

THE AMISTAD FREEDOM SCHOONER
AN ECONOMIC IMPACT STUDY

by

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for the
Mystic Seaport Museum
and
Connecticut Afro-American Historical Society

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EXECUTIVE SUMMARY

The Connecticut Center for Economic Analysis has performed an economic impact study of the *Amistad* project for Mystic Seaport Museum, Inc., and the Connecticut Afro-American Historical Society. This study has been done as part of the requirements for a \$2,500,000 grant requested of the State of Connecticut to help finance construction of the *Amistad* replica.

The bulk of the data used to perform this analysis was provided by Mystic Seaport Museum, Inc. and the Connecticut Afro-American Historical Society. Tourism data was provided by the Tourism Division of the Connecticut Department of Economic and Community Development. Final input sheets for the analysis were prepared and checked by the Connecticut Center for Economic Analysis located within the Department of Economics at the University of Connecticut. The final numerical analysis was performed utilizing the REMI econometric model of the State of Connecticut housed at the Connecticut Center for Economic Analysis.

The REMI model was developed by Regional Economic Models Inc. of Amherst, Massachusetts. The current version of the model housed at the Connecticut Center for Economic Analysis was licensed using funds from a grant from the Connecticut Department of Economic and Community Development. The model is operated and the result interpreted by personnel from the Connecticut Center for Economic Analysis and the Department of Economics at the University of Connecticut.

The *Amistad* is to be a replica of a 19th century schooner ship. It is to be used as an educational center on Afro-American culture and history. Plans call for the ship to be docked in New Haven during the summer. Over the winter months of most years, the ship will sail down the east coast and dock in various ports. During its visit to these various ports, a variety of educational programs for the citizens of the states being visited will be run. The proposed educational program envisioned for the *Amistad* are numerous. They include: (1) dockside exhibits, (2) dockside school programs, (3) dockside receptions, (4) half day sailing programs, (5) full day sailing programs, and (6) overnight sailing programs.

The analysis performed by the Connecticut Center for Economic Analysis was performed under three different case scenarios. We have label them (1) the high impact scenario, (2) the median impact scenario and (3) the low impact scenario. The median impact scenario is the one deemed most likely by the Center.

The three scenarios considered differ mainly on two points: the percentage of net new tourists attracted and the proportion of *Amistad* operational expenditures and staff income that will be expended out of state during visits to east coast ports. Under the high impact scenario, forty percent of out of state tourists are consider to be net new tourists that would not have visited Connecticut were it not for the *Amistad*. In the same vein, it is assumed that forty percent of the spending of Connecticut residents at the *Amistad* is money that otherwise would have been expended for an educational or recreational activity outside of Connecticut. Finally, under this scenario, the amount of spending for non Connecticut goods and services by operations and by the crew while out of state is in the same portion as while they are docked in Connecticut.

The median impact scenario reduces the share of net new tourists and Connecticut recapture to 25%. In addition it is assumed that the portion of goods and services purchased from other states by operations and the crew rises to 50% of income and spending during these out of state

dockings. This latter assumption remains the same under the low impact scenario. The share of net new tourists and Connecticut recapture is further reduced to 10%.

The overall results of our study are positive. The *Amistad* will return to the citizens of Connecticut the investment of their tax dollars for the construction of the *Amistad* replica. In addition to generating new income for Connecticut citizens, the project will also created new jobs, both as a result of the construction of the ship and as a result of the ongoing operation of the ship. A summary of our findings are contained in Table 1 that follows:

**Table 1: Economic Impact Results: *Amistad* Project
All Three Case Scenarios**

Economic Variable	Low Impact Scenario	Median Impact Scenario	High Impact Scenario
Benefit-Cost Ratio	1.406	2.313	6.006
Present Value New Gross State Product (95\$)	\$2,625,000	\$6,072,000	\$17,262,000
Present Value New Real Disposable Personal Income (95\$)	\$3,751,000	\$6,172,000	\$16,027,000
Annual Average New Personal Income	\$570,000	\$1,297,000	\$4,303,000
Average Annual New Private Employment	2	6.2	20.4

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INTRODUCTION

The mission behind the partnership of Mystic Seaport and the Afro-American Historical Society is to educate Connecticut residents and tourists on Afro-American heritage, inter-racial cooperation, the dignity of the individual, and the recognition of opportunity.¹ Cultural tourism, via the freedom schooner *Amistad*, is the vehicle with which they carry out this mission. By combining American history with tourism, the partnership will bring both social and economic benefits to Connecticut.

The struggle for freedom is a theme throughout American history. Probably the events in American history most frequently associated with this theme are the American Revolution and the two World Wars. However, the struggle for freedom is a story also of the Afro-American people. Their story, an American story, dates back to the ante-bellum Spanish Slave Trade and continues today. Milestones of their struggle include the Civil War, *Brown v. Board of Education of Topeka* and the Civil Rights Movement. The purpose of the *Amistad* project is to educate the public on the importance of the Afro-American involvement in American history. This in itself is a social benefit.

