Impact Analysis of the Sasaki Plan for Bristol, Rhode Island Waterfront

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IMPACT ANALYSIS OF THE SASAKI PLAN
FOR
BRISTOL, RHODE ISLAND WATERFRONT

By
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INTRODUCTION

In August of 1982 Sasaki Associates of Boston, Massachusetts completed a plan for the Bristol, Rhode Island waterfront. Sasaki was hired in 1982 by the Economic Development Office in Bristol to act as a consultant in the development of a Waterfront/Downtown Master Plan that would become an amendment to the Town's Comprehensive Plan. The Plan's goal was to assist the town in formulating a direction for the revitalization of downtown Bristol.

The Master Plan for the Waterfront/Downtown was adopted as an amendment to the Comprehensive Plan in 1982. A part of the plan was the proposal of a waterfront zone that would encourage water-orientated development. The zone is to encourage "suitable recreational and water-orientated development which will contribute towards a pleasant waterfront environment that is attractive and beneficial to local residents, tourists and visitors."¹ This proposed ordinance was met with much opposition by Bristol residents who felt the Town's "fabric of life"² would be threatened. In September of 1983 the Town Council approved the waterfront zoning plan despite a petition and protest from Bristol citizens.

In 1983 a Waterfront Advisory Committee was established to "develop recommendations for the present and future of the

¹Bristol Phoenix, 14 October 1982
waterfront and possibilities for the implementation and control of that future. Specifically, the committee is charged to invent (in consultation with town government bodies, Bristol citizens and appropriate advisors) solutions in the following areas:

1. Study and evaluate the entire existing waterfront of Bristol.
2. Identify the good and the bad elements of what exists.
3. List the assets that should be preserved.
4. Study marine interests and their logical form for the future.
5. Consider existing and possible future businesses.
6. Consider present and future housing.
7. Address and comment on the Sasaki proposal.
8. Study and appraise zoning.
9. Develop one or more scenarios for the future Bristol waterfront.
10. Identify problems and possibilities for proposals.
11. State workable short-term steps for immediate improvement and as initial contribution to long term goals.  

A case study of the Waterfront/Downtown Master Plan by Sasaki Associates for Bristol, Rhode Island will evaluate how the plan will impact the Town in specified areas. Although there are many issues that are of concern for the Town, the issues that will be examined in this research project are ones that I feel are of the most relevance to the Bristol waterfront. The

3Waterfront Advisory Committee Charter, 1982.
waterfront is defined as having the following boundaries; Hope Street bounded by Franklin Street and Constitution Street, as well as Thames Street directly adjacent to the waterfront. (See Figure 1)

The issues to be addressed are as follows:

1. Economic Considerations - Tax issues; will new development on the waterfront substantially improve Bristol's tax base? Employment opportunities; what types of jobs will be created by the new "businesses"?

2. Competition of Uses - Current housing opportunities v. post Sasaki Plan housing opportunities; will the Sasaki Plan result in the gentrification of the waterfront neighborhood pushing housing costs (purchase price and rents) out of reach for current residents? Current industrial uses v. proposed commercial and residential uses; Can these three uses exist along the same waterfront or will industrial uses have to be abolished for the Sasaki Plan to be carried out?

3. Public Access - To what extent should this be provided for, and what are the legal ramifications?

It is hoped that by addressing these issues the analysis will establish the feasibility of revitalization of the Bristol Waterfront in terms of the policy areas listed above. The result will be to suggest appropriate modifications to the Sasaki Plan in line with local community needs.
CHAPTER ONE

Waterfront development has become the new frontier for urban development in coastal cities. Re-use of neglected waterfronts that were once centers of economic activity are seen as a way to improve the economic base and aesthetics of a city or town. The basic functions of waterfronts have been commerce, ship building, transportation, commercial fishing, defense and, as a secondary function, recreation. Some cities or towns have shown consistency in their waterfront uses and others have seen waterfront uses change due to economic conditions and/or technology. Commerce has had one of the largest effects on the nature and use of urban waterfronts.

How well a city responds to and is willing to accept change plays a large role in the possible uses a waterfront can take on. Waterfronts do provide diversified opportunities for economic development, public enjoyment and civic identity.

In order to more effectively assess the conditions for change and re-use of the waterfront in Bristol it is best to look back at how the city has evolved and responded to change in the past, particularly how economic changes have affected the waterfront uses.
History of Bristol, Rhode Island

In 1680 four men, Nathaniel Byfield, John Walley, Stephen Burton, and Nathaniel Oliver purchased a tract of land commonly called Mount Hope Neck. The 7,000 acre tract of land that the original town plan was laid out on in 1680 roughly corresponds to the current waterfront area.

Sir Christopher Wren, designer and builder of St. Pauls' Cathedral in London, was employed to help design the town. The town plan had broad, straight streets enclosing squares of eight acres each. Four north-to-south streets (Thames, Hope, High and Wood) and nine east-to-west streets (Oliver, Franklin, Bradford, State, Church, Constitution, Union, Burton and Walley) established the grid. (Figure 2)

At the first town meeting, which was held on September 1, 1681, the name "Bristol" was chosen. This was in honor of the great English seaport with the hope that Bristol would become a new colonial maritime center. Parker Borden's Wharf at the foot of Oliver Street was the first wharf in town.

In 1690 there were fifteen vessels from Bristol engaged in trade to the West Indies. In 1747 the jurisdiction of Bristol was transferred from Massachusetts to Rhode Island. By 1770 Bristol was among the leading commercial ports in New England with about 50 vessels, sloops and schooners. Exports were chiefly produce, pickled fish, horses and sheep; imports were
mainly sugar, molasses, coffee and rum. The town was prospering through its trade and becoming a thriving seaport.

During the American Revolution, the town of Bristol suffered severely. In October of 1775 a British fleet of ten ships shelled the town and then in 1778 a church and sixteen houses were burned by the British. After the Revolution, the Town of Bristol was rebuilt and by 1780 was made a Port of Entry.

From 1787 to 1817 the slave trade was carried on extensively. In 1808 Congress closed the trade but British ships continued to smuggle slaves into the United States until 1817. From 1804 until 1808 when an embargo halted all European trade Bristol was engaged in the lucrative Far East Trade. "Bristol was at the peak of her commercial wealth and maritime activity in 1812".4

When privateering became a lawful activity during the War of 1812, Bristol became actively involved. By 1817 there were sixty-nine vessels on the register in Bristol. Exports of the time were beef, port, salt fish, potatoes, hardware, cheese, flour, soap, candles, and rum.

Bristol entered briefly into whaling in 1825. In 1837, the whaling fleet totalled nineteen ships. The whaling industry peaked about 1843 and was entirely abandoned by 1860.

At one point Bristol was the fourth largest seaport in the country. The town experienced its commercial peak around 1825

4Elizabeth S. Warren, "Bristol Waterfront Historic District" (National Register of Historic Places Inventory - Nomination Form, Providence, 1974), continuation sheet 2.
when the town was very busy with imports and exports. Though it was about 1830 that the economic base of Bristol began to shift from maritime commerce to manufacturing, records from the 1850's show viable commercial activity on the waterfront.

