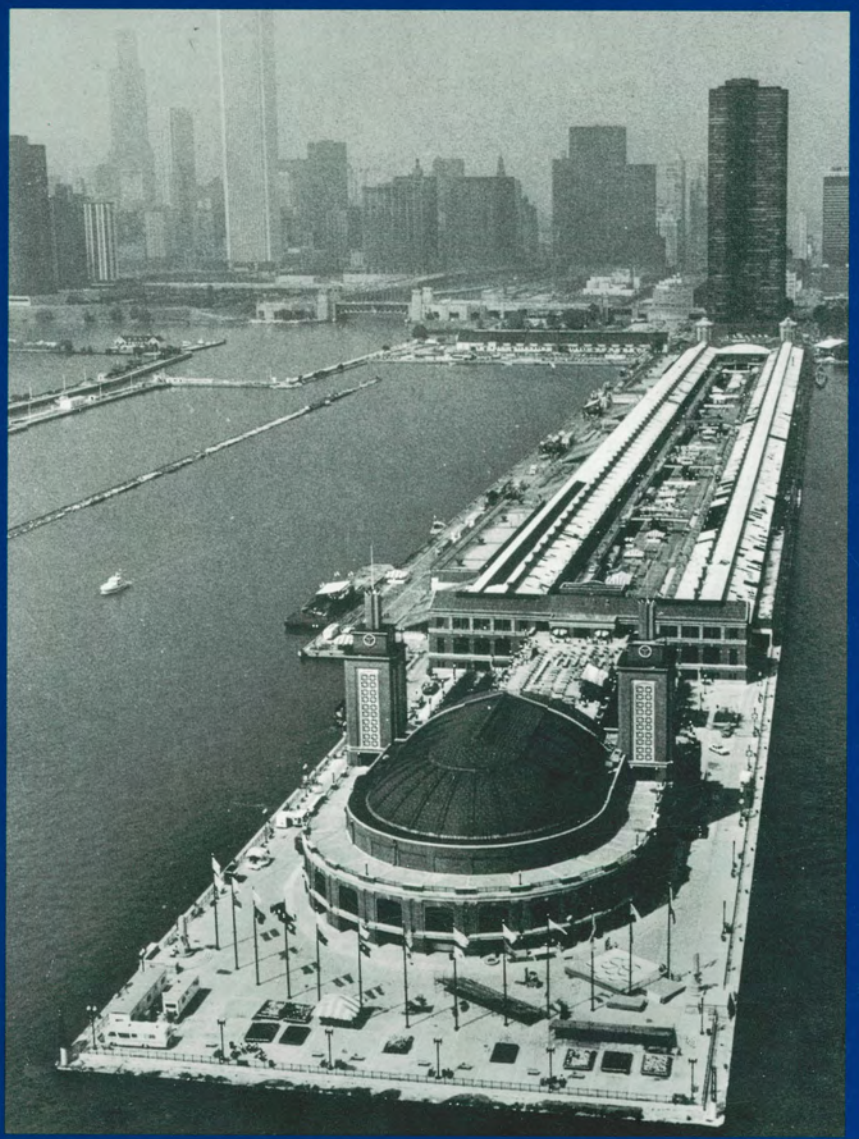
ULI

NAVY PIER CHICAGO



Overhead view of Navy Pier. "Copyrighted, Chicago Tribune Company, all rights reserved, used with permission."

NOTICE

Less than seven weeks after the ULI panel made its recommendations for Navy Pier, the Illinois General Assembly created a new city/state entity—the Metropolitan Pier and Exposition Authority—that replaces the Metropolitan Fair and Exposition Authority. This new authority will operate both McCormick Place and Navy Pier and is authorized to issue up to $150 million for pier redevelopment to be raised and secured by a statewide cigarette tax.

NAVY PIER
CHICAGO, ILLINOIS

An Evaluation of Revitalization Strategies for the City of Chicago and the Navy Pier Development Authority

May 7–12, 1989
A Panel Advisory Service Report
ULI–the Urban Land Institute
1090 Vermont Avenue, N.W.
Washington, D.C. 20005

ABOUT ULI– THE URBAN LAND INSTITUTE

ULI is a nonprofit education and research organization that fosters and encourages high standards of land use planning and development. To this end, the Institute sponsors a wide variety of education programs, conducts research, interprets current land use trends, and disseminates pertinent information.

Established in 1936, ULI is recognized as one of America's most respected and widely quoted sources of objective information on urban planning, growth, and development.

Members of the Washington, D.C.–based Institute include land developers, builders, architects, city planners, investors, planning and renewal agencies, financial institutions, and others interested in land use.

Much of the Institute's work is accomplished through its councils, which include:

- Urban Development/Mixed-Use Councils
- Commercial and Retail Development Councils
- Industrial and Office Park Development Councils
- Community Development Council
- Residential Development Councils
- Recreational Development Council
- Small-Scale Development Councils
- National Policy Council
- Development Regulations Council
- Development Infrastructure and Services Council

This Panel Advisory Service report is intended to further the objectives of the Institute and to make authoritative information generally available to those seeking knowledge in the urban land use field.

David E. Stahl
Executive Vice President
ULI–the Urban Land Institute

ULI PROJECT STAFF

Jerry S. Church
Staff Vice President
Advisory Services

Terry Jill Lassar
Project Editor
Research Counsel

Margarita Betancourt
Coordinator
Advisory Services

Nancy H. Stewart
Managing Editor

Carol E. Soble
Copy Editor

Helene Y. Redmond
Computer-Assisted Publishing Manager

Kim Rusch
Artist

©1989 by ULI–the Urban Land Institute
1090 Vermont Avenue, N.W.
Washington, D.C. 20005

All rights reserved. Reproduction or use of the whole or any part of the contents without written permission of the copyright holder is prohibited.

ULI Catalog Number N21

CONTENTS

ACKNOWLEDGMENTS 4

PANEL MEMBERS AND STAFF 5

FOREWORD: THE PANEL'S ASSIGNMENT 6

SETTING THE STAGE 8

OPTIONAL STRATEGIES FOR NAVY PIER 11

SUMMARY OF RECOMMENDATIONS 13

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS 17
- Development Potential 17
- Implementation Strategy 22
- Urban Design and Transportation Plan 24
- Financial Considerations 31
- Preservation and Development Strategy 33

ABOUT THE PANEL 38

ACKNOWLEDGMENTS

Both personally and on behalf of ULI–the Urban Land Institute, the panel members and staff wish to express their appreciation to the Honorable Richard M. Daley, mayor, city of Chicago; Eugene Sawyer, former mayor; and Scott Hodes, chairman, Navy Pier Development Authority, for the opportunity to be involved in such an important and challenging assignment.

In particular, the panel would like to thank Marshall Bennett, chairman, ULI Panel Committee, and other members of the Navy Pier Development Authority for their help and courtesy before and during the on-site assignment. Special thanks are due to Nicholas V. Trkla, president, and Joan H. Herron, senior associate, Trkla, Pettigrew, Allen & Payne, and to Jerome R. Butler, senior associate, Architectural Consultants, Ltd., for the excellent briefing materials, support during the panel's visit, and additional materials, information, and contacts needed to bring the assignment to a successful conclusion. The panel also greatly appreciates the assistance of James R. Turner, Jr., first deputy commissioner, and Cheryl Cooke, City of Chicago Department of Planning.

In addition, the panel wishes to acknowledge the many individuals who gave of their time to meet with the members during their visit. These interviews gave the panel a broad range of views from all segments of the community as well as the extensive and timely information on which the panel members based many of their findings.

PANEL MEMBERS AND STAFF

PANEL MEMBERS

Wayne Ratkovich
Panel Chairman
President
The Ratkovich Company
Los Angeles, California

M. J. (Jay) Brodie
Executive Director
Pennsylvania Avenue Development Corporation (PADC)
Washington, D.C.

Anthony Downs
Senior Fellow
The Brookings Institution
Washington, D.C.

Stanton Eckstut
Principal
The Ehrenkrantz Group & Eckstut
New York, New York

Stuart Fuchs
Vice President
Goldman Sachs & Co.
Chicago, Illinois

Richard C. Gern
Senior Vice President
Barton-Aschman Associates, Inc.
Evanston, Illinois

Keith Kelly
President
Union Station Redevelopment Corporation
Washington, D.C.

John F. Leak
Vice President
Central Atlanta Progress
Atlanta, Georgia

Douglas N. Salter
President
Bramalea USA Urban Properties, Inc.
Dallas, Texas

Alyssa J. Taubman
Vice President
Salomon Brothers, Inc.
Los Angeles, California

ULI STAFF

Jerry S. Church
Staff Vice President
Advisory Services

Terry Jill Lassar
Research Counsel
Senior Research Associate

Margarita Betancourt
Coordinator
Advisory Services

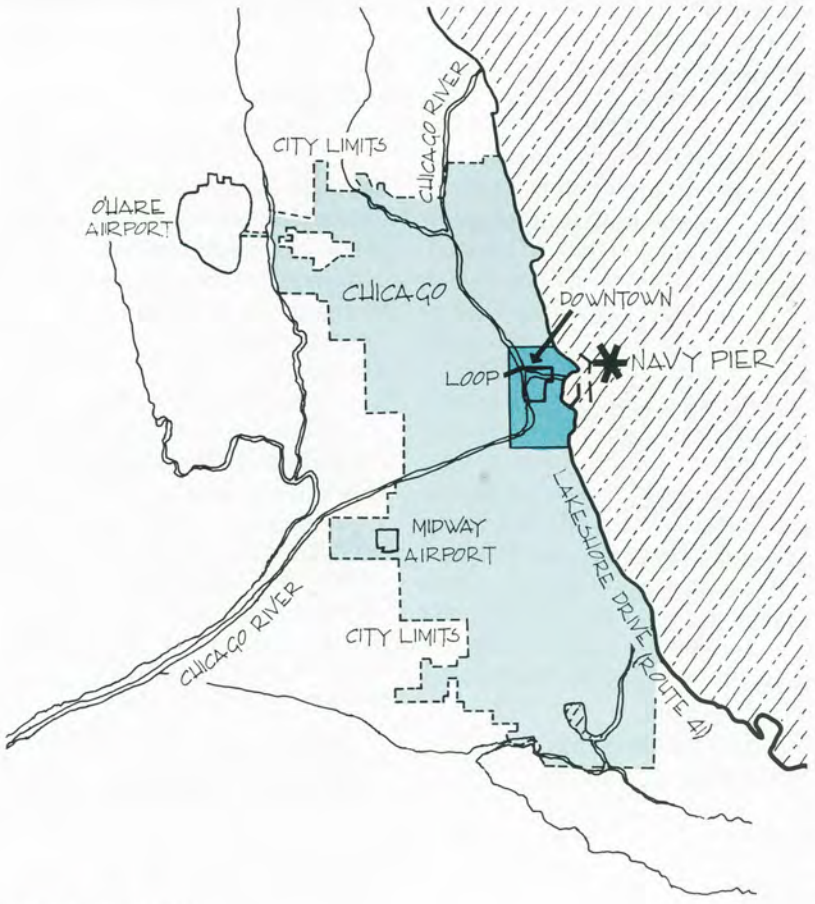
GRAPHIC DESIGN SERVICES

Gilbert Gorski
Architectural Illustration
Chicago, Illinois

Matthew A. Rosenshine
University of Illinois–Chicago

Shelley A. Salter
University of Illinois–Chicago

FOREWORD: THE PANEL'S ASSIGNMENT



VICINITY MAP

Navy Pier, originally called Municipal Pier, was constructed on Lake Michigan in 1916 as part of Daniel Burnham's revered 1909 Master Plan of Chicago. Burnham's intention was to create a Venetian-type shoreline. The 3,000-foot-long pier, which originally served as a freight terminal and public summer recreational facility, was at one time the largest structure of its kind in the world. The city of Chicago has always owned the pier, which was renamed Navy Pier in 1927 to honor World War I Navy veterans.

Although the Great Depression and advent of the automobile and truck precipitated its decline as a major freight and passenger facility, Navy Pier continues to offer a variety of cultural and recreational activities and, in 1988 alone, attracted more than 1 million visitors. Because of its symbolic and historic significance, Navy Pier has been compared to such landmarks as the Eiffel Tower and the Golden Gate Bridge.

The pier has accommodated a myriad of uses, including shipping and storage, federal intelligence operations, University of Illinois classrooms, and occasional festivals and art shows. As a result, Navy Pier is regarded as one of Chicago's greatest underused resources. Proposals for its reuse run the gamut—from gambling casino and international trade center to such passive public uses as museums, open space, and a park. In addition, a host of suggestions for various public/private uses has been bandied about, including a festival marketplace and a hotel/entertainment center.



