

State Museum of Connecticut History

Feasibility Study for the
Connecticut Historical Commission

Bill
Harkin

Dedicated to the memory of

Eric Hatch

and

William J. Morris

whose tireless efforts made this
feasibility study possible and
whose association with the historical
commission is greatly missed



State Museum of Connecticut History

Feasibility Study for the Connecticut Historical Commission

Feasibility Study for a State Museum of Connecticut History
authorized by the Connecticut Historical Commission in
Commemoration of the Bicentennial of the American Revolution

July, 1974

Public Act No. 74-347

An Act Establishing the State Historical Museum.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. As used in this act, "commission" shall mean the Connecticut historical commission, "director" shall mean director of the state museum of Connecticut history, "staff" shall mean such assistants, experts, technicians and clerical staff as the director may appoint, and "museum" shall mean the museum of Connecticut history.

Sec. 2. The Connecticut historical commission shall plan and establish a state museum of Connecticut history which will be Connecticut's permanent commemoration of the bicentennial period.

Sec. 3. Said commission shall, with the approval of the governor, select and acquire a site for the museum which is close to major transportation arteries and population centers.

Sec. 4. Said commission shall appoint a museum director who shall be qualified by special training or experience in museum work and who shall be in the unclassified service. He shall work under the general direction of the Connecticut historical commission and shall serve at the pleasure of said commission. Said director shall, subject to chapter 67 and with the approval of the commission appoint such assistants, experts, technicians and clerical staff as may be necessary for the effective conduct of its work.

Sec. 5. Said director and his staff shall, subject to the approval and directive of the commission, have the following duties and powers in planning and administering the permanent museum and its facilities, as well as temporary exhibits during the bicentennial period: (a) To plan and exhibit, using modern audiovisual techniques, historic scenes; (b) to institute and maintain a program of systematic collection in the several fields of museum activity with particular emphasis on those fields relating to the state of Connecticut; (c) to preserve, identify, catalogue, document and safeguard the collections of the museum; (d) to carry on research to increase knowledge in the several fields of museum activity and to provide interpretive and information services, including the dissemination and recording of information gathered through research; (e) to provide reference services to individuals and to local historical, natural history, scientific and other groups and societies interested in museum activity; (f) to exhibit the collections of the museum including permanent and temporary exhibits and to provide a loan service for films, artifacts, specimens and other exhibits of the museum to such persons, groups and schools and under such terms and conditions as determined by the director; (g) to provide ancillary museum services such as operation of a museum library, consultation concerning museum activities, sale of publications, provision of speakers, participation in special events, and any other activities which will promote the effectiveness of the museum, including, but not limited to, the exchange of part or parts of the museum collection with other museums both within and without the state; (h) to enter into such contract or contracts as from time to time shall become necessary to carry out the functions necessary to the operation of a museum; and (i) to promulgate such regulations, including but not limited to, fixing an admission fee, and setting hours during which said museum shall be open to the public, as are necessary to carry out the provisions of this act.

Sec. 6. The sum of seventy-five thousand dollars is appropriated to the Connecticut historical commission to implement the purposes of this act, which appropriation shall be from the sum appropriated to the finance advisory committee under section 1 of number 74-31 of the special acts of the current session for the reserve for legislation affecting agency budgets and shall be administered by said commission.

Sec. 7. This act shall take effect July 1, 1974.

**Connecticut Historical Commission and
American Revolution Bicentennial
Commission of Connecticut Members**

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Whitney L. Brooks, Vice Chairman
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Ella F. Wood

Staff Members

John W. Shannahan, Acting Director
Judy D. Warfield, Secretary to the Director

Associated Museum Consultants

H. J. Swinney, Rochester, N.Y.
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Washington, D.C.; West Haven, Connecticut; Tarrytown, New York

Table of Contents

1	Introduction	Page No.	7
2	Policies and Objectives		11
3	Review of Other State Museums		17
4	A State Museum Space Program		27
5	Museum Staff Organization and Budget		39
6	Site Selection Criteria		53
7	Site Selection Review		59
8	Market Demand and Economic Impact Analysis		67
	Appendix		

Introduction

"Nowhere in Connecticut does there now exist an historical museum which presents in a *comprehensive manner* the highlights of Connecticut's history. Our most famous and best patronized museum, Mystic Seaport, depicts only *one aspect* of history — maritime history. Even in its field it concentrates not on *Connecticut* maritime history but on *American* maritime history. Other museums are strictly local in their coverage or tend to emphasize a very few areas such as decorative arts, clocks, firearms, and the like.

Connecticut badly needs to have a comprehensive state historical museum, centrally located, where children, adults, and visitors will be able to see vividly depicted a range of exhibits which will provide a clear sense of our historical past. They will obtain an understanding of what is distinctive in Connecticut's historical heritage."

This statement was presented by Dr. Albert E. Van Dusen, the State Historian and member of the Bicentennial Commission in his remarks before the Subcommittee of the Interim Appropriations Committee of the General Assembly, on October 30, 1973.

A state museum is an educational institution of equal importance to any other educational facility in this state. Today, there is no place in Connecticut where a child or an adult can view the development of this state and the contributions of its citizens of many heritages through various periods of history.

The goal of the Bicentennial Commission is to remove this deficiency and to provide an institution that represents Connecticut's future as a reflection of its past.

This study was authorized by the General Assembly in July, 1972. It is intended to clarify the role of the state museum, outline its programs, suggest its staff organization, estimate its capital and operating budget, estimate its size, establish criteria for its location and review potential sites. The information is intended to provide a preliminary concept for this project and serve as a guide in the preparation of more detailed design of the facility in the future.

Legislation establishing the State Historical Museum was passed and signed by the Governor on May 30, 1974.

Policies & Objectives

The new American Heritage Dictionary defines a museum as a "place or building in which works of artistic, historical and scientific value are cared for and exhibited."

The Encyclopaedia Britannica's new article on museums, written by Ralph H. Lewis, a distinguished museum specialist of the National Park Service, begins, "museums are the institutions developed by modern society to stave off for as long as possible the deterioration and loss of objects treasured for their cultural value. Museums do for objects what libraries do for books and archives for official documents."

These statements, which emphasize the curatorial responsibility as a primary function, hint at the idea of a program to educate the general public through the exhibition of these collections in an interesting and dynamic way.

Another significant definition to be considered is one used by the American Association of Museums as the cornerstone of its accreditation system.

"For purposes of the accreditation program of the American Association of Museums, a museum is defined as an organized and permanent non-profit institution, essentially educational or aesthetic in purpose, with professional staff, which owns and utilizes tangible objects, cares for them, and exhibits them to the public on some regular schedule."

An institution commensurate with these definitions is what is being proposed for Connecticut.

The State Museum of Connecticut History is to be an educational institution for the purpose of collecting, conserving, studying, arranging, exhibiting and interpreting collections of objects related to the economic, social and cultural development of Connecticut. It will be concerned with transmitting information and ideas covering *all* periods of Connecticut history to the visitor.

This concept for this museum emphasizes a compre-

hensive view of the State's history, an approach that has not been the concern of other museums in Connecticut. At the same time, the role of the museum in the educational process is also stressed.

As H. J. Swinney clearly stated, "There are many different kinds of teaching devices — books, classrooms, laboratories, and many more. All of these have both strengths and weak points. A book, for instance, provides opportunities for a student to read the written word at leisure and in comfort, checking back, rereading, and reflecting as his mood or his understanding of the material requires. But a book has disadvantages: it can be read by only one person at a time, and it can transmit ideas only through the medium of the very complex symbolological process called reading, which not everyone in our population has mastered. A classroom, for another instance, is a device in which a single lecturer can efficiently teach a minimum of about ten students and a maximum of about forty; if a smaller group is involved, a seminar room is far better, and if the group is over forty, an entirely different room arrangement is required. Furthermore, the classroom is not an effective device for the transmission of ideas through books, experiments, demonstrations, movies, and so on; it is really effective only as a format for a lecture.

A museum, like these other teaching devices, has strengths and weaknesses. It is the best device we have been able to work out for the transmission of ideas through the exhibition of actual objects to large numbers of people. But it is not a device that teaches effectively through the extensive use of written words (a book is better) or movies (a theater is better) or lectures (a classroom or an auditorium is better). As long as a museum sticks to what it does well — the exhibition of objects — it can be very successful."

This is not to be interpreted as ignoring the full range of audio-visual techniques in teaching, nor does it ignore the great variety of programs of special events, performing arts, folk life demonstrations, historical plays, pageants, or colonial farms which may be conducted by the museum to reinforce the impact of

its collections and exhibits. It does indicate that these techniques must be used to augment exhibits, not replace them.

The emphasis thus remains on the display of genuine objects using the most effective exhibition techniques available to tell its full story.

From this basic concept, the emphasis of this institution is telling the history of Connecticut during all periods of history. Many local Connecticut historical societies tend to emphasize the history of the Colonial period, and it is treated in some depth in nearby major historical enterprises. Connecticut has in its projected state museum an opportunity to bring history down to the present by telling the story of the gradual rise of industrialization which made nineteenth century Connecticut so important, and by presenting the contribution of generations of extraordinary "common men" to that greatness. The idea of an extraordinary common man is not a contradiction in terms. In fact, the focal theme of the museum should be the role of the settlers, and successive waves of immigrants in the late eighteenth, nineteenth, and early twentieth centuries. The changing life styles of working men and all the facets of their existence as well as their contribution to the industrialization of Connecticut can provide a fresh approach to the New England museum scene.

The museum should incorporate the scientific contribution with emphasis on the historical aspects. This is not to be a Museum of Science and Industry with large collections of animated models depicting how machinery works. Yet where this type of item relates to historical presentations they will be used. The time-worn concept of rows of items on shelves in glass cases is passe. All techniques will be used based on the interpretive needs for a dynamic museum.

A concern has been expressed that this museum will replace the many small local museums throughout the state. On the contrary, their general emphasis on Colonial and early nineteenth century history and their local focus would coordinate well with a State

Museum's broader vision emphasizing the later periods. A state institution of this type can be extremely helpful to local museums by providing technical assistance in administrative, curatorial and conservation matters. In addition, traveling exhibits can be prepared for local use along with loans of collections. Information on local museums and historical sites will be provided by the reception desk which will probably improve attendance at local museums.

As an educational institution the State museum will have extension programs and probably will publish works by curators, and other experts in various fields of interest. Special programs for groups of all ages are mandatory for museums. The attendance figures suggested in this report may appear optimistic. However, the probability of visits by clubs, groups and out-of-state tourists, and busloads of students along with the relatively short driving distances to the corners of the state give credence to these projections.

Concern has also been expressed that the State Museum would duplicate programs of the State Library and Archives. The State Museum will not be concerned with either of these important functions of the State Government. The museum library in the program is a curatorial library to serve the research and analytical activities of the museum and would not need to embark on a major program of collection of books and archival materials. In fact, it would need to draw on the resources of the State Library and Archives in its study program.

A. The State Museum of Connecticut History will be an educational institution.

1. To serve as a repository of artifacts and objects covering both pre-recorded and recorded history of Connecticut and its inhabitants.
2. To serve as an exhibit area where the history of the State can be taught through every modern device of exhibitions and interpretation of objects.
3. To cooperate with public and private museums of the state to establish services of benefit to all.
4. A resource for the study of the history of the State.

B. The State Museum of Connecticut History is the "window to the future" and a fitting commemorative for the Revolutionary Bicentennial Celebration and Connecticut's role during that historical period.

C. The State Museum of Connecticut History will use all available techniques to provide an imaginative and dynamic exhibition.

D. The State Museum of Connecticut History will be located to serve primarily the residents of Connecticut and, secondly, the visitors to the state in a setting which represents the environmental quality of the state.

E. The State Museum of Connecticut History as a major public institution will be an economic as well as a cultural asset to Connecticut and to the community in which it is located. The facility and its use will be carefully planned to minimize environmental damage to the community and to the site.

F. The State Museum of Connecticut History will be an institution of interest and inspiration to all segments of the population and will include programs related to all.

G. The State Museum of Connecticut History will seek the support and participation of the state's residents and scholars in the continuing development of its programs and the concept of its exhibition, permanent and temporary.

Review of Other State Museums

The development of state museums has taken various forms from those evolving as projects of Historical Societies to those created by major efforts of state governments. Some are single purpose facilities while many are multi-purpose institutions combined with archives, libraries, and historical societies. The State Museum of Connecticut History is proposed as a single purpose institution and will not be combined with any existing activity such as the State Archives, Connecticut Historical Society or State Library.

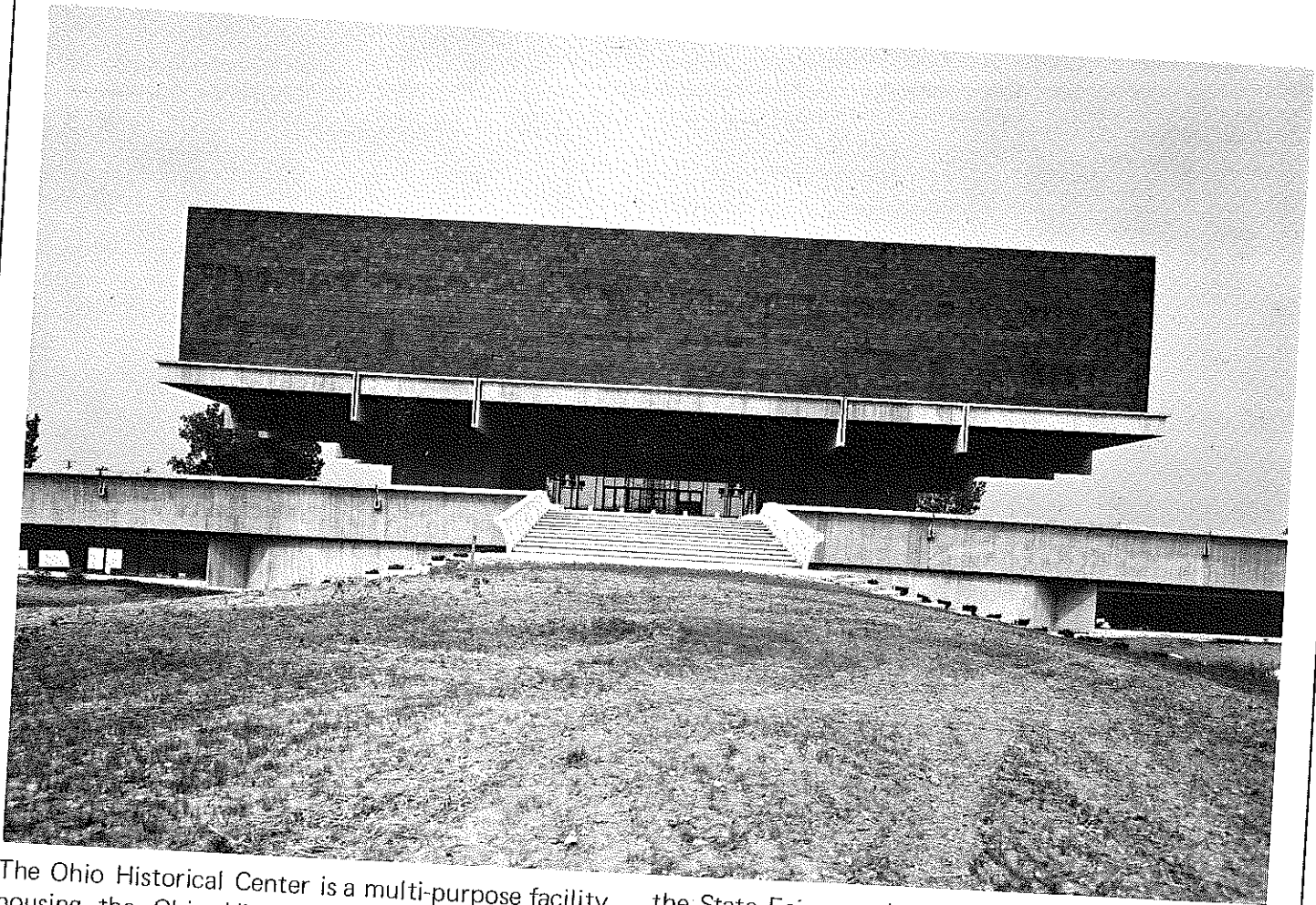
A 1970 survey conducted by the Maine State Museum Commission was reported in Museum News. Out of thirty-one museums reporting, fourteen were independent agencies, two were associated with their Departments of History and Archives, two were associated with their Departments of Higher Education, four with their Departments of Education and Cultural Affairs, three with their Departments of State, two with their Departments of Natural Resources, two with their Departments of Parks and Tourism and two with their Departments of Development Services. The preference expressed in the survey was to be an independent museum agency unaffiliated with any other government agency.

The source of revenue for these institutions is generally state appropriation. Seventeen reported ninety to one hundred percent appropriation, nine reported seventy to ninety percent. A few reported smaller amounts. Other sources included federal grants (4.3 percent), endowments (3.3 percent), memberships (8.6 percent) and miscellaneous activities (7.2 percent). There was not reporting of admission fees or of what percentage of total income was received from admissions. In those surveyed by the consultant, no admission was charged.

A review of selected museums constructed generally within the last ten years was also conducted. Telephone interviews were conducted with museum directors to determine size, cost, function, staff and other information relevant to this study. In addition, each provided copies of reports, building plans, photographs and valuable information.

Ohio Historical Center

Columbus, Ohio



The Ohio Historical Center is a multi-purpose facility housing the Ohio Historical Society which administers public museums, historical libraries, archives and memorials. The Society is a non-profit state-assisted corporation.

The new building completed in 1970 contains about 260,000 square feet of which the museum uses about 150,000 square feet. Exhibit area accounts for about 60,000 square feet. Because of the multi-purpose design, various facilities are shared, thus permitting a larger percentage of the museum area to be devoted to exhibits than might be found in a single purpose facility. The Museum has an outdoor area for a collection of typical nineteenth century Ohio buildings.

The building is located on a fifty-eight acre tract three miles from downtown Columbus adjacent to

the State Fairgrounds with available parking for over 1,000 vehicles.

The indoor portion of the Museum is located in the base of the structure, with the library, archives and administrative space in the block above the museum level. The exhibit area is divided into four principal areas: natural history, history, archeology, and a hall of fame, with additional space devoted to rotating exhibits.

The museum staff numbers about ninety with thirty-five additional personnel for the outdoor exhibits. Many museum personnel are also involved in other activities of the Society which broadens their involvement.

No admission is charged.

Oregon Historical Society
Portland, Oregon



The Oregon Historical Society, a non-profit state assisted institution, operates the State Museum and Historical Library in Portland, Oregon also has a State Library. The Historical Society also is engaged in museum programs, technical assistance to local historical societies and publishing. The building, recently constructed and architecturally significant, is placed on a downtown site without open space, landscaping or parking.

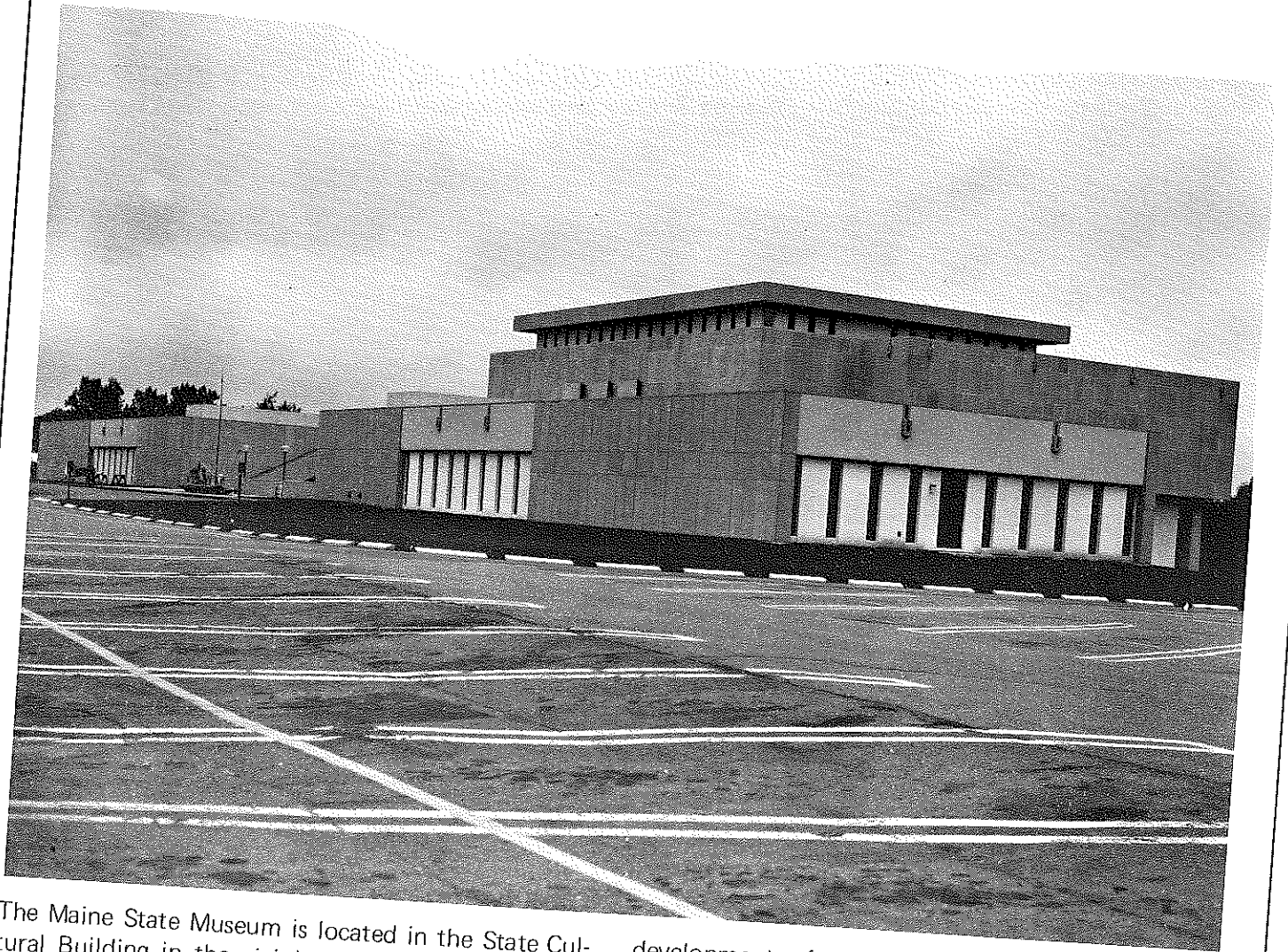
Of the total space, about one-half of the building is devoted to exhibits and curatorial activities of the museum function.

