute.

2. If these negotiations do not within a short space of time lead to an agreement, any Party shall refer the matter to the President of the Bureau and shall request him to nominate a conciliator. If the conciliator is unable to obtain the agreement of the Parties in dispute on a solution, he shall take note of and define the nature and the extent of the dispute in his report to the President.

3. Once a lack of agreement is thus notified the dispute shall become the subject of arbitration. To this end any Party shall, within an interval of two months from the date on which the report was communicated to the Parties in dispute, refer to the Secretary General of the Bureau a request for arbitration, naming the arbitrator chosen by that Party. The other Party or Parties to the dispute must each nominate, within an interval of two months, their respective arbitrators. Failing this, any Party shall notify the President of the International Court of Justice, requesting him to nominate the arbitrator or arbitrators. When several Parties act in unison for purposes outlined in the preceding paragraph, they shall count as one entity. In case of doubt, the decision lies with the Secretary General. The arbitrators shall in their turn nominate an additional arbitrator. If the arbitrators cannot agree on this choice within a space of two months, the President of the International Court of Justice, having been notified by any one Party, shall be responsible for nominating the additional arbitrator.



4. The arbitrating body shall give its decision by the majority of its members, the additional arbitrator having the casting vote in the event of the arbitrators' votes being equally divided. This decision shall be binding on all the Parties in dispute, finally and without the right of appeal.

5. Any State may, at the time of signing or ratifying this Convention, or acceding to it, declare itself not bound by the provisions of the above paragraphs 3 and 4. Other Contracting Parties will not be bound as regards those provisions towards any State which has so reserved its positions.

6. Any Contracting Party which has reserved its position in accordance with the provisions of the above paragraph, may at any time rescind its reservations by a notification to the depository Government.

### **ARTICLE 35**

This Convention shall be open for accession by any State which is a member of the United Nations, or any State which is not a member of the United Nations but which is a Party to the Statute of the International Court of Justice or any State which is a member of one of the specialised agencies of the United Nations or the International Atomic Energy Agency and also by any State whose application for accession is approved by a two-thirds majority of the Contracting Parties which have the right to vote in the General Assembly of the Bureau. Instruments of accession shall be deposited with the Government of the French Republic and shall become effective on the date they are so deposited.

### **ARTICLE 36**

The Government of the French Republic shall inform signatory and acceding Governments and also the International Exhibitions Bureau of:

- a) the entry into force of amendments in accordance with Article 33;
- b) accessions in accordance with Article 35;
- c) denunciations in accordance with Article 37;
- d) reservations filed in accordance with Article 34 paragraph 5;
- e) the termination of the Convention, should this arise.

