



ECONOMIC AND FISCAL IMPACT OF PORT SAN ANTONIO IN 2010

Study Conducted by:

**Steve Nivin, Ph.D. and Cheyenna Villarreal
SABER Institute¹
(210) 639-5587**

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¹ SABER Institute is a research collaborative of St. Mary's University and the San Antonio Hispanic Chamber of Commerce.

I. Executive Summary

Port San Antonio was created out of the closing of Kelly Air Force Base and has become a shining example of successful base redevelopment. Using the available assets, such as an 11,500 foot runway, rail access, and a geographically strategic location, the Port is a leading aerospace, industrial, and logistics facility with many of the leading companies in these industries calling the Port home.

Port San Antonio commissioned the SABÉR Institute to conduct a study of the economic and fiscal impacts of the economic activities at the Port. This analysis estimates the projected impact for 2010 resulting from the various business operations at the Port, plus the construction activities. Using the IMPLAN input-output model for Bexar County, both the direct and multiplier impacts are captured.

As summarized in Table 1, the economic impact from the business operations at Port San Antonio generated an economic impact of about \$4.14 billion. This activity supported employment of about 24,216 full-time equivalent positions and paid incomes to these workers of \$1.68 billion. The value added is estimated at over \$2.65 billion, and the total fiscal impact was \$467 million to the federal, state, and local governments.

In 2010, Port San Antonio is projected to engage in almost \$53 million in construction to the buildings and facilities generating an overall economic impact of over \$89.77 million. The construction activities will support employment of 658.7 full-time equivalents who will receive \$33.76 million in income. The value added is projected to be \$43.66 million, and the construction will generate net fiscal revenues to government agencies of about \$8.20 million.

In total, all of the economic activity at Port San Antonio is projected to generate an overall economic impact of \$4.23 billion, while supporting almost 25 thousand jobs earning income of over \$1.70 billion. The total value added will extend over \$2.69 billion, and the impacts to federal, state, and local government coffers is estimated to be over \$475.22 million.

**Table 1: Summary of Economic and Fiscal Impact of Port San Antonio
(2010 \$ except employment)**

Impact from Operations				
	<u>Direct Impact</u>	<u>Indirect Impact</u>	<u>Induced Impact</u>	<u>Total Impact</u>
Output	2,657,184,770	566,072,520	913,610,584	4,136,867,865
Employment	13,679.0	3,347.1	7,189.6	24,215.7
Income	1,160,200,964	212,399,616	302,564,357	1,675,164,932
Value Added	1,786,226,962	312,946,518	538,664,759	2,646,838,249
Fiscal Impact	NA	NA	NA	467,026,486
Impact from Construction				
	<u>Direct Impact</u>	<u>Indirect Impact</u>	<u>Induced Impact</u>	<u>Total Impact</u>
Output	54,817,696	16,555,864	18,398,026	89,771,586
Employment	408.2	105.4	145.1	658.7
Income	21,461,282	6,209,210	6,087,491	33,757,983
Value Added	23,600,442	9,209,619	10,845,163	43,655,223
Fiscal Impact	NA	NA	NA	8,196,529
Total Impact from Operations and Construction				
	<u>Direct Impact</u>	<u>Indirect Impact</u>	<u>Induced Impact</u>	<u>Total Impact</u>
Output	2,712,002,466	582,628,384	932,008,610	4,226,639,451
Employment	14,087.2	3,452.5	7,334.7	24,874.4
Income	1,181,662,246	218,608,826	308,651,848	1,708,922,915
Value Added	1,809,827,404	531,555,344	549,509,922	2,690,493,472
Fiscal Impact	NA	NA	NA	475,223,015

The growth at Port San Antonio has been nothing short of remarkable. As of 2007, direct employment at the Port was 8,529 with an income of \$520 million. This economic activity combined with the construction in 2007 resulted in an overall economic impact of \$3.3 billion.

