

Research report 3/2020

Modern Awards Database: an introduction

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All research undertaken or commissioned by the Fair Work Commission for the Annual Wage Review 2019–20 has been agreed by the Minimum Wages Research Group (MWRG). The MWRG comprises a Chair from the Fair Work Commission, and representatives nominated by:

- Australian Chamber of Commerce and Industry (ACCI);
- Australian Industry Group (Ai Group);
- Australian Council of Social Service (ACOSS);
- Australian Council of Trade Unions (ACTU);
- Australian Government; and
- State and territory governments.

An appropriate reference for this report is:

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A draft of this report was also workshopped with the MWRG prior to finalisation. The authors would like to thank the MWRG and staff from the Fair Work Commission for comments.

The contents of this report, however, remain the responsibility of the authors and the research has been conducted without the involvement of members of the Fair Work Commission

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List of abbreviations

2019–20 Review Annual Wage Review 2019–20

4 yearly review 4 yearly review of modern awards

Commission Fair Work Commission

CPI Consumer Price Index

Expert Panel Expert Panel for annual wage reviews

MAD Modern Awards Database

NMWO National Minimum Wage Order

1 Introduction

The Fair Work Commission's (Commission) Modern Awards Database (MAD) is the central repository of information related to the 155 modern awards¹ covering employees in the national workplace relations system. It records the classifications, wage and expense-related allowances and penalties contained in each modern award. The Commission has developed the MAD in order to streamline the update to the modern award documents following an annual wage review. An additional benefit of the system is that it allows the Commission to export the data for analysis, which may also be of interest to the public and adds transparency as to how the modern award rates are calculated.

This paper is intended to be a brief introduction to the MAD. It covers the structure and how the data files will be provided to the public.

In accordance with the research program set for the Annual Wage Review 2019–20 (2019–20 Review)², the data from the MAD will likely be made available to the public in the second half of 2020. While the database will feature separate files for each year from 2015, pre-2015 data will be added in the future.

Individuals, employer, employee and other organisations may use the database for their own research purposes or as a complement to their own payroll tools.

2 Background

The MAD was created to automate the updating of wages, allowances, penalties and overtime rates in modern awards following an increase to the national minimum wage and modern award minimum wages handed down by the Expert Panel for annual wage reviews (Expert Panel). This process is currently undertaken using a combination of automated and manual components. The MAD brings together formulas and figures into one central location. The dollar figures from the database are linked directly to modern award documents and the determinations that give effect to the Annual Wage Review Decision (Review Decision).

Research conducted during the 4 yearly review of modern awards (4 yearly review) showed that users preferred rates in modern awards to be expressed as calculated (dollar) amounts rather than as percentages.³ For example, wage-related allowances in modern awards are expressed as percentages of a defined rate, the standard rate. Similarly, many modern awards contain penalty and overtime rates that are expressed as percentages of the employee's minimum or ordinary hourly rate.

During the 4 yearly review, exposure drafts⁴ were created containing summary tables setting out these rates as calculated amounts. These innovations to reduce complexity and make modern awards simpler and more user-friendly has led to an increase in the number of monetary figures

Referring to the 122 industry and occupational modern awards and the 33 enterprise and state reference public sector modern awards.

² [2019] FWC 8129 at Attachment A.

³ Sweeny Research (2014), *Citizen co-design with small-business owners*, prepared for the Fair Work Commission, August. Available from: https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/citizen-codesign-report.pdf.

⁴ An exposure draft is a draft of each modern award that is updated for each decision coming out of the 4 yearly review.

expressed in modern awards. While this has reduced the need for interpretation and calculation of wages and in doing so provided greater clarity on the amount to pay employees, the increase has meant that the current system of updating wages is no longer viable. By streamlining and automating this process it will allow the Commission to meet its legislative requirement to publish the modern awards by 1 July each year.⁵

Whilst the primary purpose of the MAD is to ensure that the modern awards are able to be updated in accordance with Review Decisions, it was recognised that the data collected and stored within the system could be used for a range of other purposes. The database contains a comprehensive record of the rates in modern awards and may be useful to researchers, payroll companies and other interested parties. As such the Commission intends to make the database publicly available.

3 Overview of the MAD

3.1 Database structure

The data stored for each modern award in the MAD are divided into four main records or files: Classification, Wage Allowances, Expense Allowances and Penalties.