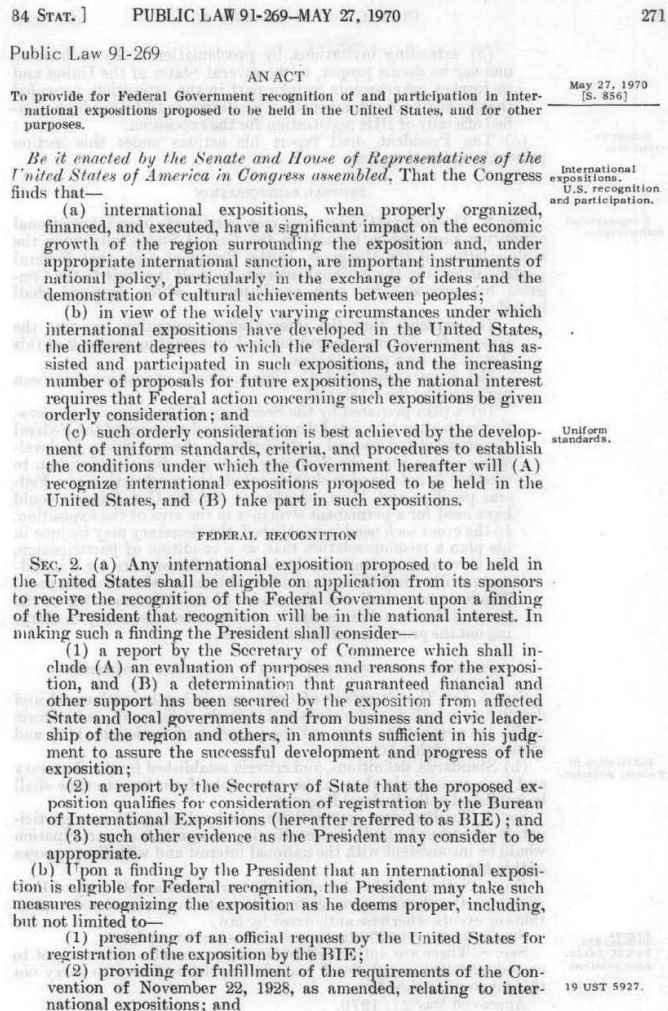
### **ARTICLE 37**

1. Any Contracting Government may denounce this Convention by notifying the Government of the French Republic in writing.

2. Such a denunciation shall take effect one year after the date of receipt of such notification.
  
3. This Convention shall terminate if, as the result of denunciations, the number of Contracting Governments is reduced to less than seven. Subject to any agreement which may be concluded between the Contracting Governments concerning the dissolution of the Bureau, the Secretary General shall be responsible for questions regarding liquidation. Unless the General Assembly decides otherwise, the assets shall be divided among the Contracting Governments in proportion to the subscriptions paid since they have been Parties of this Convention. If there are liabilities, these shall be taken over by the same Governments in proportion to the subscriptions fixed for the current financial year.

*DONE* at Paris, the 30th of November, 1972

## APPENDIX B



(3) extending invitations, by proclamation or by such other manner he deems proper, to the several States of the Union and to foreign governments to take part in the exposition, provided that he shall not extend such an invitation until he has been notified officially of BIE registration for the exposition.

President shall report his actions under this section promptly to the Congress.

FEDERAL PARTICIPATION

SEC. 3. The Federal Government may participate in an international exposition proposed to be held in the United States only upon the authorization of the Congress. If the President finds that Federal participation is in the national interest, he shall transmit to the Congress his proposal for such participation, which proposal shall include—

(a) evidence that the international exposition has met the criteria for Federal recognition and, pursuant to section 2 of this Act, it has been so recognized;

(b) a statement that the international exposition has been registered by the BIE; and

(c) a plan prepared by the Secretary of Commerce in cooperation with other interested departments and agencies of the Federal Government for Federal participation in the exposition. In developing such a plan, the Secretary shall give due consideration to whether or not the plan should include the construction of a Federal pavilion and, if so, whether or not the Government would have need for a permanent structure in the area of the exposition. In the event such need is established, the Secretary may include in his plan a recommendation that, as a condition of participation, the Government should be deeded a satisfactory site for the Federal pavilion, in fee simple and free of liens or other encumbrances. The Secretary shall seek the advice of the Administrator of the General Services Administration to the extent necessary in carrying out the provisions of this subsection.

ESTABLISHMENT AND PUBLICATION OF STANDARDS AND CRITERIA

SEC. 4. (a) The Secretary of Commerce is hereby authorized and directed to establish and maintain standards, definitions, and criteria which are adequate to carry out the purposes of section 2(a) (1) and section 3(a) of this Act; and

Standards, definitions, and criteria established by the Secretary and such revisions in them as he may make from time to time shall be published in the Federal Register.

SEC. 5. The President may withdraw Federal recognition or participation whenever he finds that continuing recognition or participation would be inconsistent with the national interest and with the purposes of this Act.

