



**Environmental Justice & Socioeconomic
Analysis for the Proposed Development of
the San Juan Waterfront Project**

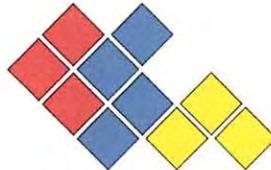
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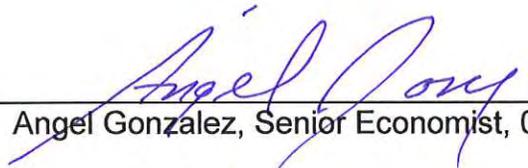
San Juan Waterfront Project



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TABLE OF CONTENT

	EXECUTIVE SUMMARY.....	i
I.	INTRODUCTION.....	1
II.	SOCIOECONOMIC ANALYSIS OF THE IMPACTED AREA.....	5
III.	SOCIOECONOMIC INDEX.....	10
IV.	SOCIOECONOMIC & EJ CONCLUSION.....	14
V.	MITIGATION ALTERNATIVES.....	16
VI.	ECONOMIC IMPACT ANALYSIS.....	22
	APPENDIX 1.....	I
	APPENDIX 2.....	II
	APPENDIX 3.....	III

EXECUTIVE SUMMARY

The principal finding in this study is that the proposed project will not infringe the Executive Order Num. 12898. The project will help to develop the socioeconomic conditions of San Juan Antiguo creating more than 8,000 direct jobs during the construction phase and around 1,500 direct jobs during the operational phase. The economic impact will be significant for San Juan Antiguo, the rest of the municipality and the entire Island.

The Puerto Rico Ports Authority is planning to create a mixed-use waterfront area along a recreational contemplative public space throughout the San Antonio Channel in the San Juan harbor. The proposed project is part of several Central and Municipal Government initiatives to revitalize the Old San Juan urban area creating a new economic cluster that complements with the Convention District efforts. Proposed land uses programs include tourism, residential, public and commercial uses.

As part of the environmental justice (EJ) analysis a socioeconomic index was developed to help compare the socioeconomic conditions of the impacted sub-county against the rest of sub-counties that compose the municipality of San Juan. The index was constructed using the following eleven indicators:

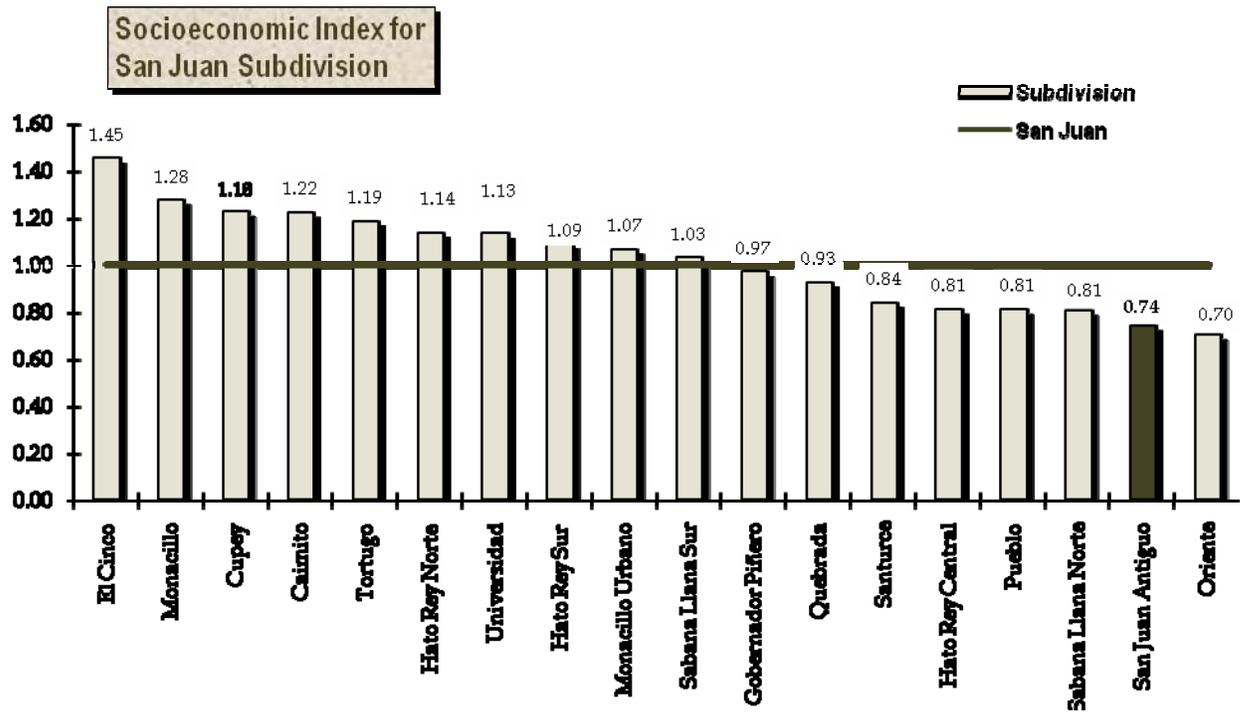
Indicators Used to Create the Environmental Justice Study

Median Household Income
Income Per Cápita
Households under the poverty level
Households that receive public assistance
Households that receive social security
Unemployment Rate
Education Level
Number of People with a 7th grade education or higher
Incidence of Owned Property vs. Rented Property
Median Household Value
Households with Complete Kitchens and Plumbing

Information obtained from the 1990 and 2000 Census

The socioeconomic index reflects that San Juan Antiguo has the lowest socioeconomic conditions than most of its pairs in the Municipality. San Juan Antiguo is 26% lower than the Municipality average and is only better than Oriente sub-county.

It should be noted that San Juan has a better socioeconomic profile than the average of Puerto Rico. The San Juan index is 20% higher than Puerto Rico average. This means that even though San Juan Antiguo reflects to have one of the lowest indexes in the county subdivision if it is measured against the average of Puerto Rico it would be around the mean.



The socioeconomic analysis evaluates three mayor groups of data which gather economic, social and housing indicators. The variables used allow us to create a socioeconomic profile of the sub-counties. The data is used to measure the socioeconomic position of the impacted sub-county with respect to their pairs.

The data reflect that for all the three mayor groups of indicators, 50% of the observations, for the impacted sub-county (San Juan Antiguo), are in the first three quartiles. The upper quartiles reflect better socioeconomic conditions than the lowers quartiles.

San Juan Antiguo is a unique place, because it is point of convergence of tourism, commercial, cultural, educational and government activity. However, it has more people visiting the sub-county from the outside than actual local people living within its limits. Also, most of the people from San Juan Antiguo live in public housing, special communities, or in small unit renter households (usually young singles' or old couples' households). This explains why San Juan Antiguo reflects so poorly in the socioeconomic analysis.

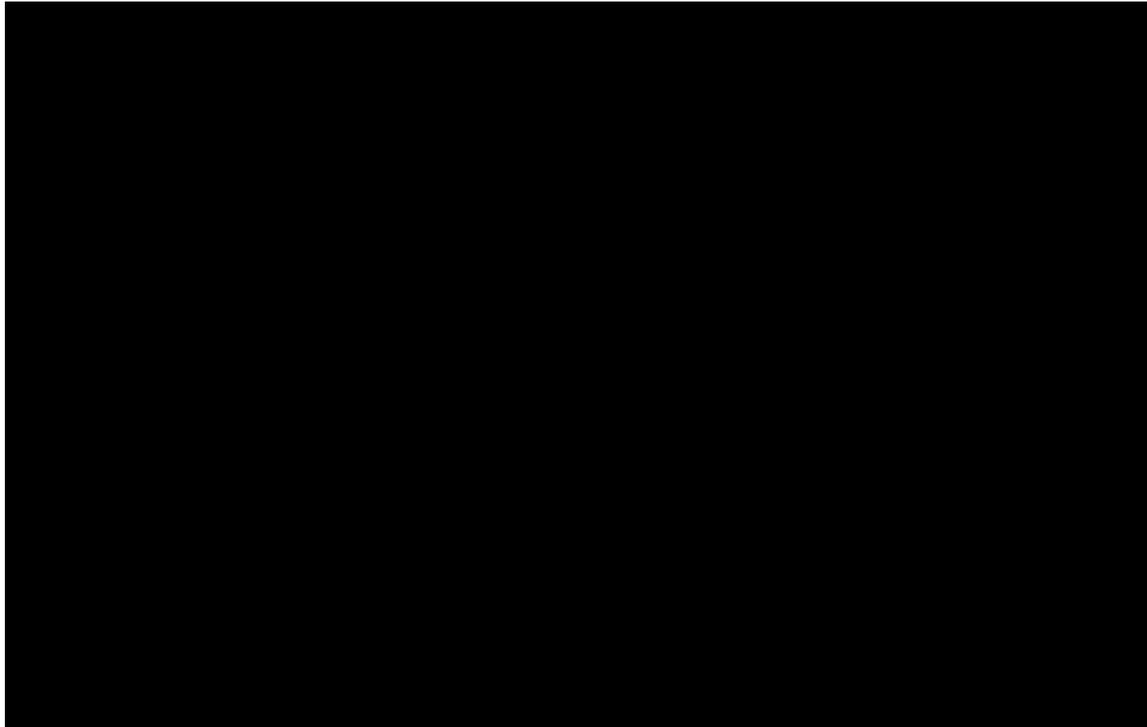
The San Juan Waterfront will be developed in an area of San Juan Antiguo that today is underused and deteriorated. Most of the land belongs to the Government of Puerto Rico. There are various private properties in this area. The properties will be appraised to present value. The expropriation process will be executed as established by law and the owners will be properly compensated. The owners will have all the administrative and judicial mechanisms to make their allegation in case that they differ on the appraisal of their properties.

The break-bulk cargo operators (Carga Suelta) will remain on Piers 13-14 until 2011, to be relocated to Navy Frontier Pier until 2015. Permanent relocation is pending to be determined. Currently evaluating the San Juan Bay area for permanent relocation. The "Gondoleros" will be relocated to Navy Frontier Pier from 2009 until 2011. A Guaynabo PRPA site is being evaluated for permanent relocation.

The UPR School of Architecture is evaluating permanent relocation options within the SJ Waterfront project area for La Coal Fishing Village. Currently planned to be temporarily relocated to the Navy Frontier Pier until 2009.

The San Juan Waterfront will generate an aggregated economic impact (in the aggregated economic activity of Puerto Rico) of over \$1,700 million during the construction phase and over \$150 million in the operational phase yearly. The construction phase is expected to last 15 years timeframe.¹

The benefit to the government internal revenue is almost \$64 million in the construction phase (estimated to last a period of 15 years). The operational phase represents an income to the government of around \$19.6 million per year.²



¹ The estimates are based on information given by Colliers International.

² These estimates could change if the assumptions used change.

Government Income Revenue / After the 15 years Development	
<u>Concept</u>	<u>\$</u>
Construction Phase:	
Construction Taxes	\$ 30,911,552
Operating Municipal Taxes "Patente"	\$ 5,152,225
<i>Total Municipal Construction</i>	<i>\$ 36,063,777</i>
Internal Revenue	\$ 5,152,225
Engineer Collage Stamp	\$ 1,030,445
Income Tax	\$ 21,993,965
<i>Total State Construction</i>	<i>\$ 28,176,636</i>
Government Revenue - Construction Phase	\$ 64,240,413
Operational Phase:	
CRIM*	\$ 14,234,131
Income Tax (State)	\$ 5,373,427
Total Operational Phase	\$ 19,607,558
Government Revenue - Operational Phase**	\$ 19,607,558

* Estimated based in construction value as property value.

** After the 15 years period construction phase is finish.

The conclusion is that even though the proposed project will directly affect an area with low socioeconomic conditions, it will not be discriminatory because the direct impact of the project will be the revitalization of the area and as it will externality upgrade their conditions. This means that the Environmental Justice guidelines from the Executive Order Num.12898 from the President William J. Clinton have not been infringed.

I. INTRODUCTION

The Puerto Rico Ports Authority (PRPA) is planning to create a mixed-use waterfront area along a recreational contemplative public space, the San Antonio Channel in the San Juan harbor. The proposed project is part of several Central and Municipal Government initiatives to revitalize the Old San Juan urban area creating a new economic cluster that complements with the Convention District efforts. Proposed land use programs include tourism, residential, public and commercial uses.

<< Figura 1 >>

Puerto Rico Law # 416 of 2004 requires the Lead Agency (i.e., PRPA) to submit an Environmental Impact Statement document (Declaración de Impacto Ambiental [DIA]) to the Environmental Quality Board (EQB) in which potential impacts associated with socioeconomics, among others humans and physical environmental resources, are considered. This study was made as part of the requirement of the Regulation of Environmental Quality Board for the Process of Presentation, Evaluation and Proceeding of Environmental Documents and it is based on the Executive Order Num. 12898 of President William J. Clinton.

The Executive Order indicates that each federal agency must formulate a strategy for environmental justice that includes the identification of possible impacts of its policy on minority populations and low income populations, to promote the fulfillment with the environmental statutes of health and, to assure the citizen participation and, identify differential patterns of consumption of natural resources among minority population and low income population.

It agrees to indicate that, in this subject of Environmental Justice, Puerto Rico represents a singularity whose differences with which Executive Order 12898 contemplates, and have taken to Region 2 of the Environmental Protection Agency of the United States (EPA) to recognize the exceptional nature of the Island. We based in the document published by the EPA in June 1999 under the title “USEPA Region 2 Draft Interim Policy on Identifying EJ Areas.” In this document the EPA emphasizes the following:

“In certain circumstances, a Community of Concern may be virtually indistinguishable from any of its neighbors for a given EJ demographic factor. The classic example in Region 2 is in Puerto Rico, where every community is classified as Hispanic, even though additional racial differences may exist. A related example would be a community that is not higher in minority representation than the reference communities when all minority groups are considered, but may have significantly greater minority representation when only a single minority group is considered.”

Later it says:

“In Puerto Rico, for example, the Hispanic factor would be canceled out, and the EJ assessment would be based on the outcome of the low-income factor, any other minority differences, and the disproportionate and adverse burden factor.”

This socioeconomic study uses fourteen (14) variables which offer a comparative scenario of the socioeconomic condition of the sub-county of San Juan. Eleven (11) of these variables were grouped to construct a socioeconomic index that allows to make an appreciation of the set of the conditions in each sub-county.

The socioeconomic analysis is made by comparing the impacted sub-county with respect to its cohort sub-counties and the average of the municipality. At the end, the socioeconomic conditions of the impacted sub-county will be compared with the Municipality of San Juan and Puerto Rico.

The information sources used were the decennial censuses of Population and Housing performed by the United States Census Bureau for years 1990 and 2000. For the index calculation, the information source used was United States Census for Population and Housing for year 2000.

Indicators Used in the Socioeconomic Analysis / EJ Study

Median Household Income
Per Cápita Income
Households under the poverty level
Households that receive public assistance
Households that receive social security
Unemployment Rate
Education Level
Number of People with a 7th grade education or higher
Analphabeticism
Population growth
Incidence of Owned Property vs. Rented Property
Median Household Value
Housing units in good conditions
Housing units with Complete Kitchens and Plumbing

Information obtained from the 1990 and 2000 Census

The variables analphabetism and housing units in good conditions were not available for the Census of year 2000 and therefore the information used was the one published in the Census of the 1990. These two variables were not included in the socioeconomic index that was created for the comparison of each sub-county.

For year 2008, the socioeconomic indicators are estimated using the technique of linear extrapolation based on the previous growth of the years 1990 and 2000.

In order to be able to compare the impacted sub-county in respect to other sub-counties in the Municipality of San Juan (cohort) the sub-counties were organized in ascending or descending form according to how their socioeconomic conditions are better reflected in the studied geographic area. Once ordered, the data is subdivided in “Quartiles.” To organize in quartiles is a statistical operation that divides a group of data in four similar sub-groups.

The following example illustrates the ranking process for a municipality that possesses 12 sub-counties. All of the sub-counties are organized in an ascending form based on the size of the population. Then the group of sub-counties is divided in four groups of three (3). The first quartile will have the three top populated sub-counties meanwhile the fourth quartile will have the fewest three populated sub-counties in the municipality.

