



Australian Government
Department of Social Services



How to use TableBuilder

2018

Hi everyone

In this session we will walk through how to use TableBuilder using a few examples. The notes from these presentations will be available afterwards on the community grants hub website for your reference, so please don't feel that you need to remember everything!

This presentation has been designed as a 'how to' to enable you to get the data from TableBuilder that you need for your grant application.

How to Apply for Microdata

Census TableBuilder Basic datasets can be accessed as a **guest user** without registering. Users can also register to access Census TableBuilder Basic, which enables additional features such as saving tables, submitting large tables and creating custom groups.

Users need to register and subscribe to access all other TableBuilder and microdata data series, including Census TableBuilder Pro. Users who are members of an organisation which subscribes to TableBuilder or microdata may also be automatically joined to their organisation for immediate access to subscribed products.

REGISTER AND ACTIVATE YOUR ACCOUNT

1. Register a new user account in the Registration Centre and agree to the Terms and conditions. Use your organisation email address when registering.
 - If you are not sure if you have previously registered, contact microdata.access@abs.gov.au or phone 1300 135 070 before re-registering.
 - If you are a user in more than one organisation, you will need to register separately for each organisation using each organisation's email address.
2. You will receive an email asking you to activate your account by clicking on the link.
3. Once activated, all registered users automatically have access to the free products, including Census TableBuilder Basic.
4. If your organisation has already been registered you may be automatically joined to your organisation in Registration Centre. You will receive a confirmation email to let you know you have been joined and which products your organisation has subscribed to. If you are not automatically joined to your organisation, contact microdata.access@abs.gov.au and request to be joined to your organisation.
5. Log into Registration Centre to:
 - see a list of the products you and your organisation have access to
 - find out who your organisation's Contact Officer is
 - update your contact details
 - change your password or secret question and answer.
 To change your email address or organisation, contact microdata.access@abs.gov.au.
6. Contact Officers can update their organisation's contact details in the Registration Centre, and remove users who are no longer with their organisation. Alternatively, contact the ABS to have the organisation's details or members updated.

Access to Priority Investment Approach (PIA) Data 2

TableBuilder holds over 50 datasets other than PIA. There is an open version of the Census data that you are able to go in and play with as a 'Guest' without needing to register. This might be good to do if you would like to get a feel for what you can do in TableBuilder before getting access to the PIA dataset.

1. To apply for access to TableBuilder go to the ABS registration page (www.abs.gov.au/registration) and select Register

If your organisation hasn't registered for data access with ABS before, you will need to provide some additional information about your organisation as part of the registration process.

1. This is the email address you need to write to with any access questions you might have.

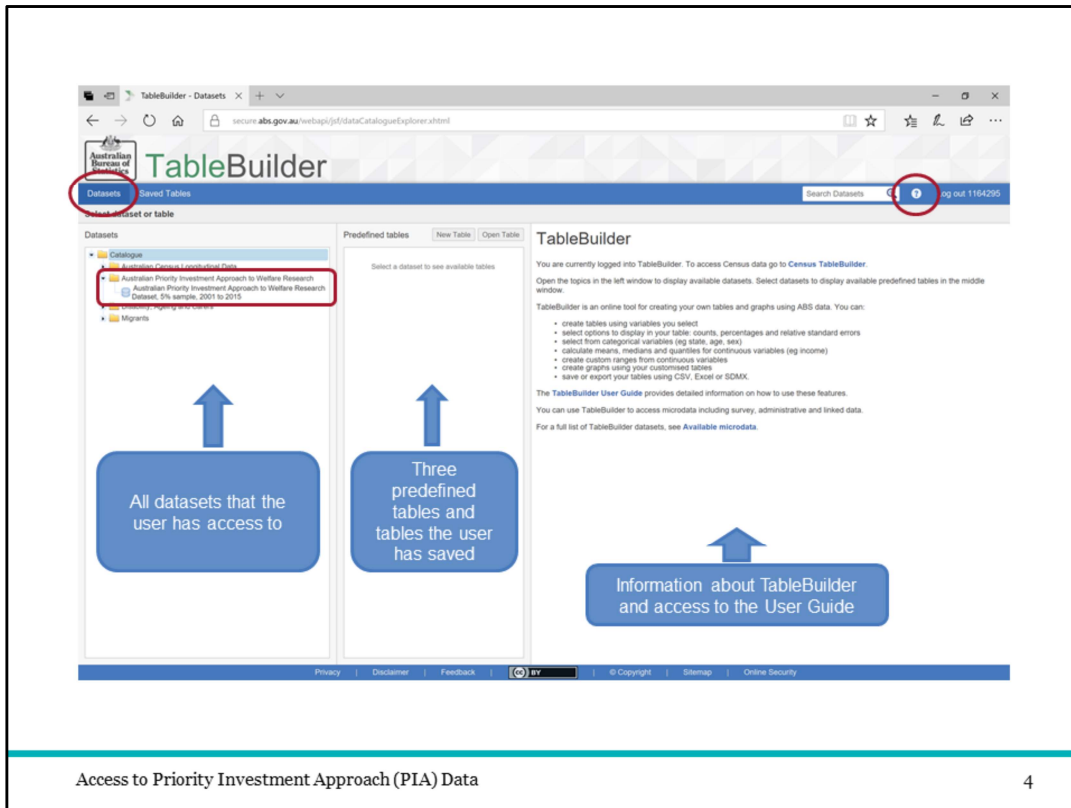
The screenshot shows the 'About TableBuilder' page on the Australian Bureau of Statistics website. At the top, there is a navigation bar with 'Statistics', 'Census', 'Complete your survey', and 'About us'. Below this, the 'About TableBuilder' section features three login options:

- Census TableBuilder Basic**: Guest button
- Census TableBuilder Basic & Pro**: Log in button
- TableBuilder: all other datasets**: Log in button (circled in red)

The 'TableBuilder: all other datasets' button is highlighted with a red circle. The page also includes a sidebar with various links and a main content area with descriptive text and a 'CENSUS TABLEBUILDER' section.

Once you have registered you can log in to the PIA dataset using this “All other datasets” button on the right.

The first two buttons will take you to the Census data.



Once you have registered with TableBuilder and have logged in, this is the first screen you will see.

1. The datasets you have access to will be listed here in the left column and this will depend on the datasets that your organisation has access to. For this reason it is important to register using your organisation email, not a personal email account like bigpond or gmail.
2. You should see the Priority Investment Approach, or PIA, dataset listed here. If you don't see it, please write to the email I highlighted in the previous slide to ask for access.
3. The middle column will display the predefined tables and any tables you save over time (we will go into this later).
4. When no dataset has been selected on the left, the right hand column provides background information to TableBuilder and links to the User Guide.
5. You can also access the TableBuilder User Guide at any time by this Help button at the top right.
6. And you can come back to these pages anytime by selecting the Datasets tab.

The screenshot shows the Australian Bureau of Statistics website. The page title is "1406.0.55.005 - TableBuilder, User Guide". The page is released at 11:30 AM (CANBERRA TIME) 19/06/2017. The page includes a navigation menu with links for "Statistics", "Census", "Complete your survey", and "About us". The page also features a search bar and a table of contents on the left. The table of contents includes links for "Introduction", "Build a table", "Working with tables", "Options", "Save, download and print", "Search", "Working with hierarchies", "Large tables", "Custom data", "Summation options, ranges and quantiles", "Graph view", "Map view", "Confidentiality", "Relative standard error", "Tutorials", and "Troubleshooting". A red box highlights the "Tutorials" link, and a red arrow points to it.

Access to Priority Investment Approach (PIA) Data

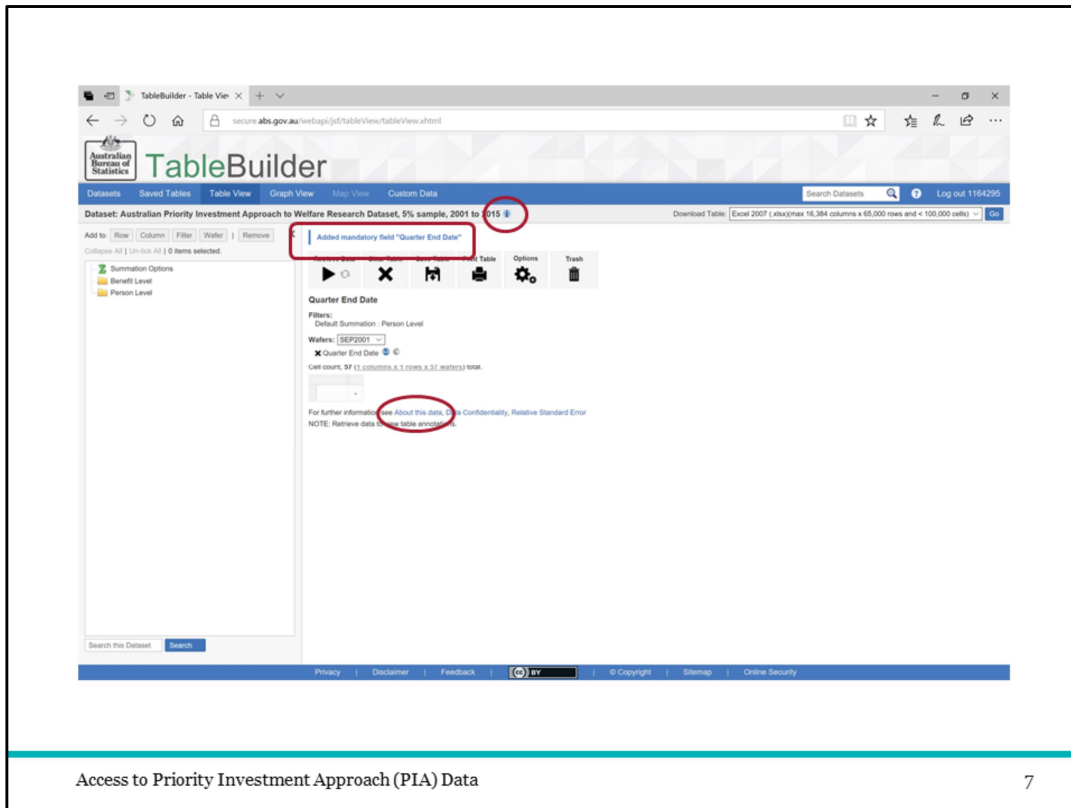
5

As a side note, this is the TableBuilder User Guide

1. Use the navigation links on the left to move through the topics.
2. The tutorials link will take you to a selection of videos created by ABS using the Census TableBuilder.

