

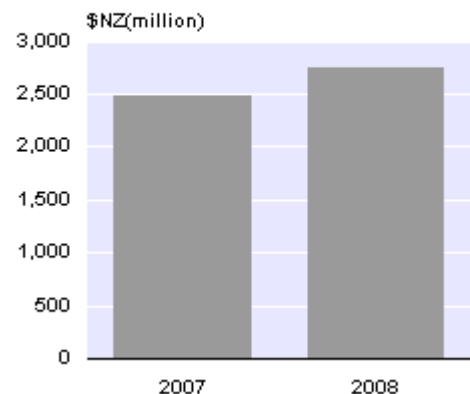
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## Screen Industry Survey: 2007/08

### Highlights

- The New Zealand screen industry recorded total gross revenue of \$2,743 million for the 2008 financial year, an 11 percent increase from the previous year.
- Expenditure in the Wellington region more than doubled from \$128 million in 2007 to \$285 million in 2008.
- Funding received by screen production companies increased 59 percent to \$644 million.
- The United States' contribution to the New Zealand screen production sector increased by 99 percent to \$481 million.

**Gross Revenue for the Screen Industry**  
2007 and 2008 financial years



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See also *Screen Industry Survey: 2007/08* – Media release.

# **Commentary**

## **Screen Industry Survey: 2007/08**

The Statistics New Zealand Screen Industry Survey collects information used to measure the size and nature of the screen industry in New Zealand. The survey is sent to businesses involved with various aspects of the screen production industry.

The objective of the survey is to recognise the contribution that the screen industry makes to the economy, and identify any impediments to and opportunities for sustainable growth within the industry. The data gathered is intended to provide information for government and industry to measure and shape policies, plan, market, and make business development decisions.

This is the first release of screen industry statistics using the Australian New Zealand Standard Industrial Classification (ANZSIC) 2006. For more information, see the 'Technical notes' section of this release.

## **Information about the screen industry**

Screen industry refers to all businesses involved in the following sectors: screen production and post-production, distribution, exhibition and broadcasting.

### **Screen industry**

#### **Production and post-production**

Production is all work leading up to and including development, pre-production and principal photography. Post-production is all activities involved in putting together scenes to make a production complete (eg editing, visual effects, computer graphics, animation and special effects; developing, printing and processing; captioning and sub-titling; film and video transfers of reproduction; and audio and duplication).

#### **Television broadcasting**

The distribution of works through media such as television or the Internet.

#### **Film and video distribution**

The process of distributing the completed work for display to the market. This includes marketing the completed work (eg film, television or software distribution, film library operation, and film leasing).

#### **Film exhibition**

The display of a completed work to the public at preset locations, such as cinemas or museum displays (eg cinema, drive-in theatre and festival operation, and film screening).

## **Screen production sector**

A business in the screen production sector can conduct both contractor and screen production company activity during the same year. For example, while a production company may work primarily on its own projects, it can also undertake contract work for other companies. Similarly, there are times when contractors complete their own screen production activities.

The Screen Industry Survey 2007/08 collects specific data on both screen production company and contractor activity. Reference to the screen production industry includes both screen production company and contractor activities.

For this publication, we refer to screen production and contractor activities as 'business structure'.

## **Business structure**

### **Screen production company**

Creates work intended for the final users (television stations, corporate customers, and advertising agencies or distributors).

### **Contractor**

A freelancer, sole trader, individual or business that provides services or equipment to another screen production entity on contract.

## **Screen production subsectors**

Production activity for both screen production companies and contractors has been broken down into the following subsectors:

- feature films and short films
- television programmes
- commercials
- non-broadcast media
- other.

## **Gross revenue in the screen industry**

The New Zealand screen industry recorded gross revenue of \$2,743 million in the 2008 financial year, an increase of 11 percent from \$2,480 million in 2007. Production and post-production was the most significant sector in the 2008 financial year, accounting for revenue of \$1,266 million, an increase compared with \$1,076 million in 2007.

