

The Contribution of Working Waterfronts to the Maine Economy

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Maine's Working Waterfront Coalition

dedicated to supporting and enhancing Maine's working waterfront through policy, planning, investment, and education

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Farm Credit
OF MAINE



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Introduction

Maine's 3,500 mile coastline is one of the most important resources in our economy, but a number of trends have come together recently to renew concerns about the future of Maine's working waterfronts. One key trend is the increasing pressure for conversion to other uses, primarily seasonal or year-round residences. Maine's Working Waterfront Coalition, with support from Farm Credit of Maine, ASA, the Island Foundation, and CEI, contracted with economist Charlie Colgan to clarify the economic impact of Maine's working waterfront activities.

In this report you will find evidence that protecting our working waterfront is smart economic development. Colgan compares the economic contribution of coastal residential construction and working waterfront activities. The working waterfront contributes anywhere from \$15 million to \$168 million more per year to our gross state product than does coastal residential construction. In other words, our working piers and wharves contribute almost two times more to the state's economy than would converting 500 coastal properties and building a \$650,000 house on each one.

Colgan says, "Waterfronts are in fact one of valuable and productive assets, state and local policies should not be indifferent to the fate of Maine's working waterfronts. Rather policies should recognize their value and seek to promote and preserve them wherever possible."

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Overview

Maine's 3,500 mile coastline is one of the most important resources in the Maine economy, but a number of trends have come together recently to raise renewed concerns about the future of Maine's working waterfronts, a key part of Maine's coastal resources. Working waterfronts are those portions of the shore used to support commercial activities such as fishing, marinas, boat building and repair. Such uses of the shore have been under increasing pressure for conversion to other uses, principally residences on either a seasonal or year-round basis.

**3,500 miles of
coastline –
25 miles of working
waterfront**

Although oceanfront property in Maine is generally the most expensive real estate in the state, a steady and high level of pressure for development of residential property on the shoreline has been driven in the past few years by historically low interest rates and a “flight to land” for money taken out of the stock market during the historic boom of the late 1990s. While much of the shore is developed along the Maine coast, particularly west of Penobscot Bay, in many communities the location of small privately-owned piers, wharves, and ramps offer some of the best shoreline access still available for residential development.

A major question surrounding the conversion of working waterfront from commercial to residential uses is what effect this has on the Maine economy. The loss of a single pier or ramp might make only small reductions in space for commercial activities, which can often shift to other areas. And the construction sector is a major part of the economy, with residential construction employing 15,000-20,000 people per year in Maine, and many of the residences built on prime shoreline providing significant additional tax base in many towns.

This paper explores the contributions to the Maine economy from coastal real estate development and from those activities most likely to rely on the working waterfront. The evidence suggests that, while coastal real estate development does make a significant contribution to the Maine economy, those activities associated with working waterfronts make larger and more long-lasting contributions. The contribution to the economy of these activities, as measured by gross state product is at least \$15 million to \$23 million higher than that of residential development under conservative assumptions.

While this conclusion rests on the latest and most detailed data available, it is not possible to provide a detailed picture of the tradeoff between real estate development and other coastal uses in every location. The process of development is gradual and incremental and

individual situations may offer different results than those presented here. However, the results indicate that policies and programs that maintain working waterfronts as viable contributions to the economy are likely to be an important element in assuring the future of a viable ocean and coastal economy in Maine.

Measuring the Economic Contributions of Working Waterfronts and Coastal Residential Development

The measure chosen to describe the contributions of working waterfronts and coastal residential development is the contribution each makes to gross state product. Gross state product is the total value of goods and services produced in the Maine economy, and is analogous to the U.S. Gross Domestic Product. It is the broadest measure of what is actually produced in Maine, and is calculated on a “value added basis” to avoid double counting the output of one industry when it is used as the input of another industry.