Access to Priority Investment Approach (PIA) Data

1. Now that I have selected the PIA dataset on the left,
2. the information on the right now provides background information to this dataset and links to more detailed information.
3. To get started, you can select one of the existing tables and then 'Open Table'
4. Or you can start a New Table. We will create a new table for this demonstration.

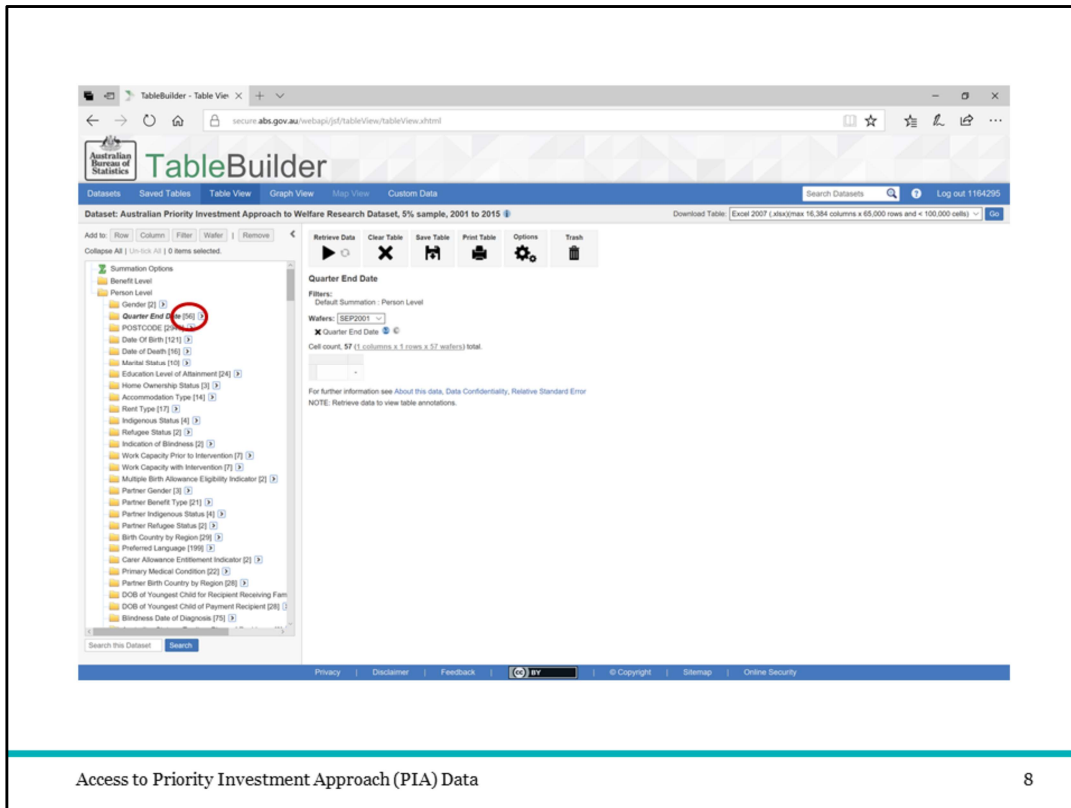


When you go in to a new table you will see this screen.

1. At all times when using TableBuilder you are able to select either the ‘i’ icon at the right of the title or the ‘About this data’ link at the bottom of the main screen. These will both take you to the background information about the Priority Investment Approach data and how it has been applied to TableBuilder.

As described in the previous session, the PIA dataset includes 56 separate quarterly snapshots over 14 years. The table has been designed so that the variable that identifies which of these quarters you are looking at is

2. a mandatory field and must be included somewhere in your table. You can have it in the columns or rows of your table, but by default it is in the wafer. Adding any variable to the wafer will turn a 2D table (with rows and columns) into a 3D cube. That is, the categories you add to the Wafer become the layers of your table



By expanding the Benefit level and Person level folders, all 38 variables will be displayed. The number at the end of each variable title describes the number of categories available in that variable.

1. Here you can see there are 56 quarters in the Quarter End Date. By default, all 56 quarters are added to the wafer.

Having your table retrieve data for all 56 quarters for every table design you create, will increase the size of your table and slow down the time it takes to retrieve data. To make your table smaller and faster, you can remove those quarters that you are not interested in.

The screenshot shows the ABS TableBuilder web application. The browser address bar indicates the URL is `secure.abs.gov.au/webapi/gdf/tableView/tableView.xhtml`. The page title is "TableBuilder" and the dataset is "Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015".

On the left, a "Summation Options" panel is visible, showing a tree structure with "Benefit Level", "Person Level", "Gender [2]", and "Quarter End Date [56]". The "Quarter End Date" section is expanded, showing a list of quarters from SEP2001 to DEC2007. The "Quarter End Date" filter is currently set to "SEP2007".

On the right, the "Quarter End Date" filter is displayed with a dropdown menu showing "SEP2007" selected. Below it, the "Wafers" section shows "Quarter End Date" selected, and the cell count is "57 (1 columns x 1 rows x 57 wafers) total".

At the bottom of the page, there is a footer with links for "Privacy", "Disclaimer", "Feedback", "Copyright", "Sitemap", and "Online Security".

Access to Priority Investment Approach (PIA) Data

9

Play: You can see all the quarters listed in the Wafer to start. To select many categories at a time, you can tick the first and then hold shift and tick the last, and it will include all categories in between. Here I have removed all quarters except for the latest one. Now my table will include only the data from the most recent time period.

How many Carers are in each age group?

Let's say I want to use TableBuilder to look at the age distribution of people who are receiving Carer Payment.

The screenshot displays the TableBuilder web application interface. The left-hand navigation pane shows a tree view of variables under 'Benefit Type'. The 'Carer Payment' variable is highlighted with a red circle. The top navigation bar contains buttons for 'Row', 'Column', 'Filter', and 'Walter'. The right-hand panel shows filter settings, including 'Quarter End Date' set to 'JUN2015'. The bottom of the page features a blue bar with the text 'Access to Priority Investment Approach (PIA) Data' on the left and the number '11' on the right.

By expanding the Benefit Type variable you can see all benefit types available.

1. Selecting the particular benefit you are interested in
2. allows you to use the buttons across the top. We will add Carer Payment as a Filter. Using the filter means that only those records (or people) who are on Carer Payment will be added to the table.

Access to Priority Investment Approach (PIA) Data 12

So far we can see that

1. In June 2015,
2. there were 12,876 recipients of carer payment. Remember this is a 5% sample so for population estimates we would multiply this by 20.

To find out “How many Carers are in each age group?”, we can add all the age groups to the table.

Access to Priority Investment Approach (PIA) Data

PLAY: When you click and hold a variable, the pop up menu of Row, column and Wafer appears. You can then drag and drop your variable into the one of these to have the whole variable added to the table. In this case we have added Date of Birth to Row to have the years listed vertically.

The screenshot shows the TableBuilder interface with the following details:

- Page Title:** TableBuilder - Table View
- URL:** secure.abs.gov.au/webapi/jsp/tableView/tableView.xhtml
- Dataset:** Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015
- Table Title:** Quarter End Date by Date Of Birth by Benefit Type
- Filters:** Benefit Type: Carer Payment; Default Summation: Person Level #
- Waters:** JUN2015
- Cell count:** 244 (1 columns x 122 rows x 2 waters) total.
- Table Content:**

Date Of Birth	Value
1993	0.0
1995	0.0
1996	0.0
1997	0.0
1998	0.0
1999	0.0
1900	0.0
1901	0.0
1902	0.0
1903	0.0
1904	0.0
1905	0.0
1906	0.0
1907	0.0
1908	0.0
1909	0.0
1910	0.0

Access to Priority Investment Approach (PIA) Data 14

By selecting 'Retrieve Data' we will see how many people who were receiving Carer Payments in June 2015 were born in each year of our data. By scrolling up and down we see that the earliest date of birth is **1925** and the latest is **1997**. That is, our oldest carer for that quarter (June 2015) was **90** years old and our youngest was **18**.

The screenshot displays the TableBuilder web application interface. At the top, the 'Table View' tab is selected and circled in red. The main content area shows a bar chart titled 'Quarter End Date by Date Of Birth by Benefit Type'. The y-axis is labeled 'Percent Level' and ranges from 0 to 450. The x-axis is labeled 'Date Of Birth'. The chart shows a distribution of bars representing different birth dates, with a peak around the middle of the range. The interface includes a navigation menu on the left with options like 'Line', 'Bar', 'Stacked Bar', 'Column', 'Stacked Column', 'Stacked Percentage Column', 'Area', 'Stacked Area', 'Stacked Percentage Area', and 'Pie'. There are also filters for 'Benefit Type: Carer Payment' and 'Default Summation: Person Level #'. The footer contains links for 'Privacy', 'Disclaimer', 'Feedback', 'BY', 'Copyright', 'Sitemap', and 'Online Security'.

Access to Priority Investment Approach (PIA) Data

15

To see a graphic representation of this data you simply select the
1. Graph View from the tabs across the top.

How many Carers are in
each age group?
**How does this change
over time?**

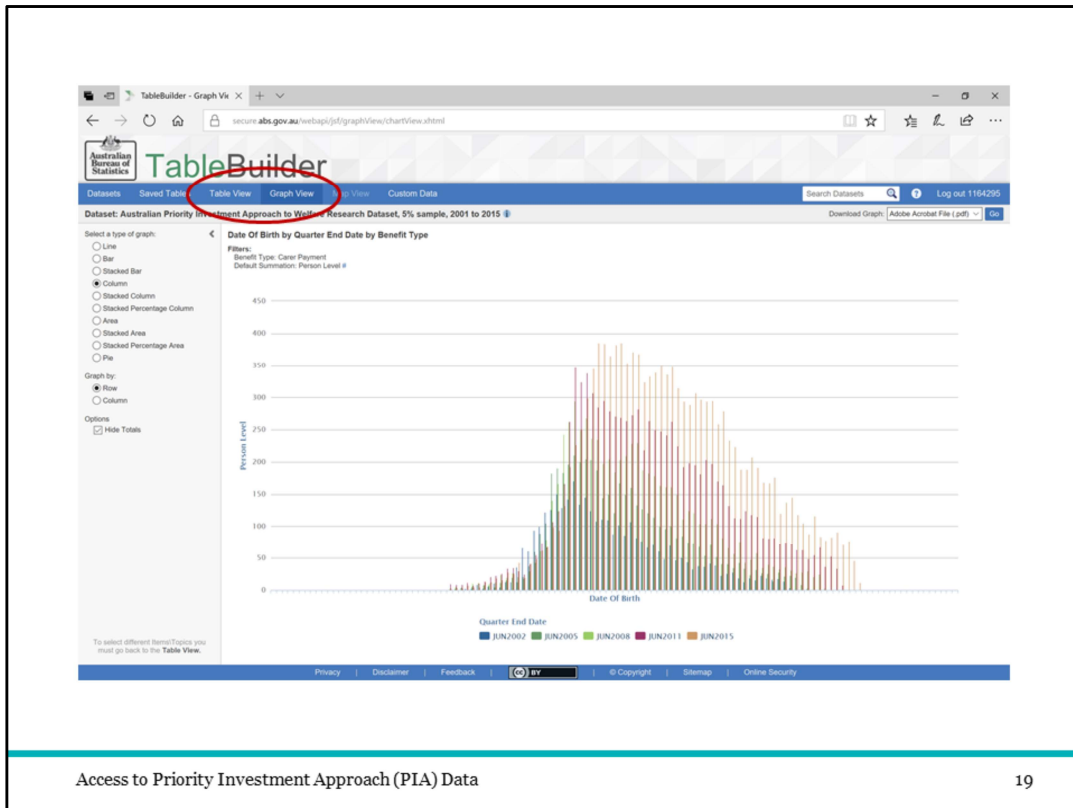
Let's see how the age of Carer Payment recipients has changed across time.

