

Buccaneer Economic Impact Analysis

Prepared for

City of Homer

December 2013

Prepared by



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1 Introduction

Buccaneer Alaska (Buccaneer) is an independent oil and gas firm operating in Alaska’s Cook Inlet. In 2012, Buccaneer mobilized a jack-up rig to support its Alaskan exploration and drilling activities. The rig, named Endeavour – the Spirit of Independence (Endeavour), arrived in Cook Inlet in August of last year, where it docked at the City of Homer for several months while it underwent repairs (Buccaneer Energy 2013; Armstrong 2013).

Figure 1. Buccaneer’s ‘Endeavour – Spirit of Independence’ Jack-Up Drill Rig



Source: City of Homer, 2013

Buccaneer’s Endeavour docked in Homer for just over 200 days, from August 29, 2012 to March 29, 2013 (City of Homer 2013). During this time, Buccaneer generated economic activity within the Kenai Peninsula Borough through its expenditures on local goods and services, as well as payments to the local governments for property taxes assessed on the Endeavour. The table below (Table 1) summarizes Buccaneer’s spending within the local economy.

Table 1. Buccaneer’s Direct Spending in the Kenai Peninsula Borough, 2012-2013

Source of Spending	Amount (\$)
Shipyards Work and Operations	3,330,778
Property Taxes	454,730
Total	3,785,508

Source: Anderson 2013; City of Homer 2013

The shipyard work and operations spending shown in Table 1 includes approximately \$577,000 spent on port fees for dockage, moorage, and water, as well as assorted services such as stevedoring and tug assistance.

Buccaneer’s \$3.79 million in total spending generated direct, indirect and induced economic impacts within the local community, as summarized in Table 2. The study team estimates that the money spent by Buccaneer generated a total of 50 jobs, \$1.8 million worth of labor income (wages), and \$4.8 million in total output within the Kenai Peninsula Borough.

Table 2. Direct, Indirect and Induced Economic Output Effects of Endeavour-Related Spending

Impact Type	Direct	Indirect + Induced	Total
Employment	37	13	50
Labor Income (\$)	1,300,970	531,771	1,832,742
Total Output (\$)	3,325,449	1,478,983	4,804,432

Note: Labor Income and Output presented in 2013 dollars; Labor Income is a subset of Total Output
 Source: NEI estimates based on Anderson (2013), City of Homer (2013), and IMPLAN software and database

The following two tables (Table 3 and Table 4) breakdown the economic impacts of Buccaneer’s shipyard and operations spending separately from those generated by property tax payments.

Table 3. Direct, Indirect and Induced Economic Output Effects (Shipyard and Operations)

Impact Type	Direct	Indirect + Induced	Total
Employment	37	10	47
Labor Income (\$)	1,300,970	345,585	\$1,646,556
Total Output (\$)	3,325,449	1,136,209	\$4,461,658

Note: Labor Income and Output presented in 2013 dollars; Labor Income is a subset of Total Output
 Source: NEI estimates based on Anderson (2013) and IMPLAN software and database

Table 4. Direct, Indirect and Induced Economic Output Effects (Property Taxes)

Impact Type	Direct	Induced	Total
Employment	-	3	3
Labor Income (\$)	-	186,186	186,186
Total Output (\$)	-	342,774	342,774

Note: Property tax payments, by definition, produce induced effects only; Labor Income and Output presented in 2013 dollars; Labor Income is a subset of Total Output
 Source: NEI estimates based on City of Homer (2013), and IMPLAN software and database