The *Amistad* vessel is symbolic of the Afro-American struggle for freedom. In 1839 the schooner was the stage for a revolt for freedom by Africans who were en route to being sold into the Spanish Slave Trade. The reconstructed *Amistad* schooner will serve as a floating classroom, traveling the eastern seaboard, educating the public on the *Amistad* affair in particular and Afro-American struggle for freedom in general. Curriculum themes taught along with Afro-American bravery and perseverance for justice and freedom include inter-racial cooperation and leadership in American history. Together these broad themes of American idealism will attract a broad domestic tourist market and potentially an international market.

In addition to its serving as an educational exhibit, the *Amistad* will serve as an entertainment facility. For example, sailing programs on board the *Amistad* will be offered, and the *Amistad* itself will be available to serve as a reception center for private parties. It's sailing programs and co-function as an educational exhibit and reception center, will generate economic activity. A closer examination of the economic impact of the *Amistad* project follows.

¹ Mystic Seaport Museum, Inc., *A Great American Story: Freedom Schooner Amistad, The Plan*, 1996.

CCEA CONNECTICUT ECONOMETRIC MODEL

In 1992, with funding from the Connecticut Department of Economic and Community Development (DECD), the Department of Economics at the University of Connecticut acquired a microcomputer-based econometric model of the Connecticut economy from Regional Economic Models, Inc. (REMI). A Massachusetts-based firm with historical ties to the University of Massachusetts, REMI has developed an expertise in regional econometric modeling, and is a leading supplier and developer of such models. Following the acquisition of the model, the Department of Economics at the University began the formal process to create the Connecticut Center for Economic Analysis (CCEA).

In 1993, the CCEA, with funding again from DECD and private sources, acquired another economic model from REMI that breaks out Hartford and Fairfield Counties, allowing each county to be studied in isolation or combined with the rest of the state. In 1995, this model was replaced with a model which can provide economic information for each of five contiguous subregions that aggregate to the entire state.

The REMI models include all of the major inter-industry linkages among 466 private industries, aggregated into some 49 major industrial sectors. With the addition of farming and three public sectors (state & local government, civilian federal government, and military), there is a total of 53 sectors represented in the models.

At the root of the models are the results of extensive modeling efforts at the U.S. Department of Commerce (DoC). The DoC has developed, and continues to develop, an *input-output model (or I/O model)* for the United States. Modern input-output models, largely the result of the path-breaking research by Nobel laureate Wassily Leontief, focus on the inter-relationships between industries, and provide micro-level detail regarding factor markets (including the labor market), intermediate goods production, as well as final goods production and consumption. Conceptually, the model is constructed in the form of a table, a kind of cross-reference, in which each cell summarizes the sales-purchase relation between industries or sectors.

An example may help to make clear the value of this structure. Suppose that one cell changes; wages for labor rise in one specific sector. The labor cell in that sector would change. Then the change would flow through the table, affecting inputs and outputs in other industries along the chain of production. At the same time, businesses might substitute capital machinery (automation) or other inputs that appear more cost effective as a result of the change, offsetting to some extent the rising cost of labor. Workers may attempt to shift their employment to the sector with the higher wages. That is, all of the elements of the model, just like the economy it represents, are related to all other elements of the model.

The REMI Connecticut model takes the U. S. I/O “table” results and scales them according to traditional regional relationships and current conditions, allowing the relationships to adapt at reasonable rates to changing conditions. Additionally:

- Consumption is determined on an industry-by-industry basis, from real disposable income in Keynesian fashion.
- Wage income is related to sector employment factored by regional differences.
- Property income depends only on population and its distribution, adjusted for *traditional* regional differences, not on market conditions or building rates relative to business activity.

- Estimates of transfer payments depend upon unemployment details of the previous period. Moreover, government expenditures are proportional to the size of the population.
- Federal military and civilian employment is exogenous and maintained at a *fixed* share of the corresponding total U. S. values, unless specifically altered in the analysis.
- Migration into and out of the state is estimated based upon relative wages and the “amenities” of life in Connecticut versus other states.
- “Imports” and “exports” from other states are related to relative pricing and production costs in Connecticut versus elsewhere.

Depending on the analysis being performed, the nature of the chain of events cascading through the model (economy) can be as informative for the policymaker as the final aggregate results. Because the model generates such extensive sectoral detail, it is possible for experienced economists in this field to discern the dominant causal linkages involved in the result.

In the sections that follow, the final aggregate results are discussed and important causal linkages highlighted. The model output summary tables for the cases examined are included as an appendix.

METHODOLOGY AND ASSUMPTIONS

The Connecticut Center for Economic Analysis has performed a study of the economic impact of the construction and operation of a replica of the schooner *Amistad*. The study examines three different case scenarios. We have labeled these scenarios the (a) high, (b) median and (c) low impact case scenarios. The high impact case scenario shows the largest positive impact of the construction and operation of *Amistad* on the Connecticut economy and the low scenario shows the smallest impact of *Amistad* on the Connecticut economy. In the pages that follow we report the results of these three case scenarios.