There may exist some differences in methodologies between the 2007 economic impact study and this one, but with that caveat, if we compare the impacts of the Port in 2010 to those in 2007, it is evident that the Port has experienced phenomenal growth in that brief time period. For example, direct employment grew from 8,529 to 14,087 (65.17%) and the economic impact of Port San Antonio, including multiplier effects, grew from \$3.3 billion to \$4.2 billion – an increase of 27.3%. It is very evident that Port San Antonio has grown out of much uncertainty with the closing of Kelly Air Force Base into an economic development engine for San Antonio and the region.

The following sections of this report will document the concepts and methodologies used in the analysis and the detailed results.

II. Economic and Fiscal Impact Concepts and Methodologies

II.1. Economic Impact Concepts

Economic impact is based on the concept that a new dollar flowing into the area causes an expansion of the economy. The economic activity of many businesses generates exports outside of the region, which brings this money flowing back into the local economy. These businesses use this revenue to pay their workers salaries and benefits, purchase inputs from local suppliers, and pay government taxes and fees. The direct economic impact is derived from the production activity of the businesses and the salaries and benefits they are then able to pay their workers. As already alluded to, this also generates additional economic activity often times referred to as the multiplier effects.

The multiplier effects can be separated into two effects: the indirect effect and the induced effect. The indirect effect results from the company purchasing inputs (physical goods or services) from its local suppliers. Of course, this then sets off additional spending by the supplier in its purchases of inputs and payment of salaries and benefits to its employees. The induced effect is derived from the spending of the employees of the company resulting from the incomes they receive. This is where the economic impact really begins to spread throughout the economy as workers spend their incomes to buy the various goods and services that they need and desire.

All of this economic activity also benefits the government at various levels as the spending by businesses, their employees, and others generate tax revenues and fees. For instance, these activities will generate excise, income, and property tax revenues, social security contributions, and various license fees.

Of course, not all of this economic activity is captured within the local economy. There are leakages as businesses and individual consumers purchase goods and services outside of the local economy causing some money to leak or flow out of the local economy. This is also the case as federal and state taxes and fees are paid resulting from these activities. These leakages are accounted for in the model and are not counted as part of the economic impact. In fact, they reduce the impact of these activities.

II.2. The Model

In order to estimate these impacts, the IMPLAN input-output model for the Bexar County economy was used as developed by MIG, Inc. This model is based off “the ‘Input-Output Study of the U.S. economy’ by the [U.S.] Bureau of Economic Analysis,”² and is adapted for Bexar County using data specific to the region from the Bureau of Economic Analysis. The IMPLAN model measures the interactions across 440 industries.

² *IMPLAN Professional® Version 2.0 User's Guide*, p. 98.

Input-output analysis was introduced by Wassily Leontief for which he later received the Nobel Prize in economics in 1973.³ An input-output model describes the economic interactions or trade flows among businesses, households, and governments and shows how changes in one area of the economy impact other areas. The multipliers that result from these models are the expressions of these interactions.

There are generally three basic multipliers used to measure the overall impacts. The output multiplier measures the direct, indirect, and induced changes in output across the economy resulting from a change in economy activity within the local economy. The employment multiplier measures the direct, indirect, and induced changes in full-time equivalent employment across the economy resulting from this change in economic activity. Finally, the earnings multiplier measures the direct, indirect, and induced changes in earnings (including benefits) across the economy resulting from the change in economic activity. Like the proverbial ripples resulting from a rock being thrown in a pond, the multiplier effects will register successive rounds of effects until eventually the leakage from each round halts the process.

II.3. Units of Analysis

While this study focuses on the economic and fiscal impacts derived from the various economic activities at Port San Antonio, the actual geographic unit of analysis is Bexar County. In other words, while the operations of the companies under consideration are at Port San Antonio, the impacts of these operations are measured across the entire county.