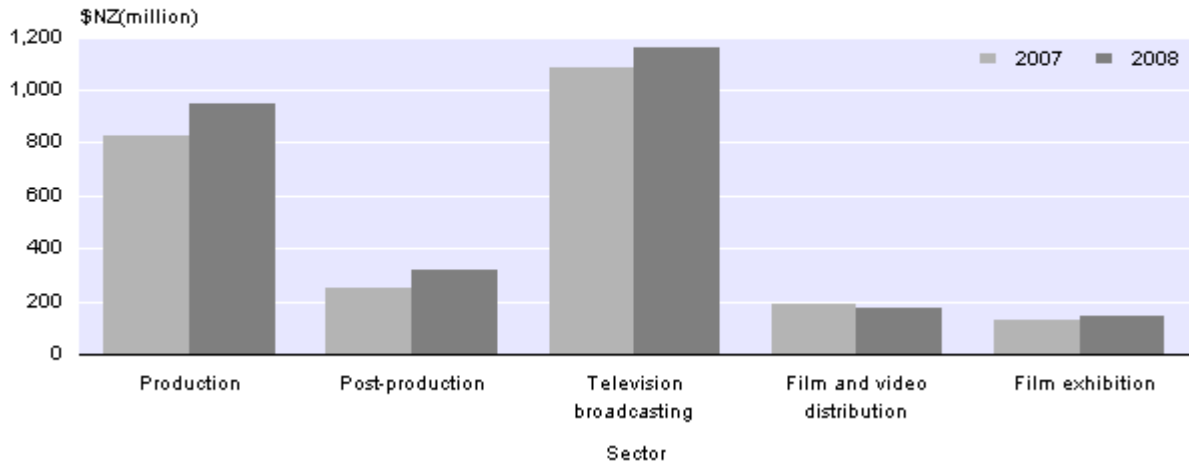
Production revenue accounted for three-quarters of the total production and post-production figure (\$945 million). Post-production contributed \$321 million to the total screen revenue compared with \$253 million in the 2007 financial year.

Television broadcasting increased 7 percent (from \$1,081 million to \$1,155 million). Film and video distribution decreased 9 percent (from \$194 million to \$176 million). Film exhibition increased 13 percent (from \$129 million to \$145 million).

## Gross Revenue for the Screen Industry

*By sector*

2007 and 2008 financial years



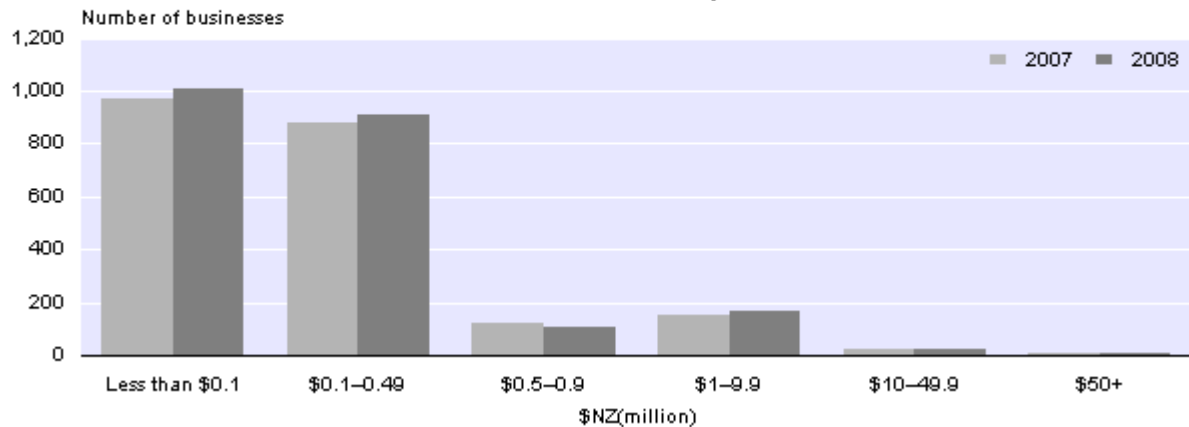
## Screen industry growth and development

The number of businesses recording gross revenue of \$10–49.9 million increased 29 percent to 27 businesses in 2008. The same number of businesses (six) earned more than \$50 million in both the 2007 and 2008 financial years, and 86 percent earned less than \$0.5 million in the 2008 financial year.