An increase in manufacturing and the building of railroads contributed to the change in economic conditions. When steam power was introduced, waterfront land with access to cheap fuel became potential mill sites. Thames Street became the location for the new textile locations. Bristol did maintain some foreign commerce until 1873 when the last firm engaged in West India trade was dissolved.

The industry boom lasted into the turn of the century when it overgrew itself. But the Industrial Revolution, that was not only taking place in Bristol but in other waterfront towns, caused entrepreneurs to look less to the water and more to the mills for produce. This created a barrier of industrial buildings along the waterfront cutting it off from the rest of the town. Two of the cotton textile mills that existed in the 1800's either remain in whole or part on Thames Street today.

1855 was a year of progress for Bristol. The town now had a population of about 4,900. There were forty-eight mechanical and manufacturing establishments, including the two cotton factories, and fifty-six trading stores. Summer business was up with local and shore travellers. It was the year of the first passenger train run between Bristol and Providence. Gas was provided to Bristol allowing gas manufacturing. Telegraph operation was
first established. Steamboat service from Bristol to New York City also began. All of this change encouraged the growth and industrial expansion of Bristol.

"In 1896, the Providence Journal of Commerce gave a concise overview of a Bristol that had turned from shipping as a livelihood to manufacturing and tourism."5 The D'Wolf Inn, a four story hotel with broad piazzas, was built on the waterfront and could accommodate 200 guests.

In 1912, Bristol ceased to be a port of entry. The twenties saw the D'Wolf Inn razed, and Rockwell Park constructed on the site. In 1929 the Mount Hope Bridge was opened providing an additional access route to Bristol.

Natural disasters continued to change the Bristol waterfront if economic conditions did not. The Hurricane of 1938 caused much property damage and Herreshoff Manufacturing Company and all other businesses near the waterfront suffered severe damage along the shoreline.

The Hurricane of 1954 flooded all the waterfront area and tore apart a section of the sea wall along Hope Street. The Bristol Yacht Club's boatyard suffered almost complete damage. Thames Street was flooded to a depth of between five and six feet.

Bristol, during its three hundred year history rose from a colonial seaport into a prosperous maritime center. It played a

role in the American Revolution and War of 1812. The De Wolf family who dominated shipping, the slave trade, banking, trading and politics played an influential role in the community's development during the early nineteenth century. The growth of manufacturing in the mid-nineteenth century which shifted Bristol's economic base from maritime commerce to industry. Bristol also was the home of Herreshoff Manufacturing Company from 1863 to 1948, the designers and builders of "America's Cup" defenders and other vessels.

Today the factories remain along Thames Street as does Rockwell Park and the Armory. "Bristol's fisherman still ply the waters, fishing and quahauging".6 Except for the annual fourth of July celebration, Bristol remains a quiet town.

"Visually Bristol tells an exciting story of growth, rise, and decline and rebirth of an old "Yankee" seaport".7 The past of Bristol's waterfront reflects the history of many of this Nation's seaports and waterfronts. The town either prospered or declined depending upon the economic conditions in the country. Natural disasters, economic conditions and technology have caused changes in waterfront uses.

As can be seen from the past, the future could hold even more changes for Bristol's waterfront as economic conditions fluctuate and technological advances continue.

With many economic changes taking place and the waterfront

6Ibid p.27.

7Warren, continuation sheet 5.
seen as an area for potential development, Bristol is like other cities in hiring a consultant firm to undertake a study of potential development schemed for the downtown waterfront area. "The Master Plan is based on the premise that the key to the revitalization of downtown Bristol lies in its most valuable asset, the waterfront. Historically, the waterfront has played an important role in Bristol's economy. However, its past role as an active port and a location for important industries is no longer valid. As these activities faded over time, the waterfront's contribution to the economic strength of the Community also declined. Today, although the waterfront is underused, its potential is still great." The next chapter will look at the economic consideration of the plan that was completed by Sasaki Associates, Incorporated with the Cross Group.

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CHAPTER II

Economic Considerations

Sasaki Associates, Incorporated with the Cross Group, Incorporated worked together on the Master Plan for the waterfront/downtown area of the Town of Bristol. The plan was written to assist the Town in formulating a direction for the revitalization of downtown Bristol. It was the intention of the plan, should it be implemented, that it would help to attract development interests for the waterfront.

The plan covers two major areas, one dealing with guidelines for future development and the other on how they should be implemented. Covered are site and planning criteria, vehicular circulation and parking, facade, signage and streetscape guidelines. The section on implementation covers zoning guidelines, development costs and financing, fiscal impact estimate and a private sector revitalization vehicle.

This chapter will concentrate on economic considerations and answer the questions of tax issues; will new development on the waterfront substantially improve Bristol's tax base and employment opportunities? What types of jobs will be created by the new "businesses"?
Economic Conditions

Sasaki in their plan "set forth a step-by-step analysis of the estimated costs and income that may be expected to result from the carrying out of the Bristol Waterfront Downtown Master Plan." 9 The analysis employed assumptions that were, according to Sasaki, on the conservative side. They felt that the conclusions would provide useful "order of magnitude" information that the Town could use to analyze the project and its' monetary benefits for the Town. Following is a summary of how the Sasaki Plan felt the Real Estate taxes would be affected:

"The proposed mixed-use development along the waterfront normally would not generate large amounts of real estate taxes because much of the land areas are owned and maintained by the city. In addition, the sailaway center, is an adjunct to the industrial operations of the boatbuilders which are located in other parts of town. However, the recreational marina and Armory building, in addition to the Sailaway Center when they are fully developed, will generate both real estate taxes and land lease income if the land is leased by the City. In this particular analysis, land lease income for the sailaway center has not been included. However, land lease income from the recreational marina and the Armory building is included. The reason for not including lease income from the Sailaway Center is an assumption based on minimizing the cost of this industrial operation which is both germane and essential to the City of Bristol.

