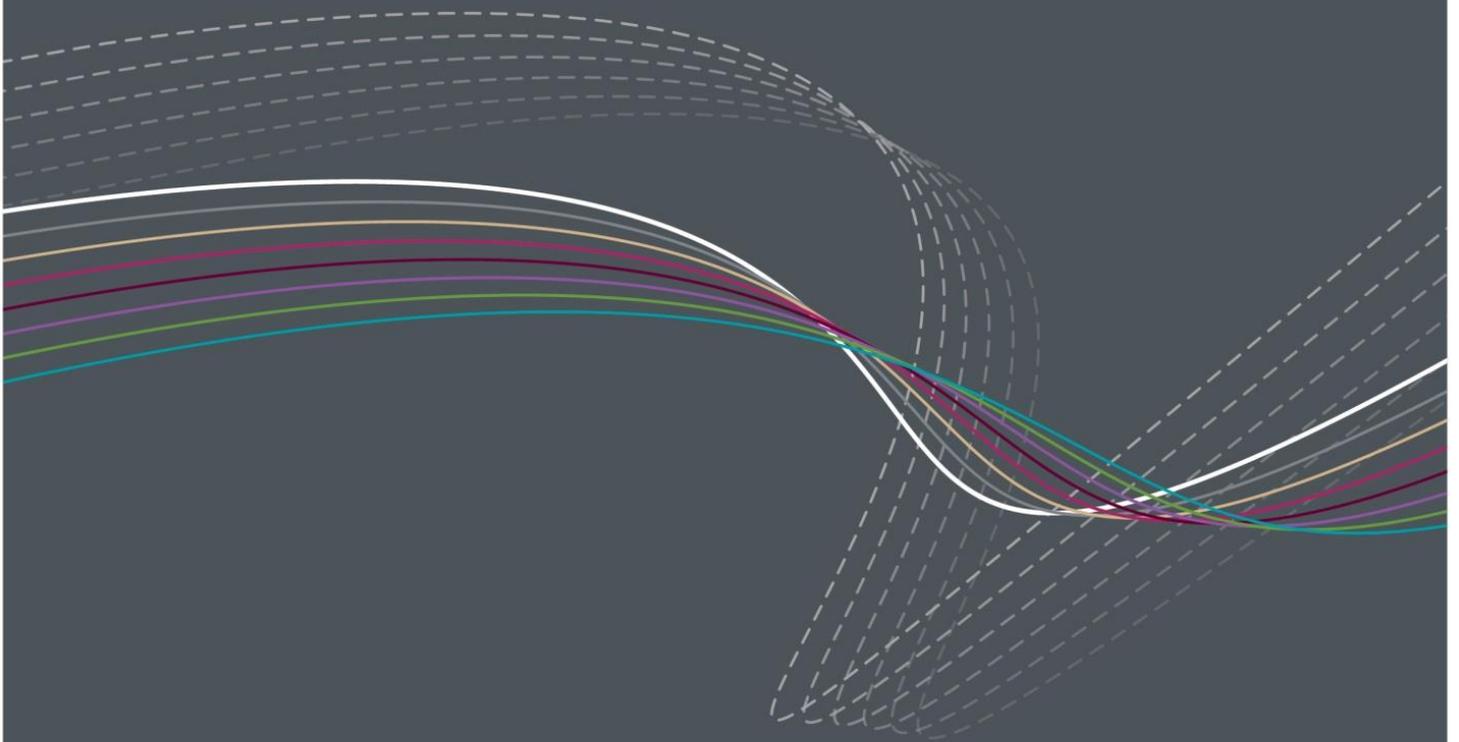


QUEENSLAND TREASURY

# Guidelines for estimating the net benefits of regulatory reforms

April 2016





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## GLOSSARY OF KEY TERMS

<b>Regulatory burden</b>	The costs government regulation imposes on business/the community
<b>Red tape</b>	Excessive government regulation
<b>Net benefits of reforms</b>	The benefits minus the costs of changes to existing regulation
<b>Baseline scenario</b>	The costs incurred by business/the community before reform
<b>Reform scenario</b>	The costs incurred by business/the community after reform
<b>Compliance costs</b>	The costs of meeting regulatory requirements and demonstrating compliance with them
<b>Fee costs</b>	Monies that must be paid directly from business/the community to the Government or a public agency as part of a regulation
<b>Delay costs</b>	The expenses and/or loss of income incurred during a regulatory or administrative procedure or transaction with government
<b>Third party</b>	Business/individual not directly impacted by the regulatory reform

## Introduction

The Queensland Government has a strong focus on growing Queensland's economy. A key aspect of this is reducing unnecessary regulatory burden on business, community and government to improve efficiency, competitiveness and productivity.

Queensland Government agencies (agencies) continually identify and implement red tape reduction activities; however, this work is not always communicated effectively or in a tangible way to express their benefits. By estimating the net benefits of reforms, and communicating these to business and community, agencies can help stakeholders understand how the reform affects them.

These guidelines outline a simple approach which agencies can adopt to quickly assess reform benefits. This approach is based on cost-benefit analysis principles, and provides a simple, yet robust and consistent approach to constructing reasonable estimations of reform benefits.

The following pages outline steps to assist officers to estimate the net benefits of reforms. Examples have been included and parameters established to assist readers.

The approach is not mandatory, but provides a framework for helping officers think through the impacts of reform. Agencies retain responsibility for how the information is used and deciding whether it should be made publicly available. Queensland Treasury will not review or report red tape savings, and will engage to assist departments where appropriate.

This approach does not replace the need for a more detailed or full economic analysis of larger or more technical reforms. In these cases, Queensland Treasury's Economics Division should be contacted to provide advice on an appropriate approach and methodology at [regreform@treasury.qld.gov.au](mailto:regreform@treasury.qld.gov.au).

## How the guidelines complement other Government resources and processes

These guidelines are intended to be distinct from, but complement, other Queensland Government resources including *The Queensland Government Guide to Better Regulation* and the *Program Evaluation Guidelines (PEG)*.<sup>1</sup> As these guidelines offer a simplified and focused approach to estimating the net benefits of reducing red tape to stakeholders, they do not replace the need for agencies to undertake a more considered analysis of regulation, policies or programs during policy development or evaluation. However, they may assist in providing valuable information to contribute to broader analyses such as the Regulatory Impact Analysis (RIA) process or evaluation, and the framework can be adapted for more general cost-benefit purposes. Similarly, if quantification of net benefits of red tape reduction is done by departments as part of a Preliminary impact Assessment (PIA) or RIA, a separate analysis of the benefits of red tape reduction may not be necessary.

