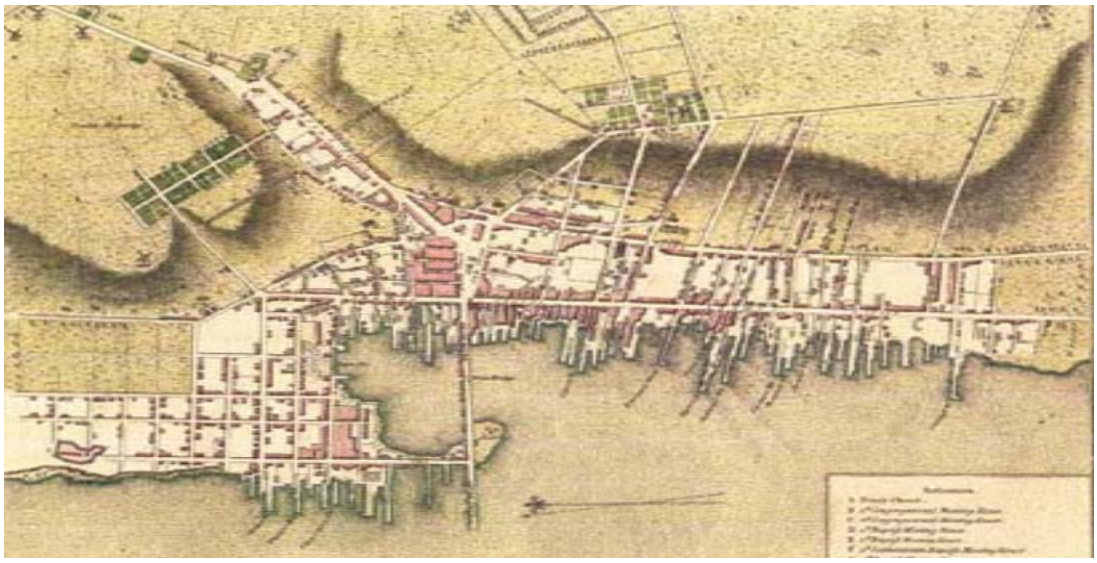

The Contribution of Waterfront Land Uses to Municipal Revenues in Newport, Rhode Island

Summary Report

Prepared by
FXM Associates

Prepared for
University of Rhode Island
Coastal Resources Center

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Introduction

This report summarizes FXM Associates' analyses and findings of work to estimate the contribution made by waterfront land uses and activities on the water in Newport Harbor to the City's municipal revenues. The report is part of a larger study undertaken by the University of Rhode Island Coastal Resources Center (CRC) -- with funding support from the Rhode Island Foundation -- to assist the City of Newport's Comprehensive Plan Update and other planning and policy initiatives relating to the waterfront.

CRC retained FXM Associates to analyze land use, property assessment, municipal revenue and other data compiled by CRC and members of the Waterfront Steering Committee from various sources. FXM was also charged with undertaking a comprehensive review of pertinent studies and primary survey research done by others; analyzing relevant and available primary and secondary source economic data; and conducting 25 confidential interviews with a target list of waterfront businesses, institutions, and property owners suggested by members of the Waterfront Steering Committee.[1] A full report of the overall Newport Harbor Economic Study is being separately prepared by CRC and includes FXM Associates' technical memorandum *Newport Harbor Economic Study: Economic and Demographic Overview* (September 2009) and a detailed slide presentation to the Steering Committee: *Newport Harbor Economic Study* (March 2010). At the request of the Steering Committee, FXM also prepared an abbreviated version of the full slide presentation that includes a template for selected graphs and tables noting data sources and a brief interpretation of each table and graph (June 2010).

Rationale for this Report

From the outset of this study, Steering Committee members expressed a primary goal for FXM's research: provide substantive, and, where possible, quantitative information documenting the contribution that water-dependent land uses make to municipal revenues compared to other waterfront land uses. This issue is of paramount concern not only in Newport but also in all active urban waterfronts where demands for residential, hotel, restaurant, retail, and other land uses that do not explicitly require water access have outstripped the economic capacity of many water-dependent uses to compete for waterfront property. A specific concern for public officials, residents and businesses in Newport is whether the continued loss of water-dependent uses jeopardizes the economic vitality of the waterfront and ultimately diminishes current and potential future revenue streams to the City of Newport.