View of the recreation complex on the eastern end of the pier.

In 1988, former Mayor Eugene Sawyer created the Navy Pier Development Authority to prepare a redevelopment plan for the pier. The authority, in concert with the city of Chicago, invited a panel from ULI–the Urban Land Institute to develop recommendations for the pier's future role and use.

The authority's objectives, which guided the panel's assignment, included the following:

- To consider the highest and best use of Navy Pier for the city as a whole, not solely for private redevelopment interests.
- To recommend a revitalization program that responds to both the opportunities and constraints imposed by the pier's unique location and development setting.

In addition, the authority asked the panel to address parking, circulation, and transportation issues; historic preservation concerns; urban design relationships; and financial considerations and to recommend implementation and development strategies.

To that end, the ULI panel convened in Chicago for an intensive five-day study, culminating in a public presentation on Friday, May 12, 1989. Over the course of the week, the 10 panel members—real estate professionals in varied fields—toured the area and conducted extensive interviews with public officials, community and neighborhood leaders, planning and design professionals, and members of the business community.



Panelists and city officials returning from a helicopter tour of the study area.

SETTING THE STAGE

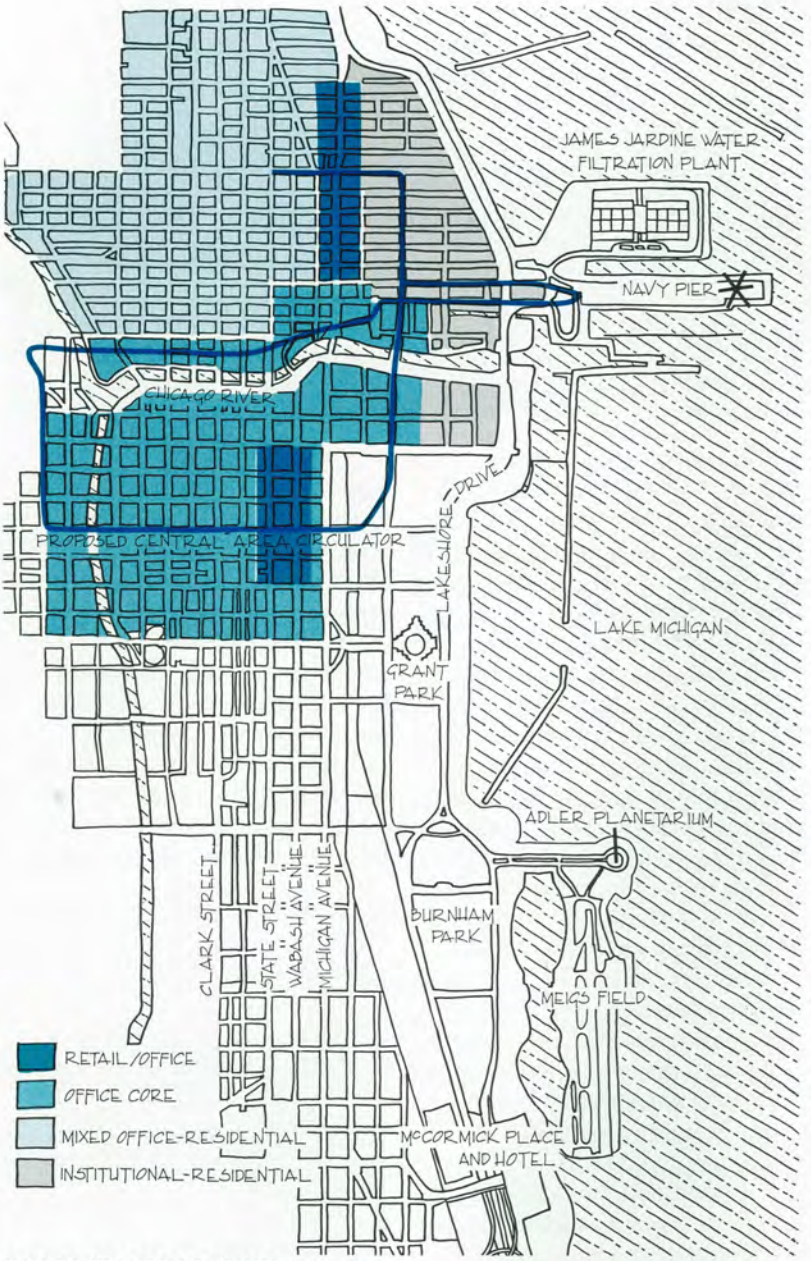
BACKGROUND FACTORS

The potential markets for various types of activities and land uses at Navy Pier are greatly influenced by certain key characteristics of the pier as described below.

LOCATION AND ACCESSIBILITY

Navy Pier is located on the fringes of Chicago's downtown business district just east of Lake Shore Drive. It is five long blocks east of Michigan Avenue and two blocks north of the Chicago River. The pier's location offers both positive and negative features.

On the positive side, Navy Pier is located near the commercial center of the entire Chicago metropolitan region, which is home to over 8 million residents, and represents the second largest concentration of downtown office and retail space in the United States. Navy Pier is relatively close to large established markets for and facilities supplying major retail, office, entertainment, hotel, restaurant, and other commercial services.



DOWNTOWN SETTING

On the negative side, Navy Pier stands apart from the downtown concentration and is therefore far less accessible than many competitive retail and commercial sites closer to the Loop and North Michigan Avenue retail and office areas. While motorists can easily reach Navy Pier via Lake Shore Drive, pedestrians traveling from either North Michigan Avenue or the Loop area find the pier difficult to reach. A CTA bus line terminates at Navy Pier but requires a 10- to 15-minute ride from the Loop or a five-minute ride from the Michigan Avenue corridor. Regardless of transportation mode, all visitors to the pier must walk more than one-half mile to reach the main facilities, which are located at the eastern end of the pier. Even though plans call for constructing a light rail central area circulator system to link Navy Pier to both North Michigan Avenue and the Loop, that system is unlikely to begin operating during the first five years of Navy Pier development.

VISTAS

Navy Pier is one of the few places in Chicago that offers pedestrians views of the city's dramatic lakefront skylines. One of the pier's most valuable assets, the vista to the south encompasses the Loop area and to the north, the "Gold Coast." Extending 3,000 feet out into Lake Michigan, the pier also provides visitors with the unique experience of strolling on the lakefront in the midst of Lake Michigan itself.



One of many spectacular views of the city offered by Navy Pier.

CLIMATE AND EXPOSURE TO WEATHER

Because Navy Pier extends more than one-half mile into Lake Michigan, it is fully exposed to winds blowing off the lake and to Chicago's often harsh winters. The pier's setting drastically limits the use of the facility's outdoor features during at least four months of each year. Climatic conditions have resulted in seasonal use patterns that limit the success of retail stores, restaurants, and other concerns in attracting patrons during a significant part of the year. Navy Pier is a less economically feasible site for selected activities than are other sites located in more temperate climates. Moreover, Navy Pier's setting demands a range of design considerations, including sheltered walkways, that help compensate for frequently inclement weather.

Navy Pier as seen from Lake Michigan.



NEIGHBORHOOD VICINITY

Several of the blocks immediately to the west of Navy Pier are currently vacant but will probably undergo intensive development during the next decade. For example, the Chicago Dock and Canal Corporation's Cityfront Center development will include office and apartment projects. Among the developments already completed are Lake Point Tower, a large high-rise apartment building, and North Pier, a mixed-use rehabilitation project featuring restaurants, retail stores, and office space. Immediately north of Navy Pier are the James Jardine Water Filtration Plant and Olive Park.

The neighborhood environment has important implications concerning the pier's development potential. Since the pier's immediate environs will undergo marked change over the next decade, Navy Pier's uses will shift in nature and intensity in response to potential demand for surrounding land uses. In particular, the intensity of uses feasible for development on Navy Pier will tend to rise over time as the surrounding neighborhood becomes more densely occupied and used.

The likely changes emphasize the importance of adopting a highly flexible development plan.

OPTIONAL STRATEGIES FOR NAVY PIER

Navy Pier is in extremely poor physical condition and is continuing to deteriorate rapidly. Unless large-scale investments are made almost immediately to halt further decline, Navy Pier will soon—perhaps within a few months—be in such dilapidated and perilous condition that the city will have to close the facility to all visitors in order to maintain public safety. Moreover, prolonged failure to invest in arresting Navy Pier's deterioration would eventually—within a few years—render the pier so decayed as to be virtually irreparable despite major investment. The panel has developed four possible strategies for addressing Navy Pier's physical condition.



Water-damaged plaster on interior of recreation building.



View of deteriorating expansion joint in the upper level of the north promenade.

THE "NO ACTION" STRATEGY

Do not make any investment in Navy Pier, closing the facility to the public within the next few months.

THE "MINIMUM STABILIZATION" STRATEGY

Invest enough in Navy Pier to stabilize its physical condition, but not enough to make the pier entirely safe for public use. The minimum stabilization strategy would require some rehabilitation, structural work, basic platform improvement, replacement of the storm sewer system, and demolition of the existing sheds as well as the near-term closing of the pier to the public. The strategy would halt further deterioration and leave open the option of restoration at a future date. The panel estimates that such an approach would require a construction budget of about $32 million.

THE "MAXIMUM STABILIZATION" STRATEGY

Invest enough to arrest Navy Pier's current deterioration and to improve its present condition, permitting most current and some additional activities (except those in the sheds, which would be slated for demolition) to continue without hazard to the public. Existing major structures at the eastern and western ends of Navy Pier would be repaired and upgraded with new sprinkler systems, and a new sanitary sewer system would be installed. The panel estimates that the maximum stabilization strategy would require a construction budget of about $40 million expended over several years.

THE "DEVELOPMENT" STRATEGY

Invest enough in improving Navy Pier to arrest decay completely and to encourage major additional development. The degree of additional development would, of course, vary with the magnitude of the investment. The panel's development plan is based upon a set of assumptions concerning the amount of that investment over time. In particular, the total cost of implementing the panel's plan would be about $127 million over a multiyear period and excludes an additional infrastructure investment of $16 million for a proposed marina. Owing to time and resource constraints, the panel has formulated just one of many possible development plans yet recognizes that many other different development strategies are conceivable.

The panel's assignment did not call for recommending any one of the four strategies over the others. Such a choice requires the public sector to make value judgments and assign relative priorities to the allocation of its scarce funds. Those judgments are beyond the legitimate purview of this panel and can be made only by elected officials of the city and state or their appointees.

Rather, the panel has been charged with describing the various strategic options available to the city of Chicago concerning Navy Pier. The panel also agreed to formulate and outline a development strategy (the "Development" option) that would maximize the public usefulness of Navy Pier within the constraints of both its environment and the likely availability of resources. Most of the analysis, therefore, concentrates on developing and analyzing the fourth strategy. The report's emphasis, however, is not to be construed as an endorsement of that strategy.

The panel's report speaks to potential uses for Navy Pier. It focuses on an extensive urban design concept, including related transportation, parking, and accessibility issues. In addition, it outlines a management concept and implementation strategy and sets forth approximate costs of the recommended improvements as well as the likely sources of capital necessary to fund the improvements.



View of efflorescence and staining of brickwork and stone trim at shelter building.

SUMMARY OF RECOMMENDATIONS

Early in its deliberations, the panel agreed upon several principles to guide its work.

- Reuse of Navy Pier should be "tied to the water," offering the public an opportunity to increase its use and enjoyment of the waterfront and Lake Michigan.
- Navy Pier should be improved to serve the citizens of the city, region, and state. It should serve the citizens so well that others—visitors, tourists, conventioneers—will also be attracted to it.
- Navy Pier should be an open, public resource accessible to all citizens.
- Both literally and figuratively, Navy Pier should be a platform upon which all citizens—entrepreneurs, artists, organizations, and institutions—can find an inspiring common ground to share their lives with one another.
- The deteriorating condition of the pier requires immediate action. Delay, postponement, and inaction simply are not options.



View of cracked terra-cotta panels at Head House.

These basic principles subsequently led to other concepts and conclusions. First, given both the importance of the pier as a resource and the need for its repair and renewal, the city should be required to engage in large-scale construction and development. The panel suggests development of an approach that would keep repair activities at a manageable level, thereby minimizing risk and investment.

Second, reuse of Navy Pier should consider the facility in the context of its environs and forge a link between the city and the waterfront. A sensitive and thoughtful design could lead to greater use and enjoyment of the waterfront and the lake.