Each of the records are presented to resemble the corresponding table in the modern award. Amounts in the modern award that appear as part of a sentence (like most allowances) are also captured.

3.1.1 Classification record

This record contains information related to the classifications of a modern award, such as the classification name, the classification base rate and any associated calculated rate (see Figure 1 of Attachment A). The unit of a base rate can be weekly, hourly, daily, annual, or a piece rate.

The Review Decision applies directly to all base rates in the system and flows on to all calculated rates in accordance with its formula.

There are many classifications, such as apprentices and juniors, whose base rate is derived as a percentage or function of another classification. These are called calculated base rates as they are dependent on a formula.

3.1.2 Wage allowance record

This record contains information on the wage-related allowances of a modern award, such as the allowance name, whether it applies for all-purposes, payment frequency, the base rate of the classification it is linked to, as well as the formula and percentage amount used to calculate the allowance (see Figure 2 of Attachment A).

These records must be a function of a classification base rate (in order to derive the standard rate) and a percentage amount for it to be included as a wage allowance. Fixed allowances, such as the 'Special allowance' of the *Plumbing and Fire Sprinklers Award 2010*, have fixed amounts that are not adjusted through either the standard rate or by the Consumer Price Index (CPI). For the purposes of capturing these data, they have been included in the Wage Allowance record.

⁵ As per s.292(1) of the Fair Work Act 2009 (Cth).

3.1.3 Expense allowance record

This record contains information on the expense-related allowances of a modern award, such as the allowance name, the applicable CPI group and its current index value. It also shows the year, CPI value and allowance (\$) amount at the time of the last adjustment to the allowance (see Figure 3 of Attachment A).

Expense-related allowances are adjusted for increases in the CPI between the most recent quarter at the time of the Review Decision and the quarter when the allowance was last adjusted.⁶ The allowance amount remains the same if the CPI falls or remains constant over the period, or if the increase was so small that it was not sufficient to change the allowance (\$) value.⁷ The system recognises these cases and retains the allowance (\$) value and index figure of last adjustment in preparation for the following year until an adjustment occurs.

3.1.4 Penalty record

This record contains information related to the penalties and overtime rates of a modern award. For the purposes of the database, penalties and overtime rates are referred to as 'penalties'. The record includes details of the penalty name, the penalty rate (%), the classification name and classification clause to which the penalty is linked, and the percentage amount used for the penalty rate (see Figure 4 of Attachment A).

Penalties are what employees are awarded on top of their minimum or ordinary hourly rate of pay as compensation for working outside or beyond their ordinary hours of work as overtime, on weekends or public holidays or for shift work.

Penalty rates (\$) are calculated in the system by linking a penalty to a clause from the Classification record. The system automatically multiplies the penalty rate (%) across each classification base rate under that clause. A formula is applied so that the base rate is converted to an hourly amount before the penalty percentage is applied.

For data up to 2020, the only penalty records contained in the system are for those presented in the enterprise and state reference public sector modern awards. The penalty data for the industry and occupational modern awards will only appear in the year in which their exposure draft comes into operation.

The penalty data will only reflect the penalty rates (\$) that are presented in the modern award. Although the updated modern awards contain an extensive number of penalty rates, it may not cover all permutations of penalties for every type of employee. Only the Fair Work Ombudsman maintains this information. In addition, a small number of updated modern awards do not contain any calculated penalty rates.

⁶ More information on the methodology of adjusting expense-related allowances in modern awards is provided on the Commission's website at: https://www.fwc.gov.au/documents/wage-reviews/2018-19/research/method-of-adjustment-2019.pdf.

⁷ This has proven to be the case for allowances with low absolute values such as the Tool Allowance from the *Joinery and Building Trades Award 2010*. Despite the all groups CPI increasing over the period in the 2019–20 Review by a little over 1 per cent, the allowance rate remained unchanged from last year at \$0.07 per hour when rounded to the nearest cent.

4 Data files

The MAD is likely to be released in the second half of 2020 and will provide data from 2015 to 2020. The MAD will be released as a series of data files and will be updated on an annual basis following the conclusion of each annual wage review, or on an ad hoc basis if data are revised. Pre-2015 data will be included in the future, with the intention of the MAD covering all modern award rates since the instrument came into operation in January 2010. The pre-2015 data will not account for transitional provisions and will only reflect the modern award rates from that time.

