

# **Temora Workforce Futures Study**

This project has been conducted by RDA Riverina

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#### RESOURCES

All modelling has been undertaken using REMPLAN<sup>™</sup> software that has been authored by Principal Research Fellow (ret.), Ian Pinge, at La Trobe University Bendigo.

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## 1. Executive Summary

Temora Shire council approached RDA Riverina to complete a report on the workforce needs that may arise due to investment occurring in the region. Many parts of Australia are struggling with ageing populations and diminishing workforces, and Temora is no exception. Thanks to significant investment occurring in the region, there is a strong and growing labour market. However, this is not without its own challenges.

When investment into a region is considered, often the job growth that is projected only considers those jobs directly related to the investment. It is imperative; however, to look beyond the direct impacts of investment to the flow on effects of job creation.

Through a consultative process with the companies investing in the region, it is possible to find out the specific industry sectors in which they expect to produce direct job growth. Using input-output style impact analysis, these direct changes to employment by industry can then be modelled to analyse the broader effect of investment on the job market. This allows for supply chain and consumption effects to be considered.

When the scenarios outlined within this report are analysed, it becomes evident that there will not only be significant supply issues for the direct changes to the job market, but also many jobs created through flow on effects. This, coupled with observations regarding age demography of the current workforce, leads to examining potential industries which could experience a supply deficit over the coming years.

This report has been created in order to help inform decisions to be made regarding attracting and retaining workers in the Temora Shire Council Local Government Area. This report will also provide a tool for discussing the impact of projected population growth on housing supply and service provision, such as healthcare, childcare, education and aged care.



## 2. Aim

RDA Riverina has created this report at the request of Temora Shire Council. Temora Shire council approached RDA Riverina due to the significant investment slated for Temora Shire over the coming five years.

The purpose of this study is to capture the workforce demands that will result from the jobs created by this investment. Increased business and new business will result in direct impacts on the workforce and create new jobs in the region but will also have flow on effects which will increase the demand for employees within the supply chain. This report aims to present these supply chain needs, as well as the needs created by the direct impact of investment and retirement of current members of the workforce.

## 3. Scope

This report aims to provide scenario analysis of the year by year employment requirements which will result from investment in the Temora Shire Council Local Government Area (LGA).

This report endeavours to encompass the supply side demands generated by new business investment, growth of large employers and retirement. This report does not make recommendations towards how workers should be sourced. This report does not aim to suggest how workers may move within the established labour market of Temora Shire LGA. This report is to be used as a guide for how many new jobs may be created under different investment and growth conditions. Alongside the quantitative data supplied, some qualitative data will be reported as gathered from the participants.



## 4. Scenario Model

## 4.1 Participants

Nine organisations were approached to participate in this study. Of the nine approached, seven responded within the given timeframe. These seven companies are:

- L.P.C Trading PTY LTD
- Bright Beginnings Childcare
- ib vogt
- President Biotech
- Sydney Flight College
- Whiddon Support Services
- Intersales

These companies operate in the following industries:

- Poultry farming
- Early childhood education
- Renewable energy
- Vocational education, specifically pilot training.
- Aged care
- Agricultural services including machinery sales & servicing, as well as agricultural product wholesale.

## 4.2 Assumption – General

The questions asked of participants attempted to make demarcation between low, medium and high growth scenarios. Many of the participants had binary answers that resulted in either a low or high growth scenario. These scenarios are outlined in subsequent sections.

The low growth scenario was largely built around various investments not being made. In these scenarios, the region does not gain the investment as it does in the high growth scenario. For this reason, it is possible that some combination of the low and high growth scenarios could occur. These scenarios are to be used as the upper and lower bounds for the impact of investment. There is variability in between these two options.