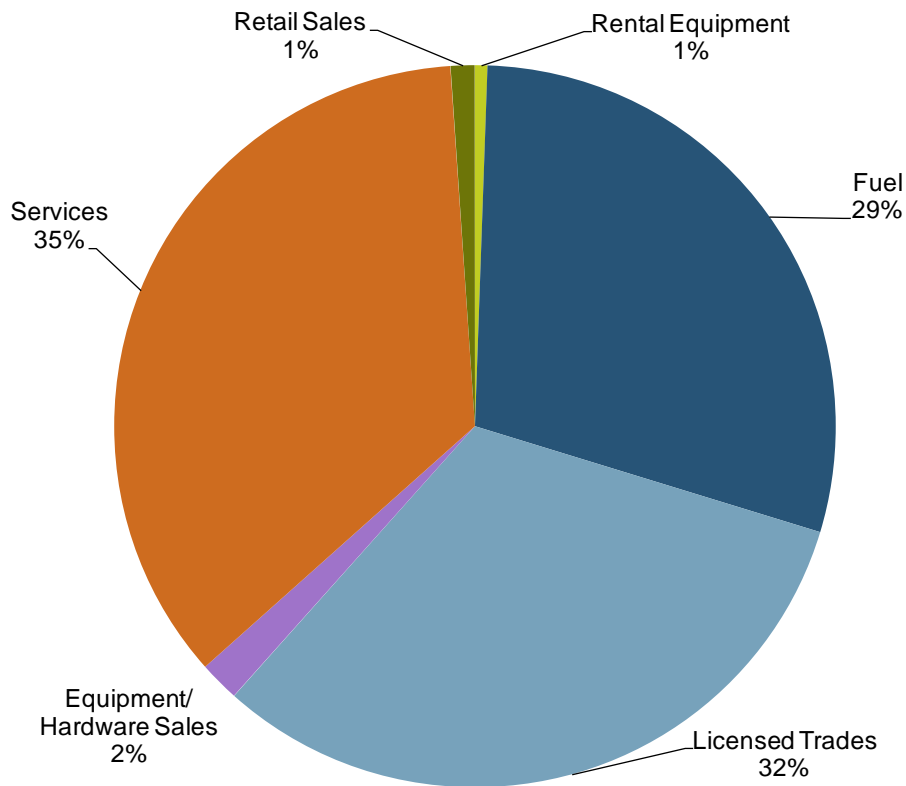
In the following sections we describe the data and analysis that produced these results.

2 Expenditure Data

The expenditure data used to calculate the impacts of the non-tax spending within the Kenai Peninsula Borough were provided by Buccaneer Alaska. Buccaneer provided a spreadsheet summarizing its Endeavour-related spending within the local community. As noted on the data, “Only payment(s) to vendors that have a local office or employ members of the local Homer community were included in the listing,” (Anderson 2013).

Buccaneer’s expenditure data were split into two categories, payments made by Buccaneer Alaska Drilling (BAD) and those made by Buccaneer Alaska Operations (BAO). BAD expenditures are for shipyard activities and reflect one-time, non-recurring expenditures. BAO expenditures are for operational activities and reflect one-time payments for recurring expenses. Both BAD and BAO expenditures were broken-down by identical spending categories; Figure 2 illustrates the combined breakdown of spending by category.

Figure 2 . Buccaneer Alaska’s Endeavour-Related Spending in Homer (2012-2013)



Source: Anderson, 2013

The City of Homer estimates that Buccaneer paid approximately \$577,000 to the Port in the form of fees for dockage, moorage, and water, as well as assorted services such as stevedoring and tug assistance. Communications with Buccaneer revealed that spending on these port fees is included within the BAD and BAO expenditure categories shown in Figure 2. To avoid double-counting, the study team did not calculate the economic impact of spending on port fees separately from the categories shown above.

In contrast to port fees, the expenditure data provided by Buccaneer did not include the Endeavour property taxes paid to the city and borough. The City of Homer provided the property tax breakdown show in Table 3; the drill rig's \$40 million dollar assessed value generated \$454,730 in property tax payments in 2013.

Table 5. Property Tax Invoice Summary, Buccaneer Alaska (2013)

Charge Description	Total Value (\$)	Rate/1000	Total (\$)
Kenai Peninsula Borough	40,241,590	4.5	181,087
City of Homer	40,241,590	4.5	181,087
South Hospital	40,241,590	2.3	92,556
Total		11.3	454,730

Note: Borough code allows the tax revenues for the South Peninsula Hospital Service Area to be used for payment of debt service, purchase of capital equipment, operational expenses of the hospital, and other health care related items within the Service Area.

Source: City of Homer, 2013

3 Input Output Analysis

The economic benefits of Buccaneer’s spending were estimated by quantifying the direct, indirect, and induced effects of local spending on goods and services. The expenditure data described in Section 2 were used as the inputs to an Input-Output (I-O) model used to quantify the multiplier effects of Buccaneer’s activities.