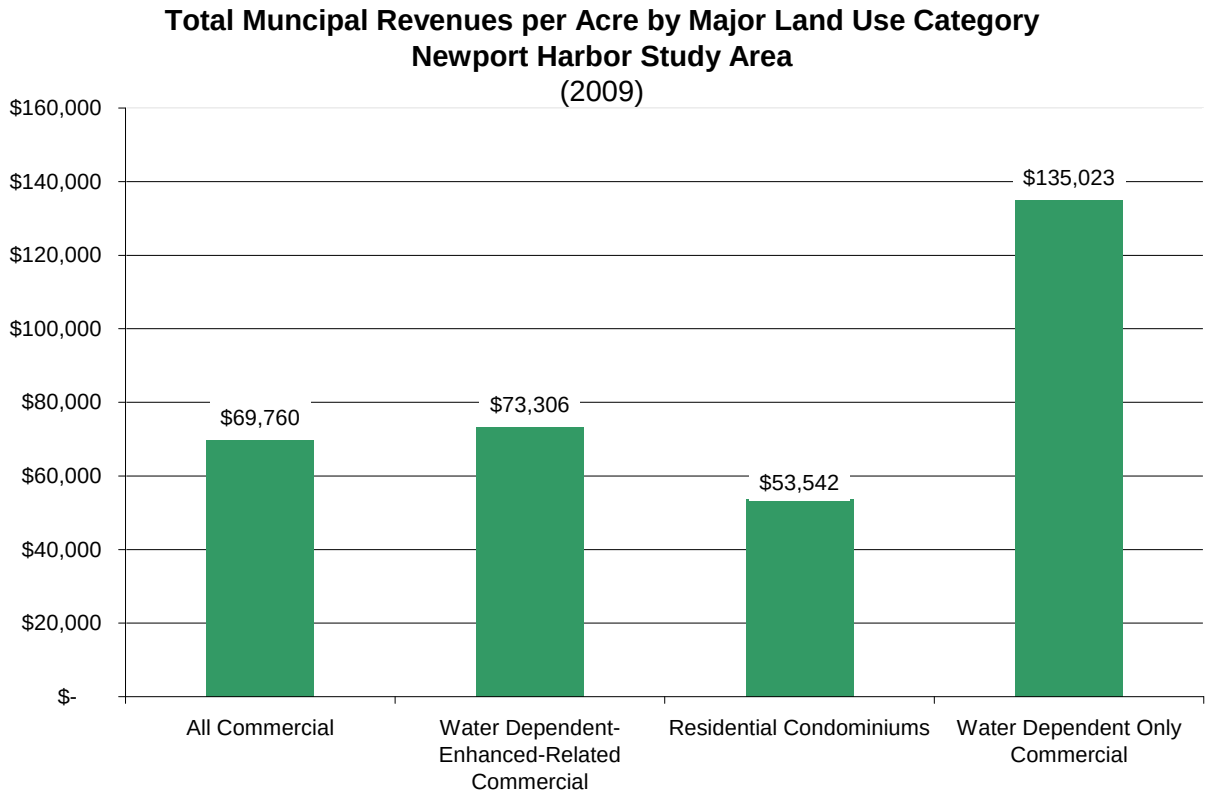
While many studies have shown the economic importance of water-dependent industries to the economy and tax revenues of regions and states, the authors are unaware of studies by others that have analyzed how each type of waterfront land use contributes to revenues at the municipal level. One reason such studies have not been done is that a proper assessment of the question requires land use, property value, and economic data that does not exist or is not readily available at the level of a waterfront district or harbor area. Moreover, an analytic framework is needed that goes beyond examining only direct property and use tax revenues attributable to specific land use types -- the analysis must explicitly account for the indirect contribution to municipal

[1] The Waterfront Steering Committee for this study was comprised of individuals representing the URI Coastal Resources Center, City of Newport, Newport Waterfront Commission, Newport Redevelopment Authority, Newport City Convention & Visitors Bureau, and Newport County Chamber of Commerce.

revenues made by activities on the water and public access to the waterfront, and to attribute these indirect effects to the specific landside uses that support activities on the water. In the subsequent **Approach and Methods** section of this report we describe the analytic framework, data sources, and technical methods used to account for both direct and indirect contributions of water-dependent uses to municipal revenues. A third section of this report, **Analyses and Findings**, summarizes the technical work.

Summary Finding on Municipal Revenues Attributable to Land Use Types

As documented in subsequent sections of this report, *water-dependent uses in Newport Harbor contribute substantially more to municipal revenues on a per acre of waterfront land utilized basis than other waterfront area commercial and residential uses*. The graph below (also shown as Figure C on page 10) shows estimated total direct and indirect municipal revenues per acre by land use type in the Newport Harbor study area in 2009[2].