As the modelling was carried out, it became apparent that for most years beyond 2019, answers were binary for all businesses besides Intersales. Intersales was the only business with variable growth. Therefore, the scenario modelled for 2020-2022 is that in which all investment is made. The alternative provided by many businesses was that there would be zero growth. In these scenarios, the scenarios again act as an upper bound. The true growth expected could exist anywhere underneath this upper bound.

Only Sydney Flight College was able to provide answers out to 2023, and their projections showed no new staff hired in 2023, therefore modelling for this year was not done.

The year by year analysis is done using current multipliers for the economic impact of employment in different sectors. These are based on 2016 census data and 2014-15 input output tables. This is the most current data available at the time of publication. The scenario outlined in this report will change as input-output tables are updated and economic multipliers change. As more jobs move into the region, the impact on input-output tables is potentially positive. As such, revision of the



upper bound generated by year to year scenario analysis should see an increase in job creation. Increased investment in the region should lead to a stronger economy, therefore the estimates provided based on current data should not be lessened by revision as investment continues to occur and input-output tables are updated.

For all the companies surveyed, every effort was made to find correct job categories for the jobs created. Appropriate and direct correlations did not exist for all jobs. Where direct correlations did not exist, jobs where put into an appropriately similar category. For example, the is no specific category in REMPLAN for certificate qualified childcare worker, however 'Residential care & social assistance services' does encompass Child Care Services, separate from Pre-School Education (assumed to be degree qualified positions).

## 4.3 Assumptions – Company Specific

## 4.3.1 L.P.C Trading PTY LTD

Construction will be completed in 2019. The FTE jobs introduced to the local economy will therefore be a part of the 2019 model. Jobs are to be distributed between agricultural and manufacturing sectors. Low scenario considers a single farm coming online, while the high scenario has two farms come online. Numbers of jobs can be altered as necessary to reflect difference. Increases to the number of farms and production will result in a larger industry and larger multipliers, these numbers only reflect the impact given the present condition of the industry.

## 4.3.2 Bright Beginning Childcare

Operational from early 2019. Will work up to capacity over next 24 month. Jobs created will be added to the model, even though there is potential for movement of workers within the current workforce, there will be vacancy created that needs to be filled. There will be one centre manager required, then two FTE degree qualified positions

#### 4.3.3 ib vogt

Construction costs were not broken down adequately to create a model incorporating these costs. Jobs were based on the functioning operations of the solar farm. Ib vogt had previously collected information to suggest a functioning farm required two-to- three FTE workers. In the present inputoutput tables for Temora shire there is no multiplier for energy generation. As such the workers needed to be put into energy distribution.

## 4.3.4 President Biotech

Initial stages require two shifts to run, and after 12 months, the aim is to be running full time at three shifts per day. Each shift requires one supervisor and three workers. In the present inputoutput tables for Temora shire there is no multiplier for energy generation. As such the workers needed to be put into energy distribution. The average full time wage was taken, and multiplied by the number of staff to then calculate the number of FTE energy distribution jobs. Once energy generation becomes a factor in the local economy, these numbers will need to be upgraded so that the input-output table more accurately represents the economic impact of energy investments.

## 4.3.5 Sydney Flight College

Sydney Flight College has been added to the model as per the table in Appendix A, with appropriate job matching where direct correlations did not exist. In the low scenario of 2019, the Sydney flight



school is not present. Students will have a significant impact on the local economy as consumers, however they were not incorporated into the model due to the incredible complexity of the task.

#### 4.3.6 Whiddon Support Services

The current nursing home will increase the total number of beds by 14. Although 50 beds are being brought online, there will then be 36 beds decommissioned. The jobs created by these increased bed numbers will be in operation from the end of 2020. Therefore, these increases been included into the 2021 employment numbers.

#### 4.3.7 Intersales

Intersales had three growth scenarios and was the only respondent that did not fit a project style model. In the low scenario, there was no growth slated. In the high scenario growth continued at the rate that it has for the last five years. This growth pattern would see 50 new staff across the next five years. The company has previously grown in such a way that for every six technical staff, four administrative staff are required when the company is running without significant overhead. For this reason, the high growth model for Intersales incorporated these numbers.