The description of data within a file reflects the language contained in modern awards, particularly the language used in the summary tables contained in the Schedules. As such, the name of a penalty rate may simply be 'Night shift', or the name of an expense-related allowance could be 'Meal—overtime'. The MAD will not define what a night shift is or detail the circumstances in which a meal allowance is provided for working overtime. Similarly, the MAD does not provide definitions of each classification. The user will have to ascertain this information by referring to the modern award itself.

Data from the system are exported separately for each year and do not produce a time series. Further enhancements to the technical operation of the database may improve the ability of users to generate time series data.

4.1 Format

Data from the MAD are extracted into a Comma Separated Value (CSV) file format. The CSV format can be easily opened in a spreadsheet program, such as Microsoft Excel, or imported into more advanced statistical software packages such as Stata or SAS.

A Data Dictionary will be provided to assist users in understanding the variables in the database.

The data are extracted into five separate files for each year. These files, along with some of their useful variables and identifiers are listed in Attachment B.

4.2 Considerations with linking data over time

As a result of changes made throughout the 4 yearly review, the information on modern awards contained in the MAD can differ between years. The following examples reflect some of these changes:

- The clause number for all records has changed. The order of classification and allowance records as they appear in the modern award may also have changed.
- Some classification and allowance records may have split from one clause to many or many clauses into one. The source identifiers⁸ are largely lost in this process.
- The description of many wage and expense-related allowances have been amended to a
 more detailed description in line with the summary of allowance tables contained in the
 schedule of a modern award. Allowance records were initially recorded in the MAD using a
 combination of headings⁹ (i.e. 'Leading hand allowance') and non-headings ('3 to 10

⁸ Source identifiers are further explained at Attachment B.

⁹ The *isHeading* variable indicates whether a record is used as heading or not (1 = true, 2 = false). This is used as a flag for the purposes of mapping certain records in a table.

- employees').¹⁰ The allowance records have since changed to merge the description of headings and non-headings ('Leading hand allowance—3 to 10 employees'). This will be apparent for allowances that are presented in a table.
- The Quarrying Award 2010 was amalgamated into the Cement and Lime Award 2010 to form the Cement, Lime and Quarrying Award 2020. The source identifiers belonging to the Quarrying Award 2010 could not be carried over. The modern award record for the Quarrying Award 2010 is removed from the database from 2020.
- Similarly, the vehicle manufacturing classifications and allowances belonging to the Vehicle Manufacturing, Repair Services and Retail Award 2010 were moved to the Manufacturing and Associated Industries Occupations Award 2010. The source identifiers could not be transferred.

5 Feedback

The database is currently undergoing a period of quality control and assurance and is likely to be publicly released in the second half of 2020.

Any questions about the format of the data files and the variables or other information presented in this report can be emailed to the Commission at amod@fwc.gov.au.

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¹⁰ This was done in the same style as the Allowance sheets that were previously attached to each modern award.

References

[2019] FWC 8129 at Attachment A.

Fair Work Commission (2019), *Methodology for adjusting expense related allowances in modern awards*, 9 June, https://www.fwc.gov.au/documents/wage-reviews/2018-19/research/method-of-adjustment-2019.pdf.

Sweeny Research (2014), *Citizen co-design with small business owners*, prepared for the Fair Work Commission, August, https://www.fwc.gov.au/documents/sites/awardsmodernfouryr/citizen-codesign-report.pdf.