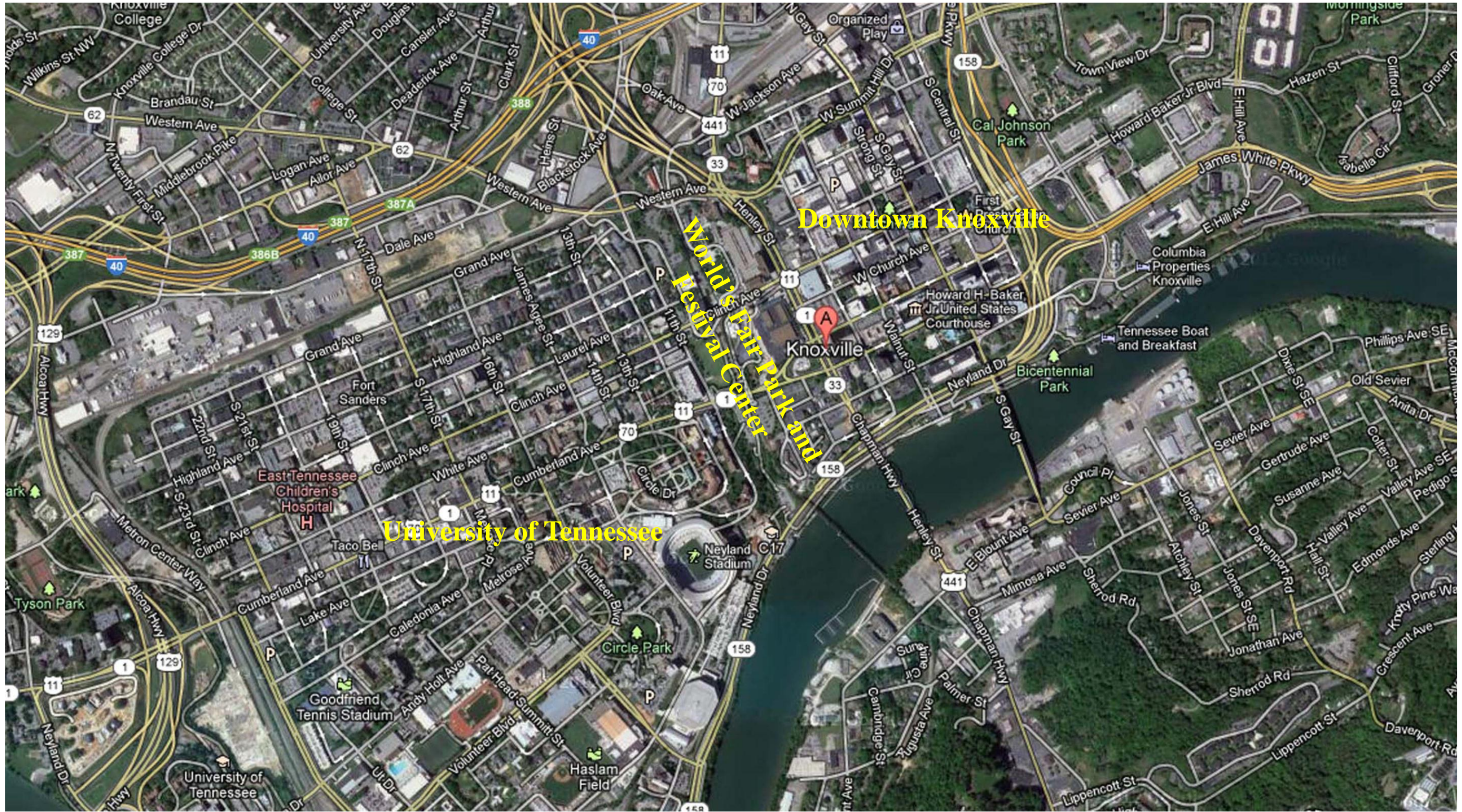
SEC. 6. Nothing in this Act shall affect or limit the authority of Federal departments and agencies to participate in international expositions or events otherwise authorized by law.

Section 5 of Public Law 91-504 is hereby repealed. There are authorized to be appropriated such sums, not to exceed \$20,000,000 in any fiscal year, as may be necessary to carry out the purposes of this Act.

Approved May 27, 1970.