## Number of Businesses in Screen Industry

*By gross revenue range*

2007 and 2008 financial years



## Business activity

The number of active businesses in the screen industry increased from 2,157 businesses in 2007 to 2,223 businesses in 2008.

There were 2,106 businesses involved in the production and post-production sector, an increase of 4 percent from 2,028 in 2007. Of those businesses, 1,713 were involved in production work (an increase of 4 percent), while 873 businesses carried out post-production work (an increase of 21 percent).

## Location of screen industry businesses

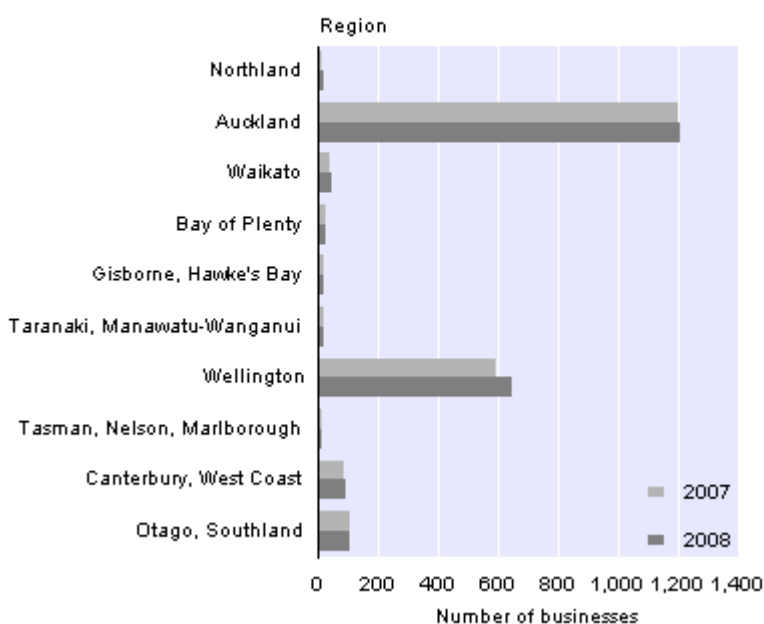
The physical location of screen industry businesses is obtained using the region where each business is situated. In the case of a business operating out of various regions, the region of the business with the largest rolling mean employment count (RME) is taken as the main region. Location data for the screen industry covers all 2,223 businesses.

The Auckland and Wellington regions again supported the largest proportion of screen industry businesses. When combined, they make up just under three-quarters of the total number of businesses. The total in these regions increased from 1,797 in 2007 to 1,860 in 2008. The South Island represents 10 percent of screen industry businesses.

### Location of Screen Industry Businesses

*By region*

2007 and 2008 financial years



## Gross revenue for the screen production sector

### Screen production companies by subsector

Gross revenue received by screen production companies includes funding, sales income, payments and other financing arrangements. The total gross revenue for screen production companies in the 2008 financial year was \$932 million, a 27 percent increase from \$731 million in 2007.

Screen production companies generated just under three-quarters of the total gross revenue within the screen production subsectors. Feature films made the highest contribution to gross revenue for screen production companies with \$487 million. The 2007/08 questionnaire was changed so that feature films revenue could be split from the previously combined feature films and short films grouping – these are the first results from that split.

### Contractors by subsector

For the 2008 financial year, contractors recorded total gross revenue of \$334 million, a 3 percent decrease from \$345 million in 2007. Feature films was the largest screen subsector for contractors with revenue of \$150 million.

### Gross revenue for screen production companies by country

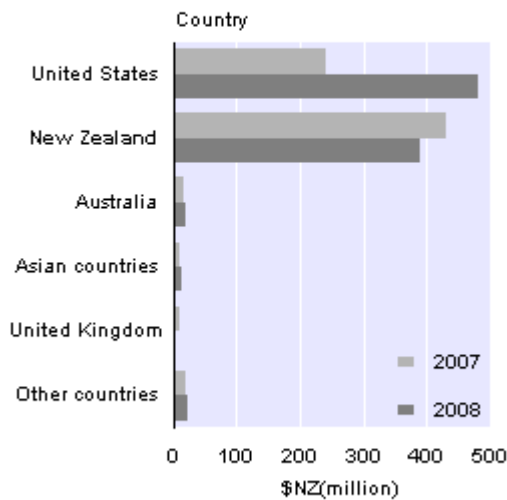
Of the total gross revenue for screen production companies (\$932 million), domestic sources contributed 42 percent compared with 59 percent in 2007.