Attachment A: Records

Figure 1: Classification Record

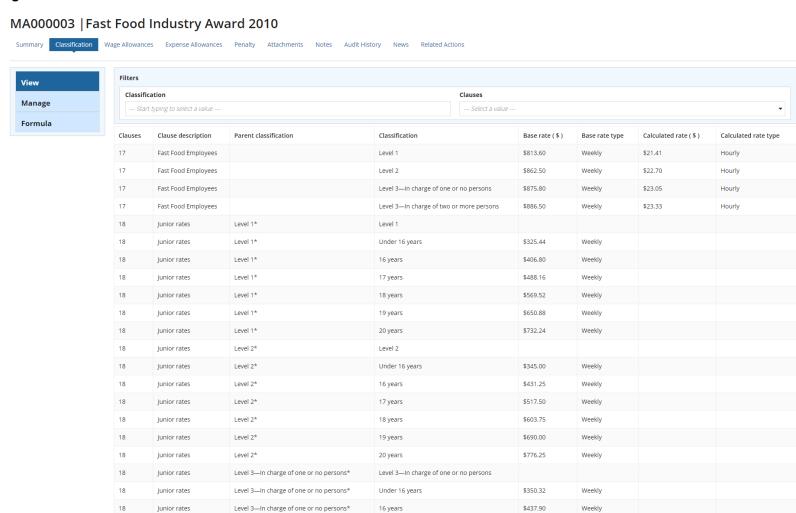


Figure 2: Wage Allowance Record

MA000070 | Cemetery Industry Award 2010

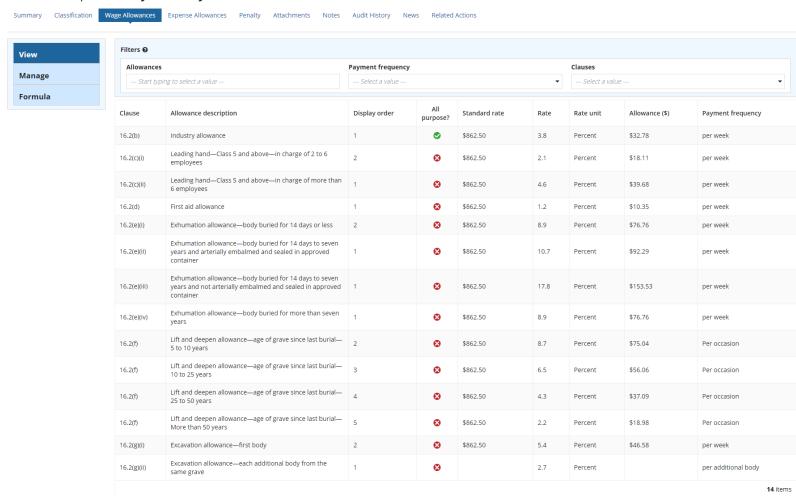


Figure 3: Expense Allowance Record

MA000080 | Amusement, Events and Recreation Award 2010

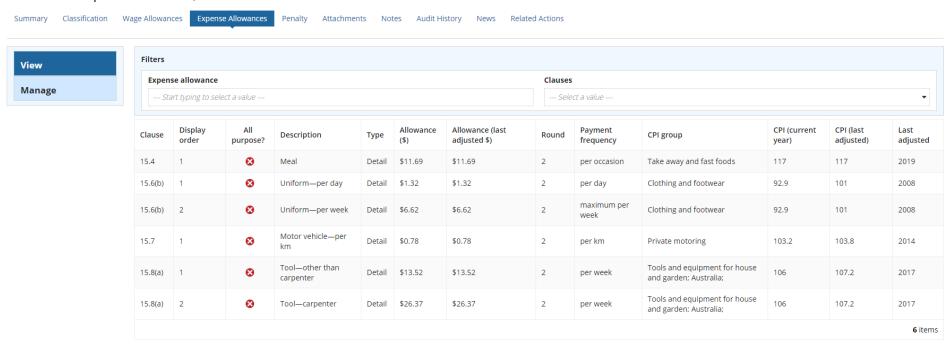
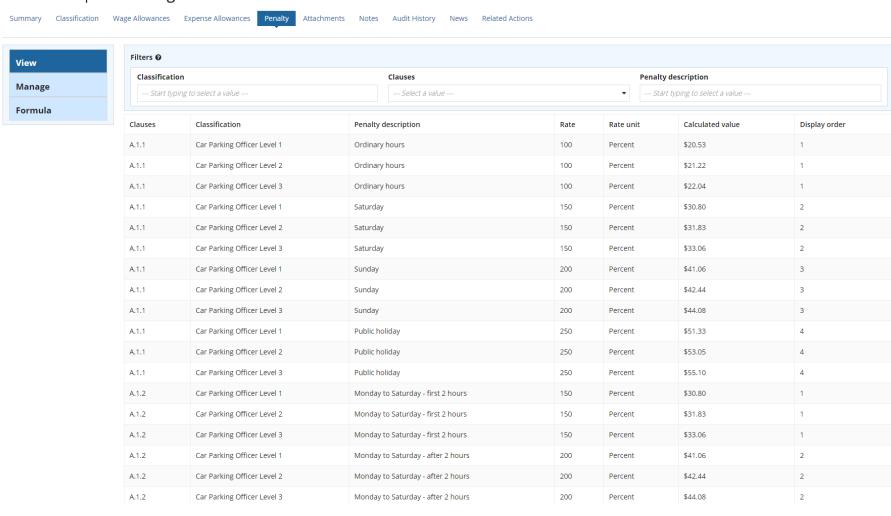


Figure 4: Penalty Record

MA000095 | Car Parking Award 2010



Attachment B: Data dictionary—sample of useful variables and identifiers

Award file

 awardCode – the modern award number (i.e. MA000001), used as an identifier across each data file.