The region to be examined consists of coastal towns which have facilities that are used as boat launching ramps, piers, marinas, etc. A 1998 inventory of port facilities by the Southern Maine Economic Development District and the Eastern Maine Development Corporation conducted 1998 for the Maine Department of Marine Resources identifies 583 such facilities spread across 88 coastal towns.



These towns can be designated as “port towns” for purposes of this report. (Table 1)

This listing of port facilities should be considered only a partial list. Other counts of port facilities have returned different numbers of facilities due in large part to issues of defining what a “port facility” is and the problem of accessing the entire coast line for purposes of enumeration. However, the exact number of such facilities is not critical to this analysis since the inventory is used primarily to identify coastal towns where conversion of facilities may take place. Of course, not all of the facilities are subject to potential conversion to residential use, as many are publicly owned and operated, but the large number of such facilities gives a picture of the size of the working waterfront issue along the coast.

**Table 1
PORT AND HARBOR FACILITIES ON THE MAINE COAST**

Municipality	Boat Launch or Ramp	Commercial Land/ Buildings	Float System	Incomplete	Marina or Yacht Club	National Park	Other	State or Municipal Park	Wharf or Pier	Total
Addison	2									2
Bangor			1						2	3
Bar Harbor	2	2			1				7	12
Bath	1	3			2				4	10
Belfast									6	6
Biddeford	3		1		2					6
Blue Hill	3								3	6
Boothbay	2	1	2						6	11
Boothbay Harbor	1				3				24	28
Bremen									3	3
Brewer									2	2
Bristol	1	3							7	11
Brooksville					1				1	2
Brunswick	5				2				1	8
Bucksport			1						3	4
Camden		1		1	1				6	9
Cape Elizabeth	1							3		4
Castine									5	5
Cumberland	1	1	1						4	7
Cushing									3	3
Cutler	2								5	7
Damariscotta	1									1
Deer Isle				1	1				4	6
East Boothbay	1	1							3	5
Eastport									14	14
Eliot	1				1					2
Ellsworth									1	1
Falmouth	1				1				1	3
Freeport	3	4			1				1	9
Frenchboro									4	4
Friendship		1			1				8	10
Gouldsboro									3	3
Hampden					1					1
Hancock		1							2	3
Harpwell	6	1		2	3			1	23	36
Harrington	1									1
Isle Au Haut						1			1	2
Isleboro		1	1						5	7
Jonesport - Beals	2	2							12	16
Kennebunk					2				1	3
Kennebunkport					3				7	10
Kittery	2	2	1		2				8	15
Lincolnton									2	2
Long Island									2	2

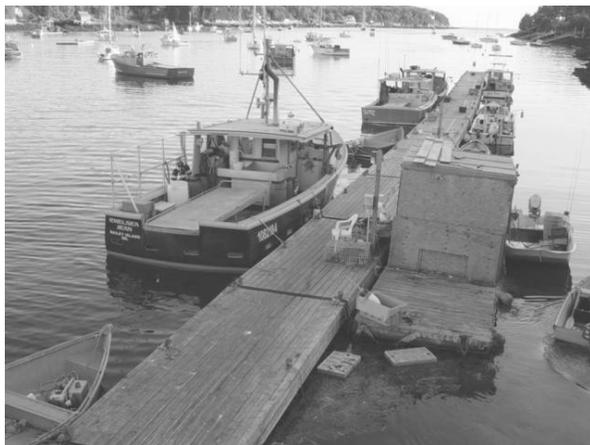
**Table 1
PORT AND HARBOR FACILITIES ON THE MAINE COAST**