Access to Priority Investment Approach (PIA) Data

1. I select 'Table View' from the tabs at the top to make changes to the table. To be able to look at age distributions over time,
 2. I added four more quarters I was interested in by ticking the categories
 3. And then adding them to the Wafer
- To compare quarters alongside each other I have moved them from the Wafer to the Column. Because Quarter End Date is a mandatory field, it cannot be removed entirely from the table and can only be moved around between Wafer, Row and Column.

Access to Priority Investment Approach (PIA) Data

PLAY: To do this you can simply click and drag the title and drop to the position in the table you'd like it to be.

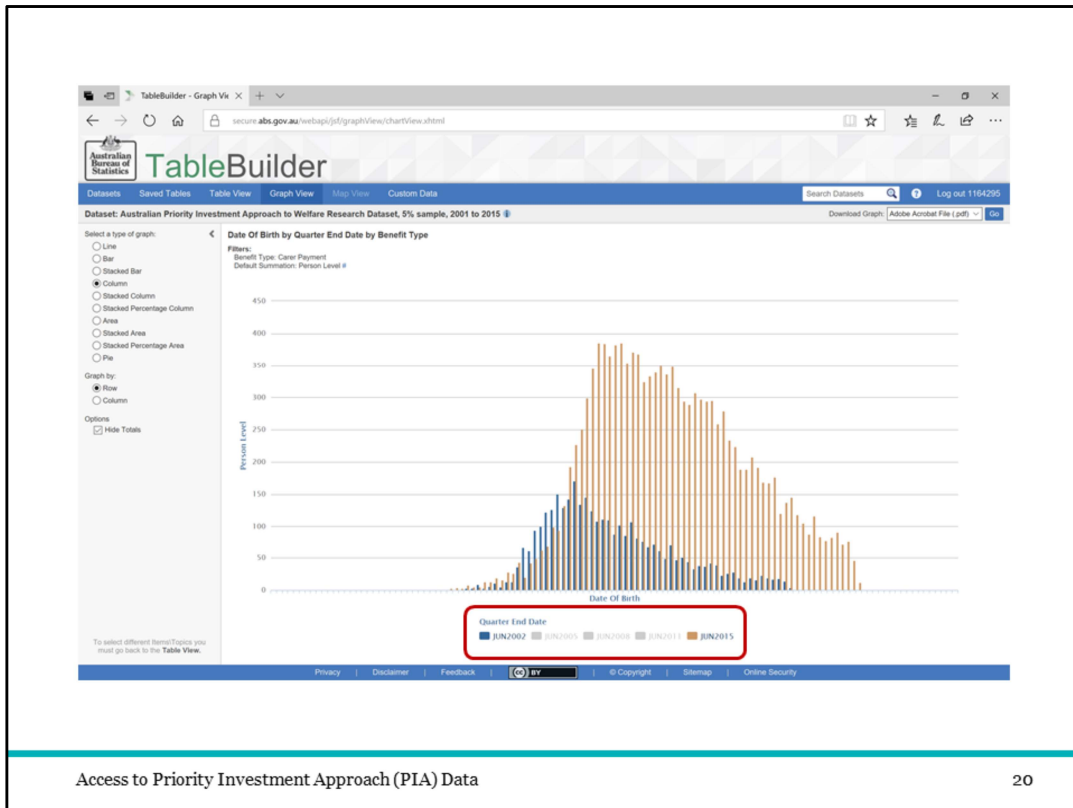


Access to Priority Investment Approach (PIA) Data

By selecting

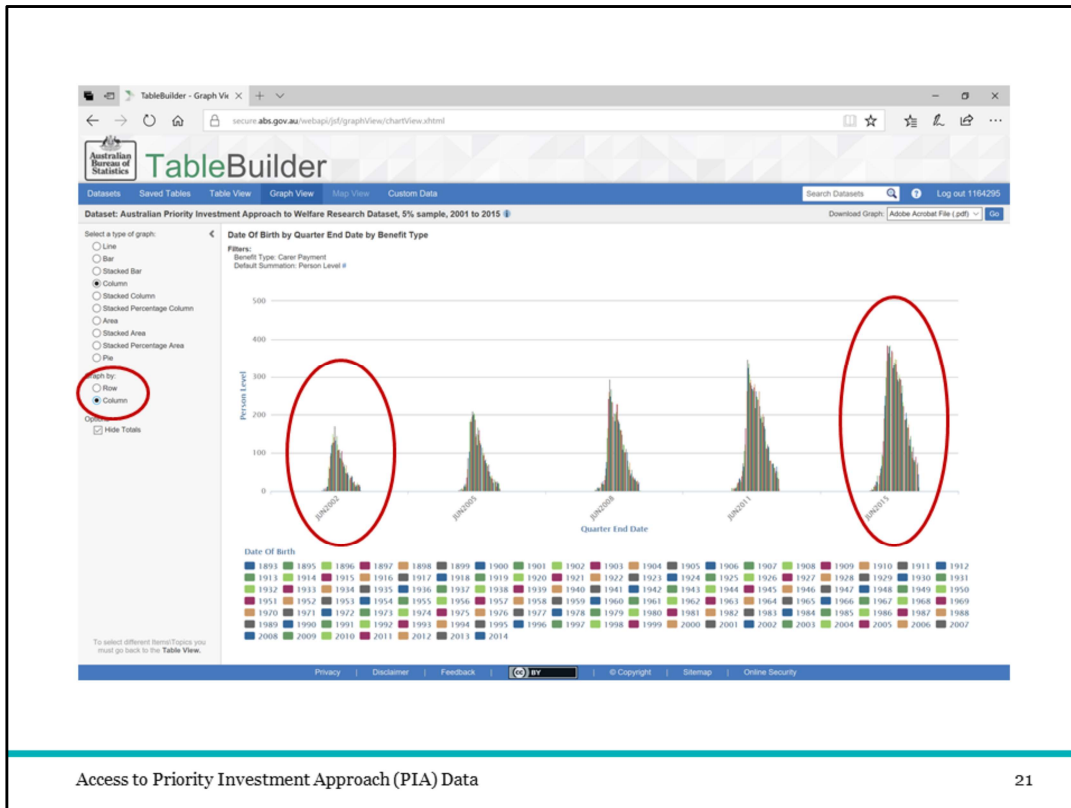
1. Graph View we can see the distribution of age groups for each of the four time periods.

In this display it is difficult to see the change in shape across time periods because they are displayed on top of each other.



Access to Priority Investment Approach (PIA) Data

You can hide parts of the graph by
 1. clicking on the categories at the bottom



Alternatively you can display the results by

1. Column rather than Row. In our table we had the five time periods as the headings across the Columns and so now this is how the data is grouped here.

Now you can see not only the growth in numbers but also the change in shape across the time periods. In particular you can see that there are more young carers in the

2. 2015 time period than there were in the
3. 2002 time period. That is the shape of the 2002 distribution is leaning to the left (more older aged carers) whereas the shape of the 2014 distribution has a slight lean to the right (there are more younger aged carers).

How many Carers are in
each age group?
How does this change
over time?
**How does this differ by
geographic region?**

Let's see how the age of the carers might be different across geographic regions.

Access to Priority Investment Approach (PIA) Data

Again, to change the table simply

1. select 'Table View' from the tabs at the top. To compare across geographic regions, I have put the quarter dates back into the Wafer. For geographic information we have three variables available: State, Postcode or region.
2. In this case we will use 'Region of Residence'.
3. We will select the Snowy Mountains, Kiama – Shellharbour and Broken Hill. Let's say we want to compare these areas to an Inner Sydney region.
4. There are 319 different regions so it might be quicker and easier
5. to use the Search bar. Simply type in 'Sydney' and the search will return all categories and variables that have that word in them. Tick the one you want and
6. use the buttons at the top to add these regions into the Columns of the table.

The screenshot shows the TableBuilder interface with the following details:

- Dataset:** Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015
- Table Title:** Quarter End Date by Date Of Birth by Region of Residence by Benefit Type
- Filters:** Benefit Type: Carer Payment; Default Summation: Person Level; Workers: JUN2000; Quarter End Date: [dropdown]
- Table Structure:**
 - Columns (Wafer):** Region of Residence (Snowy Mountains, Kiama - Shellharbour, Broken Hill and Far West, Sydney Inner City, Total)
 - Rows (Date of Birth):** 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008
- Data:** All cells in the table contain the value 0.0.
- Cell count:** 3660 (5 columns x 732 rows x 6 wafers) total.

Access to Priority Investment Approach (PIA) Data

24

Now we have a table with the regions next to each other in the Column, the quarters in the Wafer and Date of Birth in the Rows

Access to Priority Investment Approach (PIA) Data

By selecting the

1. small 'c' next to any variable in a table, you will toggle between the codes and the label. You might want to see the codes used in variables to compare to other data or information sources. In this case you will see the SA3 region codes.
2. In this case the table has been suppressed. This is one of the privacy measures built into TableBuilder. That is, where there are low numbers in any cells and there is the possibility of people being identified, the information in the table is suppressed and zero values are returned.

Lets look at another way of defining by geographic region.