Then, each sub-county is identified with a number to determine its “Rank.” The term “Rank” represents the position of the sub-county within the distribution of the sub-counties in the municipality. Continuing with the previous example, (12 sub-counties organized in an ascending form), the sub-county that is on the top of the list will have the number one (1) rank and should be the most populated sub-county of the distribution, while the sub-county that is on the bottom will have the number (12) rank and should be the lower populated area. The “Rank” and “Quartile” are organized based on each of the studied variable.

II. SOCIOECONOMIC ANALYSIS

The socioeconomic analysis evaluates three mayor groups of data which gather economic, social and housing indicators. The variables used allow us to create a socioeconomic profile of the sub-counties. The data is used to measure the socioeconomic position of the impacted sub-county with respect to their pairs.

This analysis assumes that to have a good socioeconomic condition most of the indicators analyzed are in the first two or three quartiles of the distribution. **The data reflect that 50% of the observations for all the three mayor groups of indicators, for the impacted sub-county (San Juan Antiguo), are in the first three quartiles.**³

In order to determine the economic position of the impacted sub-county in relation to its pairs and with the average of the municipality the most important variables regarding household income were compiled. These indicators were: *Per Capita Income, Median Household Income, Households under Poverty Level and with Public Assistance, Social Security, and Unemployment*. All the data come from the US Census of Population and Housing from the year 2000.

The data was ordered based on a predetermined variable for each of the indicators and then each of these indicators was divided in “Quartiles.” The rank and quartile were obtained for each of the studied variables in this manner.⁴

The analysis of the economic indicators reflects that 33% of the observations are in the first two quartiles (1 and 2).

³ A quartile is a statistic operation that divides a group of data into four similar sub-groups.

⁴ The “*Rank*” represents the position of the sub-county in the distributions of sub-counties in the municipality.

<< Figura 2 >>

ENVIRONMENTAL JUSTICE AND ECONOMIC IMPACT STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Summary of Economic Indicators

County Subdivision	Per Capita Income		Median Income for Households		Poverty Level		Public Assistance		Social Security		Unemployment	
	Rank	Quartile	Rank	Quartile	Rank	Quartile	Rank	Quartile	Rank	Quartile	Rank	Quartile
Caimito	1	1	4	1	4	1	13	3	2	1	3	1
Cupey	4	1	2	1	3	1	15	4	1	1	6	2
El Cinco	5	2	3	1	1	1	18	4	16	4	5	2
Gobernador Piñero	12	3	10	3	9	3	14	4	15	4	11	3
Hato Rey Central	14	4	16	4	15	4	3	1	12	3	16	4
Hato Rey Norte	2	1	5	2	5	2	8	2	13	3	4	1
Hato Rey Sur	7	2	8	2	7	2	17	4	7	2	12	3
Monacillo	3	1	1	1	2	1	16	4	8	2	8	2
Monacillo Urbano	6	2	6	2	6	2	11	3	10	3	9	3
Oriente	18	4	17	4	18	4	1	1	11	3	17	4
Pueblo	15	4	15	4	16	4	9	3	3	1	13	3
Quebrada	17	4	14	4	14	4	4	1	18	4	7	2
Sabana Llana Norte	16	4	13	3	13	3	2	1	14	4	15	4
Sabana Llana Sur	11	3	7	2	8	2	12	3	6	2	12	3
San Juan Antiguo	10	3	18	4	17	4	7	2	5	2	18	4
Santurce	9	3	12	3	12	3	6	2	9	3	14	4
Tortugo	13	3	9	3	10	3	5	2	4	1	1	1
Universidad	8	2	11	3	11	3	10	3	17	4	2	1

In order to measure the impact of San Juan Waterfront Project we also evaluated social indicators. These indicators were: *Educational Attainment, People graduated from 7th grade or higher, Ability to Read and Write, and Population.*

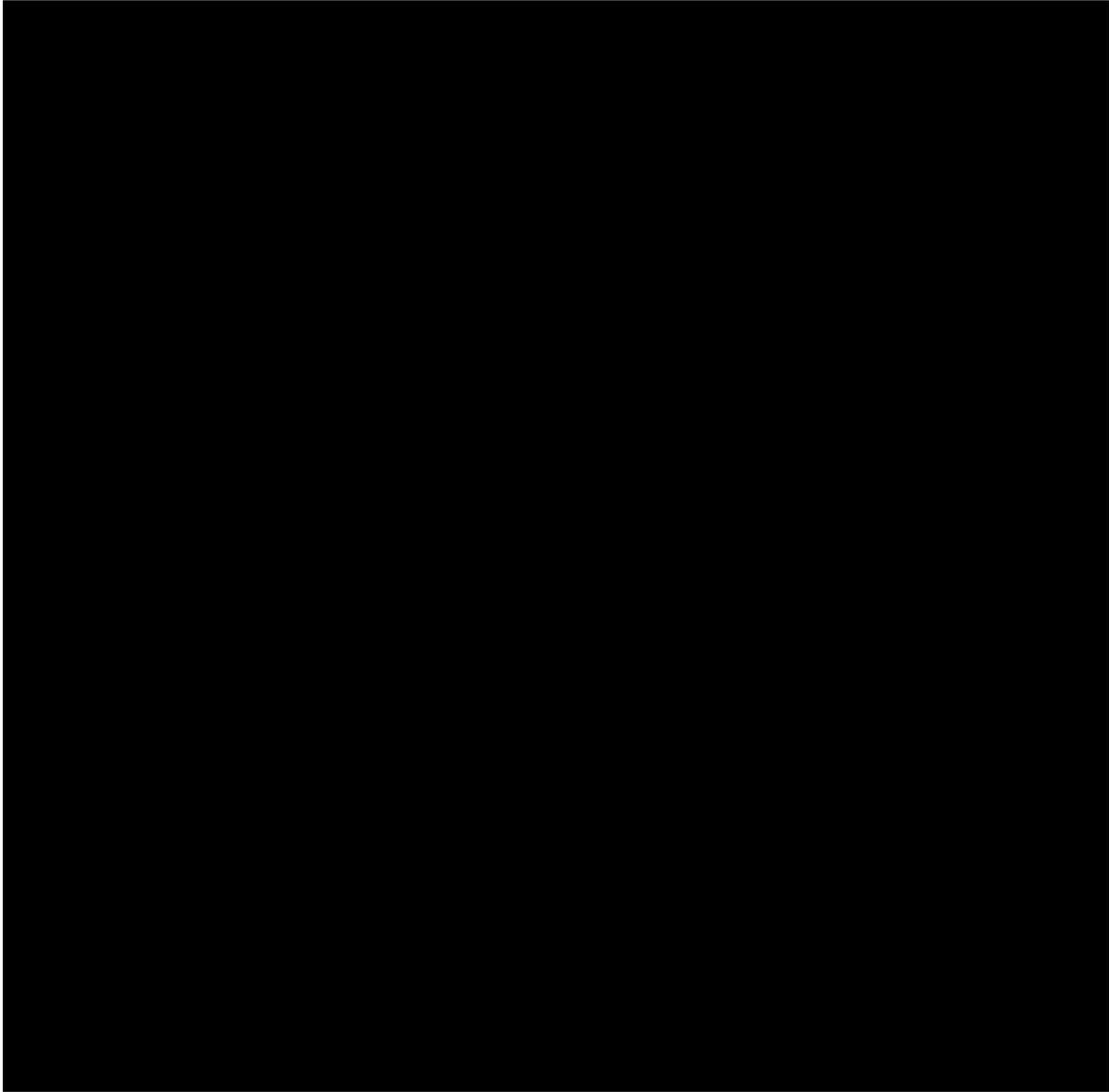
The analysis of the social indicators reflects that 50% of the observations are in the third quartile and the other half in the fourth.

Summary of Social Indicators

County Subdivision	Educational Attainment		7th Grade or More		Ability to Write and Read		Population	
	Rank	Quartile	Rank	Quartile	Rank	Quartile	Rank	Quartile
Caimito	6	2	8	2	10	3	1	1
Cupey	5	2	7	2	7	2	2	1
El Cinco	1	1	1	1	1	1	3	1
Gobernador Piñero	10	3	9	3	6	2	4	1
Hato Rey Central	15	4	15	4	16	4	5	2
Hato Rey Norte	4	1	4	1	4	1	6	2
Hato Rey Sur	2	1	3	1	3	1	7	2
Monacillo	3	1	2	1	2	1	8	2
Monacillo Urbano	8	2	6	2	9	3	9	3
Oriente	18	4	17	4	15	4	10	3
Pueblo	16	4	16	4	13	3	11	3
Quebrada	17	4	18	4	18	4	12	3
Sabana Llana Norte	11	3	11	3	12	3	13	3
Sabana Llana Sur	7	2	5	2	8	2	14	4
San Juan Antiguo	13	3	13	3	17	4	15	4
Santurce	14	4	14	4	14	4	16	4
Tortugo	9	3	10	3	11	3	17	4
Universidad	12	3	12	3	5	2	18	4

Finally, housing indicators were used. This group of variables includes: ***Housing Occupied by Owners vs. Rented, Median Housing Value, Selected Housing Conditions, and Housing in Adequate Conditions.***

The analysis of the housing indicators reflects that 25% of the observations are in the first quartile (Median Housing Value) while the remaining observations are in the third or fourth quartile.



III. SOCIOECONOMIC INDEX

As part of the Environmental Justice (EJ) analysis a socioeconomic index was developed to help compare the socioeconomic conditions of the impacted sub-county against the rest of sub-counties that compose San Juan Municipality. The index was developed using the following eleven indicators:

Indicators Used to Create
the Environmental Justice Study

Median Household Income
Per Capita Income
Households under the poverty level
Households that receive public assistance
Households that receive social security
Unemployment Rate
Education Level
Number of People with a 7th grade education or higher
Incidence of Owned Property vs. Rented Property
Median Household Value
Households with Complete Kitchens and Plumbing

Information obtained from the 1990 and 2000 Census

The analysis of indicators was performed by comparing the ratio of the smallest geographic unit versus the largest geographic unit. In this case the indicators for the sub-county of San Juan Antiguo were compared to the indicators of its peers and its average, the municipality of San Juan (reference area).

The index for the sub-counties was performed in two steps. First, each individual value of an indicator for the sub-counties was divided by the value of the indicator of the reference area (San Juan Municipality). It represents a measure of the sub-counties relative *vis a vis* the total reference area (SJ). Second, all of the relative measures tallied in the first step are averaged. This average represents the index.

The reasoning behind this analysis is that for most of the indicators, the higher the ratio of the geographic subunit with respects to the larger geographic subunit (sub-county vs. reference area) the better off is the sub-county in comparison to the other sub-counties in the reference area. A ratio value of 1 indicates that there is a complete equality between the values of the indicator of the sub-county with respect to the indicator of the reference area. In other words, any value above 1 indicates that the sub-county presents a more favorable condition than the average for the reference area, while any value below a 1 indicates that the sub-county presents a less favorable condition than the average for the reference area.

There are a certain number of variables for which this reasoning and subsequence conclusion do not apply since the information reflects exactly the contrary. In other words, the higher the value of the sub-county relative to the reference area for particular indicators, the worse is the socioeconomic condition. These variables are:

**Inverse Indicators Used to Create
the Environmental Justice Study**

Households under the poverty level
Households that receive public assistance
Households that receive social security
Unemployment Rate
Households with Complete Kitchens and Plumbing

Information obtained from the 1990 and 2000 Census

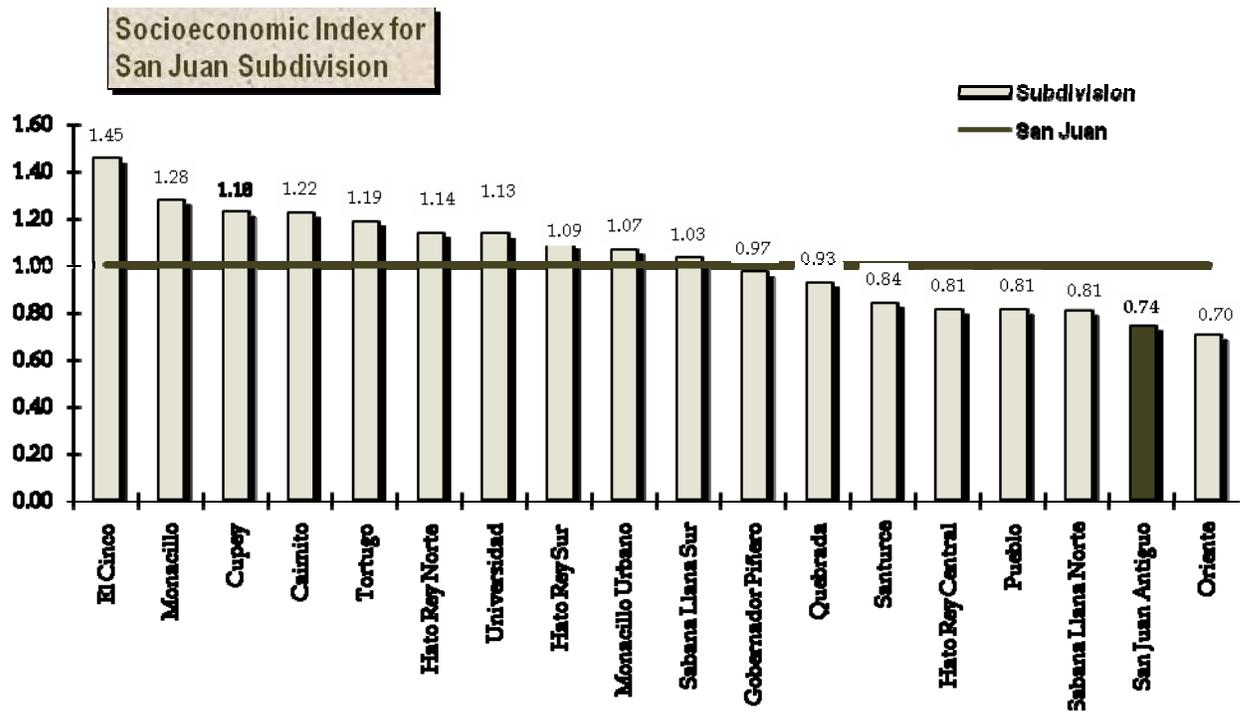
In the previous five indicators, a higher value represents a worse socioeconomic situation for the geographic area under evaluation. To be able to compare these variables with the other six, the inverse of the variable ($1/X$) must be used to present congruency between the variables. Using the inverse of the variable guarantees that the geometric mean is consistent with the other indicators, which presents consistency between the larger the value the more favorable the socioeconomic condition of the area. All the variables used for the index are obtained from the 2000 Population Census.

The socioeconomic index reflects that San Juan Antiguo has lower socioeconomic conditions than most of its cohort subdivisions in the Municipality. San Juan Antiguo is 26% lower than the Municipality average and outrank only the Oriente sub-county with respect to socioeconomic condition.

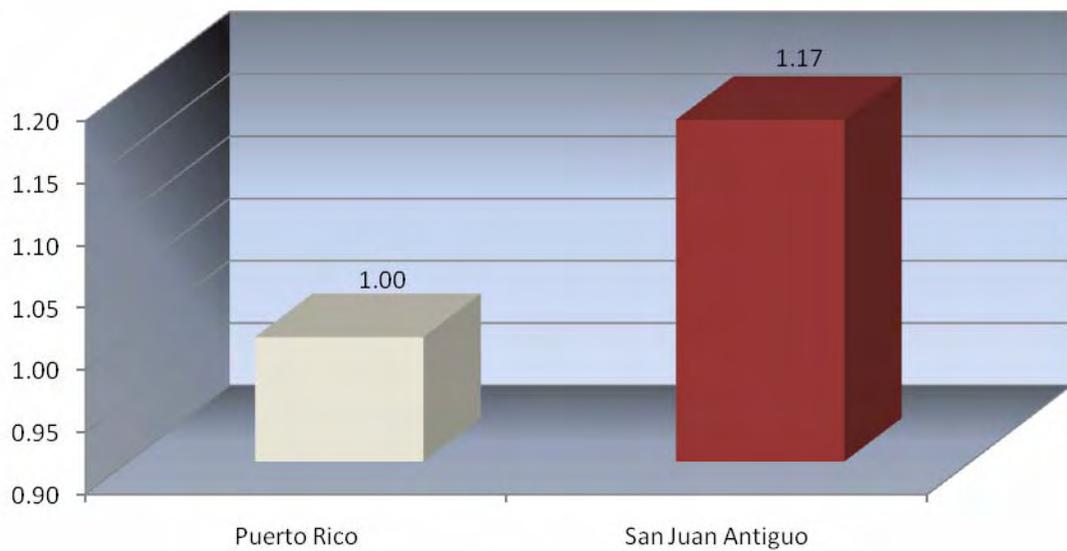
It should be noted that San Juan has a better socioeconomic profile than the average of Puerto Rico. The San Juan index is 20% higher than Puerto Rico average. This means that, even when San Juan Antiguo has one of the lowest indexes of the county subdivisions, when is measured with the average of Puerto Rico it reflects a better socioeconomic condition.