International revenue sources increased by 79 percent to reach \$542 million. United States' revenue has almost doubled compared with 2007, recording an increase of 99 percent (from \$242 million to \$481 million). Revenue from the United Kingdom had a large decrease of 70 percent (from \$10 million to \$3 million).

### Gross Revenue Received by Screen Production Companies

*By country of origin*

2007 and 2008 financial years



**Note:** Screen production companies are a subset of the screen production sector.

### Funding screen production companies received

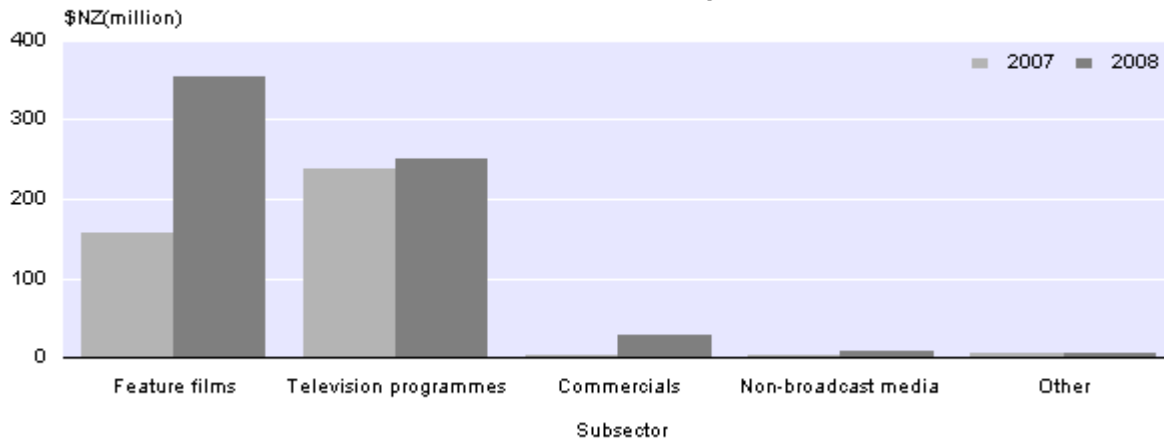
Funding is the financial investment made by government or private organisations (located in New Zealand and overseas) towards the production of a particular project or series of projects to help with costs and facilitate the production. Funding is a subset of revenue and is included within the gross revenue figure.

Funding increased 59 percent from \$406 million in 2007 to \$644 million in the 2008 financial year. International funding has more than doubled from \$173 million in 2007 to \$368 million in 2008. The largest contributor was funding received from the United States (\$340 million). New Zealand funding increased to \$276 million, up 18 percent from \$233 million in 2007.

Feature films received the highest level of funding with \$353 million, making up over half of the total funding received. Television programmes followed with \$249 million, a 5 percent increase compared with the 2007 financial year.

## Funding Received by Screen Production Companies

*By screen subsector*  
2007 and 2008 financial years



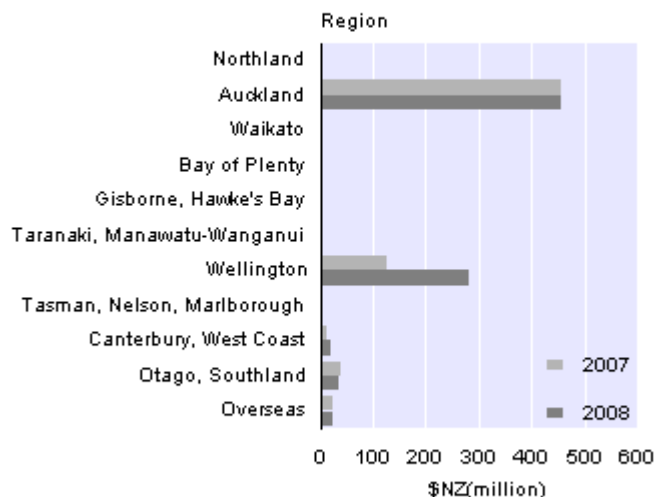
**Note:** Screen production companies are a subset of the screen production sector.