The screenshot shows the TableBuilder interface with the following components:

- Header:** Australian Bureau of Statistics logo and 'TableBuilder' title.
- Navigation:** Datasets, Saved Tables, Table View, Graph View, Map View, Custom Data.
- Dataset Info:** Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015. Download Table: Excer 2007 (xlsx)max 16,384 columns x 65,000 rows and < 100,000 cells.
- Table Title:** Quarter End Date by Date Of Birth by Region of Residence by Benefit Type
- Filters:** Benefit Type: Carer Payment, Default Summation: Person Level, Wafers: JUN2002, Quarter End Date.
- Table Data:**

Region of Residence	Snowy Mountains	Kiama - Shellharbour	Broken Hill and Far West	Sydney Inner City	Total
Date Of Birth					
1893	0.0	0.0	0.0	0.0	0.0
1895	0.0	0.0	0.0	0.0	0.0
1896	0.0	0.0	0.0	0.0	0.0
1897	0.0	0.0	0.0	0.0	0.0
1898	0.0	0.0	0.0	0.0	0.0
1899	0.0	0.0	0.0	0.0	0.0
1900	0.0	0.0	0.0	0.0	0.0
1901	0.0	0.0	0.0	0.0	0.0
1902	0.0	0.0	0.0	0.0	0.0
1903	0.0	0.0	0.0	0.0	0.0
1904	0.0	0.0	0.0	0.0	0.0
1905	0.0	0.0	0.0	0.0	0.0
1906	0.0	0.0	0.0	0.0	0.0
1907	0.0	0.0	0.0	0.0	0.0
1908	0.0	0.0	0.0	0.0	0.0
- Footer:** Privacy, Disclaimer, Feedback, Copyright, Sitemap, Online Security.

Access to Priority Investment Approach (PIA) Data

26

PLAY: To remove a whole variable from the table simply grab the variable title and drag and drop over the Trash icon

The screenshot shows the TableBuilder interface for the dataset 'Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015'. The interface includes a top navigation bar with 'TableBuilder' and 'Australian Bureau of Statistics' logos. Below the navigation bar, there are tabs for 'Datasets', 'Saved Tables', 'Table View', 'Graph View', and 'Custom Data'. The main area is divided into a left sidebar with a list of variables, a central table view, and a right sidebar with filters and options. The 'Australian State or Territory Place of Residence' variable is selected in the filters, and the 'Date of Birth' column is visible in the table view. The table view shows a list of years from 1983 to 1989. The right sidebar shows filters for 'Benefit Type' and 'Quarter End Date'.

Access to Priority Investment Approach (PIA) Data

27

We might look at the age distribution of Carers by State. In this case I have selected only NSW, Victoria and Queensland. I will select these states by

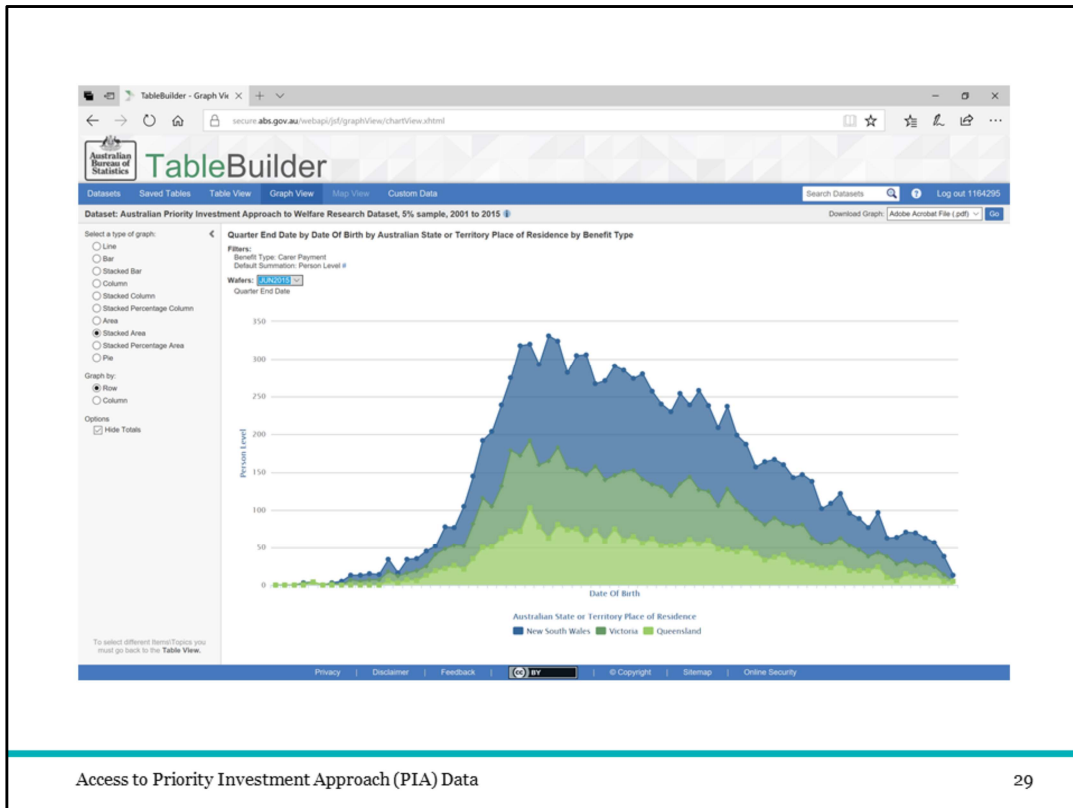
1. ticking the box and then using the
2. Column button at the top.

Access to Priority Investment Approach (PIA) Data

28

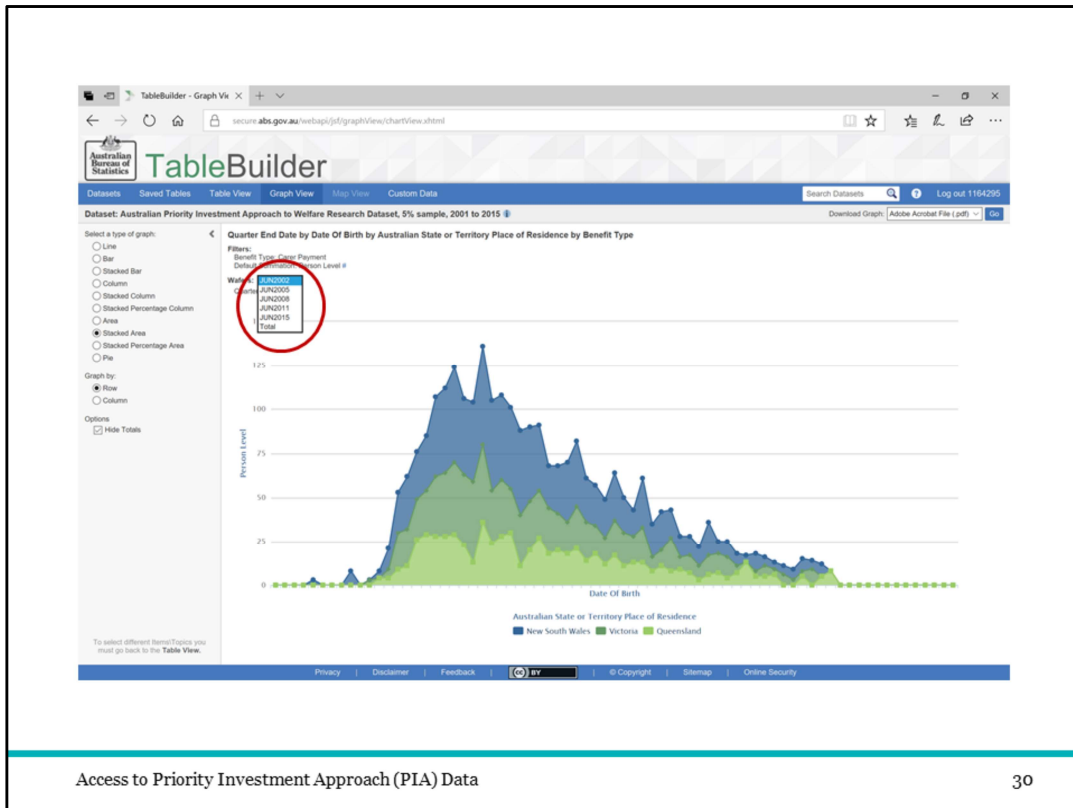
Due to the larger geographic regions, we now have data in our table

1. Please note that the order the categories are displayed in is determined by the order that they are ticked. In this case I selected
2. Victoria before I selected
3. Queensland. And as such,
4. Victoria is listed before
5. Queensland in the table.



Access to Priority Investment Approach (PIA) Data

By selecting Graph View we can see the distribution of age groups for each state.

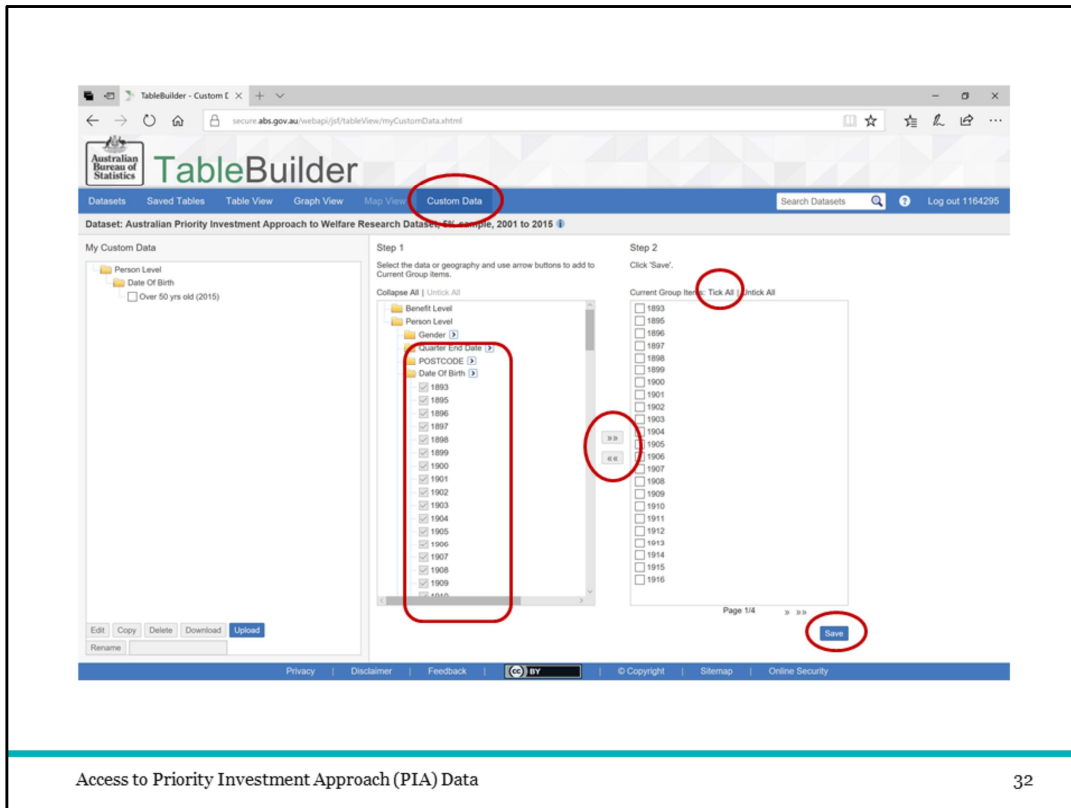


Access to Priority Investment Approach (PIA) Data

And we can easily switch between graphs of the different quarters that we have in the Wafer by using the
 1. drop down box

How many people aged 50
and over are receiving
Newstart?