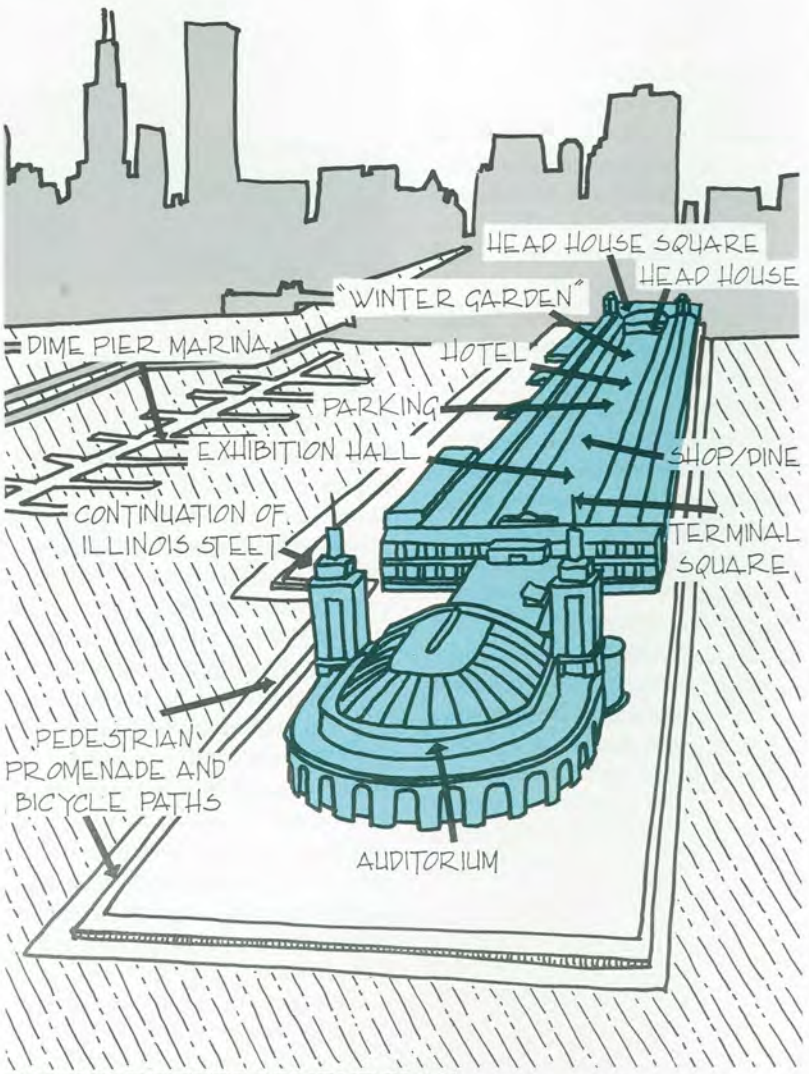
Third, the panel recognizes that it should outline a framework to facilitate a decision to act. The goal was to develop a clear concept for the pier and to establish a course for success. The talented citizens of Chicago are capable of offering stimulating ideas for specific uses and forms and should ultimately make such determinations.

To advance its development concept, the panel summarized its findings with supporting details, provided specific examples, and quantified the investment that is likely to be required. The members emphasize, however, that this framework for action is highly flexible and can be changed at any time. For example, the projected $127 million needed to implement the development strategy might be reduced through the use of less expensive materials, private donations, and phasing programs. Likewise, as for-profit uses are developed over the years, the annual income from such uses might well exceed the estimated $2 million, thus reducing the overall cost/income gap. Therefore, the panel's proposed development program is not intended to be followed rigidly but should be constantly reevaluated and retooled.

THE IMPORTANCE OF FLEXIBILITY OF USE AND ACTIVITY ON NAVY PIER

The panel's assignment was to develop a long-range plan for the preservation and further development of Navy Pier and to suggest immediate actions for the pier. Because of the rapidly shifting nature of modern society, it was impossible to project with great accuracy the appropriate uses and activities for each part of Navy Pier over the long term. Yet investments in the physical stabilization and development of the pier may last decades. Therefore, the panel developed a plan that permits considerable flexibility in use and activity over time.

The plan calls for a series of platforms or "pads" on Navy Pier that can be developed with any of a number of different uses or activities. These pads consist of separate blocks of space on the pier as differentiated by a street grid. Each block contains a basic platform equivalent to a vacant on-shore land parcel and can accommodate the specific uses or activities most appropriate and feasible at the time the city offers that block for development, possibly through competitive bidding. Such development would be carried out within design and use guidelines established by the authority that will develop Navy Pier.



CONCEPT DEVELOPMENT PLAN

SPECIFIC USES AND ACTIVITIES APPROPRIATE FOR NAVY PIER

As part of its assignment, the panel was asked to recommend the appropriate mix of public/private and commercial/noncommercial uses. The panel's program reserves approximately two-thirds of the area for public uses. The members note, however, that some of the country's most beloved and successful public spaces—Rockefeller Center in New York and the plaza at One First National Bank Center in Chicago—were privately financed; therefore, the public/private distinction tends to be arbitrary and may even be misleading. Nonetheless, the so-called private uses recommended for the pier, including the marine-related shops, restaurants, and hotel, would connect directly to the public areas, thus enhancing those areas and ultimately increasing public use of the pier. The following types of activities and uses are appropriate for Navy Pier in terms of public acceptability and potential economic viability:

- public open space, including an enclosed "winter garden" accessible year-round and containing extensive plantings;
- exhibition space for shows, conventions, banquets, etc.;
- musical events or festivals celebrating the ethnicity of Chicago's various population groups;
- a marina accommodating various-sized boats;
- mooring and docking facilities for tour boats, water taxis, and other passenger vessels;
- boat rental facilities;
- destination-type restaurants that draw patrons expressly for dining and ancillary-type restaurants that serve both casual visitors to the pier and users of the pier's other facilities;
- maritime-oriented retail facilities;
- other festival-type retail facilities;
- a relatively small hotel or "boatel" oriented toward boats and water activities;
- parking facilities;
- museums, possibly including ethnic, art, and maritime museums;
- office space serving or related to activities located at the pier.

Finally, the panel speaks with enthusiasm and hope for Navy Pier. As individuals and as a panel, the members, along with many Chicagoans, view Navy Pier as a precious and unique resource. Nonetheless—and in spite of the panel's hopes and affection for Navy Pier—the decision to invest the funds necessary to bring the concept to fruition ultimately rests with the citizens and leaders of Chicago, the region, and the state. Even though the panel's recommendations attempt to limit, to the extent possible, public investment and financial risk while maximizing earnings from the pier development, large sums of public money will be required for program implementation. These sums as well as the various uses are set forth in the following table.

PRESERVATION AND DEVELOPMENT STRATEGY
SUMMARY OF USES, COSTS, AND INCOME

Use	Quanity	Unit[1]	Unit Cost	Total Cost	Land Basis per Unit	Land Value	Income per Annum
INITIAL PUBLIC CAPITALIZATION							
Pier Stabilization				$52,000,000[2]			
Maintenance Reserve				10,000,000			
Public Areas							
South Promenade	300,000	SF	$100	30,000,000			
Terminal Square	70,000	SF	100	7,000,000			
Around East End	85,000	SF	100	8,000,000			
North & Cross St.	164,000	SF	60	10,000,000			
Head House Square	66,000	SF	30	2,000,000			
Subtotal				57,000,000			
Winter Garden	36,000	GSF	225	8,000,000			
Marina Infrastructure				16,000,000[3]			
Total Initial Public Capitalization				143,000,000			
PIER FACILITIES OTHERWISE FUNDED AND REVENUES							
Auditorium Rental							$500,000[4]
Museum/Cultural	70,000	RSF	150	10,400,000	$5	$ 350,000	28,000[5]
Exhibit Hall	220,000	GSF	200	44,000,000	5	1,100,000	88,000
For-Profit Developments							
Marina[6]	720	Berths		19,000,000			
Tour Boats	12	Berths					400,000[7]
Retail	180,000	RSF	180	32,400,000	30	5,400,000	432,000[8]
Office	195,000	RSF	165	32,200,000	20	3,900,000	312,000
Hotel	180	Rooms	100,000	18,000,000	10,000	1,800,000	144,000
Marine Support	50,000	RSF	145	7,000,000	10	500,000	40,000
Parking[9]							
Structured	1,440	Stalls	10,000	14,400,000			30,000
Surface	300	Stalls					100,000
Kiosks/Pushcarts	30	Units	20,000	600,000			75,000
Total Costs Aside from Initial Public Capitalization				178,000,000			
Grand Total of Costs				**$321,000,000**			
Total Income per Annum							**$2,149,000**

1. SF stands for Square Feet, GSF for Gross Square Feet, and RSF for Rentable Square Feet.
2. The panel used hard costs as developed by the Chicago Department of Public Works (rounded to $40.0 million) and added 30 percent for planning, design, management, costs of bond issuance, testing, contingency, and miscellaneous soft costs.
3. All marina development costs and operating projections were taken from a Laventhol & Horwath report made April/May 1989. Infrastructure costs involve building a substructure (pilings or rock fill) to replace the Dime Pier and extend it to land, and extending the north breakwater wall of the locks to the Chicago River in order to separate river traffic from a marina south of the Dime Pier. These costs also include building breakwaters to the east of the marina facility. Such improvements make a marina possible but cannot be justified out of marina cash flow. If one believes that the marina adds to the total experience and performance of Navy Pier, one can justify funding these infrastructure developments. They are treated as an option in this report.
4. Rough estimates of current pier income were provided to the panel with projections in the range of $1 million gross revenues annually. The projection assumes that approximately 50 percent of this amount, or $500,000, can continue as net annual income.
5. The assumption is that museum, exhibition, and cultural facilities will be developed by entities who would be well qualified and able to pay some ground rental but substantially less than full market value. A floor/area ratio value of $5 per square foot was assigned to the building area and a rental factor of 8 percent was applied.
6. The panel assumed that the marina would return $1.9 million annually, about a 10 percent return on the cost of the marina facilities. Therefore, in the initial years, no ground rent above debt service is shown. In future years, there could be a cash flow over the above debt service on marina improvements.
7. Income from mooring tour boats along the north side of the pier was based on conversations with the tour boat *Star of Chicago*.
8. An 8 percent ground lease rate on various FAR values.
9. Parking revenues are lump sum estimates for the two types of parking—structured and surface. Calculations are based upon estimates received by the panel from local parking operators. Structured parking is assumed to have been built by lessees; surface parking is assumed to be vendor operated.



The panel presents its final report.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

DEVELOPMENT POTENTIAL

The estimates of market potential for various uses and activities at the pier are based upon all the sources of information made available to the panel during the course of the analysis. The sources include an excellent background survey of Navy Pier's current condition and previous studies of Navy Pier compiled in *Navy Pier: Determining Its Future Role and Use in the Best Interests of the City of Chicago—Briefing Book for the Urban Land Institute Panel;* summaries and copies of most earlier studies of Navy Pier; personal interviews with several dozen Chicago residents familiar with various aspects of Navy Pier and its potential markets; and testimony and statements provided to the Navy Pier Development Authority during previous hearings and in earlier questionnaires. Since these sources yielded masses of data and several personal opinions, the panel did not conduct detailed, in-depth studies of the markets discussed below.

Moreover, the panel reached its conclusions with varying degrees of confidence. The members, for example, are convinced of a strong market for boat slips and other marina services at Navy Pier and believe that commercial boating operations—such as tour boat services—could be readily relocated there. At the other extreme, the panel questions the advisability of marketing any large amount of office space at Navy Pier, given that such space is already available at other, more convenient locations in downtown Chicago. The members' confidence in the estimates for other types of space set forth below ranges between these extremes.

PUBLIC OPEN SPACE

Navy Pier has traditionally featured public promenades and walkways that offer citizens the opportunity to fish, view Chicago's magnificent lakefront skylines, enjoy the open air, stroll, jog, ride bicycles, and cook out. The unique opportunity to view the lakefront skylines demands preservation and enhancement of the pier as open space. The proposed plan creates a wharf-like frontage street along the southern side of the pier, a public square toward the eastern end, another public square at the western entrance, and an enclosed winter garden.



Panel members and city officials at one of the public access spaces that will surround Navy Pier.

EXHIBITION SPACE

As the nation's largest exhibition facility, Chicago's McCormick Place encompasses three structures totaling 1.6 million square feet of exposition space. Although McCormick Place books such exhibitions as the automobile show, boat show, and dog show that are open to the general public, the space is used almost year-round for industrial and other trade shows that are closed to the public. Further, its operators plan to continue booking exhibitions closed to the general public. As a result, Navy Pier could capture the market for additional exposition space in Chicago, even with the likely expansion of McCormick Place. The market consists of a variety of shows open to the general public, meetings, conventions, and other activities that cannot be accommodated at McCormick Place.