Socioeconomic Index for
San Juan County Subdivision

County Subdivision	Subdivision	San Juan	
El Cinco	1.45	1.00	1
Monacillo	1.28	1.00	2
Cupey	1.23	1.00	3
Caimito	1.22	1.00	4
Tortugo	1.19	1.00	5
Hato Rey Norte	1.14	1.00	6
Universidad	1.13	1.00	7
Hato Rey Sur	1.09	1.00	8
Monacillo Urbano	1.07	1.00	9
Sabana Llana Sur	1.03	1.00	10
Gobernador Piñero	0.97	1.00	11
Quebrada	0.93	1.00	12
Santurce	0.84	1.00	13
Hato Rey Central	0.81	1.00	14
Pueblo	0.81	1.00	15
Sabana Llana Norte	0.81	1.00	16
San Juan Antiguo	0.74	1.00	17
Oriente	0.70	1.00	18
San Juan Municipality	1.20	-	-
Puerto Rico	1.00	-	-



Socioeconomic Index San Juan v. Puerto Rico



IV SOCIOECONOMIC AND EJ CONCLUSIONS

Based on the information presented and the results of our analysis, the socioeconomic condition of San Juan Antiguo is one of the lowest in the county subdivision of San Juan Municipality. It is important to understand the factors of this situation. First of all San Juan Antiguo is an historical site that has some of the most beautiful architecture on the Island but their buildings are hundreds of years old.

San Juan Antiguo has been designated as an historical district, thus it has restrictive laws in terms of construction and rehabilitation. This situation makes the housing conditions very unique. For example, its housing value is one of the highest and it is estimated to continue to appreciate in the near future. Nonetheless, it has the highest percentage of rent occupancy. This means that most of the housing units in San Juan Antiguo are out of budget for acquisition by most of the people who lived in them.

It is important to note that San Juan Antiguo is the seat of the Central Government of the Island. The Executive Mansion, Legislature House and the Supreme Court are located in this sub-county. Also, other important governmental agencies are located here including the Internal Revenue Office (Hacienda), the Institute of Puerto Rican Culture (Instituto de Cultura Puertorriqueño) and the Budget and Management Office.

Because of its historical importance San Juan Antiguo is a prime tourist destination. It has a cruise-ship-port and at least four hotels within its boundaries. It also has art galleries, restaurants, theaters and historical museums and monuments (San Cristóbal and San Felipe forts). San Juan Antiguo also has retail stores, schools and universities. Also, it accommodates the head office of the Puerto Rico Chamber of Commerce.

All these features combine to make San Juan Antiguo a unique place. It is a tourist, commercial, cultural, educational and government center. All these sectors gave the sub-county its role as an urban center and acts as an anchor that attracts people from all over the Island and beyond.

San Juan Antiguo has more people there from the outside than local people living. The transient (e.i., tourists) and daily workforce population who commute to San Juan Antiguo outnumbers the sub-county's permanent resident population. Also, most of the people from San Juan Antiguo live in public housing projects, special communities or in small unit renter households (usually young singles' or old couples' households). This explains why San Juan Antiguo reflects so poorly in the socioeconomic analysis even though it is the political urban center of the Island.

Nevertheless, the San Juan Waterfront project is a revitalization proposal for the sub-county area, San Juan Antiguo. The proposed project will upgrade the socioeconomic conditions of the people of San Juan Antiguo. The proposed action would be a mechanism for growth that would not only contribute to the economy of the impacted sub-county and the municipality but also the whole Island.

It is important to highlight that public housing near the proposed project lies outside the San Juan Waterfront project footprint and would not be removed from its site. On the contrary, the Ports Authority is working with the Housing Departments to ensure integration between the proposed Waterfront project and public housing initiatives.

The conclusion is that the proposed project even though it directly affects an area with low socioeconomic conditions; would not be discriminatory because the direct impact of the project will be the revitalization of the area, and secondarily it would upgrade the areas conditions. This means that the Environmental Justice guidelines from the Executive Order Num.12898 from the President William J. Clinton have not been infringed.

V. MITIGATIONS ALTERNATIVES

A Critical Mission of the San Juan Waterfront is to bring amenity and economic benefit to the larger context of the Isleta of San Juan through a Land Use Strategy that calls for the creation of a true mixed-use and vibrant neighborhood. As such, this neighborhood will support local businesses, public housing and promote additional opportunities for home ownership and employment for neighborhood residents.

Achieving this goal means a necessary level of reassessment and reconfiguration of the uses and properties within the project area. Disposition of these properties fall into two categories: those which will be relocated for greater functionality or preferred siting and those which have been selected for appropriation.

Criteria for appropriation

- Existing uses are no longer appropriate or are incompatible with economic and urban goals for the Waterfront
- Existing structures are in poor condition, or are not adaptable either structurally or spatially for proposed program uses
- Existing properties are inactive, abandoned, derelict, or in poor condition

In many cases, the programs could be re-established in the proposed development in the reconstructed/redeveloped context that achieves both the highest and best use of the property to create revenue for Puerto Rico and the continued functioning of these establishments. For example, existing professional offices or service station integrated into a mixed use structure of higher density.

In other cases, properties subject to taking by eminent domain will be put to use as public amenity. These interventions are critical to establishing a strong Public Realm which will:

- provide an important amenity for all that maintains the Waterfront is not just for private gain. For example, the West Cross Island Park makes a pleasant buffer between the largely institutional and government uses on its west and the largely residential neighborhood to its east, defining each zone's identity. For the institutions, it is a great place to have lunch or take a break. For the neighborhood, it is a place for recreation. In both cases, it is a valuable community enhancement.
- communicate to all who visit Puerto Rico's economic progress, connection with the outdoors and respect for the land, opportunity for adventure and exploration, and desire to foster community and overcome economic segregation
- create walkable connections for tourism: the ability to connect Viejo San Juan, the Condado and the Puerto Rico Convention Center District by providing safe, attractive and comfortable streetscapes and parkways are particularly important to tourists who are unfamiliar with the city and use the visual clues to tell them of worthwhile destinations
- avoid the proposed Waterfront and Paseo del Puerto becoming just another isolated board walk within a risky context that turns its back to the surrounding neighborhoods- surrounding neighborhoods which need to change for reasons of safety and security as well as aesthetic and economic reasons

A total of 50 parcels comprise the Project Area. No residential uses are currently associated to any of these parcels. The parcels that comprise the Project Area are distributed as follows:

- The Government of Puerto Rico owns the majority of such parcels (31), which represents 62%.

- The Federal Government and the San Juan Municipal Government own 4% (2) and 2 % (1) of the parcels, respectively. The properties of the Federal Government correspond to the Food and Drug Administration and the US Army Corps of Engineers. The property of the Municipality of San Juan is currently under an agreement with a private developer for a residential development project.
- Private parties own the remaining 32% (16) of the parcels that comprise the Project Area.

A total of 36 parcels, out of the 50 parcels total, require land transactions, since such parcels are not owned by the Ports Authority. None of the parcels correspond to residential use. The parcel corresponding to the USACE is not included in this discussion since it does not require a land transaction. The strip of land which faces the coast will be granted as an easement for the San Juan Waterfront Canal Walk; however its ownership will remain on the USACE. The aforementioned transactions are described below:

Relocation – Public properties will be relocated in its majority. Such relocations (18), which represent 50% of the land transactions, are in the following status as described in the table below. Remarkable relocations, which consider those that involve maritime operations or security issues, are described in this table.

<p>Temporary Relocations</p>	<p>8 lots, which comprise:</p> <ul style="list-style-type: none"> • Break-bulk Cargo Operators (Carga Suelta) – They will remain on Piers 13-14 until 2011, to be relocated to Navy Frontier Pier until 2015. Permanent relocation is pending to be determined. Currently evaluating the San Juan Bay area for permanent relocation. • Gondoleros – They will be relocated to Navy Frontier Pier from 2009 until 2011. A Guaynabo PRPA site is being evaluated for permanent relocation. • La Coal Fishing Village – The UPR School of Architecture is evaluating permanent relocation options within the SJ Waterfront project area. Currently planned to be temporarily relocated to the Navy Frontier Pier until 2009.
<p>In Progress</p>	<p>6 lots, which include, among others:</p> <ul style="list-style-type: none"> • Police of PR – Currently evaluating permanent relocation options for the Tactical Operations Office and the Police Headquarters. Currently evaluating permanent relocation options for the SJ Precinct within the Isleta and possibly the SJ Waterfront area. • PR Dept. of Agriculture – Currently evaluating permanent relocation options. • Federal Drug Administration - Currently evaluating permanent

	<p>relocation options.</p> <ul style="list-style-type: none"> • Harbor Fuel Service: Currently evaluating permanent relocation options within PRPA San Juan Bay area.
Final Relocation Determined	<p>4 lots, which includes:</p> <ul style="list-style-type: none"> • DNER facilities – To be relocated within DNER Headquarters in SJ. • San Juan Bay Pilots – To be relocated within PRPA site within Isla Grande. • PR National Guard – To be relocated to PR National Guard property in Ceiba. • Seaborne Airlines – To be relocated within Isla Grande Airport.

Cessation of Use – Two (2) public properties, which represent 5.5% of land transactions, include the following:

- The property belonging to the Municipality of San Juan is currently under an agreement with a private developer for a Residential Development Project. A portion of this lot overlaps with the West Cross Island Park. Currently in conversations with the developer to conform the project to the proposed Cross Island Park.
- A basketball court in the San Andrés Street, at the corner of San Agustín Street. This is a portion of a lot owned by the PR Housing Department, which also overlaps with the West Cross Island Park. Currently in conversations with the PR Housing Department to conform this portion of the lot to the Proposed Cross Island Park. The proposed use, although of different nature, is consistent with the recreational character of the existing use.

Condemnation – A total of 16 lots, which represent 44.4 % of land transactions correspond to private parties. None of these parcels correspond to residential use. Such properties are used for commercial purposes; however, they do not involve maritime operations. The current value of the properties would be appraised, and the owners would be compensated accordingly. If necessary, property owners would have administrative and judicial mechanisms to contest appraised property values.

VI ECONOMIC IMPACT ANALYSIS

The San Juan Waterfront project would generate an aggregated economic impact of more than \$1,700 million in the construction phase (15 years) and over \$150 million in the operational phase (yearly estimated). Construction of the project is estimated to be completed in approximately 15 years. The *aggregated* economic impact for this phase (construction) represents the total value over the 15 year construction period.

Impact

This section presents the estimated value that the proposed project would have on the *aggregated* economic activity for San Juan Municipality and for the rest of the Island. The economic impact is based on investment, direct jobs, indirect and induced jobs, aggregated economic activity and government income revenue. The analysis presents the commercial interaction between the different economic sectors.

The Input-Output method was used to make the economic impact estimations. The Input-Output is an economic empirical study that presents the relationships between all the different sectors of the economy. It is a wide economic system because it intertwines all economic sectors of a country in terms of production and consumption. The industries produce and consume at the same time (intermediary demand) and also supply the products that are used as final consumption (final demand).⁵

Intermediate demand represents the buy-sales transactions that the industries make during their own production process. These transactions are reflected, in the structure of Input-Output, in where the goods and services that are consumed come from. This is in terms of the sector that produces it and if it was consumed by locals or imported.

⁵ Input-Output Matrix 1991-1992; March 2002. Puerto Rico Planning Board. Social Analysis Program, Forecasts and Models.

Final demand is the value that represents the part of goods and services that was consumed by the four groups of final consumers: the people, the enterprises, the government, and the rest of the world.

Different kind of multipliers can be obtained throughout the application of the Input-Output matrix, combined with employment data, final demand, income, and production. In general, these are classified as: Production, Income, and Employment multipliers.

Both the employment and income multipliers can be subdivided in two different classes:

- the ones that only consider the direct and indirect effects generated by the changes in the final demand of any sector (Type I multiplier) and
- the ones that also include the effects on the induced income and employment by changes in the consumption of people (Type II multipliers).

In other words, Type II multipliers indicate which will be the direct, indirect, and induced impact over employment and income when there is a change in the final demand (excluding the personal consumption as part of the final demand) for whichever industry included in the Input-Output matrix.⁶

In this section the economic impact will be estimated for each of the different proposed land use programs.⁷ These are:

- Residential Housing
- Hotels
- Commercial Areas
- Public Areas
- Civic Space
- Marine

⁶ To be able to estimate the induced impact for the consumption by people, they must be eliminated from the equation.

⁷ The data used to estimate the economic impact were provided by CBT Architects and the Ports Authority.

The following section present, the economic impact analysis for both the construction and operation phases. All multipliers and coefficients used to estimate the economic impact of each of the proposed projects appear in the summary tables within the sections.

The summary tables indicate the economic impact of the investment based on direct and indirect impacts and direct, indirect and induced jobs. The direct impact is the amount of money invested in each project. The indirect *aggregated* economic impact is what the initial investment will grow by circulating in the economic system of Puerto Rico. The direct jobs are the jobs needed to construct or operates the proposed project, the indirect jobs are the ones that are created by supplying inputs or services to the proposed project. The induced jobs are the ones created by supplying goods or services to the people employed in account of the project (direct and indirect jobs). The multipliers are published by the Puerto Rico Planning Board.

Residential Housing

The economic impact analysis for the housing units proposed in the San Juan Waterfront development is divided into three phases: construction, sales, and operation.

Economic Impact: *Construction and Sales Phase*

Construction

Approximately 1,529 residential units (Basic House Units, UVB by its acronym in Spanish) are proposed by the project. The total investment for the residential area was estimated as \$588.7 million for a period of 15 years (period in which it is estimated that the project will be finished) based on an estimated construction cost of \$210/sf or approximately \$385,000/unit.⁸ This estimate includes the construction costs but do not include the land acquisition. **The direct and indirect impact of the construction phase over the local economy (aggregated production) will be over \$1 billion.**

⁸ Estimates provided by Colliers International.

In general, for each \$1 million invested in the construction sector the economy generates 8 direct jobs, 6.2 indirect jobs, and 2.1 induced jobs for a total of 16.3 jobs.⁹ Based on these factors, project would generate more than 9,500 direct, indirect and induced jobs. The inter-industrial multipliers reflect that the income generated by the jobs that will be created by the proposed project would be over \$260 million for the 15 years construction period.

Parking will be contained within the residential developments. Approximately 3,376 parking spaces will be provided for residential development. The construction cost of development (\$385,000/unit) includes the cost of constructing parking facilities for residential development.

Economic Impact: Construction Phase / Residential Housing		
<u>Concept</u>	<u>Multiplier by: \$1 Million**</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.0	\$ 588.7
Direct and Indirect	1.7	\$ 1,000.8
Employments:		
Direct	8	4,709.6
Direct and Indirect	14.2	8,359.5
Direct, Indirect and Induced	16.3	9,595.8
Salary:		
Direct	0.15	\$ 86.0
Direct and Indirect	0.25	\$ 147.2
Direct, Indirect and Induced	0.45	\$ 264.9

*In millions of \$

** The multipliers used where those of construction. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

⁹ Input-Output Matrix 1991-1992; March 2002. Puerto Rico Planning Board. Social Analysis Program, Forecasts and Models.

Sales

Based on the total sales of the proposed housing units, at an average cost of \$735,000 per unit, the aggregated sales value will be almost \$1.1 billion.¹⁰ Unit sales are expected to range from \$300/sf to \$700/sf depending on the layout and location within the buildings (top floor versus bottom floor and view versus no view). The sales price includes the 1.2 parking spaces per 1,000 sf with no monthly parking charge.

Estimated Total Housing Units Sales		
Housing	<u>Concept</u>	
1,529 housing units	x \$735,000	\$ 1,123,815,000
Estimated Aggregated Sales Value		\$ 1,123,815,000

For the aggregated impact estimate, a 1.5 direct employment multiplier was applied per each \$1 million dollar invested.¹¹ A \$36,000 average salary was used.¹² The multipliers used were those of real estate. In this case only the sales process was examined.