Now let's look at a different question. Say we would like to know information about people who are 50 years or older and receiving Newstart Allowance.

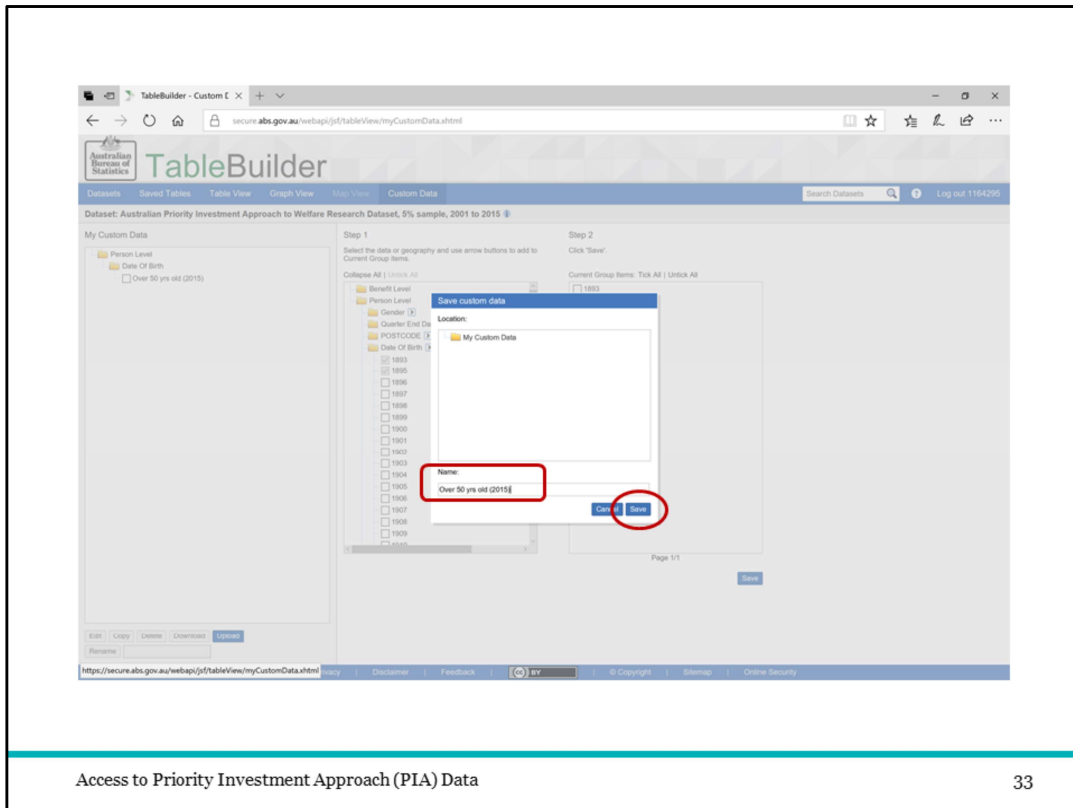


Access to Priority Investment Approach (PIA) Data

You can't add multiple categories (or years) as a filter to a table. To create a table that only includes information about people who are 50 years and over, I will use Custom Data to create an age group category. This method can also be used if you were looking to select 'young people' defined by a certain age range or to combine a number of postcodes or geographic regions to create your own geographic category.

Details on how to use Custom Data are available in the TableBuilder User Guide however briefly,

1. go into Custom Data using the tabs at the top
2. Select the categories you want to include. In this case, I only interested in the latest information which is the June 2015 quarter. As I want everyone aged 50 and over, I am interested in all Date of Birth years from the earliest up to 1965.
3. Move these years over to the right column
4. Tick all of these and then
5. Select Save



1. You will need to give a name to your new category.
2. Then Save again.

Access to Priority Investment Approach (PIA) Data

This new category will be added under the variable in your TableBuilder.

1. To add this age group as your filter select the new category
2. And select Filter
3. I have June 2015 in the Wafer so only information from this quarter will be displayed.

The screenshot shows the TableBuilder interface with the following details:

- Dataset:** Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015
- Filters:**
 - Date Of Birth: Over 50 yrs old (2015)
 - Benefit Type: Newstart Allowance
 - Default Summation: Person Level #
- Wafers:** JUN2015
- Cell count:** 12,522.0
- Annotation Descriptions:**

Symbol #	Description #
#	No scaling applied

Access to Priority Investment Approach (PIA) Data

1. I am also only looking at those receiving Newstart allowance so I need to add this Benefit Type to the filter. Now, the table will only present the count of those people who were aged 50 and over and were receiving Newstart Allowance in June 2015.
2. In this case, there were 12,522 recipients (again, multiply by 20 for a population estimate)

How many people aged 50 and over are receiving Newstart?

What is their highest level of education? How is this different by Gender?

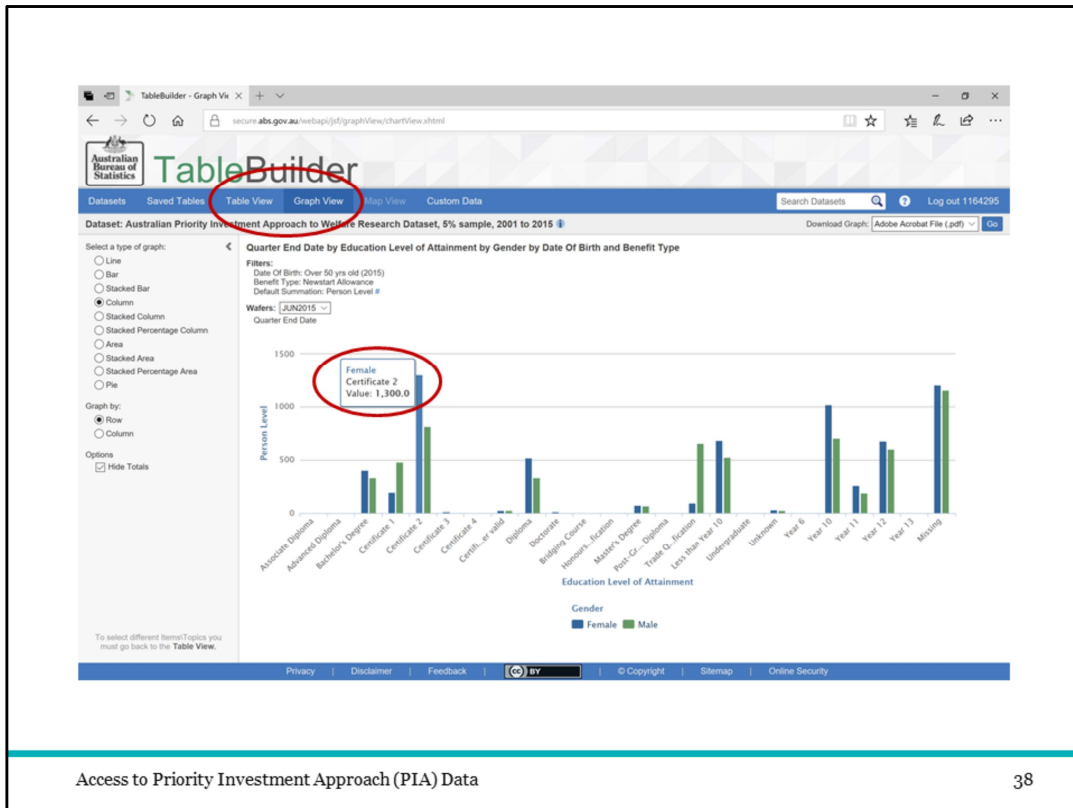
Let's look at what we know about these recipients regarding their level of education and gender.

The screenshot shows the TableBuilder interface with the following data table:

Education Level of Attainment	Female	Male	Total
Associate Diploma	8.0	3.0	9.0
Advanced Diploma	0.0	0.0	0.0
Bachelor's Degree	407.0	333.0	742.0
Certificate 1	201.0	481.0	683.0
Certificate 2	1,300.0	812.0	2,110.0
Certificate 3	15.0	5.0	23.0
Certificate 4	5.0	7.0	14.0
Certificate - No longer valid	25.0	29.0	54.0
Diploma	519.0	336.0	853.0
Doctorate	13.0	5.0	18.0
Bridging Course	0.0	0.0	0.0

Access to Priority Investment Approach (PIA) Data 37

1. To look at this question I have added 'Education Level of Attainment' to the Row and
2. Gender to the Column by dragging the variable title.



Access to Priority Investment Approach (PIA) Data

1. Using the Graph View I can look at the distribution of the Newstart Recipients by their highest level of education.
2. To see more detailed information, I can hover over any of the graph elements. You can see the information is quite spread out here and is not in any sensible order.

TableBuilder - Table View

secure.abs.gov.au/webapi/jsp/tableView/tableView.xhtml

Australian Bureau of Statistics **TableBuilder**

Datasets Saved Tables Table View Graph View Map View Custom Data Search Datasets Log out 1164295

Dataset: Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015 Download Table: Excel 2007 (.xlsx)(max 16,384 columns x 65,000 rows and < 100,000 cells) Go

Add to: Row Column Filter Wafer Remove

Retrieve Data Clear Table Save Table Print Table Options Trash

Quarter End Date by Education Level of Attainment by Gender by Date of Birth and Benefit Type

Filters:

- Date of Birth: Over 50 yrs old (2015)
- Benefit Type: Newstart Allowance
- Default Summation: Person Level #

Wafers: JUN2015

Quarter End Date

Cell count: 66 (2 columns x 11 rows x 2 wafers) total.