Admittedly, several major downtown hotels now offer meeting and exhibition space that might serve some of this market, but Navy Pier offers a unique site because of its position on Lake Michigan and the amenities it will feature if development occurs in accordance with the panel's plan. Further, Navy Pier is already the site of several activities, including the International Art Exposition, the International Antique Exposition, and several ethnic festivals. Consequently, the panel estimates that about 220,000 square feet could be developed as flexible space.

FESTIVALS

Chicago has traditionally held many large-scale festivals celebrating such themes as the heritage of one or more of the city's several ethnic groups. In particular, Navy Pier has frequently been the site of large-scale gatherings that create an exciting mass-participation atmosphere. The panel believes that several festivals can be held on Navy Pier in the future, capitalizing on the facility's large size, visually stimulating lakefront location, and relatively central location within the Chicago region. Festivals do not constitute a specific type of land use that demands particular building configurations; rather, they require the use of large spaces—both formal exhibition space within structures and informal outdoor areas. In addition, festivals would stimulate markets for other types of land uses such as retail stores and restaurants and would comprise an important part of the pier's overall activities and milieu.

MARINA

Boat mooring space in Chicago, especially slips designed to accommodate boats 35 feet long or longer, is in short supply as reflected by the capacity use of all harbor facilities within the city of Chicago and the recent or ongoing development of major additional marina facilities on Lake Michigan at Zion, New Buffalo, and other sites outside Chicago. The new facilities were developed in response to demand for boat slips that the Chicago Park District was unable to meet in its existing harbors. All observers familiar with boating conditions in the Chicago area, including the authors of earlier studies of Navy Pier, emphasized the strong demand for additional boat slips that might be at least partly met in the vicinity of Navy Pier. The panel learned, for example, that boat traffic through the Chicago River locks has been rising about 25 percent per year recently and that the Detroit area contains 28,000 boat slips—or more than five times the number now available in Chicago, even though Chicago is a much more populous city.

As a result, the panel concludes that demand exists for the development of a marina—as large as is physically practical—associated with Navy Pier. The members suggest locating the marina on both sides of the redeveloped Dime Pier, which lies south of Navy Pier. Use of Dime Pier would leave Navy Pier available for use by cruise ships, water taxis, boat rental facilities, and other boating activities fully accessible to the public. The marina should contain a sizable number of "visitor" slips for boats whose out-of-town owners want to travel to Chicago for short visits.

MOORING AND DOCKING FACILITIES FOR COMMERCIAL BOATS

Several commercial boating firms now dock their boats at locations along the Chicago River near Michigan Avenue or at other sites outside Navy Pier, while others use Navy Pier as their main docking point. Conversations with commercial operators indicate continuing demand for docking facilities at Navy Pier. In fact, several firms that now dock their boats in other locations might be persuaded to shift to Navy Pier if it became a better known center for all types of lake-oriented activities. Therefore, the panel believes that significant market potential exists at Navy Pier for tour boats, dinner boats, cruise boats, and, possibly, ferries connecting Chicago with other cities along Lake Michigan. The panel's plan calls for developing and reserving docking facilities along the northern side of Navy Pier for the exclusive use of commercial vessels.

BOAT RENTAL FACILITIES

Visitors to Navy Pier can enjoy boating only as spectators of passing or moored vessels or as passengers on commercially operated boats. The panel believes that Navy Pier should offer visitors the opportunity to rent and operate small boats, including canoes, small sail boats, wind-surfing boards, pedal-operated craft, and small motorboats.

RESTAURANTS

The Chicago lakefront offers citizens few places to sit and view the dramatic skylines while partaking of a meal, drink, or snack. Even though many of Chicago's lakefront parks include food establishments, most of the parks do not offer the spectacular skyline views visible from Navy Pier. In this respect, Chicago suffers in comparison with nearly all other cities in the United States and around the world that have capitalized upon visually attractive lakefronts or ocean shorelines. Almost all of these cities provide dining opportunities at strategic waterfront locations. Navy Pier offers a unique opportunity to remedy this deficiency by accommodating several restaurants that offer unobstructed views of Chicago's lakefront skylines.

The panel believes that the market exists for several different types of restaurants on Navy Pier. One category is the so-called destination restaurant that would attract diners to Navy Pier for the express purpose of patronizing a particular establishment. At least one well-known Chicago restaurateur is willing to open a destination restaurant on Navy Pier. Another category is the so-called ancillary restaurant that would offer food and drink to customers who come to Navy Pier primarily to visit other attractions. Ancillary restaurants could include food kiosks or carts located at convenient spots along the wharf street on the southern side of Navy Pier as well as fast-food outlets offering low-cost dining. The panel believes that both restaurant types should be located on Navy Pier, providing food and drink in all price ranges.

MARINE AND LAKEFRONT-ORIENTED RETAIL FACILITIES

At least one earlier plan for Navy Pier recommended the development of a major "festival" retailing center. Based upon interviews with principals from both the city of Chicago and the Rouse Company, the panel advises against the transformation of Navy Pier into a festival retailing center. Simply stated, the market is not strong enough to compete with the high-quality retail establishments already situated along State Street, at other locations in the Loop, and along North Michigan Avenue. Further, Navy Pier is not nearly as conveniently located to Chicago's major hotels and office complexes as these retail concentrations.

Nevertheless, the panel believes that a significant market exists at Navy Pier for retail services limited to boating, other water-oriented activities, and convenience goods targeted to casual visitors to the pier. Retail services could include a boating sales firm, marine supply stores, clothing stores offering apparel suitable for boating and other water-oriented activities, and gift shops featuring marine-related gifts and novelties. The market could eventually absorb as much as 180,000 square feet of retail space introduced in several phases.

Architect Stanton Eckstut ponders urban design plan.



SMALL HOTEL OR "BOATEL"

Out-of-town boat owners who choose to travel by boat to Chicago are deterred by the absence of both slips and conveniently located lodgings. These deficiencies suggest a potential market for both visitor boat slips—which should be part of any marina developed at Navy Pier—and a small hotel sited immediately adjacent to the slips.

A 200-room hotel should be situated so that its guest rooms, restaurants, and meeting rooms take advantage of the outstanding views of both Chicago's lakefront and the marina adjacent to Navy Pier. The property should be planned to include sufficient meeting rooms, conference rooms, and food facilities to accommodate small meetings, conventions, banquets, and dinners as well as transient boat owners. One benefit of locating a hotel on Navy Pier is that hotels generate activity, including automobile and pedestrian traffic, over significant portions of each 24-hour period, creating an atmosphere of activity and liveliness that would add to the general allure of the pier.

PARKING

Navy Pier's idiosyncratic location in relation to Chicago's mass transit lines and services suggests that most visitors to the pier will arrive by automobile or taxi. Therefore, it is essential to provide sufficient on-site parking. The panel's plan calls for the development of the following types of parking facilities:

- short-term metered parking (about 200 spaces) on the south wharf's Illinois Street extension
- a multilevel structured parking facility on the land site adjacent to the western end
- structured parking facilities integrated into the former shed blocks (a total of about 750 spaces within the three clusters)
- interim public surface parking before the individual block parcels are developed

Parking issues are described more fully in the section on the Urban Design and Transportation Plan.

MUSEUMS

Most museums do not rely exclusively on visitor fees; rather, they are often partially financed by gifts from interested donors, endowments from patrons, or contributions from firms in industries with an interest in the focus of such institutions. The development potential for museums at Navy Pier is based in part on the expectation that they will collect nonfee revenues.

MARITIME

Clearly, a maritime museum would enhance the water orientation of Navy Pier. In fact, a maritime museum has already been temporarily established at nearby North Pier. Relocating the museum onto Navy Pier and expanding it makes sense for two reasons. First, relocation would permit the creation of links between the indoor museum exhibits and the boats anchored in the water adjacent to Navy Pier. Vessels might include a "tall ship" with high sailing masts such as the U.S.S. *Constellation* in Baltimore's Inner Harbor. Another possible attraction might be a submarine that visitors could tour—similar to an exhibit that was long located at another site on Chicago's lakefront. Second, as expected patronage increases at North Pier over time, relocation would help accommodate the planned shift of space use from North Pier's low-revenue producers such as museums to more intensive retail services.

GRAMMY

A Grammy museum would focus on the history and nature of the recording industry and the sales achievements of its greatest stars.

ETHNIC

The pier might highlight the heritage, history, and current activities of different ethnic groups that comprise Chicago's multinationality population. Foreign nations with consulates in Chicago might be persuaded to sponsor, finance, and manage specific exhibits on Navy Pier that feature both historical and current cultural themes relevant to the city's various nationality or ethnic groups. Exhibitions might be incorporated into the exposition space described earlier, perhaps serving as the basis for a separate museum.

NAVY PIER MUSEUM

A museum devoted to the history of the pier could include vivid and accurate models in dramatic scale showing the pier's operation during its heyday. Care should be taken to document the sheds (slated for demolition as part of the panel's plan). Dime Pier should be depicted during its period of intensive use. Chicagoans' eyewitness accounts of momentous events that occurred on the pier would be an important addition to the museum. Finally, the role of the pier during wartime and as a campus of the University of Illinois should be thoroughly portrayed. Governor Thompson and other dignitaries who attended the pier campus could offer their own recollections of and memorabilia associated with the pier for inclusion in museum displays.

It is impossible to develop a reliable estimate of how much space various museums might eventually absorb. The panel, therefore, arbitrarily estimates that museums would occupy 70,000 square feet when the pier is fully developed.

OFFICE SPACE

At the end of 1988, the Chicago metropolitan area contained about 164.7 million square feet of office space, including 96.2 million square feet in downtown Chicago. With a downtown vacancy rate of 10.4 percent, almost 10 million square feet of vacant office space was available in the downtown Chicago market. Much of this space was far more conveniently located to major existing office and retail concentrations than is Navy Pier. Therefore, the panel believes that the market for general office space at Navy Pier is particularly weak.

The market will, however, improve over time as office space development proceeds eastward from Michigan Avenue toward Lake Michigan. Further, more intensive development of Navy Pier itself will eventually enhance the prestige of nearby office buildings, especially given the outstanding lakefront views possible from these office sites.

As a result, the panel believes the market for office space at the pier will develop in two major phases. Initially, a limited market will materialize for certain specialized types of office space on Navy Pier itself or on the land parcel adjacent to the western end of the pier. Offices associated with activities scheduled to locate on Navy Pier and offices associated with water-related services and facilities in general are likely candidates. Later, after the pier is more fully developed, a stronger market for pier office space will evolve, possibly including design-oriented firms attracted by the pier's outstanding aesthetic characteristics and proximity to the downtown Chicago office market.

During the initial phase, it would be desirable to strengthen the demand for office space on the pier by moving any city of Chicago government offices located in nearby privately owned space into offices on the pier. It would also be advisable for the proposed Navy Pier Preservation and Development Authority (described in the next section) to maintain its own office on the pier, along with offices used by various developers and contractors during development of their projects on Navy Pier.

IMPLEMENTATION STRATEGY

MASTER DEVELOPMENT AUTHORITY

The panel proposes establishing a city/state "master development authority," called the Navy Pier Preservation and Development Authority (NPPDA). Created by state statute as a political subdivision, this authority would be accorded the powers to issue debt, manage public assets, and implement restoration of the pier. The NPPDA might be modeled after the entity created by the Illinois General Assembly to build a stadium for the Chicago White Sox or after the Metropolitan Fair and Exposition Authority that manages McCormick Place on the Lake and the McCormick Place annex. In other states, similar public authorities that have successfully developed underused waterfront property include the entity established by Los Angeles County to develop Marina Del Rey and the Battery Park City Authority created by the state of New York to oversee development of a planned community built on a 92-acre landfill site in lower Manhattan.

The basic mission of the authority would be as follows:

> To preserve and renew Navy Pier as a valued and cherished public resource available to all, while limiting the costs and risks that must be assumed by the public sector in order to accomplish those goals.

Although the NPPDA would assume overall control and management of the redevelopment process, it would delegate much of the detailed execution responsibility to other public and private entities.

The panel recommends that the authority remain relatively small and employ no more than five or six staff, plus an executive director. The management costs for operating the authority are included in the proposed lump-sum budget for the development plan described earlier.