¹⁰ The 1,529 housing units indicated in the table were estimated based on a 2,813,093 total square feet proposed for the residential area and assuming an average 1,840 square feet per unit. The total area was provided by CBT Architects.

¹¹ The direct jobs generated by this activity respond to real estate salesman and brokers, lawyers, appraisers, loans administrators and other necessary personnel required by the activity. The multipliers used were those of real estate.

¹² The average salary was based on data provided by the Bureau of Labor Statistics (BLS) for Puerto Rico year 2006 in the categories of real estate brokers and real estate sales agents.

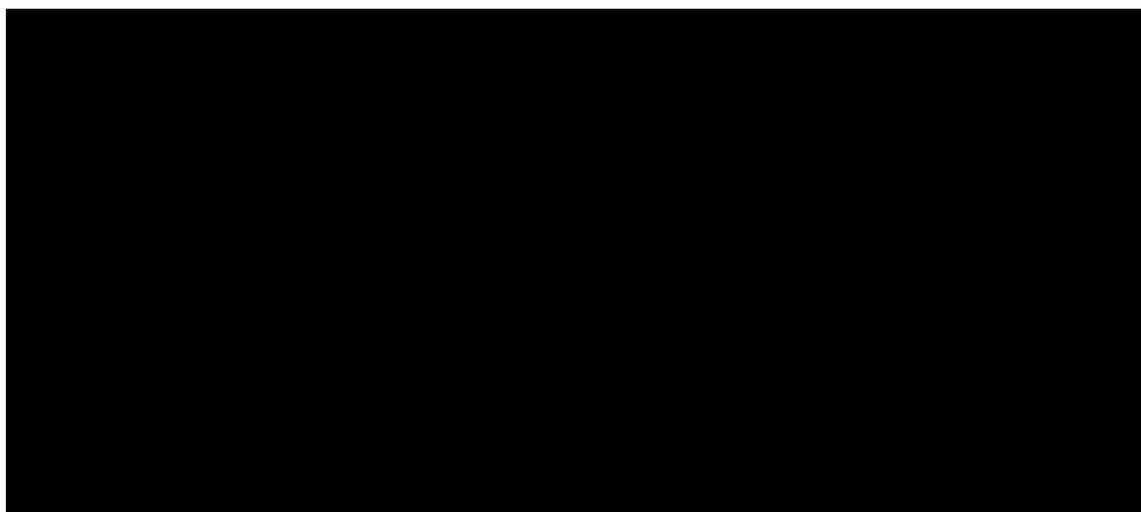
Economic Impact: Sales Phase / Housing		
<u>Concept</u>	Multiplier by: <u>\$1 Million**</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$ 1,123,815,000
Direct and Indirect	1.54	\$ 1,730,675,100
Employments:		
Direct	1.50	1,685.7
Direct and Indirect	3.90	6,574.2
Direct, Indirect and Induced	6.63	11,176.2
Salary:		
Direct	(\$36 thousand x 1)	\$ 60,685,200
Direct and Indirect	3.06	\$ 185,696,712
Direct, Indirect and Induced	4.73	\$ 287,040,996

* The multipliers used were those of real state.

** The multipliers used were those of real state. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002. Direct salary by the Bureau of Labor Statistics (BLS).

Economic Impact: *Operation Phase*

The parameters to estimate the economic impact for the operation of the high income housing units are presented as follows. The direct operational estimate is almost \$17 million.



The direct and indirect economic activity for the annual operation of the housing units is estimated in approximately \$28.7 million. For each \$1 million invested in the operation of the housing units there will be 3 direct jobs created.¹³

Economic Impact: Operation Phase Residential Housing (Annual)		
<u>Concept</u>	<u>Multiplier by:</u> <u>\$1 Million**</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.0	\$ 16,880,160
Direct and Indirect	1.7	\$ 28,696,272
Employments:		
Direct	3.00	50.7
Direct and Indirect	3.09	156.7
Direct, Indirect and Induced	5.86	297.1
Salary:		
Direct	(\$14,400 x 1)	\$ 730,080
Direct and Indirect	1.84	\$ 1,343,347
Direct, Indirect and Induced	2.85	\$ 2,080,728

* The multipliers used were those of buildings maintenance and repairs. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

¹³ The direct salary is based on \$14,400 annually per job. The indirect and induced jobs are based on the buildings maintenance & repairs multipliers publish by the Planning Board Input-Output Matrix 1991-1992, March 2002.

Hotel

Economic Impact: Construction Phase

A total of 940 hotel keys are expected to be constructed over the 15 year construction period of the San Juan Waterfront project. Based on an estimated construction cost of \$430/sf or \$265,000/key, the estimated investment for the proposed hotel in the Waterfront development area is \$249,100,000.¹⁴ Each hotel is expected to have parking contained within the structure and 0.8 parking spaces are planned per 1,000 sf of hotel development. Approximately 455 structured parking spaces are planned for the hotel development. The estimated construction cost of \$265,000/key includes the cost of constructing parking. For each \$1 million invested in construction 8 direct jobs will be generated. The direct income coefficient is based on a 0.15 per each million. The direct and indirect economic impact is estimated in over \$420 million for the 15 year period timeframe.

Economic Impact: Construction Phase / Hotel		
<u>Concept</u>	Multiplier by: <u>\$1 Million**</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.0	\$ 249.1
Direct and Indirect	1.7	\$ 423.5
Employments:		
Direct	8	1,992.8
Direct and Indirect	14.2	3,537.2
Direct, Indirect and Induced	16.3	4,060.3
Salary:		
Direct	0.15	\$ 36.4
Direct and Indirect	0.25	\$ 62.3
Direct, Indirect and Induced	0.45	\$ 112.1

*In millions of \$

** The multipliers used were those of construction. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

¹⁴ The amount invested for the Hotel was provided by Colliers International.

Economic Impact: Operation Phase

The average rate for a hotel room has been established to be \$197 per night.¹⁵ An average daily rate of \$205 was assumed at the marina hotel on Pier 9 (240 keys) due to the views and location. Occupancy was estimated to be 60% in the first year, 70% in the second year and then stabilizes at 78% in the third year.¹⁶ An average of one (1) Full Time Employee (FTE) (full time equivalent) was used for the operation of each room. It was assumed a construction of 940 hotel rooms at an average for each room of 520 sf per room. The total square feet designated to the development of the hotel area is 569,153 million square feet. A 14% of the total square feet were reduced for common space, equipment and circulation. There is an annual adjustment of 5% for both the industry and salary based on inflation.

Jobs Generated during the Operational Phase				
<u>Project</u>	<u>Municipality</u>	<u>Employment</u>	<u>Rooms</u>	<u>Employees per Room</u>
El Conquistador	Fajardo	1,252	905	1.38
Caribe Hilton	San Juan	578	646	0.89
Westin Rio Mar	Rio Grande	1,200	600	2.00
Wyndham Condado Plaza	San Juan	1,007	570	1.77
San Juan Marriot	San Juan	750	525	1.43
ESJ Towers	Carolina	100	450	0.22
The Ritz Carlton	Carolina	925	416	2.22
InterContinental Resort	Carolina	400	402	1.00
Wyndham El San Juan Hotel	Carolina	800	382	2.09
Embassy Suites Hotel	Carolina	400	299	1.34
Hyatt Dorado Beach	Dorado	300	262	1.15
Courtyard by Marriot	Carolina	182	260	0.70
Wyndham Old San Juan Hotel	San Juan	260	240	1.08
Radisson Ambassador Plaza	San Juan	260	233	1.12
Hampton Inn & Suites	Carolina	64	201	0.32
Best Western Hotel	San Juan	75	184	0.41
Total / Average		8,553	6,575	1.19

Source: The Book of List 2004: Caribbean Business

¹⁵ Data provided by the Puerto Rico Tourism Company Selected Statistic of the Tourism Activity of Puerto Rico 2005-2006 Edition.

¹⁶ Data provided by Colliers International.

The direct and indirect impact in the operational phase of the hotel program over the local economy (aggregated production) is estimated in more than \$70 million.

Based on the inter-industrial multipliers that provide the Input-Output matrix, it is estimated that the operation of the proposed hotel program will generate more than 830 direct and indirect jobs and 454 induced jobs. This represents a total employment of more than 1,200 people (direct, indirect and induced).

The generated salaries based on the direct and indirect jobs are estimated in approximately \$15 million. The induced salary was estimated in \$7.9 million. The total salary sums up to \$22.6 million. This implies that for each \$1 in direct salary the economy generates \$1.24 in indirect salary and \$1.91 in indirect and induced salary.¹⁷

Economic Impact: Operation Phase / Hotel (Annual)		
<u>Concept</u>	<u>Multiplier by:</u> <u>\$1 Million**</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$47,804,050
Direct and Indirect	1.47	\$ 70,271,954
Employments :		
Direct	(940 x 0.70 x 1)	658.0
Direct and Indirect	1.27	835.7
Direct, Indirect and Induced	1.96	1,289.7
Salary:		
Direct	(\$18,000 x 1)	\$ 11,844,000
Direct and Indirect	1.24	\$ 14,686,560
Direct, Indirect and Induced	1.91	\$ 22,622,040

* The multipliers used were those of tourism hotels. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

¹⁷ Input-Output Matrix 1991-1992; March 2002. Puerto Rico Planning Board. Social Analysis Program, Forecasts and Models.

Economic Impact: Hotel Parking Operational Phase

Parking income is expected to be \$18.00/day/space with a parking vacancy of 40%. Approximately 455 parking spaces are planned for the hotel development. The parking lot will operate 365 days a year. The income for the operation of the hotel parking is estimated at \$1.2 million per year.

Direct and indirect impact of the hotel parking operational phase on the local economy is estimated at \$2 million per year.

The staffing will consist of: 3 tellers and 3 security guards. In addition, 2 administrative employees were considered. The operation will consist of 8 direct jobs, 1.2 indirect and 3.6 induced, for a total of 12.8 jobs. Average salary was estimated at \$7 per hour for a total of \$116 thousand per year.

Economic Impact: Operation Phase / Parking Spaces (Annual)		
<u>Concept</u>	<u>Multiplier by:</u> <u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$ 1,195,740
Direct and Indirect	1.75	\$ 2,092,545
Employments:		
Direct	1.00	8.0
Direct and Indirect	1.15	9.2
Direct, Indirect and Induced	1.60	12.8
Salary:		
Direct	(\$7 x 2,080 hrs year)	\$ 116,480
Direct and Indirect	1.29	\$ 150,259
Direct, Indirect and Induced	1.99	\$ 231,795

* The multipliers used were those of parking services sector. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

Commercial Area

Economic Impact: Construction Phase

The impact is estimated for 315,562 square feet proposed for commercial use. The average cost of the construction phase per square foot is estimated at \$290. Approximately 897 parking spaces are expected to be constructed, the cost of which is included in the unit price of \$290/sf. The remaining required 50 spaces would be on-street parking. The construction cost of the commercial area is \$91.5 million.¹⁸ The economic impact over the aggregated economy is \$155.6 million. This project will generate approximately 1,500 jobs (direct, indirect and induced). The inter-industrial multipliers reflect that the salaries generated from this component of the Project are \$41.2 million per year.¹⁹

Economic Impact: Construction Phase / Commercial Area		
<u>Concept</u>	Multiplier by:	
	<u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$ 91.5
Direct and Indirect	1.70	\$ 155.6
Employments:		
Direct	8.00	732.0
Direct and Indirect	14.20	1,299.3
Direct, Indirect and Induced	16.30	1,491.5
Salary:		
Direct	0.15	\$ 13.4
Direct and Indirect	0.25	\$ 22.9
Direct, Indirect and Induced	0.45	\$ 41.2

*In millions of \$

** The multipliers used were those of construction. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

¹⁸ Data provided by Colliers International.

¹⁹ Input-Output Matrix 1991-1992; March 2002. Puerto Rico Planning Board. Social Analysis Program, Forecasts and Models.

Economic Impact: Operational Phase

The sales projections were estimated at \$200 per square feet for the first year of operations. That figure is consistent with the local retail market experience.²⁰ For the operation income, a 35% mark-up was used. Staffing was estimated at 1.2 direct jobs (FTE) for every 1,000 s.f. at an average salary of \$14,400.

Economic Impact: Operation Phase / Commercial Area (Annual)		
<u>Concept</u>	Multiplier by: <u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$ 22,089,340
Direct and Indirect	1.36	\$ 30,041,502
Employments:		
Direct	1.20	379.2
Direct and Indirect	1.17	443.7
Direct, Indirect and Induced	1.76	667.4
Salary:		
Direct	(\$14,400 x 1 FTE)	\$ 5,460,480
Direct and Indirect	1.23	\$ 6,716,390
Direct, Indirect and Induced	1.91	\$ 10,429,517

* The multipliers used were those of commercial sector. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

Economic Impact: Commercial Area Parking Operational Phase

897 structured parking spaces are planned for the commercial development, which are expected to provide income of \$18/day per space with a vacancy rate of 40%. The parking space will operate 365 days a year. The income for the operation of the commercial parking is estimated at \$2.3 million per year.

²⁰The estimation is based on Advantage Business Consulting experience consulting for retailers. The analysis is based on retail sales to cover not only the building administration operation impact (the rent to tenants) but also the impact of the business operating in the facilities.

Direct and indirect impact of the commercial parking operational phase on the local economy is estimated at \$4 million per year.

The staffing will likely consist of: 4 tellers and 4 security guards. In addition, 2 administrative employees were considered. The operation will likely consist of 10 direct jobs, 1.2 indirect and 3.6 induced, for a total of 16 jobs. Average salary was estimated at \$7 per hour for a total of \$146 thousand per year.

Economic Impact: Operation Phase / Parking Spaces (Annual)		
<u>Concept</u>	Multiplier by: <u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$ 2,357,316
Direct and Indirect	1.75	\$ 4,125,303
Employments:		
Direct	1.00	10.0
Direct and Indirect	1.15	11.5
Direct, Indirect and Induced	1.60	16.0
Salary:		
Direct	(\$7 x 2,080 hrs year)	\$ 145,600
Direct and Indirect	1.29	\$ 187,824
Direct, Indirect and Induced	1.99	\$ 289,744

* The multipliers used were those of parking services sector. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

Civic Space

Economic Impact: Construction Phase

The civic space will be of 120,093 sf of development on 1.8 acres. 366 structured parking spaces have been allocated. Advantage estimate a construction cost of \$250 per sf. The use is yet to be determined, but is potentially intended for a police station, museum fire department or other public/civic use.

Economic Impact: Construction Phase / Civic Space		
<u>Concept</u>	Multiplier by:	
	<u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.0	\$ 30.0
Direct and Indirect	1.7	\$ 51.0
Employments :		
Direct	8.0	\$ 240.0
Direct and Indirect	14.2	\$ 426.0
Direct, Indirect and Induced	16.3	\$ 489.0
Salary:		
Direct	0.15	\$ 4.4
Direct and Indirect	0.25	\$ 7.5
Direct, Indirect and Induced	0.45	\$ 13.5

*In millions of \$

** The multipliers used were those of construction. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

Economic Impact: Operational Phase

The annual total cost of the operation of the civic spaces is estimated at \$600 thousand per year. A total of 22 jobs will be generated (direct, indirect and induced). Direct jobs are estimated at a rate of 1 employee for every 10,000 square feet. Average salary was estimated at \$30,000 a year.²¹

Direct and indirect impact of this phase over the local economy is estimated at \$810.6 thousand in the first year.

²¹ The salary estimation is based on the basic salary of policemen in Puerto Rico.

Economic Impact: Operation Phase / Civic Space (Annual)		
<u>Concept</u>	Multiplier by: <u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$ 600,465
Direct and Indirect	1.35	\$ 810,628
Employments:		
Direct	1.00	12.0
Direct and Indirect	1.10	13.2
Direct, Indirect and Induced	1.85	22.2
Salary:		
Direct	(\$30,000 x 1 FTE)	\$ 360,279
Direct and Indirect	1.09	\$ 428,732
Direct, Indirect and Induced	1.68	\$ 666,516

* The multipliers used were those of government (ELA). Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002. Direct salary estimated by using the basic salary of Policemen in PR.

Public Areas

Economic Impact: Construction Phase

The total cost of the public areas construction, which includes parks, sidewalks and landscaping is estimated at \$51.1M. This estimate does not include land cost. **Direct and indirect impact of the construction phase of this Project is \$86.9 million.**

It is estimated that the public areas will consist of 2,857,392 square feet.²² Based on the construction cost of \$51.1M, the construction cost of \$17.88 per square foot was derived.