Total taxes expected to be generated

10Ibid p.68.
are $83,000 per year. It must be emphasized, however, that 66% of these taxes are generated by the waterfront housing, both the north and south blocks. This is a significant amount of taxes in the future, compared to the 33% of the remaining balance generated by the recreational and industrial elements. It can be seen from the real estate projections that the Boatyard/Sailaway Center, Rockwell Marina, and Armory Building generate a total of $27,500 per year in taxes. The waterfront housing is an essential element of the economic viability of the Bristol waterfront and revitalization. Not only does it provide additional real estate taxes, but it also adds the critical mass of people to the area to provide the attraction, activity, and inherent security that is needed. Without the housing element taxes are substantially reduced.\textsuperscript{11}

Sasaki's analysis did not include the adaptive re-use of the Robin Rug, Premier Thread Building, Hotel, or YMCA that is called for in their plan. Table 13 from their analysis gives a summary of the "Estimated City Incremental Cost and Income". (Figure 3)

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|}
\hline
\textbf{Phase} & \textbf{I} & \textbf{II} & \textbf{III} & \textbf{IV} \\
\hline
\textbf{I. General} & & & & \\
\hline
A. Average Capital Cost/ & & & & \\
Capital Budget & & & & \\
Homes & $4,000 & $4,000 & $4,000 & $4,000 \\
TOTAL & $24,000 & $24,000 & $24,000 & $24,000 \\
\hline
\textbf{II. Income} & & & & \\
\hline
A. Property Taxes & & & & \\
Recreation Center & & & & \\
Marina & & & & \\
Armory Building & & & & \\
Housing North & & & & \\
Housing South & & & & \\
TOTAL & $24,000 & $24,000 & $24,000 & $24,000 \\
\hline
B. Land Lease Income/ & & & & \\
Armory Building & & & & \\
Marina & & & & \\
TOTAL & $24,000 & $24,000 & $24,000 & $24,000 \\
\hline
\textbf{III. Net (Goal) Surplus To Town} & & & & \\
\textsuperscript{(133,388)} & \textsuperscript{33,040} & \textsuperscript{66,000} & \textsuperscript{567,050} & \\
\hline
\end{tabular}
\caption{Summary - Incremental City Cost & Income}
\end{table}

\textsuperscript{11} Ibid p.70.
In this report, the project proposed by Sasaki will be analyzed using several different computer models, each of which have different underlying assumptions. By using the three different methods of Fiscal Impact Analysis and comparing the results one hopes to obtain the most realistic projections.

The three methods that will be used are Per Capita Multiplier Method, Service Standard Fiscal Impact Method, and Proportional Valuation Method.

Per Capita Multiplier Method is a classic average costing approach for projecting the impact of population change on local municipal and school district costs and functions. There are several assumptions:

1. Over the long run, current average operating costs per capita and per student are the best estimates of future operating costs occasioned by growth.

2. Current local service levels are the most accurate indicators of future service levels and will continue on the same scale in the future.

3. Current composition of the population occasioning costs and the population contributing to future costs are sufficiently similar that the above scenario will remain unaltered.

4. Number of residents and students introduced locally varies primarily with the size of the dwelling unit and secondarily with the type of dwelling unit.

5. Current distribution of expenditures among various sectors of municipal service will remain constant in the short
run and will serve as the primary indicator of the way in which additional expenditures will be subsequently allocated.

Services Standard Fiscal Impact Method uses average costing to project the impact population change on local municipal and school district costs and revenues. The assumptions with this method are as follows:

1. Over the long run, average existing service levels for both manpower and capital facilities of comparable cities can be used to assign costs to future development.

2. Service levels for both manpower and capital facilities vary according to the community's population.

3. After population size, geographic location also affects public service levels.

4. Average servicing levels of the population group appropriate for the local municipality and school district at the time of development annexation, zone change, etc., are those that should be used to assign the service load to the new development.

Proportional Valuation is an average costing approach used to project the impact of nonresidential (industrial and commercial) development on local costs and revenues. The assumptions with this method are as follows:

1. Municipal costs increase with the intensity of land use and change in real property value is a reasonable substitute for change in intensity of use.

2. As nonresidential real property value departs significantly from the average local real property value, the
direct proportional relationship must be refined to avoid either overstating or understating costs.

3. Aggregate impacts of commercial and industrial land uses on municipal services are sufficiently similar to group these land uses in a single nonresidential category.

4. Nonresidential development primarily affects municipal functions rather than school district services, which may thus be ignored.

The Project Summary is as follows:

Project market value $4,601,000.00
Project square footage (Commercial-Industrial only) 0
Anticipated Sales Base (Comm.-Ind. only) $ 0

Additional population (Residential only) 141
Additional school enrollment (Residential only) 21

Revenue Forecast Summary:

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Current Revenues</th>
<th>Revenue Increment</th>
</tr>
</thead>
<tbody>
<tr>
<td>addirevenue $5,192,071.00</td>
<td>$ 45,657.96</td>
<td></td>
</tr>
</tbody>
</table>

Project-related Property Tax Rev. $ 94,458.53
Additional Project Revenues $ 0.00

TOTAL PROJECT-RELATED REVENUES $ 140,116.50

The results for the three fiscal impact analysis methods are as follows:

PER CAPITA COSTING METHOD SUMMARY

| Total municipal expenditures | $ 5,029,515.00 |
| Total school expenditures | $ 9,013,700.00 |
| Residential share of local tax base: $ 62.00 |
| Non-residential refinement coeff.: 1.00 |

Residential expenditures $ 3,118,300.00
Per Capita residential expenditures $ 154.92
Per student school expenses $ 3,328.55

Forecast municipal exp. growth $ 21,844.21
Forecast school exp. growth $ 69,899.45
TOTAL forecast exp. growth $ 91,743.66
TOTAL forecast revenue growth $ 140,116.50
BALANCE (Revenues - Expenditures): $ 48,372.85

PROPORTIONAL VALUATION COSTING METHOD SUMMARY

Local Property Tax Base $379,506,000.00
Local Non-residential Tax Base $144,212,300.00
Nonresidential Share of Local Tax Base 38.00
Average Refinement Coefficient 1.00
Total Municipal Expenditures $ 5,029,515.00
Nonresidential Municipal Expenditures $ 1,911,216.00

Project Share of Nonresidential Tax Base 0.03
Incremental Refinement Coefficient 1.00

Forecast Expenditure Growth: $ 60,976.10
Forecast Revenue Growth: $ 140,116.50
Balance (Revenues - Expenditures) $ 79,140.40

SERVICE STANDARD METHOD COST PROJECTIONS

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Forecast Operating Cost Growth</th>
<th>Forecast Capital Cost Growth</th>
<th>Forecast Total Cost Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government</td>
<td>$ 2,326.00</td>
<td>0.00</td>
<td>2,326.00</td>
</tr>
<tr>
<td>Public Safety</td>
<td>$ 6,738.00</td>
<td>189.00</td>
<td>6,927.00</td>
</tr>
<tr>
<td>Public Works &amp; Health</td>
<td>$ 10,299.00</td>
<td>4,037.00</td>
<td>14,336.00</td>
</tr>
<tr>
<td>Recreation &amp; Culture</td>
<td>$ 417.00</td>
<td>13.00</td>
<td>430.00</td>
</tr>
<tr>
<td>School District</td>
<td>$ 58,953.00</td>
<td>943.00</td>
<td>59,896.00</td>
</tr>
</tbody>
</table>

Total Forecast Expenditure Growth: $ 83,915.00
Total Forecast Revenue Growth: $ 140,116.00
Balance (Revenues - Expenditures) $ 56,201.00

As can be seen in all three analyses, the bottom line result does not show that the project will provide a substantial increase in the amount of revenues collected by the Town of Bristol. The project will not in any of the three methods place a burden on the Town with an increase of additional expenditures.