## 4.4 Results of Scenario Modelling

In the tables below, the total column can have a loss of additivy. If all the numbers in the total column are added together, they do not necessarily equal the total. This is due to partial FTE jobs being created in other industry sectors.

Supply chain effects are those that result from local purchases of goods and services as a result of the increased number of jobs in an industry sector.

Consumption effects are those that result from increases in wages and salaries which are then used on consumption within the local economy.

## 4.4.1 – 2019 Low Growth

This scenario includes LPC Trading and Bright Beginnings. The direct change due to investment is 17 jobs. This results in up to 10 FTE jobs due to supply chain effects and up to 5 FTE jobs due to consumption effects.

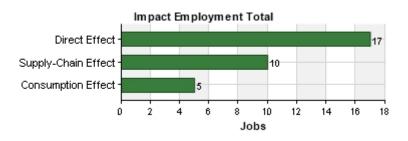


Figure 1 - Total Employment 2019 Low Growth

Table 1 - Distribution of Employment 2019 – Low Growth

| Employment  | Direct<br>Change<br>Jobs | Direct<br>Effect<br>(Jobs) | Supply-Chain<br>Effect (Jobs) | Consumption<br>Effect (Jobs) | Total<br>(Jobs) |
|---|--------------------------|----------------------------|-------------------------------|------------------------------|-----------------|
| Sheep, Grains, Beef & Dairy Cattle                    |                          |                            | 4                             | 0                            | 4               |
| Poultry & Other Livestock                             |                          |                            | 1                             | 0                            | 1               |
| Agriculture, Forestry & Fishing Support Services      | 4                        | 4                          | 0                             | 0                            | 4               |
| Meat & Meat Product Manufacturing                     | 5                        | 5                          | 0                             | 0                            | 5               |
| Wholesale Trade                                       |                          |                            | 0                             | 0                            | 1               |
| Retail Trade  |                          |                            | 1                             | 2                            | 2               |
| Accommodation & Food Services                         |                          |                            | 0                             | 1                            | 1               |
| Transport, Postal & Warehousing                       |                          |                            | 1                             | 0                            | 1               |
| Professional, Scientific & Technical Services         |                          |                            | 1                             | 0                            | 1               |
| Administrative & Support Services                     |                          |                            | 1                             | 0                            | 1               |
| Pre-School, Primary, Secondary & Special<br>Education | 3                        | 3                          | 0                             | 0                            | 3               |
| Residential Care & Social Assistance Services         | 5                        | 5                          | 0                             | 0                            | 5               |
| Other Services  |                          |                            | 0                             | 0                            | 1               |
| TOTAL   | 17                       | 17                         | 10                            | 5                            | 32              |



## 4.4.2 – 2019 High Growth

This scenario includes Sydney Flight College and Intersales high growth scenario. The direct change due to investment is 46 jobs. This results in 24 FTE jobs due to supply chain effects and up to 18 FTE jobs due to consumption effects.