The impact of the *Amistad* on the Connecticut economy comes basically from two sources. The economic activity generated by the construction of the replica and the economic activity that comes from the continued operation of the *Amistad* as an educational tourist attraction.

Under the high impact case scenario, we have made very liberal assumptions concerning the ability of *Amistad* to attract new out-of-state tourists to Connecticut. Under this scenario, forty percent of all out-of-state tourists that visit *Amistad* are net new tourists to Connecticut. In other words, sixty percent of the out-of-state tourists who participate in one of *Amistad* activities, while it is docked within Connecticut, are substituting visits to *Amistad* for other recreational or educational activities that they would have otherwise undertaken in Connecticut during the same year. Redirected spending cannot be counted as a positive contribution of *Amistad* to the Connecticut economy; it is merely *substitute spending*. Here you are simply “robbing Peter to pay Paul.”

The same assumption is made relative to the recapture component of Connecticut residents' spending at *Amistad*. Forty percent of spending by Connecticut residents in visiting *Amistad* comes from spending for educational and recreational activities that would have been otherwise done outside the boundaries of Connecticut. This implies that sixty percent of Connecticut resident spending for the *Amistad* is substitution spending.

In the case of school field trips to *Amistad*, we have not been as liberal with our assumption. Throughout all three case scenarios, we assume that only twenty percent of school outings to *Amistad* represent either recaptured Connecticut school spending from other states or net new out-of-state spending within Connecticut. Most field trips of Connecticut students are to Connecticut educational sites. Therefore, since the number of field trips is not expected to increase, a field trip to the *Amistad* most likely will represent a substitution of the *Amistad* for another Connecticut educational site. Hence, there is no net positive economic impact associated with the *Amistad* visit.

The final assumption associated with the high impact scenario deals with the time that the *Amistad* is docked out-of-state. It is the intention of the project promoters to sail *Amistad* down the east coast during the winter months. During its trip down the east coast, it will be docked at piers within other states. Visitors will be permitted to participate in *Amistad* activities at these out-of-state piers. Thus a portion of *Amistad's* annual revenue will be generated out-of-state. In classic economic theory this activity is viewed as an export. Under the high impact case scenario, the income generated at these out-of-state dockings is expended on Connecticut goods and services in the same proportion as income generated at in-state dockings.

The tables attached to the end of this report measure the impact of the *Amistad* project from 1996 to 2035. Beyond the first five years of operation for which data was provided us, we have assumed that the

level activity associated with the *Amistad* for each year from 2003 to 2035 is at the average of the first five years activity.

HIGH IMPACT SCENARIO

Key measures of the economic impact of the *Amistad* operations on the Connecticut economy between now and 2025 are given in Table 2. Under the high impact scenario, *Amistad* will generate an average of 20.4 new private sector jobs per year. In addition, the project will increase public employment on average by one half job per year. Throughout the state, residents' personal income in current dollars will increase by 4.3 million dollars per year over the same period as a result of the *Amistad* project. Real disposable income in 1995 dollars, a measure of residents' after-tax buying power, will go up by an average of 0.9 million dollars per year, and gross state product in 1995 dollars will be increased by 0.93 million dollars.

Table 2: Economic Summary of Scenario One

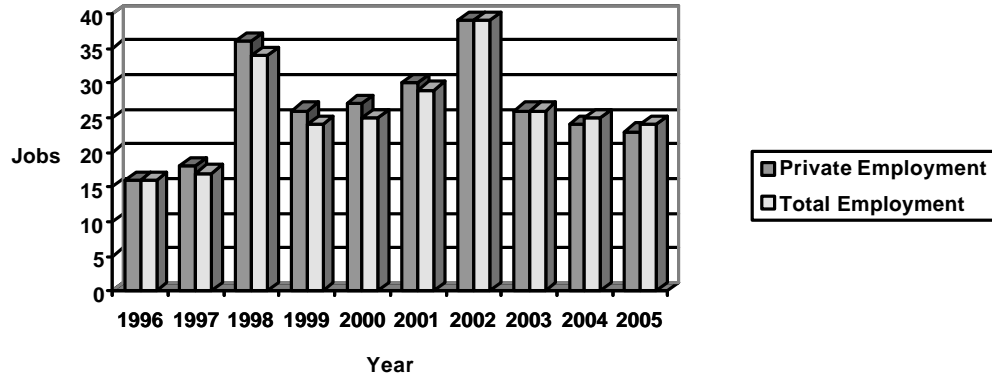
Economic Variable	Annual Average Impact*	Present Value (1995 dollars)
Real Disposable Income	\$0.906 million	\$16.027 million
Real Gross State Product	\$0.933 million	\$17.262 million
Personal Income	\$4.303 million	-
Total Private Employment	20.4 jobs	-
Total Employment	20.9 jobs	-
Population	33.2 people	-

*Reals are in 1995 dollars.