All of the analysis undertaken to project the cost impact of
the proposed project on the Town of Bristol have assumed that all factors remain constant and that the proposed project would be inserted into this consistent environment. The Sasaki analysis did not consider the re-use of the Robin Rug, Premier Thread Building, Hotel, or YMCA, though those re-use projects are called for in their plan. It must be mentioned however that it is that particular aspect of the Sasaki project that could have an adverse impact on the cost/revenues for the Town of Bristol. Using the computer models to analyze the effect of the re-use of the Robin Rug, Premier Thread Building, Hotel or YMCA would show a positive impact for the Town of Bristol. This would be dependent on the industrial uses that are currently located along the waterfront remaining in Bristol for the proposed project not to have an adverse effect on the revenues and expenditures for Bristol.

The proposed project calls for commercial uses as well as residential. When all the phases of the project are completed and built out, industrial uses along the waterfront will have been replaced with commercial and residential uses. Jobs will be created with the new commercial uses, but they should not replace the jobs at Robin Rug and Premier Thread. If the Town of Bristol wishes for this project to be completed it will be necessary to assure that the industrial uses and the jobs associated with those uses remain in Bristol. Bristol should work with Robin Rug and Premier Thread to relocate the businesses to another site if the waterfront development takes hold and the existing uses
become incompatible with the new development. The City of Bristol could use a variety of cost sharing techniques to ease the relocation process.

What is occurring in Bristol is typical of what has been and is continuing to happen along waterfronts across the United States. Many cities attribute it to the economic conditions running their course and the statement that is often made is that people seek out the "highest and best use of the land" and those uses often change.

The next chapter will deal more specifically with the competition of uses along waterfronts and examples of how other cities have dealt with the issue of competition of uses.
CHAPTER III

Competition of Uses

Over the course of history, waterfront uses have evolved from seaports and maritime commerce to industrial uses, and now in many locations to areas for commercial, recreational and residential uses. "This time, the waterfronts owe their vitality not to big ships and salty, rough-cut seafarers, but to the desire of affluent Northeasterners to eat, drink, shop, stroll, play and just lounge around in the evocative maritime atmosphere." Examples of this include Baltimore's Harborplace, Boston's Faneuil Hall, Philadelphia's Penn Landing and Norfolk's Waterside to name a few. "At one time, the commercial life of North American cities depended almost exclusively on the activities of their ports. This is no longer true; the shift in importance along with the significant changes in cargo handling and steadily decreasing passenger travel has left large areas of waterfront land under used. Few cities, however, can afford to ignore the wealth of benefits offered by the full and productive utilization of their waterfronts." Market forces seem to place the highest and best use of the land as that of commercial and


residential. Unfortunately there are along many waterfronts, uses that have been located there for years and/or depend on the waterfront for the actual operation of the businesses. These businesses though may not be of the highest monetary value for the town.

The geographic location of a waterfront will influence its physical form and cultural heritage. Water resource dynamics and water quality are factors that dictate the potential for water related uses along the shoreline. These factors combine to affect engineering, design and construction of a waterfront project. The greater the range of potential waterfront uses, the greater the potential for competition and conflict between uses. A typical example of friction is that between recreational boating and the shipping industry.

In many cities, the waterfront has been a convenient location for lumber yards, storage tanks and vehicle storage areas. As well as the most common use for commercial fishing. Pursuing other forms of waterfront development means having to relocate the existing uses. Consolidating parcels of land for development can be difficult due to easements, railroad lines and other deed restrictions. The other alternative is to try and maintain different types of waterfront activities such as industrial, residential and commercial activities along the same waterfront. This mixture of uses has been worked out effectively in several waterfront communities. Before elaborating on how

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Ibid., p.40.
different uses can be accommodated, on the same waterfront the proposed land uses called for in the Sasaki Plan will be discussed along with the reasoning for those uses.

Plan Overview

Sasaki, as part of their plan, conducted a market overview. In the overview they addressed the issues of tourism; boating (commercial and pleasure); retail along Hope Street; the industrial pattern along the waterfront and the residential characteristics of downtown Bristol.

"Based on the space-fit constraints and the high probability of attracting only day visitors to the Town of Bristol, the Consultant Team and City Officials decided that tourism as a major attraction to the Bristol waterfront would not have a high priority. For this reason, extensive research into the tourist characteristics and spending patterns was not pursued as part of this analysis."\textsuperscript{15} It was decided, from a Master Plan point of view, to develop the Bristol waterfront as a localized, personal, recreational/industrial amenity with the market being the residents of the Bristol area rather than depend on outside tourism.

Commercial boating that is discussed evolves around the Prudence Island Ferry. If the State of Rhode Island develops the Bay Island Park system there will be a need for expanded ferry

and cruise boat services. Present plans by the Rhode Island Department of Environmental Management do not include Bristol as an embarkation point because of space limitations and parking at the existing Prudence Island slip. Overcoming these problems should be considered because of Bristol's amenities.

Recreational boating is very popular in Rhode Island, but Bristol Harbor lacks an adequate breakwater to protect boats from winds and high waves. There has been a lack of slip expansion and construction in Bristol, and as a result other towns have benefited from Bristol's lack of expansion.

Retail activity is concentrated on State Street between Thames and Hope Streets and on two blocks of Hope Street from Bradford to John Court Street. The types of shops are generally convenience stores catering to the daily needs and services of the community but not attracting major shopping by local residents, students or visitors.

The Sasaki plan feels that a waterfront revitalization can create a market for increased retail activity, both marine related and in Bristol's central business district. Roger Williams College also provides a source of revenues for shops and restaurants in the downtown area.

Industrial uses in the plan were broken down into four categories: boat building, commercial fishing, quahogging, and other industrial uses. "Bristol was not recommended by the authors of the report as a commercial fishing port for a number of reasons. One is the lack of a breakwater. However, even if a
breakwater were to be installed, there are other reasons that Bristol would not make a viable fishing port. It is too far away from the fishing grounds, the port is too small to accommodate a large fleet, landside support services are not available, and access to interstate highways is longer than at other locations."16

Rhode Island's most abundant species of shellfish is the quahog and the industry is characterized by independent fishermen known as handriggers. Narragansett Bay is a fertile field for quahogs and creates competition for the quahoggers on Long Island. Slip space is available on the waterfront of Bristol to dock the boats of the quahoggers but many trailer their boats in on a day to day basis. Sasaki recommends that additional launching ramps be created for the area.

Under other industrial uses are listed Premier Thread and Magic Carpet/Robin Rug Company. The report states that if Premier Thread were to ever relocate, the building they occupy has re-use potential. The likelihood of Premier Thread relocating is remote because of the cost of relocating the existing equipment. Magic Carpet/Robin Rug Company is only discussed in terms of the potential re-use of the building.

Residential characteristics are expressed in terms of rental inventory and for sale inventory. Residential construction has been slow in the area according to Sasaki. For apartments, there is a very low vacancy rate.

16Ibid p.18.
The summary of the Market Overview is expressed as a "Program Potential". New construction as well as adaptive re-use is discussed.