Over 100 years ago at an early meeting of the Historical Society, the goals of the society were established in the following resolution.

"The collection, preservation, exhibition and publication of material of a historical character, especially that relating to the history of Oregon and of the U.S.; and, for the accomplishment of this end, to explore all places of deposit of archaeological matter; to acquire documents, manuscripts and publications of every description; to obtain narratives and records of the pioneers of the Oregon Territory; ... to gather and preserve the Indian traditions relative to the history of the Pacific Northwest prior to white settlement; to maintain a gallery of historical portraiture and an ethnological and historical museum; ... and in general to encourage and develop within this State the study of history ..."

This goal statement is as significant today as it was one hundred years ago and could be used by any institution today.

Maine State Museum
Augusta, Maine



The Maine State Museum is located in the State Cultural Building in the vicinity of the State Capitol in Augusta.

The facility is to have 31,500 square feet of exhibit space with additional space for a classroom. The basic responsibility of the Museum is to collect, preserve and document those materials indicative of the environmental, cultural and historical development of Maine in particular and the Northeast in general.

Its second function is to interpret and present the collections and knowledge acquired through research to all citizens of the state in a meaningful and educational manner with the primary objective being the

development of an understanding of the environmental, cultural and historical evolution of Maine.

The exhibits area is divided into theme areas: Natural Environment, The Coming of Man, Organizing and Governing the Emerging State, Producing and Exchanging in the New Economy, Creating a Society, Unifying the Community, The Mind and Spirit of Man, and Recreation and Entertainment.

In addition, the museum provides a variety of extension services and material as well as programs to meet the specialized interests of groups, young and old.

Museum of History

Raleigh, North Carolina



The Museum in Raleigh is one element of the Archives and History State Library Building dedicated in 1969. The building has been described as "North Carolinians' three hundredth birthday gift to themselves" since it was appropriated for the observance of the anniversary of the issuance of the Carolina Charter in 1663. The building is located between the State Legislature Building and the Executive Mansion.

The building is multi-purpose and the Museum of History is limited to 16,500 square feet of exhibit space out of the total of 145,000 square feet of usable space. The major portions are allotted to the Archives and the Library.

William Penn Memorial Museum

Harrisburg, Pennsylvania



The William Penn Memorial Museum and Archives Building is located adjacent to the State Capitol in Harrisburg. It is operated by the Historical and Museum Commission which is also responsible for the operation of historical sites throughout the State.

The museum portion contains over 270,000 square feet of which over 100,000 is devoted to exhibits. The museum contains a Memorial Hall, Auditorium, Art Gallery, and Planetarium as part of the exhibit area. Exhibits are located on three floors and are divided into various galleries devoted to permanent and temporary exhibits. Curatorial and Administrative space is provided on two additional floors. Additional Curatorial space is provided off-site.

The Museum and Archives Complex has the following purposes:

1. To create a suitable, functional memorial to William Penn.
2. To store archival and public records of the Commonwealth.
3. To establish an attractive and functional showcase for historical, scientific, artistic and cultural displays related to Pennsylvania.
4. To create and develop a major educational center for the entire state.

The building was opened in 1965 and has no admission charge.

Provincial Museum and Archives
Edmonton, Alberta, Canada



The Provincial Museum and Archives is located in Edmonton on the thirteen and one-half acre site of the old Government House. It is a multi-purpose facility with the Museum being the dominant use of the structure. The building was opened in late 1967 with only a portion of the exhibit space completed. The building contains 250,000 gross square feet mainly devoted to museum use. The design has been prepared for expansion of the exhibit area by approximately 100 percent. The exhibit area is divided into four principal galleries for Indian, Habitat, Historical and Natural History themes.

"The purpose of the institution is to collect, preserve and exhibit significant specimens, artifacts and documents concerning Alberta and to advance and dis-

seminate knowledge of Alberta's natural and human heritage. In line with modern museum trends, freshness and vitality are maintained through changing dynamic exhibits arranged in story sequence, educational programs for all ages and stimulating surroundings."

With a federal grant, the project was completed in commemoration of the Canadian Centennial.

The museum has been located in an historic site with a vista of the North Saskatchewan River and the valley parkland providing an image of the province in all seasons. The museum is open to the public without charge.

A State Museum Space Program

The space utilization ratios used in the preliminary design of a museum are directly related to the functions of the institution, i.e., library, archives, museum, administration for historic preservation, and historic sites. The ratio can also be adjusted depending on the location of the facility and the development staging to be employed.

A "rule of thumb" for the allocation of museum space is forty percent for exhibit areas, forty percent for curatorial space and twenty percent for administrative and workshop facilities. These are net space figures, excluding auditoriums, food service, corridors, lobbies, lounges, and mechanical equipment space.

A review of the recently constructed or proposed state museums in Ohio, Pennsylvania, Nebraska, Oregon, Maine, North Carolina, Florida, New York and the Province of Alberta, Canada, indicate a wide range of museum sizes and space organization; however, the following space analysis, based on the gross area of the building, appears to be a reasonable guideline for initial planning for the State Museum of Connecticut History.

Type of Area	Percent of Gross Building*
Exhibits (Permanent and Temporary)	30-35
Circulation (Corridors, stairways)	15-20
Public Facilities (Lounges, restrooms, food service)	10-15
Administration (Offices)	2- 5
Curatorial (Laboratories and storage)	25-30
Exhibits Production (Shops and studios)	5-10
Building Utilities (Shops, equipment rooms)	15-20

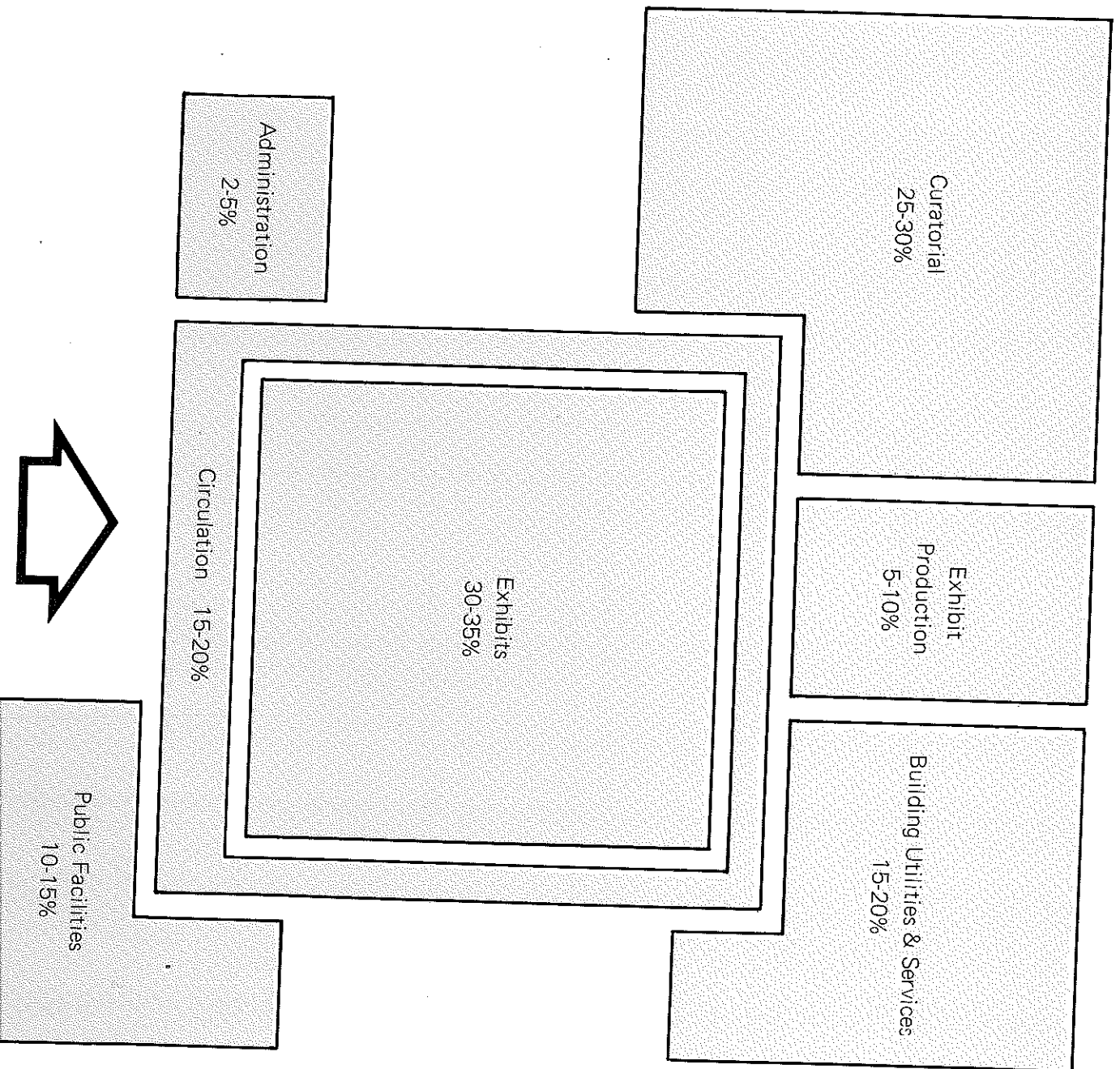
*Gross Building is all space measured from and including the exterior walls.

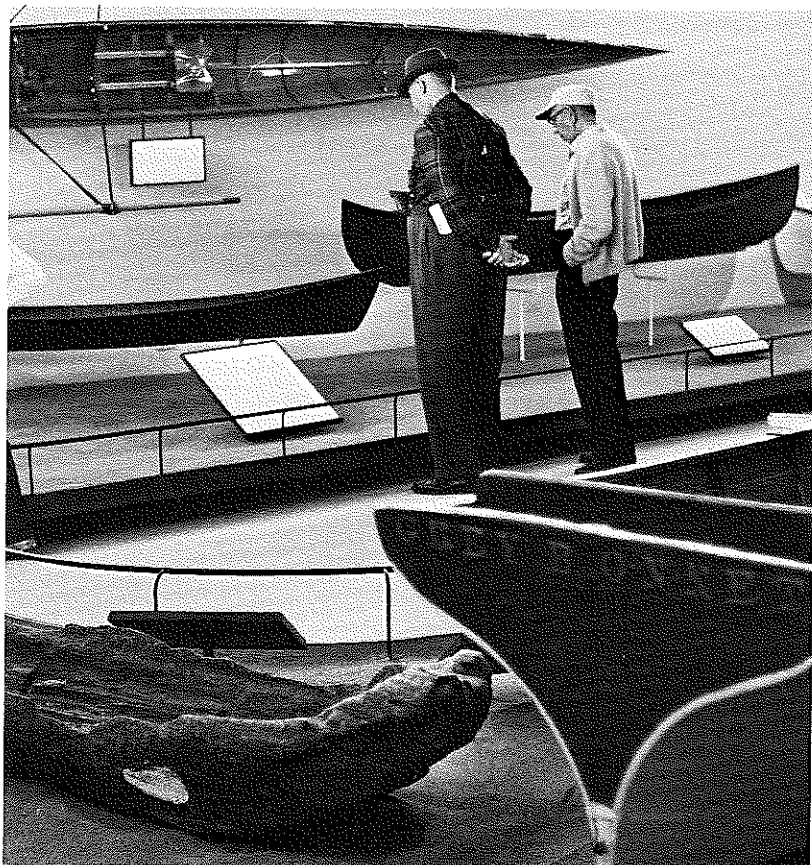
This breakdown compares reasonably with the 40/40/20 "rule of thumb" when public space is excluded. These variations are influenced by the size of exhibit area, the multiple functions of the museum staff, the use of satellite space for storage and shops, the multi-use of the building, and other specific requirements of the state museum agency.

The most difficult yet critical question to be answered by the Commission at this time is "how big should the museum be?". The controlling element is obviously the size of the exhibits area and the multiple functions to be housed. A review of new state museums indicated the following range of building sizes. The proposed New York State Museum will have 175,000 square feet of exhibit space, and the William Penn Museum in Pennsylvania has 105,000 square feet. These represent the upper range of the alternatives. The recently opened Ohio Historical Center has 60,000 and the Alberta Museum has 50,000 square feet, which represent the mid range. The new Maine Museum has about 24,000 square feet and the Nebraska Museum 30,000 in an existing archives/museum building. This space will be transferred to archives and a new 30,000 square foot exhibit area is being planned at this time. The proposed Florida Museum of History has 30,000 square feet and is part of an archives, library and museum building. These museums represent the smaller facilities. The sizes of these exhibit areas provide some insight into the dimensions for a State Museum of Connecticut History.

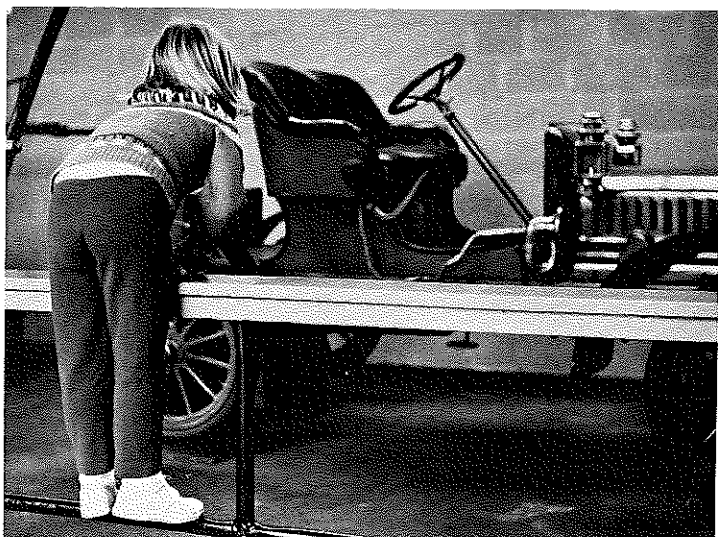
While Connecticut is not geographically large, its rich history over a span of almost four centuries of development, plus its Indian history, makes its story extensive. Without attempting to complete a program outline prematurely, it would appear that a building with an exhibition area in the 40,000 to 60,000 square foot range, before designated expansion, would appear to be desirable to interpret Connecticut's heritage. This exhibit area size does not include the use of outdoor exhibits adjacent to the building which will probably be desirable in later stages of development.

State Museum of Connecticut History Museum Elements





Visitors examine the small boats collection at the Adirondack Museum, Blue Mountain Lake, N.Y.



A young visitor to the Adirondack Museum's Transportation Building gets a close look at a 1906 Maxwell.



Section of a communications mall in The Ohio Historical Center.

Curatorial space ranges from slightly less to slightly more than the space designated for exhibits. Much depends on the availability of storage and curatorial offices and laboratories in the building, when the size of this element is considered. Recognizing that this is the initial effort in the State for such a museum, and a collection must be assembled, the curatorial space should be at least comparable in size to the exhibit area. The construction of curatorial space, however, could be staged, since a collection will be acquired over considerable time. Prior to the construction of the building, curatorial space will be required. This space must be rented; it must be climatically controlled and properly secured.

The public facilities in museums range from small 100-seat auditoriums and a few other assembly spaces, to a 400-seat auditorium and extensive room for small groups, plus sales and food service space. The choice of size here must recognize the educational role of the State Museum, its location and the evening programs anticipated in the community activities programs. If it is to be extensive and centrally located, then a larger auditorium is necessary. If a more rural site is used, the auditorium may be smaller. From the initial discussions of the program concept, an auditorium with 300 to 350 seats appears to be the optimum size. Other public space for seminars, meetings and presentations, food service and sales, will also be required.

Other elements are related to a more detailed program and concept design; however, if a 40,000 to 60,000 square foot exhibition area is to be considered, the gross area of a state museum will undoubtedly be 125,000 to 180,000 square feet of enclosed space.

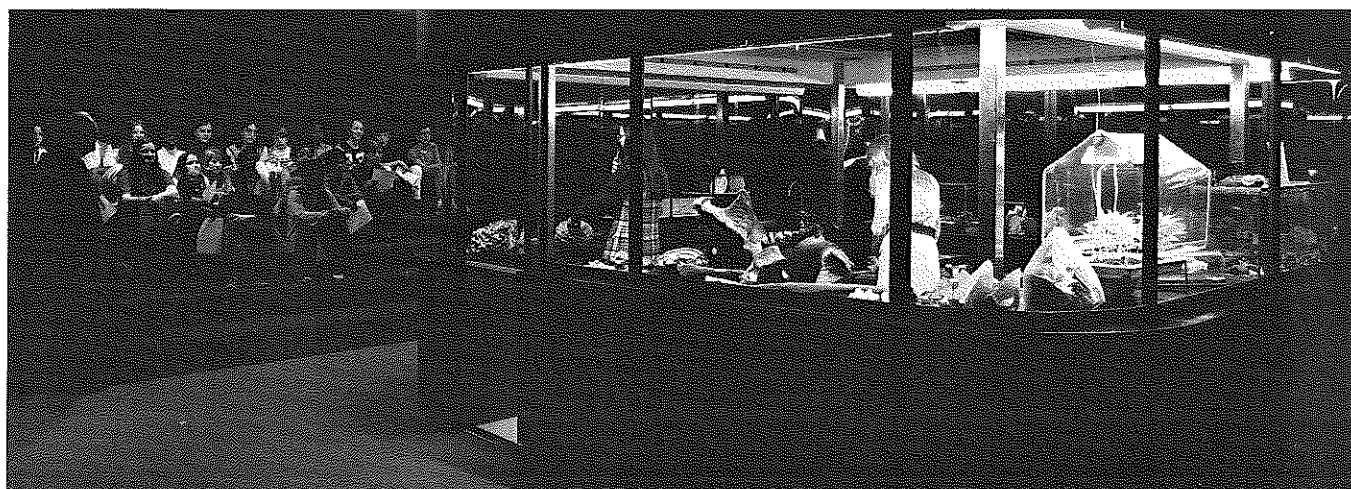
Of equal concern is the question of cost, including building, equipment and exhibits. The Alberta Museum, built between 1964 and 1967, cost about \$25.00 per square foot, with reduced architectural/engineering fees since the design was done by the

provincial architectural staff. The Ohio Historical Center was completed in 1970 at a cost of \$29.00 per square foot, and the new Maine Museum in 1971 cost slightly over \$30.00 per square foot. The estimated cost of the Florida Museum, including landscaping and fees based on 1972 figures, is about \$38.00 per square foot. A recent study for a non-state-supported facility near Connecticut is estimated at \$41.00 per square foot on mid-1973 figures. Today's costs due to daily inflation in the building construction field will probably be about \$48.00 to \$50.00 per square foot. These cost figures indicate it would appear wise to consider a cost of \$60.00 to \$70.00 per square foot for facilities to be undertaken within the next few years, and an increase of over twelve percent annually beyond 1974. For an upper limit, some new art galleries and museums are being built today for \$100 per square foot. A community center, a comparable facility in space utilization and building cube, has been priced at \$45.00 to \$50.00 per square foot in 1974. In addition, funds for landscaping and external areas must be included.