IMPLEMENTATION RESPONSIBILITIES

The proposed authority would be responsible for renewing and rehabilitating existing public spaces on the pier, creating new and improved public spaces, subdividing the pier into individual building parcels on which private real estate entities other than the NPPDA would undertake development, and orchestrating the development process for the private-development parcels. Since the authority must be capable of performing each of these tasks, it should reflect a combination of public administration and private real estate development skills.

The panel recommends that the authority limit its direct involvement in the above tasks by contracting out most development activities to private parties. Although the pier development strategy involves a formidable expenditure of public funds and potential financial risk, the NPPDA should implement a development program that, to the extent feasible, reduces such risk.

When the time is appropriate for development, the authority should solicit proposals to develop the vacant block parcels created by demolition of the sheds located along the middle of the pier. These parcels would be leased (unsubordinated ground leases) to private developers or, possibly, to institutions for the construction of buildings to house for-profit and/or nonprofit uses. The authority should select block developers on the following basis:

- a demonstrated record of producing sensitive, small-scale urban projects;
- financial capability;
- ground rent offered, including inflationary protection and participation in gross income;
- commitment to ethnic participation programs;
- development's compatibility with the marine environment.

The solicitation package should contain specific design guidelines to ensure architectural compatibility. New development along the pier's middle section, for example, should generally be located within the footprint and profile of the former sheds.

The NPPDA should also maintain a comprehensive, but flexible, plan for storefront and proposed building uses within the blocks, similar to the approach applied in shopping centers and urban mixed-use projects. The plan would enable specific uses to be strategically situated in the most appropriate locations. Once new development is completed, the authority might also develop a centralized retail management (CRM) program that would secure agreements among owners and retailers to observe consistent business hours and to finance joint activities relating to maintenance, security, marketing, and parking.

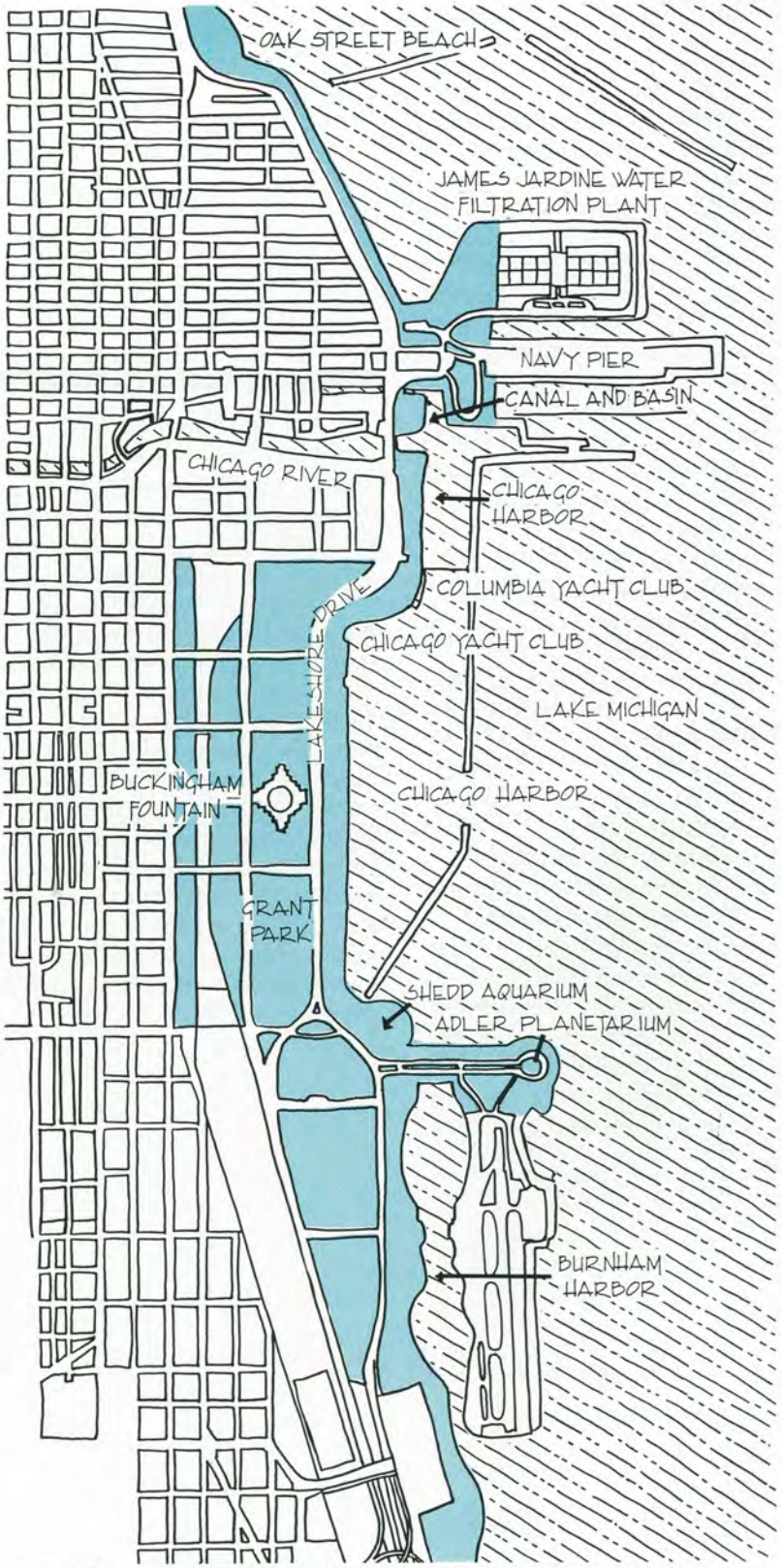
POSTSCRIPT

Less than seven weeks after the panel made its recommendations, the Illinois General Assembly created a new city/state entity—the Metropolitan Pier and Exposition Authority—that replaces the Metropolitan Fair and Exposition Authority. This new authority will operate both McCormick Place and Navy Pier and is authorized to issue up to $150 million for pier redevelopment to be raised and secured by a statewide cigarette tax.

URBAN DESIGN AND TRANSPORTATION PLAN

URBAN DESIGN CONCEPTS

The panel's urban design plan is based on the fundamental assumption that Navy Pier represents more than a single, isolated project; it is an extension of the city and, as such, should connect directly to the city's existing street, park and open space, water, and transportation systems. Following in the tradition of the city's greatest planner—Daniel Burnham—the design recommendations focus on blocks, streets, parks, wharves, and great public squares rather than on specific land uses.



EXISTING WATERFRONT PARKS AND PUBLIC SPACES

RECOMMENDATIONS

Although Lake Shore Drive provides motorists with magnificent views of the lake, it essentially cuts off the pier from downtown. One main design challenge, therefore, is to improve accessibility to the pier, both perceptually and physically. First, the panel recommends that Illinois Street be treated as the main entryway to the pier and extend onto the pier itself, thereby pulling Burnham's street block system out to the lakefront and linking the pier more directly to the heart of the city. This "Great South Wharf" (the Illinois Street extension) is envisioned as the pier's main street, running the full length of the facility. Some 50 or 60 feet wide, this over-the-water street would be expansive enough to accommodate a two-way traffic artery, bicycle paths, places to sit, short-term metered parking, public squares, a retail arcade, and a grand tree-lined promenade. Pedestrians and bicyclists would be able to circle the pier without crossing the traffic artery. The existing eastern-end promenades and the public walkways along both the northern and southern edges of the pier would be maintained.

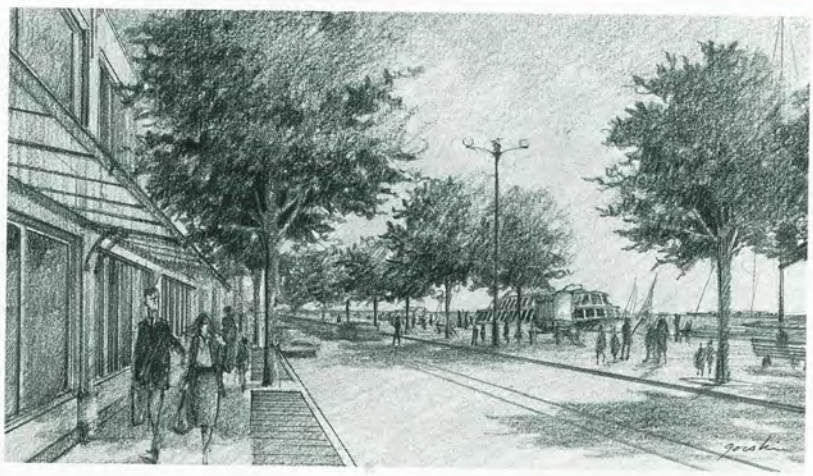


Illustration of the promenade on the proposed Great South Wharf.

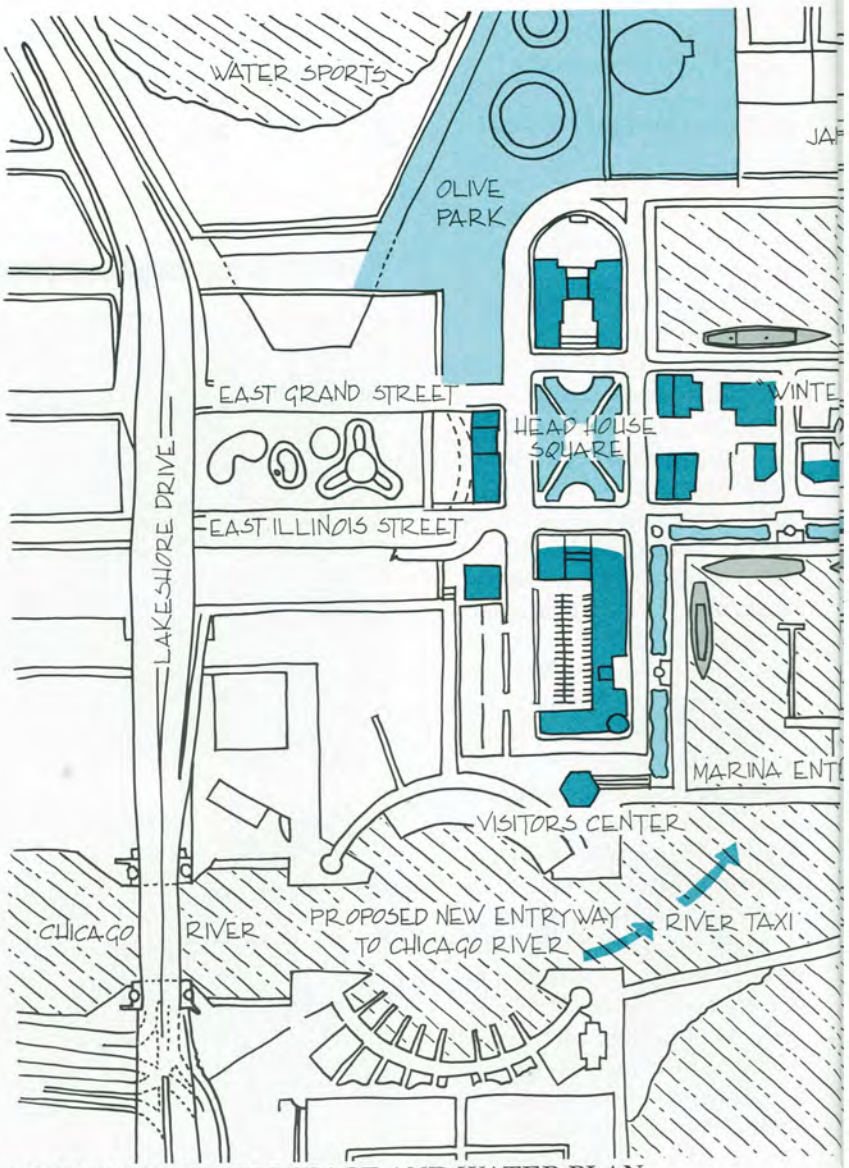


Panelists Jay Brodie (left) and Stuart Fuchs (right) promenade on walk proposed for development as the Great South Wharf.