Principle reasons for the relatively high per acre yield in revenues to the City of Newport from water-dependent uses include:

a) That the patrons of activities and uses on the water (especially recreational boaters and excursion vessel customers) spend considerable amounts at waterfront area businesses and, therefore, contribute to the taxable property value and sales of commercial uses such as restaurants and retail shops; and

[2] The "All Commercial" land use category refers to all parcels within the study area classified by the Newport Assessor as commercial uses and subject to the commercial property tax rate. See Appendix (page 12) for the definitions of "Water Dependent" and "Water Dependent-Enhanced-Related" used by the State of Rhode Island.

b) That activities on the water and public access to the water define the overall attractiveness of Newport Harbor and help distinguish Newport from other destinations. Residents, tourists, and business visitors drawn to Newport because of uses and activities on the water and public access to the water (in addition to recreational boaters and excursion, ferry, shuttle, cruise ship, and water taxi passengers) contribute to the taxable sales and property values of many business uses, especially restaurants, entertainment and hotels.

Approach and Methods

The following bullet points summarize the analytic steps that were performed and data sources used to estimate the direct and indirect contribution that water-dependent and other land uses in the Newport Harbor Study Area made to municipal revenues in Newport in 2009.

- Compiled all available data on land uses in 2009 within the Harbor Study Area. The source of these data was parcel records of the Newport Assessor and included: property ownership and description; property use classification; land area in acres; assessed value of land; and assessed value of improvements. These data were collected by CRC and entered into a master Excel spreadsheet.
- Classified the parcel land use and property assessment data by general land use categories consistent with State land use classifications. CRC performed this analysis and also categorized water-dependent-enhanced-related and water-dependent only uses as warranted with assistance from the City of Newport and FXM Associates.
- Calculated property tax revenues from the 2009 total property value assessments (land and improvements) using 2009 tax rates for commercial and residential uses as warranted. The City of Newport was the source of tax rate information.
- Compiled all available data on other revenue sources pertaining to uses and activities in Newport Harbor in 2009, including the Maritime Fund, meals/beverage taxes, and hotel/motel taxes. Historical data were also obtained for each of these revenue sources and trends analyzed. The City of Newport Harbormaster and City Planner were the sources for these data.
- Obtained from CRC, the City of Newport, and other Waterfront Steering Committee members all available and pertinent primary survey research data and reports prepared by others. FXM critically reviewed the methodology and content of each survey and reported on this review in the March 2010 presentation to the Steering Committee. The surveys included the 2007 Visitor Center Survey (Preservation Society of Newport and Newport Convention and Visitors Bureau, July 2007); Recreational Boaters Survey (Newport Waterfront Commission, Summer 2009); and *Go Newport* Visitation Data (Newport Visitors Center, Summer2009).
- Prepared a survey questionnaire for cruise ship passengers and for an intercept survey of persons in the waterfront area. The Harbormaster administered the survey of cruise ship passengers, and FXM analyzed the survey results. The CRC administered the intercept survey, and FXM analyzed the survey results.

- Contacted 25 individuals suggested by the Steering Committee and conducted confidential interviews between October 2009 and January 2010. These individuals included hotel, restaurant, entertainment, and retail store owners/managers as well as institutions and businesses engaged in water-dependent-enhanced-related uses and activities. Interview questions focused on recent business activity and trends; Newport's assets, attributes, and limitations; the value of water-dependent land uses, the effect that activities on the water and public access to the water have on their current business sales and growth potential; and future waterfront development opportunities and constraints.
- Analyzed waterfront study area business sales and employment by type of business. The source of these data was A.E. Nielsen *Claritas Site Reports* (2008-9), a widely used data service to which FXM subscribes. FXM also utilized the Rhode Island Department of Labor ES-202 data series; US County Business Patterns; the US Department of Commerce, Bureau of Economic Analysis, *Regional Economic Information System* (REIS) data series; State of Rhode Island and City of Newport data on meals/beverage and hotel sales; and data from the City of Newport Convention and Visitors Bureau on individual establishments to check the reasonableness of business sales and employment estimates specific to the Harbor Study Area provided in the *Claritas Site Reports* data.
- Reviewed survey research data on per capita spending by visitor type and activity from case studies and research by FXM on comparable assignments, and prepared extensive sensitivity tests of all variables for which reliable survey data specific to the Newport Harbor Study Area were not available.

Based on the information and analyses outlined above, FXM applied the following methods to estimate municipal revenues directly and indirectly attributable to water-dependent uses and public access to the water in the Newport Harbor Study Area.