Municipality	Boat Launch or Ramp	Commercial Land/ Buildings	Float System	Incomplete	Marina or Yacht Club	National Park	Other	State or Municipal Park	Wharf or Pier	Total
Lubec		2							5	7
Machias					1					1
Machiasport	3	1							2	6
Milbridge									3	3
Monhegan Plantation									1	1
Mount Desert		2			3				6	1
NewCastle	1									1
North Haven			1						6	7
Northport					1				1	2
Ogunquit			1						3	4
Orrington	1									1
Owls Head	1	1							1	3
Phippsburg		1								1
Portland					2				24	26
Rockland	2	3			2		1		13	21
Rockport			2						2	4
Roque Bluffs	2									2
Saco					2				1	3
Scarborough	4	2			1			2	2	11
Searsport									3	3
Sedgwick	1								1	2
South Berwick	1									1
South Bristol									10	10
South Portland	1				4				14	19
South Thomaston	2	1							4	7
Southport					1				4	5
Southwest Harbor		1							14	15
St. George/ Port Clyde	1								7	8
St. George/ Tenants Harbor	1	2							5	8
Steuben	3									3
Stonington			1	1					9	11
Surry	1								1	2
Swans Island		1		1					6	8
Thomaston									6	6
Tremont	1								3	4
Tremont (Bass Harbor)		2							4	6
Vinalhaven	1		1						9	11
Waldoboro	2									2
Wells					1				2	3
Winter Harbor					1				2	3
Winterport					1				1	2
Wiscasset	1								3	4
Yarmouth	3	2		1	3				2	11

Table 1 PORT AND HARBOR FACILITIES ON THE MAINE COAST										
Municipality	Boat Launch or Ramp	Commercial Land/Buildings	Float System	Incomplete	Marina or Yacht Club	National Park	Other	State or Municipal Park	Wharf or Pier	Total
York					1				8	9
GRAND TOTAL	75	45	14	7	52	1	1	6	382	583

A 2002 study of port facilities by Coastal Enterprises Inc. found that among the 25 towns studied, 40% of the commercial fishing access is provided by private residences. 25% by publicly owned facilities; and 75% private facilities, of which 35% were private commercial and 40% were private residential.

To estimate the economic impacts of working waterfronts, data is available for the contributions to gross state product and working waterfront-related activities for 2001. For the purpose of estimating real estate activity, housing permit data reported by towns to the Bureau of the Census was used in the towns with port facilities. Of the 86 towns in this category, the following towns did not report any residential development over this period: Blue Hill, Brooksville, Cushing, Deer Isle, Lubec, Monhegan Plantation, Searsport, Sedgwick, South Bristol, and Swans Island. It is not clear whether no residential development took place in these towns, or no development was recorded by the Census Bureau.



In 2001, 2137 permits were issued in the 78 coastal port towns for which permit data is available. The total value of construction reported in the permit applications was \$325.1 million. The mean construction value per unit was \$152,000. This is the gross construction value. The direct value added of this activity (contribution to the Gross State Product) is estimated at \$63.35 million, comprising primarily wages and profits. The indirect and induced, or “multiplier” effects of this activity yields a total contribution to the Maine economy in 2001 is \$192.8 million.¹

An important question is whether these estimates are actually representative of the types of housing that might be built to replace working waterfront properties. In one sense, the answer

¹ Estimates of direct and multiplier effects are derived using an IMPLAN model of the Maine economy. IMPLAN is a standard economic model used in making such estimates.

would appear to be no. While data about the location of new housing construction within each town is not available (except from individual town records), it is likely that most of the housing developed in the coastal towns takes place away from the shoreline simply because the land is cheaper away from the shore. Thus the average value calculated above understates the likely value of shoreline construction.

At the same time, there are also substantially fewer shoreline construction projects simply because of the price and availability of shorefront property. The total reported value of \$325.1 million would imply about 500 units valued at \$650,000 per unit. This would almost certainly be a high estimate of the number of shoreline residential developments, and so the estimate of construction impacts on the Maine economy must be considered conservative (that is high).