New construction is discussed for the block bounded by Hope, State, Thames and John Streets which are in single ownership. It is the core of downtown and "should be viewed as the super block for purposes of redevelopment in the future."17 "Market rate housing to be sold in the condominium form of ownership, with a mixture of retail elements along State, Thames and Hope Streets, provide an opportunity in the future."18

Buildings along the waterfront which are considered opportunities for adaptive re-use are the Rug Factory complex, the Armory Building and the Premier Thread Factory.

The Rug Complex should be viewed as an existing industrial use and should be continued. Sasaki recommends that future tenant mixes focus on those industries which are related to marine activity. Including high-tech industries currently located in the Quonsett, Rhode Island area. The southern portion of the building adjacent to the Coast Guard Station could provide an opportunity for residential development. Sasaki proceeds to recommend that certain existing buildings in downtown be converted for residential use. "The Harriet Bradford Hotel would be a likely candidate for conversion to condominiums."19

17Ibid p.21.
18Ibid p.21.
19Ibid p.21.
"The Armory building should be adaptively re-used as a retail/marina oriented operation. The marina and Boatyard/Sailaway Center have space needs which the Armory Building can satisfy. This includes repair, storage, display, as well as retail facilities. A restaurant and lounge would be good uses for the upper floors."\textsuperscript{20}(Figure 4)

Sasaki states in the plan that "the investigations conducted in preparing this plan indicate that the contemporary waterfront would best function in the following capacities:

1. As the location of activities which depend on direct access to and use of the water for their operations. Prime examples are pleasure boating, commercial fishing, marine sales and services boat building and repair, and marine orientated research and light industrial uses.

2. As a unique, value-adding amenity for land uses which benefit from a downtown waterfront or near waterfront location. Characterized as "water-enhanced" uses, prime examples include residential, offices, specialty retailing, restaurants and parks (see following).

3. As a significant public recreational resource providing access to the shoreline for both passive and active recreational purposes, including walking, picnicking, fishing, swimming, sailing, biking, etc.\textsuperscript{21}

"This development strategy is aimed toward achieving a higher utilization of the waterfront with an appropriate balance among these functions. This will help to stabilize the downtown and justify additional investment and improvements to existing businesses there. Also, it will help to attract new economic

\textsuperscript{20}Ibid p.21.

\textsuperscript{21}Ibid p.24.
FIGURE 4: ARMORY BUILDING & MAGIC CARPET FACTORY
PHOTO CREDIT: DR. HOWARD FOSTER
activity both to the downtown and to other parts of Bristol. "

Accommodation of Competitive Uses

"Waterfront revitalization is a newly popular element of city planning that presents unusual challenges: It must satisfy the needs of both industrial and recreational users." Water has the appeal as a backdrop for both commercial and recreational uses which compete with industrial activities for the use of the waterfront.

Historically, as stated previously, waterfronts have been the location for industrial type uses, centers of commerce. As modes of transportation turned from shipping and rail to trucking, many waterfront buildings became vacant. For most cities, after many years of decay, the waterfront was seen as an area for revitalization that once improved would work to uplift the image of the city. Shorelines became areas to celebrate the waterfront heritage of the community with many city sponsored activities.

Of course, not all the uses along most waterfronts were abandoned. "Between the abandoned buildings and piles of maritime junk, however, small businesses such as fishing and boat building continue to thrive. While these industries usually do not operate


out of ultra modern offices and are rarely tidy in appearance, they provide necessary services for the entire community. The people who work from the docks form a tightly knit commercial neighborhood, though few may actually live by the water. Nevertheless, the waterfront community is one with its own particular traditions and heritage, often unknown to inland citizens."24

A particular city's size, age and history of waterfront land uses provide either incentives or constraints for development.

Issues that need to be considered in planning for waterfront development are:

1. Regulations and permits;
2. Appropriate use of the waterfront;
3. Public access; and
4. Citizen participation.25

To expand on the issue of citizen participation, a decision to revitalize a city's waterfront must be a conscious one with community involvement since many of the existing uses may be displaced or forced to accommodate what are considered incompatible uses. "The indigenous waterfront community may be overlooked, however, in all the excitement. Maritime laborers and low-income residents of nearby neighborhoods have no use for specialty shops and expensive restaurants that are being


developed. They find themselves crowded out by the very people who once turned their backs to the waterfront. Residential complexes have been constructed, forming new neighborhoods, and as rents soar and the city evicts businesses, even working waterfronts become theme parks for the affluent. The smell, noise and chaos of the docks are a vital part of the maritime heritage but do not suit the tourist industry. Tourists are often unwelcome on the working waterfront where they can hinder commercial truck and boat traffic."

Not only is it important that the community be involved in the decision to revitalize the waterfront but also what is the appropriate land use for the waterfront. The issue of what is an appropriate use often paralyzes the redevelopment of urban shorelines. Distinguishing between water-dependent uses, water-related uses and uses that are not dependent on or have any relationship to the water is at the center of most controversies.

Policies for development established at the outset can help to alleviate controversies. Policies can take on several different positions:

1. preserve waterfront exclusively for totally water-dependent uses;

2. preserve waterfront for uses which may be helped by locating on the waterfront but could function elsewhere, water-related uses;

3. place no restrictions on waterfront uses and let site

\[26\text{Ibid, p.2.}\]
suitability factors and market conditions determine the use of the waterfront. 27

Once policies for the appropriate waterfront uses have been established the land use decisions can be controlled and enforced through zoning and permitting processes.

Zoning controls for a waterfront district must be innovative enough to accommodate multiple use projects and untypical development proposals.

There have been three common approaches to waterfront zones;

1. designate a special waterfront planning area and recognize it as such in the city master plan;

2. adopt a waterfront zone as part of the existing zoning ordinance; and

3. develop criteria and performance standards that pertain to waterfront characteristics. 28

A combination of all three approaches is also quite appropriate. Recognizing the waterfront as a distinct element in the city master plan is an important foundation for any regulatory controls that may be enacted since it is the legal basis for developing regulatory controls.

Bristol is not alone in having to make decisions for what was and still is a working waterfront. Cities from Miami to San Francisco to Seattle to Portland, Maine to East Providence, 27


28 Ibid., p.54.
Rhode Island have had to assess certain items in making land use choices for their waterfronts.

One item in making land use choices is the character of the community. Does the city value its existing character which may be that of a working waterfront and does it want to maintain that character. Maintaining waterfront businesses may require some extra help from the local government such as financial subsidies or tax incentives especially if property values along the waterfront increase. Bristol can make a choice to keep industrial uses on its waterfront or do away with them.

Another item to deal with is the public's perception of the waterfront. Perfectly viable businesses may look unkept. These businesses can pose problems when trying to accommodate residential or commercial uses along the waterfront even though the businesses may have been there for years.

The blue collar employment force of the waterfront businesses must also be addressed. "Do blue-collar jobs deserve protection in an age of high tech? Are restaurant jobs equivalent to ship repair jobs?"29 Bristol is faced with these very questions. Though several of the businesses along Bristol's waterfront are not water-dependent and could be located elsewhere in the community, the expense to relocate would be enormous. The town would have to make important policy decisions for its future employment base, fiscal future and character of the community.