²² Data provided by CBT Architects.

In general, for every \$1 million invested in the construction phase 8 direct jobs, 6.2 indirect jobs and 2.1 induced jobs will be generated for a total of 16.3 jobs. The project will generate a total of 832.9 jobs (direct, indirect and induced jobs).

The inter-industrial multipliers reflect that salaries generated will reach approximately \$23 million per year.²³

Economic Impact: Construction Phase / Public Areas		
<u>Concept</u>	Multiplier by:	
	<u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.0	\$ 51.1
Direct and Indirect	1.7	\$ 86.9
Employments :		
Direct	8	408.8
Direct and Indirect	14.2	725.6
Direct, Indirect and Induced	16.3	832.9
Salary:		
Direct	0.15	\$ 7.5
Direct and Indirect	0.25	\$ 12.8
Direct, Indirect and Induced	0.45	\$ 23.0

*In millions of \$

** The multipliers used were those of construction. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

²³ Input-Output Matrix 1991-1992; March 2002. Puerto Rico Planning Board. Social Analysis Program, Forecasts and Models.

Economic Impact: Operational Phase

The annual total cost of the operation of the public spaces is estimated at \$11.4 million per year. Approximately 2,857,392 sf will be dedicated to public areas. Maintenance and operational cost are estimated at \$4 per square foot.²⁴ A total of 528.6 jobs are expected to be generated. Direct jobs are estimated at a rate of 1 employee for every 10,000 square feet. Average salary was estimated at \$7 per hour.²⁵

Direct and indirect impact of this phase over the local economy is estimated at \$15 million in the first year.

Based on the inter-industrial multipliers it is estimated that the operation of the public areas will generate a total of 529 direct, indirect and induced jobs from which 286 are direct jobs.

Salaries for direct jobs are estimated at \$4.2 million per year. Indirect jobs will generate \$374 thousands and the induced jobs \$2.5 million. Total salaries are estimated at \$6.9 million per year.

²⁴ Estimated by Advantage Business Consulting.

²⁵ Salary estimate take into account the rise in the minimum wage.

Economic Impact: Operation Phase / Public Areas (Annual)		
<u>Concept</u>	Multiplier by: <u>\$1 Million</u>	<u>Project Total*</u>
Production (Aggregated Economic Activity) :		
Direct	1.00	\$ 11,429,568
Direct and Indirect	1.32	\$ 15,087,030
Employments :		
Direct	1.0	285.7
Direct and Indirect	1.1	314.3
Direct, Indirect and Induced	1.85	528.6
Salary:		
Direct	(\$7 x 2,080 hrs year)	\$ 4,160,363
Direct and Indirect	1.09	\$ 4,534,795
Direct, Indirect and Induced	1.68	\$ 6,989,409

* The multipliers used were those of government (ELA). Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

Marina

Economic Impact: Direct Investment and Construction Phase

Direct investment includes the construction of 96 slips, an information center and the administration building. 70 slips will be for boats less than 80 feet long and 26 slips will be for boats longer than 80 feet. The estimated construction cost per slip is expected to average \$195,000. Since the slips will be of different sizes, it may be more appropriate to account for the cost of the slips on a linear foot basis. A total of 7,496 linear feet of slip length is proposed for the marina to be constructed at an estimated cost of \$2,671/lf. The administrative building is estimated to be 9,000 square feet.²⁶

The construction cost of this project is estimated at \$20 million. The direct and indirect impact of the construction phase is \$34 million over the local economy.

The marina portion of the project is expected to generate 160 direct jobs, 124 indirect and 42 induced. The total employment generated by the project is estimated at 326 jobs.

²⁶ Data provided by Colliers International.

Economic Impact: Marina Construction Phase		
<u>Concept</u>	Multiplier by:	
	<u>\$1 Million</u>	<u>Project Total</u>
Production (Aggregated Economic Activity) :		
Direct	1.0	\$ 20,021,816
Direct and Indirect	1.7	\$ 34,037,087
Employments:		
Direct	8	160.0
Direct and Indirect	14.2	284.0
Direct, Indirect and Induced	16.3	326.0
Salary:		
Direct	0.15	\$ 2,923,185
Direct and Indirect	0.25	\$ 5,005,454
Direct, Indirect and Induced	0.45	\$ 9,009,817

** The multipliers used were those of construction. Puerto Rico Planning Board Input-Output Matrix 1991-1992; March 2002.

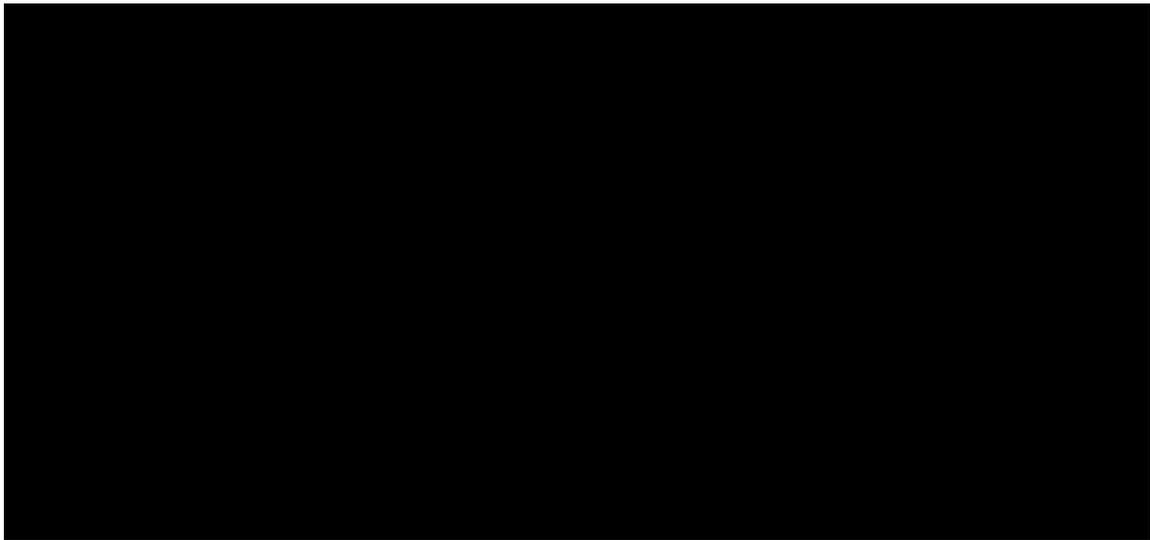
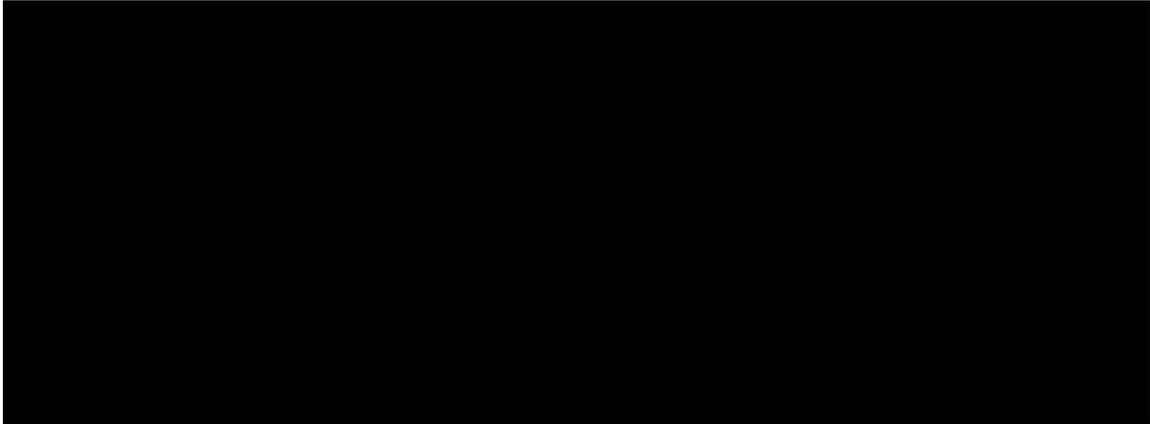
Economic Impact: Operational Phase of the Marina

It is important to note that the significant impact on the economic activity of the marina is in attracting boats to the area, not on the marina operation per-se. To estimate the economic impact of the marina, both the administration and the operation of boats were considered.

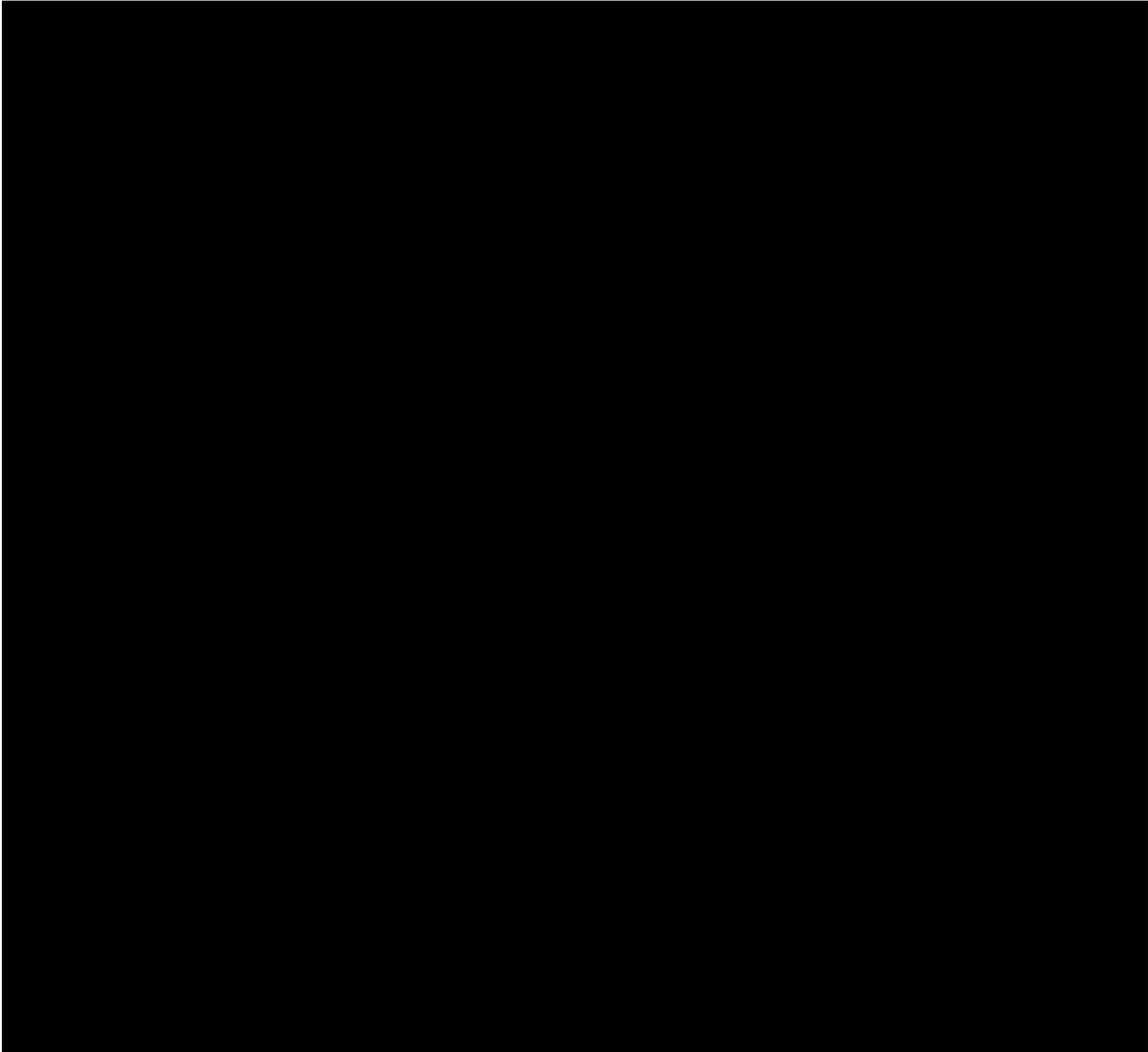
The marina management cost was estimated at \$2.3 million per year.²⁷ The boats operation costs were estimated at \$68 thousand yearly per boat. Vacancy was considered according to the number of boats in the marina. In the first year, 64% of the slips were assumed to be vacant, considering 35 boats docked at a cost estimated to be \$2.4 million. In the second year the vacancy rate was assumed to be 51%, considering 47 boats docked at a cost of \$3.2 million. Vacancy in the third year was assumed to be 38% considering 60 boats docked at a cost of \$4 million. From the fifth year on the staffing will consist of 12 FTEs.²⁸

²⁷ The estimate is based on data provided by Colliers International. Average rent of \$37,500 by 35 boats.

²⁸ Estimated by Advantage Business Consulting based on previous experience.



The economic impact of the operation of the marina and the boats that will use it is presented in the following table.



The following table presents a summary of the economic impact the San Juan Waterfront project including the construction and operation phases. The summary presents the aggregate impact after the culmination of the project in a fifteen year period.

Economic Impact Summary: Phases: Construction & Operation (15 Years)		
<u>Concept</u>	15 Years Period <u>Construction Phase</u>	Annual* <u>Operational Phase</u>
Production (Aggregated Economic Activity) :		
Direct	\$1,030.4 million	\$106.0 million
Direct and Indirect	\$1,751.8 million	\$155.95 million
Employments:		
Direct	8,243.2	1,485.0
Direct and Indirect	14,631.7	1,979.0
Direct, Indirect and Induced	16,795.5	3,337.0
Salary:		
Direct	\$150.4 million	\$24.3 million
Direct and Indirect	\$257.6 million	\$29.6 million
Direct, Indirect and Induced	\$463.7 million	\$45.7 million

* After the 15 years period construction phase is finish.

The costs discussed thus far are related to the actual development, but prior to sale of parcels, roadway, utility, and pier improvements are required. There will be significant job creation as a result of the required construction projects and maintenance of the roadways and utilities may require additional jobs. See AMEC's Construction Cost Estimate based on Conceptual Design (January 2008).

Fiscal Impact

Fiscal analysis of this project considered many variables such as income on its various phases at state and municipal level. The variables considered were: construction taxes, municipal taxes, Internal Revenue taxes, stamps from the College of Engineers, income and property taxes.

The construction tax was estimated at 5% on the excess of \$20 thousand and \$300 over the first \$20 thousand. The municipal tax was estimated at a rate of 0.5%. Internal revenue taxes were estimated at \$5.00 for every \$1,000 and the stamps from the College of Engineers at \$1.00 for every \$1,000. Municipal Tax Revenue Center (CRIM) payments were estimated at a rate of 8.33% over the property valued at 1954 prices.²⁹

During the construction phase, income taxes were estimated at over the average salary for the construction sector that is \$13,370 per year. The income taxes for the indirect and induced jobs were estimated at a rate of \$ 22,070 at a rate of 7.5%.³⁰

Fiscal income during the construction phase is estimated at \$64.2 million in a period of 15 years. On the other side, fiscal income related to the Project operation was estimated at \$19.6 million for the same period.

²⁹ The property value for the Municipal Tax Revenue Center (CRIM) is based in 1954 prices. Puerto Rican government have not yet up date its base year for the cadastral properties pricing.

³⁰ Data obtained from "State Occupational Employment and Wage Estimates" publish by U.S. Department of Labor (Bureau of Labor Statistics).

Government Income Revenue / After the 15 years Development	
<u>Concept</u>	<u>\$</u>
Construction Phase:	
Construction Taxes	\$ 30,911,552
Operating Municipal Taxes "Patente"	\$ 5,152,225
<i>Total Municipal Construction</i>	<i>\$ 36,063,777</i>
Internal Revenue	\$ 5,152,225
Engineer Collage Stamp	\$ 1,030,445
Income Tax	\$ 21,993,965
<i>Total State Construction</i>	<i>\$ 28,176,636</i>
Government Revenue - Construction Phase	\$ 64,240,413
Operational Phase:	
CRIM*	\$ 14,234,131
Income Tax (State)	\$ 5,373,427
Total Operational Phase	\$ 19,607,558
Government Revenue - Operational Phase**	\$ 19,607,558

* Estimated based in construction value as property value.