To estimate the contribution of working waterfront-related activities, data is used from the National Ocean Economics Project.² This data was developed by the author for a national study of the ocean and coastal economy sponsored by the National Oceanic and

Atmospheric Administration. Estimates of the gross state product for the marina and seafood processing industries can be compared to the value of construction. In 2001, the direct contribution of seafood processing to Maine gross state product is estimated as \$51 million, while marinas' contribution is estimated as \$27.2 million, for a total of \$78.2 million. With multiplier effects, the total for the two industries is \$216 million.

Of course, the seafood processing industry and marinas represent only two of the industries dependent on working waterfronts. One key activity is lobstering, most of which is not included in the seafood processing since lobster is sold almost entirely fresh in Maine. It is reasonable, therefore, to add the landed value of the lobster industry as the contribution of this industry to the economy. In 2001, lobster landings were \$154 million. Because we do not have data to estimate value added for the lobster industry, no multiplier effects are calculated.

² See www.oceaneconomics.org for more information

Boat building³ represents a high value activity which takes place both on the shoreline and away from it. Sabre Yachts in South Casco and the Hinckley boat building facility in Trenton for its lines of motor yachts are examples of boat building facilities without direct access to the shore. While such companies remain dependent on waterfront access for that portion of their production that will be launched in Maine, data is not available on what that portion is. Boat building's Gross State Product estimate for 2000 (the latest year available for this industry) is \$80.7 million. Table 2 and Figure 1 bring together these estimates.

Table 2			
Estimated Contributions to Maine Gross State Product 2001			
(Millions of Dollars)			
Residential Construction - Port Towns	\$325.1	\$63.3	\$192.8
Seafood Processing		\$51.0	\$149.1
Marinas		\$27.2	\$66.8
SUB TOTAL		\$78.2	\$215.9
Lobster Landed Value			\$154.0
Boat Building		\$80.7	\$145.4
TOTAL WORKING WATERFRONT ACTIVITIES		\$158.9	\$361.3
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, National Ocean Economics Project			

The estimates in Table 2 show that even a very high rate of home construction in coastal communities would not contribute as much to the Maine economy on an annual basis as the activities associated with working waterfronts. Using the estimates for seafood processing and marinas, those for which the available data are best, the annual contribution to the Maine economy as measured by gross state product is higher than the construction of up to 500 homes valued at \$650,000. In 2001, these industries exceeded the contribution to GSP by \$15 million in direct economic activity and \$23 million in total GSP. Although the estimates for lobstering and boat building are not as accurate, these substantially increase the gap.



³ We exclude ship building at BIW and Kittery-Portsmouth Naval Shipyard as special cases.

Comparison of Contribution of Coastal Residential Construction
and Working Waterfront Activities to Maine Gross State Product
2001