As stated previously, regulatory controls play a very important role in establishing and/or maintaining the character of the waterfront. A waterfront can be defined as a commodity or community resource. As a commodity, there is little reason for the town to intervene with the workings of the marketplace. As a community resource, it can be looked at as land adjacent to a public resource, the water. With this scenario, other values besides strictly economic ones are taken into account. Here one can address the issue of retention of blue collar jobs, marine enterprises and even what is the community's own individuality.

Portland, Maine is often cited for its work in the area of waterfront development. Portland made a conscious effort to adopt a waterfront zoning ordinance in 1983 that would permit new commercial uses on the waterfront but would also preserve areas for industrial uses that are dependent on waterfront access. The public, specifically the Waterfront Preservation Association consisting of mostly dock owners, played an important role in the establishment of a maritime zone that protected the docks to either side of the central waterfront from development.

The central waterfront area is a mixed use zone that allows a range of commercial activities and some residential. All marine associated uses are also allowed. The two other areas encompassing both ends of the waterfront permit only marine, marine retail and restaurants.

Portland however is similar to Bristol in the respect that the central business district is closely related to the
waterfront. Investment and renovation in the central business
district has a direct effect on its surroundings which include
the waterfront. As development takes place adjacent to the zones
that permit only marine uses, pressure is put on the owners to
sell and on the city to change the zoning. Though there has been
a sincere effort to maintain two large portions of the waterfront
for existing marine uses, it is still uncertain whether the
waterfront will stand up to the commercial pressures.

Alexandria, Virginia also has experience with the
redevelopment of its waterfront. "Beginning in 1965, a sustained
planning, design and capital investment effort by the city
transformed what in the 1960's was an inaccessible, neglected and
unattractively industrialized stretch of riverfront into a
publicly accessible, visually attractive and commercially
thriving urban waterfront."30

Alexandria has retained the function of a working port and
accommodates recreational boating activities and commercial
shipping. Land uses alternate between compatible commercial
development, open space and recreation. Like Bristol, Alexandria
has a history of being a seaport dating back to the late 1800's
and its waterfront is adjacent to the historic district.

Interest in developing the waterfront began with "public
attention focusing on the need to clean up the Potomac River and
with the increasing value of land so close to Washington, D.C.

Returning People to The Port," *Virginia Town and City* 22
then the region's dominant employment center, the waterfront became too valuable to remain vacant or in industrial use."\textsuperscript{31}

Beginning in the 1960's joint planning efforts by the city residents and the federal government resulted in waterfront studies. Eventually in 1974 a Consolidated Master Plan for the city that set forth the future basis for the development of residential, commercial and open space along the waterfront. Their intent was to "attract nearby residents, other citizens of Alexandria and visitors to the area."\textsuperscript{32}

Alexandria "succeeded in preserving an important part of the city's history as a seaport town and has revived an asset that will anchor the economic vitality of the historic district into the next century."\textsuperscript{33}

Norfolk, Virginia has a more extensive waterfront than Bristol or the previously mentioned communities. But, all of its redevelopment efforts for the waterfront have been, until recently, concentrated to the downtown area. Norfolk's waterfront history dates back to the 1600's as many ports on the East coast do. The downtown waterfront saw a transition of uses and eventually became a vacant wasteland. The city who controls almost all the waterfront land in the downtown area took the initiative in working with consultants to develop a plan for waterfront development.

\textsuperscript{31}Ibid. p.9.
\textsuperscript{32}Ibid. p.9.
\textsuperscript{33}Ibid. p.9.
Within the seven years Norfolk has transformed the waterfront into an area that comprises office space, a hotel, festival market place, major waterfront park and residences. There are still sites to be developed which are earmarked for a Maritime Center, another hotel, mixed use developments of commercial and residential, another park and additional marine space.

Conflicts have arisen between residential and recreational uses when major activities are held in the park but these instances are seldom. Norfolk's Boat Building School has had to relocate due to the City's purchasing of land and proposals for development. Norfolk though is fortunate enough to have a considerable amount of waterfront that businesses can relocate to.

Miami, Florida has had conflicts between housing and heavy marine industry. Housing development and increased property values have pushed taxes up for the marine businesses. A proposal put forth in 1984 to the governor of Florida was to provide tax relief for river related businesses such as freighter loading operations, boat repair yards and fishing fleets. Also proposed was the creation of a special district where a ceiling could be placed on marine business property taxes.

Seattle, Washington adopted a shoreline policy that placed the highest value on public access to the waterfront, preserving views and maintaining open water. As a result, of the policy restaurants were built along the waterfront. But in 1982 a group,
the Seattle Marine Business Coalition was organized. Natural Resource Consultants of Seattle was commissioned by the group to document the value of marine businesses on Lake Union.

As a result of the study the city council in 1983 made restaurants conditional waterfront uses. Restaurants "shall not usurp land needed for and better suited to water-dependent and water related industrial and commercial use." 134

Sasaki sets forth in the plan for Bristol's Waterfront that water dependent uses should first be accommodated then followed by water-related uses.

Citizen concern in Bristol seems to center around the existing waterfront industrial uses which are uses that are not dependent on waterfront access.

Since these uses play an important role in Bristol's economic vitality every effort should be made to accommodate them in planning for new adjacent development. It is not wrong however in laying out long range plans to provide for other uses on these sites. What must be remembered is that these uses should be encouraged to remain in Bristol and relocation assistance should be provided by the town.

It may also be appropriate for the town to provide for tax relief for industrial uses on the waterfront so that increasing property values do not push out the existing industrial uses before their time or the water-dependent uses at any time.

In order to accommodate the existing industrial uses and make them more compatible with new uses such as housing and commercial uses open space and landscaping should be considered as buffers to mitigate the impacts of what might be termed incompatible land uses.
CHAPTER IV

Public Access

The issue of public access to waterfronts has become one of increasing concern in recent years. Waterfronts were for many years considered areas of neglect where only fishermen and long shoremen could be found. With many cities and towns developing an awareness for economic development, the blighted waterfronts were seen as potential areas for development. With this redevelopment, it was hoped tax bases would be increased and therefore the waterfront revitalized.

As with any development project, issues can arise and with waterfront developments one issue is public access. There has been a renewed interest in access to the waterfront perhaps due to the fact that recreation has become a large part of the American life style. The work week, in terms of hours, has been decreasing allowing more leisure time. D. Duscik in his book, Shoreline for the Public mentions that disposable income, leisure, mobility and education as factors contributing to the increased demands on recreational space.35 The public's interest in recreational use on the shoreline is special because of the shoreline's unique and finite quality. It is unique both geographically and in terms of recreational uses. To say that a shoreline is a unique recreational area, not much is available

35D. Duscik, Shoreline for the Public ( ), p. .
for public use. "In 1971, out of a total shoreline of 84,240 miles, 45,290 were federally owned, 10,080 were state and locally held and 26,310 were in private hands. With respect to recreational shoreline, out of a total 9,210 miles devoted to recreation in 1971, 5,820 miles were privately owned." Since the shoreline can be considered a unique asset of this country, it should be available for public access. In recent years there has been progress in efforts to allow public access to our nation's shoreline.