An exhibits development budget is a major variable at this time. This cost estimate *excludes* the purchase of objects. New exhibits, designed, constructed and installed by a consultant can cost as much as \$100 per square foot with the footage based on the room size, not the area of the exhibit itself. This includes special items such as audio-visual equipment, lighting, mechanical equipment. This cost can be substantially reduced by undertaking all design, production and installation with the museum's own staff. Obviously, complex audio-visual and mechanical equipment must be purchased and these items are often expensive. Installation is often done with museum staff. The Ohio Historical Center has a 1.2 million dollar exhibits budget, or about \$20.00 per square foot. Therefore, even with an exhibits production staff, an exhibits budget of \$750,000 to 1.5 million dollars will be required over several years. If extensive use of dioramas or other highly mechanical exhibits are used, the exhibits budget may well increase beyond the upper limit.



Entrance foyer, William Penn Memorial Museum.



Nature lab theater, Ohio Historical Center.



Ipswich House exhibit, Smithsonian Institution, Washington, D.C.

Assuming a mid-range exhibits area size of 50,000 square feet, the facilities will probably require 40,000 to 50,000 square feet of curatorial space and 5,000 to 7,000 square feet of administrative space.

The various education elements, auditorium and classrooms will require about 15,000 square feet, plus space for museum sales and food service facilities.

Building management and exhibit production will require 30,000 to 35,000 square feet with the bulk in the building management shops, heating and air conditioning plant and related facilities.

In summary, a museum with 50,000 square feet of exhibit space will result in a building containing approximately 160,000 square feet of gross floor area. This figure may vary when the detailed exhibit and education programs are prepared by the museum staff prior to the beginning of preliminary design.

A preliminary estimate for a State Museum is between twelve to fifteen million dollars, depending on size, location, facilities, exhibit development and the construction year. If land acquisition is necessary, its costs must be added to this estimate.

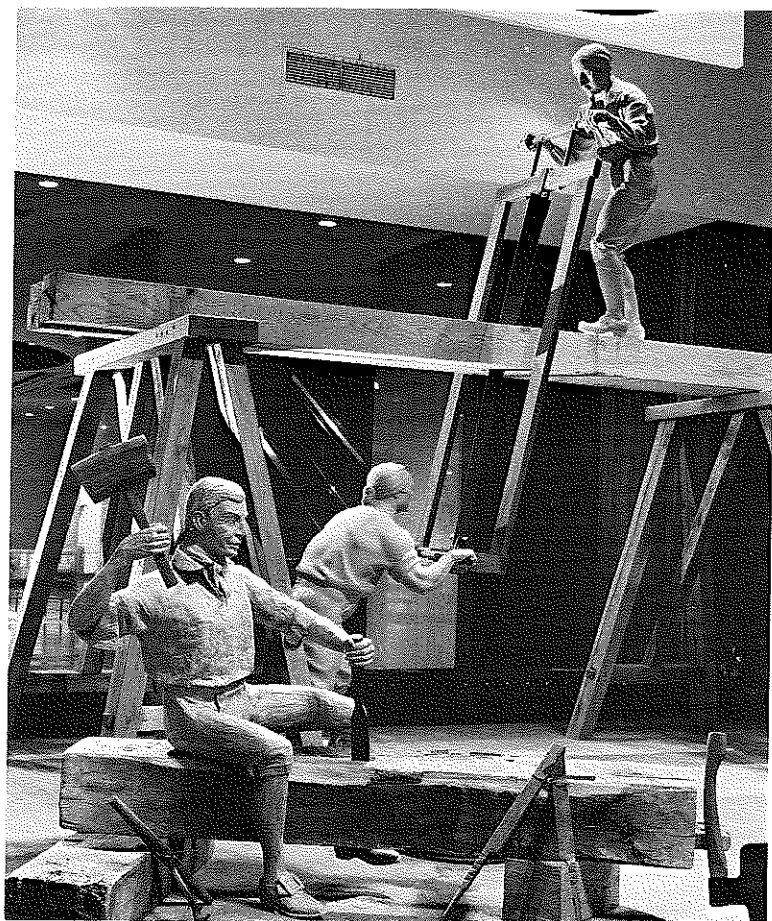
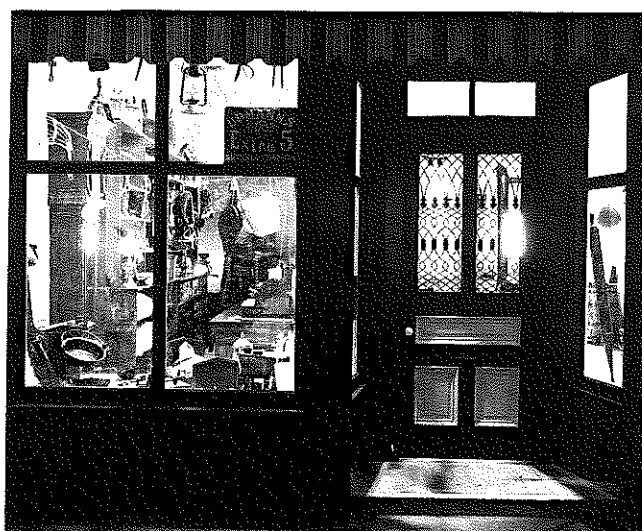


Exhibit of colonial construction techniques, Smithsonian Institution.



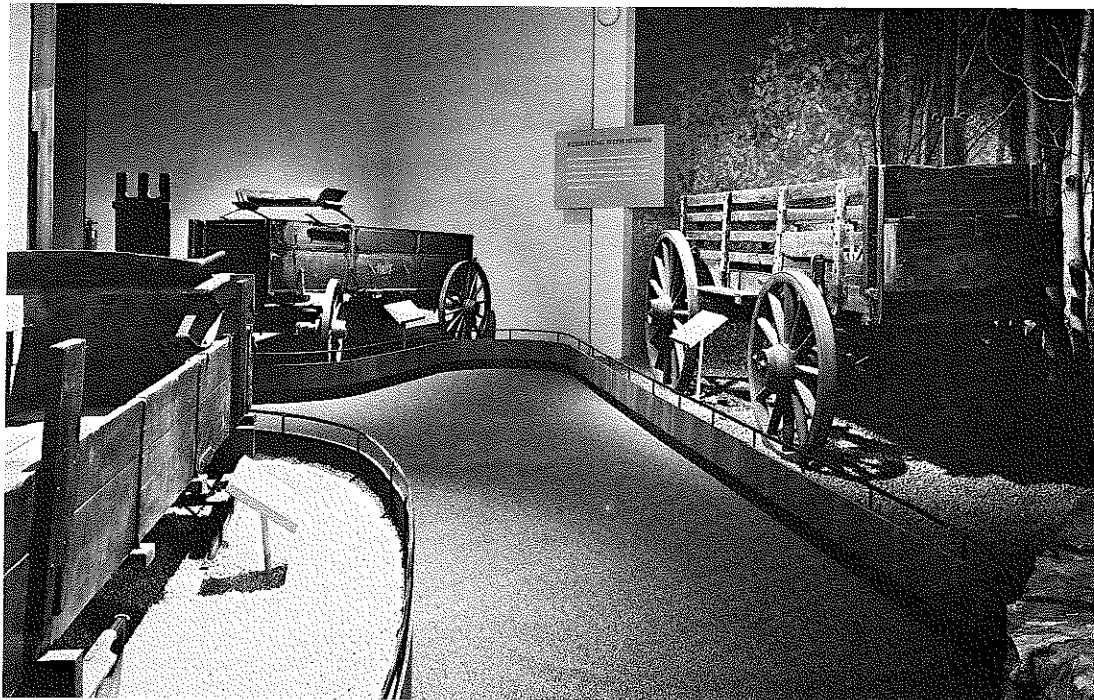
General store exhibit, Maine State Museum.



Political campaign parade, Smithsonian Institution.

Generalized Space Program

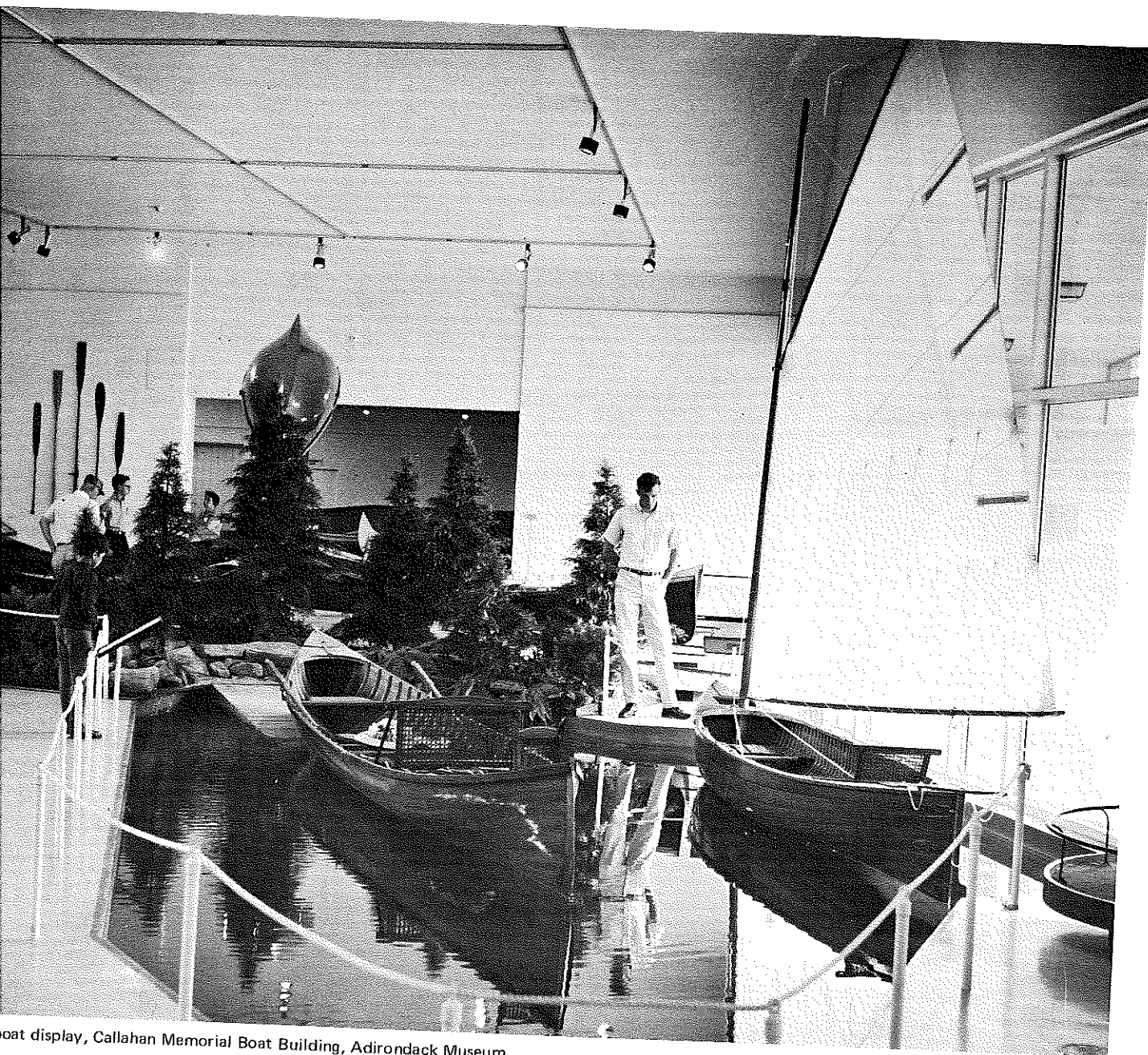
Interior	Approximate Area in Sq. Ft.
Public Space	6,000
Entrance and Lobby	
Public Lounge	
Reception/Information	
Gift Shop	
Coat Room	
Restrooms	
Food Service	
Exhibit Areas	50,000
Permanent	
Temporary	
Educational/Interpretive Facilities	8,000
Auditorium — 300± seats	
Lecture/Orientation Room — 50± seats	
Classroom — Two @ 30± seats	
Director's Office	3,000
Offices	
Conference/Board Room	
Program Staff	2,000
Offices	
Curatorial Staff	35,000
Office and Laboratories	2,000
Museum Library	3,000
Collections	30,000
Exhibit Production	10,000
Offices and Studio	1,000
Workshop	9,000
Storage	
Material	
Photo Lab	
Paint & Silk Screen	
Building Management	23,000
Boiler, fan, transformers	
Maintenance Shop	
Offices	
Locker Room/Restroom	
Storage	
Shipping and Receiving	
Circulation	15,000
Corridors, stairways	
Miscellaneous	8,000



"Freighting With Horses" exhibit, Road & Rail Transportation Building, Adirondack Museum.



Turn of the century blacksmith shop, Adirondack Museum.



Boat display, Callahan Memorial Boat Building, Adirondack Museum.

Museum Staff Organization & Budget— Initial and Long Range

Initial Staffing

A state history museum requires considerable pre-design planning once the decision has been made to undertake the project. To effectively do this phase of the work, a small staff should be available to organize the short- and long-range programs, the design concept of the structure and its exhibits. A museum is not only a physical structure. It is, in fact, a multifaceted institution with programs oriented to the education of the residents of, and visitors to, Connecticut. Thus, a staff must be "on hand" prior to opening the doors. In addition to the pre-planning functions, the staff of a new museum will be collecting and borrowing objects for future permanent and short-term temporary exhibits. Since a portion of the facility must be operational when the building opens, exhibit designers and technicians must also be on the staff to begin the design and construction of exhibits for the Museum.¹ On opening day, twenty percent of the permanent exhibits should be in place, and this staff, over a five-year period, should be able to complete the placing of permanent exhibits.

During the initial year to eighteen months, while the program is being completed and architectural designs begin, the image of a state museum can be established through temporary exhibits and the preparation of bicentennial period displays. This staffing strongly proposes the two-pronged approach: a short-range one centered on the Bicentennial Celebration, and a long-range one oriented to the opening of a State Museum of Connecticut History.

To fulfill both of these objectives, the initial staffing should begin as soon as possible.

Understanding that a permanent physical facility cannot be achieved overnight, and can best be achieved with staff involvement, the proposed staff would create a program of exhibits and other public events beginning on a small scale within a year or eighteen months of initial funding. This effort would build up to considerable visible activity during the bicentennial

period. This program may include exhibits in temporary quarters, a "Travelling Van of History", special exhibitions in Connecticut public buildings, and appropriate events and activities related to such exhibitions. These exhibits should be coordinated with other activities such as, but not limited to, folk festivals, craft exhibitions and demonstrations, programs involving Connecticut's many organizations interested in historic military drill and music, with emphasis on the bicentennial period, which would be undertaken by the Bicentennial Commission.

The proposed staff serving the short-range function would be the nucleus for a permanent State Museum of Connecticut History staff, and all of their planning would be oriented to this long-range objective. Collections formed for temporary exhibit would continue in the permanent possession of the museum organization and would form the nucleus of its permanent collection. Research and publications would also be prepared for both the short-range and long-range exhibitions. During the initial period, considerable administrative support of a fiscal and personnel services nature would come from the parent office of the Historical Commission. Initially, executive and legislative liaison would also be provided by the Commission. Working with these assumptions, this staffing program suggests an organization of three principal functional departments, each with specialized staff members. However, it is emphasized that a director must be hired first, and that he have the option to structure the staff to express his own ideas and the best way to achieve the institution's goals. What follows, therefore, is not a proposed staff organization in precise detail; it is one alternative staff structure that can be considered for organizational purposes. This staff recommendation is provided to outline the scope of the staff requirements and to provide substance to a budget estimate.

1. Director's Office

a. Director

The director is responsible directly to the Historical Commission for the planning, supervision and operation of the entire organization. The director

¹ This Museum staff can also prepare Bicentennial exhibits.

should be a person of maturity, force, experience and competence in history, with demonstrated ability to create a vivid and dynamic program based on sound scholarship, to represent the institution effectively to the population of Connecticut, and to sustain a high level of enthusiasm and morale within his staff. He should have experience with an institution of major importance. Staff *positions* should be created by the Commission at the director's recommendation; however, the director should choose, appoint, supervise and (when necessary) discharge all *individuals* who occupy positions created by the Commission, subject to the Civil Service Regulations. Although he should keep the Commission informed of such appointments, and although he would probably seek the Commission's counsel in certain instances, he should not be required to seek prior Commission approval for individual appointments. Recognizing the atypical situation of creating a new cultural/educational institution from the beginning, special emphasis must be placed on the selection process. Outstanding museum directors are beginning to be paid at levels commensurate with their responsibilities. A salary in excess of \$25,000 should be considered and even one year of delay may require an addition to this sum; however, maximum flexibility should be retained during the recruiting phase.

b. Secretary

This position requires a person of considerable skill and presence and should be established at a level comparable to a State Commissioner's secretary on the Civil Service scale, which is \$9,400 per year.

c. Fiscal Specialist

Depending on the level of fiscal support provided by the Historical Commission staff, a bookkeeper or junior accountant may be required for a State Museum staff. Once the staff begins to be operational, a significant number of transactions would be made, many in small sums for rather unusual items, to prepare exhibits, conserve collections and similar functions. Thus, to insure sound fiscal management, this position would undoubtedly be

required early in the program development. The position would, however, require sufficient experience and an ability to work with minimum supervision, and should be scaled at \$9,400 to \$11,000.

2. Program Staff

a. Communications Specialist

A person with public relations experience would be very important to the operation during the bicentennial period, and would be desirable. This person can be of assistance in the writing of label texts, the production of exhibit catalogs, the creation of materials for school-support programs, and a variety of other writing and editing jobs. Depending on the degree of experience, a person may be available in the \$8,500 - \$9,500 range; however, a more experienced person will command \$12,500 to \$14,500.

b. Program Coordinator

Since the staff would be responsible for coordinating the museum activities with various elements of the bicentennial programs, this person would be responsible for coordinating the many cultural and educational activities associated with the celebration. The holder should be energetic and enthusiastic, and be knowledgeable in the performing arts. The individual serving in this position would be most helpful in assisting in the development of exhibits and activities. It can be expected that this person would spend considerable time touring the state. Once the museum is open, the coordinator would be responsible for the special programs associated with visiting school children and tourist groups. The position should be budgeted for \$9,000 to \$12,000, depending on the level of experience.

c. Program Staff Secretary

Secretary to assist the Program Coordinator and Communications Specialist. The holder must be able to handle the complex activities of these individuals and assist in the scheduling of programs and activities under their supervision. The salary level should be \$8,000 to \$9,000.

3. Curatorial Department

a. Historian and Chief Planner

A great deal of research goes into even a single exhibition, and the selection and development of overall themes for a new museum is a major task. A person with good training in history and a flair for interpretation should be sought to develop overall continuity for the exhibition program, and to ensure that there is a sound basis of scholarship underlying all of the museum's activities. This probably cannot be done by the director, who will be more than fully occupied with the multitude of daily details; the fundamental responsibility must rest with a senior staff member, who can give full time to it. This person would do a good deal of public relations on behalf of the museum, by lecturing at local historical societies and similar activities. This individual could be responsible for coordinating the state-wide historical program during the bicentennial period. This position would be at the level of assistant professor at the State University and would naturally be on a twelve-month basis. This individual would be the acting deputy director during the initial phases of stage development. A person with experience would demand a salary of \$13,500 to \$15,000 annually.

b. Research Assistant

The duties assigned to the Historian/Chief Planner would require professional assistance. The Research Assistant would undertake research assignments leading to exhibit development and support of the overall program. A recent college graduate in the history field, with little or no professional experience can be most useful in this position. The salary, depending on experience, should be in the \$8,000 to \$9,500 range.

c. Curator of Collections

An individual knowledgeable about historical objects would be needed to seek out the collections which would become part of the permanent holdings of the proposed museum, and also to arrange in the early period for loans from Connecticut organizations and institutions, and from institu-

tions in other states. This person must have curatorial training, preferably in one of the museum graduate programs such as Cooperstown, Sturbridge or Winterthur, or equivalent experience, and should be able to establish a system of curatorial records, carry out basic conservation activities, and generally be responsible for the collections which would form the basis of the museum and for the loans as well. Recognizing that this is an initial effort, previous experience would be necessary. A salary of \$10,500 to \$12,500 should be budgeted.

d. Registrar

As objects and collections are assembled, either as the property of the new museum or as loans, there would be a considerable amount of record-keeping. Objects must be registered in, assigned a number, and covered by a variety of records from the very beginning; if an object's record is lost, it loses a large part of its value to the museum. In particular, loan materials must be meticulously recorded in order to ensure that they are returned in good order to the lenders. Insurance records are extremely important and to lose or break a loan object often results in a public relations disaster entirely out of scale with the actual importance of the object. If there is no person with primary responsibility for such a record-keeping system, the job often does not get done properly. A museum registrar must be a meticulous record-keeper with interest in the objects, and would work for the Curator of Collections. A salary of \$8,500 to \$9,500 should be considered.

e. Curator of Exhibits

This person will be the chief exhibit designer, responsible for gallery and exhibition layout, for the design and supervision of individual exhibition units, for the creation (in cooperation with the Historian and the Curator of Collections) of the interpretative purpose and the label texts, and able to set up the production of labels and other interpretative devices. He must be a good designer, with training or experience in museum design, graphic design, or industrial design (or some comparable

background), and *with practical experience* in the actual construction and installation of exhibits. A person without museum experience should *not* be recruited for this job, no matter what other design experience he has. The interpretation of history through a museum exhibition is a special field, and most graphic and industrial designers have a different orientation and take considerable time to appreciate the different approaches. A trained exhibit designer for this position will demand \$12,500 to \$15,000.

f. Curatorial Department Secretary

This position would support the entire curatorial department and will require an experienced secretary at a cost of at least \$8,000.

g. Exhibition Designer

One or two exhibit designers and supervisors will be required depending on how rapidly the museum organization is to be asked to begin producing exhibits for the bicentennial program. Persons with skills in graphic design, type-styling, lettering, and the supervision of exhibit construction should be selected. Ideally, one of these might be especially interested in graphic design and production, and one in three-dimensional work. These specialists must be skilled in as many of these skills as possible, i.e., silk screening, air brush painting, label and printing layout, photography, photolithography, and similar tools of the commercial art trade. It is not likely that all of these skills will be covered by each of the persons. Recent graduates from Pratt Institute, the Rhode Island School of Design, or similar schools are acceptable if designers with more experience are not available. Starting salaries will range from \$9,000 to \$11,000, depending on experience.