- Property taxes total and per acre were calculated and assigned as appropriate to each land use type (commercial and residential).
- Revenues from meals/beverage and hotel/motel taxes were assigned to the appropriate commercial uses (restaurants and hotels) and calculated on a per acre basis. Acreage by land use type was contained in the Assessor's property data base.
- Maritime Fund revenues (mooring fees, harbor fees and fines, and cruise ship head taxes) were assigned to water-dependent land useson a per acre basis.
- Property taxes on dockominiums were assigned to residential and commercial land use types as appropriate.
- Estimates of spending by recreational boaters, excursion and charter vessel passengers, and cruise ship passengers were compared with the actual sales of selected retail and restaurant establishments in the Harbor Study Area to estimate the proportion of total sales in these establishments attributable to water-dependent uses. The derived proportion was applied to the property and meals/beverage taxes paid by the retail and restaurant uses and assigned on a per acre basis to water-dependent uses.
- Estimates of spending by visitors not directly engaged in the water-dependent activities but which could be attributable to activities on and public access to the water were

compared to the residual sales (net of purchases made by recreational boaters, excursion and charter vessel passengers, and cruise ship passengers) of selected restaurant, retail, and hotel establishments[3]. The derived proportion was applied to the property and meals/beverage taxes paid by the retail and restaurant uses and the room taxes paid by hotel uses and assigned on a per acre basis to water-dependent uses.

FXM considered the data sources and analytic methods described above sufficient to produce reasonable estimates of municipal revenues attributable to water-dependent uses. However, these estimates could be more precise if statistically reliable primary survey research data had been available in the following areas: a count of recreational vessels in Newport Harbor (including anchorages) on an average daily basis throughout the boating season; a count of recreational boaters and charter/excursion passengers as well as patrons of waterfront festivals and events throughout the season and their spending by type of purchase; and the per capita spending by type of purchase by other visitors to the Newport waterfront area.

Analyses and Findings

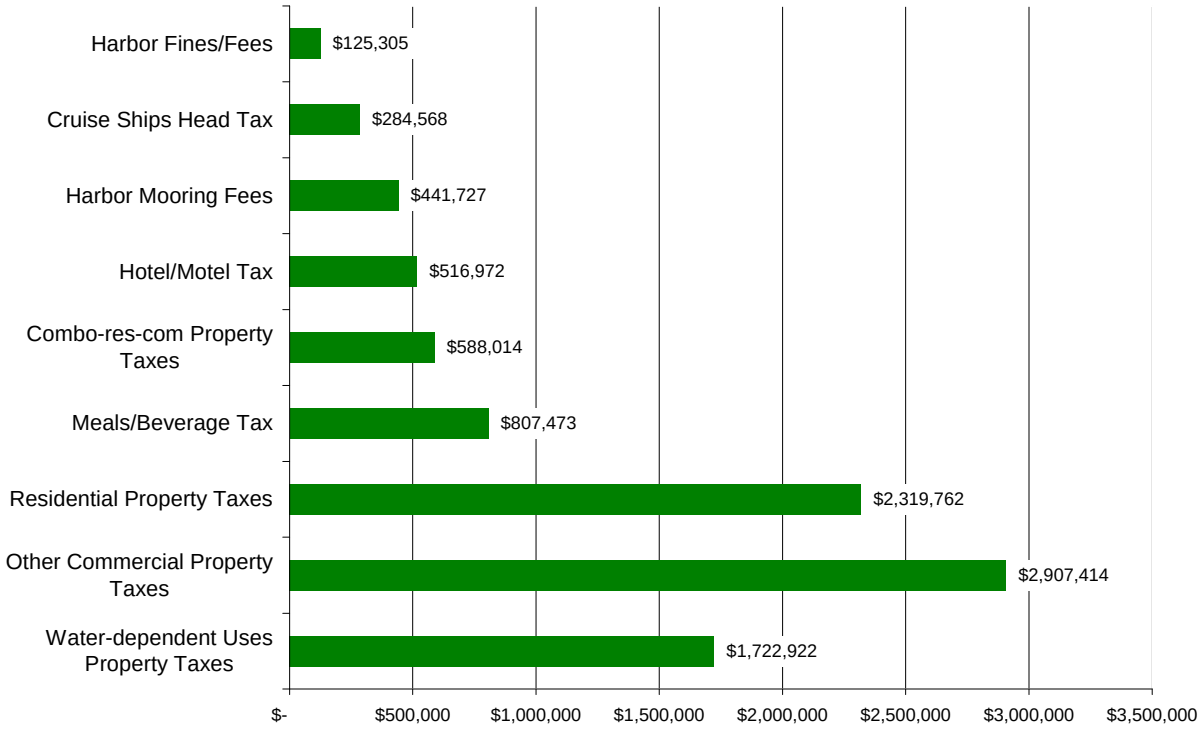
Data in Figure A show municipal revenues from property tax and other revenue sources in the Newport Harbor Study Area, which totaled over $9,700,000 in 2009.