## Expenditure of screen production companies

Expenditure in the Wellington region more than doubled with 222 businesses spending \$285 million, compared with 201 businesses spending \$128 million in 2007. The total expenditure of screen production companies in 2008 was \$875 million, an increase compared with \$674 million in 2007. Of the total expenditure, just over half (\$491 million) was spent in the Auckland region by 363 businesses.

## Expenditure of Screen Production Companies

*By region*  
2007 and 2008 financial years



**Note:** Screen production companies are a subset of the screen production sector.

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**Next release . . .**

Further results will be published in August 2009.

## **Technical notes**

### **Background to the Screen Industry Survey release**

The Government has identified that creativity, imagination, and innovation are major driving forces for sustainable economic growth. The Screen Industry Survey is part of an overall Government strategy to enhance the collection of information to support the screen industry. The overall purpose of the survey is to recognise and establish an accurate assessment of activities within the screen industry. The Screen Industry Survey aims to determine the full contribution of the industry to the New Zealand economy, and to identify any impediments and opportunities for sustainable industry growth.

The Screen Industry Survey was sent to businesses involved in aspects of the screen industry. The survey collected information to measure the size and nature of the industry and to identify areas for future growth and development.

### **Methodological change to the 2007 screen industry data**

The 2007 data differs from what has previously been published as it has been reprocessed under different criteria. The 2006/07 Screen Industry data had incorrect weights applied to adjust for non-response, and the weights have now been corrected. As well, changes made to the weighting cell methodology for the 2007/08 Screen Industry Survey have also been incorporated, which includes the implementation of the Australia New Zealand Standard Industrial Classification 2006 (ANZSIC 06). These changes mean that the 2007 data shown in this release are consistent with the 2008 data shown in this release, allowing comparisons to be made between the two years.

The 2005/06 Screen Industry data was also affected by the incorrect weights, and these will be reprocessed and published in time for the release of more results in August 2009.

### **Reference period**

The reference period for the survey was the 2008 financial year. For businesses with balance dates falling between 1 January and 30 September, this is the financial data for the year ending 2008. For businesses with balance dates falling between 1 October and 31 December, this is the financial data for the year ending 2007. Given the transitory nature of businesses in the industry, any businesses that 'ceased' (ceased operating) before 1 April 2007 or 'birthed' (started up) after 31 March 2008 were excluded from the population.

### **Introduction of a new industrial classification for 2007/08**

This is the first official publication of the Screen Industry Survey results ANZSIC 06 it replaces the 1996 version of this classification (ANZSIC 96). Previous Screen Industry Surveys were designed and published on an ANZSIC 96 basis, though the Screen Industry Survey 2006/07 was designed under both ANZSIC 96 and ANZSIC 06 to allow for the impact of the changed classification to be measured. The Screen Industry Survey 2006/07 has been reprocessed under ANZSIC 06 and this release presents results from both the 2006/07 and 2007/08 years on an ANZSIC 06 basis to allow the trends in results to be shown over this period.

The development of a new version of ANZSIC has been driven by changes in the structure, composition and organisation of industrial and business activities in Australia and New Zealand. Significant technological changes since ANZSIC 96 was developed have affected the way industry and businesses operate. In addition, industries undertaking new activities have emerged, requiring a review of ANZSIC 96 and the development of a more contemporary version of the classification to better reflect the new economy. More information about [ANZSIC 06](#) is available on our website.

The conversion of the Screen Industry Survey 2007/08 to ANZSIC 06 was completed using the following steps.

- the sample for the Screen Industry Survey 2006/07 was designed on both an ANZSIC 96 and an ANZSIC 06 basis
- the analysis of the Screen Industry Survey 2006/07 data was completed on an ANZSIC 96 basis and published in the 2006/07 release
- the sample for the Screen Industry Survey 2007/08 was designed and optimised on an ANZSIC 06 basis
- weighting and imputation cells for the Screen Industry Survey 2007/08 were reviewed and created on an ANZSIC 06 basis
- the analysis of Screen Industry Survey 2006/07 and 2007/08 data was completed on an ANZSIC 06 basis.