Exhibit Preparation Technicians

Two men will be needed initially, probably a carpenter and a painter or similar combination. These must be excellent craftsmen, able to do a variety of jobs in the creation of exhibit cases and props, installation of lighting devices and audio-

visual equipment, mounting of photo murals, and all the multitude of other craft processes which are involved in the creation of good museum exhibits. They will be required to rehabilitate exhibit objects like wagons, industrial machines, furniture, and similar things, and it is more important to have excellent craftsmen rather than rapid production workers. Quality, not quantity, is desired; it can often be found with older men who bring a lifetime of skill and ingenuity to the position. These craftsmen command good salaries and should be budgeted at not less than \$10,000 per man.

4. Operating Staff

Until physical facilities are available, building maintenance, groundskeeper, janitors, security personnel, visitor receptionist, guides and sales desk assistants will not be necessary; however, if curatorial storage and exhibit shops are created early in the center's development, security and janitorial personnel will be required. No budget is assumed for these positions in the initial year.

It must be emphasized over again that the establishment of a table of organization like this, on a purely hypothetical basis, is always subject to revision. Museum organizations and museum activities are not very standardized enterprises. This proposal is to suggest the *kind* of organization that a future director may develop.

Salaries for museum personnel are constantly rising. These salaries are similar to those reported in a 1972 *Report on Professional Salaries in New York State Museums* for other than New York City Museums. *The 1971 Financial and Salary Survey*, prepared by the American Association of Museums, was also used. These salaries may be considered low when compared with those in the major metropolitan area institutions, i.e., New York and Washington; however, they compare favorably with those in upstate New York museums. It should be recognized that salaries based on 1972 levels will be inadequate in 1974 and more so in 1975.

The suggested salaries of these persons are shown in the Summary of Suggested Personnel Salaries table and would require about \$175,000 per year. To this must be added thirty percent for personnel overhead (a figure provided by State of Connecticut sources), resulting in an initial staff cost of about \$225,000. For the first year, the budget could be reduced to about \$130,000 for salaries, recognizing that many of the positions will not be filled for the entire fiscal year. With the director coming first, some time is needed for him to organize his staff, and some employees would not be hired for more than six months.

A recent survey of State Museums ¹ indicated that personnel costs constitute about sixty-five percent of the annual operating budget. Exhibits production accounted for only thirteen percent; however, a new facility will have a smaller personnel budget and a considerably larger exhibits budget since the preparation of new exhibits for a new facility requires greater initial expenditures. Once the Museum is fully operational the continuing exhibit production budget will be reduced as a percentage of the gross expenditures.

¹ Robert L. Domm, "What's Your Status?" *Museum News*, March 1973, pp. 45-49.

**A State Museum of Connecticut History
Summary of Suggested Personnel Salaries**

Starting Salary

Director's Staff

Director	Minimum \$25,000
Director's Secretary	Minimum \$ 9,400
Fiscal Specialist	\$ 9,400 - \$11,000

Program Staff

Communication Specialist	\$12,500 - \$14,500
Program Coordinator	\$ 9,000 - \$12,000
Secretary	\$ 8,000 - \$ 9,000

Curatorial Staff

Historian/Chief Planner	\$13,500 - \$15,000
Research Assistant	\$ 8,000 - \$ 9,500
Curator of Collections	\$10,500 - \$12,500
Registrar	\$ 8,500 - \$ 9,500
Curator of Exhibits	\$12,500 - \$15,000
Secretary	Minimum \$ 8,000
Junior Designer	\$ 9,000 - \$11,000
Junior Designer	\$ 9,000 - \$11,000
Production Technician	Minimum \$10,000
Production Technician	Minimum \$10,000

Total Salaries: Sixteen Positions Approx. \$175,000

FY74-75 Budget Estimate
State Museum of Connecticut History

FY74-75 Initial Budget

As indicated in the Chairman's remarks at the Appropriations Committee subcommittee hearing, a budget of \$200,000 is necessary to begin the staffing, planning and acquisition programs of the State Museum of Connecticut History. This sum is divided into three major categories: staff, office and operating costs.

The requested salaries budget of \$130,000 will permit sixteen positions to be filled as outlined in the initial staffing statement. This will provide personnel for the Director's, Curatorial and Program staffs and permit all facets of the program to be undertaken in order to meet the suggested ground-breaking date of January 1, 1976.

Office costs represent the rental of office space and the acquisition of office furniture and equipment. Since these items for the Museum staff are not included in the proposed FY74-75 budgets of the Department of Public Works (for space) and the State Comptroller's Office (for furniture and equipment) sums are included in this request for the museum's first year.

The operating budget includes supplies, travel, storage for collections, recruiting expenses, telephone and miscellaneous. In addition, sums are included for printing and exhibit production to permit the museum staff to produce materials to explain the program goals of the museum and to produce an initial exhibit for display throughout the state.

The FY74-75 budget is as follows:

Salaries		\$130,000
Office Rent	\$15,000	
Office Furniture	10,000	
		25,000
Storage	\$ 4,000	
Travel	4,000	
Office and Design Supplies	3,500	
Printing	5,000	
Recruiting Expenses	3,000	
Telephone	2,500	
Exhibit Production	20,000	
Miscellaneous	3,000	
		45,000
Total		\$200,000

No funds are requested during the coming fiscal year for capital expenditures.

NOTE: During the preparation of the report, the State Legislature appropriated \$75,000 for the FY74-75 budget. Thus, the second year budget (FY75-76) should approximate the initial budget proposed in the report.

Budget During Construction Phase

For the third year of operation the entire staff as outlined for initial staffing should be on hand. This will require a minimum of \$175,000 to staff the sixteen positions. After the initial years, expenditures for office rent and furniture will not be required since these costs become part of other State agency budgets.

The costs for travel, exhibit production, printing and office and design supplies will be increased. During the second and third years of operations, the staff will be fully involved in the development of the building program and the concept of the exhibit to be housed in the museum. Limited exhibit production will be underway primarily for traveling shows prior to the opening of the museum. Collections acquisition will also be a major activity during this year.

Operating expenses will require additional funds totaling \$125,000 or an annual total of at least \$300,000. These operating funds will be used as follows:

Storage Facility

The storage of museum collections requires space that is secure and climatically controlled to avoid damage or deterioration of collections. Thus, during the pre-construction period, space must be leased to house acquisitions. The space must be accessible to curators for study and use in the exhibit development program and not be simply storage areas for crated objects.

Travel

Extensive travel will be required for acquisition of collections and for the development of the museum facilities. In addition, curators and other personnel will begin the museum's program to provide technical assistance to historical societies and local museums, an important responsibility of the museum.

Consultants

Specialists in various museum fields will be required to assist the staff during the design of the museum, its exhibits and its organization and programs. Funds are programmed for this function.

Exhibit Production

This item is primarily for exhibits to be used by the museum for traveling exhibits prior to the opening of the museum to advance the museum program and to emphasize the "institutional" aspects of the museum.

Printing

This item is for cost of printing publications which advance the museum's varied programs.

During the second and third years, bond funds will probably be utilized for building design, exhibit production for the museum and possibly for building construction if the design process is advanced expeditiously.

For the third year, the size of staff can be relatively static with a salaries budget of \$200,000 which represents salary increases. The expenses budget would also increase to \$150,000 for the continuation of the previous year's program with slight increases in collections storage, exhibit design and production.

The staff requirement beyond the third year will depend on the progress achieved in the design and construction of the permanent facility. If the building can be opened in the fourth year, the staff requirement indicated in the long range staff projections can be used. If not, the staff will resemble the third year staff with increases in the Director's Program and Curatorial Staffs.

**FY75-76 Budget Estimate
State Museum of Connecticut History**

Salaries — sixteen positions	\$175,000	
Storage Facilities	\$15,000	
Travel	10,000	
Office and Design Supplies	8,000	
Printing	10,000	
Recruiting Expenses	2,500	
Telephone	5,000	
Exhibit Production	40,000	
Miscellaneous	10,000	
Consultants	25,000	
		125,500
Total	\$300,500	

Long Range Staff Requirements

With the opening of the State-Museum of Connecticut History, the staff requirements will change to reflect the increase in program.

The table indicates an approach to staffing the museum at its opening with approximately twenty percent of the exhibits in place and with approximately fifty percent in place within one year. The second "milestone" is about five years from the opening with all exhibit space utilized and the third is about ten years from the opening when redesign and replacement of exhibits on a rotating basis will be in effect.

Opening of Museum

The initial staff with three major sections, director's office, program staff and curatorial staff is augmented with the opening of the building with a security staff and an operating staff.

Security Staff

The security staff is headed by a chief of security with eight equivalent positions (full and part-time) for security officers. Staff will be required for twenty-four hour security, every day irrespective of the visitor hours. Assisting the security officers are attendants whose responsibilities include daytime custodial service and general security duties. Three equivalent positions are proposed which will permit one or two attendants to be on duty during all open hours.

Operating Staff

The operating staff is headed by a Superintendent of the Plant whose responsibilities include all operational and maintenance functions within the building and on the grounds. His staff includes a grounds crew of four persons, custodial crew with six equivalent positions and maintenance personnel with three positions.

Director's Office

For the opening of the building, the Director's office

is increased by upgrading the Fiscal Specialist to be Business Manager recognizing the additional duties of handling revenues from admissions and sales as well as increased internal management requirements created by the existence of the building and increased program activities. Added to the director's office are a bookkeeper, cashiers, and gift shop attendants. The gift shop attendants will also staff an information desk to direct visitors to the many historic sites in the State and provide general assistance to the visitors as required.

Program Staff

The program staff is increased by adding a Director of Education and an education specialist to operate all programs for school children and other groups. This office will also select, train and supervise the Docents (volunteer guides) who will be available on established shifts to guide groups through the museum exhibits and educational activities.

Curatorial Staff

The curatorial staff is increased by the addition of a librarian, an associate curator, an assistant curator and two secretaries. These positions reflect an increase in the curatorial activities in a new museum with growing collections, additional exhibits, technical assistance and educational responsibilities.

These increased positions for the Director's office, curatorial and program staff **should be filled at least six months prior** to opening the building. Operating staff will be required two to three months before opening and the security staff about one month before opening to facilitate training and to prepare for the opening of the building.

The staff of twenty-seven and one-half positions in the Director's, Program and Curatorial staffs plus twenty-six positions in the Security and Operating Staffs will meet the basic operating requirement. It is estimated that this staff will require a budget of \$490,000 based on 1973/74 salary scales.

Five Years After Opening

Five years after the opening, the staff would be increased by ten positions with three and one-half positions in the Director's office, primarily for additional cashiers and gift shop attendants. The Program staff is increased by three positions to reflect increased educational activity for a completed museum. Curatorial staffs would be increased by one position, an assistant curator. The Security staff is increased by two and one-half positions since more space is open to the public and the Operating staff remains fixed.

These increases add approximately \$80,000 to the salaries budget based on 1974 figures. This does not reflect annual increases. These positions are required to staff the completed museum with all exhibit areas open to the public and to provide for increased educational and technical assistance programs in the museum.

Ten Years After Opening

After the museum has been in full operation for not more than five years, new collections have been acquired and the need to rotate exhibits and replace exhibits becomes necessary. A museum is **not** a static institution and only through a dynamic approach to meeting the curiosity and desire for knowledge of the public will the museum be a continually successful institution.

To meet the changing requirements and to continue ongoing activities, the staff is slightly increased.

An additional educational specialist is added to the program staff, and one exhibits designer is replaced by an additional exhibits production technician to reflect the emphasis on exhibit rotation. The budget increase would be about \$10,000 annually based on 1974 salary scales.

It must be emphasized that this personnel structure is only **one** way of meeting the personnel requirements for a new cultural and educational institution. The Museum Director must have the right to structure a staff based on his concept to fulfill the goals of the museum as established by the Historical Commission.

A State Museum of Connecticut History
Summary of Suggested Personnel
Long Range

	Opening $\pm$ 1 Yr. 50% Exhibits Installed	5 Yrs. 100% Exhibits Installed	10 Yrs. 100% Exhibits Installed Rotation Underway	Starting Salary FY74 Salary Level
Director's Staff				
Director	1	1	1	Minimum \$25,000
Director's Secretary	1	1	1	Minimum 9,400
Business Manager	1	1	1	\$15,000 - 18,000
Bookkeeper	1	1	1	9,000 - 11,000
Cashier	1 1/2 eq.*	3 eq.	3 eq.	6,500 - 7,400
Secretary		1	1	Minimum 8,000
Gift Shop Assistants	2 eq.	3 eq.	3 eq.	Minimum 6,500
Program Staff				
Communication Specialist	1	1	1	\$12,500 - \$14,500
Secretary	1	1	1	Minimum 8,000
Program Director	1	1	1	Minimum 12,000
Administrative Assistant		1	1	Minimum 9,500
Director of Education	1	1	1	Minimum 12,000
Education Specialist	1	2	3	Minimum 10,500
Secretary		1	1	Minimum 8,000
Curatorial Staff				
Historian/Chief Planner	1	1	1	\$14,500 - \$17,500
Research Assistant	1	1	1	9,000 - 10,000
Librarian	1	1	1	Minimum 9,500
Secretary	1	1	1	Minimum 8,000
Curator of Collections	1	1	1	\$14,500 - \$17,500
Registrar	1	1	1	9,000 - 10,500
Associate Curator	1	1	1	11,000 - 14,000
Assistant Curator	1	2	2	9,000 - 10,500
Secretary	1	1	1	Minimum 8,000
Curator of Exhibits	1	1	1	\$13,500 - \$16,500
Designers	2	2	1	9,500 - 10,500
Production Technicians	2	2	3	Minimum 10,500
Secretary	1	1	1	Minimum 8,000
Security Staff				
Chief of Security	1	1	1	\$ 9,000 - \$11,000
Security Officer	8 eq.	9 eq.	9 eq.	7,500 - 9,000
Attendants	3 eq.	4 1/2 eq.	4 1/2 eq.	Minimum 5,200
Operating Staff				
Superintendent of Plant	1	1	1	\$13,000 - \$15,000
Grounds Crew Chief	1	1	1	7,500 - 9,000
Grounds Crew	3	3	3	6,000 - 7,000
Custodial Crew - day	3 eq.	3 eq.	3 eq.	Minimum 4,500
Custodial Crew - night	3 eq.	3 eq.	3 eq.	Minimum 4,500
Electrician	1	1	1	8,000 - 10,000
Carpenters	1	1	1	8,000 - 10,000
Stationary Engineer/Plumber	1	1	1	8,000 - 10,000

*Equivalent

Based on a salaries to operating ratio of 50 - 50 for the initial years after the opening of the museum, the operating cost would be approximately \$500,000 annually. After five years, the personnel costs would constitute about sixty-five percent of the total budget. These are operating estimates based on various surveys of state museums.

Site Selection Criteria

The Connecticut American Revolution Bicentennial Commission desires to locate the State Museum of Connecticut History where it will be easily accessible to the existing population concentrations in the State, yet remain as near to the center of the State as possible. The two corridors which appear to be most oriented to the State's resident concentrations are the I-91 corridor between New Haven and Hartford and the I-84 corridor between Waterbury and Hartford. However, site selection is not limited to these corridors and the Commission will review any site offered irrespective of location.

It is also considered desirable to locate the Museum on publicly-owned property provided the property can be utilized without an adverse environmental impact. The Commission will also consider privately-owned sites but recognizes that land acquisition adds to the cost and to the many difficulties a project of this type may encounter.

The site selection criteria provided are to be used as a checklist to permit evaluation of comparable items. The checklist has been designed primarily for a suburban or rural site in order for the Museum to have sufficient ground for outdoor activities and exhibits. If an urban site is to be considered, the acreage required may be substantially reduced to a building site plus very limited exterior open space.

These criteria also serve as the basis for an Environmental Assessment and to evaluate the consistency of the use of the property with the master plan of the community in which the site is located. The proposal must also be consistent with the development plan of the State or local agencies holding title to the property where applicable.

Checklist of Criteria for Museum Site Selection

1.
Does the site contain between 150 and 250 acres or more?

2.
Is the topography suitable for development?
3.
Is the soil on the site capable of bearing a large structure without excess sub-structure cost or excess cost for excavation?
4.
Is the site well drained and is there a low water table year-round?
5.
Is the site free from surface flooding?
6.
Is the site served by a public water system?
7.
Is the site served by a public sewer system?
8.
Are electric power and gas lines located nearby?
9.
Are there *full-time* police, fire and other public protection services in the community?
10.
Is the site on, or within three minutes of, an expressway?
11.
Is there direct access available from the major expressway to the site?
12.
Will future secondary roads be adequate to handle the anticipated traffic?
13.
Is the site served by: train, bus, air, water transportation?
14.
Is the museum compatible with existing land uses?
15.
Is the museum compatible with proposed land uses?
16.
Is the site central to population concentrations?
17.
Is the site on existing tourist routes and near other attractions?
18.
Is the site directly related to other historical sites?
19.
Will the museum have a positive economic impact on

the local economy?
20.

Will the museum have a disruptive affect on any of the following: existing plant life, existing animal life, groundwater, natural drainage systems, natural landscape, water quality, air quality, noise level ?
21.

Is the site aesthetically pleasing in its natural state?

The checklist has not been weighted and a scoring method is not recommended. It may be necessary to weight answers at a later date; however, this practice should be avoided.

An explanation of each question is provided to guide those using the checklist.

1. Size

To reflect a rural or fringe suburban environment, a site ranging from 150 to 250 acres is suggested. The site must be capable of providing space for a building or buildings of substantial size, adequate parking for peak visitor loads, outdoor amphitheater and auditorium, parade grounds, nature walks, and open space. At the same time, consideration must be given to future site expansion.

The site size must also relate to the quality of the environment.

However, if it is desired to place the museum on a site with a very urban character, the size criteria may be substantially reduced to reflect the proposed urban character.

2. Topography

To achieve an attractive environment for the museum, the site should be preferably rolling, rather than flat, countryside.

The selected site may have portions that are topographically unacceptable, including steep grades, marshes, etc. If the site is of sufficient size to include this type of land to provide variety and aesthetics of the site, the site will be more interesting and will have

better vistas and environmental quality.

3. Soil and Condition

Soil and subsoil conditions must be suitable for excavation, site preparation, placement of utility lines, grading, and planting. Subsoil conditions should provide suitable bearing capacity for economical construction of buildings. Bearing capacity will be limited if the site contains mulch, peat, poorly compacted fill or shifting sand.

Test borings will normally be needed to detect presence of ledge, hardpan, or other obstructions to efficient excavation for necessary utilities, foundations, or basements.

4. Drainage

An essential factor in site selection is a water table low enough to protect against basement flooding and interference with sewerage systems. Swamps or marshes should be avoided for a building site; however, this type of land can contribute to an environmentally attractive site. There should be a sufficient slope to permit surface drainage of normal rainfall and free flow of sanitary sewers.

5. Flooding

Flooding from any source is a major concern in any potential site. Any site which may be flooded must be immediately rejected since the risks are too great for a museum to assume.

6. Public Water Supply

A site with a public water system that can provide an adequate supply has various advantages over a well. However, where a new supply must be developed, the usability of a site may be wholly determined by the problems of such installations. Factors such as: uncertainty of flow, depths needed to assure safe quality, limitations for fire fighting, conformance to health standards such as minimum distances from sewer systems, should be weighed in relation to costs. A site connected to a public water supply with maintenance of official health standards is generally preferable to one with individual on-site systems.

7. Public Sewer System

Removal of wastes by a water carriage system is standard practice and is usually accomplished by either discharging to a public sewerage system or treatment on-site. Unless the site contains exceptionally dry and sandy subsoil with gentle slopes, properly separated from a public water supply watershed, on-site systems should be avoided. For a public facility as large as a State Museum Complex, a connection to a public sewer system is recommended.

8. Other Public Utilities

Electricity and gas are important energy sources necessary to the feasibility of the museum. These should be available to the site without extensive cost or adverse impact on the capacity of these systems.