The operations of the industries considered in this study range from maintenance, repair, and overhaul to warehousing to manufacturing of various sorts. They span 41 NAICS codes, not including the U.S. Air Force operations, and range in size from small to rather large. The NAICS

³ For an example of his seminal work, see: Leontief, Wassily et al., *Studies in the Structure of the American Economy: Theoretical and Empirical Explorations in Input-Output Analysis*, New York: Oxford University Press, 1953.

were used to crosswalk the data into the IMPLAN sectors which corresponded nicely to the NAICS sectors.

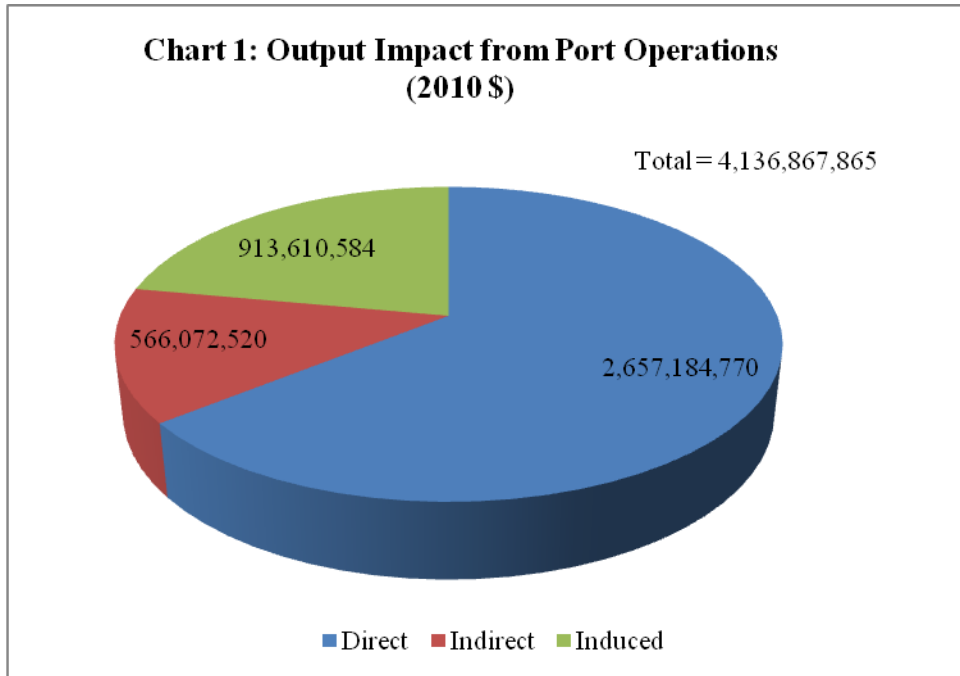
III. The Results

This section will briefly describe the economic and fiscal impact resulting from the economic activities of the businesses in the aforementioned sectors at Port San Antonio (i.e., operational impacts), as well as the construction activity conducted by Port San Antonio in 2009. The annual impacts are measured on output, employment, earnings, valued added, and tax revenues.

III.A. IMPACTS FROM OPERATIONS

III.A.1. Output Impacts

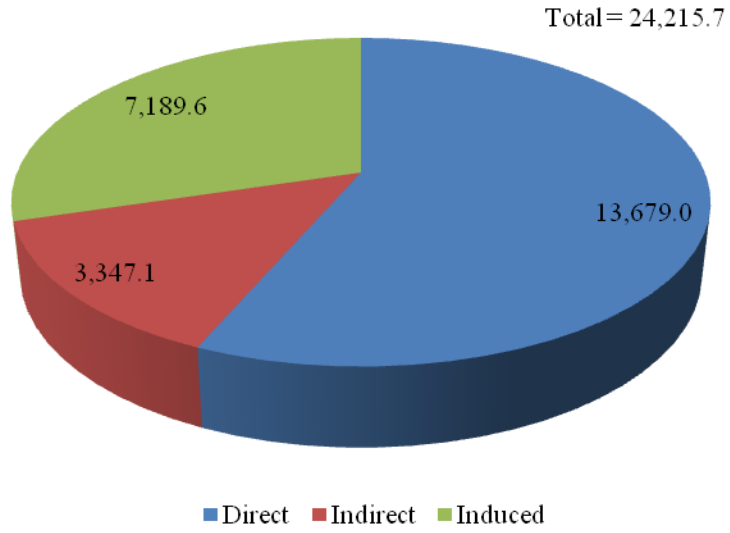
The impacts on output across industries, including indirect and induced effects, are shown in Chart 1. The direct output impacts are derived from the operations of the businesses located at Port San Antonio and amounts to \$2,657,184,770. The indirect output impacts of \$566,072,520 are the result of the purchases of inputs by these businesses from their suppliers, and the induced impacts are the result of spending by the households who receive wages from this direct and indirect economic activity, as well as additional induced effects, resulting in \$913,610,584 in impact. The total output or economic impact due to business operations is \$4,136,867,865.