# Appendix C

## Map of Knoxville, Tennessee



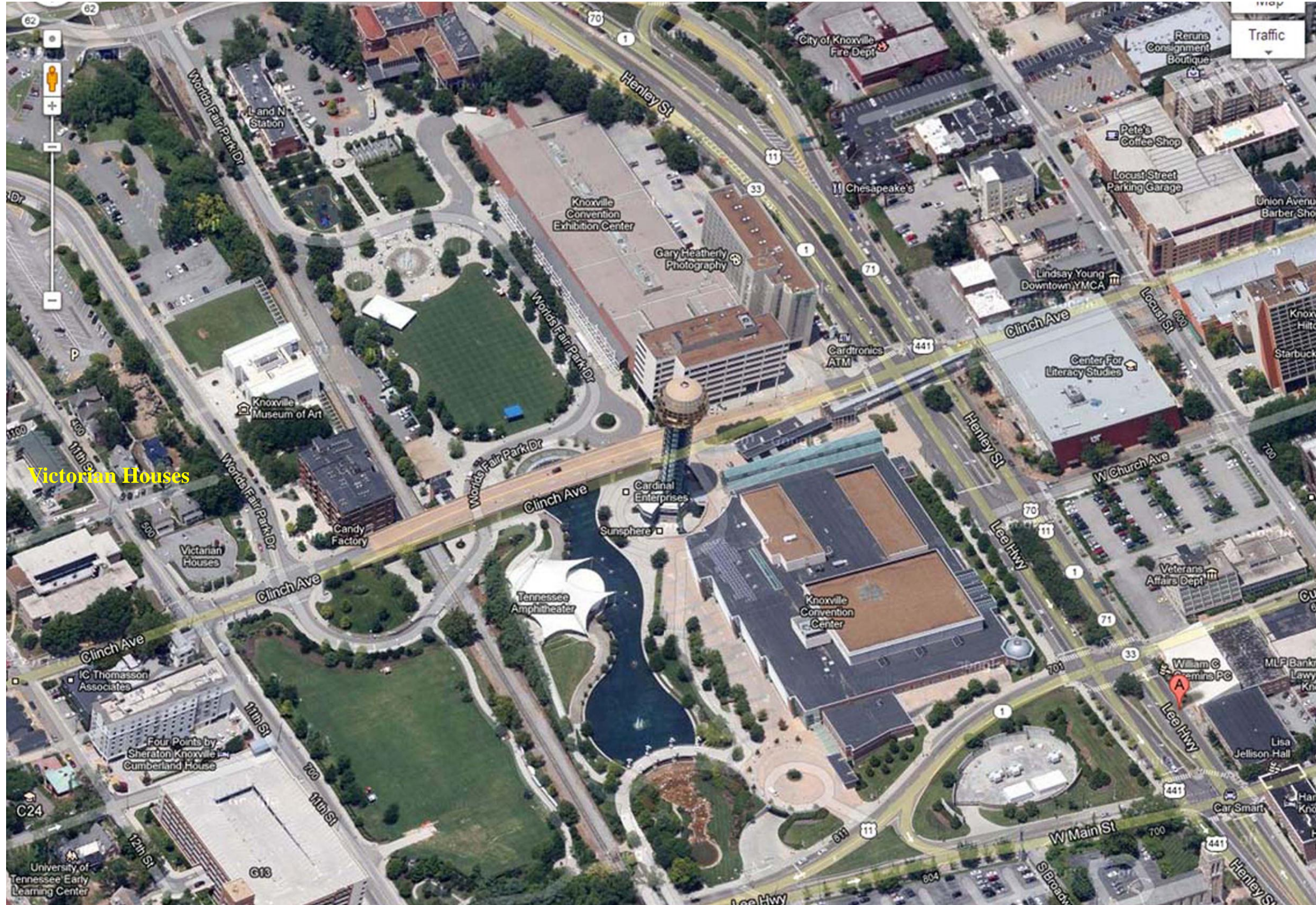
# Appendix D

## Map of Energy Expo '82 Grounds



# Appendix E

## Current World's Fair Park and Festival Center



# Appendix F

## World's Fair Park Composite Site Plan with Culvert Highlighted