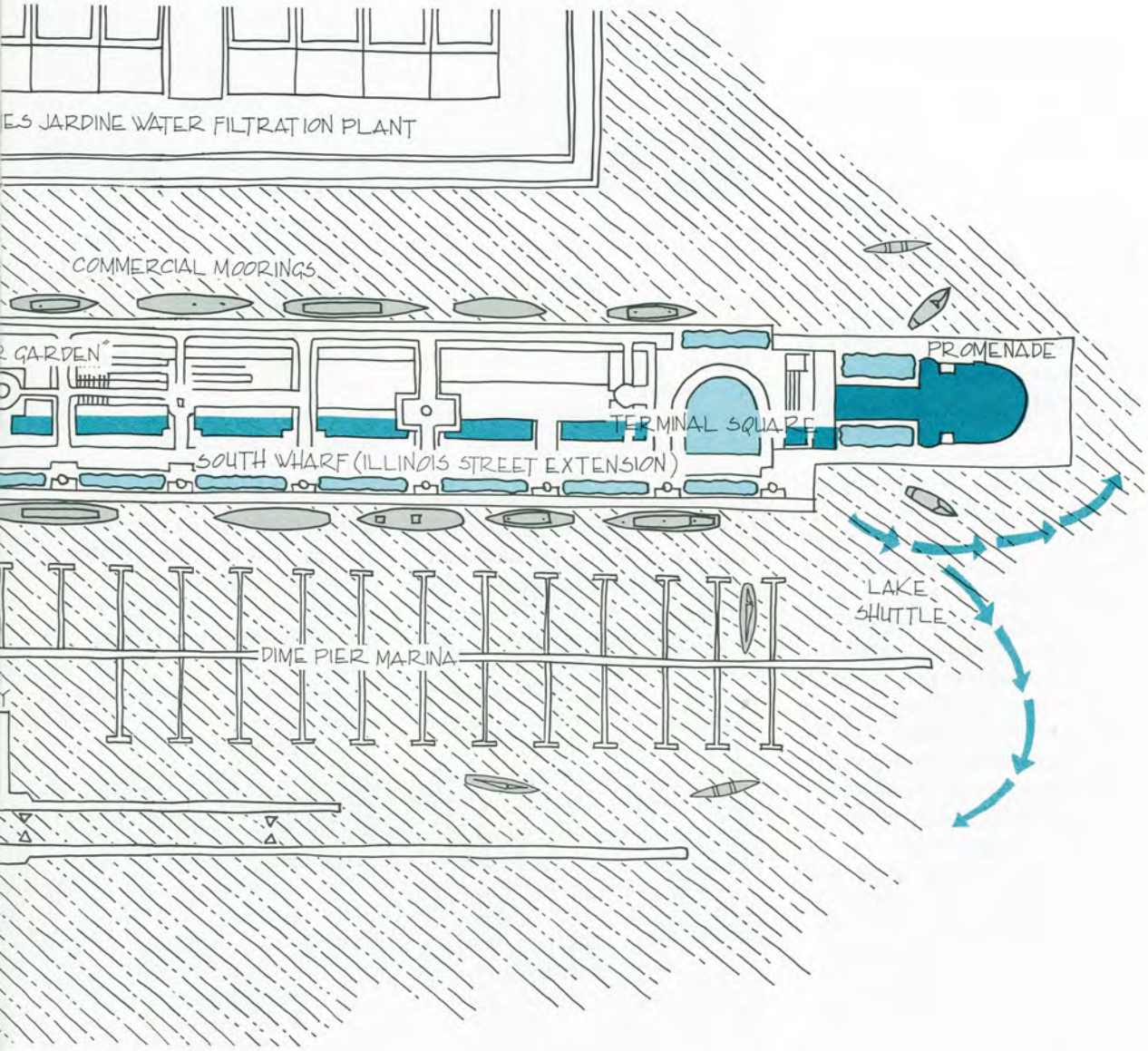
BACK TO THE GRID

Like any other city street, the south wharf should be divided into seven 230- to 300-foot-long blocks and function as an extension of downtown Chicago's grid system. In addition to enhancing the pier's image as a great urban streetscape, the grid pattern would help break up the overwhelming size of the facility into manageable sections. Stretching more than one-half mile, the pier is longer than Chicago's Magnificent Mile as well as most major streets in the country. The provision of short-term parking on the pier would allow visitors and sightseers to use individual sections without traversing the full 3,000 feet.

In addition, cross streets should be constructed at six or seven points to permit cars, taxis, trucks, and buses to shuttle between the northern and southern sides of the pier and to provide direct access to such interior uses as parking, loading, and entry areas, thereby eliminating the need for curb cuts on the wharf. The cross streets should be no wider than 50 feet to minimize wind tunnel effects that are especially severe during the winter and to preserve visual continuity at street level.



PROPOSED PUBLIC SPACE AND WATER PLAN


ES JARDINE WATER FILTRATION PLANT
COMMERCIAL MOORINGS
R GARDEN
PROMENADE
TERMINAL SQUARE
SOUTH WHARF (ILLINOIS STREET EXTENSION)
LAKE SHUTTLE
DIME PIER MARINA

Sheds proposed for demolition.



FLEXIBLE FRAMEWORK

The street block system would accommodate the flexible, incremental development approach recommended by the panel. Specific uses for large development sites such as Navy Pier are likely to change greatly over time in response to societal needs and environmental pressures. Moreover, the immediate neighborhood on the landside of the pier is likely to undergo dramatic shifts over the next decade. Accordingly, the design plan hinges on a clear but flexible framework that calls for a series of discrete blocks of space that could be programmed for a variety of uses—rather than specific uses fixed at the outset—subject to a phasing scheme.

The urban design plan also calls for three great public spaces—Terminal Square on the east, Head House Square at the western entrance, and an enclosed winter garden—which will help relieve the pier's massive scale. These major open spaces as well as the south wharf pedestrian promenade should be treated as an extension of Burnham's original parks and open space system plan for the lakefront.

WATER PLAN

Even though the pier design is both a land plan and a water plan, Lake Michigan should clearly set the tone for future development.
As with most waterfront development projects, the landside should serve the water plan. Navy Pier should be developed as a major energizing force that dramatizes Chicago's lakefront setting and focuses attention and activities on the lake. The pier design plan should also take into account the city's comprehensive water plan, including the park district's proposal for a new entrance to the Chicago River.

While the pier should be designed for year-round use, the eastern end should not be used during the winter. It extends more than one-half mile into Lake Michigan and is more adversely affected by the lakefront's exposure to brutal winter weather than other sections of the pier. By contrast, the urban spaces tightly clustered at the western end, including the Head House renovation and enclosed winter garden, would provide a winter respite close to shore with a year-round draw. To counteract the fierce climate, portions of the street-level retail arcade should be glassed in and designed as a continuous arcade to border the Great South Wharf.

FRONT AND BACK DOORS

Just as the pier has a waterside and land/cityside, it also has front and back doors. The sunnier southern side is associated with public, recreational uses—the grand tree-lined promenade, maritime park, and retail arcade—and should be considered the front door, whereas the northern side of the pier, which faces the James Jardine Water Filtration Plant, is clearly the service zone or back door. Additional public water activities should be planned for the southern side—water taxis running between the Chicago River and Navy Pier, boat rental facilities, and recreational boat slips on the redeveloped Dime Pier. Parking and loading for the proposed hotel and commercial maritime uses should be concentrated on the northern side. The northern side should also be devoted to commercial maritime use—tour boats, dinner boats, cruise boats, and, possibly, ferries connecting Chicago with other cities along Lake Michigan.

To underscore the role of the southern side as front door, the architecture should be festive, with the design scaled to grand, civic proportions. In particular, the design program should specify replacement of the sheds located along the pier's middle section. Originally built to serve the now-defunct shipping and freight industry, the sheds turn inward into a "no man's land."

With the removal of most of the 2,000-foot-long cargo sheds (for additional discussion of historic preservation issues, see section on Preservation and Development Strategy), the Head House and Terminal will function as historic bookends. Low-rise (two or three story) incremental development should fill out the shed envelope. Just as the upper level of the sheds (formerly the passenger terminals) were originally glass, the design plan should call for glass on the upper levels of the new phased-in development, reminiscent of London's great Crystal Palace. The panel recommends that the NPPDA develop explicit guidelines governing development, use, and design, thereby preserving the essential low-rise character of the pier and confining new development to the footprint of the sheds.

TRANSPORTATION PLAN

Located on the periphery of the downtown business district, Navy Pier is poorly served by the city's mass transit facilities. The pier's success, however, depends on an efficient transportation system that provides direct access to and from major activity centers. Three important considerations must guide the development of the transportation plan. First, the pier is beyond acceptable walking distance from most of downtown Chicago. The western end is one-quarter mile (five-minute walk) from Lake Shore Drive, over one-half mile (10-minute walk) from Columbus Drive/Fairbanks Court, and three-quarters of a mile (15-minute walk) from Michigan Avenue and the East Loop, south of the river. Second, the volume of daily visits requires the development of a reasonably high-capacity roadway system and related parking. A transportation system with insufficient capacity would discourage potential users from traveling to the pier. Finally, the transportation system must be carefully designed to be compatible with the planned development. The environment where the transportation system and the pedestrian come together must be pleasant and attractive while still serving as an efficient means for bringing visitors to the pier.

The proposed transportation system consists of four major elements:

- vehicular access for cars, taxis, and tour buses;
- parking;
- transit both to and on the pier itself;
- pedestrian access and circulation.

The recommended transportation strategy for the pier is based on the following principles:

- automobile access should be direct and comprehensible;
- transit access should link downtown and the Near North Side of the city to the pier;
- any transit element should be integrated into the proposed central area circulator system which will link the existing (and future) regional transit systems serving the city;
- public transit should be encouraged as an alternative to the private automobile;
- the number of parking spaces at the pier should be sufficient to meet average daily demands; and
- transportation improvements and parking should not detract from the attractive environment both on the pier and at the western land end.

The panel's main recommendations for the Navy Pier transportation system follow.

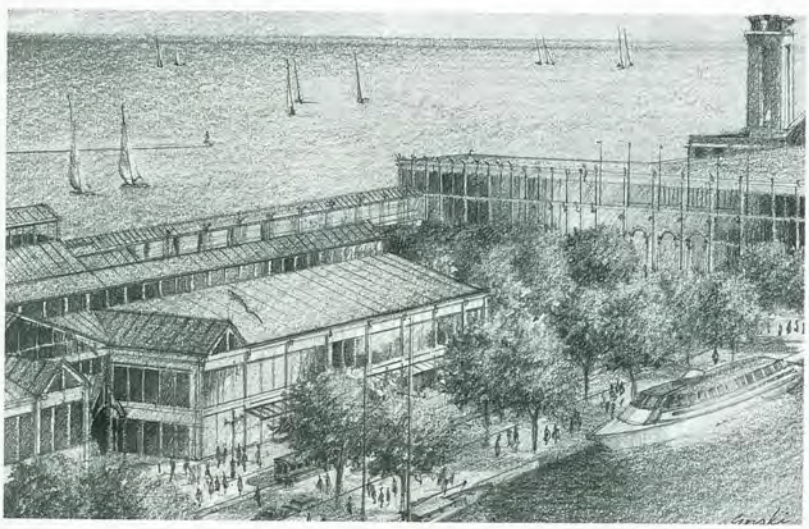


Illustration of the western portion of Navy Pier, designed in the manner of London's Crystal Palace.

VEHICULAR ACCESS

Since most of the uses recommended for redevelopment of the pier will not generate peak traffic demands during the morning and afternoon commuter hours, the existing roadway system serving the pier from Lake Shore Drive and Illinois Street can be expected to accommodate vehicular traffic satisfactorily. If, however, future conditions warrant access improvements, the city of Chicago should consider implementing the 1982 plan for building a separate ramp from northbound Lake Shore Drive to the pier. During the interim, the eastbound lanes of Illinois Street that enter the pier area and the existing northbound ramp from Lake Shore Drive will adequately meet most traffic demand associated with the pier.

As previously discussed, Illinois Street should be extended as a two-way drive onto the south wharf, connecting directly to the short-term parking provided for pier users and sightseers. Conceptually, the extension would be similar to the existing roadway linking the Adler Planetarium (south of Grant Park on the lake) to Lake Shore Drive.

TRANSIT LINKAGE

The proposed central area circulator will provide the missing transit link needed to connect the pier to downtown Chicago and other facilities. Since it is unlikely that the circulator will be in operation during the first five years of pier development, interim transit plans should be devised. For example, the city and the NPPDA should improve the existing CTA bus operations along Illinois Street/Grand Avenue connecting to State Street, along Michigan Avenue, at commuter rail stations, and at other "destination" areas in the downtown and Near North Side. Existing curb parking on Illinois Street and Grand Avenue, west of Lake Shore Drive, could be eliminated to provide separate lanes for frequent shuttle bus service.

In addition to the CTA system improvements, a separate (from CTA) high-grade shuttle system should be established to link hotels, museums, etc., to the pier. The Chicago Cultural Affairs Department, the Chicago Convention and Visitors' Bureau, and the NPPDA should be involved in the planning process to identify the mutual opportunities and benefits that might be derived from shuttle service.

