

2016

Pirates of the Caribbean 5

ECONOMIC IMPACT REPORT
PREPARED FOR SCREEN QUEENSLAND



FOCUSED EVENT THINKING

1. Summary of Key Findings /

The key findings from the research of Pirates of the Caribbean 5 include: -

Queensland

- The production of the film provided employment for 2,142 Queensland residents, which represents an estimated 401 FTE's (full time equivalents). This employment generated wages of approximately \$80 million.
- It is estimated 615 people from outside the region worked on the production. These workers were accompanied, on average, by an addition 2.0 people. Therefore, a total of just over 1,850 workers and accompanying people visited the region – creating nearly 161,000 bed nights in Queensland.
- This activity is estimated to have generated incomes in the region (or a contribution to Gross Regional Product) of \$220 million and support a total of almost 1,350 full time equivalents of employment in Queensland.

Figure 1: Summary of the Economic Impacts of Pirates of the Caribbean 5

Category	Gold Coast	Queensland
Generated Visitors	4,237	1,835
Generated Visitors Nights	205,912	160,957
Contribution to Gross Regional/State Product (\$m)	\$166.9	\$220.2
Created Employment (FTE's)		
Project Employment	265	401
First Round	439	524
Induced	349	423
TOTAL	1,054	1,348

Gold Coast

- The production of the film provided employment for 1,195 Gold Coast residents, which represents an estimated as 265 FTE's (full time equivalents). This employment generated wages of approximately \$53 million.
- It is estimated 1,560 people from outside the region worked on the production. These workers were accompanied, on average, by an addition 1.7 people. Therefore, a total of just over 4,200 workers and accompanying people visited the region – creating nearly 206,000 bed nights in the Gold Coast.

- This activity is estimated to generate incomes in the region (or a contribution to Gross Regional Product) of \$167 million and support a total of over 1,050 full time equivalents of employment.
- Residents who live in the Gold Coast and worked on Pirates of the Caribbean 5 were presented with five statements relating to the level of community pride generated by the production. These residents were asked to indicate their level of agreement with each of the following five statements. Overall, most statements rated very high, with 'I feel proud that the Gold Coast was chosen as the location to produce Pirates of the Caribbean 5' (92%) and 'Overall, I feel that the production of the Pirates of the Caribbean 5 is important for the local area' (92%) rating the highest in terms of some level of agreement.

2. Background Information /

2.1 Introduction

IER was commissioned by Screen Queensland (SQ) to undertake an economic impact of the film production - Pirates of the Caribbean 5 (Dead Men Tell No Tales). The Hollywood film was produced on the Gold Coast, Australia over the period late 2014 to mid-2015. Pirates of the Caribbean 5 was supported by film production funds of the Australian and Queensland Governments. This financial support is provided because of the primary and secondary economic impacts that film production activity generates within the local economy. The primary impacts include the employment outcomes generated in the production process (in production and in flow-on impacts) and the associated incomes generated. The secondary impacts are the opportunities for Australians, in the creative industry, to use and further develop their skills through their employment and association with the production process which can then be employed in other creative ventures locally and abroad.

On location pre-production of the film started in late September 2014 with filming undertaken exclusively in Queensland (Village RoadShow Studios, and various locations on the Gold Coast). The production was the largest film production to ever shoot in the country. On January 1, 2015, The Rainbow Gypsy, a 15-year-old replica of an 1897 Scottish bawley, sailed into the Gold Coast to start an extensive refit, which included a new bowsprit and reconfigured decks and cabins in order to become the Dying Gull, a single-masted ghost ship. Filming commenced in February 2015 with ship scenes filmed in front of a giant outdoor green screen in Helensvale, and a film set in the form of a village built in Maudsland. Filming moved to Doug Jennings Park on The Spit for water bound scenes and then to Raby Bay for calmer waters. Filming was completed in mid-2015, with the film then moving to post production.

This study provides an assessment of the economic impact (direct in-scope expenditure) generated for the Queensland and Gold Coast economies as a result of the production. The main data source uses information collected from Screen Queensland and from a survey of those who attained employment on the production. This data was used to provide an estimate of the primary impacts of the film's production on the Queensland and Gold Coast economies. The methodology used is consistent with analyses of film productions and film sector activity in Australia and overseas.