Access to the shoreline, whether it be that of a river, bay, or ocean, should be both physical and visual. Port towns were developed with their orientation towards the waterfront. Commerce and transportation of the time were water orientated uses so access to the waterfront was very important. The evolution of land uses as a result of changes in economic conditions has effected the visual and physical access to the waterfront.

In the original platting of coastal seaports streets were laid out parallel and perpendicular to the shoreline, providing direct visual and physical access to the waterfronts. As land uses changed, access to the waterfront, both physical and visual were gradually cut-off. Evidence of this can be seen in many East Coast communities. In Bristol, factories were built blocking visual and physical access to the waterfront. A 1974 survey by the Public Rights of Way Commission in Bristol, Rhode Island

noted only 3 waterfront access points in "downtown" Bristol. (Figure 5). In some cities such as Providence, Boston, New Bedford and New York City if it wasn't factories, it was the construction of major highways that became barriers between the cities and the waterfront.

Now that cities across the nation that had turned their backs on the waterfront are looking to it for a viable economic use, there is a strong concern for public access. It is the belief among many that the waterfront and access to it should be preserved for the use of the general public. People that can not afford the high price condominiums should still be able to enjoy an asset as important as this Country's bays, harbors, rivers and lakes.

In some waterfront areas, as many psychological barriers exist as actual physical or visual barriers. Even if physical or institutional barriers are removed, people may still continue to stay away from the waterfront if they think the waterfront is inaccessible. These psychological barriers can only be totally removed if the public's image of the waterfront is changed from that of being a difficult place to get to, to an area that welcomes the general public.

This new mentality of providing public access to the waterfront has dictated certain guidelines for the planning and construction of waterfront projects. In the plan completed by Sasaki for the Bristol waterfront they list certain functions that would be best suited for the waterfront. One of these is
a public recreational resource that would provide access to the waterfront for active and passive use. "Opportunities for public access to the water, should be further expanded and the visual attractiveness of the waterfront should be enhanced."\(^{37}\)

In the site planning criteria for the projected Rockwell Park Boat Basin/Sailaway Center it is stated that "pedestrian access and a continuous wateredge walkway should be provided in order to maximize the public recreational aspects of the boat basin. A wide, landscaped strip park along Thames Street should provide screening of parking areas."\(^{38}\) The State Street Waterfront Park would also provide additional access to the waterfront. Plans call for 18,000 square feet for the park of which 15,800 square feet would be landscaped open space and activity area including a wateredge promenade, seating and display. The Quahog Fisherman's Wharf would also provide for public access along the edge. The Independence Park Ferry Charter and Tour Boat Terminal program has a total square foot requirement of 177,000 square feet of which 50,000 square feet is allocated for a waterfront promenade and terminal area. One of the site planning criteria is to improve pedestrian access from Thames Street.

As part of the "Pedestrian Circulation and Streetscape Guidelines" a network of paths are proposed which should be emphasized through public street improvements. Public rights - of


\(^{38}\)Ibid., p.32.
- way would be used where possible and new ones created through redevelopment of the area. Five design proposals are recommended for pedestrian circulation, they are:

1. Pedestrian connections between Hope Street and the waterfront in the core area should be strengthened. In addition to Bradford, State, John and Church which exist, a new mid-block pedestrian path should link the proposed Thames Street parking lot to Hope Street between the library and Post Office. Ultimately this path would serve as a link to the waterfront in the vicinity of the lumber yard and Thread Factory.

2. Improvement of State Street as the main pedestrian link to the waterfront from Hope Street should be undertaken. State and Hope are the crossroads of the downtown and State Street commands an imposing vista of the Harbor from the intersection. The waterfront public park proposed at the foot of State Street would be a suitable termination for the State Street axis and would be the major public focal point of the waterfront. New street trees, pedestrian lighting, paving and sidewalk extensions would give State Street the characteristics of a semi-mall, and would enable the street to be closed to traffic and function as a full pedestrian mall during special promotions and festival days.

3. A continuous waterfront walkway system, permitting public access to the shoreline should be developed over time. From State Street south, the system substantially could be put in place with the development of the Rockwell Park recreational marina. North of State Street, accomplishment of the link to Independence Park, would require negotiated easements with current land owners. On a longer term basis, changed use and/or ownership status would allow the Town to exercise mandatory provision of a public waterfront walkway through zoning. Where crossing private properties, the walkway configuration would have to take account of the security requirements and operational constraints of the property owners.

4. Hope Street is the main shopping street of the downtown and as such has the heaviest pedestrian volumes. This activity needs to be supported with improved physical facilities. Since the narrow thirty one foot street width of Hope Street precludes sidewalk widening in the downtown area. Improvements should be directed toward
upgrading the quality of existing facilities, such as sidewalk paving and pedestrian street lighting rather than adding street trees which would tend to crowd the existing sidewalks, and interfere with storefront awnings and facade signage. The Town should establish a vehicle for matching private contributions to a historic street light fund.

5. As the waterfront is redeveloped Thames Street will have increased activity and it will become a major element of the downtown pedestrian circulation system. Its visual quality and design standards need to be substantially improved from present levels.

The roadway of Thames Street which, like Hope Street is quite narrow, would remain at its present thirty foot width in order to preserve its traffic handling capacity. New sidewalks, pedestrian scale lighting and street trees are recommended. A landscaped park strip of over 30 feet in width is recommended to act as a buffer between Thames Street and the Rockwell Park marina parking area.

The sketch sections illustrate the proposed dimensional standards and streetscape elements of the major streets, and design character of major waterfront public spaces.39(Figure 6)

New development for the waterfront should preserve waterfront views and visual corridors. Except for the areas where factories are now located, the views and visual corridors in Bristol have existed since the original platting of the town and should be protected. (Figure 7). In addition, open space and waterfront access should be provided for. These items and provision of them should be checked through the site plan review required for Planned Unit Development Zoning.

It has been "the prevailing opinion among city officials, 39Ibid.p.45."
FIGURE 6: SECTIONS OF STREET IMPROVEMENTS

Bristol Rhode Island

SOURCE: SASAKI ASSOCIATES, INC., 1982
government agency representatives, and urban residents that public access to the waters edge should not be limited by private development of waterfront lands. This viewpoint is based on the premise that an urban shoreline is a public resource and should be managed to benefit the greatest number of people in the best possible way. Under this policy, private developers are encouraged to enhance the public use and enjoyment of urban shorelines by providing access to the waters edge.\textsuperscript{40}

Furthermore, waterfronts themselves, which may include the land to the mean high tide mark are publicly owned and managed.

On the other side, developers who are required to provide public access must consider the project's feasibility if a percentage of land is required to be set aside for providing public access. Depending on the conditions of the site, etc. it may alter the developable land to a point that makes the project unreasonable financially. Then there is the question for both the public and private sectors as to who will manage and maintain the public area. Not all local governments can afford to finance public holdings of waterfront land.