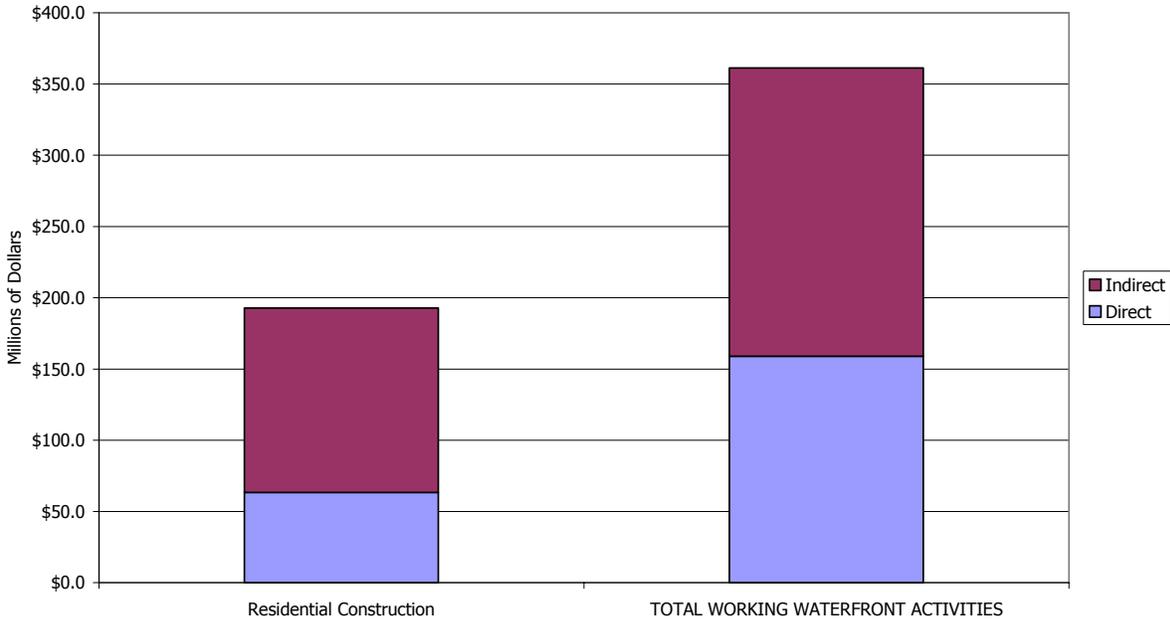


Figure 1

The larger contribution of the working waterfront activities should also be seen in the context of more than one year. A major characteristic of home construction is that the contribution to the state's economic output occurs generally only once (excepting repairs and maintenance), while the contribution of the commercial activities occurs each year. There are certainly likely to be variations in the contributions of these activities, particularly fishing, but

The contribution to the state's economic output from home construction generally occurs only once, while the contribution from commercial activities occurs each year.

even relatively large variations would not be likely to eliminate the contribution of living resources. Recreational boating, the principal use of marinas, is also expected to grow over the long term.

There is also one aspect which favors residential development. The high values of shoreline real estate are likely to produce significantly higher property tax revenues for local governments. A precise estimate of the property

tax impacts of the residential development cannot be made, but if the \$325.1 million in additional residential construction value were distributed across the coastal port towns in proportion to their valuation size, the result would be \$6.06 million in property tax revenues at

2001 rates. (The average property tax rate for these towns was 18.6 mils, based on data from the Property Tax Division of Maine Revenue Services.)

The additional revenues generated from the residential construction can be used by local governments to expand services, to reduce taxes paid by others, or some combination. The choice of uses will add to the economic impact. If spent on increased local services, the money would be used for both education and non-education purposes. Assuming an 80/20 split between education and non-education uses, the total contribution of spending of the \$6.06 million to the gross state product is \$8.4 million a year. If taxes were lowered with no increase in spending, total gross state product would increase by \$7.4 million a year. These increases represent real ongoing benefits generated by the taxes on the increased values of residential development. However, these increased benefits do not alter the relatively larger contribution of working waterfront-related activities.

It is important to understand the implications of these estimates. They do not mean that no conversions of working waterfront to residential purposes are economically warranted. These are statewide estimates and do not reflect many local variations that exist along Maine's extensive shoreline. They do indicate that state and local policies should not be indifferent to the fate of Maine's working waterfronts. Rather, policies should recognize their value and seek to promote and preserve them wherever possible.

The analysis indicates that the contributions of the working waterfront-related activities to the Maine economy will, on average, be larger than residential development. It should also be pointed out that the facilities provided to the commercial fishing industry could, if substantially lost, raise the possibility that the public would be forced to invest in additional facilities to replace those lost. The State of Maine has made substantial investments in fish piers in a number of communities over the past thirty years, including Kennebunkport, Saco, and Portland. Policies that preserve existing port and pier capacity will avoid public investments for replacement of losses.

State and local policies should not be indifferent to the fate of Maine's working waterfronts.

Thank You

Members of the Working Waterfront Coalition, Farm Credit of Maine, ASA,
the Island Foundation, and Coastal Enterprises, Inc.,
for making this possible.

For more information about the Working Waterfront Coalition contact
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Cover photo by Nance S. Trueworthy
from her fishing book
"Down the Shore."
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