In addition to assessing the economic impacts, IER also measured the level of community pride generated by Pirates of the Caribbean 5. This question was only asked of Gold Coast residents.

2.2 Objectives

This study is designed to illustrate the magnitude and impact of all areas of the production of the Hollywood produced film *Pirates of the Caribbean 5* in terms of both new and local economic impacts to the Gold Coast and Queensland economy.

The study examines the employment opportunity linked tourism value and economic impact including overnight visitor expenditure, direct visitor nights, direct and incremental spending associated with this visitation. This data provides the basis for calculating direct and flow on economic impacts (incomes and jobs) associated with the provision of local employment and supplying activity generated for Gold Coast and Queensland based businesses.

The main objectives of the study were:

1. To provide an independent and reliable assessment of the economic activity and impacts, including production, asset and Film and TV production role information.
2. To provide an estimation of the gross economic benefit, job creation and tourism generation for *Pirates of the Caribbean 5* within the Gold Coast and Queensland economy.

2.3 Methodology

Film and television in Australia is supported by film production funds provided by the Australian (Location and Producer Offsets and specific grants) and Queensland (grant funding) Governments. These supports are provided to stimulate investment in film production because of the primary and secondary economic impacts that film production activity generates within the local economy. The primary impacts include the employment outcomes generated in the production process (in production and in flow on impacts) and the associated incomes generated. The secondary impacts are the opportunities for Australians in the creative industry to use and further develop their skills through their employment and association with the production process which can then be employed in other creative ventures locally and abroad.

The methodology used in this study is consistent with valid analyses of film productions and film sector activity in Australia and overseas¹. Examples of reports that confirm the validity of the methodology include:

- Deloitte Access Economics, Economic contribution of the film and television industry in Australia, Australian Screen Association, February 2015.

¹

It should be noted that there are many studies that overstate the economic impact of film production (see for example <http://www.politifact.com/georgia/statements/2015/aug/07/georgia-department-economic-development/film-industrys-impact-georgia-economy-overstated/>). This study uses a defensible and sound methodology that is consistent with economic theory and cannot be subject to these criticisms.

- Shilling Swift, Economic analysis of screen industry economic and cultural benefits in Western Australia, October 2011, for Screen West.
- Barry Burgan and Simon Molloy, Multipliers and Economic Impact Studies for the Film Industry - A Clarification of Issues and Recommendations as to Appropriate Frameworks, A Report for the Australian Film Commission, March 2005.

The methodological approach used in this report has been employed to:

1. Estimate the net expenditure and employment generated by the production of the film that occurs in Queensland and in the Gold Coast respectively.
2. Allocate the intermediate expenditure as well as the spend on wages to industry sectors in order to determine the first round production and consumption induced impacts.
3. Trace the impact of this first round expenditure through the economy and flow on effects. This impact is measured in terms of: -
 - a. Value added – which is a measure of the generated incomes in the regional economy. Incomes are gross wages and salaries, and gross operating surplus (returns to capital).
 - b. Household income – or the gross wages and salaries component of value added.
 - c. Employment - in full time equivalent terms.

This has been undertaken by applying the first round expenditure to an input-output table of the Queensland and Gold Coast economy respectively – which is used to estimate not only the aggregate impact, but also to identify the industry sectors in which the impact occurs. The input-output tables used have been developed specifically for this study, and are based on the 2012/13 national input-output table – adapted to the respective regions by using a location quotient method². In tracing the impact the following assumptions have been used:

- a. It is assumed that a proportion of the employment outcomes in each region are drawn from unemployed residents and as such the consumption impact is discounted for the replacement effect of other sources of income (the discount applied is 25%)
- b. It is assumed that there is a small degree of supply side constraint which results in some activity being transferred from other industry sectors.

This conservative approach and subsequent adjustments adapts the modelling to account for some of the weaknesses often mentioned in relation to the use of input-output tables (constant returns to scale in production).

Overall, this methodology only considers what are described here as the primary impacts. In addition, there are the skill development impacts from people who work on the production, there are secondary impacts on tourism more generally (the experiential outcomes for general visitors to the Gold Coast who visited the production site, or rubbed shoulders with the stars of the movie etc.).