9. Fire, Police and Other Protection Services

The operation of a museum demands primarily adequate fire protection services. Extensive fire warning systems are provided to allow minimum response time by well trained professional departments.

The museum provides internal guard and watchman services and does not rely extensively on local and state police. Nevertheless, the availability of these services, with a minimum response time, is desirable.

10. Accessibility from Expressways

To serve both the resident and non-resident visitors, the site selected must be extremely accessible to major freeways, preferably the north-south arteries. A site which is visible from an expressway need not be the most desirable, if the secondary roads do not provide easy access to the site.

Sites where these expressways intersect should be given special attention if for no other reason than greater accessibility from all directions. Obviously, land in these locations has a high market value and may be difficult to obtain for a museum site, if a site is to be purchased.

11. Secondary Road Connections

The museum site should be served by a modern system of secondary roads connecting the facility to the expressway(s). It will be important to have more than one entrance and exit road serving the site to avoid peak load traffic congestion. Alternate routes will also be needed for emergencies. Once visitor projections are available, the number of lanes required can be established.

12. Proposed Secondary Road System

If the secondary road system is programmed for improvements, will the upgraded system be adequate to meet peak traffic demands of the museum?

13. Public Transportation

Although the site will probably be away from population centers, the availability of public transportation is desirable. Specialized approaches, historic railroad, river boat, bus lines, etc., are also of importance to stimulate visitation by all age groups.

14. Compatibility with Existing Land Uses

The museum could be located in low-density residential areas, adjacent to or in a civic complex, near commercial areas or even shopping centers to promote use. Isolated sites or sites next to incompatible uses, such as heavy industry, junk yards, etc., should be avoided. In any case, adequate land should be available to provide adequate parking facilities, multi-activity areas, expansion and transitional buffer areas separating the site from adjacent uses.

The museum must be free from external influences which could, through noise, vibration, smoke, odor, etc., adversely affect the collections or the well-being of the visitor.

15. Compatibility with Proposed Land Uses

A review of local Master Plans or Plans of Development will indicate the best use of land and the anticipated development concept for the environs of a proposed site. Wherever possible, the site selected should conform to the goals expressed in the local plan.

16. Site Related to Population Concentrations

A museum is an educational institution and should be located centrally to the population concentrations to afford the greatest degree of accessibility to the people of the state.

17. Site Related to Tourist Routes

The secondary role of a museum is to attract visitors to the state. The location selected should also serve this function. The site must be accessible to all of the principal tourist routes.

18. Site Related to Other Historic Sites

An asset to the site would be its location within an historic area or area of environmental quality which would increase the visitor's awareness of the natural setting in which the history of Connecticut unfolded.

19. Positive Economic Impact on Local Economy

The site selected should have a positive economic impact without unduly taxing local public facilities or removing excessive land from local tax rolls.

20. Environmental Disruption

Although an Environmental Impact Statement may not be required, knowledge of the impact on environmental and ecological systems should be known before a final selection is made.

21. Aesthetic Quality of Project

Irrespective of the style of architecture, the building and its relationship to the site must provide the state with an asset and a facility which is a credit to the state.

Site Selection Review

The location for the museum has *not* been selected by the consultants or the Historical/Bicentennial Commissions. The Commissions have undertaken a preliminary review of sites in order to prescreen potential sites and to test the site selection criteria prepared by the consultant.

The initial screening of sites was based on a list provided by the Department of Finance and Control. This list included only State-owned sites.

1. Dinosaur State Park in Rocky Hill.
2. State Police Academy in Meriden.
3. Veterans Home in Rocky Hill.
4. Wethersfield Cove in Wethersfield.
5. Bradley Airport in Windsor Locks, Suffield and East Granby.
6. Wharton Brook State Park in Wallingford.
7. Connecticut Department of Transportation — Excess Property next to Wickham Park in Manchester.

In addition to these sites, additional sites were suggested from other sources including:

1. Osborndale State Park in Derby.
2. Connecticut Valley Hospital in Middletown.
3. Rocky River Realty Company (Northeast Utilities) site in Middletown.
4. Lamentation Mountain State Park and adjoining private property — Berlin.
5. Private property between Wilbur Cross Highway, Route 72 and Middletown Road in Berlin.
6. Five additional private sites in Berlin.
7. Connecticut State Women's Prison, Niantic.
8. Connecticut State School for Boys, Meriden.
9. Undercliff State Hospital, Meriden.
10. Manchester Community College in Manchester.

From these lists of privately and publicly-owned sites, the following sites appeared to be worthy of a further review. The sites rejected were rejected primarily

because there were conflicting uses on the site. The availability was questionable or the site was unsuitable for a museum based on the selection criteria.

Osborndale Park in Derby.

Connecticut Valley Hospital in Middletown.

Lamentation Mountain State Park and adjoining private property in Berlin.

Connecticut State School for Boys in Meriden.

On December 28, 1973, the Connecticut Bicentennial Commission addressed a letter to every municipality in Connecticut asking for nominations of suitable sites for the museum. This solicitation resulted in the following additions to the inventory.

1. Salmon Brook Reservoir owned by the Metropolitan District Commission in Glastonbury.
2. Josephine Kessler site, private property in Lebanon.
3. "Highfield" a private property in Harwinton.
4. Stollman Site, private property in Durham.
5. Raskin Site, private property in Durham.
6. Sleeping Giant State Park in Hamden.
7. Greenbacker Site, private property in Durham.
8. Research Park, private property in Wallingford.

This list was reviewed by the Commission staff and in selected cases, additional information was requested from State, regional and local agencies. As a result of these nominations, the following site appears to be usable for the museum:

Salmon Brook Reservoir in Glastonbury.

A further analysis of all the sites recommended by various agencies, communities and organizations with additional input from public agencies suggests that the following sites should be considered by the Bicentennial Commission for the museum:

Salmon Brook Reservoir in Glastonbury.

Osborndale State Park in Derby.

Central Valley Hospital in Middletown.

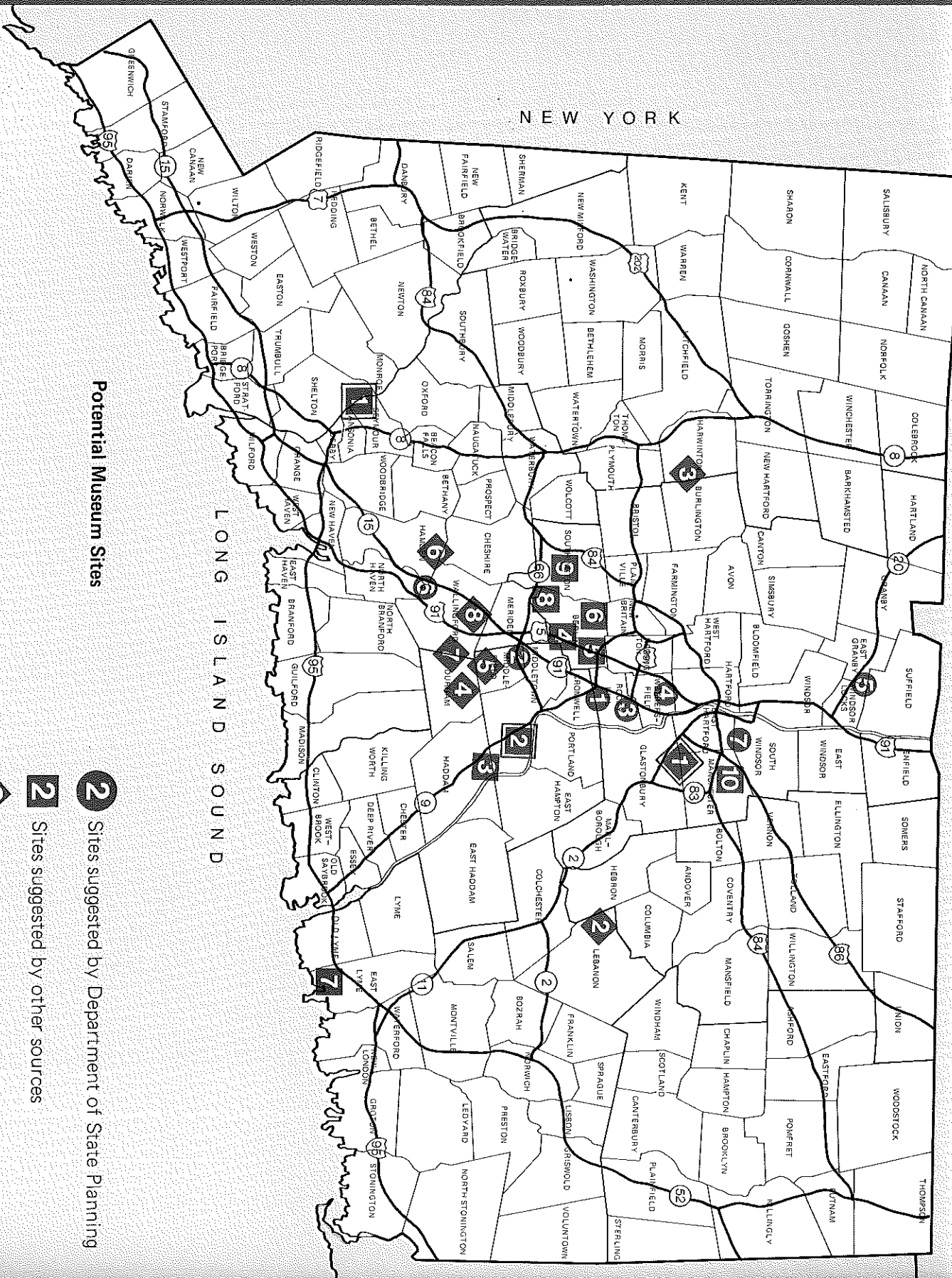
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SCALE

MASSACHUSETTS

NEW YORK

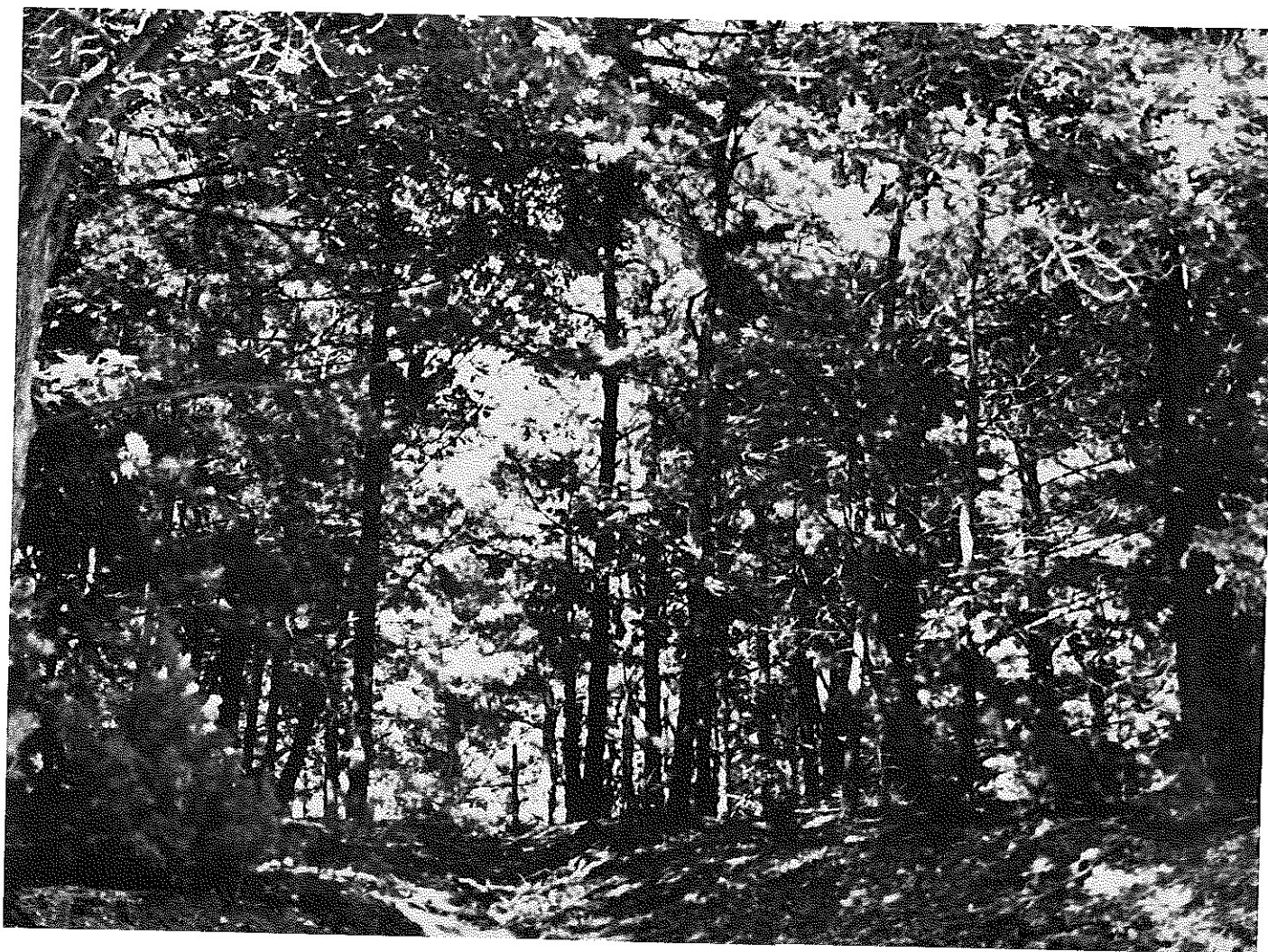
LONG ISLAND SOUND



Potential Museum Sites

- 2 Sites suggested by Department of State Planning
- 2 Sites suggested by other sources

Description of Recommended Sites



Salmon Brook Reservoir Site — Glastonbury

This 600-acre tract owned by the Metropolitan District Commission is in the northern portion of Glastonbury. One parcel containing 265 acres appears to be well-suited for the museum and is accessible to Interstate Highways 84, 86 and 91 as well as Connecticut Route 2.

A preliminary review indicated the soils are conducive to development and utilities are readily available in the vicinity of the site.

The environs of the site are scenic and the beauty of the site itself makes it worthy of further consideration.

The site is owned by the Metropolitan District Commission. Their willingness to release the site has not been determined.



Osborndale State Park in Derby

The State Park contains 350 acres overlooking the Housatonic River. It is accessible from Route 8 which is being rebuilt to the Merritt Parkway and Interstate 95. It is also connected to the Wilbur Cross Parkway via Routes 34 and 8.

A preliminary survey indicated the eastern portion of the site suitable for development. Utilities systems are available in the vicinity. From the site superb vistas of the Housatonic River Valley are provided, and the site is an attractive combination of meadows, forests and varied topography.

The site is publicly owned. The Parks Director of the Department of Environmental Protection is opposed to its release for a museum site. The Department of Environmental Protection has not commented, therefore, the availability is unknown.



Connecticut Valley Hospital Site — Middletown

A site containing approximately 100 acres on the east edge of the Hospital grounds is available for the museum. The site borders on the Connecticut River and is dominated by a hill with an elevation of over 200 feet. The site offers a superb vista of the Connecticut River and the Pecauset Meadows and Straits Hill to the north.

The site is accessible via Route 9 (0.6 miles to the west) from Interstates 91 and 95. Local access roads are available. The site is also accessible by boat if proposed city docking facilities are constructed and

by rail if the Valley Railroad line can be extended northward to Middletown.

A preliminary review of the site indicates the soil conditions are suitable for development. The topography is gently sloping and portions of the site are tree-covered. Utilities are available through either the City of Middletown or the Connecticut Valley Hospital.

The site is under the jurisdiction of the Connecticut Valley Hospital which appears to be willing to make it available.

Recommendation

No ranking of these sites is provided by the consultants. All sites appear to be suitable for the museum and provide an environment that is attractive and representative of the State of Connecticut.

It is recommended that the Historical/Bicentennial Commissions conduct an open hearing at which each site can be presented to the Commissions and its assets and localities evaluated. It is suggested that each town be asked to make a presentation indicating its interest in the museum and the extent of official support for the museum in their community.

As a case study (Appendix), the Connecticut Valley Hospital site was used to test the criteria and provide an example for the form to be used in presenting each site.

Market Demand & Economic Impact Analysis

The economic analysis element of the State Museum of Connecticut History feasibility study is focused on two primary tasks. (1) forecast of the overall magnitude of potential demand for a state museum and identification of potential source of demand; and (2) estimates of net benefits to the Connecticut economy which can be attributable to development of the state museum. The section to follow summarize the findings and conclusions of the analysis and discuss locational considerations which will be helpful in development planning. Supporting data is presented in a series of tables appended at the end of this chapter.

Market Demand Forecasts

Projected patronage of the State Museum of Connecticut History is divided into two sources of support. The primary source is expected to be Connecticut residents who visit the museum during day trips, virtually none of whom stay overnight. A secondary, but still significant source of patronage is vacationists to, or passing through, the State of Connecticut.

Connecticut Residents

Attendance by state residents has a direct relationship to travel time to the museum. Analysis of demand for other public recreation facilities has shown that most one- and two-day recreation trip travelers seek to minimize the distance traversed to reach their recreational destination. If this is not possible, the result is a decline in the number of potential users when the travelers are called upon to take a substantial period of time to reach their destinations. For analytical purposes, it is assumed that the proposed museum would be developed as an attractive cultural and recreational complex, charging only a nominal fee for admittance, and capable of attracting families on an outing as well as other recreationists in the state. Based on attendance at similar facilities, the following relationship between travel time (one-way) and patronage is estimated as follows:

Attendance/Travel Time Factor For Residents

Travel Time From Residence	Percent of Population Estimated to Visit Annually
Within fifteen minutes	80.0 percent
15 - 30 minutes	33.0 percent
30 - 45 minutes	25.0 percent
45 minutes —	
1 hour 15 minutes	15.0 percent
1 hour 15 minutes —	
1 hour 45 minutes	8.5 percent
1 hour 45 minutes — 2 hours	7.5 percent

Based on this information, the equivalent of approximately 80 percent of all residents living within a fifteen minute drive of the museum can be expected to visit annually. Although this figure appears high (and allows for some persons visiting the museum more than one time each year), the close proximity will make the institution attractive to people living nearby. It is recognized that outside of a fifteen-minute trip, the factor drops radically. However, an average of only 7.5 percent of all residents living over one hour and 45 minutes away can be projected to visit the museum once in a given year.

By 1980, total population in the State of Connecticut is projected to reach 3,161,000, an increase of 129,000 or four percent over the 1970 population. The projected increase is a modest one, based on past trends of population migration and accepted forecasting techniques. This forecast is generally consistent with those reported by the various planning agencies.

The largest percentage increases are expected to occur in Windham County (nineteen percent) and Middlesex County (eighteen percent). The two largest counties, Hartford and Fairfield, are projected to increase by only one percent and three percent respectively over the ten-year period.

When the potential percentage shares or capture-ratios are applied to projected 1980 county popula-

tion (see Tables 1 and 2, and Plate 1 in the Appendix), estimated visitation by county would be as follows in 1980:

Museum Location (County)	(In Thousands)	
	Households (County)	Total Attendance (Statewide)
Litchfield	192.4	608.0
Hartford	270.7	855.4
Tolland	185.1	584.9
Windham	130.1	411.1
Fairfield	186.0	587.8
New Haven	308.8	975.8
Middlesex	219.9	694.9
New London	160.9	508.4

Therefore, based entirely on distribution of the state population, a state museum could potentially attract up to 975,000 state residents annually by 1980, depending on the exact location within the state. A median estimate based on a location close to the geographical center of the state would be about 750,000 state residents annually.

Out-of-State Visitors

Estimates of potential non-resident attendance are derived in Tables 3 to 9. Including the impact of increased American Revolution Bicentennial visitation to Connecticut, it is estimated that vacation visitation (as opposed to total visitation) will reach 13,400,000 visitors in 1976 and fall off to 12,400,000 visitors by 1980.

The largest share of out-of-state vacationists (48.8 percent) visit New London County, which is attributable to the presence of the Mystic Seaport and some of the most popular state parks located in southern New London County. New Haven, Hartford and Middlesex Counties together account for only 36.6 percent of the out-of-state visitation. For analytical purposes, it is assumed that the distribution of tourists among the eight Connecticut counties will remain at approximately the same relationship as it has in the past.

Through-travelers — those who are enroute to destinations outside the state of Connecticut — account for 65 percent of all vacationists. It can be estimated that the State Museum of Connecticut History should be able to attract up to five percent of these through-travelers, depending on the location of the museum. However, because of its presumed minimal attraction to this category of out-of-state visitors, it is assumed that most travelers passing through on highways more than ten miles from the site will not visit the museum.

Estimates of potential capture of other out-of-state vacationists (those staying at least one night in the state) are based on the nature of major attractions in the various counties. Sixty percent of all visitation can be accounted for from attendance figures at these attractions (see Table 10 and Plate 2). In some counties, these are primarily state parks and camping facilities; in others there are museums, fairs and other similar attractions. It is assumed that persons attending the latter types of attractions are more likely to visit the state museum. Accordingly, attendance projections reflect visitation to existing historical/cultural/educational facilities and events.