In 1980, the Heritage Conservation and Recreation Service (HCRS) of the Department of the Interior and the American Planning Association (APA) cosponsored a nationwide series of Urban Waterfront Revitalization Seminars. One of the key issues discussed was public access.

Four reasons for ensuring public access to a waterfront

revitalization were stated as a result of the seminars.

Public access is important because:

1. Waterways that are cleaned up can be used for swimming and fishing;
2. The need to conserve fuel makes nearby recreation increasingly attractive for millions of people;
3. In areas where coastal storms threaten waterfront development, recreational uses may be a more practical alternative than other kinds of development;
4. When public access has been included in private development of urban waterfronts, benefits increase substantially, not only for the public but also for the commercial developer. 41

Public access requirements exist within the state coastal management programs of California, Washington and Massachusetts. In San Francisco, the San Francisco Bay Conservation and Development Commission reviews each shoreline development application to determine the amount of public access that can be accommodated in the development proposal. This access can be required at the actual permit site or can be substituted for access at another point that may be more suitable. Washington's shoreline management regulations require local governments to include a public access element in their master programs.

Other states handle the regulation of public access to

waterfronts on the local level. One way of handling is by zoning restrictions that require easements. Others include provisions for public access if permits are required for dredging or pier construction. Still others use incentives rather than requirements. Increased floor area ratios have been used in New Orleans to encourage the private sector to provide access to the waterfront.

Zoning and permitting processes create a legal means by which to provide both visual and physical access in waterfront development projects. But, legal questions continue to arise about the actual ownership of waterfront lands and care must be taken so that there is not a "taking of private land for public use without just compensation."

An example of a city that has established a special overlay district to provide for public access as well as other amenities is Toledo, Ohio. In 1979 a Maumee Riverfront Overlay District (MR-O) was created. "Specifically, the ordinance calls for increased public access to the water, improved scenic and aesthetic controls, improved transportation, and better coordination of recreational, commercial, and industrial land uses."\textsuperscript{42}

The district was implemented and designed to be an interim measure until a revised zoning ordinance could be developed and policy decisions could be made as to what type of development the

community wanted along the riverfront.

Toledo's special overlay district succeeded in increasing public control over private development and thus encouraging quality design and public access.

Alexandria, Virginia had an advantage in providing public access to the waterfront because a good portion of the properties were in public ownership. Guidelines were established in 1977, by the City Council, for waterfront development. These guidelines stressed that convenient access should be provided to the waterfront and that waterfront open spaces should be for public use. A proposal for a continuous promenade and bikeway along a major portion of Alexandria's waterfront was included in the guidelines to ensure public access.

Norfolk, Virginia, like Alexandria, has been able to control the majority of the development along its waterfront in the central business district. The City and the Norfolk Redevelopment and Housing Authority owned and still owns almost all the waterfront property within the central business district. This has enabled the city to develop, with consultants, a Master Plan for the waterfront that includes a continuous waterfront walkway system with public open spaces. The walkway system and major open spaces ensures public access to the waterfront.

The quality of the public access that is to be provided is just as important as the public access itself and should be addressed at the outset. The space designated for public access should have amenities. These amenities can then draw people to
the waterfront. "Enhancing waterfront areas and providing public access to the shoreline generate economic returns that are difficult to quantify."43

The Sasaki Plan for Bristol, Rhode Island has provided public access to the waterfront through the use of wateredge walkways and open spaces.

CHAPTER VI

Conclusion

The purpose of this paper has been to assess the impact of the Sasaki Plan to revitalize the Bristol, Rhode Island waterfront using three components of the plan; economic considerations, competition of uses and public access.

The Sasaki Plan was undertaken with the underlying assumption that the waterfront is Bristol's key to revitalizing the downtown. The plan they developed would help to attract new development interests to the waterfront and, as a result, help to revitalize the downtown.

The success of the plan could very well depend on how easily the town of Bristol responds to change. Chapter One showed how waterfront land uses in Bristol have evolved over time due to changes in technology, transportation, and the market place. Perhaps it is once again time for changes to the waterfront. Typical trends in land use follow the "highest and best use of the land" and if other communities can be any sort of example the "highest and best use" of waterfront land is currently residential and commercial uses.

No additional substantial revenues are created as a result of the project on the initial look, but no burden has been placed on the community's tax base either. Over time the project could have a spin-off affect with increased sales taxes, etc..
Residential development typically places the biggest burden on a community's tax base with new roads, utilities, and schools. The type of residential development planned for in this project, which would typically not generate a large number of school age children, would not put a big burden on the tax base.

What must occur for this project to be a success monetarily and in the eyes of the community is for the existing industrial uses on the waterfront to either remain where they are or to relocate within the community. This is necessary for the community's tax base as well as employment base. For the most part, service type jobs would be created as a result of new development if the plan goes forward. Service jobs could not replace the type of jobs at Premier Thread or the Rug Complex.

Steps can be taken through zoning and buffering to avoid any competition between new development and existing industrial uses. Market forces can be controlled through special districts that would give the industrial uses a tax break and enable them to survive longer on the waterfront or the community can let the market forces run their course.

Bristol residents have been concerned about the town becoming another Newport. Yet, the Sasaki proposal has made the projects' market the residents of Bristol. The one exception would be the plan for embarkation points for the Prudence Island Ferry and other commercial boating if the State ever develops the Bay Island Park Service. Sasaki states that Bristol is currently not being considered by the State as an embarkation point but
should be due to Bristol's amenities. Such a designation could have a positive effect on Bristol's economy. Bristol like many small communities is missing economic opportunities by not providing for shopping other than convenience needs and services. There is a need and potential to attract major shopping in the community by local residents, students at Roger Williams College and visitors.

As for what types of uses would be best suited for the waterfront, Sasaki recommends maintaining the industrial uses, ie. Rug Complex and Premier Thread and that future tenant mixes should be marine related. Waterfront activities should be focused to water-dependent uses, water-related uses and as a public recreational resource. This sort of policy for waterfront uses is what most communities strive for.

Public access both visual and physical is provided for in the Master Plan. Visual access that existed when the town was originally platted is maintained. Physical access along the waterfront is maintained where possible in the form of a wateredge walkway system.

With appropriate phasing of this project and a commitment on the part of the town to undertake public improvements with the implementation of streetscape guidelines and park improvements, the waterfront revitalization project could be very successful. Care should be taken not to proceed to quickly but to appropriately phase the project so that impacts from the initial development projects can be developed and future projects can be
modified accordingly.

If open communication between the town and the people of the community is maintained and input on behalf of the residents is permitted, this project could be very successful and have a positive impact on the economic status of Bristol.
Bristol, Rhode Island
A downtown waterfront revitalization plan
Prepared by Studio Architecture Inc.

FIGURE 9: BRISTOL, RHODE ISLAND WATERFRONT - PROPOSED
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