- *Property tax revenues* accounted for over $7,500,000 in 2009, representing 78% of all municipal revenues attributable to uses and activities within the Harbor Study Area.
- *Commercial property tax revenues* contributed $4,630,000 or 48% of all municipal revenues from the waterfront area.
- *Residential property tax revenues* totaled $2,320,000 in 2009, or 24% of total municipal revenues in the study area.
- *Combination commercial-residential* uses yielded $588,000 in property tax revenues or 6% of total municipal revenues.
- *Non-property tax revenues* totaled $2,180,000, or 22% of all municipal revenues within the study area. These included the Maritime Fund at $850,000 (9% of study area revenues); meals/beverage taxes of $807,000 (8% of study area revenues); and hotel/motel taxes of $516,000 or 5% of total municipal revenues within the waterfront study area in 2009.

[3] The waterfront restaurant and hotel owners/managers interviewed by FXM estimated that at least 50% of their annual sales are attributable to visitors drawn to Newport by activities on the water and public access to the waterfront. The spending by recreational boaters, charter/excursion/cruise ship/water taxi/ferry passengers is estimated to account for roughly one-third of retail/restaurant/hotel/transportation services sales in the waterfront area while spending attributable to other visitors linked to activities on the water and public access to the waterfront is estimated to account for about one-fifth of the waterfront area retail/restaurant/hotel/transportation services sales (see Table 1).

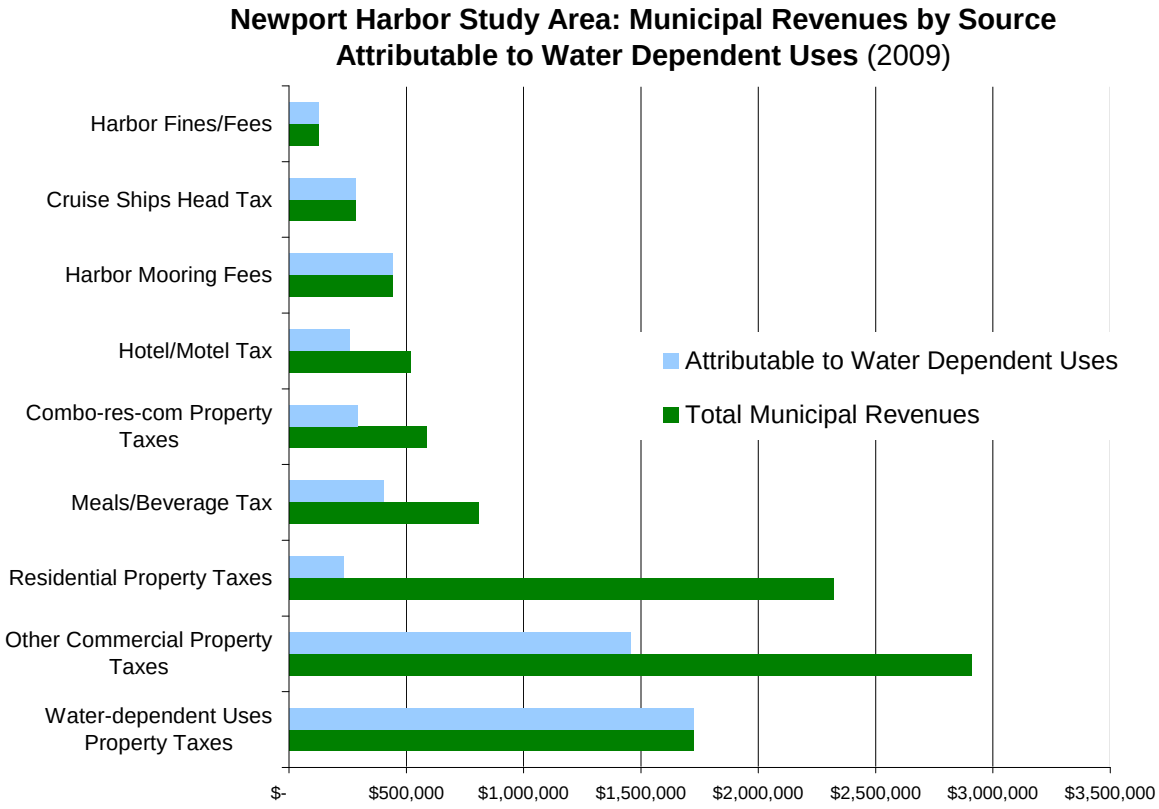
Figure A

Newport Harbor Study Area: Municipal Revenues by Source (2009)



Data in Figure B show municipal revenues by source attributable to water-dependent uses, using the estimation procedure described in the previous **Approach and Methods** section of this report. Of the $9.7 million in City revenues derived from property and other taxes and fees within the Harbor Study Area in 2009, approximately $5.2 million (54%) is attributable to water-dependent uses and public access to the water.