To account for the remaining forty percent of out-of-state vacationists, the 1966 survey conducted by the University of Connecticut was used.¹ In the survey, 58 percent of all vacationing motorists reported their major activity consisted of general sightseeing or visiting historic places. Estimating that 30 percent of this group (using 50 percent instead of 58 percent to avoid double-counting those visitors who engaged in both general sightseeing and visiting historic places), or fifteen percent of those visiting places other than the major attractions, could potentially be attracted to the State Museum of Connecticut History ($50\% \times 30\% = 15\%$).

Demand Analysis: Conclusions

Based on county-by county estimates, which were necessary due to data limitations, annual museum

¹ University of Connecticut, *Non-Resident Travel in Connecticut, Summer of 1966*.

attendance by 1976 theoretically could vary from 430,000 visitors (Tolland County) to 1.2 million visitors (New Haven County). However, because of corridor or cluster configurations of development patterns in the state, and the fact that the major share of visitation is expected to come from state residents, it seems advisable to locate the museum on a site where visitation from a number of counties is maximized.

For economic and demographic considerations, the optimum location for the museum is between New Haven and Hartford or between Hartford and Danbury. A location in either of these areas will forego some potential out-of-state visitors in the New London area, but will maximize availability for state residents.

It is estimated that a museum located in either of these corridors can reasonably expect to result in about one million visitors annually. This is an optimistic but reasonable forecast which presumes:

1. Nominal admission charges with reduced rates for children.
2. Exhibits and displays within a format which is entertaining for families.
3. Attractive eating, drinking and other ancillary facilities.
4. Effective advertising and publicity program.
5. Good access to major arterials, particularly I-91 or I-84.

Developed in such a fashion, we foresee a highly favorable reception for such an institution among residents and tourists alike.

Projected Economic Impact

The economic benefits associated with development of a state museum are primarily in terms of increased

employment — both during construction and during operation and the resultant increases in state sales tax revenue. In calculating these benefits, it has been assumed that expenditures by Connecticut state residents are not net benefits to the state, since they presumably would have occurred elsewhere in the state without the museum. It can be argued that the development of the state museum may retain resident recreation expenditures that would otherwise have gone to New York, Massachusetts, or elsewhere outside the State of Connecticut. However, for purposes of this analysis, only expenditures by out-of-state vacationists visiting the museum are counted as net new benefits to Connecticut.

In calculating the economic impact, it has been assumed that a facility with the following characteristics is to be constructed:

Facility construction cost	\$10 million
Exhibits and Display	\$ 5 million
Total Cost	\$15 million
Initial Operating Budget	\$300,000/year (\$175,000 = salaries)
Budget at Stabilized Operating Level	\$500,000 (\$300,000 = salaries)

Expenditure Patterns

In 1966, overnight visitors spent an average of \$11.30 per person per day and through-travelers an average of \$2.10 per person per day. From 1966 to 1976, real disposable personal income (income in terms of constant purchasing power) is projected to increase by twenty percent (see Table 7). Moreover, the share of total income allocated to recreation has increased, as people have more leisure time and more discretionary income to spend. Accordingly, it is estimated that per capita expenditures will increase by 35 percent from 1966 to 1976 (55 percent by 1980), calculated as follows:

	1976	1980
Expenditures by Overnight Vacationists (1966)	\$11.30	\$11.30
Minus Expenditures by Through-Travelers (1966)	- 2.10	- 2.10
	\$ 9.20	\$ 9.20
Expenditure Premium Since 1966	\$ 3.22 (+35%)	\$ 5.06 (+55%)
Increased Daily Expenditures by Through-Travelers Induced to Stay Overnight	\$12.42	\$14.26
Expenditures by Overnight Vacationists (1966)	\$11.30	\$11.30
Expenditure Premium Since 1966	\$ 3.95 (+35%)	\$ 6.22 (+55%)
Increased Daily Expenditure by Vacationists Induced to Stay in Connecticut An Extra Night	\$15.25	\$17.52

The primary economic benefits to the state are associated with overnight expenditures as opposed to minimal expenditures by through-travelers. Through-travelers who spend a night in Connecticut accommodations as a result of visiting the museum will spend an additional \$12.42 per person (\$14.26 in 1980) which they otherwise would have not spent in Connecticut. Vacationists who plan to stay overnight in the state but stay an extra night are estimated to spend an additional \$15.25 per person (\$17.52 in 1980) which they otherwise would not have spent.

Tax Benefits

Table 15 summarizes the increased tax revenue to the state as a result of increased expenditures. Fifty percent of the out-of-state travelers are considered "short-time" vacationists who spend up to three weeks in the state. It is estimated that half of these who attend the museum will elect to stay an extra night. Vacationists spending more than three weeks will more likely rearrange their vacation plans to include a visit to the museum, rather than spend an extra night in the state because of the museum.

Total increased tourist spending as a result of the museum is estimated at \$2.2 million in 1976 and \$2.3 million in 1980. Using the present sales tax of 6.5 percent, increased tax revenues to the state are projected to be approximately \$145,000 in 1976 and \$150,000 in 1980.

In addition, taxes associated with construction of the museum facility and its exhibits add to the net benefits of the state. For purposes of this analysis, on total construction costs of \$15 million, wages and salaries of 60 percent, or \$9 million, construction materials of 30 percent, or \$4.5 million, and profits of ten percent, or \$1.5 million are assumed. The cost of materials is excluded from net benefits to the state since purchases are rarely retail transactions where a sales tax is paid and many materials are manufactured outside of Connecticut.¹ Considering only wages, salaries and profits, it is assumed that 75 to 80 percent is spent in Connecticut (\$8 million), 60 percent of which is spent for consumption (\$4.8 million). Projected sales tax revenues to the state, then, total \$312,000.

Some portion of the incomes flowing from the museum project will be re-spent by their recipients in the state. Since sales taxes are levied each time money is re-spent, it is reasonable to add the resulting

¹ Exclusion is also suggested by the U.S. Department of Commerce in *Determination of Area Redevelopment Benefits from Water Resources Projects*, 1964.

increased tax revenue to the benefits accruing to the state. This area multiplier is calculated as $1/1 - \text{MPC}$ where MPC is the Marginal Propensity to Consume. For a \$15 million museum project, it is estimated that \$4.8 million will be spent on consumption. Therefore, the Marginal Propensity to Consume (MPC) is $4.8/15.0 = .32$, or approximately one-third. The balance goes for accumulated non-consumption expenditures (savings, capital expenditures, etc.) and expenditures outside the state. The area multiplier, then, is $1/1 - .32$ of 1.47.

For every dollar spent in the museum, an additional 47 cents is generated as a result of money spent and respent in the state. The Economic Development Administration (U.S. Department of Commerce) estimates public recreation multipliers of this type are typically around 1.5 which gives added support to the calculations for the state museum.

Table 16 summarizes direct benefits derived from annual operating expenditures of the museum, non-recurring expenditures on construction of the facility and exhibits, and secondary benefits as a result of area multiplier effects throughout the state economy. At the stabilized operating level, we project incremental sales tax revenues of \$258,000 annually, and non-recurring (one-time) revenues of \$468,000.

Employment Impact

Based on the foregoing, an estimate can be made of the job generation potential for construction of the proposed museum. Table 17 indicates the job characteristics of large recreation-oriented public facilities drawn from recent surveys.

Based on this experience it would appear that the first million dollars in cost represents ten to fifteen year-round jobs and the second million in investment adds fifteen to twenty jobs. Thereafter, the jobs-to-investment ratio increases relatively with successive investment increments. This relative increase is explained by the fact that the early investment dollars go to the more expensive facility construction requirements, which are not job-intensive. Thereafter,

however, more job-intensive activities such as dining and visitor service units can be added at a relatively lower cost. Using this formula, it is estimated that a \$15 million museum investment will generate 300-350 jobs.

Total employment effects of the museum are summarized in Table 18. In addition to short-term construction jobs (300-350) and 25-30 year-round employees when the museum is in full operation, an additional 145 jobs will probably be created as a direct result of \$2.3 million in increased vacation spending from out-of-state residents.

Estimated total direct benefits to the State of Connecticut as a result of the proposed state museum are as follows:

	Construction of Facility (non-recurring)	Annual Operations (at stabilized operating level)
Incremental Sales		
Tax Revenue	\$468,000	\$258,000
New Employment	300-350 jobs	25-30 jobs

Benefits are entirely related to increased spending by out-of-state residents. To the extent Connecticut residents are encouraged to spend money in Connecticut rather than elsewhere, benefits will be increased.

Conclusions

The foregoing market analysis is suggestive of numerous specific conclusions relative to the further planning and development of the proposed state museum. However, it is important to establish as the principal conclusions for the analysis, the basic market support for the proposal and direct benefits to the state, assuming the museum can attract the patronage potentially available to it.

Table 1
Population and Income Factors, 1970
 By County

County	1970 Population	No. of Households	Median Household Income	(In Millions) Total County Income
Litchfield	144,091	45,550	\$11,226	\$ 511.3
Hartford	816,737	255,437	12,057	3,079.8
Tolland	103,440	27,902	11,874	331.3
Windham	84,515	26,444	10,075	266.4
Fairfield	792,814	243,806	13,086	3,190.4
New Haven	744,948	231,754	11,303	2,619.5
Middlesex	114,816	34,758	11,632	404.3
New London	230,348	67,618	10,520	711.3

SOURCE:
 U.S. Census of Population, 1970
 Development Economics Group

Table 2
Population and Income Factors, 1980
 By County

County	1980 Projected Population	Projected No. of Households	Projected Median Household Income	Projected Total County Income (In Millions)
Litchfield	154,177	49,258	\$13,583	\$ 669.0
Hartford	824,905	263,548	14,589	3,844.9
Tolland	118,956	35,615	14,368	511.7
Windham	100,573	32,235	12,191	393.0
Fairfield	816,598	255,987	15,834	4,053.3
New Haven	752,398	240,383	13,677	3,287.7
Middlesex	135,482	42,874	14,075	603.5
New London	257,989	81,385	12,729	1,035.9

SOURCE:
 U.S. Census of Population, 1970
 Development Economics Group

0 10 MILES
SCALE

MASSACHUSETTS

LONG ISLAND SOUND

NEW YORK

RHODE ISLAND

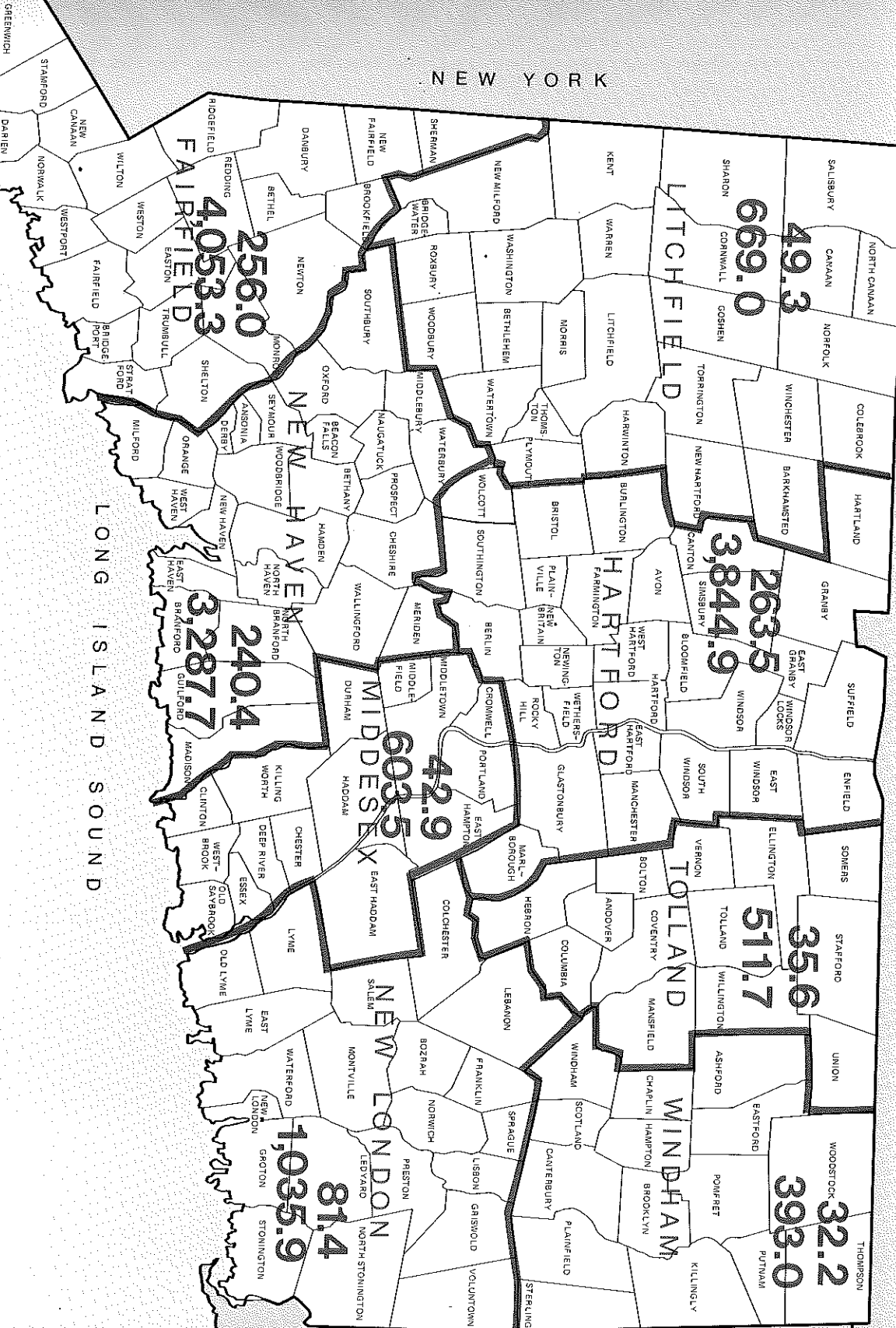


Table 3

**Vacation Visitors To Connecticut
1956 - 1976**

(Thousands of Persons)

	80 Days in ¹ Summer 1966	Total ² Year 1966	1956 ³	1966	1976 ⁴
Travel Parties	4,031				
Vacation	1,892	3,153	1,633	3,153	4,600
Non-Vacation	2,139				
Total Visitors	9,715				
Vacation	4,466	7,443	3,856	7,443	10,840
Non-Vacation	5,249				

¹ University of Connecticut *Non-Resident Vacation Travel in Connecticut, Summer 1966*² Projected on basis of 60 percent of all vacation travel occurs during 80 days in summer³ Survey of out-of-state motorists, 1956⁴ Straight line projection; yields "normal" vacation visitors for 1976

Table 4

Impact of Bicentennial on Connecticut Vacation Visitation

(Thousands of Persons)

	Normal	Premium	Total
1976	10,840	23.7 Percent	13,400
1977	11,200	16.7 Percent	13,050
1978	11,600	10.8 Percent	12,850
1979	12,000	5.5 Percent	12,650
1980	12,400	—	12,400
1985	14,200	—	14,200
1990	16,000	—	16,000

SOURCE:

Project of Impact for Washington, D.C., 1976-1980

Table 5
Distribution of Vacationists, 1969 - 1971
 By County

County	1971	1970	1969	Change 1969-1971	Percent Change 1969-1971
Litchfield	3.5%	2.9%	3.2%	0.3	9.4%
Hartford	6.1	6.2	6.5	- 0.4	- 6.2
Tolland	0.6	1.1	0.6	0.0	0.0
Windham	0.9	1.4	1.1	- 0.2	- 18.0
Fairfield	6.6	8.6	11.0	- 4.4	- 40.0
New Haven	10.7	8.0	9.1	1.6	17.6
Middlesex	4.9	7.0	5.3	- 0.4	- 7.5
New London	26.0	22.1	19.6	6.4	32.7
Various Areas	15.7	18.5	18.1		
Not Stated	25.0	24.2	25.5		

SOURCE:

State of Connecticut Department of Commerce
 Development Economics Group

Table 6
Estimated Distribution of Vacationists, 1971 and 1976¹
 By County

County	Percent	1971 Number (In Thousands)	1976 Number (In Thousands)
Litchfield	5.9	535	790
Hartford	10.4	940	1,395
Tolland	1.0	90	135
Windham	1.5	135	200
Fairfield	11.1	1,000	1,490
New Haven	18.1	1,630	2,425
Middlesex	8.1	730	1,085
New London	43.8	3,940	5,870
Total	100.0	9,000	13,400

¹ Distribution in Table 5 expanded to exclude multiple destinations and areas not stated.

SOURCE:

University of Connecticut, *Non-Resident Vacation Travel in Connecticut, Summer 1966*.
 State of Connecticut Department of Commerce
 Development Economics Group

Table 7

Vacation Visitor Expenditures

(Motor Visitors Only)

1966 - 1990

	Disposable Personal Income (Index)	Vacation Visitor Expenditures	Share DPI to Recreation (Index)	Final Projected Expenditures
1966	100.0	\$28.00	100.0	\$28.00
1970	108.6	30.41	104.9	31.90
1971	111.3	31.16	105.7	32.94
1976	120.2	33.66	112.3	37.80
1980	131.5	36.82	118.0	43.45
1985	142.7	39.96	124.6	49.79
1990	154.3	43.20	131.1	56.65

SOURCE:

University of Connecticut, *Non-Resident Vacation Travel in Connecticut, Summer 1966*
Development Economics Group

Table 8

Distribution of Vacationists' Expendituresby County **1969 - 1971**

County	1971	1970	1969	Change 1969-1971	Percent Change 1969-1971
Hartford	5.0%	2.5%	3.7%	1.3	35.0%
Meriden	7.1	7.0	5.1	2.0	39.2
Stamford	1.6	0.8	0.2	1.4	700.0
Waterbury	0.9	0.8	0.5	0.4	80.0
Shelton	8.5	7.3	9.9	- 1.4	- 14.0
New Haven	11.1	12.2	20.0	- 8.9	- 44.5
Bridgeport	5.5	7.4	6.6	- 1.1	- 16.7
Other Areas	21.0	17.8	14.6	6.4	43.8
Unstated	22.8	29.5	24.6		
	16.3	14.7	14.8		

SOURCE:

University of Connecticut Department of Commerce
Development Economics Group

Table 9

Estimated Distribution of Total Vacationists' Expenditures ¹

By County, 1971 and 1976

County	Percent	(\$ Millions)	
		1971	1976
Litchfield	8.2	\$ 24.3	\$ 41.5
Hartford	11.7	34.7	59.3
Tolland	2.6	7.7	13.2
Windham	1.5	4.4	7.6
Fairfield	18.3	54.3	92.7
New Haven	14.0	41.5	70.9
Middlesex	9.1	27.0	46.1
New London	34.6	102.6	175.2
Total	100.0	\$296.5	\$506.5

¹ Distribution in Table 8 expanded to exclude multiple destinations and areas not stated.

SOURCE:

University of Connecticut, *Non-Resident Vacation Travel in Connecticut, Summer 1966*.
Development Economics Group

Table 10
Attendance At Major Attractions in Connecticut, 1971

Map Code	Attraction	Visitation
1	Hamonasset Beach State Park	
2	Sherwood Island State Park	
3	Ocean Beach Park	1,619,000
4	Mystic Seaport	1,005,000
5	Rocky Neck State Park	551,000
6	Stamford Museum	507,000
7	Shakespeare Theatre	722,000
8	Indian Well State Park	273,000
9	Black Rock State Park	225,000
10	Squantz Pond State Park	250,000
11	Wadsworth Atheneum	248,000
12	Peabody Museum	296,000
13	Gillette Castle State Park	245,000
14	Christmas Village	274,000
15	Branford Trolley Museum	268,000
16	Goodspeed Opera House	50,000
17	Mark Twain-Harriet Beecher Stowe Houses	42,000
18	Danbury State Fair	55,000
19	Barnum Festival	54,000
20	Norwich Rose/Arts Festival	280,000
21	Yale-Harvard Regatta	250,000
22	Mystic Outdoor Art Festival	45,000
23	Woodstock State Fair	6,500
24	Greater Hartford Open Golf Tournament	50,000
25	North Haven Fair	58,000
26	Durham Fair	30,000
27	Berlin Fair	38,000
28	Brooklyn Fair	43,000
29	Ancient Muster Fife & Drum	39,000
30	Children's Services Horse Show	16,000
31	Bigelow Hollow	16,000
32	Burr Pond	15,000
33	Chatfield Hollow	116,312
34	Devil's Hopyard	153,884
35	Fort Shantok	173,376
36	Hall Meadow	119,926
37	Harkness Memorial	146,799
38	Hopeville Pond	110,048
39	Housatonic Meadows	160,249
40	Kettletown	159,935
41	Lake Waramaug	133,380
42	Macedonia Brook	185,543
43	Mansfield Hollow	125,405
44	Mashamoquet Brook	122,103
45	Mohawk Mountain	131,709
46	Mount Tom	129,232
47	Osbornedale	250,000
48	Quaddick	120,222
49	Sleeping Giant	162,842
50	Wharton Brook	118,469
		226,512
		145,426

SOURCE:
State of Connecticut, Department of Environmental Protection



MASSACHUSETTS

296,000 NEW YORK

R H O D E I S L A N D

LONG ISLAND SOUND

Plate 2

Attendance at Selected Attractions, 1971

1-17 Museums, parks, other

Table 11

Attendance At Selected Museums, ¹ 1963 - 1971

(In Thousands)

Year	Mystic Seaport	Old Sturbridge Village	Plymouth Plantation	Shelburne Museum
1963	332.9	348.6	244.9	67.8
1964	327.2	375.6	272.4	76.3
1965	347.9	423.1	306.7	80.2
1966	419.0	548.0	346.8	96.7
1967	406.6	523.4	358.6	128.0
1968	524.4	577.9	398.0	120.9
1969	527.4	578.7	377.3	119.6
1970	508.4	603.6	401.9	137.7
1971	485.1	646.4	400.5	132.9
Total Change 1963-1971				
Number	162.2	297.8	155.6	65.1
Percent	+50%	+86%	+64%	+99%

¹ Museum attendance only; figures do not necessarily coincide with overall attendance figures in Table 10.