As more detailed planning continues for the central area circulator, the CTA should consider two additional alternatives. First, the system could provide a direct connection from the Monroe-Columbus line to the pier to avoid a transfer at the Cityfront station. Second, since the type of vehicle proposed for the circulator system may not be suitable for use on the pier, a smaller vehicle similar to a trolley car might be used for the Grand-Illinois route. Such a vehicle could then run along the pier and out to its eastern end.

PARKING SYSTEM

Until the central area circulator provides service to the pier, large numbers of visitors to the pier will rely on private automobiles. Successful development of the pier, therefore, requires sufficient on-site parking to serve these visitors. The panel recommends the construction of the following types of parking facilities.

A multilevel, self-contained parking structure developed on the land site adjacent to the pier's western end would be integrated into office and possible other commercial space that might be constructed on that site. Preferably, the commercial uses would place the greatest demand on parking facilities during normal business hours, making the space available for visitors at other times. The panel also recommends the creation of 200 metered parking spaces along the Illinois Street roadway extension to the pier. Short-term parking (one hour or less) would allow visitors seeking a viewing spot along the Great South Wharf to stop and take in the spectacular vistas of the lakefront and the downtown skylines.

Finally, the panel suggests the development of structured, well-screened parking facilities along the pier's middle three blocks. Accessible from the south dock roadway, clusters of approximately 250 short-term (two- to three-hour) parking spaces would be built at dock level and on two higher levels, possibly topped by one level of cultural/museum space. Before the individual block parcels are developed, interim public surface parking should be provided on the sites previously occupied by the sheds. These parking areas would help make the new public spaces more immediately accessible.

As the pier and the area west of Lake Shore Drive undergo development, several large parking facilities could be used for major crowd-generating pier events during weekends and evenings. Additional parking facilities could also be built on the land parcels adjacent to the western end. Special buses should be used to route visitors from the parking facilities on the landside to the pier until the shuttle system described earlier is in place. The same shuttle bus system could also serve off-pier parking facilities during major events, especially events that run into the evening when security concerns and cold night weather make a shuttle system essential.



Richard Gern (front left) and Stanton Eckstut (left center) in an interview session with Chicago architects.

FINANCIAL CONSIDERATIONS

BACKGROUND

Any realistic evaluation of strategies to finance the restoration of Navy Pier must take into account the financial condition of the pier's present owner, the city of Chicago. In a preliminary report dated April 25, 1989, Mayor Daley's transition team on financial issues projected a large budgetary shortfall in the current fiscal year if steps are not taken immediately to reduce city expenditures and increase revenues. At the same time, the city is confronting pressing needs for additional spending to meet educational and other goals. The panel recognizes that these realities may render the city's exercise of its traditional borrowing powers to finance the restoration of Navy Pier politically and economically infeasible.

Because the panel's revitalization program calls for low-density, low-rise development, tax increment financing bonds, which depend on future growth in real property tax revenues, would not be an effective solution to Navy Pier's near-term infrastructure problems. On a positive note, the city has set aside about $13 million of unexpended city general obligation bond proceeds that could be used to restore the Head House and make selected infrastructure improvements. But the balance of funds needed to stabilize Navy Pier and make it suitable for an appropriate mix of public and commercial uses will have to be raised from other sources.

DEADLINE FOR TAX-EXEMPT BOND ISSUANCE

Restoration of Navy Pier will cost much more if action is delayed rather than undertaken immediately. The cost differential is attributable not only to the continuing physical deterioration of the pier and its component structures but to the expiration on December 31, 1990, of two transition rules in the 1986 Tax Reform Act. These rules would facilitate the issuance of up to $150 million of tax-exempt bonds for the Navy Pier project.

The Internal Revenue Code requires interest on a so-called private activity bond to be subject to federal income taxation unless the bond is a "qualified redevelopment bond" under the code. Section 144(c) of the code provides for "qualified redevelopment bonds" if 95 percent or more of the net proceeds are used for redevelopment in any designated blighted area. The 1986 Tax Reform Act included a favorable transition rule that permits Chicago to issue bonds in the aggregate principal amount of $75 million on or before December 31, 1990, to redevelop Navy Pier. Accordingly, the bonds for Navy Pier would be tax-exempt even if otherwise deemed "private activity bonds." Although the transition rule does not relieve the issuer of certain other restrictions on private activity bonds as specified in the code, it enhances Chicago's ability to finance the Navy Pier redevelopment on a tax-exempt basis.

The second transition rule applies to "an area located within the boundaries of any one or more census tracts which are directly adjacent to a river whose course runs through" the city. Apparently applicable to the Navy Pier site, the rule provides a tax exemption for an additional $75 million in redevelopment bonds issued on or before December 31, 1990. If, however, the city or another political subdivision chose to issue traditional general obligation bonds secured only by the city's or state's general taxing powers, the use of the transition rules might not be necessary. In any case, the tax status of the proposed bond sale will depend on the exact sources and uses of project funds.

FINANCING THROUGH CITY/STATE JOINT PARTICIPATION

Considering the factors discussed above, the panel believes that the restoration of Navy Pier and its subsequent development and maintenance would probably be best implemented by the proposed Navy Pier Preservation and Development Authority. The authority would allow the joint participation of the city of Chicago and the state of Illinois in pier development. The city owns the pier structure and adjacent land, while the state owns the lakebed below. The restoration project would help Illinois capture dollars spent by out-of-state and international visitors. It would also enhance sales tax and hotel room occupancy tax revenues for the state and city and create both construction and permanent jobs. More to the point, because potential revenues generated from the redevelopment of Navy Pier are likely to be modest in relation to costs, the city/state partnership may need to identify and pledge streams of dedicated tax revenues to retire the bonds issued for restoration of the pier.

(On June 30, 1989, the Illinois General Assembly created the new Metropolitan Pier and Exposition Authority and authorized it to issue up to $150 million of cigarette-tax-backed revenue bonds for redevelopment of Navy Pier.)

In addition to implementing restoration of the pier, the NPPDA would be empowered to issue debt and to accept charitable contributions from civic-minded citizens and corporations. Proceeds from the sale of the authority's revenue bonds, along with the $13 million of unexpended city general obligation bond proceeds, would be used for several purposes, including pier stabilization, installation of sanitary and storm sewers, adaptive reuse of the Head House and the buildings at the pier's eastern end, demolition of the sheds, landscaping, reconstruction of the promenades, other city improvements, and creation of a renewal and replacement fund for maintenance below the waterline. In-fill development between the Head House and eastern-end buildings would be financed separately, either publicly or privately, as determined by the use or ownership of the improvements.

Depending upon the density and character of the development of Navy Pier, the panel expects that "net revenues" from the leasing of pier property would be available after commercial build-out is completed. The revenues could be used either to offset a portion of revenues collected from external sources (otherwise allocated to the authority's revenue bond debt service) or to provide an additional funding source to cover pier maintenance expenses. Another use might be to subsidize the development of public spaces or amenities on the pier.

ALTERNATIVE SOURCES OF FUNDS

To minimize the dollar amount of revenue bonds issued, the NPPDA should consider other funding alternatives. It might solicit corporations and individuals for contributions and naming grants for such pier amenities as the existing auditorium, Head House Square and Terminal Square, parks and promenades, cross streets, benches, fountains, lighting, and landscaping. A portion of a new children's playlot in a Chicago Park District-owned park in the Streeterville neighborhood north of Navy Pier is being financed with naming grants. In the Eli M. Schulman Playlot, fountains and park benches will bear the names of donors who contribute $2,000 and $1,000, respectively. Bricks or paving stones might be offered for donations as small as $25 to encourage the widest possible participation by citizens willing to support the restoration of Navy Pier.

PRESERVATION AND DEVELOPMENT STRATEGY

The underlying principle that guided formulation of the panel's preservation and development strategy is flexibility. The table on page 16 presents potential uses for the pier as well as the estimated costs of pier stabilization and development. For development within the middle blocks (discussed later in this section), the panel recommends that public interest, economic need, and market demand determine specific uses. For example, there is no reason to rule out rental housing or perhaps casinos, even though these uses are not a part of the panel's plan. Such uses might be needed to produce revenue while not dramatically altering the character of the open spaces and public uses.

Head House at present.



PHASED DEVELOPMENT APPROACH

It is the panel's conclusion that relatively low-density commercial space is appropriate for the pier. Further, the plan calls for 12 of the pier's 23 acres to be devoted to open space. Accordingly, the required investment could not be supported financially by commercial development alone. A gradual phase-in of development activity will ease the public financial burden, but a public- finance (as opposed to real estate finance) solution is required.

Subject to certain critical path constraints, the order of the phased projects is flexible. Obviously, selected elements must be completed before others are initiated. For example, the pier itself must be stabilized before any construction on the facility is undertaken. Further, demolition of the sheds must be completed to accommodate both new interim and later permanent uses on the shed site.

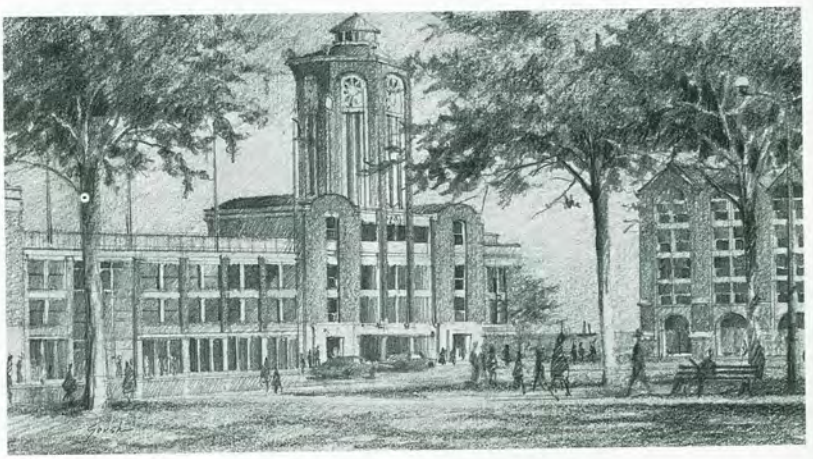
STABILIZATION AND PUBLIC SPACE PHASE

A new sheet piling wall is to be installed around the pier; the sheds are to be demolished; and all public surfaces will be improved, including the development of new roads, promenades, squares, and surface parking, and the completion of landscaping. The Head House is to be restored to useable condition and permanently heated; similarly, the eastern-end complex should be repaired and improved. Sewers and utilities should be installed to support new development.

Certain major public spaces such as the Great South Wharf, Terminal Square, and Head House Square should be constructed as early as possible to signal the city's serious commitment to revitalizing the pier. Since the major public spaces developed near and on the pier are permanent, they could help shape the essential character of the redeveloped pier early in the restoration process. Importantly, the construction of these public spaces will speed development of the rest of the pier and stimulate higher revenues.

The panel recommends the creation, during the initial development phase, of a maintenance reserve for ongoing pier operations. A $10 million maintenance reserve (included in the initial public capitalization cost) would help inspire confidence in lenders, tenants, and pier visitors.

Illustration of the new entryway to Head House.



MARINA

Ideally, development of the marina should be undertaken during the initial phase to help revitalize the area and draw new visitors to the pier immediately. The marina envisioned by the panel would operate along both sides of Dime Pier and might accommodate as many as 720 slips. Absent certain infrastructure costs, it appears that the marina is capable of supporting its capital cost through income and, if bond-financed at the market rate, would yield a positive cash flow. The panel assumes that the marina would be publicly built and then leased to an operator.

Development of the marina cannot proceed, however, until several infrastructure improvements are completed, including reconstruction of the Dime Pier substructure, construction of a new sea wall or breakwater to separate the marina from the entry to the locks, and development of breakwater entry walls to the west. Since it would be inappropriate to allocate all of these infrastructure costs to the marina (and thereby primarily benefit boat owners), the panel has separated marina costs from the pier improvement costs. Future pier managers and prospective marina operators should assume the challenge of raising income or minimizing costs so the marina can become a reality.



City landmark designation for Navy Pier.

Clearly, a marina would enhance the marketability of the block parcels when offered for bid. Some of the commercial uses projected for these parcels—restaurants, marine-related shops, and a hotel—will capitalize on the marina and its unique visual appeal. Moreover, boaters and their guests will provide a significant ready-made market for the commercial uses. In addition, higher ground lease income will probably be generated, and stronger developers are likely to be attracted when the marina is in place. In summary, the panel views the marina as an important part of the new Navy Pier complex. By offering all citizens of Chicago—whether participants or spectators—a comprehensive waterside experience, Navy Pier will ultimately engage more public interest and draw more visitors.