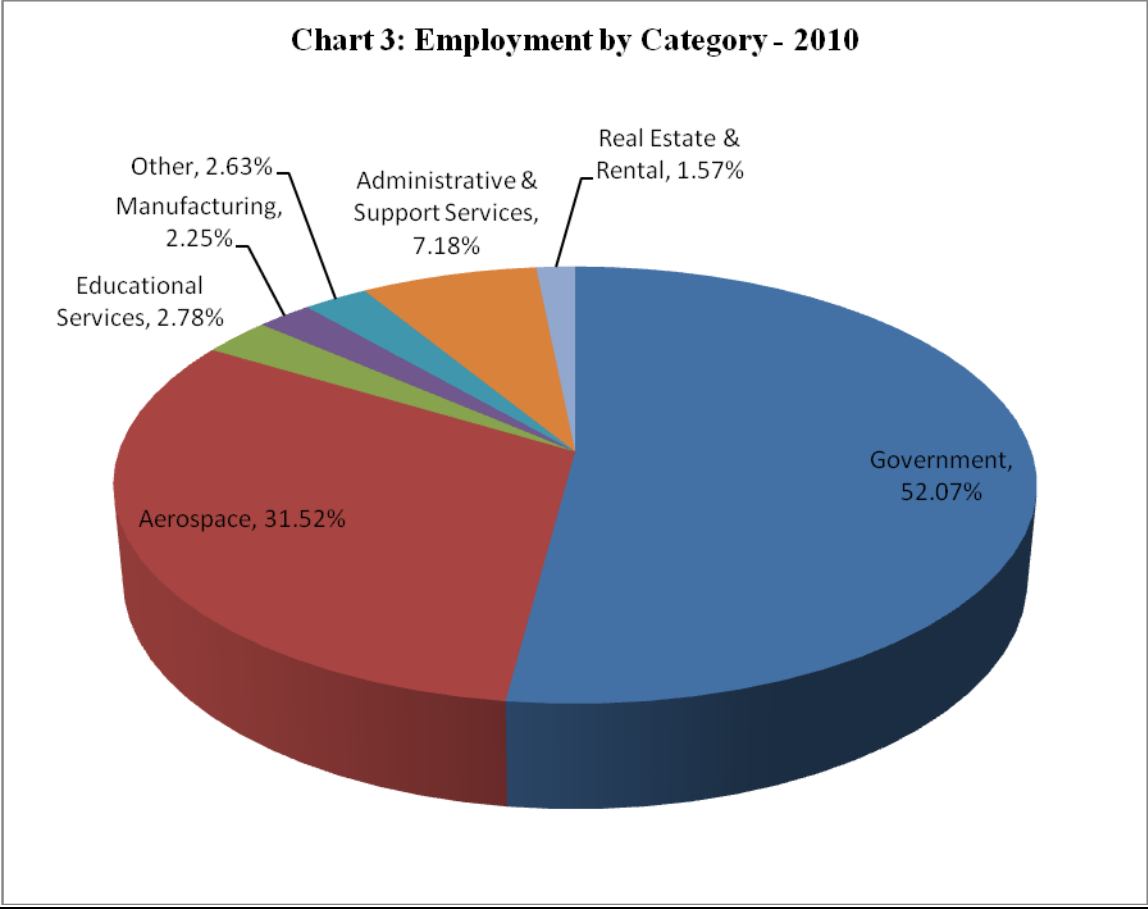


III.A.2. Employment Impacts

The impacts on employment across industries, including indirect and induced effects, are shown in Chart 2. The direct employment impacts are the employment of the businesses at Port San Antonio and amount to 13,679.0. Chart 3 illustrates the breakdown of direct employment by broad category. The indirect employment impacts of 3,347.1 are the full-time equivalent jobs resulting from the purchases of inputs by these businesses from their suppliers and the additional multiplier effects on employment. The induced employment impacts are the employment supported by the spending of the households who receive wages from this direct and indirect economic activity and additional induced effects resulting in an impact on employment of 7,189.6. The total impact on employment from operations is 24,215.7.