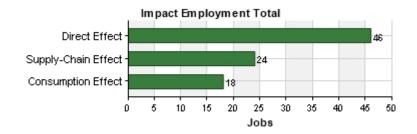


Figure 2 - Total Employment 2019 High Growth

#### Table 2 - Distribution of Employment 2019 - High Growth

| Employment   | Direct<br>Change<br>Jobs | Direct<br>Effect<br>(Jobs) | Supply-<br>Chain<br>Effect<br>(Jobs) | Consumption<br>Effect (Jobs) | Total<br>(Jobs) |
|--|--------------------------|----------------------------|--------------------------------------|------------------------------|-----------------|
| Sheep, Grains, Beef & Dairy Cattle                             |                          |                            | 8                                    | 0                            | 8               |
| Poultry & Other Livestock                                      |                          |                            | 2                                    | 0                            | 2               |
| Agriculture, Forestry & Fishing Support Services               | 6                        | 6                          | 1                                    | 0                            | 7               |
| Meat & Meat Product Manufacturing                              | 10                       | 10                         | 0                                    | 0                            | 10              |
| Construction   |                          |                            | 1                                    | 0                            | 1               |
| Wholesale Trade  |                          |                            | 1                                    | 1                            | 2               |
| Retail Trade   |                          |                            | 1                                    | 5                            | 6               |
| Accommodation & Food Services                                  |                          |                            | 1                                    | 3                            | 4               |
| Transport, Postal & Warehousing                                |                          |                            | 2                                    | 1                            | 3               |
| Financial & Insurance Services                                 |                          |                            | 0                                    | 0                            | 1               |
| Rental, Hiring & Real Estate Services                          |                          |                            | 0                                    | 0                            | 1               |
| Professional, Scientific & Technical Services                  | 1                        | 1                          | 2                                    | 1                            | 4               |
| Employment, Travel Agency and Other Administrative<br>Services | 4                        | 4                          | 1                                    | 0                            | 5               |
| Building Cleaning, Pest Control and Other Support<br>Services  |                          |                            | 1                                    | 0                            | 1               |
| Pre-School, Primary, Secondary & Special Education             | 3                        | 3                          | 0                                    | 1                            | 4               |
| Tech, Vocational & Tertiary Education (undergrad & postgrad)   | 6                        | 6                          | 0                                    | 0                            | 6               |
| Health Care Services   |                          |                            | 0                                    | 1                            | 1               |
| Residential Care & Social Assistance Services                  | 5                        | 5                          | 0                                    | 1                            | 6               |
| Automotive Repair & Maintenance                                |                          |                            | 0                                    | 0                            | 1               |
| Other Repair & Maintenance                                     | 7                        | 7                          | 0                                    | 0                            | 7               |
| Other Services   | 4                        | 4                          | 0                                    | 0                            | 4               |
| Personal Services  |                          |                            | 0                                    | 1                            | 1               |
| TOTAL  | 46                       | 46                         | 24                                   | 18                           | 88              |



#### 4.4.3 - 2020

As outlined previously, the low scenario for years following 2019 is a binary due to nature of the projects; either projects will run, or they won't. The model therefore acts as the upper bound in which all projects run each year.

This scenario includes Sydney Flight College, Intersales high growth scenario, ib vogt, Bright Beginnings and President Biotech . The direct change due to investment is 31 jobs. This results in 13 FTE jobs due to supply chain effects and up to 15 FTE jobs due to consumption effects.