SOURCE:
Development Economics Group

Table 12

Tourist Profile

	Connecticut Development Commission, 1966	Better Homes & Gardens, 1971
Persons Per Party	2.9	3.0
Average Length of Stay	3.0 days	3.2 days
Average Expenditures		
Per Person	\$30.90	\$ 41.00
Per Party	89.61	123.00
Per Day	29.87	38.44
Source of Tourists		
New England	23.2	25.0
Middle Atlantic	50.5	45.0
South Atlantic	12.3	9.0
North Central	6.8	16.0
South Central	1.8	1.0
Pacific	1.5	3.0
Other	3.8	—

SOURCE:
State of Connecticut Department of Commerce

Plate 3 Museum Visitation Corridors

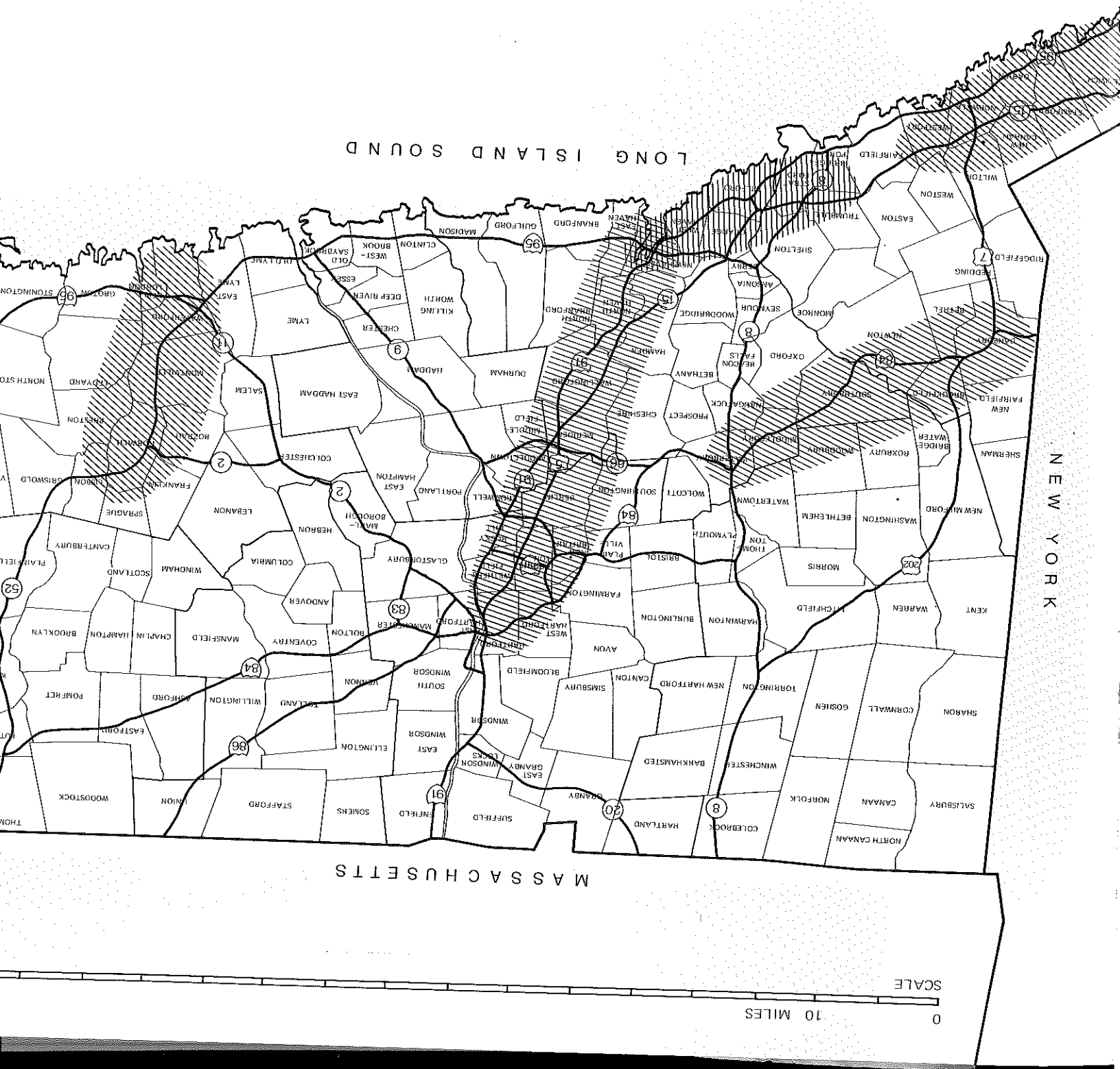


Table 13

Maximum Potential State Museum of Connecticut History Attendance At Alternative Locations, 1976
(In Thousands)

Museum Location (County)	1976 Non-Resident Vacationists	Through Travelers		Non-Through Travelers						Total Non-Resident	Total Resident	Total 1976
				Major Attractions			Other Activities					
		Number (60% of all non-through travelers)	Share	Capture	Number (40% of all non-through travelers)	Capture	Total (50% x 30%=15%)					
Number (65%)	Capture (5%)	Number (35%)	non-through travelers)	Share	Capture	non-through travelers)	(50% x 30%=15%)					
Litchfield	790	514	26	276	166	0.20	33	110	17	76	598	674
Hartford	1,395	907	45	488	293	1.00	293	195	29	367	841	1,208
Tolland	135	88	4	47	28	—	0	19	3	7	576	583
Windham	200	130	7	70	42	0.36	15	28	4	26	404	430
Fairfield	1,490	968	48	522	313	0.34	106	209	31	185	579	764
New Haven	2,425	1,576	79	849	509	0.33	168	340	51	298	960	1,258
Middlesex	1,085	705	35	380	228	0.15	34	152	23	92	684	776
New London	5,870	3,816	191	2,054	1,232	0.25	308	822	123	622	500	1,122

SOURCE:

Development Economics Group

Table 14

Maximum Potential State Museum of Connecticut History Attendance At Alternative Locations, 1980
(In Thousands)

Museum Location (County)	1980 Non-Resident Vacationists	Through Travelers		Non-Through Travelers							Total Non-Resident	Total Resident1980
				Major Attractions			Other Activities					
				Number			Number					
				(60% of all			(40% of all					
				non-through			non-through					
Number	Capture	Number	non-through	Share	Capture	non-through	Capture	Total				
(65%)	(5%)	(35%)	travelers)			travelers)	(50% x	Non-				
							30%=15%)	Resident				
Litchfield	732	476	24	256	154	0.20	31	102	15	70	608	678
Hartford	1,290	838	42	452	271	1.00	271	181	27	340	855	1,195
Tolland	124	81	4	43	26	—	0	17	3	7	585	592
Windham	190	123	6	67	40	0.36	14	27	4	24	411	435
Fairfield	1,380	897	45	483	290	0.34	99	193	29	173	588	761
New Haven	2,250	1,462	73	788	473	0.33	156	315	47	276	976	1,252
Middlesex	1,004	653	33	351	211	0.15	32	140	21	86	695	781
New London	5,430	3,530	176	1,900	1,140	0.25	285	760	114	575	508	1,083

SOURCE:

Development Economics Group

Table 15

**Incremental Sales Tax Revenue As A Result of
Increased Non-Resident Tourist Expenditures**

	1976	1980
Through-Travelers who elect to stay overnight	57,000	49,000
Added Expenditures Per Person	\$12.42	\$14.26
Added Expenditures — Total	\$ 708,000	\$ 699,000
Non-Through Travelers who elect to stay one extra night	200,000	185,000
100% of overnight vacationers (25%)	50,000	46,000
50% of "short time" vacationers(50%) (50% x 50% = 25%)	50,000	46,000
Total	100,000	92,000
Added Expenditures Per Person	\$15.25	\$17.52
Added Expenditures — Total	\$1,525,000	\$1,612,000
Total	\$2,233,000	\$2,311,000
Annual Sales Tax Revenues (6.5% sales tax)	\$ 145,000	\$ 150,000

SOURCE:

Development Economics Group

Table 16

**Estimated Incremental Sales Tax Revenue Generated As A
Result of State Museum of Connecticut History**

	Taxes From Direct Expenditures	Secondary Multiplier Effects (50%)	Total
Annual (at stabilized operating level)			
Non-Resident Vacationer ¹			
Expenditures	\$150,000	\$ 75,000	\$225,000
Operation of SMCH Facility (\$500,000/year)	22,000 ²	11,000	33,000
Total Annual	\$172,000	\$ 86,000	\$258,000
Nonrecurring			
Construction of \$15 million SMCH Facility & Exhibits	\$312,000	\$156,000	\$468,000

¹ Connecticut resident expenditures are not considered to be a direct result of the museum and therefore are not included as incremental taxes.

² Eighty percent of wages and salaries (\$300,000) plus fifty percent of balance (\$200,000).

SOURCE:

Development Economics Group

Table 17

Jobs Associated With Construction of Museum Facility and Exhibits

Jobs/\$ Millions of Cost		@ \$15 Million Cost
First Million Cost:	10-15 jobs/\$ million	10- 15 jobs
Second Million:	15-20 jobs/\$ million	15- 20 jobs
\$3- 6 Million:	20 jobs/\$ million	80 jobs
\$7-10 Million:	20-25 jobs/\$ million	80-100 jobs
Above \$10 Million:	25 jobs/\$ million	125 jobs
Total		310-340 jobs say 300-350 jobs

SOURCE:
Development Economics Group

Table 18

New Employment Generated As A Result of State Museum of Connecticut History

	No. of Employees (Annual Average)
Annual (at stabilized operating level)	
SMCH Employees	
Non-Resident Tourist Expenditures ¹	25- 30
(\$2.3 million)	145
Nonrecurring	
Construction of SMCH Facility	
(\$15 million)	300-350

Based on 1967 State of Maryland recreation study, adjusted for price changes.

SOURCE:
Development Economics Group

Conclusion

By necessity, the data and reasoning presented in this report are based upon the state of museum practices today. It draws upon the experience of existing museums for the purpose of establishing the dimensions of the project, its staffing, and costs. These are generally examples of generally conventional museum programs. It is not the intent to recommend that the Museum of Connecticut History must be developed along either conventional or traditional lines. It may be but it need not be one or the other.

The Commission and the Director, when engaged, should be encouraged to evaluate the best of what is being done in the museum field here and abroad and project their planning based on the concept best suited to portray Connecticut's history. They have the opportunity to determine the cultural, inspirational, and educational needs of the State which a museum-like institution can effectively address. And they have the opportunity to break new ground in creating new museum programs which will attract, inspire, instruct, and create the will to learn.

MIDDLETOWN

Location

The City of Middletown with a 1970 population of 36,924 is situated along the westerly bank of the Connecticut River, midway between Hartford and Long Island Sound. Middletown, as the name implies, is near the geographic center of the State.

The Connecticut Valley Hospital site is located approximately one mile due east of Middletown's central business district on a plateau rising above a bend in the Connecticut River.

Owner

State of Connecticut, Connecticut Valley Hospital.

Size

Nearly 800 acres are occupied by the Connecticut Valley Hospital. The area proposed for the State Museum is a 100 acre site bounded on the north by the Connecticut River, on the east by the Hospital's property line, on the south by Bow Lane and on the west by Silvermine Road to its intersection with a dirt road which runs easterly for a distance of 1,110 feet then northerly for 650 feet, then easterly for 800 feet and again northerly for 500 feet until it intersects with River Road.

Topography

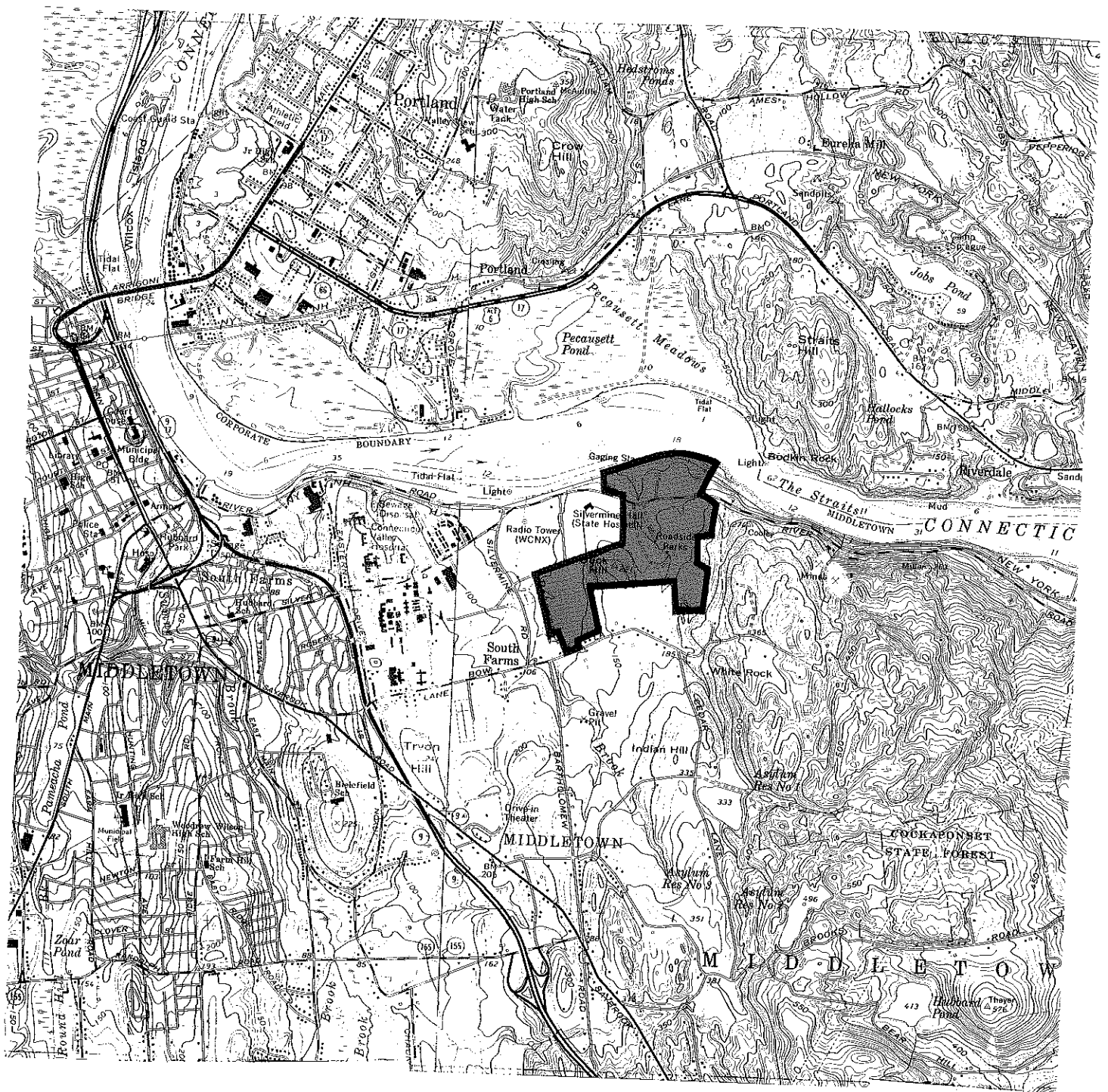
The site is dominated by a hill 212 feet above sea level in the center of the site. The land gently slopes to the north to a base of 25 feet above sea level at the Connecticut River. Nine hundred feet to the east of the hill's summit, the land slopes to 125 feet above sea level to form a seasonal stream which eventually flows to the river. At the eastern boundary a flat plateau between 150 to 175 feet above sea level predominates.

From the central business district the site is viewed across a large bend in the river. A plateau in the northern quarter would make an ideal location for a museum building as it is surrounded by strands of deciduous trees on the east, west, and south. The treed areas appear to cover bedrock formations. A magnificent view is provided north to the river.

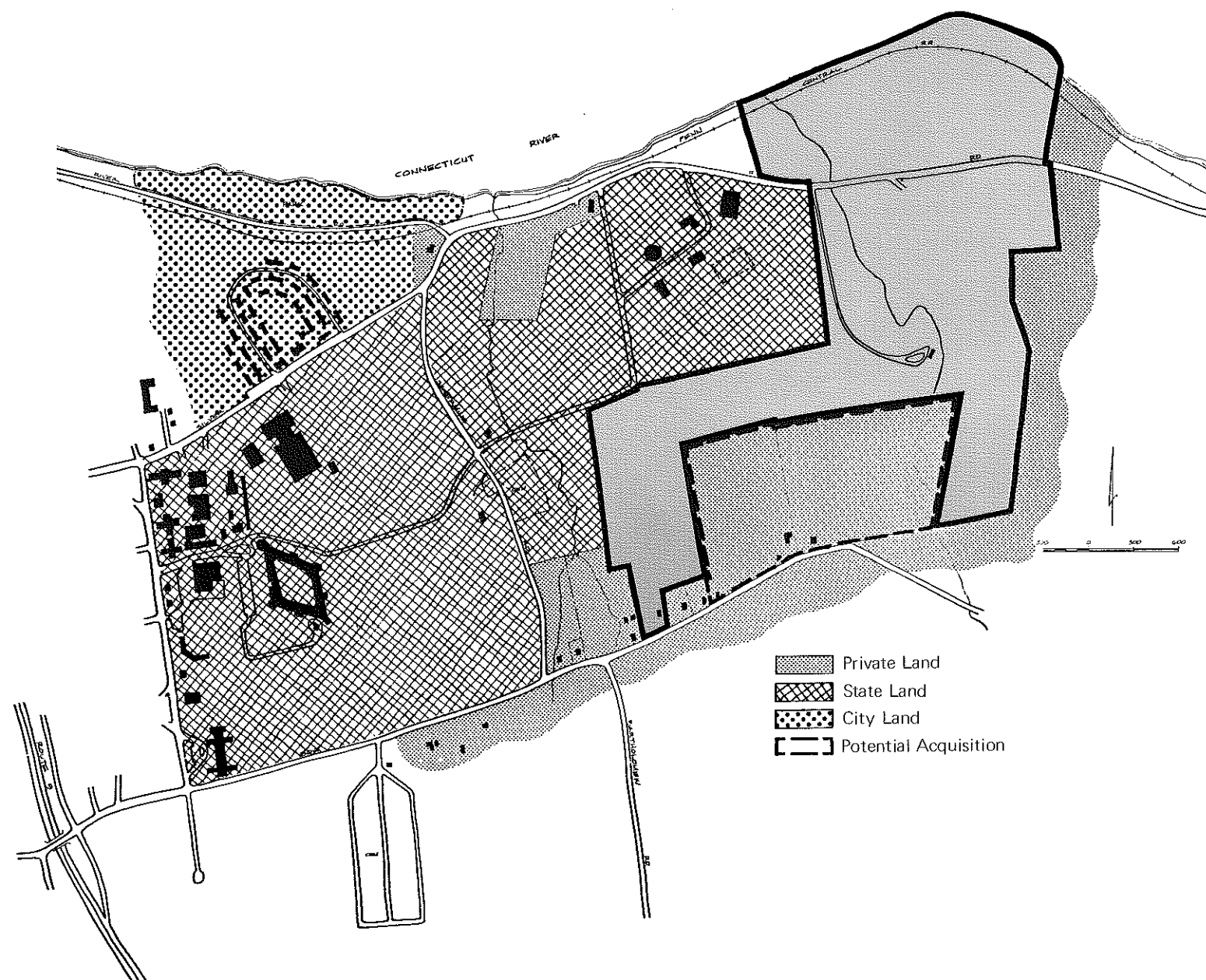
Soil Conditions

A detailed soil survey conducted by the Soil Conservation Service reveals that silt, loam, and sand and gravel soils predominate on the site. On the plateau, previously mentioned as an ideal location for the museum structure, the soils are sand and gravel. To the east of the plateau a patch of land has a seasonal high water table. To the southwest of the plateau under a strand of trees, bedrock is found less than two feet underground. Following two nearby streams, wetlands are found. Any development on soils classified as inland wetlands or water courses would have to be reviewed by the Commissioner of the Department of Environmental Protection as per P.A. 155. Generally, soil characteristics found on the proposed site should present no severe limitations to development. The only exception appears to be an area of approximately 10 acres which is covered with trees and has bedrock