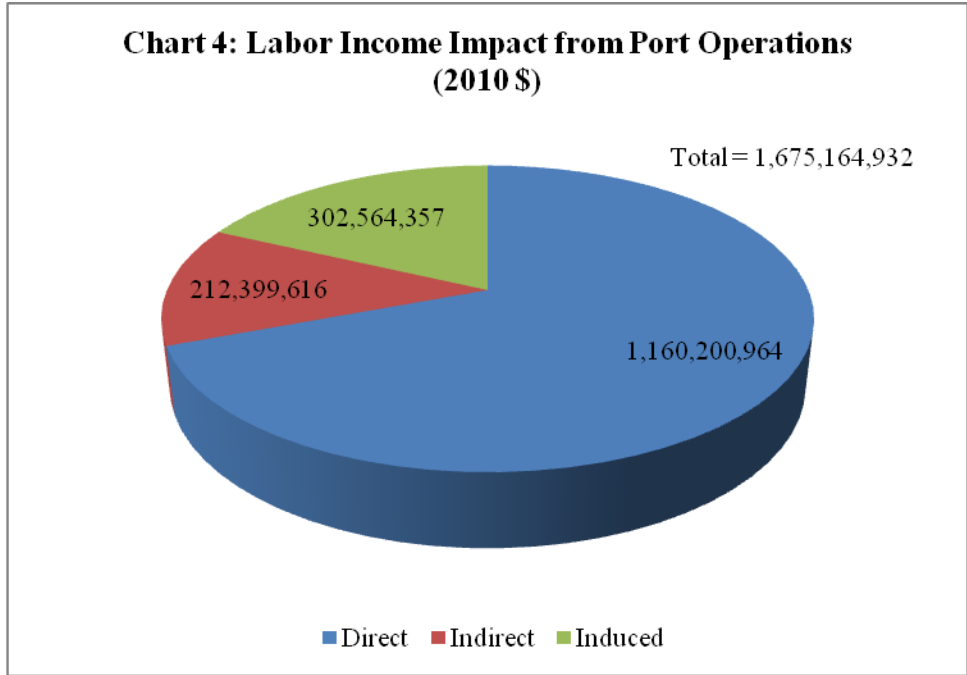
**Chart 2: Employment Impact from Port Operations
(2010)**





III.A.3. Income Impacts

The impacts on income across industries, including indirect and induced effects, are shown in Chart 4. The direct income impacts are the wages and benefits paid to the employees of the businesses at Port San Antonio and amounts to \$1,160,200,964. The indirect income impacts of \$212,399,616 are the wages and benefits paid as a result of the purchases of inputs by these businesses from their suppliers and the additional multiplier effects on income. The induced income impacts are the wages and benefits paid as a result of the spending of the households who receive wages from this direct and indirect economic activity and additional induced effects resulting in \$302,564,357 in impact. The total impact on income from operations is \$1,675,164,932.