Figure B



To better understand how the estimates of municipal revenues attributable to water-dependent uses shown in Figure B were derived, data in Table 1 show the mid-range of sensitivity tests done on the effect that each general category of visitor spending has on business sales in the study area. Of particular interest is the estimate of recreational boater spending, which in this analysis is estimated to account for about one-fourth (26%) of waterfront area sales in the industry categories shown in the upper portion of the table. The estimate is, at best, a rough one since no primary survey data were available to determine either the number of recreational boaters in Newport Harbor over the course of the boating season or their spending within the waterfront study area. FXM tested several hypotheses for recreational boater spending using estimates provided by City officials on the number of slips, moorings, and vessels at anchor during peak periods and average occupancy rates over the course of the season. The FXM analysis also used a range of estimates provided in related surveys of boater party size and per capita spending by recreational boaters. The number for spending by recreational boaters ($40 million) shown in Table 1 falls within the low range of hypotheses tested. It is possible that the actual impact of recreational boaters on waterfront area business sales, and therefore property taxes and meals/beverage taxes attributable to these sales is much higher.

The estimate of excursion/charter/shuttle/ferry passenger purchases is based on prior work by FXM for the Newport Harbor Water Shuttle Study in 2007 (which included detailed interviews with water transportation service providers to estimate total ridership), and prior empirical research by FXM on spending by excursion, charter, and ferry vessel passengers in other New

England ports. The cruise ship passenger spending number shown in Table 1 is based on actual cruise ship passenger counts and the survey administered in Newport by the Harbormaster under FXM and CRC direction in the summer-fall of 2009. That survey specifically asked spending questions of cruise ship passengers and the number derived for median per capita spending at restaurants and retail stores ($26) is considered statistically reliable for cruise ship passengers to Newport[4]. The 30% of residual sales attributable to Newport Harbor visitors drawn primarily by the attraction of the waterfront ambience, activities on the water, and public access to the water is derived from the interviews with waterfront area hotel and restaurant owners/managers and a limited intercept survey conducted by CRC. The waterfront area hotel and restaurant owners/managers interviewed by FXM attributable a far higher portion of their sales to water-dependent uses in Newport Harbor so the $31 million shown in Table 1 for "other visitors and residents" may, like the recreational boater spending estimate, be much lower than the actual effects.

Table 1

Sample Worksheet for Estimating the Effect of Visitors Linked to Water-dependent Uses in the Newport Harbor Study Area (2009)

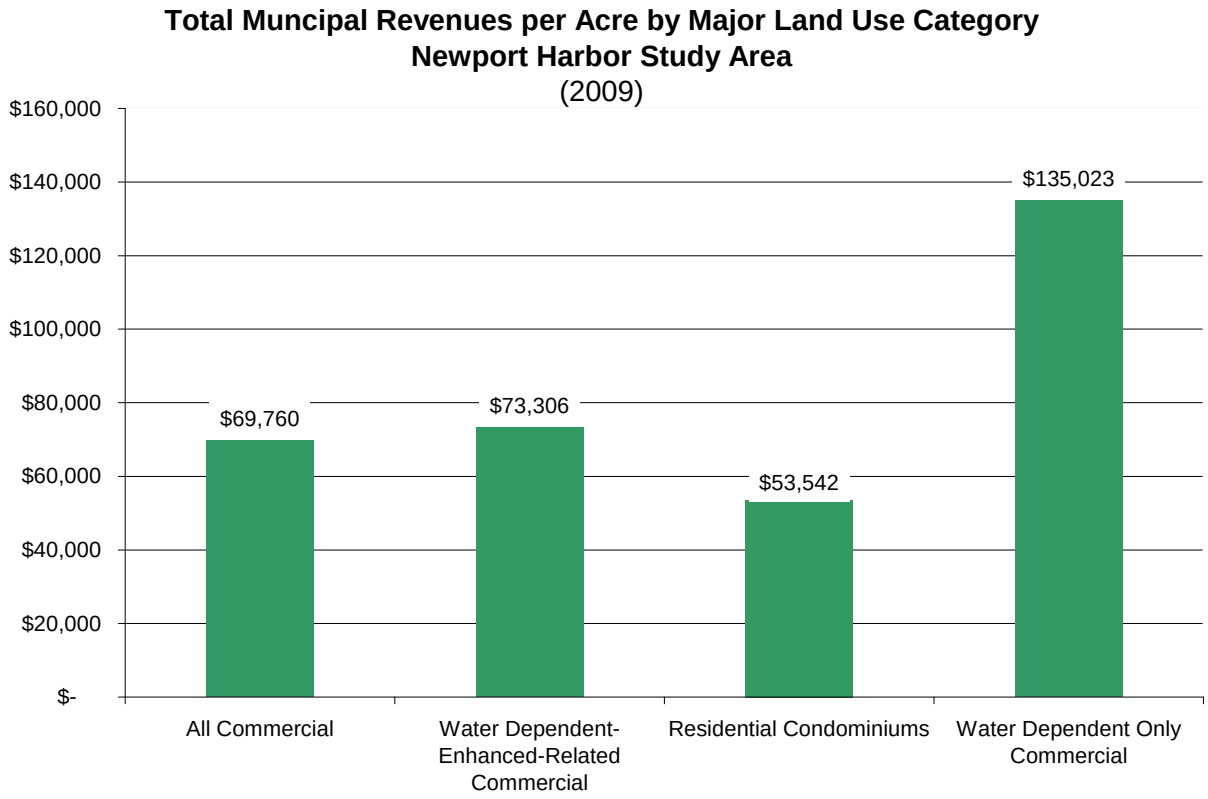
INDUSTRY	Waterfront Study Area Sales	% of Total Sales
Water transportation	$ 37,400,000	24%
Eating & Drinking	$ 66,000,000	43%
Apparel	$ 14,000,000	9%
Misc Retail	$ 18,300,000	12%
SUBTOTAL	$ 135,700,000	87%
Hotels	$ 19,400,000	13%
TOTAL Sales	**$ 155,100,000**	**100%**
CONSUMER	**Waterfront Study Area Purchases**	
Recreational Boaters	$ 40,000,000	26%
Excursion/charter/shuttle/ferry passengers	$ 11,000,000	7%
Cruise Ship Passengers	$ 1,785,834	1%
Other Visitors & Residents @ 30% of residual sales	$ 30,694,250	20%
TOTAL Water-dependent Purchases	***$ 83,480,084***	***54%***