The following table provides an indication of the affect of the change from ANZSIC 96 to ANZSIC 06 using data collected in the Screen Industry Survey 2006/07.

<b>Gross Revenue for the Screen Industry 2007</b>		
Sector	ANZSIC 96 (R)	ANZSIC 06
	\$NZ(million)	
Production and post-production <sup>(1)</sup>	1,075	1,076
Production	822	823
Post-production	253	253
Television broadcasting	1,081	1,081
Film and video distribution	194	194
Film exhibition	129	129
<b>Total</b>	<b>2,479</b>	<b>2,480</b>

(1) Production and post-production consists of contractors and screen production companies.

**Note:** Figures may not sum to totals due to rounding.

**Symbol:**

R = Revised

## Population

The population is defined as all economically significant New Zealand businesses involved in any screen industry activity. Specifically, the industry encompasses all film, video, television, commercial, music video, and non-broadcast media activities in the aspects of production (including pre-production), post-production, distribution, exhibition, and broadcasting. The population for the Screen Industry Survey 2007/08 was 2,545 enterprises.

All businesses must be found on the Statistics New Zealand Business Frame. The Business Frame defines a business as economically significant if it meets one or more of the following criteria:

- has greater than \$30,000 annual GST expenses or sales
- had more than two employees over the last year
- is in a GST-exempt industry
- is part of a group of businesses.

For the purpose of this survey, the population included all businesses that meet the economic significance criteria and fall within the ANZSIC 06 classifications listed below.

### **J5511 Motion Picture and Video Production**

Units mainly engaged in producing motion pictures, videos and television programmes or commercials. These productions are recorded and stored on a variety of analogue or digital visual media such as film, video tape or DVD.

### **J5512 Motion Picture and Video Distribution**

Units mainly engaged in acquiring distribution rights and distributing motion pictures and videos. These products are distributed (through leasing and wholesale channels) to a range of exhibitors such as motion picture theatres and television stations using a variety of visual media.

### **J5513 Motion Picture Exhibition**

Units mainly engaged in screening motion pictures using a variety of visual media. Included in this class are units screening productions at festivals and other similar events.

### **J5514 Post-production Services and Other Motion Picture and Video Activities**

Units mainly engaged in providing post-production services and other motion picture and video activities, including specialised motion picture or video post-production services such as editing, film/tape transfers, titling, subtitling, credits, closed captioning and computer-produced graphics, animation and special effects, as well as developing and processing motion picture film.

### **J5621 Free-to-Air Television Broadcasting**

Units mainly engaged in free-to-air television broadcasting of visual content, in the form of electronic images together with sound, through broadcasting studios and facilities. These units may also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs on a pre-determined schedule. Transmissions are made available without cost to the viewer.

### **J5622 Cable and Other Subscription Broadcasting**

Units mainly engaged in broadcasting television programs on a subscription or fee basis (such as subscription cable or satellite television broadcasting) to viewers.

## **J6020 Other Information Services**

Units mainly engaged in providing other information services.

### **Additions**

To ensure that as much of the target population as possible was covered in the survey, the ANZSIC classifications were supplemented with listings in The Data Book (New Zealand's Screen Production Directory) that were matched to the Business Frame.

### **Exclusions**

Any activity not directly related to the process of making or screening a screen production was excluded from the population. Activities related to acting and all auxiliary services not directly involved in these activities are excluded. Other examples of excluded activities are all services to crew (accommodation and catering), services to office management (accounting and legal), and services that support the industry but are not involved in screen productions (educational bodies, film libraries, and film trusts). Businesses that supply services to the industry but not on an exclusive basis were also excluded. These businesses (which include builders and vehicle hire) are excluded as information is unlikely to be easily isolated from other business activities.

### **Data collection**

The Screen Industry Survey is a postal census of all known businesses meeting the population selection criteria. The survey population was selected by targeting seven Australian New Zealand Standard Industrial Classification (ANZSIC) codes on the Statistics New Zealand Business Frame supplemented by listings in The Data Book (New Zealand's Screen Production Directory). This enables the survey population to capture businesses that are involved in all aspects of the screen industry, but which would normally fall out of scope based on ANZSIC classification criteria.