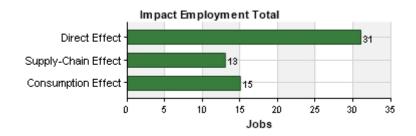


Figure 3 - Total Employment 2020

Table 3 - Distribution of Employment 2020

| Employment   | Direct<br>Change<br>Jobs | Direct<br>Effect<br>(Jobs) | Supply-<br>Chain<br>Effect<br>(Jobs) | Consumption<br>Effect (Jobs) | Total<br>(Jobs) |
|--|--------------------------|----------------------------|--------------------------------------|------------------------------|-----------------|
| Agriculture, Forestry & Fishing                                |                          |                            | 0                                    | 0                            | 0               |
| Manufacturing  |                          |                            | 0                                    | 0                            | 1               |
| Electricity Distribution                                       | 6                        | 6                          | 3                                    | 0                            | 9               |
| Construction   |                          |                            | 1                                    | 0                            | 1               |
| Wholesale Trade  |                          |                            | 1                                    | 1                            | 1               |
| Retail Trade   |                          |                            | 1                                    | 4                            | 5               |
| Accommodation & Food Services                                  |                          |                            | 1                                    | 2                            | 3               |
| Transport, Postal & Warehousing                                |                          |                            | 1                                    | 1                            | 1               |
| Financial & Insurance Services                                 |                          |                            | 1                                    | 0                            | 1               |
| Rental, Hiring & Real Estate Services                          |                          |                            | 0                                    | 0                            | 0               |
| Professional, Scientific & Technical Services                  | 2                        | 2                          | 2                                    | 0                            | 5               |
| Employment, Travel Agency and Other<br>Administrative Services | 4                        | 4                          | 1                                    | 0                            | 5               |
| Building Cleaning, Pest Control and Other Support<br>Services  |                          |                            | 0                                    | 0                            | 1               |
| Pre-School, Primary, Secondary & Special Education             | 1                        | 1                          | 0                                    | 1                            | 2               |
| Tech, Vocational & Tertiary Education (undergrad & postgrad)   | 6                        | 6                          | 0                                    | 0                            | 6               |
| Health Care Services   |                          |                            | 0                                    | 1                            | 1               |
| Residential Care & Social Assistance Services                  | 5                        | 5                          | 0                                    | 1                            | 6               |
| Automotive Repair & Maintenance                                |                          |                            | 0                                    | 0                            | 1               |
| Other Repair & Maintenance                                     | 7                        | 7                          | 0                                    | 0                            | 7               |
| Personal Services  |                          |                            | 0                                    | 1                            | 1               |
| TOTAL  | 31                       | 31                         | 13                                   | 15                           | 59              |



#### 4.4.4 - 2021

This scenario includes Sydney Flight College, Intersales high growth scenario, Whiddon Support Services, Bright Beginnings and President Biotech. The direct change due to investment is 55 jobs. This results in 11 FTE jobs due to supply chain effects and up to 21 FTE jobs due to consumption effects.

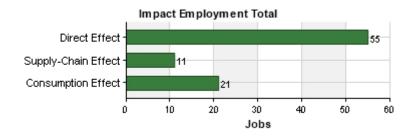


Figure 4 - Total Employment 2021

Table 4 - Distribution of Employment 2021

| Employment  | Direct<br>Change<br>Jobs | Direct<br>Effect<br>(Jobs) | Supply-<br>Chain<br>Effect<br>(Jobs) | Consumption<br>Effect (Jobs) | Total<br>(Jobs) |
|---|--------------------------|----------------------------|--------------------------------------|------------------------------|-----------------|
| Manufacturing   |                          |                            | 0                                    | 1                            | 1               |
| Electricity Distribution  | 1                        | 1                          | 1                                    | 0                            | 2               |
| Construction  |                          |                            | 0                                    | 0                            | 1               |
| Wholesale Trade   |                          |                            | 1                                    | 1                            | 2               |
| Retail Trade  |                          |                            | 1                                    | 6                            | 7               |
| Accommodation & Food Services                                   |                          |                            | 1                                    | 3                            | 4               |
| Transport, Postal & Warehousing                                 |                          |                            | 1                                    | 1                            | 2               |
| Financial & Insurance Services                                  |                          |                            | 0                                    | 0                            | 1               |
| Rental, Hiring & Real Estate Services                           |                          |                            | 0                                    | 0                            | 1               |
| Professional, Scientific & Technical Services                   | 4                        | 4                          | 3                                    | 1                            | 7               |
| Employment, Travel Agency and Other<br>Administrative Services  | 5                        | 5                          | 1                                    | 0                            | 6               |
| Building Cleaning, Pest Control and Other Support<br>Services   |                          |                            | 1                                    | 0                            | 1               |
| Public Administration & Safety                                  |                          |                            | 0                                    | 0                            | 1               |
| Pre-School, Primary, Secondary & Special<br>Education           | 1                        | 1                          | 0                                    | 2                            | 3               |
| Tech, Vocational & Tertiary Education (undergrad<br>& postgrad) | 12                       | 12                         | 0                                    | 0                            | 12              |
| Arts, Sports, Adult, Community & Other Education                |                          |                            | 0                                    | 0                            | 1               |
| Health Care Services  |                          |                            | 0                                    | 1                            | 2               |
| Residential Care & Social Assistance Services                   | 14                       | 14                         | 0                                    | 1                            | 15              |
| Automotive Repair & Maintenance                                 |                          |                            | 0                                    | 0                            | 1               |
| Other Repair & Maintenance                                      | 10                       | 10                         | 0                                    | 0                            | 10              |
| Other Services  | 8                        | 8                          | 0                                    | 0                            | 8               |
| Personal Services   |                          |                            | 0                                    | 1                            | 1               |
| TOTAL   | 55                       | 55                         | 11                                   | 21                           | 87              |