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<sup>1</sup> Further information on these resources is in Appendix A

## Scope

Any Queensland Government reform that reduces the burden of complying with regulation is within the scope of these guidelines. This can include reforms instigated in cooperation with other jurisdictions or the Commonwealth, or affecting local government. As noted above, Queensland Treasury will not review or report the benefits of red tape reduction. It is a matter for agencies to determine whether to estimate such benefits.

Assessment of the net benefits of reforms can be undertaken when a reform is in the early stages of development, currently underway or completed. An advantage of assessing net benefits at earlier stages is it can help to identify unintended consequences of the reform.

Reforms can be regulatory or non-regulatory in nature. An example of a non-regulatory red tape reduction is where an administrative process is moved online without any need to change regulatory requirements. In this case there is no regulatory reform but the cost of complying with this process is reduced by saving time.

Examples of regulatory requirements within scope include:

- compulsory registration or licensing requirements for business or occupations
- required qualifications, experience or memberships for prescribed organisations
- information and reporting required to regulators
- obligations to keep prescribed information records
- the supply or display of prescribed information or notices by providers of goods and services
- the payment of a fee, charge or mandatory contribution to government or a third party
- obligations to obtain an approval.

Examples of non-regulatory requirements in scope include:

- changes to the administration of procurement and grants applications
- changes in the administration of benefit payments
- any other non-regulatory interaction between government and business or the community, such as collecting and dispersing information to the public.

Should additional information be required to understand whether the reform is in scope it may be necessary to consult with the operational area that works with the reform or with affected stakeholder groups. Questions to ask include: Why was it implemented? What was the policy intention? What is the initiative trying to fix or improve?

For further guidance, contact Queensland Treasury's Economics Division.

### Examples of initiatives in scope

The following examples are provided to aid understanding of the key stages in assessing red tape reduction reforms. These simplified examples will be used at various points throughout the document, and referred to by number. Note these examples are used for illustration only and are not an indication of government policy.



#### Example 1 – Streamlined forms

A government department has been lobbied by community organisations and individual customers to make it easier to complete forms. In response, the department has reduced the length of the forms, without losing any of the necessary information. This saves time for the community organisations filling in the forms and the government employees processing them, and will also reduce the administrative costs the community organisation incurs printing them.



#### Example 2 – Cheaper licences

To reduce the cost of living, the government is considering reducing the cost of a particular licence. This would save money for a large number of individuals. It would also mean a reduction in government revenue from the licence.



### Example 3 – Streamlined approvals

Businesses have raised concerns with government that the time taken by government to process certain applications is too long and should be shortened. In response, the government has proposed to assess the existing application process to identify where the process may be streamlined, which could save businesses and government time and money.

## Methodology

As the guidelines use similar principles to a standard cost-benefit analysis, they compare the status-quo or baseline scenario with the reform scenario. Changes must be identified and costs and values allocated to three broad stakeholder groups: business, community and government.

The **baseline scenario** is the costs businesses and individuals face without the reform.

The **reform scenario** is the costs that businesses and individuals would face with the reform in place.

The **net benefits of the reforms** (or red tape savings) are the difference in costs between the **baseline scenario** and the **reform scenario** – the cost changes brought about by the reform.

A step-by-step process for how to implement the methodology, including some examples is included below.

Step 1 - Identify the stakeholders affected by the reform

Step 2 - Identify all the impacts of the reforms on these stakeholders

Step 3 - Estimate the impacts of the reform

Step 4 - Calculate the annual average impacts of the reform

## Step 1 – Identify the affected stakeholders

Reforms can impact a number of different stakeholders, and consideration should be given to the potential impacts on all key stakeholders.

Key stakeholder groups include; individuals, businesses, not-for-profit organisations and the local, State and Federal governments. Identifying more specific stakeholder groups (e.g. drivers licence holders, childcare centres, farmers, etc.) is essential to determining and estimating the number of and individuals and businesses impacted by the reform.

Impacts on government should be captured in the analysis and estimation (steps 2 and 3) for completeness and to ensure the impacts on government are understood. However, the focus of the government's red tape reduction is benefits to businesses and the community. Therefore, to best communicate these benefits, impacts on government should be excluded from the final figure reported (step 4).



### Example 1 – Streamlined forms

A department has identified that reducing the length of forms may save time and money for community organisations and government.

Data from the government shows that in 2013 before the reform was introduced, there were 1,000 community organisations in Queensland that were required to fill in these forms. The forms were generally filled in by administrative officers at these organisations.

For the government, public servants are responsible for processing the forms. The department identified that the processing of forms was usually done by a team of departmental staff at grade A05.

## Step 2 – Identify the impacts

Once affected stakeholders have been identified, the impacts on these stakeholders can be assessed. The step allows the author to describe in detail what the effects on different stakeholder groups would be.

It is critical to describe the change in process. The changes and resulting impacts should be explored and explained in detail. Estimations or approximations are considered appropriate. If appropriate information is not available, assumptions can be made to allow approximations in the first instance, however, greater consultation with relevant stakeholders should be sought to justify and test the realism and appropriateness of such assumptions.

Impacts tend to fall into three main categories: compliance costs, fee costs, and delay costs. These are described in more detail below.

In some cases, a reform may result in indirect impacts to third parties not directly targeted by the reform. Indirect impacts, including competition impacts, should not be captured for red tape reporting purposes. For example, as a result of a red tape reduction reform, some businesses no longer need to buy a good or service from a third party supplier. It is assumed that third parties experiencing reduced demand for their goods or services will ultimately reallocate resources towards other productive activities, so this type of indirect impact shouldn't be included in the estimation of reform benefits.

### Compliance costs

When a business or individual has to comply with government regulations, this takes time and effort. To meet government regulations, businesses might have to provide certain training for their staff or produce reports and information. Individuals may have to complete forms to demonstrate compliance with regulations. Compliance costs are the costs of meeting requirements, and of demonstrating that they have been met.

Costs incurred when meeting requirements can include the costs of training employees, buying or maintaining equipment, and meeting specific product or quality standards mandated by government.