### **Response rate**

The target response rate for the Screen Industry Survey 2007/08 was 75 percent for units in the population list. Businesses that were identified as key respondents (predominantly based on GST figures) required a response rate of 100 percent.

An overall response rate of 79 percent was achieved, including 100 percent of key businesses.

### **Non-response and imputation**

The following gives an outline of the imputation methodology used in the Screen Industry Survey 2007/08.

#### **Unit and item non-responses**

The unit non-response criteria were that the business:

- did not return a form or it returned a blank form
- returned a form but did not answer the key questions on being a producer, contractor, distributor, exhibitor or broadcaster.

These units were not imputed for, but were considered a complete non-response and were compensated for by using weight adjustment. The weight adjustment is used to 'rate up' the responding firms to compensate for the non-responding firms in the same weighting cell. Initial selection weights are multiplied by a non-response factor to give the adjusted weight.

Weighting cells were based on ANZSIC, annual GST turnover, region, and if they were a key business.

Responding units that did not complete one or more questions that they should have were treated as item non-responses and had their missing variables imputed.

## **Imputation of item non-response – numeric variables**

### **Imputation cells and merging**

Units were assigned to imputation cells for the calculation and assignment of imputation factors. Imputation cells were based on the main activity of the business, annual GST turnover, region, and if they were a key business.

For each variable there was a minimum number and percentage of linked units within the imputation cell for the imputation method to run in that cell for that variable. This was to ensure the robustness of the imputation factor calculations. If an imputation cell did not reach these criteria then it was merged before imputation, following a list of merging preferences, until sufficient responses were achieved. The imputation factor was then calculated from all linked units within the merged imputation cell.

### **Imputation of numeric variables**

The imputation methods used were weighted mean imputation and donor imputation.

With the weighted mean method, a weighted mean is calculated from linked responding units for each numeric linecode within each imputation cell. Non-responding units are then imputed with the weighted mean for their imputation cell. Weighted mean imputation was used to impute totals.

Donor imputation randomly selects a donor from within each imputation cell. The non-respondent is then imputed with the value(s) from the donor. Donor imputation was used to impute components and percentages so that the distribution was maintained.

### **Imputation of categoric questions**

For categoric imputation, the method used was donor imputation, where a donor is randomly selected within each imputation cell and the non-respondent is imputed with the value(s) from the donor.

## **Unlinking and special treatment**

### **Unlinking**

Influential responses were excluded from the imputation factor calculations for numeric variables by unlinking. There are three kinds of unlinking:

- Automatic exclusion – due to logic, a unit that is non-response (unit or item), specially treated or not required to answer that question.
- Automatic unlinking – due to influence, units with undesirable influence on the imputation factor calculation for a variable are automatically detected and unlinked for that variable (with the ability for manual declining of this). The checks are done at the imputation cell level or merged imputation cell level and are carried out separately for each variable.
- Manual unlinking – due to influence, additional units with undesirable influence on imputation factor calculations that are not automatically detected can be unlinked.

## **Special treatment**

Special treatment candidates are identified as outliers using an inter-quartile check. The checks are carried out separately by variable. However, if a unit is accepted for special treatment for one variable then it will be specially treated for all variables. If a unit is specially treated, then its final weight is set to 1 and it is unlinked for all imputation factor calculations. If a unit is not specially treated, then its final weight is its adjusted weight.

## **Data quality**

Given that the Screen Industry Survey is a census rather than a sample, the data is not subject to sample variability; therefore, there is no sample error. However, other inaccuracies, such as non-sampling errors, may affect the data.

Non-sampling error occurs for reasons such as respondent error, interpretation variations, frame quality and errors in processing. Imputation methodologies are used to incorporate non-respondents, which may introduce some error to results. While every effort is made to minimise these types of error, they may still occur. It is not possible to quantify their effect.

Every effort has been made to reduce non-sampling error to a minimum by careful design and thorough testing of questionnaires, efficient operating systems and procedures, and appropriate methodology.

In analysis of the results, the survey data have been compared with annual reports, websites, trade data and other indicators published by Statistics NZ. Where the survey results differed substantially, more detailed study of the data was made. In some cases, however, exact comparisons are not possible due to differences in timing or definition.