The new real gross state product to be generated over the next thirty years has a present value of \$17.26 million 1995 dollars. More importantly, the new disposable personal income has a net present value of \$16.02 million 1995 dollars. This is the new spendable income placed in Connecticut residents pockets as a result of the *Amistad* project. This is what citizens have left after they pay taxes, including the taxes necessary to pay the principal and interest on the state bonds used to finance the State's share of this project. Viewing this net present value of new disposable personal income as the benefit derived by Connecticut residents from this project and the funding put up by the state as the cost of the project, the *Amistad* project has a benefit cost ratio of 6.04. This implies that in present value terms, Connecticut residents are going to get back after taxes, \$6.04 for each dollar the State invests in the *Amistad* project—a very attractive investment alternative indeed.

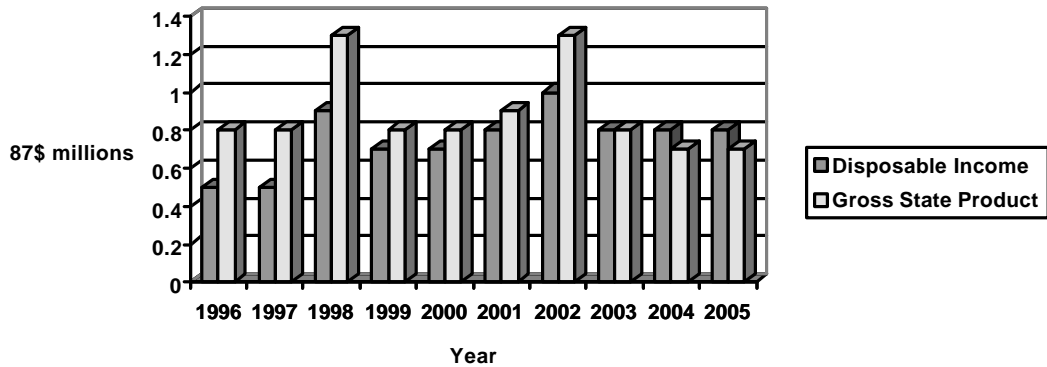
Figure One displays the pattern of job growth as a result of the *Amistad* project for the next ten years. Much of the impact occurs in the early years due to the construction phase. With time, the operation becomes more efficient and substitutes capital for labor. Therefore, in the latter years the economic impact of the *Amistad* on Connecticut employment is less. The figures for 1998 are larger than the surrounding years because of the total in-state operation and the construction activities during the first half of the year. 2002 also has an above average rate of in-state activity relative to out-of-state activity and hence the large impact. After 2002, the assumed level of activity is at the average of the first five years. This tends to mirror the middle years of the first five years more than the wing years.

**Table 1: New Employment Due Amistad Project
1996-2005**



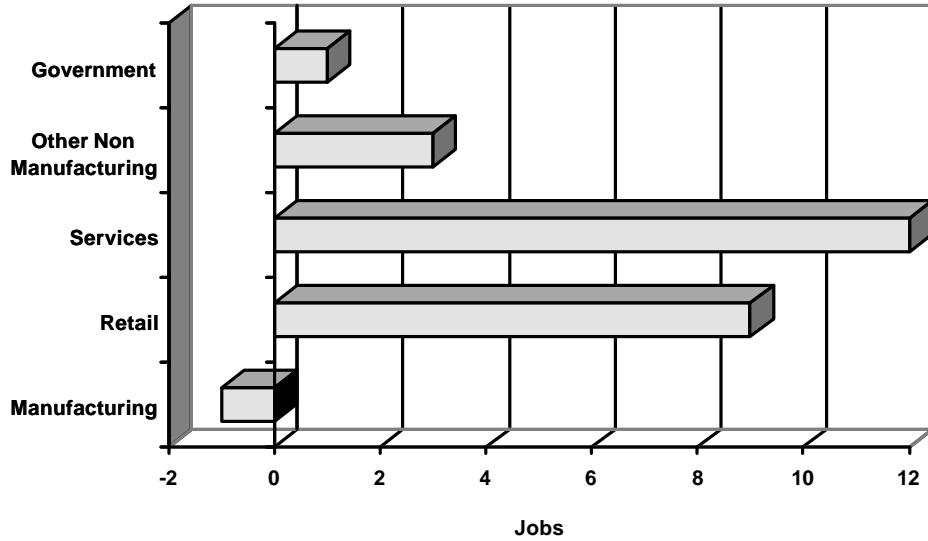
Not only does the *Amistad* project impact employment, it also affects income and output. Figure 2 reflects the impact of *Amistad* over the years 1996 to 2005 on disposable personal income in 1987 dollars and gross state product in 1987 dollars. The patterns observed closely mirror those followed by new employment.

**Figure 2: New Real Disposable Income and New Gross State Product
1996-2002**



We are not only interested in the number of new jobs created by the *Amistad* Project, but also with their composition. Figure 3 reflects the pattern of jobs created after the project has reached a stable state of operation in the year 2005. As expected the main impact of the *Amistad* project is on the retail sector and the service sector. In fact, 87.5% of the new jobs will be found in the service and retail sectors.