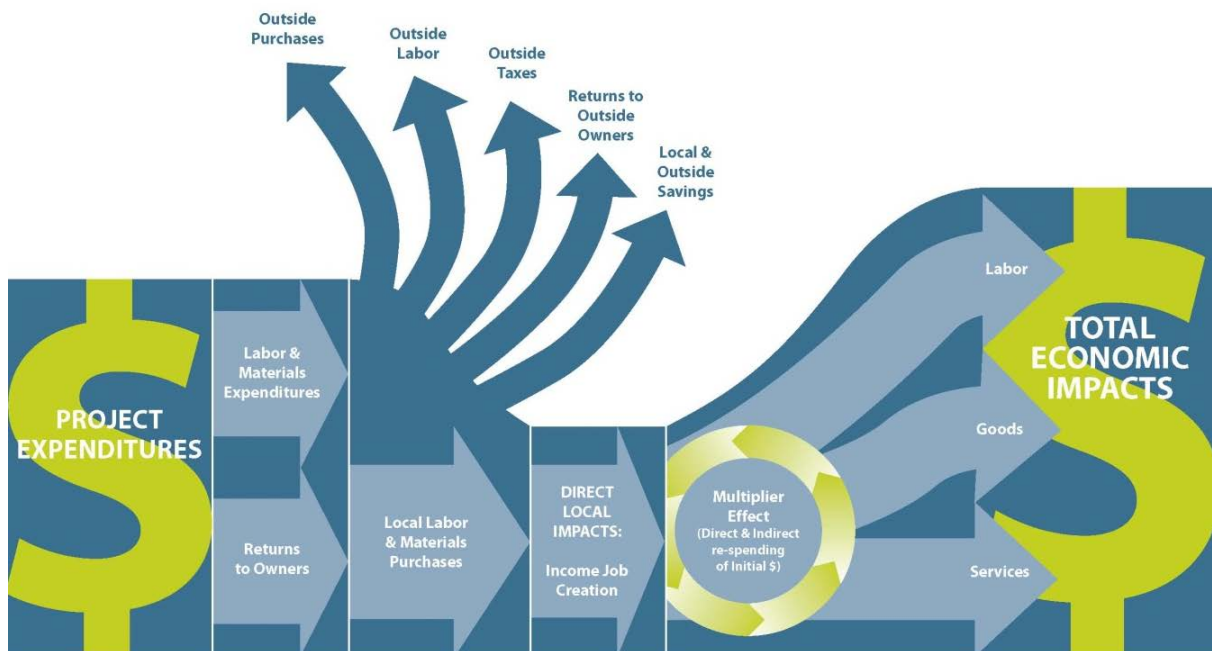
I-O models are economic tools used to measure the effects of an economic activity on a region; using expenditure patterns, tax payments, labor requirements and other economic data they aim to replicate the inter-industry transactions within a community, tracking the flow of money between the industries within a specified economic region of interest. An I-O model can measure how many times a dollar is re-spent in, or “ripples” through, the economic region before it leaks out.

The I-O model yields multipliers that are used to calculate the indirect and induced effects on jobs, income, and business sales/output generated per dollar of spending on various types of goods and services in the study area. To evaluate the economic effects to the state or a particular region, only the “local” (i.e., within the state or within the region) expenditures are used in the model; the rest are considered leakages. More leakages mean smaller multipliers; and the larger the local expenditures, the greater the multiplier effects. The multipliers for any given industry in any given location are unique, based on industry composition and geographic area. In this case, the IMPLAN™ software was used to model the Kenai Peninsula Borough economy, which in turn allowed the study team to estimate the local impacts of Buccaneer’s Endeavour-related spending.

IMPLAN uses specific data on what inputs are needed to produce the goods or services for over 400 industries, and borough-specific data on what industries are available locally from which to purchase those inputs. The most recent (2011) IMPLAN data on multipliers for the Kenai Peninsula Borough were applied for this analysis

Figure 1 illustrates conceptually how the total economic impacts or benefits are determined.

Figure 3. Framework in Evaluating the Total Economic Effects or Impacts of Local Spending



4 References

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