Some examples of initiatives that may reduce the costs of meeting requirements are:

- no longer requiring certain equipment to be purchased
- reducing packaging requirements.

Costs incurred when demonstrating that government requirements have been met, may be in the form of paperwork-costs when providing information to the government or regulator, and the time costs of preparing these documents.

Some examples of initiatives that may reduce the cost of demonstrating compliance are:

- no longer requiring certain information to be submitted
- moving from collecting information through paper forms to online forms.



### Example 1 – Streamlined forms

There are several compliance cost impacts associated with reducing the number of forms to be completed which should be explored further. Following a review, the department identified that the number of forms could be reduced from 20 to 10 pages.

The forms took on average 30 minutes for administration officers in community organisations to complete, but the new forms now only take 15 minutes. They are completed in six organisational categories by each community organisation, each quarter.

Community organisations also no longer need to pay for printing costs associated with the 10 now redundant pages. Desktop research suggests average paper and ink costs are estimated to be \$0.10 per sheet.

For government employees who are responsible for reviewing the forms will now be able to do so more quickly, with review times reduced from 15 to 10 minutes, saving 5 minutes per form.

## Fee costs

Fees are monies that must be paid directly from business/individuals to the government or a public agency as part of a regulation. These could be described as fees, levies, licence or permit charges, other charges, fines and other mandatory payments. Fee costs do not include taxes and duties. Even though a reduction in fees will usually result in a reduction in government revenue, it is still considered a reportable red tape reduction benefit to either business or the individual/community. The fee impacts on government should be analysed, but not reported in the final red tape reduction figure.

Some examples of initiatives that may reduce fee costs incurred by regulation are:

- reducing the fee for a particular licence/permit
- reducing the fine for a particular offence.



### Example 2 – Cheaper licences

The government is considering reducing a licence fee, to reduce the cost of living for Queenslanders. A government department is analysing the impacts of reducing the licence fee from \$100 to \$90. This would save money for many individuals applying for the licence. It would result in reduced revenue for government as a result.

## Delay costs

Delay costs are the expenses and/or loss of income incurred during a regulatory or administrative procedure or transaction with government, such as lost time and capital awaiting the approval of licences, or the outcome of a tender process. This will generally involve processes that prevent the business/organisation from commencing its operations, tying up the resources so they are unable to be used elsewhere. For example, streamlining approvals can expedite project developments and reduce costly time delays for business.

Some examples of initiatives that may reduce delay costs are:

- reducing the length of an approval process for a licence/permit
- reducing the length of time taken to assess applications for grants or government contracts.



### Example 3 – Streamlined approvals

Business groups and a government department are discussing how to improve an application process so businesses can start trading more quickly. One option is to reduce the time taken to process the applications from six to three weeks. The business would be able to start trading sooner, reducing the delay costs associated with resources being tied up during the application process.

## Step 3 – Estimate the impacts

Having identified the impacts of reforms on stakeholder groups, and which of the three categories of costs they fall into, the costs of these impacts can then be estimated.

Common information and data needed to quantify the impacts include the number of stakeholders impacted, the number of times stakeholders impacted, time saved, reduced or removed fees, implementation time frames, take up rates and so on.

In many cases, average figures for these data will be sufficient to produce robust estimates (such as in the first example where the average time saved per form is 15 minutes for the community organisation administrative officers). However, in certain circumstances impacts will vary significantly across stakeholders. For instance, consider the third example – in a given year there will be many small businesses which commence trading but only a few large businesses. The costs and resource inputs of small and large organisations might be quite different, so assuming a uniform size for businesses could lead to inaccurate or misleading estimates. In cases where assuming an average across stakeholders may not be appropriate, a more detailed analysis of the impacts on different stakeholders/stakeholder groups may be necessary.

### Compliance costs

Compliance costs of meeting requirements and demonstrating that they've been met can generally be divided into two main categories; time costs and dollar costs.

- Time costs** include any impacts that result in a change to the time required to comply with regulation, such as a reduction in administrative burden. As individuals and businesses save time it can be reallocated toward other productive activities or leisure. Calculating this requires data on who is affected, for how long, and the value of their time. Converting time costs into a dollar measure should be done using an appropriate wage rate. On-costs are included in the wage rate to better capture the overall cost to business of employing staff (e.g. wage plus training costs) and hence reflect a better estimate of the actual value of the staff's time to the business. Further information on valuing time is provided in Appendices B and C.



- Dollar costs** are changes that directly impact the cost of complying with regulation such as training costs, travel costs, capital costs or any other relevant expenditure. Calculating this requires data on who is affected, with what frequency, and which costs are impacted by the reform.





**Example 1 – Streamlined forms**

The government department can calculate compliance cost (or saving) of the streamlined forms as both time and dollar savings.

To calculate the costs, it has been assumed that a total of 24,000 forms are completed each year (1,000 community organisations fill in the forms under six organisational categories, four times a year).

The community organisations will achieve time savings with administration officers taking less time to complete the new forms and dollar savings through reduced printing costs.

The government department will also achieve time savings, with employees processing the forms faster.

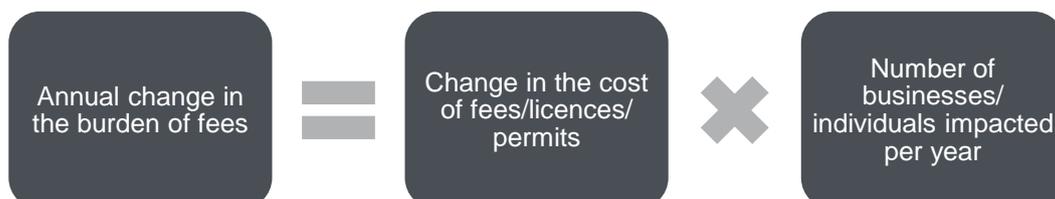
To calculate the time saved by both the community organisation and the government department, the wages have been estimated using the wage data for ‘other miscellaneous clerical and administrative workers’ (details can be found in Appendices B and C).

<b>Community time savings</b> Annual change in the burden of administration	1,000 organisations x 24 forms x 0.25 hours x \$36.10 = \$216,600 per annum
<b>Community dollar savings</b> Annual change in the burden of compliance	1,000 organisations x 24 forms x 10 pages x \$0.10 = \$24,000 per annum
<b>Total red tape savings</b>	\$216,600 + \$24,000 = \$240,600 per annum
<b>Government dollar costs*</b> Annual change in the burden of administration	24,000 forms x 0.083 hours (5 mins) x \$43.50 = \$86,652 per annum

\* Government dollar costs should be included in the analysis but not reported in the final red tape reduction figure as it is not a reform benefit to the community.