	Gender	Female	Male	Total
Education Level of Attainment				
Less than Year 10		696.0	528.0	1,216.0
Year 10		1,019.0	708.0	1,726.0
Year 11		258.0	194.0	459.0
Year 12		680.0	600.0	1,284.0
Certificate 1		201.0	481.0	683.0
Certificate 2		1,300.0	812.0	2,110.0
Diploma		519.0	336.0	853.0
Trade Qualification		96.0	660.0	754.0
Bachelor's Degree		407.0	333.0	742.0
Master's Degree		74.0	66.0	138.0
Total		5,233.0	4,728.0	9,964.0

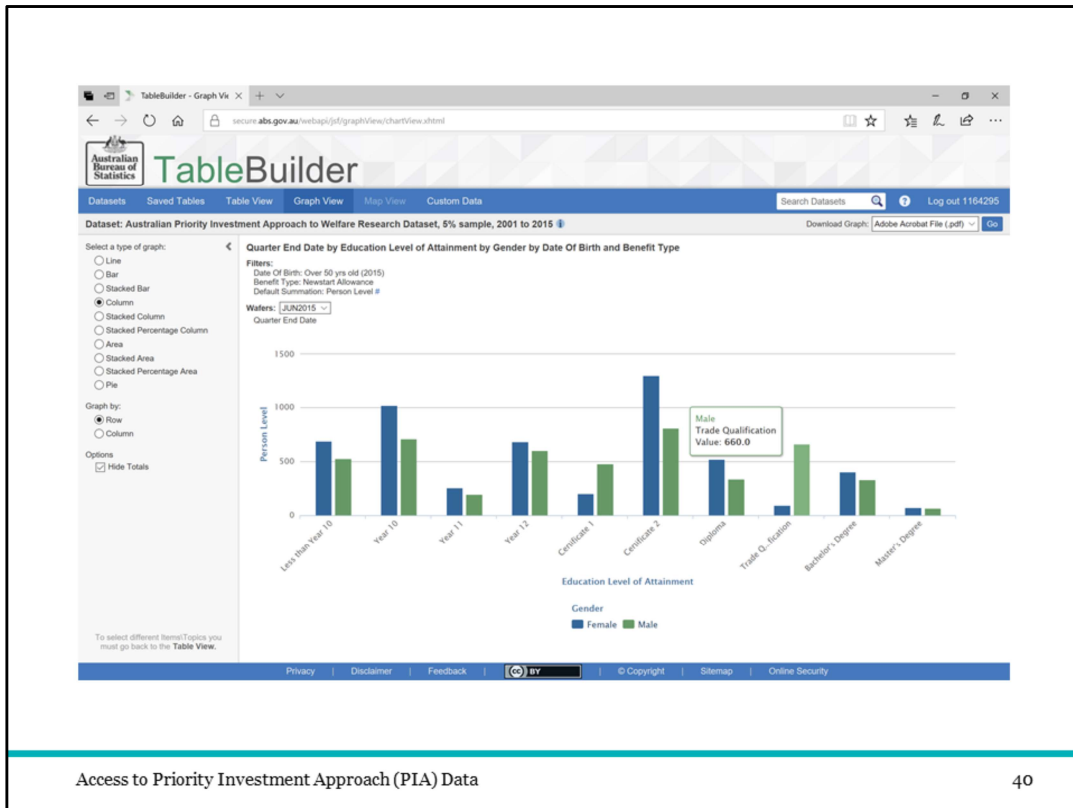
Privacy Disclaimer Feedback BY Copyright Sitemap Online Security

Access to Priority Investment Approach (PIA) Data

39

To make this table (and graph) make a little more sense, I have removed the Education variable and then selected only the categories I am interested in, in an order that makes sense.

1. You can see education is now listed from “Less than Year 10” through to “Master’s Degree”.



Now the graph also presents the information in this same order and as such is easier to read.

How many young people aged 50 and over are receiving Newstart?
What is their highest level of education? How is this different by Gender?
How is this different by Indigenous Status?

Let's look at how this is different for indigenous and non-indigenous recipients.

The screenshot shows the TableBuilder interface for the dataset 'Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015'. The main table displays data for 'Quarter End Date by Education Level of Attainment by Gender by Date of Birth and Benefit Type'. The table has columns for Gender (Female, Male, Total) and Education Level of Attainment (Less than Year 10, Year 10, Year 11, Certificate 1, Certificate 2, Diploma, Trade Qualification, Bachelor's Degree, Master's Degree, Total). The 'Indigenous Status' variable is highlighted in the left-hand menu and is being added to the 'Column' information in the table header.

Education Level of Attainment	Female	Male	Total
Less than Year 10	696.0	528.0	1,216.0
Year 10	1,019.0	708.0	1,726.0
Year 11	258.0	194.0	459.0
Certificate 1	680.0	600.0	1,284.0
Certificate 2	201.0	481.0	683.0
Diploma	1,300.0	812.0	2,110.0
Trade Qualification	519.0	336.0	853.0
Bachelor's Degree	96.0	660.0	754.0
Master's Degree	407.0	333.0	742.0
Total	74.0	66.0	138.0
Total	5,233.0	4,726.0	9,964.0

Access to Priority Investment Approach (PIA) Data

42

1. To add Indigenous Status we simply pull the 'Indigenous Status' Variable across to add it to the Column information.

TableBuilder - Table View

secure.abs.gov.au/webapi/jsp/tableView/tableView.xhtml

Australian Bureau of Statistics **TableBuilder**

Datasets Saved Tables Table View Graph View Map View Custom Data Search Datasets Log out 1164295

Dataset: Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015 Download Table: Excel 2007 (xlsx)(max 16,384 columns x 65,000 rows and < 100,000 cells) Go

Add to: Row Column Filter Wafer Remove

Retrieval Data Clear Table Save Table Print Table Options Trash

Quarter End Date by Education Level of Attainment by Gender and Indigenous Status by Date of Birth and Benefit Type

Filters:

- ☑ Date of Birth: Over 50 yrs old (2015)
- ☑ Benefit Type: Newstart Allowance
- Default Summation: Person Level #

Wafers: JUN2015

- ☑ Quarter End Date

Cell count: 330 (18 columns x 11 rows x 2 wafers) total, 264 (12 columns x 11 rows x 2 wafers) displayed.

Education Level of Attainment	Female				Male			
	Indigenous	Non-Indigenous	Unknown	Missing	Indigenous	Non-Indigenous	Unknown	Missing
Less than Year 10	51.0	569.0	62.0	0.0	50.0	437.0	47.0	0.0
Year 10	57.0	825.0	134.0	0.0	38.0	557.0	112.0	0.0
Year 11	12.0	224.0	22.0	0.0	6.0	163.0	29.0	0.0
Year 12	17.0	586.0	76.0	0.0	6.0	475.0	115.0	0.0
Certificate 1	11.0	171.0	23.0	0.0	42.0	379.0	64.0	0.0
Certificate 2	61.0	1,095.0	145.0	0.0	51.0	654.0	104.0	0.0
Diploma	11.0	454.0	49.0	0.0	5.0	295.0	37.0	0.0
Trade Qualification	0.0	84.0	8.0	0.0	14.0	537.0	105.0	0.0
Bachelor's Degree	10.0	354.0	47.0	0.0	4.0	288.0	44.0	0.0

Privacy | Disclaimer | Feedback | BY | © Copyright | Sitemap | Online Security

Access to Priority Investment Approach (PIA) Data

43

This will display the information for Gender by Indigenous Status.

Access to Priority Investment Approach (PIA) Data

We might decide that we don't want to include 'Unknown' and 'Missing'.

1. To change this we tick these categories, and then
2. Select 'Remove'

The screenshot shows the TableBuilder interface for the dataset 'Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015'. The 'Options' menu is open, showing 'Row' selected for 'Percentages'. The table displays data for 'Education Level of Attainment' and 'Indigenous Status' by 'Date of Birth' and 'Benefit Type'. The table is structured as follows:

Education Level of Attainment	Female		Male		Total	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Less than Year 10	4.61%	51.40%	4.52%	39.48%	8.76%	90.42%
Year 10	3.86%	55.89%	2.57%	37.74%	3.21%	93.56%
Year 11	2.96%	55.31%	1.48%	40.25%	4.69%	95.56%
Year 12	1.56%	53.81%	0.55%	43.62%	2.11%	97.43%
Certificate 1	1.84%	28.55%	7.01%	63.27%	8.68%	91.32%
Certificate 2	3.27%	58.74%	2.74%	35.09%	6.12%	93.83%
Diploma	1.44%	59.50%	0.68%	38.66%	2.75%	98.17%
Trade Qualification	0.00%	13.23%	2.20%	84.57%	1.89%	97.64%
Bachelor's Degree	1.52%	53.95%	0.61%	43.90%	2.13%	97.41%
Master's Degree	0.00%	52.00%	0.00%	48.40%	0.00%	100.00%

Access to Priority Investment Approach (PIA) Data

The table is now more easily read with only the two categories for Indigenous Status.

1. We can also display the results by percentage. We can choose between percentage by Row or percentage by Column. Here we have selected by Row and as such see the distribution across the groups for each education level.
2. Here we can see that 8.76% of this group who had not completed Year 10, were indigenous.
3. Over 80% who had a Trade Qualification were non-indigenous men.

TableBuilder - Table View

secure.abs.gov.au/webapi/jsp/tableView/tableView.xhtml

Australian Bureau of Statistics **TableBuilder**

Datasets Saved Tables Table View Graph View Map View Custom Data Search Datasets Log out 1164295

Dataset: Australian Priority Investment Approach to Welfare Research Dataset, 5% Sample, 2001 to 2015 Download Table: Excel 2007 (xlsx)(max 16,384 columns x 65,000 rows and = 100,000 cells) Go

Add to: Row Column Filter Wafer Remove Collapse All Unlink All 0 items selected.

Summation Options

- Benefit Level
 - Benefit Type [2] (3)
 - Benefit Status [2] (3)
 - Assessment Type [3] (3)
 - Reason For Suspension [122] (3)
- Person Level
 - Gender [2] (3)
 - Quarter End Date [56] (3)
 - POSTCODE [943] (3)
 - Date Of Birth [122] (3)
 - Date of Death [16] (3)
 - Marital Status [10] (3)
 - Education Level of Attainment [24] (3)
 - Home Ownership Status [3] (3)
 - Accommodation Type [14] (3)
 - Rent Type [17] (3)
 - Indigenous Status [4] (3)
 - Refugee Status [2] (3)
 - Indication of Blindness [2] (3)
 - Work Capacity Prior to Intervention [7] (3)
 - Work Capacity with Intervention [7] (3)
 - Multiple Birth Allowance Eligibility Indicator [2] (3)
 - Partner Gender [3] (3)
 - Partner Benefit Type [2] (3)
 - Partner Indigenous Status [4] (3)

Search this Dataset Search

Review Data Clear Table **Save Table** Print Table Options Trash

Quarter End Date by Education Level of Attainment by Gender and Indigenous Status by Date Of Birth and Benefit Type

Filters:

- Date of Birth: Over 50 yrs old (2015)
- Benefit Type: Newstart Allowance
- Default Summation: Person Level #

Wafers: JUN2015

Quarter End Date

Cell count: 198 (8 columns x 11 rows x 2 wafers) total, 132 (8 columns x 11 rows x 2 wafers) displayed.