## **Confidentiality**

Data published from the Screen Industry Survey 2007/08 must conform to the provisions of the Statistics Act 1975, which requires that all statistical information published by Statistics NZ shall be arranged to prevent any individual being identifiable. For more information on Statistics NZ confidentiality rules please see our website ([www.stats.govt.nz](http://www.stats.govt.nz)).

## **Presentation of numerical totals**

In order to preserve the confidentiality of respondents, counts are randomly rounded to base 3. When data in a table has been randomly rounded to base 3, every value in the table is a multiple of 3. The probabilities of rounding up or down are set so that in the long run the expected value, after rounding, equals the original count. The randomness of this kind of rounding may result in a total that differs slightly from the sum of the individual cells contributing to this total.

## **Concepts and terms**

### **ANZSIC**

The Australian and New Zealand Industrial Classification (ANZSIC).

### **Broadcasting**

The distribution of works through media such as television or the Internet.

### **Business Frame**

A register maintained by Statistics New Zealand of all businesses operating in New Zealand.

### **The Data Book**

The Data Book is New Zealand's only directory of the screen production industry. It provides free listings for businesses and individuals involved in screen production in New Zealand.

See: <http://www.databook.co.nz/>

### **Digital technology**

Digital technology is measured in terms of the use of digital recording formats (for example DVCAM), digital distribution (for example internet distribution), digital exhibition (for example digital cinema), and digital broadcasting (for example digital television broadcasting).

### **Distribution**

The process of delivering the completed work for display to the public market. This includes marketing of the completed work.

### **Economically significant business**

A business is considered economically significant if it has an annual GST sales (or purchases) figure of at least \$30,000 at the time of population selection.

### **Employees**

The number of employees is defined by a business's rolling mean employment (RME) count. RME is a 12-month moving average of the monthly employment count (EC) figure. The EC is obtained from taxation data.

### **Enterprise**

A business or service entity operating in New Zealand. It can be a company, partnership, trust, estate, incorporated society, producer board, local or central government organisation, voluntary organisation or self-employed individual.

### **Exhibition**

The display of a completed work to the public at pre-set locations, such as cinemas or museum displays.

### **Funding**

Direct investment made by government and private organisations specifically targeting a single project or series of projects to aid with costs and enable production. This incorporates production investment provided to businesses.

## **Goods and services tax (GST)**

Respondents are asked to exclude GST if possible in the financial figures provided in the questionnaire. If they have not, Statistics New Zealand removes GST to make all businesses comparable.

## **Gross revenue**

Gross revenue is used to define total turnover within the industry, it measures all transactions and money flows within the industry, including internal transactions. The industry is measured using turnover as opposed to net revenue earned by the industry.

## **Imputation**

If there is any non-response in a survey we may impute, whether implicitly (by 'rating up') or explicitly (by unit record imputation). Rating up is when the estimate is derived from the achieved sample with the weights adjusted accordingly.

## **Non-broadcast media**

Works intended for a specialised audience, such as corporate, marketing, training or educational media.

## **Post-production**

All activities involved in putting together scenes to make a production complete, for example editing, duplication, visual effects, audio.

## **Production**

All work leading up to and including filming. This includes development, pre-production and principal photography.

## **Screen industry**

This term is used for all aspects of the industry included in the Screen Industry Survey 2007/08. Screen industry refers to all businesses involved in screen production and post-production, distribution, exhibition and broadcasting.

## **Screen production sector**

All stages involved in completing production activity within the screen industry, including production and post-production work in all sub-sectors of film, television, commercials, music videos and non-broadcast media.

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## **Timing**

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## Tables

The following tables are printed with this Hot Off The Press and can also be downloaded from the Statistics New Zealand website in Excel format. If you do not have access to Excel, you may use the [Excel file viewer](#) to view, print and export the contents of the file.

1. Gross revenue for the screen industry, by sector
2. Number of businesses in the screen industry, by gross revenue range
3. Screen industry businesses, by sector
4. Location of screen industry businesses, by region
5. Screen production industry businesses, by business structure and subsector
6. Gross revenue received by screen production industry subsectors, by business structure
7. Gross revenue and funding received by screen production companies, by country of origin
8. Funding received by screen production companies, by subsector
9. Expenditure of screen production companies, by region