**Fee costs**

Fee costs from the reform can be analysed by estimating the costs of the relevant fees/licences/charges before and after the reform and the number of stakeholders affected. Data on fee revenue is usually readily available from the area of government responsible for the fee. The government is also likely to have data on which businesses or individuals are affected by the fees.





**Example 2 – Cheaper licences**

The government is considering a reduction in the cost of a licence fee from \$100 to \$90. Only those applying for a new licence will benefit from the reduced cost. Data from the government show that 80 per cent of the state’s population aged over 21 already hold this licence.

People aged 21 have been identified as the main impacted stakeholder group. The following assumptions have been made about this group:

- population data shows that there are 40,000 people aged 21 in the state
- 80 per cent of 21-year olds will apply for this licence (i.e. 32,000 people)

<b>Community fee costs</b>	
Annual change in the burden of fees (reduction in licence fees)	$(\$100 - \$90) \times 32,000 \text{ people} = \$320,000 \text{ per annum}$ $= \$320,000 \text{ per annum}$

**Government fee costs**

This will mean a reduction in government revenue of \$320,000 per annum. This should be included in the analysis but not reported in the final red tape savings figure.

**Delay costs**

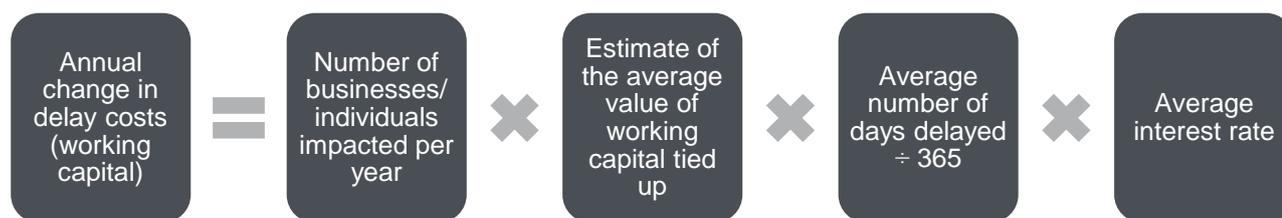
Delay costs can be difficult to quantify and agencies may wish to seek advice from the Economics Division in Queensland Treasury.

Delay costs can impact businesses in a number of ways. A business awaiting a particular approval to begin providing a new product or service faces a delayed realisation of profits. Estimating this requires data on the number of businesses affected by the reform, the profits they are foregoing, and for how long.



Profits can be difficult to estimate, and vary substantially across industries and sizes of firms. Where there are specific data available, such as business data or industry studies, these can help inform a reasonable estimate. Another approach for business projects is to make an assumption on a rate of return on capital investment, best informed by knowledge of the business or industry.

Alternatively, a business may have purchased land, equipment or other inputs during a process, which is unable to be used productively to generate a return during the delay. This is the cost of delayed working capital. To estimate this cost, data will be required concerning the number of stakeholders affected, the value of the working capital tied up, and for how long.



The interest rate is commonly used as the price of delay, as it is the rate of return that money held in a bank could generate. For private sector delay costs, an appropriate commercial interest rate should be used. For public sector delay costs, an appropriate public sector interest rate should be used. For assistance with which interest rate to apply, contact Queensland Treasury Economics Division.



**Example 3 – Streamlined approvals**

In the third example, the government reduces the length of time taken to process business applications from 6 weeks to 3 weeks.

Department data indicates there is an average of 1,500 business applications lodged per annum and that the businesses affected make an average profit of \$60,000 a year. An interest rate of 5 per cent is used here.

Business	
Annual change in delay costs of working capital	1,500 applications x \$60,000 profits delayed x (21 days/365) x 5% interest rate = \$258,904 per annum

**Data collection**

Information about affected stakeholders, impacts and the costs of reform may be known or readily available. However, this is often not the case. Even without all of this information, it may still be possible to construct reasonable estimates, using the following sources:

- agency or other sources like
  - relevant ABS data
  - wage rates to estimate the value of time
  - agency data on impacted stakeholders (e.g. number of schools, community housing providers, approval timeframes, etc.)
  - changes to quantity of paperwork (e.g. 10 pages to 5)
  - survey results
  - business and community submissions
  - industry papers
  - previous RIAs and PIAs
  - case studies
- internal agency data and data collected to inform agency policy-making
- consultation with impacted stakeholders can provide valuable information, in terms of both reliable data and in determining appropriate assumptions
- similar data collected or estimated by other jurisdictions

It is important to document which sources are used and the key steps in the methodology.

Where appropriate information/data is not available, some assumptions and/or estimates may need to be made to estimate the impacts of red tape reforms. It is important these assumptions or estimates are also clearly documented and made on the basis of a sound understanding of the impact being considered.

Where constructing an estimate is not feasible, a detailed qualitative description of the impacts (as set out in Step 2) should be undertaken, as well as an explanation of why it is not possible to estimate benefits and costs

quantitatively. Qualitative analysis can be presented alongside quantitative estimates. In this case, it is useful to give an indication of the magnitude of the qualitative costs/benefits, to give a sense of the overall impact of a reform.

Excluding an impact due to lack of information is equivalent to assuming the impact is zero. Conservative assumptions/estimates should be adopted in cases where there is any significant level of uncertainty around the likely size of impacts. Where there is uncertainty undertake sensitivity analysis or provide a range for the magnitude of impacts. Where it is unreasonable to make any assumptions, specific impacts should be described in qualitative terms.

## Step 4 – Report annual average impacts over 10 years

To ensure consistent reporting across all red tape reforms, agencies should estimate the impacts from the initial implementation date, and every subsequent financial year over a ten year period.

Some impacts may vary over time and the full impact may not be experienced from the start of the reform. Impacts of reforms may vary over time due to factors such as take-up rates of voluntary changes (e.g. online submission of application forms), implementation timeframes, National partnership agreements, etc. General growth rates such as population and inflation should be excluded to allow for comparison across years.