Figure 3: Distribution of New Connecticut Jobs in 2005
Amistad Project



Under the high scenario, it is clear that the *Amistad* project will have a very positive economic impact on the State of Connecticut. As citizens, we will receive back a very attractive economic return on our investment of state money. This says nothing of the improvement of the quality of life within Connecticut as we improve our understanding of the cultural heritage of our citizens.

In the next two sections, we will look at the impact of the *Amistad* project under less liberal assumptions. The first of these two cases probably best reflects what will probably be the true impact of *Amistad*.

MEDIAN SCENARIO (MOST LIKELY CASE)

This case represents what the Connecticut Center for Economic Analysis considers to be the most realistic case. Under this case scenario, we have reduced the proportion of out-of-state tourists that represent net new tourists. We have also reduced the recapture proportion. Finally, we have made adjustments that reflect the fact that much of the income earned by the *Amistad* crew and most of the ship operating expenses may end up being spent out-of-state during dockings along the east coast.

Under the median case scenario, only twenty-five percent of out-of-state tourists are assumed to be net new tourists. In other words, seventy-five percent of the spending of residents of other states at the Connecticut dockings of *Amistad* are expected to come at the expense of spending at other Connecticut recreational and educational facilities. In the same vein, only twenty-five percent of Connecticut resident spending on *Amistad* will be assumed to have been recaptured from other states. Because the number of net new tourists has been reduced, the amount of induced spending by these tourists on other activities within Connecticut has been correspondingly reduced. Under this second scenario, no adjustment has been made with respect to the assumptions surrounding school field trips.

The second major change in the assumptions deal with the spending of crew members while out-of-state, and operational expenditures that occur while *Amistad* is docked at piers along the east coast (outside of Connecticut). Under this second scenario, we have made a residential adjustment. We have assumed that for the personnel that will accompany the *Amistad* during its out-of-state visits, half of their earnings should be treated as if they resided in another state during this period. This assumption realizes that many of the crew and other operational personnel will have families remaining within Connecticut and have commitments for expenses within Connecticut. On the other hand, it is anticipated that these individual will find themselves expending a reasonable portion of their paycheck out of state during these tours.

In the same manner, operational expenses on such things as fuel, docking fees, food, electricity, advertising, etc. will most likely be purchased out-of-state rather than from Connecticut firms during these tours. We have allocated these expenses to new in-state and out-of-state demand in proportion to the amount of revenue earned in a given year in and out of the state.

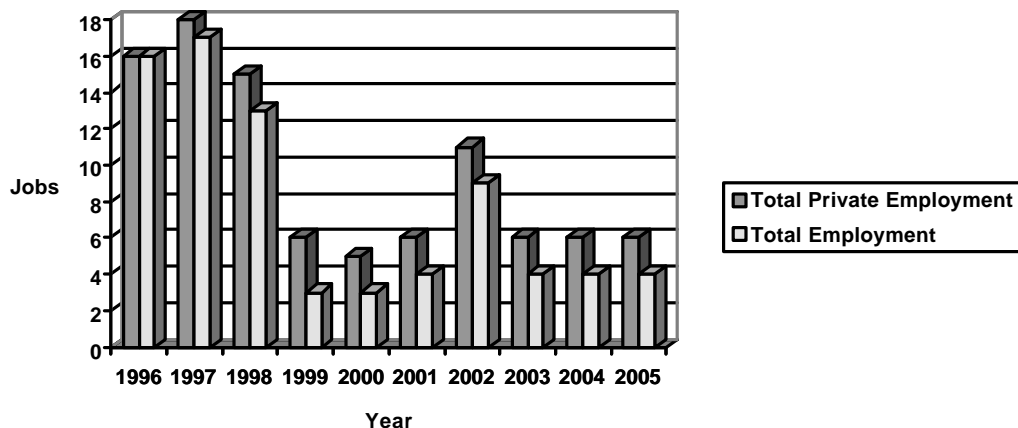
Results

While we have drastically reduced the proportion of tourist spending that can be viewed as net-new tourist spending and while we have allocated a share of operational expenses and income earned to other states, the *Amistad* project still has a positive impact on Connecticut's economy under this case scenario. The project generates an annual average of 6.2 new private sector jobs over the first thirty years. With these new jobs comes an average of \$1.297 million dollars of new (annual) personal income. Net new real disposable income amounts to \$327 thousand 1995 dollars. This new real disposable income has a net present value of \$6.17 million 1995 dollars. Relative to the State's expenditure of \$2.668 million dollars on this project, we have a benefit-cost ratio of 2.313. In other words, Connecticut residents, in addition to receiving back the tax cost of the project, obtain approximately \$2.31 of net new spending money for each dollar invested in the *Amistad* project. By traditional standards, this is a very attractive benefit-cost ratio.