THE SHEDS

For the following reasons, the panel recommends removing the sheds during the initial phase:

- they no longer serve their original purpose of loading passengers and freight onto major vessels and are, therefore, incompatible with the other proposed pier uses;
- the cost of repairing the sheds and holding them for staged development is prohibitive, equal to or exceeding the cost of building new structures;
- the sheds' current state of disrepair might deter potential developers from acquiring the block parcels, thereby slowing the overall pace of development; and
- unlike some of the other pier structures such as the Head House and auditorium, the sheds offer less architectural and historic value. While the sheds are not a city-designated landmark, they are considered part of the pier which, in turn, is listed on the U.S. Department of the Interior's National Register of Historic Places. Unless the pier redevelopment proposal were to involve the use of tax credits (which it does not), inclusion of the pier on the national register should not impede plans for replacing the sheds.



Terra-cotta detail on Head House.

NEW DEVELOPMENT REPLACING THE SHEDS

The panel recommends subdividing the area between the Head House and Terminal Square into seven discrete blocks by constructing six or seven cross streets that run between the northern and southern sides of the pier. The Head House and Terminal will serve as a pair of historic bookends, framing the area now occupied by the sheds. New buildings would be designed to fit within the original elevation of the sheds, although some uses might require structures that exceed two or three stories. While higher buildings would be acceptable, the overall low-rise character and building form should be maintained.

THE SOUTH FACADES

At street level, most of the length along the south facades consists of retail and museum/cultural space. The panel assumes a 50-foot store depth at the street level. Since the second level projects over the arcade, it lends itself to hotel development and major exhibition space. Restaurants would be well suited to the second level, taking advantage of the spectacular views.

THE NORTH FACADES

Assuming a 30-foot depth on two levels, the ground floor would offer staging space and ticket booths for tour boats and cruise ships, while the second level would accommodate offices for these operations. The authority could rent ground- and second-floor space along with mooring rights to the boat operators.

BLOCK DEVELOPMENT

The authority should solicit both for-profit and nonprofit developers to develop the seven blocks. The authority should prepare and make available a solicitation package that contains explicit design and other guidelines. Developers would bid ground rents, which might include both periodic escalations and percentage-of-revenue provisions.

BLOCK USES

Exhibit Hall. The panel suggests an exhibit hall for the eastern end, developed by either a public or private entity.

The proposed exhibit hall should be developed quickly to ensure that the International Art Exposition and many of the city's ethnic festivals, which may be temporarily displaced during construction on the pier, return to the facility after redevelopment is completed and make it their permanent home. In addition, many of the public shows currently booked by McCormick Place could be booked into the redeveloped Navy Pier. The new exhibit space should be located so that it can be used in conjunction with the large auditorium at the eastern end of Navy Pier, much as the eastern ends of the sheds are now used.

Hotel. The proposed plan places a hotel adjacent to the winter garden at the western end of the pier. The panel envisions the hotel as modestly sized and "product differentiated" from the larger, nearby convention hotels.

Winter Garden. The enclosed winter garden should be developed as soon as possible since it is an alternative, activity-generating public use. Furthermore, it will make the hotel site more attractive and will strengthen the Head House renovation.

Existing Historic Buildings. The eastern-end complex should be integrated into the exhibit hall. The auditorium should continue to be a highly revered place used primarily for important civic and private functions and secondarily for exhibit hall functions. The panel assumes no interior improvement costs or income from the eastern-end complex. Nonetheless, a premier restaurant might be appropriate as block development occurs. The complex currently generates significant annual income that is not included in the panel's projections.



View of auditorium interior.

LANDSIDE DEVELOPMENT

The buildings and uses programmed for the land parcel adjacent to the western end of the pier should frame Head House Square as a grand urban space where the city meets the water. Nonetheless, the development of buildings on the landside parcel is not likely to be undertaken until the pier generates significant traffic and the parcel (primarily office) can be successfully marketed. However, during the early development phase, a modest amount of office space devoted to water-oriented business such as boat sales, repair facilities, and some limited boat storage might also serve as appropriate interim uses. In general, the panel recommends using the landside parcel for surface parking during the early development phase.

ABOUT THE PANEL

WAYNE RATKOVICH
Panel Chairman
Los Angeles, California

Ratkovich is president of the Ratkovich Company, a Los Angeles development firm. His company concentrates its diversified activities in the Los Angeles Basin and has developed over 4 million square feet of high tech, office, and mixed-use projects. Among them are many rehabilitation projects, including five historic buildings that are national and local landmarks. The Ratkovich Company is affiliated with Copley Real Estate Advisors on several of its projects and is in partnership with the Enterprise Development Company of Baltimore on a major mixed-use development in Long Beach, California. A ULI trustee, Ratkovich is also a trustee of the National Trust for Historic Preservation and a member of several Los Angeles civic and philanthropic organizations.

M. J. (JAY) BRODIE
Washington, D.C.

Since 1984, Brodie, an architect and urban planner, has been executive director of the Pennsylvania Avenue Development Corporation (PADC). Created by Congress, PADC is charged with revitalizing 21 square blocks of downtown Washington between the White House and the Capitol, an area that will contain more than 6 million square feet of office space, 700,000 square feet of retail space, 1,400 hotel rooms, 1,200 to 1,500 residential units, and a variety of public open spaces. Brodie began his public career as an architect with Baltimore's Urban Renewal and Housing Agency in the early 1960s and eventually became chief planner for that agency. In 1969, he was selected as deputy commissioner of Baltimore's newly formed Department of Housing and Community Development (HCD) and, between 1977 and 1984, he served as commissioner of HCD and executive director of the Baltimore Housing Authority. Brodie is a member of the American Institute of Architects, the National Association of Housing and Redevelopment Officials, and the International Downtown Association and is listed in *Who's Who in America.*

ANTHONY DOWNS
Washington, D.C.

Downs is a senior fellow at the Brookings Institution in Washington, D.C., a private, nonprofit research organization specializing in public policy studies. Before joining Brookings, Downs served for 18 years as a member and then chairman of the Real Estate Research Corporation. He has also served as a consultant to major developers, government agencies at all levels, and many of the nation's largest corporations.

STANTON ECKSTUT
New York, New York

Eckstut, a nationally recognized architect, is a principal in the Ehrenkrantz Group & Eckstut, a leading architectural firm based in New York City. His experience encompasses a broad array of large-scale projects, including mixed-use and waterfront developments. His current work includes building commissions for three elementary schools, a state court house, and a new high-rise corporate office tower. He codesigned the master plan for Battery Park City, which received the 1985 City Club of New York Bard Award and a 1984 *Progressive Architecture* citation. Beyond the master plan, Eckstut designed Battery Park City's highly acclaimed Esplanade and the south residential neighborhood and developed the specific guidelines for Rector Place (Battery Park City's first residen-

tial phase), which received the Urban Land Institute's Award for Excellence. Other large projects include the master plan and architectural design of various buildings and public spaces for Newport, a major mixed-use project of Melvin Simon & Associates, Inc., and the LeFrak Organization in Jersey City, New Jersey; Tower City, a 4.5 million-square-foot commercial, office, and retail center undergoing development in downtown Cleveland by Forest City Enterprises; and the master plan for the redevelopment of the Pike Property in Long Beach, California, for the Enterprise Development Company and the Ratkovich Company.

In addition to his design activities, Eckstut is involved in teaching and research at Columbia University where he is director of the Urban Design Program and associate professor of architecture in the Graduate School of Architecture, Planning, and Preservation. He is currently a member of the New York governor's commission that reviews land development in the state, a trustee of the National Building Museum in Washington, D.C., and an active member of New York City's Municipal Art Society.

STUART FUCHS
Chicago, Illinois

Fuchs is a vice president of Goldman, Sachs & Co. and manager of municipal finance for the Midwest region. Since joining Goldman, Sachs in 1976, he has concentrated on city and state infrastructure financing and has served as investment banker for well over $2 billion of financing on behalf of Illinois issuers, including the Metropolitan Fair and Exposition Authority and the city of Chicago. For the city, he helped structure both the initial offering of general airport revenue bonds to finance improvements at O'Hare International Airport and the first issues of general obligation daily tender notes. From 1980 to 1983, Fuchs was a member of the Transportation Committee of the Urban Land Institute. He testified in 1986 before the Public Works and Transportation Committee of the U.S. House of Representatives on the impact of then-pending tax reform legislation on the financing of the nation's infrastructure. Before joining Goldman, Sachs, Fuchs practiced law in New York City. He received his Bachelor of Arts degree from Harvard College and his Juris Doctor degree from Harvard Law School.

RICHARD C. GERN
Evanston, Illinois

Gern is a senior vice president and principal associate at Barton-Aschman Associates, Inc. He joined the firm in 1956 and has served as vice president and a member of the board of directors since 1968. His professional interests lie principally in public and private sector urban transportation planning. Gern has delivered expert testimony before numerous municipal plan commissions, zoning commissions, city councils, court trials, and municipal boards. He has been a guest lecturer on the transportation and land use aspects of urban and suburban development for Northwestern University, the University of Wisconsin, New Community Services in Washington and Chicago, the International Council of Shopping Centers, the American Law Institute of the American Bar Association, and Waterloo University (Canada) and for various interprofessional conferences in the Midwest. He has chaired and served on several professional committees for both the Institute of Transportation Engineers and the International Council of Shopping Centers. In recent years, Gern has been engaged in transportation planning and operational studies for both municipalities throughout the continental United States and new communities in France and for urban development projects in Alaska, Mexico, Latin America, Canada, Australia, and Brazil.

KEITH KELLY
Washington, D.C.

Kelly, president of the Union Station Redevelopment Corporation, directed the renovation and restoration of Washington's Union Station which opened in September 1988. He is formerly vice president of planning and development for Crown Center Redevelopment Corporation, a private urban development subsidiary of Hallmark Cards, Inc. He coordinated the design, planning, and construction of Crown Center, the $350 million business and residential community undergoing development near Kansas City's downtown.

JOHN F. LEAK
Atlanta, Georgia

Leak is vice president of Central Atlanta Progress, Inc., a planning and research organization that undertakes a wide range of planning, housing, urban design, and economic development activities and projects for the major business interests of downtown Atlanta. Leak is also president of Park Central Communities, Inc., a firm created by Central Atlanta Progress, Inc., and six Atlanta developers to acquire the land for and coordinate the development of the 78-acre Bedford-Pine Urban Redevelopment tract in downtown Atlanta. At the beginning of 1989, Park Central had completed 765,000 square feet of office space, 125,000 square feet of retail space, 406 apartments, and 308 condominiums in the mixed-use development. Presently, 432 residential units are under construction, while 247 units are in the preliminary planning and design stages. Before joining Central Atlanta Progress and Park Central Communities, Leak was a corporate operations officer with the Citizens and Southern National Bank in Atlanta. He was previously employed by Wachovia Bank and Trust Company and by WRAL-TV in his native Raleigh, North Carolina.

A graduate of Morehouse College (Atlanta), Leak earned a Bachelor of Arts degree with honors in 1972. As a student at Morehouse, he was a legislative intern in state planning and community affairs for the Georgia General Assembly.

DOUGLAS N. SALTER
Dallas, Texas

Salter is president of Bramalea USA Urban Properties, Inc., which is currently developing urban mixed-use projects in Oakland, Chicago, Denver, Atlanta, and Dallas. The firm's projects encompass more than 14 million square feet of space, 25 percent of which is built and operating and another 25 percent of which is in the planning process.

ALYSSA J. TAUBMAN
Los Angeles, California

Taubman is a vice president in the real estate department of Salomon Brothers, Inc., where she is responsible for originating and structuring equity and debt transactions for developers and corporations in the western United States. Since opening Salomon's Western Region Real Estate Finance Office in July 1987, Taubman has been involved in the Shorenstein Company's Bank of America World Headquarters guaranteed mortgage note, the Transamerica Pyramid financing, the Playa Vista joint venture, tenant advisory and lease negotiations for Salomon Brothers, portfolio sales for the Sammis Company, and advisory services for Santa Fe Southern Pacific. Before joining Salomon in January 1986, Taubman was a project manager with Bedford Properties, Inc., in Lafayette, California. Previously, she was an attorney with Heller, Ehrman, White & McAuliffe in San Francisco. She holds Bachelor of Music, Bachelor of Arts, and Juris Doctor degrees from the University of Michigan.

A PANEL ADVISORY SERVICE REPORT
ULI–the Urban Land Institute
1090 Vermont Ave., N.W.
Washington, D.C. 20005