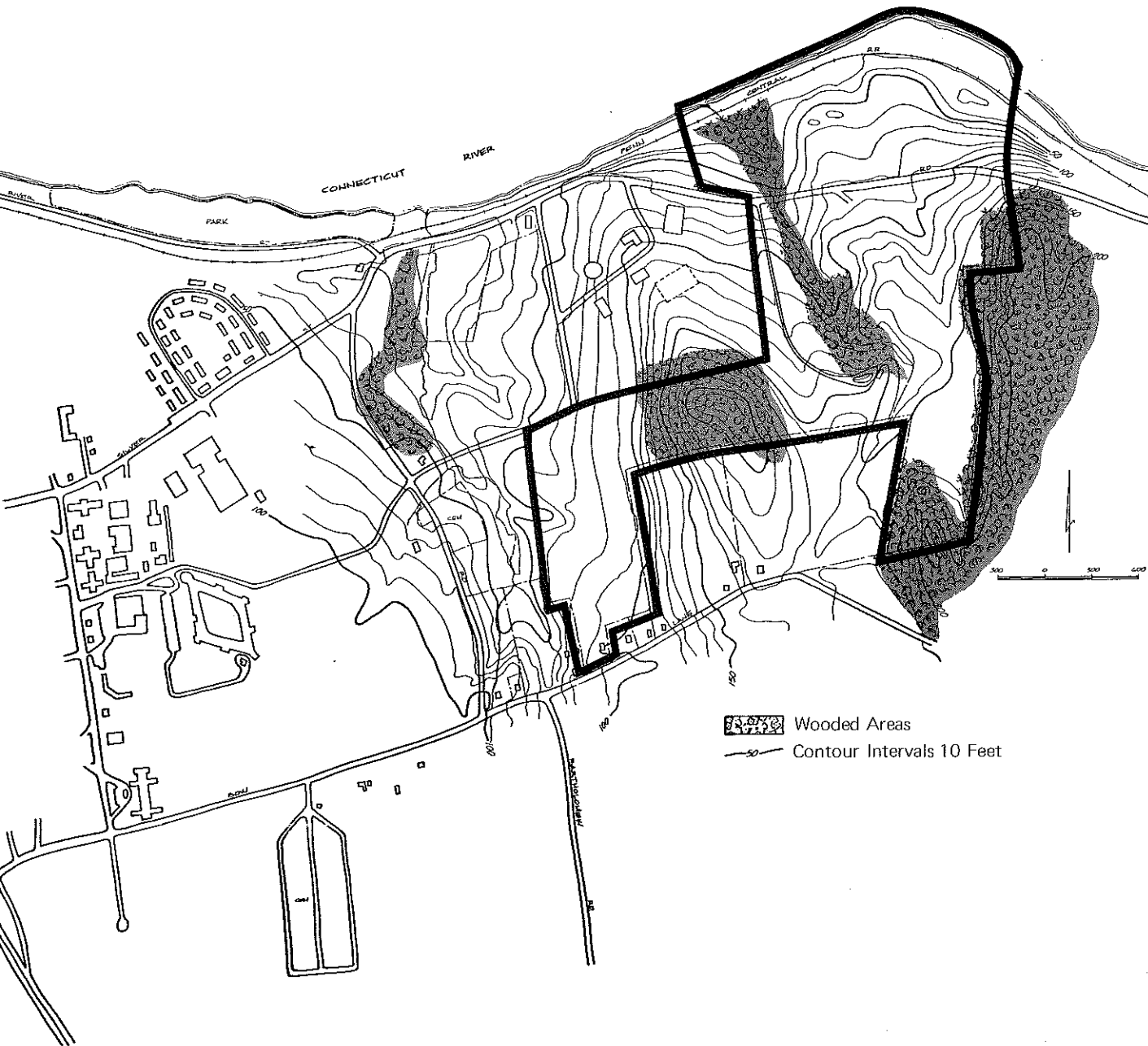
Site Location



Site Delineation



Topography & Wooded Areas



outcroppings and bedrock less than two feet beneath the surface. This area lies in the direct path of the major access way to the area proposed for construction. As one heads east past the hill of bedrock the land quickly slopes to a ravine and then raises to another hill of bedrock.

Drainage

Although the site has varied land forms, i.e., hills, streams, wetlands, bedrock outcroppings and plateaus, the site is large enough to accommodate a museum complex on well-drained areas. The stream beds, marsh areas and bedrock outcroppings in fact add to the natural beauty of the site and would lend themselves nicely to nature-walk areas.

The overall gentle slope of the land is such that there should be no drainage problems. The two small streams found on the site are found on either side of the plateau and the land slopes to their beds and eventually to the river.

Flooding

As the site is a hill rising from the Connecticut River, flooding will not pose a problem to the area where the museum would be located. The Army Corps of Engineers conducted a flood plain study which included the museum site. The study used as its base those lands inundated in 1936. The only area flooded in 1936 was a marsh area surrounding the present WCNX radio tower. This marsh is not on the site being considered for the museum.

Water Supply

The Connecticut Valley Hospital is served with a State-owned water system which receives its water from three reservoirs located to the south of the site. The museum might be tied into this Connecticut Valley Hospital operated system if flows are adequate to serve both the Hospital and a museum.

The City of Middletown has a 20 inch water line along Silvermine Road. This line is the main water line feeding the City from the well fields on the Connecticut River. The museum could also tie into this water system.

Sewer Systems

Connecticut Valley Hospital also has its own sewer system which serves all hospital buildings. The museum might tie into the hospital's sewer system as the line has been extended to serve the new Children's Complex on River Road adjacent to the site.

The museum could also tie into the City's sewer system. An eight inch line runs to the rear of Long River Village and across River Road to a small pump station near the City water wells. The museum could easily connect to the eight inch line before it reaches the pump station.

Other Utilities

The Connecticut Valley Hospital site is also served with electricity and telephone lines which run along River Road.

Fire, Police, and Other Protection Services

The South District Station of the Middletown Fire Department is located on Randolph Road, two miles from the museum site. Another fire station on Main Street is two and a half miles from the site. Connecticut Valley Hospital has its own fire station less than one mile from the potential museum site.

The museum would also be well served by police protection as the Middletown Police Department Headquarters is only two miles away. Most museums provide their own internal guard and watchman services and hence need not rely totally on local and state police. Nevertheless, the availability of these services, within a minimum response time, is desirable.

The 350 bed Middlesex Memorial Hospital is two miles from the museum site. If extreme emergency situations arise the medical staff at Connecticut Valley Hospital might possibly be available. Middletown also has two private ambulance services which could serve the area.

Accessibility From Expressways

Route 9, a major state north-south route between Old Saybrook and Cromwell, is located 0.6 of a mile west of the potential site. Route 9 connects Interstate 91, a major north-south expressway, with Interstate 95, a major east-west expressway. Once on Route 9, Interstate 91 is less than 9 miles to the north and Interstate 95 is 17 miles to the south. Other major state highways serving the City of Middletown are Route 66 in an east-west direction, Route 17 connecting the New Haven area with communities above Middletown on the east bank of the river and Route 72 from the Bristol-New Britain area. The attached map shows Middletown's location in relation to other communities in Connecticut and highways serving it.

The museum site would be served by three interchanges with Route 9. Bartholomew Road across the street from the museum entrance eventually connects with the Randolph Road interchange.

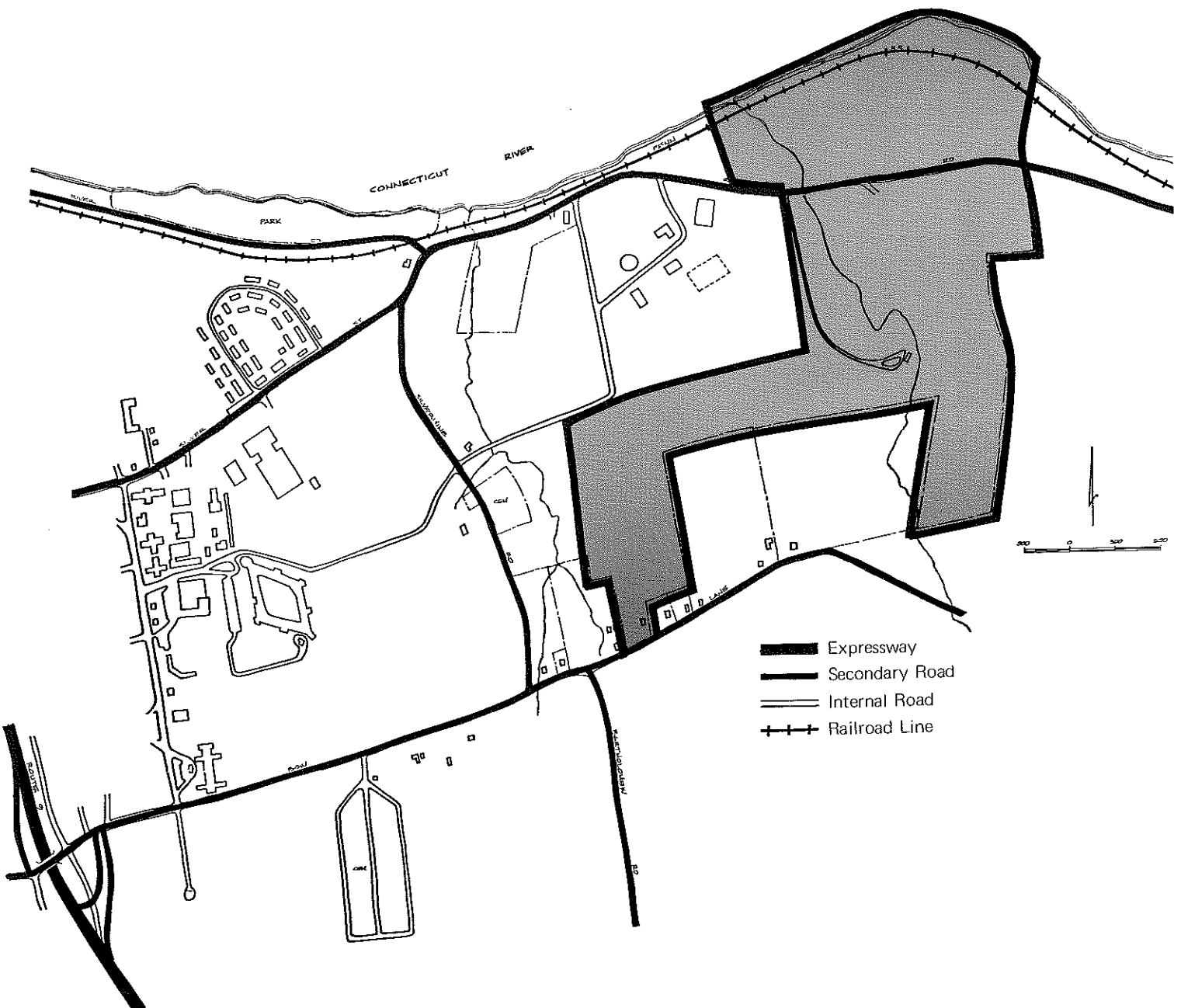
The primary road to the site would be Bow Lane. Presently, Bow Lane has only one exit ramp from Route 9; however, the State Department of Transportation has prepared plans for a new series of interchanges with the south end of the business district in Middletown. This will entail the provision of a full interchange at Bow Lane less than one mile west of the site.

A full interchange is also planned in Union Street-Acheson Drive area approximately one mile from the site along River Road.

Secondary Road Connections

The site would be directly served with three secondary roads that are planned to be both within a mile of access to Route 9. River Road provides access to the north and Bow Lane to the south.

Highway Access



River Road is a 24 foot paved road owned and maintained by the City of Middletown. It eventually connects with the City's central business district northwest of the site.

Bow Lane, a 22-24 foot public road, serves the Connecticut Valley Hospital and single family home sites to the east of the museum site. Silver Street is a public east-west road which eventually flows into River Road at the northwest corner of the site. Its paved width is approximately 32 feet. To the east, Silver Street connects with Main Street and the City's central business district.

Bartholomew Road has a 26 foot paved surface and extends from Bow Lane south to Randolph Road, passing on the way the new site of the Middlesex Community College.

The close proximity of Route 9 and the availability of four paved secondary roads indicate that traffic congestion at peak hours should present no problems at this site. The three roads also provide alternate exit and entrance routes so necessary for a complex the size of a state museum.

The City of Middletown has plans to improve and repave River Road in conjunction with a harbor improvement program. If necessary, the City would also improve Silver Street, Bow Lane, and sections of Bartholomew Lane.

Bus: Connecticut Company buses run from Hartford to Long River Village 1/4 mile from the site at regular intervals during the day.

Rail: Since 1871, the Valley Branch of the New Haven Railroad has consisted of a 43.5 mile run between Hartford and Old Saybrook. In August 1969, the Penn-Central Railroad, successor to the New Haven, sold a 21 mile segment of track below Middletown to the Connecticut State Parks and Forests Division. By Special Act of the 1967 Legislature, the Valley Railroad Company was chartered and it has initiated sightseeing runs between Essex and Chester on trackage leased from the State. It is hoped by City officials that this operation will eventually include Middletown. If the Valley Railroad Company extends its operations to serve the museum site, it will have to negotiate with the Penn-Central Railroad who presently owns the tracks that run through the site along the Connecticut River. If the railroad is allowed to run through the site, it would provide museum visitors not only with a unique mode of transportation but would also allow people to see other sections of the Connecticut River Valley on route to the museum. A railroad station could be placed on or near the site so visitors could walk to the facility.

Proposed Secondary Road System

Public Transportation

Compatibility With Existing Land Uses

Boat: The City of Middletown owns a significant strip of land between River Road and the Connecticut River in the vicinity of the site. The local Harbor Improvement Agency is pursuing plans to develop a boat ramp facility for small boats at a point opposite the Commodore MacDonough Inn at the foot of Silver Street. The City is also investigating the feasibility of providing a docking facility for excursion vessels at the same site. If these facilities are constructed by the City at this location they would be within easy walking distance of the site.

A visitor to the state museum might possibly park his car in Essex, Old Saybrook, Haddam or downtown Middletown, board either a train or boat and travel to the museum.

The site is bordered on the west by Silvermine Road. On the westerly side of Silvermine Road are numerous hospital facilities of the CVH complex. Along the easterly side of the road is a cemetery, incinerator, and landfill of the hospital. These facilities are separated from the main portion of the site by a ravine.

Radio Station WCNX borders the northwest corner of the site on approximately one acre of land. Behind WCNX are four buildings related to the Connecticut Valley Hospital, the largest of which is Silvermine Hall.

The site is bounded on the south by Bow Lane. This road is developed sparsely for residential purposes. There are two relatively sizeable farm holdings of 15.8 and 21.2 acres which could be purchased, if necessary, to square off the site.

The eastern boundary of the site is forested open space which has been proposed as a potential path for a river crossing of relocated Route 66 at Bodkin Rock. The Connecticut River forms the northern boundary of the site.

There do not appear to be any adjacent uses which would adversely affect the museum visitor. Except for the proximity of some hospital buildings, the site provides a rustic setting for a museum complex. The general view is one of rolling forested hills surrounding the Connecticut River.

There appears to be enough land area to accommodate adequate parking, multi-activity areas, room for expansion and transitional buffer areas between the museum and hospital or private homes.

The proposed City of Middletown Park along River Road, the old railroad line and the Connecticut River provide ideal neighbors for a museum complex.

**Compatibility With
Proposed Land Uses**

The Middletown Plan of Development approved in 1965 recommends that the lands which comprise the proposed site remain in institutional use.

The Midstate Regional Planning Agency in its 1969 "Preliminary Plan" for the Midstate Region, also recommends that the area remain in institutional use. The State of Connecticut Proposed Plan of Conservation and Development on its Land Use Policy Map designates the area as "proposed suitable for urban development".

A museum complex on the Connecticut Valley Hospital site would conform then with local, regional, and state plans for the area.

**Related To
Population Concentrations**

The major role of the museum would be as an educational institution and as such, should be centrally located to concentrations of population to afford the greatest degree of accessibility to all areas of the State.

An earlier report prepared by the consultants recommended that "for economic and demographic considerations, the optimum location for the museum is in the New Haven-Hartford-Middlesex area. A location in this area will forego some potential out-of-state patronage in New London County but will maximize exposure for state residents". * Middletown is not only located in the center of the New Haven-Hartford corridor but is also located next to and tied with New London by Route 9 which intersects Interstate 95 at Old Saybrook.

**Related To
Historic Sites**

An asset to a museum site would be its location in an historic area or an area of environmental quality which would increase the visitor's awareness of the natural setting in which the history of Connecticut unfolded. With regard to the environmental quality of the Middletown site, it is hard to imagine another site with as spectacular a view of the beautiful Connecticut River. As one stands on a plateau approximately 140 feet above sea level and looks to the north and northwest, the river dominates the view. To the right and left deciduous and evergreen trees surround the cleared hill.

Middletown also has a rich and illustrious history that in miniature reflects the State. Middletown has always played a major role in State history because of its central geographic location and also because of its fine harbor facilities on the Connecticut River.

A lead mine authorized by action of the General Assembly in 1775 to provide ore for the Revolutionary War lies on the site. Its role was significant

*Background Data — Connecticut Museum of State History,
Raymond, Parish, Pine and Plavnick, 1973, page 5.

in Connecticut's effort as the "Provision State". The exact location of the mine entrance and shafts could easily be determined for visitor use.

Middletown has many fine historic homes dating back to the Revolutionary era. The Middletown Preservation Trust, a non-profit organization, has recently researched records and identified nearly 600 structures in Middletown alone which have architectural or historical interest.

The Commodore MacDonough Inn, located near the potential museum site is named after a local War of 1812 hero. The inn itself was Middletown's alms house.

A structure once owned by Comfort Sage, Gen. Washington's Quartermaster General, is currently being refurbished as a restaurant. It is located at the corner of Washington and Cherry Streets just off Route 9, two miles from the proposed site.

Site Related To Tourist Routes

A secondary role of a museum is to attract visitors to the State. The location selected should be tied to all of the principle tourist routes.

The largest share of out-of-state vacationists, 48.8 percent, visit New London County, which is attributable to the fact that Mystic Seaport and some of the most popular state parks are located there. If attracting tourists was the sole function of the museum, a New London County location would be ideal. As the museum serves other functions, proximity to tourist routes is important but not absolutely necessary. Middletown has direct connections to Interstate 91 and 95 via Route 9. The Middletown site could also serve to attract people off the principle tourist routes especially I-95 as it is only one-half hour away. The Connecticut Development Commission would like to see new facilities developed which would make visitors want to leave the Interstate expressways and travel other Connecticut roads. If several potential developments such as the steam railroad line and the excursion boat line can be coordinated with the museum site, a facility which offers multi-activity use might result and attract tourists from their traditional routes.

Positive Economic Impact On Local Economy

The site selected for the state museum should not remove excessive land from local tax rolls or unduly tax local public facilities. As the Connecticut Valley Hospital site is already in state ownership, no land will be removed from local tax rolls. As we have seen above, public facilities such as sewer and water lines are available and the impact of the museum will hardly be felt as the lines are more than adequate. The City, through its Bicentennial Committee and Municipal Development Commission, is actively seeking the museum.

The Middletown Redevelopment Agency is in the execution phase of an urban renewal project which comprises 125 acres in the downtown area. Recently, the Agency designated developers to construct new buildings valued in excess of 25 million dollars in the business district. One prime commercial block will tentatively include new shops, a motel facility with at least one hundred rooms and several apartment towers. City officials feel the museum would fit in well with local redevelopment plans in the central business district and harbor development plans along the Connecticut River.

The City feels it can offer a site which has a rural setting yet all the benefits of an urban center. Plans for a convention center-motel complex are looked upon as the sort of facility which a museum should have nearby. The museum would also be a welcome neighbor to another Middletown institution, Wesleyan University.

Environmental Disruption

If the museum is constructed on this site there should be no disruption of the environmental system. The site is already cleared of trees in most areas, perhaps a result of farming on the land in past years. Besides the two small streams, one of which is seasonal and originates on the site, there are no water courses of any significance.

If land adjacent to the Connecticut River is developed, care should be taken to avoid making the area flood prone.

As a general rule, development should take place on soil which has characteristics posing no severe or very severe limitations to urban use as defined in soil survey reports issued by the Soil Conservation Service.

The complex should also comply with State regulations regarding air and water pollution.

Aesthetic Quality of the Project

The site offers an excellent opportunity for the State to erect a building in a setting of truly natural beauty. Utmost care should be taken to plan the location of the building and its associated uses in a way that the complex rests in harmony with the landscape.

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