Education Level of Attainment	Female		Male		Total	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Less than Year 10	4.61%	51.40%	4.52%	39.48%	8.76%	90.42%
Year 10	3.86%	55.89%	2.57%	37.74%	6.23%	93.56%
Year 11	2.96%	55.31%	1.48%	40.25%	4.69%	95.56%
Year 12	1.56%	53.81%	0.55%	43.62%	2.11%	97.43%
Certificate 1	1.84%	28.55%	7.01%	63.27%	8.68%	91.32%
Certificate 2	3.27%	58.74%	2.74%	35.09%	6.12%	93.83%
Diploma	1.44%	59.50%	0.66%	38.66%	2.75%	98.17%
Trade Qualification	0.00%	13.23%	2.20%	84.57%	1.89%	97.64%
Bachelor's Degree	1.52%	53.96%	0.61%	43.90%	2.13%	97.41%
Master's Degree	0.00%	52.00%	0.00%	46.40%	0.00%	100.00%

Privacy Disclaimer Feedback BY Copyright Sitemap Online Security

1. If you want to be able to come back to this table in a different session, you will need to Save the Table.

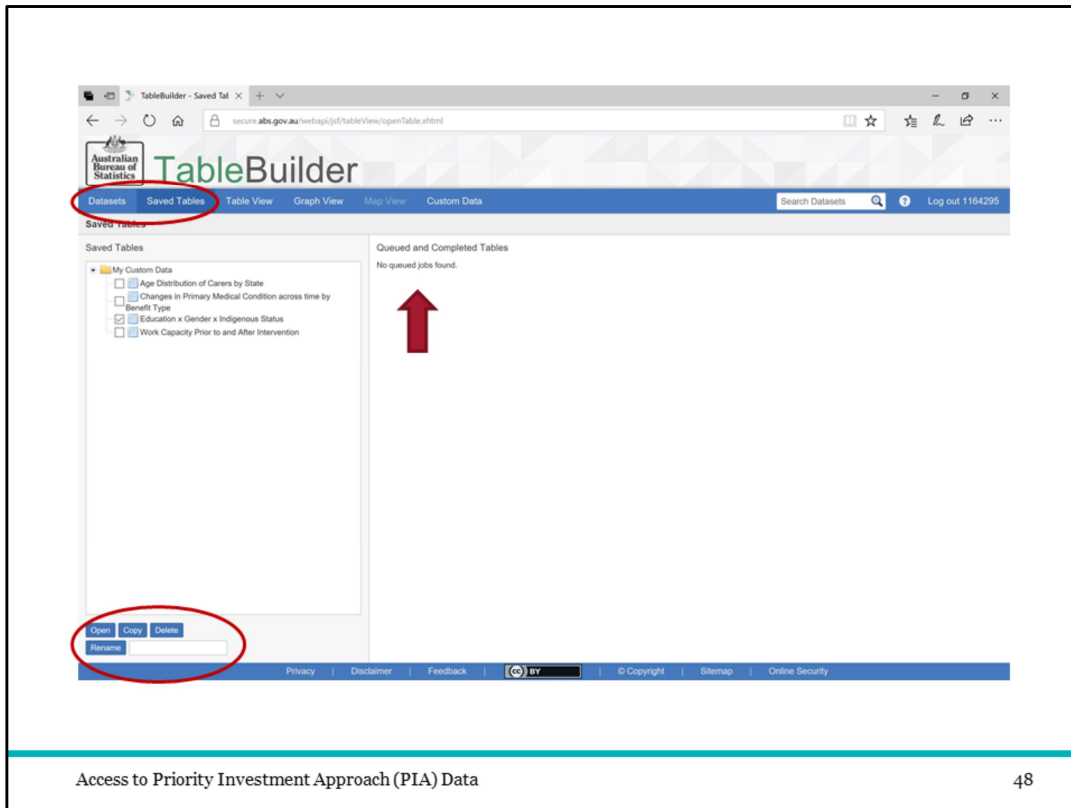
The screenshot shows the TableBuilder interface with a 'Save Table' dialog box open. The dialog box contains the following fields:

- Name:** Education x Gender x Indigenous Status
- Location:** My Custom Data

The background table displays data for Education Level, Gender, and Indigenous Status. The table structure is as follows:

Education Level	Male	Non-Indigenous	Indigenous	Total
Less than Year 10	2%	39.48%	8.76%	90.42%
Year 10	7%	37.74%	6.23%	93.56%
Year 11	8%	40.25%	4.69%	95.56%
Year 12	1.56%	53.81%	0.55%	97.43%
Certificate 1	1.84%	28.55%	7.01%	91.32%
Certificate 2	3.27%	58.74%	2.74%	93.83%
Diploma	1.44%	59.50%	0.66%	98.17%
Trade Qualification	0.00%	13.23%	2.20%	97.64%
Bachelor's Degree	1.52%	53.96%	0.61%	97.41%
Master's Degree	0.00%	52.00%	0.00%	100.00%

1. By selecting the 'Save Table' button, you will be asked to name the table. Here I have called it 'Education x Gender x Indigenous Status'



1. You will now see your table in the Datasets tab (in the middle column) as well as the Saved Tables tab.
2. In the Saved Tables tab you can Open, Copy, Delete and Rename your table.
 - As a side note, if you design a table that has too many cells, it will be converted to a Large Table. There is information about this in the TableBuilder User Guide but put simply this means that you won't be able to view your table in the TableBuilder tool but it will be available for download
3. here in your 'Queued jobs'.

The screenshot shows the TableBuilder interface with a table titled "Quarter End Date by Education Level of Attainment by Gender and Indigenous Status by Date Of Birth and Benefit Type". The table has columns for Gender (Female, Male, Total) and Indigenous Status (Indigenous, Non-Indigenous). The rows represent Education Level of Attainment categories.

Education Level of Attainment	Female		Male		Total	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Less than Year 10	51.0	569.0	50.0	437.0	97.0	1,001.0
Year 10	57.0	825.0	38.0	557.0	92.0	1,381.0
Year 11	12.0	224.0	6.0	163.0	19.0	387.0
Year 12	17.0	586.0	6.0	475.0	23.0	1,061.0
Certificate 1	11.0	171.0	42.0	379.0	52.0	547.0
Certificate 2	61.0	1,095.0	51.0	654.0	114.0	1,749.0
Diploma	11.0	454.0	5.0	295.0	21.0	749.0
Trade Qualification	0.0	84.0	14.0	537.0	12.0	620.0
Bachelor's Degree	10.0	354.0	4.0	288.0	14.0	639.0
Master's Degree	0.0	65.0	0.0	59.0	0.0	125.0

Access to Priority Investment Approach (PIA) Data

You can also download the tables you build in TableBuilder.

1. To do this, select the type of file format and
2. then select 'Go'.
 - Before downloading this table I have added a number of other quarters to the Wafer.

Australian Bureau of Statistics

Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015

Quarter End Date by Education Level of Attainment by Gender and Indigenous Status by Date Of Birth and Benefit Type

Counting: Person Level

Filters:

- Default Summation Person Level (#)
- Date Of Birth Over 50 yrs old (2015)
- Benefit Type Newstart Allowance

JUN2015

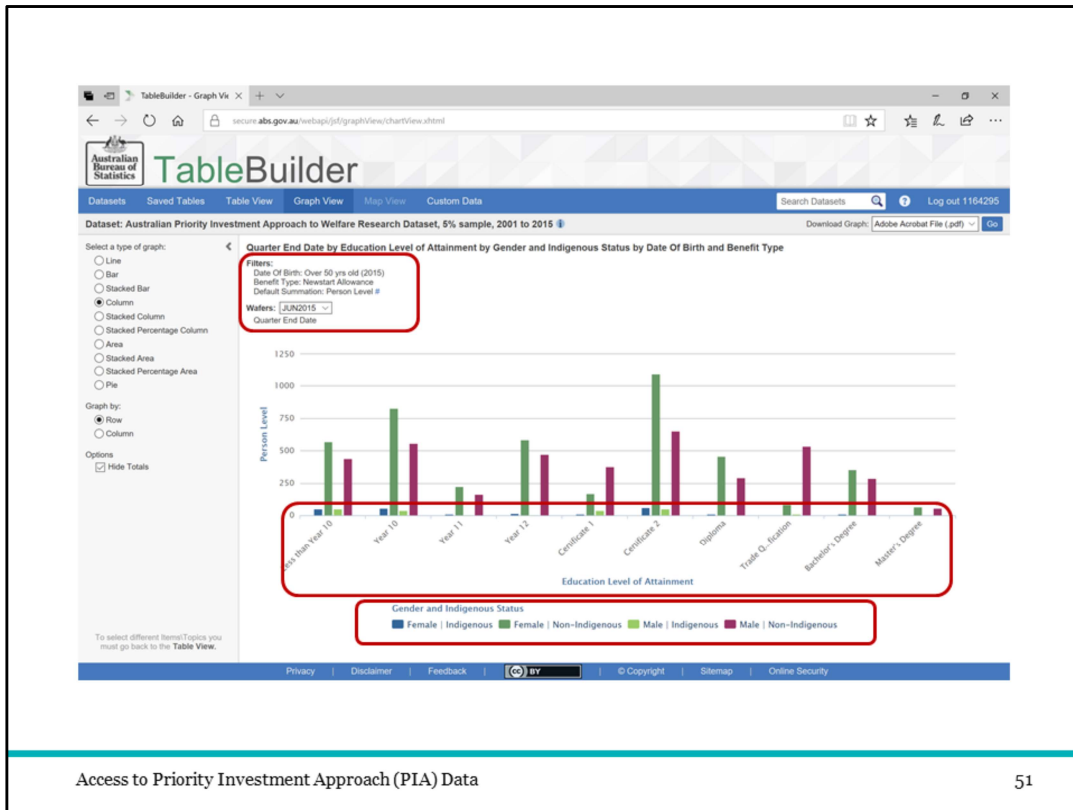
Indigenous Status	Female		Male		Total	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Education Level of Attainment						
Less than Year	51	569	50	437	97	1001
Year 10	57	825	38	557	92	1381
Year 11	12	224	6	163	19	387
Year 12	17	586	6	475	23	1061
Certificate 1	11	171	42	379	52	547
Certificate 2	61	1095	51	654	114	1749
Diploma	11	454	5	295	21	749
Trade	0	84	14	537	12	620
Bachelor's	10	354	4	288	14	639
Master's Degree	0	65	0	58	0	125
Total	232	4423	221	3837	451	8262

Cells in this table have been randomly adjusted to avoid the release of confidential data. Discrepancies may occur between sums of the component items and totals.