In addition to increasing the spending power of Connecticut residents, the *Amistad* project increases the level of economic activity within Connecticut. On average, gross state product will be \$296 thousand dollars higher per year as a result of the *Amistad* project. This growth in employment, earnings and output will make Connecticut a more attractive place to live and work. As a result, we have an average in migration of new residents equal to 5.6 people.

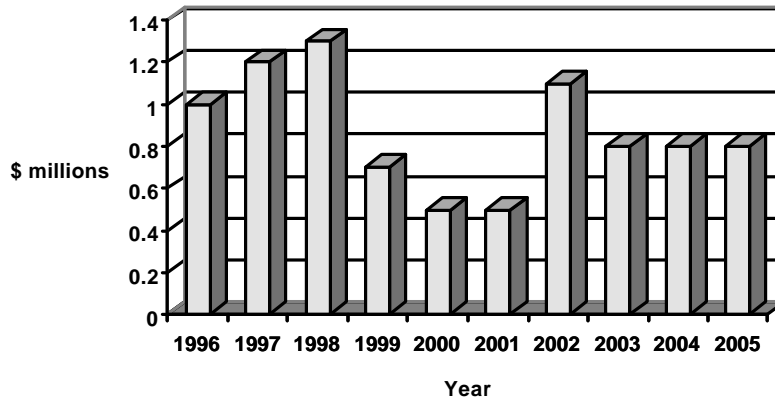
Figure 4 shows the amounts of new private and total employment to be generated over the next ten years by the construction and operation of *Amistad*. The peak observed in 2002 is the result of the fact that *Amistad's* level of economic activity within Connecticut is greater than in the previous two years and greater than assumed for the years after 2002. During 2000 and 2001, only 60% of *Amistad's* economic activity is within Connecticut. The ship is only docked within Connecticut 6 months each of these two years. It is docked out-of-state the other six months. In 2002, *Amistad* is dry-docked at Mystic for maintenance; for only two and one half months is the ship out of Connecticut waters. As a result only 22% of *Amistad* revenue in 2002 is generated out-of-state. 78% is generated within Connecticut. During the three months of dry-dock, most of *Amistad* expenditures are within Connecticut, namely within Mystic. This above normal level of economic activity within Connecticut during 2002 causes the spike in the graph. After 2002, it was assumed the *Amistad* would average 70% of its revenue from Connecticut activities and 30% from out-of-state activities. This lower level of activity within Connecticut again lowers the future impact of *Amistad* on the Connecticut economy.

**Figure 4: Net New Private and Total Employment
1996-2005**

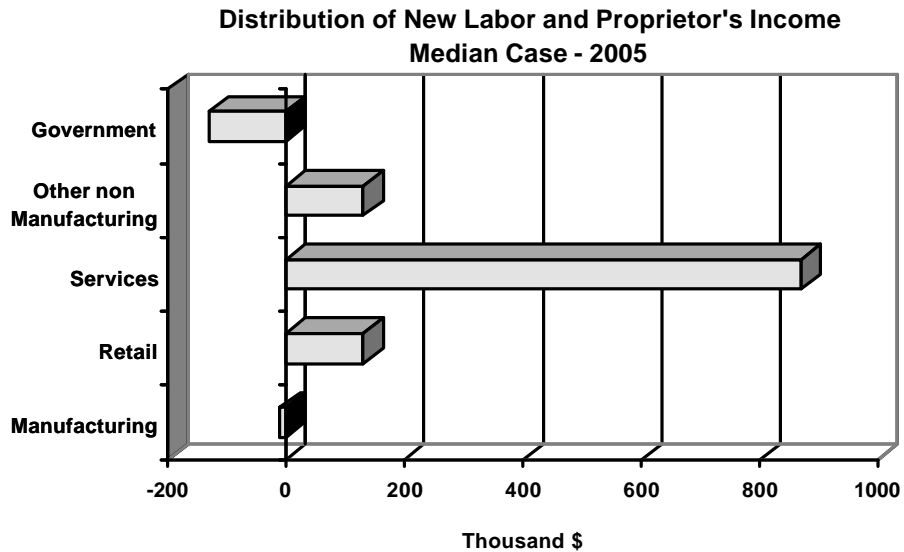


In addition to new employment, *Amistad* also affects the income level of Connecticut residents. Figure 5 displays the level of new personal income in current dollars. Part of the growth observed in this series is due to inflation; the rest is due to real economic activity.

**Figure 5: New Personal Income Due To Amistad Project
1996-2005**



Of interest to workers is the distribution of income by sectors. Again we will view this distribution when the *Amistad* project is in a steady state. Figure 6 displays the distribution of labor and proprietor's income for the year 2005.



As with the high impact case, the largest share of new income is generated in the service sector. Retail sales and other areas of non manufacturing receive the bulk of the remaining new labor and proprietor's income. Government and manufacturing employees suffer modest losses with respect to new labor and proprietor's income. The government spending diverted to make interest and principal payments on the funding of the grant given *Amistad* costs government jobs.

An overview of the results of the median case — the most likely case — are given in Table 3. This table clearly shows a clear positive economic impact of *Amistad* on the Connecticut economy. While the impact is not anywhere as near as large as under scenario one, it is still a respectable showing.