** After the 15 years period construction phase is finish.

The San Juan Waterfront is an ambitious revitalization project that will provide a mixed-use waterfront area along a recreational contemplative public space throughout the San Antonio Channel in the San Juan harbor. The project will help to develop the socioeconomic conditions of San Juan Antiguo creating more than 8 thousand direct jobs during the construction phase and around 1,500 direct jobs during the operational phase (after the 15 years period construction phase is finish). The aggregated economic impact will be significant for San Juan Antiguo, the rest of the municipality and for the entire Island.

APPENDIX 1: DEFINITIONS

GLOSSARY FOR ECONOMIC INDICATORS

Housing in good conditions:

Housing in good conditions is defined as a house that does not have defects or if it has, that those can be corrected through regular maintenance. These defects do not affect the impermeability of the house nor place any danger to the security or health of their occupants. Examples: slight damages to doors and Windows.

Population Growth:

The increase or reduction in the total number of people between two different periods of time.

Reading and Writing Capability:

Another socio-demographic variable that measures the ability of a person to develop professionally and personally is their capability to read and write, or analphabetism level. This variable is commonly used as an indicator of social development as it determines the capability of an individual to interact socially. This variable was excluded from the Population Census for the year 2000. Therefore, this indicator is only presented for the year 1990.

Households under the Poverty Level:

The Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being “below the poverty level”.

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Poverty Thresholds:

Size of The Unit	Brackets Geometric Average	Related Children under 8 years								
		None	1	2	3	4	5	6	7	8 or more
One Person (unrelated)	\$8,501									
65 years or less	\$8,667	\$8,667								
65 years or more	\$7,990	\$7,990								
Two People	\$10,869									
Head of Household 65 years or less	\$11,214	\$11,156	\$11,483							
Head of Household 65 years or more	\$10,075	\$10,070	\$11,440							
Three People	\$13,290	\$13,032	\$13,410	\$13,423						
Four People	\$17,029	\$17,184	\$17,465	\$16,895	\$16,954					
Five People	\$20,127	\$20,723	\$21,024	\$20,380	\$19,882	\$19,578				
Six People	\$22,727	\$23,835	\$23,930	\$23,436	\$22,964	\$22,261	\$21,845			
Seven People	\$25,912	\$27,425	\$27,596	\$27,006	\$26,595	\$25,828	\$24,934	\$23,953		
Eight People	\$28,967	\$30,673	\$30,944	\$30,387	\$29,899	\$29,206	\$28,327	\$27,412	\$27,180	
Nine Persons or more	\$34,417	\$36,897	\$37,076	\$36,583	\$36,169	\$35,489	\$34,554	\$33,708	\$33,499	\$32,208

Source: US Census Bureau

Households with Public Assistance:

This income includes:

- Supplementary payments made by local, state or federal agencies to elderly people (65 years or more), blind or incapacitated.
- help to families with dependants children
- money received under nutritional assistance program
- general assistance

Separated payments for medical care (“vendor payments”) are excluded.

Household with Social Security:

Income which includes social security pensions and benefits to survivors, permanent disability payments made by Social Security Administration before medical insurance deductions and checks from United States Retirement System of Railroad. Medicare reimbursements are not included.

Housing Occupied by Owner vs. Tenant (1990):

Owner: a housing unit is occupied by its owner, if de owner or co-owner lives in the unit no matter has or not debt. Owner should live in the unit. The unit belongs to someone in the household.

Tenant: all occupied housing units, not occupied by its owner, rented in cash or occupied without payment are classified as tenant occupied.

Median Household Income:

Income values for all households, families and people are calculated based on more detailed income interval than other tabulations. Median Income for Household or Families below \$20,000 is calculated using linear interpolation. For people, the corresponding median values below \$20,000 are derived by interpolation.

Income Per Capita:

Is the average income calculated for each man, woman, and child in a particular group. It is obtained dividing the total income of a particular group among total population of that group.

Educational Attainment:

People are classified according to the higher completed school grade or the higher educational level acquire. Question includes instructions to inform the higher completed school level.

People with 7th grade or higher:

This variable substitutes the ability to read and write, since 2000 Census does not compile information for it. Advantage substitutes it with the ability to read and write for people with 7th grade or more. The meaning of this variable in the impacted area is considered very important for the socioeconomic analysis.

Unemployment Rate:

Is the population of 16 years or more that is looking for job and cannot find it. It also includes as unemployed the civil population that is not working for the time of collecting the data.

House Median Value:

Estimated value of the property (house and land, mobile house and land or building) in an assuming sale scenario. For vacant units, value is the asking price of the property.

Selected Conditions:

Selected Conditions: is defined by the owner or tenant of the unit with at least one of the following conditions:

- *incomplete plumber facilities*
- *incomplete kitchen facilities*
- with 1.01 or more occupants per room
- monthly cost for owner as percentage of income in 1999 higher than 30%
- gross rent as percentage of household income in 1999 higher than 30%

For this analysis the first two conditions are chosen:

Plumber Facilities: comes from long form (“Item 39”). A complete plumber facility includes: (1) hot and cold water from the faucet, (2) toilet, and (3) a bath or shower. These three facilities must be placed inside the house, apartment, and/or mobile home but not necessarily in the same room. Not having one of the three means incomplete plumber facilities.

Kitchen Facility: it comes from Long Form (“Item 40”). An incomplete kitchen facility comes from Long Form (“Item 40”): A complete kitchen facility includes (1) water faucet, (2) a stove and a oven (3) a refrigerator. These three facilities must be inside the house, apartment or mobile home, but not necessarily in the same room. A unit with just a microwave oven or a portable heater is not considered as a complete kitchen unit. Not having one of the three implies an incomplete kitchen facility.

APPENDIX 2: EXECUTIVE ORDER

APPENDIX 3: STATISTICAL TABLES BY VARIABLES

Housing Indicators

Housing Occupied by Owner vs. Tenant (1990)

County Subdivision	House Occupied	Occupied by Owner		Rented	
		Units	Percentage	Units	Percentage
Caimito	5,847	4,895	83.7%	952	16.3%
Tortugo	1,151	945	82.1%	206	17.9%
Quebrada	804	666	82.8%	138	17.2%
Cupey	8,956	6,549	73.1%	2,407	26.9%
Monacillo	4,010	2,676	66.7%	1,334	33.3%
El Cinco	3,122	1,976	63.3%	1,146	36.7%
Sabana Llana Sur	13,997	8,320	59.4%	5,677	40.6%
Sabana Llana Norte	10,257	6,420	62.6%	3,837	37.4%
Gobernador Piñero	17,920	10,517	58.7%	7,403	41.3%
Monacillo Urbano	8,757	4,948	56.5%	3,809	43.5%
Oriente	11,987	6,034	50.3%	5,953	49.7%
Hato Rey Norte	6,362	3,074	48.3%	3,288	51.7%
Hato Rey Sur	4,899	2,402	49.0%	2,497	51.0%
Hato Rey Central	8,097	3,836	47.4%	4,261	52.6%
Pueblo	3,001	1,403	46.8%	1,598	53.2%
Santurce	36,735	16,573	45.1%	20,162	54.9%
Universidad	878	244	27.8%	634	72.2%
San Juan Antiguo	3,812	891	23.4%	2,921	76.6%
San Juan Municipality	150,592	82,369	54.7%	68,223	45.3%
Puerto Rico	1,054,949	760,258	72.1%	294,691	27.9%

Source: US Census Bureau 1990

Ordered per Variable for the Percentage of Households Occupied by Owner

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Housing Occupied by Owner vs. Tenant (2000)

San Juan Subdivision	House Occupied	Occupied by Owner		Rented	
		Units	Percentage	Units	Percentage
Caimito	6,973	5,944	85.2%	1,029	14.8%
Quebrada	924	751	81.3%	173	18.7%
Tortugo	1,435	1,165	81.2%	270	18.8%
Cupey	12,397	9,342	75.4%	3,055	24.6%
Monacillo	4,275	3,021	70.7%	1,254	29.3%
Sabana Llana Sur	15,558	9,856	63.4%	5,702	36.6%
Sabana Llana Norte	11,178	6,875	61.5%	4,303	38.5%
El Cinco	2,976	1,769	59.4%	1,207	40.6%
Monacillo Urbano	9,565	5,645	59.0%	3,920	41.0%
Gobernador Piñero	18,097	10,023	55.4%	8,074	44.6%
Hato Rey Norte	7,292	3,889	53.3%	3,403	46.7%
Oriente	12,264	6,081	49.6%	6,183	50.4%
Hato Rey Central	8,420	4,098	48.7%	4,322	51.3%
Hato Rey Sur	4,726	2,140	45.3%	2,586	54.7%
Santurce	39,521	17,590	44.5%	21,931	55.5%
Pueblo	3,425	1,476	43.1%	1,949	56.9%
Universidad	908	325	35.8%	583	64.2%
San Juan Antiguo	3,528	965	27.4%	2,563	72.6%
San Juan Municipality	163,462	90,955	55.6%	72,507	44.4%
Puerto Rico	1,261,325	919,711	72.9%	341,614	27.1%

Source: US Census Bureau 2000

Ordered per Variable for the Percentage of Households Occupied by Owner

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Housing Occupied by Owner vs. Tenant (2008*)

County Subdivision	Occupied Housing	Occupied by Owner		Rented	
		Units	Percentage	Units	Percentage
Caimito	8,038	6,943	86.4%	1,095	13.6%
Tortugo	1,713	1,377	80.4%	335	19.6%
Quebrada	1,034	827	80.0%	207	20.0%
Cupey	16,109	12,412	77.1%	3,697	22.9%
Monacillo	4,522	3,329	73.6%	1,193	26.4%
Sabana Llana Sur	17,009	11,287	66.4%	5,722	33.6%
Monacillo Urbano	10,284	6,273	61.0%	4,011	39.0%
Sabana Llana Norte	11,978	7,262	60.6%	4,716	39.4%
Hato Rey Norte	8,192	4,694	57.3%	3,498	42.7%
El Cinco	2,877	1,619	56.3%	1,258	43.7%
Gobernador Piñero	18,299	9,645	52.7%	8,654	47.3%
Hato Rey Central	8,692	4,320	49.7%	4,371	50.3%
Oriente	12,492	6,119	49.0%	6,373	51.0%
Santurce	41,906	18,448	44.0%	23,457	56.0%
Universidad	954	409	42.9%	545	57.1%
Hato Rey Sur	4,611	1,951	42.3%	2,659	57.7%
Pueblo	3,822	1,537	40.2%	2,285	59.8%
San Juan Antiguo	3,337	1,029	30.8%	2,308	69.2%
San Juan Municipality	175,868	99,480	56.6%	76,388	43.4%
Puerto Rico	1,404,076	1,031,016	73.4%	373,282	26.6%

Source: US Census Bureau 2000

Ordered per Variable for the Percentage of Households Occupied by Owner

*Projected by Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Household Median Value

County Subdivision	Median Value 1990	Median Value 2000	Median Value 2008*	% Growth 2000 / 1990	% Growth 2008 / 2000
San Juan Antiguo	\$33,400	\$215,600	\$958,452	545.5%	344.6%
Monacillo	\$111,900	\$174,300	\$248,468	55.8%	42.6%
Hato Rey Sur	\$132,100	\$166,300	\$199,933	25.9%	20.2%
Caimito	\$77,700	\$160,800	\$287,725	106.9%	78.9%
Monacillo Urbano	\$91,200	\$159,500	\$249,444	74.9%	56.4%
Universidad	\$97,100	\$158,800	\$235,372	63.5%	48.2%
Hato Rey Norte	\$106,700	\$150,700	\$198,643	41.2%	31.8%
Cupey	\$84,700	\$149,300	\$234,964	76.3%	57.4%
El Cinco	\$91,500	\$147,900	\$217,173	61.6%	46.8%
Sabana Llana Sur	\$80,900	\$120,400	\$165,489	48.8%	37.4%
Tortugo	\$43,500	\$106,500	\$217,991	144.8%	104.7%
Gobernador Piñero	\$59,800	\$95,000	\$137,576	58.9%	44.8%
Sabana Llana Norte	\$52,800	\$85,200	\$124,935	61.4%	46.6%
Hato Rey Central	\$39,400	\$80,600	\$142,891	104.6%	77.3%
Quebrada	\$33,500	\$75,200	\$143,601	124.5%	91.0%
Oriente	\$41,100	\$72,500	\$114,166	76.4%	57.5%
Pueblo	\$32,700	\$69,400	\$126,709	112.2%	82.6%
Santurce	\$36,200	\$67,800	\$112,007	87.3%	65.2%
San Juan Municipality	\$63,026	\$108,434	\$150,160	72.0%	38.5%
Puerto Rico	\$35,900	\$75,100	\$116,941	109.2%	55.7%

Source: US Census Bureau 1990 & 2000
 Ordered by Variable of Median Value 2000
 *Projected by Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Condition of Housing Unit

County Subdivision	Housing Units	House in Adecuated Conditions	Percentage Of Subdivision
Hato Rey Norte	6,965	6,697	96.2%
Monacillo	4,171	3,999	95.9%
El Cinco	3,331	3,188	95.7%
Sabana Llana Sur	14,947	14,236	95.2%
Hato Rey Sur	5,501	5,220	94.9%
Gobernador Piñero	19,323	18,324	94.8%
Monacillo Urbano	9,460	8,970	94.8%
Cupey	9,721	9,217	94.8%
Caimito	6,313	5,949	94.2%
Universidad	967	909	94.0%
Quebrada	893	831	93.1%
Sabana Llana Norte	11,549	10,720	92.8%
Tortugo	1,244	1,133	91.1%
Oriente	13,060	11,844	90.7%
Hato Rey Central	9,125	8,242	90.3%
San Juan Antiguo	4,691	4,186	89.2%
Santurce	43,193	38,127	88.3%
Pueblo	3,525	2,792	79.2%
San Juan Municipality	167,979	154,584	92.0%
Puerto Rico	1,188,985	1,067,202	89.8%

Source: US Census Bureau 1990

Ordered by Variable of Percentage of Subdivision

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Selected Housing Conditions

San Juan Subdivision	Housing Units	Housing Units without Complete Kitchen and Plumbing	% of County Subdivision
El Cinco	2,976	1,084	36.4%
Hato Rey Norte	7,292	2,747	37.7%
Monacillo	4,275	1,612	37.7%
Monacillo Urbano	9,565	3,827	40.0%
Caimito	6,973	2,886	41.4%
Tortugo	1,435	607	42.3%
Cupey	12,397	5,252	42.4%
Sabana Llana Sur	15,558	6,726	43.2%
Quebrada	924	407	44.0%
Universidad	908	409	45.0%
San Juan Antiguo	3,528	1,598	45.3%
Hato Rey Central	8,420	3,938	46.8%
Hato Rey Sur	4,726	2,243	47.5%
Gobernador Piñero	18,097	8,623	47.6%
Santurce	39,521	18,848	47.7%
Oriente	12,264	6,256	51.0%
Sabana Llana Norte	11,178	5,847	52.3%
Pueblo	3,425	1,970	57.5%
San Juan Municipality	163,462	74,880	45.8%
Puerto Rico	1,261,325	576,082	45.7%

Source: US Census Bureau 2000

Ordered per Variable of Percentage County Subdivision

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Social Indicators

Educational Attainment for Population 25 Years or More

County Subdivision	Population	High School Graduated 1990		Population	High School Graduated 2000		% Growth Graduated Number
	25 years +	Number	Percentage	25 Years +	Number	Percentage	
El Cinco	5,989	4,894	81.7%	5,050	4,518	89.5%	9.5%
Hato Rey Sur	7,989	6,836	85.6%	6,682	5,816	87.0%	1.7%
Monacillo	7,502	6,308	84.1%	7,843	6,598	84.1%	0.0%
Hato Rey Norte	10,284	7,462	72.6%	11,302	9,103	80.5%	11.0%
Cupey	17,249	11,851	68.7%	22,405	17,353	77.5%	12.7%
Caimito	11,482	7,364	64.1%	13,080	9,988	76.4%	19.1%
Sabana Llana Sur	25,361	17,743	70.0%	27,402	20,851	76.1%	8.8%
Monacillo Urbano	17,452	12,237	70.1%	19,122	13,670	71.5%	2.0%
Tortugo	2,193	1,215	55.4%	2,697	1,833	68.0%	22.7%
Gobernador Piñero	33,015	20,649	62.5%	32,083	21,660	67.5%	7.9%
Sabana Llana Norte	19,151	10,489	54.8%	19,330	12,266	63.5%	15.9%
Universidad	1,492	1,096	73.5%	1,817	1,128	62.1%	(15.5)%
San Juan Antiguo	6,267	3,036	48.4%	5,205	3,192	61.3%	26.6%
Santurce	61,147	32,366	52.9%	62,152	36,787	59.2%	11.8%
Hato Rey Central	13,877	7,514	54.1%	13,499	7,788	57.7%	6.5%
Pueblo	5,530	2,313	41.8%	5,843	3,257	55.7%	33.3%
Quebrada	1,538	696	45.3%	1,721	936	54.4%	20.2%
Oriente	21,094	9,672	45.9%	20,810	10,790	51.9%	13.1%
San Juan Municipality	268,612	163,741	61.0%	278,043	187,534	67.4%	10.6%
Puerto Rico	1,952,297	970,289	49.7%	2,288,326	1,371,922	60.0%	20.6%