Sources: *Claritas Site Reports* (waterfront study area sales) and as noted in text

Data in Figure C show the direct and indirect effect of water-dependent uses on municipal revenues shown in Figure B converted to per acre of land use, using the property assessment data base described in the **Approach and Methods** section of this report.

[4] The cruise ship passenger spending amount does not include possible tours pre-packaged by the cruise ship line.

Figure C



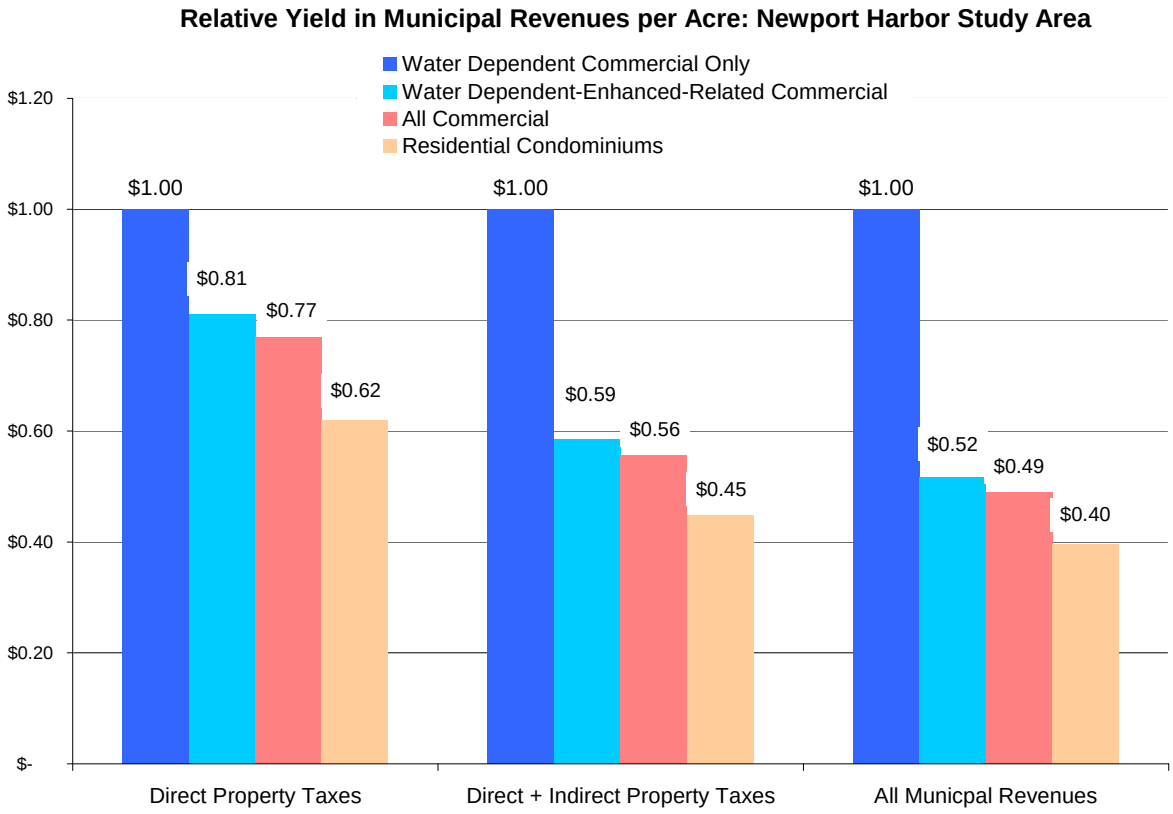
As the data in Figure C show, water-dependent land uses in the Newport Harbor Study Area are directly and indirectly responsible for considerably higher municipal revenue yields per acre than either general commercial land uses or residential condominiums.