## 4.4.5 - 2022

This scenario includes Sydney Flight College and Intersales high growth scenario. The direct change due to investment is 50 jobs. This results in 14 FTE jobs due to supply chain effects and up to 21 FTE jobs due to consumption effects.

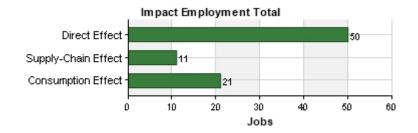


Figure 5 - Total Employment 2022

#### Table 5 - Distribution of Employment 2022

| Employment  | Direct<br>Change<br>Jobs | Direct<br>Effect<br>(Jobs) | Supply<br>-Chain<br>Effect<br>(Jobs) | Consumptio<br>n Effect<br>(Jobs) | Total<br>(Jobs) |
|---|--------------------------|----------------------------|--------------------------------------|----------------------------------|-----------------|
| Manufacturing   |                          |                            | 0                                    | 1                                | 1               |
| Construction  |                          |                            | 0                                    | 0                                | 1               |
| Wholesale Trade   |                          |                            | 1                                    | 1                                | 2               |
| Retail Trade  |                          |                            | 1                                    | 6                                | 7               |
| Accommodation & Food Services                                   |                          |                            | 1                                    | 3                                | 4               |
| Transport, Postal & Warehousing                                 |                          |                            | 1                                    | 1                                | 2               |
| Financial & Insurance Services                                  |                          |                            | 0                                    | 0                                | 1               |
| Rental, Hiring & Real Estate Services                           |                          |                            | 1                                    | 0                                | 1               |
| Professional, Scientific & Technical Services                   | 5                        | 5                          | 3                                    | 1                                | 8               |
| Employment, Travel Agency and Other<br>Administrative Services  | 5                        | 5                          | 1                                    | 0                                | 6               |
| Building Cleaning, Pest Control and Other<br>Support Services   |                          |                            | 1                                    | 0                                | 1               |
| Public Administration & Safety                                  |                          |                            | 0                                    | 0                                | 1               |
| Pre-School, Primary, Secondary & Special<br>Education           |                          |                            | 0                                    | 2                                | 2               |
| Tech, Vocational & Tertiary Education<br>(undergrad & postgrad) | 23                       | 23                         | 0                                    | 0                                | 23              |
| Arts, Sports, Adult, Community & Other<br>Education             |                          |                            | 0                                    | 0                                | 1               |
| Health Care Services  |                          |                            | 0                                    | 1                                | 2               |
| Residential Care & Social Assistance Services                   |                          |                            | 0                                    | 1                                | 1               |
| Automotive Repair & Maintenance                                 |                          |                            | 0                                    | 0                                | 1               |
| Other Repair & Maintenance                                      | 11                       | 11                         | 0                                    | 0                                | 11              |
| Other Services  | 6                        | 6                          | 0                                    | 0                                | 6               |
| Personal Services   |                          |                            | 0                                    | 1                                | 1               |
| TOTAL   | 50                       | 50                         | 11                                   | 21                               | 82              |



# 5. Workforce age demographic report

A strict cohort progression model was not possible due to severe data limitations and incongruencies. The major issue in attempting to create a cohort progression model was that the future projected populations fail to consider the significance of the investments being made. In other words, whilst it is possible to look at potential workforce demographics, giving a strict number of retirees is difficult, as the number of people who will move to the region following work acts as a major confounding variable.