For each stakeholder group (business, community and government), the costs and benefits of the initiative should be summed to give the annual net benefit by stakeholder group. To aggregate the impacts of the reform, add up the cost savings of all activities across all affected businesses and individuals.



### Example 1 – Streamlined forms

The department that completed a review of their forms found that one form could be completed online and would like to understand the average annual red tape savings.

It is estimated that completing the form online will be 15 minutes faster than the paper forms.

The department knows that 3 million people complete this form each year, and from similar previous reforms, the take-up rate of online forms is 50 per cent in the first year, rising to a peak of 90 per cent over five years.

They have assumed that the value of leisure time is \$16.40 per hour (see Appendix B).

Annual red tape savings = take up rate x 3 million people x 0.25 hours x value of leisure time.

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Take up rate	50%	60%	70%	80%	90%	90%	90%	90%	90%	90%
Red tape savings	\$6.15m	\$7.38m	\$8.61m	\$9.84m	\$11.07m	\$11.07m	\$11.07m	\$11.07m	\$11.07m	\$11.07m

Average annual red tape savings:

$(6.15+7.38+8.61+9.84+11.07+11.07+11.07+11.07+11.07+11.07) / 10 = \$9.84m$  per annum

## Further assistance

These guidelines provide a simple but robust methodology for assessing the benefits of red tape reforms to the community and businesses, based on cost-benefit analysis principles. This approach does not replace the need for a more detailed or full economic analysis of larger or more technical reforms. For further advice either with using the guidelines or alternative methods for estimating reform benefits, please contact the Economics Division in Queensland Treasury for assistance.

Queensland Treasury can be contacted at [regreform@treasury.qld.gov.au](mailto:regreform@treasury.qld.gov.au).



## Appendices

### Appendix A — Other Useful Documents

#### The Queensland Government Guide to Better Regulation

The purpose of the Guide is to reduce the regulatory burden in Queensland by requiring agencies to apply regulatory best practice principles when developing, assessing and improving regulation. For more information on the *Regulatory Impact Statement Guidelines*, visit: <https://www.treasury.qld.gov.au/publications-resources/ris-system-guidelines/ris-system-guidelines.pdf>

#### Program Evaluation Guidelines (PEG)

The PEG are designed to clarify expectations for the evaluation of public sector programs in Queensland, and provide a framework to guide Queensland Government agencies through the requirements expected to be met for the planning, implementation and management of program evaluations. For more information on the *Program Evaluation Guidelines*, visit: <https://www.treasury.qld.gov.au/publications-resources/qld-government-program-evaluation-guidelines/index.php>

## Appendix B — Valuing Time

In the absence of known wage rates for specific individuals/firms impacted, estimates of the value of time can be based on census wage data derived by the Queensland Government Statistician's Office.

The below wage data are based on the 2011 census data (the latest available). The data will be updated when the 2016 census data is available.

### Leisure time

Individuals value their leisure time, even if they are not paid for it. Half of an appropriate hourly wage rate is assumed to be a reasonable proxy for the value of leisure time, in line with the approach taken by NSW. Using the economy-wide average hourly earnings of \$32.81, this is **\$16.40 per hour**.

Consideration can be given to adjusting this rate when more specific information is known. For example, in cases where a red tape reduction initiative predominately impacts young people, the minimum wage rate may provide a better proxy for the value of those individuals' leisure time.

### Employee time

On-cost multipliers – The inclusion of on-costs (e.g. training) better captures the overall cost to business of employing staff and reflects a better estimate of the actual value to the business of the staff's time. This approach is consistent with the methodologies adopted in other Australian jurisdictions. If there is a specific department or industry on-cost multiplier, this should be used. In the absence of this, use the average on-costs multiplier across all industries of 1.165.

Where a reform impacts on businesses broadly across the economy, it is appropriate to use an economy-wide wage rate to value time. The economy-wide value of a business's time has been estimated by adjusting average hourly earnings (\$32.81) by the average on-cost multiplier of 1.165. In this case, the economy-wide value of a business's time including on-costs is **\$38.22 per hour**.

Again, if the impacts are likely to be primarily on a specific type of business where wage rates and time values may differ (e.g. reforms that apply specifically to reducing time taken by professionals in a specific field), a specific wage rate and on-cost multiplier for that sector/profession may be more appropriate. Information about this can usually be obtained from engaging with affected stakeholders. Wage rate assumptions by detailed occupation are included in Appendix C.

### Public servants' time

Reforms often involve saving government time. When valuing a public servant's time, agencies can estimate the expected wage rates of the type/level of officers impacted by the reform and multiply it by the on-cost multiplier of 1.165. If this specific information is unknown, it is suggested that as an average measure agencies use the hourly rate of an AO5 with on-costs applied, which is **\$43.50 per hour**.

## Appendix C – Hourly Cost of Labour Assumptions by Occupation

Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate \$/hour	Including On-costs \$/hour
<b>General Managers and Legislators</b>			
1111	Chief Executives and Managing Directors	47	54.8
1112	General Managers	49	57.1
1113	Legislators	42	48.9
<b>Farmers</b>			
1211	Aquaculture Farmers	24	28.0
1212	Crop Farmers	25	29.1
1213	Livestock Farmers	23	26.8
1214	Mixed Crop and Livestock Farmers	20	23.3
<b>Specialist Managers</b>			
1311	Advertising, Public Relations and Sales Managers	40	46.6
1321	Corporate Services Managers	37	43.1
1322	Finance Managers	45	52.4
1323	Human Resource Managers	43	50.1
1324	Policy and Planning Managers	47	54.8
1325	Research and Development Managers	45	52.4
1331	Construction Managers	39	45.4
1332	Engineering Managers	48	55.9
1333	Importers, Exporters and Wholesalers	36	41.9
1334	Manufacturers	32	37.3
1335	Production Managers	39	45.4
1336	Supply and Distribution Managers	39	45.4
1341	Child Care Centre Managers	29	33.8
1342	Health and Welfare Services Managers	42	48.9
1343	School Principals	47	54.8
1344	Other Education Managers	41	47.8
1351	ICT Managers	47	54.8
1391	Commissioned Officers (Management)	45	52.4
1392	Senior Non-commissioned Defence Force Members	42	48.9
1399	Other Specialist Managers	40	46.6