Source: US Census Bureau 1990 & 2000

Ordered by Variable of Percentage of High School Graduated 2000

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Educational Attainment

County Subdivision	Population 25 years +	High School Graduated 2000		Population 25 Years +	High School Graduated 2008*		% Growth Number
		Number	Percentage		Number	Percentage	
El Cinco	5,050	4,518	89.5%	4,406	4,238	96.2%	7.5%
Hato Rey Sur	6,682	5,816	87.0%	5,792	5,111	88.2%	1.4%
Caimito	13,080	9,988	76.4%	14,517	12,746	87.8%	15.0%
Hato Rey Norte	11,302	9,103	80.5%	12,188	10,672	87.6%	8.7%
Cupey	22,405	17,353	77.5%	27,619	23,543	85.2%	10.1%
Monacillo	7,843	6,598	84.1%	8,127	6,840	84.2%	0.0%
Sabana Llana Sur	27,402	20,851	76.1%	29,152	23,725	81.4%	7.0%
Tortugo	2,697	1,833	68.0%	3,182	2,547	80.0%	17.8%
San Juan Antiguo	5,205	3,192	61.3%	4,487	3,323	74.1%	20.8%
Monacillo Urbano	19,122	13,670	71.5%	20,572	14,936	72.6%	1.6%
Gobernador Piñero	32,083	21,660	67.5%	31,356	22,504	71.8%	6.3%
Sabana Llana Norte	19,330	12,266	63.5%	19,474	13,902	71.4%	12.5%
Pueblo	5,843	3,257	55.7%	6,106	4,283	70.1%	25.8%
Santurce	62,152	36,787	59.2%	62,968	40,755	64.7%	9.4%
Quebrada	1,721	936	54.4%	1,883	1,186	63.0%	15.8%
Hato Rey Central	13,499	7,788	57.7%	13,204	8,014	60.7%	5.2%
Oriente	20,810	10,790	51.9%	20,586	11,777	57.2%	10.3%
Universidad	1,817	1,128	62.1%	2,127	1,154	54.3%	(12.6)%
San Juan Municipality	278,043	187,534	67.4%	287,748	211,256	73.4%	8.9%
Puerto Rico	2,288,326	1,371,922	60.0%	2,598,337	1,809,973	69.7%	16.2%

Source: US Census Bureau 1990 & 2000

Ordered by Variable of Percentage of High School Graduated 2008

*Projected by Advantage Business Consulting

People With Ability to Read and Write

County Subdivision	Population of 10 Years or more	Ability to Read and Write	Percentage of Subdivision
El Cinco	7,570	7,388	97.6%
Monacillo	11,423	11,058	96.8%
Hato Rey Sur	11,692	11,299	96.6%
Hato Rey Norte	12,591	12,127	96.3%
Universidad	2,250	2,161	96.0%
Gobernador Piñero	42,877	40,899	95.4%
Cupey	25,504	24,044	94.3%
Sabana Llana Sur	36,543	34,400	94.1%
Monacillo Urbano	24,542	23,028	93.8%
Caimito	16,981	15,922	93.8%
Tortugo	3,099	2,903	93.7%
Sabana Llana Norte	26,602	24,777	93.1%
Pueblo	7,633	6,971	91.3%
Santurce	81,968	74,160	90.5%
Oriente	30,855	27,259	88.3%
Hato Rey Central	19,188	16,482	85.9%
San Juan Antiguo	8,257	7,052	85.4%
Quebrada	2,287	1,947	85.1%
San Juan Municipality	371,862	343,877	92.5%
Puerto Rico	2,904,455	2,596,540	89.4%

Source: US Census Bureau 1990
Ordered by Variable of Percentage of Subdivision

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Educational Attainment for Population 25 Years or More

County Subdivision	Population 25 years +	7th Grade or More 1990		Population 25 Years +	7th Grade or More 2000		% Growth Number
		Number	Percentage		Number	Percentage	
El Cinco	5,989	5,652	94.4%	5,050	4,856	96.2%	1.9%
Monacillo	7,502	7,081	94.4%	7,843	7,485	95.4%	1.1%
Hato Rey Sur	7,989	7,475	93.6%	6,682	6,322	94.6%	1.1%
Hato Rey Norte	10,284	9,196	89.4%	11,302	10,517	93.1%	4.1%
Sabana Llana Sur	25,361	21,870	86.2%	27,402	24,803	90.5%	5.0%
Monacillo Urbano	17,452	15,203	87.1%	19,122	17,288	90.4%	3.8%
Cupey	17,249	14,342	83.1%	22,405	20,245	90.4%	8.7%
Caimito	11,482	9,222	80.3%	13,080	11,610	88.8%	10.5%
Gobernador Piñero	33,015	27,830	84.3%	32,083	28,100	87.6%	3.9%
Tortugo	2,193	1,627	74.2%	2,697	2,347	87.0%	17.3%
Sabana Llana Norte	19,151	15,033	78.5%	19,330	16,630	86.0%	9.6%
Universidad	1,492	1,375	92.2%	1,817	1,555	85.6%	(7.1)%
San Juan Antiguo	6,267	4,758	75.9%	5,205	4,383	84.2%	10.9%
Santurce	61,147	47,220	77.2%	62,152	51,675	83.1%	7.7%
Hato Rey Central	13,877	10,631	76.6%	13,499	11,182	82.8%	8.1%
Pueblo	5,530	3,793	68.6%	5,843	4,698	80.4%	17.2%
Oriente	21,094	15,006	71.1%	20,810	16,622	79.9%	12.3%
Quebrada	1,538	1,153	75.0%	1,721	1,368	79.5%	6.0%
San Juan Municipality	268,612	218,467	81.3%	278,043	241,686	86.9%	6.9%
Puerto Rico	1,952,297	1,429,356	73.2%	2,288,326	1,867,257	81.6%	11.5%

Source: US Census Bureau 1990 & 2000

Ordered by Variable of Percentage of 7th Grade or More 2000

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Educational Attainment for Population 25 Years or More

County Subdivision	Population 25 years +	7th Grade or More 2000		Population 25 Years +	7th Grade or More 2008*		% Growth Number
		Number	Percentage		Number	Percentage	
Tortugo	2,697	2,347	87.0%	3,182	3,146	98.9%	13.6%
El Cinco	5,050	4,856	96.2%	4,406	4,301	97.6%	1.5%
Cupey	22,405	20,245	90.4%	27,619	26,674	96.6%	6.9%
Monacillo	7,843	7,485	95.4%	8,127	7,825	96.3%	0.9%
Caimito	13,080	11,610	88.8%	14,517	13,958	96.2%	8.3%
Hato Rey Norte	11,302	10,517	93.1%	12,188	11,709	96.1%	3.2%
Hato Rey Sur	6,682	6,322	94.6%	5,792	5,529	95.5%	0.9%
Sabana Llana Sur	27,402	24,803	90.5%	29,152	27,430	94.1%	4.0%
Monacillo Urbano	19,122	17,288	90.4%	20,572	19,160	93.1%	3.0%
Sabana Llana Norte	19,330	16,630	86.0%	19,474	18,029	92.6%	7.6%
San Juan Antiguo	5,205	4,383	84.2%	4,487	4,104	91.5%	8.6%
Pueblo	5,843	4,698	80.4%	6,106	5,575	91.3%	13.6%
Gobernador Piñero	32,083	28,100	87.6%	31,356	28,318	90.3%	3.1%
Santurce	62,152	51,675	83.1%	62,968	55,540	88.2%	6.1%
Hato Rey Central	13,499	11,182	82.8%	13,204	11,643	88.2%	6.5%
Oriente	20,810	16,622	79.9%	20,586	18,039	87.6%	9.7%
Quebrada	1,721	1,368	79.5%	1,883	1,569	83.3%	4.8%
Universidad	1,817	1,555	85.6%	2,127	1,716	80.7%	(5.8)%
San Juan Municipality	278,043	241,686	86.9%	287,748	264,266	91.8%	5.7%
Puerto Rico	2,288,326	1,867,257	81.6%	2,598,337	2,312,358	89.0%	9.1%

Source: US Census Bureau 1990 & 2000

Ordered by Variable of Percentage of 7th Grade or More 2008

*Projected by Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Population Growth for the Municipality of San Juan

County Subdivision	Población 1990	Población 2000	Población* 2008	Crecimiento % 1990 / 2000	Crecimiento % 2000 / 2008
Cupey	30,464	36,692	42,579	20.4%	16.0%
Tortugo	3,867	4,394	4,867	13.6%	10.8%
Pueblo	8,804	9,320	9,754	5.9%	4.7%
Hato Rey Norte	16,002	16,516	16,939	3.2%	2.6%
Caimito	20,011	20,618	21,117	3.0%	2.4%
Monacillo Urbano	28,707	29,454	30,066	2.6%	2.1%
Sabana Llana Norte	31,580	32,366	33,009	2.5%	2.0%
Universidad	2,491	2,497	2,502	0.2%	0.2%
Sabana Llana Sur	43,716	43,810	43,885	0.2%	0.2%
Quebrada	2,782	2,769	2,759	(0.5)%	(0.4)%
Santurce	95,184	94,067	93,183	(1.2)%	(0.9)%
Gobernador Piñero	49,427	47,872	46,663	(3.1)%	(2.5)%
Hato Rey Central	22,504	20,879	19,664	(7.2)%	(5.8)%
Oriente	37,688	34,880	32,785	(7.5)%	(6.0)%
Monacillo	13,481	12,386	11,574	(8.1)%	(6.6)%
El Cinco	8,426	7,064	6,135	(16.2)%	(13.2)%
Hato Rey Sur	12,915	10,827	9,402	(16.2)%	(13.2)%
San Juan Antiguo	9,696	7,963	6,802	(17.9)%	(14.6)%
San Juan Municipality	437,745	434,374	433,686	(0.8)%	(0.2)%
Puerto Rico	3,522,037	3,808,610	3,991,628	8.1%	4.8%

Source: US Census Bureau 1990 & 2000

Ordered by Variable of Percentage Growth 1990/2000

* Projected by Advantage Business Consulting

Economic Indicators

Per Capita Income

County Subdivision	Per Capita Income 1990	Per Capita Income 2000	Per Capita Income Estimado 2008*	% Growth 2000 / 1990	% Growth 2008 / 2000
Caimito	8,130	18,576	35,978	128.5%	93.7%
Hato Rey Norte	8,049	17,490	32,541	117.3%	86.1%
Monacillo	9,735	17,063	26,732	75.3%	56.7%
Cupey	7,476	16,679	31,694	123.1%	90.0%
El Cinco	8,816	16,280	26,593	84.7%	63.3%
Monacillo Urbano	8,821	15,337	23,874	73.9%	55.7%
Hato Rey Sur	9,013	14,167	20,343	57.2%	43.6%
Universidad	5,179	13,810	30,266	166.7%	119.2%
Santurce	6,435	12,712	21,915	97.5%	72.4%
San Juan Antiguo	4,802	12,247	25,901	155.0%	111.5%
Sabana Llana Sur	6,701	11,987	19,088	78.9%	59.2%
Gobernador Piñero	5,961	10,517	16,563	76.4%	57.5%
Tortugo	5,087	9,919	16,923	95.0%	70.6%
Hato Rey Central	5,425	9,477	14,808	74.7%	56.2%
Pueblo	4,196	8,251	14,172	96.6%	71.8%
Sabana Llana Norte	4,278	8,238	13,915	92.6%	68.9%
Quebrada	3,422	6,992	12,384	104.3%	77.1%
Oriente	3,099	6,484	11,704	109.2%	80.5%
San Juan Municipality	6,152	12,495	22,025	103.1%	76.3%
Puerto Rico	4,177	8,185	14,020	96.0%	71.3%

Source: US Census Bureau 1990 & 2000

Ordered by Variable of Income per Capita 2000

* Projected by Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Median Income for Households San Juan

County Subdivision	MI Household 1990	MI Household 2000	MI Household Projected 2008*	% Growth 2000 / 1990	% Growth 2008 / 2000
Monacillo	24,975	33,341	42,010	33.5%	26.0%
Cupey	16,577	29,917	47,979	80.5%	60.4%
El Cinco	18,615	29,508	42,658	58.5%	44.6%
Caimito	16,267	27,837	42,783	71.1%	53.7%
Hato Rey Norte	10,979	25,030	48,393	128.0%	93.3%
Monacillo Urbano	14,343	23,695	35,405	65.2%	49.4%
Sabana Llana Sur	13,979	23,382	35,286	67.3%	50.9%
Hato Rey Sur	17,014	20,625	24,058	21.2%	16.6%
Tortugo	11,395	20,068	31,560	76.1%	57.3%
Gobernador Piñero	12,077	17,831	24,353	47.6%	36.6%
Universidad	11,587	17,581	24,542	51.7%	39.6%
Santurce	8,301	14,073	21,468	69.5%	52.5%
Sabana Llana Norte	9,605	13,921	18,733	44.9%	34.6%
Quebrada	7,333	13,700	22,588	86.8%	64.9%
Pueblo	6,822	13,276	22,615	94.6%	70.3%
Hato Rey Central	9,242	13,064	17,232	41.4%	31.9%
Oriente	6,651	10,519	15,179	58.2%	44.3%
San Juan Antiguo	5,789	9,551	14,256	65.0%	49.3%
San Juan Municipality	11,653	19,084	28,318	63.8%	48.4%
Puerto Rico	8,895	14,412	21,202	62.0%	47.1%

Source: US Census Bureau 1990 & 2000

Ordered by Variable of Household Median Income 2000

* Projected by Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Households Under Poverty Level

County Subdivision	Households	Households Under Poverty Level 1990		Households	Households Under Poverty Level 2000		% Growth Number
		Number	Percentage		Number	Percentage	
El Cinco	3,185	683	21.4%	2,961	525	17.7%	(17.3)%
Monacillo	4,006	1,159	28.9%	4,262	1,047	24.6%	(15.1)%
Cupey	8,818	3,344	37.9%	12,396	3,356	27.1%	(28.6)%
Caimito	5,840	2,152	36.8%	6,984	2,069	29.6%	(19.6)%
Hato Rey Norte	6,366	2,664	41.8%	7,216	2,173	30.1%	(28.0)%
Monacillo Urbano	8,869	3,211	36.2%	9,531	2,955	31.0%	(14.4)%
Hato Rey Sur	5,927	1,577	26.6%	4,802	1,538	32.0%	20.4%
Sabana Llana Sur	13,923	5,509	39.6%	15,500	5,039	32.5%	(17.8)%
Gobernador Piñero	18,032	7,161	39.7%	18,160	6,559	36.1%	(9.1)%
Tortugo	1,139	584	51.3%	1,431	519	36.3%	(29.3)%
Universidad	863	276	32.0%	920	336	36.5%	14.2%
Santurce	36,985	19,404	52.5%	39,494	17,651	44.7%	(14.8)%
Sabana Llana Norte	10,257	5,115	49.9%	11,160	5,089	45.6%	(8.6)%
Quebrada	811	488	60.2%	924	432	46.8%	(22.3)%
Hato Rey Central	8,129	4,247	52.2%	8,418	3,963	47.1%	(9.9)%
Pueblo	2,961	1,923	64.9%	3,485	1,666	47.8%	(26.4)%
San Juan Antiguo	3,742	2,413	64.5%	3,515	1,865	53.1%	(17.7)%
Oriente	12,186	8,133	66.7%	12,269	7,011	57.1%	(14.4)%
San Juan Municipality	152,039	70,043	46.1%	163,428	63,793	39.0%	(15.3)%
Puerto Rico	1,057,357	604,412	57.2%	1,261,816	596,466	47.3%	(17.3)%