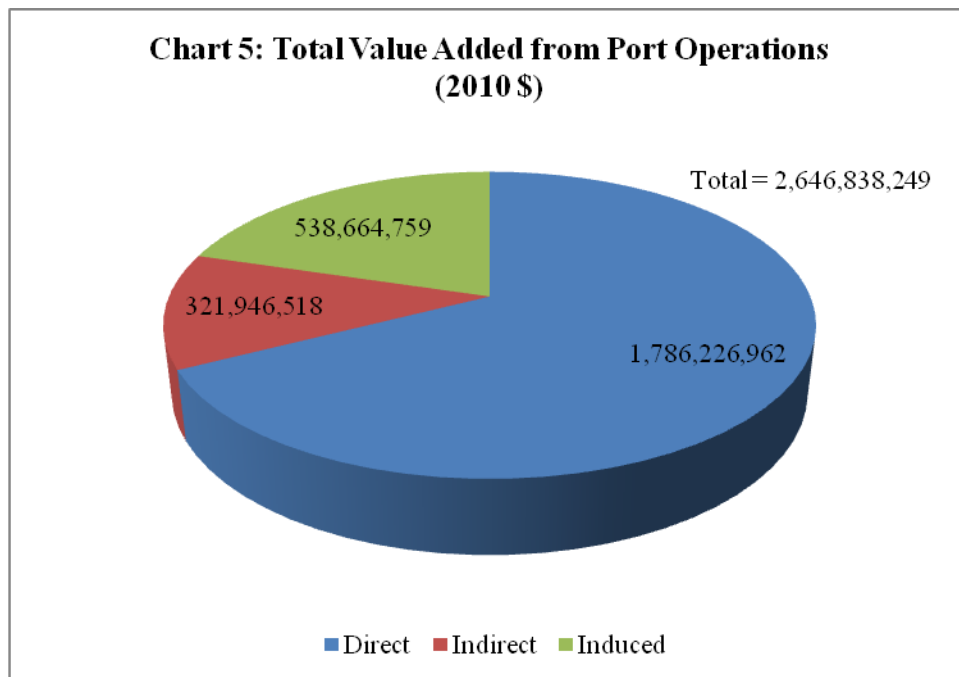
III.A.4. Value Added Impacts

Value-added is the sum of employee compensation, proprietary income, other property type income, and indirect business taxes. Basically, it is a measure of the impact of the economic activity at the Port on the gross regional product (GRP) or the gross domestic product (GDP) of Bexar County. Employee compensation includes benefits, retirement compensation, and any additional non-cash compensation provided to employees. “Proprietary income consists of payments received by self-employed individuals as income.” “Other property type income consists of payments from interest, rent, royalties, dividends, and profits,” including payments to individuals. “Indirect business taxes consist primarily of excise and sales taxes paid by individuals to businesses.”⁴ Thus, some of the impacts captured in value-added are included

⁴ All of these definitions come from: *IMPLAN Professional® Version 2.0 User’s Guide*, p. 249.

elsewhere in this report.⁵ Even with there being some duplication in reporting some of these impacts, value-added is an important measure of the economic impact, so it is included here as a separate measure.