**Table 3: Selected Economic Indicators of Impact *Amistad* Project
Median Case**

Variable	Annual Average	Present Value (95\$)
Real Gross State Product	\$296,000	\$6,072,000
Real Disposable Personal Income	\$327,000	\$6,172,000
Personal Income	\$1,297,000	-
Private Employment	6.2	-
Total Employment	5	-
Population	5.6	-

*Reals are in 1995 dollars.

LOW IMPACT SCENARIO

The low impact case is a simply downscaling of the median impact case. Under the low impact case, the percentage of net new out-of-state tourist attending activities on the *Amistad* while in Connecticut waters is ten percent. The recapture figure for Connecticut residents has also been reduced to 10%. In other words, ninety percent of out-of-state tourist spending at *Amistad* and ninety percent of Connecticut resident spending at *Amistad* are funds presently being spent at other Connecticut educational and recreational facilities. The residential adjustment and the spending during spent out of Connecticut waters remains the same as under the median impact case.

Even under this worst case scenario, the payback to Connecticut residents of investing in the construction of *Amistad* is positive. The net present value of new gross state product in 1995 dollars is \$2.625 million. In terms of the critical measure of after tax spendable income — i.e., real disposable income — the impact is even larger. The present value of new real disposable income in 1995 dollars is \$3.751 million. This implies that for every dollar Connecticut residents invest in the *Amistad* project they get back \$1.41 in new after-tax income. This implies a benefit (new income) to cost ratio of 1.41. This still represents a good return on taxpayer investment.

In average terms, *Amistad* causes personal income to increase by \$570,000 per year. Private employment increases by a net two jobs per year; total employment only increases by one half of a job per year. Thus, in employment terms, this scenario lacks the attractiveness of the previous two scenarios. Population increases mainly during the construction phase; following the construction phase it declines and we have net out-migration in response to this project. Over the next thirty years, the net impact on migration is an average out-migration of 1.5 people per year. Real output, as measured by gross state product, increases by \$103,000 1995 dollars per year, and real disposable income in like manner climbs by \$184,000 1995 dollars per year. These results are summarized in Table 4.

**Table 4: Selected Economic Indicators
Low Impact Case - *Amistad* Project**

Variable	Annual Average	Present Value (95\$)
Real Gross State Product	\$103,000	\$2,265,000
Real Disposable Income	\$184,000	\$3,751,000
Personal Income	\$570,000	-
Private Employment	2	-
Total Employment	0.5	-
Population	-1.5	-

*Reals are in 1995 dollars.

In terms of employment, the pattern of new private and total employment over the first ten years of the *Amistad* project is quite different from the previous two scenarios. In Figure 7, observe that initial years of positive employment impact are followed by a string of years with a negative employment impact. The construction phase stimulates new jobs throughout Connecticut, but the operational phase of the project does not have enough impact under the assumptions of the low impact scenario to maintain the new jobs induced by the construction phase. As a result, we get a downsizing during the initial years of the operational phase as the number of jobs adjusts to a level that can be supported directly by the *Amistad* project.

**Figure 7: *Amistad* Project - Low Impact Scenario
New Private and Total Employment: 1996-2005**

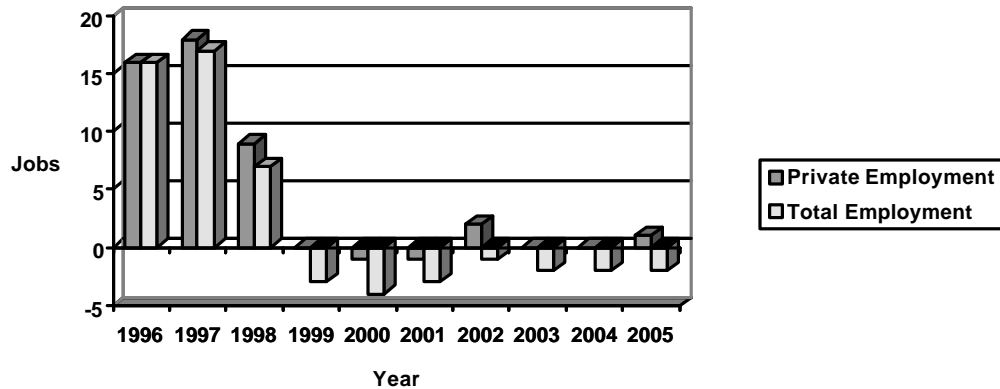


Figure 8 displays the impact of the *Amistad* project on personal income over the years 1996 to 2005. As with previous scenarios, the major impact on an annual basis is during the construction phase. We also get the 2002 “blimp” as explained in the previous section. Since personal income is in current dollars, part of the impact comes about because of wage increases and not because of real economic growth.