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
1411	Cafe and Restaurant Managers	23	26.8
1412	Caravan Park and Camping Ground Managers	23	26.8
1413	Hotel and Motel Managers	29	33.8
1414	Licensed Club Managers	28	32.6
1419	Other Accommodation and Hospitality Managers	35	40.8
1421	Retail Managers	26	30.3
1491	Amusement, Fitness and Sports Centre Managers	27	31.5
1492	Call or Contact Centre and Customer Service Managers	36	41.9
1493	Conference and Event Organisers	27	31.5
1494	Transport Services Managers	34	39.6
1499	Other Hospitality, Retail and Service Managers	40	46.6
<b>Arts and Entertainment</b>			
2111	Actors, Dancers and Other Entertainers	44	51.3
2112	Music Professionals	46	53.6
2113	Photographers	26	30.3
2114	Visual Arts and Crafts Professionals	21	24.5
2121	Artistic Directors, and Media Producers and Presenters	36	41.9
2122	Authors, and Book and Script Editors	33	38.4
2123	Film, Television, Radio and Stage Directors	30	35.0
2124	Journalists and Other Writers	36	41.9
<b>Financial and Professional Services</b>			
2211	Accountants	39	45.4
2212	Auditors, Company Secretaries and Corporate Treasurers	41	47.8
2221	Financial Brokers	35	40.8
2222	Financial Dealers	41	47.8
2223	Financial Investment Advisers and Managers	44	51.3
2231	Human Resource Professionals	36	41.9
2232	ICT Trainers	35	40.8
2233	Training and Development Professionals	37	43.1
2241	Actuaries, Mathematicians and Statisticians	41	47.8
2242	Archivists, Curators and Records Managers	35	40.8
2243	Economists	42	48.9
2244	Intelligence and Policy Analysts	44	51.3

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
2245	Land Economists and Valuers	48	55.9
2246	Librarians	35	40.8
2247	Management and Organisation Analysts	48	55.9
2249	Other Information and Organisation Professionals	37	43.1
2251	Advertising and Marketing Professionals	35	40.8
2252	ICT Sales Professionals	37	43.1
2253	Public Relations Professionals	37	43.1
2254	Technical Sales Representatives	37	43.1
<b>Engineering and Science Professionals</b>			
2311	Air Transport Professionals	54	62.9
2312	Marine Transport Professionals	37	43.1
2321	Architects and Landscape Architects	38	44.3
2322	Surveyors and Spatial Scientists	41	47.8
2323	Fashion, Industrial and Jewellery Designers	25	29.1
2324	Graphic and Web Designers, and Illustrators	28	32.6
2325	Interior Designers	34	39.6
2326	Urban and Regional Planners	41	47.8
2331	Chemical and Materials Engineers	44	51.3
2332	Civil Engineering Professionals	46	53.6
2333	Electrical Engineers	46	53.6
2334	Electronics Engineers	37	43.1
2335	Industrial, Mechanical and Production Engineers	42	48.9
2336	Mining Engineers	49	57.1
2339	Other Engineering Professionals	42	48.9
2341	Agricultural and Forestry Scientists	39	45.4
2342	Chemists, and Food and Wine Scientists	36	41.9
2343	Environmental Scientists	39	45.4
2344	Geologists and Geophysicists	48	55.9
2345	Life Scientists	37	43.1
2346	Medical Laboratory Scientists	41	47.8
2347	Veterinarians	43	50.1
2349	Other Natural and Physical Science Professionals	39	45.4

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
<b>Education Professionals</b>			
2411	Early Childhood (Pre-Primary School) Teachers	30	35.0
2412	Primary School Teachers	42	48.9
2413	Middle School Teachers (Aus) / Intermediate School Teachers (NZ)	37	43.1
2414	Secondary School Teachers	42	48.9
2415	Special Education Teachers	43	50.1
2421	University Lecturers and Tutors	57	66.4
2422	Vocational Education Teachers (Aus) / Polytechnic Teachers (NZ)	39	45.4
2491	Education Advisers and Reviewers	46	53.6
2492	Private Tutors and Teachers	40	46.6
2493	Teachers of English to Speakers of Other Languages	41	47.8
<b>Health Professionals</b>			
2511	Dietitians	37	43.1
2512	Medical Imaging Professionals	45	52.4
2513	Occupational and Environmental Health Professionals	40	46.6
2514	Optometrists and Orthoptists	48	55.9
2515	Pharmacists	44	51.3
2519	Other Health Diagnostic and Promotion Professionals	37	43.1
2521	Chiropractors and Osteopaths	46	53.6
2522	Complementary Health Therapists	33	38.4
2523	Dental Practitioners	55	64.1
2524	Occupational Therapists	40	46.6
2525	Physiotherapists	43	50.1
2526	Podiatrists	37	43.1
2527	Speech Professionals and Audiologists	50	58.3
2531	Generalist Medical Practitioners	55	64.1
2532	Anaesthetists	60	69.9
2533	Specialist Physicians	57	66.4
2534	Psychiatrists	58	67.6
2535	Surgeons	59	68.7
2539	Other Medical Practitioners	51	59.4
2541	Midwives	41	47.8

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
2542	Nurse Educators and Researchers	41	47.8
2543	Nurse Managers	42	48.9
2544	Registered Nurses	36	41.9
<b>Telecommunications Professionals</b>			
2611	ICT Business and Systems Analysts	46	53.6
2612	Multimedia Specialists and Web Developers	30	35.0
2613	Software and Applications Programmers	43	50.1
2621	Database and Systems Administrators, and ICT Security Specialists	40	46.6
2631	Computer Network Professionals	39	45.4
2632	ICT Support and Test Engineers	38	44.3
2633	Telecommunications Engineering Professionals	40	46.6
<b>Legal and Social Workers</b>			
2711	Barristers	47	54.8
2712	Judicial and Other Legal Professionals	48	55.9
2713	Solicitors	46	53.6
2721	Counsellors	40	46.6
2722	Ministers of Religion	24	28.0
2723	Psychologists	49	57.1
2724	Social Professionals	44	51.3
2725	Social Workers	38	44.3
2726	Welfare, Recreation and Community Arts Workers	33	38.4
<b>Technicians and Trade Workers</b>			
3111	Agricultural Technicians	30	35.0
3112	Medical Technicians	27	31.5
3113	Primary Products Inspectors	35	40.8
3114	Science Technicians	29	33.8
3121	Architectural, Building and Surveying Technicians	38	44.3
3122	Civil Engineering Draftspersons and Technicians	35	40.8
3123	Electrical Engineering Draftspersons and Technicians	39	45.4
3124	Electronic Engineering Draftspersons and Technicians	33	38.4
3125	Mechanical Engineering Draftspersons and Technicians	38	44.3
3126	Safety Inspectors	40	46.6
3129	Other Building and Engineering Technicians	44	51.3