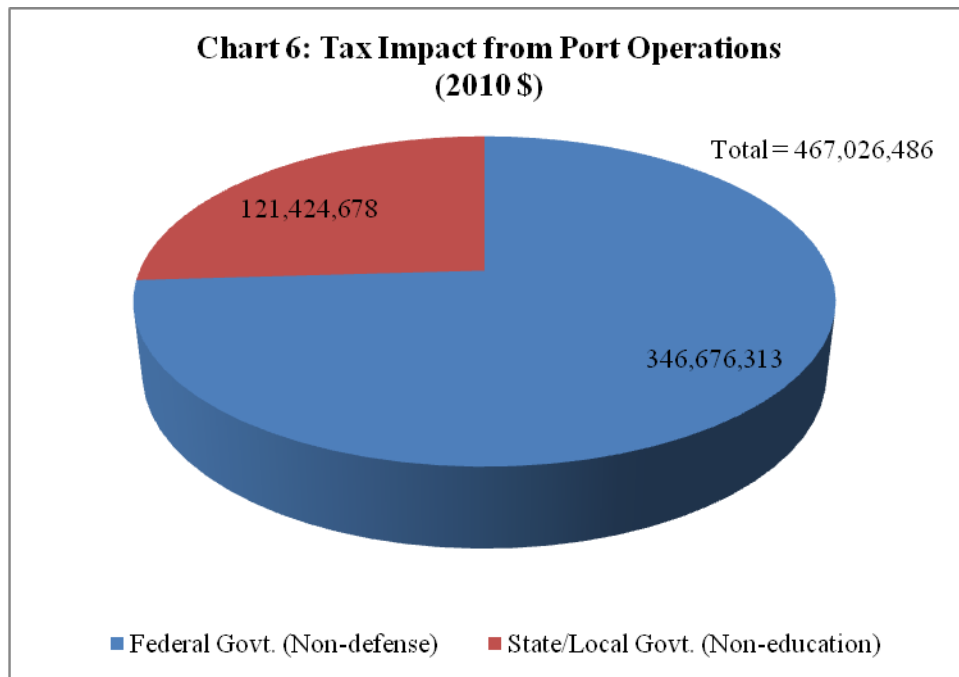
The impacts on value-added by the industries, including indirect and induced effects, are shown in Chart 5. The direct value-added impacts are derived from the operations of the businesses at Port San Antonio and amounts to \$1,786,226,962. The indirect value-added impacts of \$321,946,518 are the value-added created in the industries across the economy as a result of the purchases of inputs by these businesses from their suppliers and the additional multiplier effects. The induced value-added impacts are a result of the spending of the households who receive wages from this direct and indirect economic activity and additional induced effects resulting in the creation of an additional \$538,664,759 in value-added created. The total impact on value-added resulting from operations is \$2,646,838,249.



⁵ This does not mean that there is double-counting of impacts.

III.A.5.Fiscal Impacts

All of the direct, indirect, and induced economic activity generated by the operations of these businesses results in a substantial fiscal impact on federal, state, and local governments. The detailed breakdown of the revenues generated to these government entities is given in Table 2 and summarized in Chart 6. The impact to the federal government is \$346,676,313, and the impact to the state and local governments is a combined \$121,424,678. Since ad valorem taxes are not assessed on the land at the Port, the state/local property taxes were adjusted accordingly.⁶ The overall fiscal impact, including transfer payments, is \$467,026,486 (note that Chart 5 does not include transfer payments).



⁶ In order to estimate the property taxes on the land the Port, the market values of two comparable properties – the Southwest Business and Technology Park and a property at Somerset Road and IH-35 – were used to which the appropriate property tax rate was applied.

Table 2: Fiscal Impact (2010 \$)

	Total	
Enterprises (Corporations)	Transfers	-1,074,505
	Total	-1,074,505
Federal Government NonDefense	Corporate Profits Tax	72,752,710
	Indirect Bus Tax: Custom Duty	2,842,324
	Indirect Bus Tax: Excise Taxes	6,799,866
	Indirect Bus Tax: Fed NonTaxes	3,404,866
	Personal Tax: Estate and Gift Tax	0
	Personal Tax: Income Tax	111,823,256
	Personal Tax: NonTaxes (Fines- Fees)	0
	Social Ins Tax- Employee Contribution	78,860,620
	Social Ins Tax- Employer Contribution	70,192,669
	Total	346,676,313
State/Local Govt NonEducation	Dividends	10,204,859
	Indirect Bus Tax: Motor Vehicle Lic	747,347
	Indirect Bus Tax: Other Taxes	5,474,887
	Indirect Bus Tax: Property Tax	41,846,509
	Indirect Bus Tax: S/L NonTaxes	3,098,768
	Indirect Bus Tax: Sales Tax	41,989,863
	Indirect Bus Tax: Severance Tax	4,118,522
	Personal Tax: Estate and Gift Tax	0
	Personal Tax: Income Tax	0
	Personal Tax: Motor Vehicle License	1,503,942
	Personal Tax: NonTaxes (Fines- Fees)	7,777,466
	Personal Tax: Other Tax (Fish/Hunt)	482,806
	Personal Tax: Property Taxes	806,408
	Social Ins Tax- Employee Contribution	636,192
	Social Ins Tax- Employer Contribution	2,737,109
Total	121,424,678	
Grand Total	467,026,486	