**Figure 8: New Personal Income 1996-2005
Amistad Project: Low Impact Scenario**

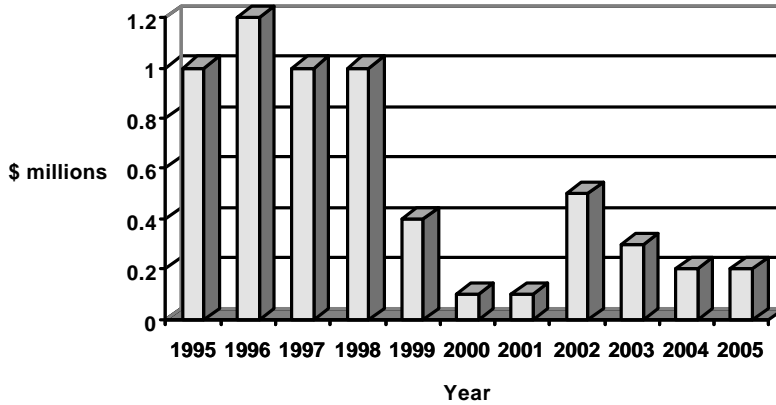
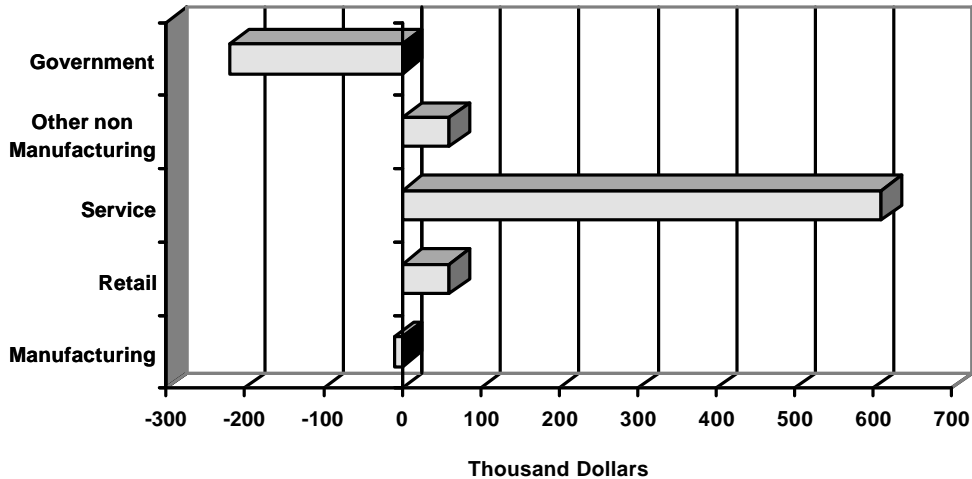


Figure 9 displays the distribution of new labor and proprietor's income in the stable economic activity year of 2005. As with the previous analyses, the major impact of the *Amistad* project is felt in the retail and service sectors. The primary reason for this is that the *Amistad* project is creating educational activities. These educational activities are a service to society. Also, like all tourist attractions, *Amistad*-related economic activity has a significant retail sales component.

**Figure 9: Distribution of New Labor and Proprietor's Income
Amistad Project: Low Impact Scenario**



While the results of this scenario are not startling, they are still, in general, positive. New income is generated and there is a positive impact of the *Amistad* project on the Connecticut economy. In fact, all three scenarios have shown the *Amistad* project to have a positive benefit-cost ratio for the citizens of the state. A comparison of the three scenarios will be given in the summary to follow. Remember this scenario, like the first, is less likely. The median case scenario is the case which historical tourist data for southeast Connecticut suggests is the most probable.

CONCLUSIONS

In this report, we have evaluated the economic impact of the *Amistad* project on the State of Connecticut. Already, the State of Connecticut has invested nearly \$170,000 in a feasibility study for this project, and is now being asked to invest an addition \$2,500,000 for the construction of the *Amistad*. The taxpayers have a right to know if their investment is going to be repaid. The answer appears to be a definite “yes.”

Under all three case scenario considered in this report, the benefit-cost ratio calculated is greater than one—the breakeven value. The values range from 1.406 under the worst case scenario to 6.006 under the best case scenario. Under the median impact scenario—the one we consider most probable—the benefit-cost ratio is 2.313. In terms of investment projects, this is very acceptable ratio.

In addition to putting spendable money in the pockets of Connecticut residents, the *Amistad* project also creates new output and jobs. Gross state product grows under all three scenarios. The average increase in gross state product in 1995 dollars is \$296,000 per year under the most probable scenario. Employment also increases by an average of 6.2 jobs per year under this median impact scenario.

The *Amistad* project, while having a positive economic impact on Connecticut, will also have a social impact on Connecticut. It will contribute to an improved level of understanding of cultural heritage and diversity in Connecticut. Such an improvement would contribute to the quality of life in Connecticut. While this will make the citizenry of Connecticut better off, we were unable to put a dollar value on this amenity for the purpose of our analysis. In the final analysis, it will be the responsibility of our elected officials to value this improvement in the quality of life within Connecticut and evaluate its contribution to the value of the *Amistad* project beyond those economic returns which we have calculated.

APPENDICES