Source: US Census Bureau 2000

Ordered by Variable of Percentage of Houses Under Poverty Level 2000

Household Below Poverty Level

San Juan Subdivision	Households	Households Below Poverty Level 2000		Households*	Households Below Poverty Level 2008*		% Change Households Number
		Number	Percentage		Number	Percentage	
El Cinco	2,961	525	17.7%	2,793	425	15.2%	(14.1)%
Monacillo	4,262	1,047	24.6%	4,479	965	21.6%	(12.3)%
Cupey	12,396	3,356	27.1%	16,278	3,366	20.7%	(23.6)%
Caimito	6,984	2,069	29.6%	8,059	2,005	24.9%	(16.0)%
Hato Rey Norte	7,216	2,173	30.1%	7,977	1,846	23.1%	(23.1)%
Monacillo Urbano	9,531	2,955	31.0%	10,096	2,765	27.4%	(11.7)%
Hato Rey Sur	4,802	1,538	32.0%	4,058	1,507	37.2%	16.0%
Sabana Llana Sur	15,500	5,039	32.5%	16,889	4,692	27.8%	(14.5)%
Gobernador Piñero	18,160	6,559	36.1%	18,263	6,114	33.5%	(7.3)%
Tortugo	1,431	519	36.3%	1,718	472	27.5%	(24.2)%
Universidad	920	336	36.5%	968	393	40.6%	11.2%
Santurce	39,494	17,651	44.7%	41,623	16,363	39.3%	(12.0)%
Sabana Llana Norte	11,160	5,089	45.6%	11,939	5,068	42.5%	(6.9)%
Quebrada	924	432	46.8%	1,026	392	38.2%	(18.3)%
Hato Rey Central	8,418	3,963	47.1%	8,657	3,750	43.3%	(8.0)%
Pueblo	3,485	1,666	47.8%	3,970	1,485	37.4%	(21.7)%
San Juan Antiguo	3,515	1,865	53.1%	3,343	1,518	45.4%	(14.4)%
Oriente	12,269	7,011	57.1%	12,336	6,226	50.5%	(11.7)%
San Juan Municipality	163,428	63,793	39.0%	174,472	59,353	34.0%	(12.8)%
Puerto Rico	1,261,816	596,466	47.3%	1,453,502	590,184	40.6%	(14.1)%

Source: US Census Bureau 2000

Ordered by Variable of Percentage of Houses Under Poverty Level 2008

* Projected by Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Households With Public Assistance

	Household	Household With Public Assistance 1990		Households	Household With Public Assistance 2000		% Change Household Number
		Number	Percentage		Number	Percentage	
San Juan Municipality	12,034	4,564	37.9%	12,269	3,365	27.4%	(27.7)%
Oriente	10,257	2,720	26.5%	11,160	2,097	18.8%	(29.1)%
Sabana Llana Norte	8,129	2,050	25.2%	8,418	1,485	17.6%	(30.0)%
Hato Rey Central	811	214	26.4%	924	152	16.5%	(37.7)%
Tortugo	1,139	354	31.1%	1,431	233	16.3%	(47.6)%
Santurce	36,985	8,507	23.0%	39,494	6,200	15.7%	(31.7)%
San Juan Antiguo	3,742	982	26.2%	3,515	549	15.6%	(40.5)%
Hato Rey Norte	6,358	1,180	18.6%	7,216	1,041	14.4%	(22.3)%
Pueblo	2,961	726	24.5%	3,485	446	12.8%	(47.8)%
Universidad	863	96	11.1%	920	117	12.7%	14.3%
Monacillo Urbano	8,869	1,569	17.7%	9,531	1,209	12.7%	(28.3)%
Sabana Llana Sur	13,923	2,884	20.7%	15,500	1,952	12.6%	(39.2)%
Caimito	5,840	879	15.1%	6,984	864	12.4%	(17.8)%
Gobernador Piñero	18,032	2,965	16.4%	18,160	2,183	12.0%	(26.9)%
Cupey	8,818	1,706	19.3%	12,396	1,258	10.1%	(47.5)%
Monacillo	4,006	492	12.3%	4,262	416	9.8%	(20.5)%
Hato Rey Sur	4,927	533	10.8%	4,802	292	6.1%	(43.8)%
El Cinco	3,185	127	4.0%	2,961	142	4.8%	20.3%
San Juan Municipality	150,879	32,548	21.6%	163,428	24,001	14.7%	(31.9)%
Puerto Rico	1,057,357	326,137	30.8%	1,261,816	253,358	20.1%	(34.9)%

Source: US Census Bureau 1990 & 2000
Ordered by Variable of Percentage of Total 2000

Households With Public Assistance

	Household	Household With Public Assistance 2000		Households	Household With Public Assistance 2008*		% Change Household Number
		Number	Percentage		Number	Percentage	
San Juan Municipality	12,269	3,365	27.4%	12,460	2,637	21.2%	(22.8)%
Oriente	11,160	2,097	18.8%	11,939	1,703	14.3%	(24.1)%
Sabana Llana Norte	8,418	1,485	17.6%	8,657	1,147	13.3%	(24.9)%
Universidad	920	117	12.7%	968	137	14.2%	11.3%
Hato Rey Central	8,418	1,485	17.6%	8,657	1,147	13.3%	(24.9)%
Hato Rey Norte	7,216	1,041	14.4%	7,985	942	11.8%	(18.3)%
Santurce	39,494	6,200	15.7%	41,623	4,814	11.6%	(26.3)%
Quebrada	924	152	16.5%	1,026	116	11.3%	(31.5)%
Caimito	6,984	864	12.4%	8,059	852	10.6%	(14.5)%
San Juan Antiguo	3,515	549	15.6%	3,343	345	10.3%	(34.0)%
Monacillo Urbano	9,531	1,209	12.7%	10,096	981	9.7%	(23.4)%
Tortugo	1,431	233	16.3%	1,718	167	9.7%	(40.4)%
Gobernador Piñero	18,160	2,183	12.0%	18,263	1,709	9.4%	(22.2)%
Sabana Llana Sur	15,500	1,952	12.6%	16,889	1,428	8.5%	(32.8)%
Monacillo	4,262	416	9.8%	4,479	364	8.1%	(16.8)%
Pueblo	3,485	446	12.8%	3,970	302	7.6%	(40.6)%
Cupey	12,396	1,258	10.1%	16,278	986	6.1%	(40.3)%
El Cinco	2,961	142	4.8%	2,793	155	5.6%	15.9%
Hato Rey Sur	4,802	292	6.1%	4,704	180	3.8%	(36.9)%
San Juan Municipality	163,428	24,001	14.7%	174,215	18,810	10.8%	(26.5)%
Puerto Rico	1,261,816	253,358	20.1%	1,453,502	207,015	14.2%	(29.1)%

Source: US Census Bureau 1990 & 2000
Ordered by Variable of Percentage of Total 2008
*Projected by Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Households With Social Security

San Juan Municipality	Households	Households With Social Security 1990		Households	Households With Social Security 2000		% Change Household Number
		Number	Percentage		Number	Percentage	
Cupey	8,818	1,949	22.1%	12,396	3,167	25.5%	15.6%
Caimito	5,840	1,057	18.1%	6,984	1,803	25.8%	42.6%
Pueblo	2,961	879	29.7%	3,485	949	27.2%	(8.3)%
Tortugo	1,139	248	21.8%	1,431	404	28.2%	29.7%
San Juan Antiguo	3,742	1,044	27.9%	3,515	1,011	28.8%	3.1%
Sabana Llana Sur	13,923	3,655	26.3%	15,500	4,494	29.0%	10.4%
Hato Rey Sur	4,927	1,479	30.0%	4,802	1,408	29.3%	(2.3)%
Monacillo	4,006	854	21.3%	4,262	1,291	30.3%	42.1%
Santurce	36,985	11,821	32.0%	39,494	12,133	30.7%	(3.9)%
Monacillo Urbano	8,869	2,401	27.1%	9,531	2,940	30.8%	13.9%
Oriente	12,034	3,345	27.8%	12,269	3,949	32.2%	15.8%
Hato Rey Central	8,129	2,334	28.7%	8,418	2,861	34.0%	18.4%
Hato Rey Norte	6,358	2,509	39.5%	7,216	2,597	36.0%	(8.8)%
Sabana Llana Norte	10,257	3,532	34.4%	11,160	4,313	38.6%	12.2%
Gobernador Piñero	18,032	7,211	40.0%	18,160	7,114	39.2%	(2.0)%
El Cinco	3,185	1,178	37.0%	2,961	1,165	39.3%	6.4%
Universidad	863	315	36.5%	920	362	39.3%	7.8%
Quebrada	811	146	18.0%	924	397	43.0%	138.7%
San Juan Municipality	150,879	45,957	30.5%	163,428	52,358	34.7%	13.9%
Puerto Rico	1,057,357	317,388	30.0%	1,261,816	426,429	40.3%	34.4%

Source: US Census Bureau 1990 & 2000
Ordered by Variable of Percentage of Total 2000

Households With Social Security

San Juan Municipality	Households	Households With Social Security 2000		Households	Households With Social Security 2008*		% Change Household Number
		Number	Percentage		Number	Percentage	
Pueblo	3,485	949	27.2%	3,970	1,009	25.4%	(6.7)%
Cupey	12,396	3,167	25.5%	16,278	4,670	28.7%	12.3%
Hato Rey Sur	4,802	1,408	29.3%	4,704	1,354	28.8%	(1.9)%
San Juan Antiguo	3,515	1,011	28.8%	3,343	985	29.5%	2.5%
Santurce	39,494	12,133	30.7%	41,623	12,389	29.8%	(3.1)%
Sabana Llana Sur	15,500	4,494	29.0%	16,889	5,302	31.4%	8.3%
Hato Rey Norte	7,216	2,597	36.0%	7,985	2,670	33.4%	(7.1)%
Monacillo Urbano	9,531	2,940	30.8%	10,096	3,457	34.2%	11.0%
Caimito	6,984	1,803	25.8%	8,059	2,764	34.3%	32.9%
Tortugo	1,431	404	28.2%	1,718	597	34.8%	23.1%
Oriente	12,269	3,949	32.2%	12,460	4,510	36.2%	12.4%
Gobernador Piñero	18,160	7,114	39.2%	18,263	7,037	38.5%	(1.6)%
Hato Rey Central	8,418	2,861	34.0%	8,657	3,367	38.9%	14.4%
Monacillo	4,262	1,291	30.3%	4,479	1,797	40.1%	32.5%
El Cinco	2,961	1,165	39.3%	2,793	1,155	41.3%	5.1%
Universidad	920	362	39.3%	968	405	41.8%	6.2%
Sabana Llana Norte	11,160	4,313	38.6%	11,939	5,060	42.4%	9.7%
Quebrada	924	397	43.0%	1,026	884	86.2%	100.6%
San Juan Municipality	163,428	52,358	32.0%	175,251	59,411	33.9%	5.8%
Puerto Rico	1,261,816	426,429	33.8%	1,453,502	540,072	37.2%	9.9%

Source: US Census Bureau 1990 & 2000
Ordered by Variable of Percentage of Total 2008
*Projected By Advantage Business Consulting

ENVIRONMENTAL JUSTICE AND ECONOMIC STUDY FOR THE ENVIRONMENTAL
IMPACT STATEMENT / SAN JUAN WATERFRONT

Unemployment Rate

County Subdivision	Labor Force	Employment	Unemployment 1990		Labor Force	Employment	Unemployment 2000		% Change Unemployment Rate
			Number	Rate			Number	Rate	
Tortugo	1,594	1,350	244	15.3%	1,583	1,507	76	4.8%	(68.6)%
Universidad	920	820	100	10.9%	749	711	38	5.1%	(53.3)%
Caimito	7,769	7,118	651	8.4%	7,774	7,220	539	6.9%	(17.3)%
Hato Rey Norte	5,339	4,693	646	12.1%	6,231	5,716	479	7.7%	(36.5)%
El Cinco	3,572	3,355	217	6.1%	3,043	2,782	254	8.3%	37.4%
Cupey	11,360	10,088	1,272	11.2%	13,512	12,282	1,223	9.1%	(19.2)%
Quebrada	935	840	95	10.2%	904	809	86	9.5%	(6.4)%
Monacillo	5,502	4,913	589	10.7%	4,685	4,235	450	9.6%	(10.3)%
Monacillo Urbano	10,234	8,700	1,534	15.0%	9,130	8,091	1,032	11.3%	(24.6)%
Sabana Llana Sur	16,778	13,955	2,823	16.8%	16,020	14,084	1,928	12.0%	(28.5)%
Gobernador Piñero	17,774	15,366	2,408	13.5%	16,389	14,353	2,023	12.3%	(8.9)%
Hato Rey Sur	6,207	5,371	836	13.5%	4,760	4,071	677	14.2%	5.6%
Pueblo	3,461	2,803	658	19.0%	3,450	2,918	532	15.4%	(18.9)%
Santurce	34,943	29,013	5,930	17.0%	33,593	28,000	5,572	16.6%	(2.3)%
Sabana Llana Norte	10,949	8,657	2,292	20.9%	9,518	7,767	1,736	18.2%	(12.9)%
Hato Rey Central	8,280	7,209	1,071	12.9%	6,477	5,282	1,194	18.4%	42.5%
Oriente	11,620	8,867	2,753	23.7%	10,109	7,935	2,174	21.5%	(9.2)%
San Juan Antiguo	3,248	2,546	702	21.6%	2,453	1,867	537	21.9%	1.3%
San Juan Municipality	160,485	135,664	24,821	15.5%	46,166	129,630	7,464	16.2%	4.5%
Puerto Rico	1,174,676	934,736	239,940	20.4%	1,156,532	930,865	220,998	19.1%	(6.4)%

Source: US Census Bureau 1990 & 2000
Ordered by Variable of Unemployment Rate 2000

Unemployment Rate

County Subdivision	Labor Force	Employment	Unemployment 2000		Labor Force	Employment	Unemployment 2008*		% Change Unemployment Rate
			Number	Rate			Number	Rate	
Tortugo	1,583	1,507	76	4.8%	1,574	1,646	30	1.9%	(60.5)%
Universidad	749	711	38	5.1%	635	634	18	2.8%	(45.6)%
Hato Rey Norte	6,231	5,716	479	7.7%	7,051	6,693	377	5.3%	(30.4)%
Caimito	7,774	7,220	539	6.9%	7,778	7,303	463	6.0%	(14.1)%
Cupey	13,512	12,282	1,223	9.1%	15,524	14,376	1,185	7.6%	(15.7)%
Monacillo	4,685	4,235	450	9.6%	4,120	3,761	363	8.8%	(8.3)%
Monacillo Urbano	9,130	8,091	1,032	11.3%	8,333	7,635	752	9.0%	(20.2)%
Quebrada	904	809	86	9.5%	880	785	79	9.0%	(5.1)%
Sabana Llana Sur	16,020	14,084	1,928	12.0%	15,438	14,188	1,421	9.2%	(23.5)%
El Cinco	3,043	2,782	254	8.3%	2,677	2,395	288	10.8%	28.9%
Gobernador Piñero	16,389	14,353	2,023	12.3%	15,359	13,591	1,760	11.5%	(7.2)%
Pueblo	3,450	2,918	532	15.4%	3,441	3,013	449	13.0%	(15.4)%
Hato Rey Sur	4,760	4,071	677	14.2%	3,849	3,262	572	14.9%	4.5%
Santurce	33,593	28,000	5,572	16.6%	32,551	27,215	5,301	16.3%	(1.8)%
Sabana Llana Norte	9,518	7,767	1,736	18.2%	8,509	7,121	1,390	16.3%	(10.4)%
Oriente	10,109	7,935	2,174	21.5%	9,043	7,260	1,800	19.9%	(7.5)%
San Juan Antiguo	2,453	1,867	537	21.9%	1,960	1,457	433	22.1%	1.0%
Hato Rey Central	6,477	5,282	1,194	18.4%	5,322	4,118	1,302	24.5%	32.8%
San Juan Municipality	46,166	38,616	7,464	16.2%	144,044	126,453	17,983	12.5%	(22.8)%
Puerto Rico	1,156,532	930,865	220,998	19.1%	1,142,219	927,780	206,927	18.1%	(5.2)%

Source: US Census Bureau 1990 & 2000
Ordered by Variable of Unemployment Rate 2008
*Projected by Advantage Business Consulting