Classification file

- *publishedYear* the relevant year of the data. The MAD reflects data as at 1 July of that vear.
- clauses an alphanumeric value indicating the clause number of where the record is in the award.
- clauseDisplayOrder a numeric value assigned to each clause of an award used for sorting clause numbers. Can also be used to sort records in an award by clause number when data from the four main files are combined.
- clauseDescription label used to add context to a classification (useful in an award with multiple streams of classifications e.g. Production and engineering employees or Staff employees)
- classification the classification title at its most detailed level.
- parentClassification this is used in some awards to group classifications within a clause.
- *displayOrder* the numerical order in which classifications are arranged in a table within a clause. Used to sort each record within a clause.
- baseRate the base or minimum hourly rate for a classification record. The AWR decision is applied directly to this amount.
- baseRateType indicates whether the base rate is a weekly, hourly, annual, daily or a
 piece rate.
- calculatedRate the calculated rate derived from the base rate of a classification (i.e. the
 hourly rate is a calculated rate derived from the weekly base rate). The corresponding
 formula is included under classificationFormula.
- nmwoExempt binary variable used to flag whether a classification rate should be equal to
 or higher than the NMW. This marker can be used to exclude juniors, apprentices
 (including adult apprentices) and rates other than the full adult minimum rate.

Wage Allowance file

- publishedYear as above.
- Clauses as above.
- clauseDisplayOrder as above.
- allowance the title of the wage allowance record.
- *isAllPurpose* binary variable indicating whether a wage-related allowance is paid for all purposes as part of an employee's ordinary rate of pay (i.e. industry allowances and the leading hand allowance in some awards).
- displayOrder the numerical order that wage-related allowances are arranged in a table
 within a clause. Most allowances will have a display order of one as they tend to be
 presented one at a time per clause within a sentence.
- baseRate shows the base rate (\$) of the classification used to link to the wage allowance record. The base rate is converted into the award's standard rate as shown under allowanceFormula.

- rate the percentage used for the calculation of a wage allowance record.
- paymentFrequency details the frequency of payment (i.e. per hour, per day).

Expense Allowance file

- publishedYear as above.
- Clauses as above.
- clauseDisplayOrder as above.
- displayOrder as above.
- description the title of the expense allowance record
- cpiGroupDescription contains the applicable CPI group that is used to adjust the record.
- cpiSeriesID the unique ID number assigned to a CPI group as defined by the Australian Bureau of Statistics.
- allowanceLastAdjusted the allowance value (\$) at the time it was last adjusted.
- cpiValueLastAdjusted the index value of the CPI group at the time the allowance was last adjusted.
- lastAdjustedYear the year in which the allowance was last adjusted.
- paymentFrequency details the frequency or the circumstances of payment (i.e. per week, per meal)

Penalty file

- publishedYear as above.
- Clauses as above.
- clauseDisplayOrder as above.
- penaltyDescription the name of the penalty being applied.
- clauseLink the clause number of the classification record in which the penalty is linked to.
- *classification* the classification name in which the penalty is linked to.
- rate the percentage amount of the penalty rate.
- penaltyFormula the formula used to calculated the penalty rate as a function of the penalty rate and the base rate of classification.
- penaltyText alternative text value used to indicate that a penalty rate does not apply to the classification, usually denoted by 'N/A' or a dash ('-').

The data within each file are sorted in ascending order of *awardID*, then by *clauseDisplayOrder* and then by each record's *display order*.¹¹

Identifiers

The MAD data files provide an identifier at the modern award, clause and, at its most detail, the record level. These will assist the user in combining data from each file and for tracking a particular record.

Useful identifiers include the modern award number (*awardCode*) and the *clauseLookupId*, provided at the modern award and clause levels, respectively. At the record level, each file will contain its own respective identifier (*classificationID*, *wageAllowanceID*, etc.).

¹¹ Except for the Penalty file which is only sorted by awardID and clauseDisplayOrder.