Continuous variables in this table have been randomly adjusted to avoid the release of confidential data.

Sheet tabs: Data Sheet 0, Data Sheet 1, Data Sheet 2, Data Sheet 3, Data Sheet 4, Data Sheet 5

1. When there are multiple categories in the wafer of your table (such as we have now with the multiple quarters), the excel worksheet you download will contain the data for each wafer on a separate tab.
2. You can identify the wafer that each tab refers to by the category identified in the cell above the table.
3. You can also see the Filters that have been applied



Access to Priority Investment Approach (PIA) Data

1. The Graph View of this table shows the number of Newstart recipients aged over 50 in the June 2015 quarter
2. for each education level
3. for each group by gender and indigenous status

The screenshot shows the TableBuilder interface with the following details:

- Dataset:** Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015
- Table Title:** Quarter End Date by Education Level of Attainment by Gender and Indigenous Status by Date of Birth and Benefit Type
- Filters:** Date of Birth: Over 50 yrs old (2015), Benefit Type: Newstart Allowance, Default Summation: Person Level
- Waters:** JUN2015
- Cell count:** 594 (8 columns x 11 rows x 5 waters) total, 396 (8 columns x 11 rows x 6 waters) displayed.

Education Level of Attainment	Female		Male		Total	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Less than Year 10	51.0	569.0	50.0	437.0	97.0	1,001.0
Year 10	57.0	825.0	38.0	557.0	92.0	1,381.0
Year 11	12.0	224.0	6.0	163.0	19.0	387.0
Year 12	17.0	586.0	6.0	475.0	23.0	1,061.0
Certificate 1	11.0	171.0	42.0	379.0	52.0	547.0
Certificate 2	61.0	1,095.0	51.0	654.0	114.0	1,749.0
Diploma	11.0	454.0	5.0	295.0	21.0	749.0
Trade Qualification	0.0	84.0	14.0	537.0	12.0	620.0
Bachelor's Degree	10.0	354.0	4.0	288.0	14.0	639.0
Master's Degree	0.0	65.0	0.0	58.0	0.0	125.0

Access to Priority Investment Approach (PIA) Data

You can reorder the nested variables.

PLAY: To do this just click, drag and drop to place Indigenous Status above Gender

TableBuilder - Table View

secure.abs.gov.au/webapi/jsp/tableView/tableView.xhtml

Australian Bureau of Statistics **TableBuilder**

Datasets Saved Tables Table View Graph View Map View Custom Data Search Datasets Log out 1164295

Dataset: Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015 Download Table: Excel 2007 (.xlsx)(max 16,384 columns x 65,000 rows and + 100,000 cells) Go

Add to: Row Column Filter Wafer Remove

Retrieval Data Clear Table Save Table Print Table Options Trash

Summation Options

- Benefit Level
 - Benefit Type [2] (3)
 - Benefit Status [2] (3)
 - Assessment Type [3] (3)
 - Reason For Suspension [122] (3)
- Person Level
 - Gender [2] (3)
 - Quarter End Date [56] (3)
 - POSTCODE [943] (3)
 - Date Of Birth [122] (3)
 - Date of Death [16] (3)
 - Marital Status [10] (3)
 - Education Level of Attainment [24] (3)
 - Home Ownership Status [3] (3)
 - Accommodation Type [14] (3)
 - Rent Type [17] (3)
 - Indigenous Status [4] (3)
 - Refugee Status [2] (3)
 - Indication of Blindness [2] (3)
 - Work Capacity Prior to Intervention [7] (3)
 - Work Capacity with Intervention [7] (3)
 - Multiple Birth Allowance Eligibility Indicator [2] (3)
 - Partner Gender [3] (3)
 - Partner Benefit Type [2] (3)
 - Partner Indigenous Status [4] (3)

Search this Dataset Search

Quarter End Date by Education Level of Attainment by Indigenous Status and Gender by Date of Birth and Benefit Type

Filters:

- Date of Birth: Over 50 yrs old (2015)
- Benefit Type: Newstart Allowance
- Default Summation: Person Level #

Wafers: JUN2015

- Quarter End Date

Cell count: 594 (6 columns x 11 rows x 5 wafers) total. 396 (6 columns x 11 rows x 6 wafers) displayed.

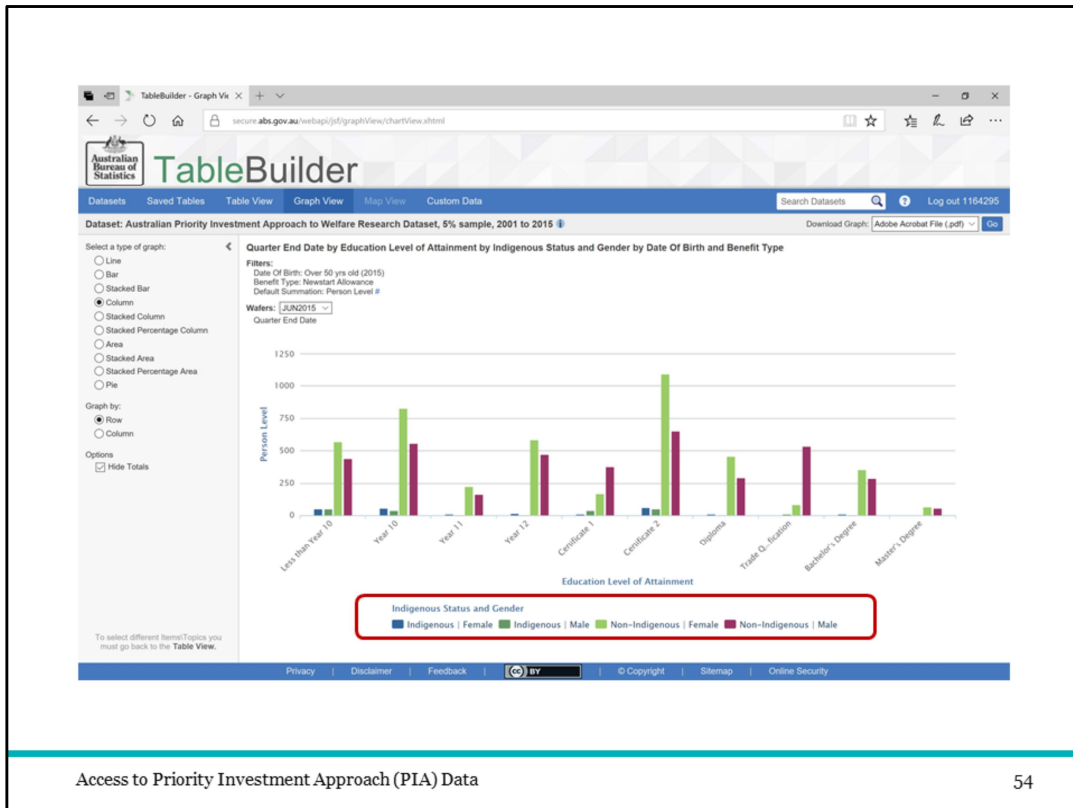
Education Level of Attainment	Indigenous Status			Non-Indigenous			
	Gender	Female	Male	Total	Female	Male	Total
Less than Year 10		51.0	50.0	97.0	569.0	437.0	1,001.0
Year 10		57.0	38.0	92.0	825.0	557.0	1,381.0
Year 11		12.0	6.0	19.0	234.0	163.0	387.0
Year 12		17.0	6.0	23.0	586.0	475.0	1,061.0
Certificate 1		11.0	42.0	52.0	171.0	379.0	547.0
Certificate 2		61.0	51.0	114.0	1,095.0	654.0	1,749.0
Diploma		11.0	5.0	21.0	454.0	295.0	749.0
Trade Qualification		0.0	14.0	12.0	84.0	537.0	620.0
Bachelor's Degree		10.0	4.0	14.0	354.0	288.0	639.0
Master's Degree		0.0	0.0	0.0	65.0	58.0	125.0

Privacy Disclaimer Feedback BY Copyright Sitemap Online Security

Access to Priority Investment Approach (PIA) Data

53

1. Now the data will show as Indigenous Status split by Gender



1. Now the graph has female and male indigenous presented next to each other and then female and male non-indigenous next to each other. The presentation order is a matter of which data you want to compare.

The screenshot shows the TableBuilder interface for the dataset 'Australian Priority Investment Approach to Welfare Research Dataset, 5% sample, 2001 to 2015'. The main chart is a stacked bar chart titled 'Quarter End Date by Education Level of Attainment by Indigenous Status and Gender by Date of Birth and Benefit Type'. The x-axis represents 'Education Level of Attainment' with categories: Less than Year 10, Year 10, Year 11, Year 12, Certificate 1, Certificate 2, Diploma, Trade O. Attainment, Bachelor's Degree, and Master's Degree. The y-axis represents 'Person Level' from 0 to 100. The legend indicates four categories: Indigenous | Female (dark blue), Indigenous | Male (green), Non-Indigenous | Female (light green), and Non-Indigenous | Male (maroon). A left-hand panel allows selecting graph types (Line, Bar, Stacked Bar, Column, Stacked Column, Stacked Percentage Column, Area, Stacked Area, Stacked Percentage Area, Pie) and graphing by Row or Column. A right-hand panel has a 'Go' button circled in red. The footer contains links for Privacy, Disclaimer, Feedback, BY, Copyright, Sitemap, and Online Security.

Access to Priority Investment Approach (PIA) Data

Sometimes the order will be particularly important for a particular style of graph.

1. You can present the data in a number of ways using the options on the left.
2. When you have a graph you like, you can download using the 'Go' button at the top right.

Any Questions?

Thank you.

*Tara Spokes, PhD
Policy Research Officer
tara.spokes@dss.gov.au*

Access to Priority Investment Approach (PIA) Data

56

A lot of this functionality will be things you can discover with use. Please make use of the ABS TableBuilder User Guide and the PIA background information available on the TableBuilder site.

At this stage, are there any questions?