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
3131	ICT Support Technicians	31	36.1
3132	Telecommunications Technical Specialists	37	43.1
3211	Automotive Electricians	28	32.6
3212	Motor Mechanics	24	28.0
3221	Metal Casting, Forging and Finishing Trades Workers	23	26.8
3222	Sheetmetal Trades Workers	26	30.3
3223	Structural Steel and Welding Trades Workers	31	36.1
3231	Aircraft Maintenance Engineers	38	44.3
3232	Metal Fitters and Machinists	36	41.9
3233	Precision Metal Trades Workers	25	29.1
3234	Toolmakers and Engineering Patternmakers	26	30.3
3241	Panelbeaters	25	29.1
3242	Vehicle Body Builders and Trimmers	24	28.0
3243	Vehicle Painters	24	28.0
3311	Bricklayers and Stonemasons	29	33.8
3312	Carpenters and Joiners	30	35.0
3321	Floor Finishers	31	36.1
3322	Painting Trades Workers	27	31.5
3331	Glaziers	25	29.1
3332	Plasterers	31	36.1
3333	Roof Tilers	30	35.0
3334	Wall and Floor Tilers	28	32.6
3341	Plumbers	31	36.1
3411	Electricians	34	39.6
3421	Airconditioning and Refrigeration Mechanics	29	33.8
3422	Electrical Distribution Trades Workers	37	43.1
3423	Electronics Trades Workers	29	33.8
3424	Telecommunications Trades Workers	33	38.4
3511	Bakers and Pastrycooks	21	24.5
3512	Butchers and Smallgoods Makers	22	25.6
3513	Chefs	24	28.0
3514	Cooks	20	23.3
3611	Animal Attendants and Trainers	23	26.8

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
3612	Shearers	29	33.8
3613	Veterinary Nurses	21	24.5
3621	Florists	19	22.1
3622	Gardeners	28	32.6
3623	Greenkeepers	24	28.0
3624	Nurserypersons	18	21.0
3911	Hairdressers	21	24.5
3921	Print Finishers and Screen Printers	22	25.6
3922	Graphic Pre-press Trades Workers	28	32.6
3923	Printers	25	29.1
3931	Canvas and Leather Goods Makers	21	24.5
3932	Clothing Trades Workers	22	25.6
3933	Upholsterers	22	25.6
3941	Cabinetmakers	23	26.8
3942	Wood Machinists and Other Wood Trades Workers	21	24.5
3991	Boat Builders and Shipwrights	25	29.1
3992	Chemical, Gas, Petroleum and Power Generation Plant Operators	45	52.4
3993	Gallery, Library and Museum Technicians	27	31.5
3994	Jewellers	23	26.8
3995	Performing Arts Technicians	31	36.1
3996	Signwriters	22	25.6
3999	Other Miscellaneous Technicians and Trades Workers	27	31.5
<b>Health and Education Support Workers</b>			
4111	Ambulance Officers and Paramedics	36	41.9
4112	Dental Hygienists, Technicians and Therapists	38	44.3
4113	Diversional Therapists	21	24.5
4114	Enrolled and Mothercraft Nurses	28	32.6
4115	Indigenous Health Workers	26	30.3
4116	Massage Therapists	35	40.8
4117	Welfare Support Workers	31	36.1
4211	Child Carers	22	25.6
4221	Education Aides	25	29.1
4231	Aged and Disabled Carers	26	30.3

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
4232	Dental Assistants	23	26.8
4233	Nursing Support and Personal Care Workers	25	29.1
4234	Special Care Workers	26	30.3
<b>Hospitality Workers</b>			
4311	Bar Attendants and Baristas	21	24.5
4312	Cafe Workers	19	22.1
4313	Gaming Workers	27	31.5
4314	Hotel Service Managers	21	24.5
4315	Waiters	20	23.3
4319	Other Hospitality Workers	24	28.0
<b>Defence and Emergency Services</b>			
4411	Defence Force Members - Other Ranks	31	36.1
4412	Fire and Emergency Workers	36	41.9
4413	Police	39	45.4
4421	Prison Officers	32	37.3
4422	Security Officers and Guards	27	31.5
<b>Personal Service Workers</b>			
4511	Beauty Therapists	24	28.0
4512	Driving Instructors	35	40.8
4513	Funeral Workers	26	30.3
4514	Gallery, Museum and Tour Guides	27	31.5
4515	Personal Care Consultants	31	36.1
4516	Tourism and Travel Advisers	26	30.3
4517	Travel Attendants	35	40.8
4518	Other Personal Service Workers	31	36.1
4521	Fitness Instructors	37	43.1
4522	Outdoor Adventure Guides	25	29.1
4523	Sports Coaches, Instructors and Officials	30	35.0
4524	Sportspersons	33	38.4
<b>Clerical and Administrative Workers</b>			
5111	Contract, Program and Project Administrators	35	40.8
5121	Office Managers	34	39.6
5122	Practice Managers	39	45.4

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including
		\$/hour	On-costs \$/hour
5211	Personal Assistants	31	36.1
5212	Secretaries	38	44.3
5311	General Clerks	30	35.0
5321	Keyboard Operators	30	35.0
5411	Call or Contact Centre Workers	26	30.3
5412	Inquiry Clerks	27	31.5
5421	Receptionists	24	28.0
5511	Accounting Clerks	31	36.1
5512	Bookkeepers	43	50.1
5513	Payroll Clerks	33	38.4
5521	Bank Workers	27	31.5
5522	Credit and Loans Officers (Aus) / Finance Clerks (NZ)	31	36.1
5523	Insurance, Money Market and Statistical Clerks	29	33.8
5611	Betting Clerks	34	39.6
5612	Couriers and Postal Deliverers	26	30.3
5613	Filing and Registry Clerks	31	36.1
5614	Mail Sorters	26	30.3
5615	Survey Interviewers	39	45.4
5616	Switchboard Operators	30	35.0
5619	Other Clerical and Office Support Workers	18	21.0
5911	Purchasing and Supply Logistics Clerks	28	32.6
5912	Transport and Despatch Clerks	29	33.8
5991	Conveyancers and Legal Executives	27	31.5
5992	Court and Legal Clerks	33	38.4
5993	Debt Collectors	27	31.5
5994	Human Resource Clerks	29	33.8
5995	Inspectors and Regulatory Officers	35	40.8
5996	Insurance Investigators, Loss Adjusters and Risk Surveyors	34	39.6
5997	Library Assistants	25	29.1
5999	Other Miscellaneous Clerical and Administrative Workers	31	36.1
6111	Auctioneers, and Stock and Station Agents	31	36.1
6112	Insurance Agents	32	37.3
<b>Sales Workers</b>	<b>Sales Representatives</b>	<b>31</b>	<b>36.1</b>