Figure D graphically shows ratios of per acre yields in municipal revenues for each land use type, based on the data shown in Figure C above. **Figure D illustrates that for every $1.00 of total municipal revenue attributable to water-dependent land uses, residential condominiums yield $0.40; commercial uses in general yield $0.49; and water dependent-enhanced-related commercial land uses on average yield $0.52 (2009).**

Figure D also shows the relative yield per acre for each land use in terms of:

a) Direct Property Taxes collected for each land use type;
b) Direct + Indirect Property Taxes -- which adds to water-dependent uses the portion of property taxes from other commercial uses that are attributable to the spending of recreational boaters, charter/excursion/ferry/cruise ship passengers, and other visitors drawn to the study area by activities on the water and public access to the waterfront; and
c) All Municipal Revenues -- which include direct and indirect property taxes *plus* the Maritime Fund, meals/beverage taxes, and hotel/motel taxes allocated as appropriate to each land use type.

Figure D



Reader Note: Another way to interpret the data shown in Figure D is to divide the numbers shown at the top of each bar. This approach shows that for every $1:00 in All Municipal Revenues yielded per acre by *Residential Condominium* uses, for example, $2.50 per acre is yielded by *Water Dependent Commercial Only* uses.

Additional Observations

In so many of the waterfront studies in which FXM has been engaged, debate over the allocation of scarce waterfront land has been framed by an "assumption" that residential, hotel, restaurant and retail land uses yield more tax revenues to a municipality than water-dependent uses. This study shows conclusively that, at least in the case of the Newport Harbor Area, when all sources of revenue attributable to activities on the water and public access to the water are accounted for, water-dependent land uses account for much higher revenue yields per acre than other waterfront land uses. This finding may surprise some, but will be unremarkable to the owners and managers of waterfront area restaurants and hotels and others in Newport interviewed by FXM in the course of this research – they regarded water-dependent land uses, which are necessary to support activities on the water and which provide a distinguishing character to Newport as a destination, as essential to their business success.

FXM Associates gratefully acknowledges the contribution to this study made by the Waterfront Steering Committee, whose framing of key issues and periodic review of the technical work drove a complex and difficult analytic exercise by the consultant. Especially noteworthy were the tireless efforts and diligence of the URI Coastal Resources Center and Newport City officials who were responsible for producing the comprehensive land use and municipal revenue data necessary to accomplish this unique study.

APPENDIX

The following definitions are used by the State of Rhode Island to determine categories of water dependence, and are used in this report to classify waterfront land uses in the Newport Harbor Study Area (**Source**: University of Rhode Island, Coastal Resources Center).

Water Dependent Use: Requires direct access to marine or tidal waters, or a location which is proximate to marine or tidal waters, for its continued viable operation and which therefore cannot be reasonably located inland.

Water Enhanced Use: Water enhanced uses do not require access to the water for viable operation, but are enhanced by a waterfront location.

Water Related: Water related uses do not require direct access to the water, but provide goods or services associated with water dependent uses. They are uses that do not strictly require a waterfront location, but are generally understood to be closely associated with the harbor. These facilities are better sited close to the water.

EXAMPLES OF USES

Water Dependent	Water Related	Water Enhanced
Marinas	Chandleries	Restaurants
Ship repair	Bait shops	Bars/taverns/night clubs
Commercial fishing facilities	Ice houses	Hotels
Cargo handling facilities	Marine supply stores	Residential with water view
Ferry terminals, water taxis	Fish processing facilities	Museums
Petroleum facilities served via marine pipeline	Marine repair facilities (welding, engine repair)	Educational institutions
Charter facilities	Tugboat dispatch	Offices
Cruise ship terminals		
Boat rentals/charter facilities (fishing, sailing, etc),		
Bulk cargo handling facilities		
U.S. Coast Guard facilities		
Tugboat dock		
Container ports		