III.B. IMPACTS FROM CONSTRUCTION

Port San Antonio is projected to engage in \$52,866,667 of construction during 2010. This is a sizeable amount of construction activity that generates much economic activity. The total impact from the construction activities is estimated to be \$89,771,586. This supports 658.7 jobs, including 408.2 direct jobs. The construction generates \$33,757,983 in labor income with \$21,461,282 of that income being paid to those workers in the direct jobs. The total valued added is projected to be \$43,655,223. The overall fiscal impact to the federal, state, and local governments is estimated at \$8,196,529 with \$2,185,394 going to the state and local governments and \$6,029,652 to the federal government. Table 3 summarizes these impacts.

Table 3: Summary of Impacts from Construction (2009 \$, except employment)

	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Output	54,817,696	16,555,864	18,398,026	89,771,586
Employment	408.2	105.4	145.1	658.7
Income	21,461,282	6,209,210	6,087,491	33,757,983
Value Added	23,600,442	9,209,619	10,845,163	43,655,223
Fiscal Impact	—	—	—	8,196,529

III.B.5. Fiscal Impacts

The construction, as shown in Table 4, is projected to generate \$8,196,529 in tax revenues to federal, state, and local agencies, including transfers. Of this total amount, \$6,029,652 will flow to the federal government, and \$2,185,394 will be captured by state and local governments.

Table 4: Fiscal Impacts Resulting from Construction Activity (2010 \$)

	Total	
Enterprises (Corporations)	Transfers	-18,517
	Total	-18,517
Federal Government NonDefense	Corporate Profits Tax	655,244
	Indirect Bus Tax: Custom Duty	52,924
	Indirect Bus Tax: Excise Taxes	126,613
	Indirect Bus Tax: Fed NonTaxes	63,399
	Personal Tax: Estate and Gift Tax	0
	Personal Tax: Income Tax	2,349,947
	Personal Tax: NonTaxes (Fines- Fees)	0
	Social Ins Tax- Employee Contribution	1,571,908
	Social Ins Tax- Employer Contribution	1,209,617
		Total
State/Local Govt NonEducation	Dividends	91,910
	Indirect Bus Tax: Motor Vehicle Lic	13,916
	Indirect Bus Tax: Other Taxes	101,942
	Indirect Bus Tax: Property Tax	786,288
	Indirect Bus Tax: S/L NonTaxes	57,699
	Indirect Bus Tax: Sales Tax	781,851
	Indirect Bus Tax: Severance Tax	76,687
	Personal Tax: Estate and Gift Tax	0
	Personal Tax: Income Tax	0
	Personal Tax: Motor Vehicle License	31,057
	Personal Tax: NonTaxes (Fines- Fees)	159,802
	Personal Tax: Other Tax (Fish/Hunt)	10,031
	Personal Tax: Property Taxes	16,080
	Social Ins Tax- Employee Contribution	10,963
	Social Ins Tax- Employer Contribution	47,168
	Total	2,185,394
	Grand Total	8,196,529

IV. Conclusion

With the closing of Kelly Air Force Base, there was much uncertainty in the community about the impact of the base closing on San Antonio's economy and what could be done to minimize any negative economic impacts. Out of a strong public-private partnership, Port San Antonio was created, and as the numbers provided in this report indicate, the success of the Port has, at a minimum, erased the negative economic impacts of the base closure. In fact, with its phenomenal growth rates, Port San Antonio has become an economic engine for the San Antonio region and an important international aerospace, industrial, and logistics hub.