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
6113			
6121	Real Estate Sales Agents	34	39.6
6211	Sales Assistants (General)	21	24.5
6212	ICT Sales Assistants	25	29.1
6213	Motor Vehicle and Vehicle Parts Salespersons	26	30.3
6214	Pharmacy Sales Assistants	20	23.3
6215	Retail Supervisors	24	28.0
6216	Service Station Attendants	27	31.5
6217	Street Vendors and Related Salespersons	30	35.0
6219	Other Sales Assistants and Salespersons	23	26.8
6311	Checkout Operators and Office Cashiers	19	22.1
6391	Models and Sales Demonstrators	31	36.1
6392	Retail and Wool Buyers	29	33.8
6393	Telemarketers	24	28.0
6394	Ticket Salespersons	26	30.3
6395	Visual Merchandisers	25	29.1
6399	Other Sales Support Workers	34	39.6
<b>Machine Operators and Drivers</b>			
7111	Clay, Concrete, Glass and Stone Processing Machine Operators	26	30.3
7112	Industrial Spraypainters	26	30.3
7113	Paper and Wood Processing Machine Operators	23	26.8
7114	Photographic Developers and Printers	20	23.3
7115	Plastics and Rubber Production Machine Operators	25	29.1
7116	Sewing Machinists	21	24.5
7117	Textile and Footwear Production Machine Operators	21	24.5
7119	Other Machine Operators	24	28.0
7121	Crane, Hoist and Lift Operators	38	44.3
7122	Drillers, Miners and Shot Firers	46	53.6
7123	Engineering Production Workers	30	35.0
7129	Other Stationary Plant Operators	35	40.8
7211	Agricultural, Forestry and Horticultural Plant Operators	24	28.0
7212	Earthmoving Plant Operators	33	38.4
7213	Forklift Drivers	24	28.0

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
7219	Other Mobile Plant Operators	30	35.0
7311	Automobile Drivers	21	24.5
7312	Bus and Coach Drivers	26	30.3
7313	Train and Tram Drivers	41	47.8
7321	Delivery Drivers	24	28.0
7331	Truck Drivers	29	33.8
7411	Storepersons	23	26.8
<b>Cleaners</b>			
8111	Car Detailers	21	24.5
8112	Commercial Cleaners	28	32.6
8113	Domestic Cleaners	32	37.3
8114	Housekeepers	22	25.6
8115	Laundry Workers	23	26.8
8116	Other Cleaners	28	32.6
<b>Construction and Mining Labourers</b>			
8211	Building and Plumbing Labourers	28	32.6
8212	Concreters	33	38.4
8213	Fencers	25	29.1
8214	Insulation and Home Improvement Installers	28	32.6
8215	Paving and Surfacing Labourers	28	32.6
8216	Railway Track Workers	30	35.0
8217	Structural Steel Construction Workers	36	41.9
8219	Other Construction and Mining Labourers	32	37.3
<b>Factory Workers</b>			
8311	Food and Drink Factory Workers	24	28.0
8312	Meat Boners and Slicers, and Slaughterers	25	29.1
8313	Meat, Poultry and Seafood Process Workers	22	25.6
8321	Packers	21	24.5
8322	Product Assemblers	20	23.3
8391	Metal Engineering Process Workers	23	26.8
8392	Plastics and Rubber Factory Workers	19	22.1
8393	Product Quality Controllers	25	29.1
8394	Timber and Wood Process Workers	20	23.3

## Hourly rate of pay (a) by 4-digit ANZSCO (b), Queensland (c), 2011

x 1.165

Code	4-digit ANZSCO	Hourly rate	Including On-costs
		\$/hour	\$/hour
8399	Other Factory Process Workers	20	23.3
<b>Farm, Forestry and Garden Workers</b>			
8411	Aquaculture Workers	20	23.3
8412	Crop Farm Workers	20	23.3
8413	Forestry and Logging Workers	23	26.8
8414	Garden and Nursery Labourers	25	29.1
8415	Livestock Farm Workers	20	23.3
8416	Mixed Crop and Livestock Farm Workers	19	22.1
8419	Other Farm, Forestry and Garden Workers	29	33.8
<b>Miscellaneous Labourers</b>			
8511	Fast Food Cooks	17	19.8
8512	Food Trades Assistants	18	21.0
8513	Kitchenhands	20	23.3
8911	Freight and Furniture Handlers	28	32.6
8912	Shelf Fillers	22	25.6
8991	Caretakers	36	41.9
8992	Deck and Fishing Hands	34	39.6
8993	Handypersons	30	35.0
8994	Motor Vehicle Parts and Accessories Fitters	23	26.8
8995	Printing Assistants and Table Workers	23	26.8
8996	Recycling and Rubbish Collectors	23	26.8
8997	Vending Machine Attendants	23	26.8
8999	Other Miscellaneous Labourers	31	36.1

(a) Hourly rate of pays have been derived by taking the midpoints of the individual personal income ranges and dividing these incomes by the number of hours worked in the week prior to the Census.

Hourly rates were then population weighted using employed persons within each occupation to derive an average hourly rate. Incomes of \$2000 or more per week were taken as an income of \$2000 and working 40 hours or more each week were taken as 40 hours.

(b) Based on ANZSCO 2006 edition.

(c) Based on place of usual residence.

Source: Australian Bureau of Statistics, Census of Population and Housing, 2011, Tablebuilder extract 6 May 2014 (Queensland Government Statistician's Office derived)

Note: this data is based on census of population and housing data released every five years. The next update will be available mid to late 2017.