As such the following information is the result of looking at breakdown by industry sector of the current workforce in comparison to the workforce in the five years leading up to the most recent data source.

The current median age of an employed person in Temora is 45.02 years, as at the 2016 census. This has increased over the previous 10 years from 43.35 years. This overall median age is heavily influenced by the presence of young people working in the service industries of Retail Trade and Accommodation & Food Services. Of 185 workers aged 15-19, 133 work in these two industry sectors (71.9%). As can be seen in Figure 6 below, the overall age profile of Temora's workforce is normally distributed with a significant tail towards the lower age brackets.

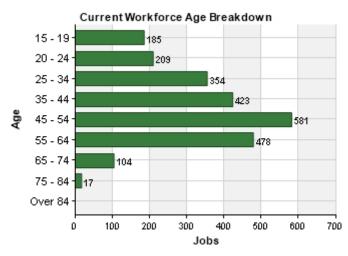


Figure 6 - Age Breakdown of Current Workforce

This does suggest that there is a younger work force coming in to Temora, helping to keep the median age of workers down, however it is important to note the median age by industry as seen in Table 6 below.

It is also worth noting that the median age has not increased significantly between the 2011 census and the 2016 census (45.01 years in 2011). As can be seen in Figure 7 below, the total number of employed persons in Temora has increased over this period, with the number of people employed aged 60-64 increasing significantly, this is counterbalanced however by increases in the number of people employed in the brackets 15-19, 20-24, 25-29 and 30-34 years old.



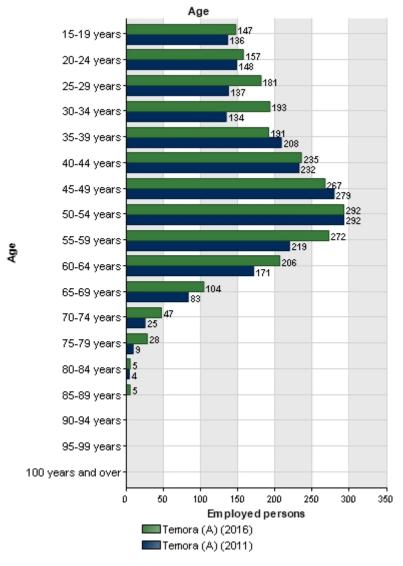


Figure 7 - Age profile comparison 2011-2016

This trend seen in the above figure is the very thing that creates a confounding variable when attempting to create a cohort progression model of retirement. There are evidently jobs being created in Temora, indicated by the overall increase in employed persons, and people are clearly moving into the region to fill these jobs. It is for this reason that this report assumes that retirement does pose a supply issue for workers in Temora, but not in all industry sectors, and not in a way that the economy won't grow to manage.



It is worth noting some figures from table 6 in considering where supply issues may occur within Temora as investment in the region increases.

| Table 6 - Median Ag | e of current workforce |
|---------------------|------------------------|
|---------------------|------------------------|

| Industry Sector                               | Median Age | Jobs  | % of Current<br>Workforce |
|---|------------|-------|---------------------------|
| Agriculture, Forestry & Fishing               | 50.7       | 533   | 22.70%                    |
| Retail Trade                                  | 31.8       | 285   | 12.10%                    |
| Health Care & Social Assistance               | 48.1       | 279   | 11.90%                    |
| Education & Training                          | 46.4       | 229   | 9.70%                     |
| Accommodation & Food Services                 | 23.4       | 157   | 6.70%                     |
| Construction                                  | 40.1       | 116   | 4.90%                     |
| Transport, Postal & Warehousing               | 52.9       | 109   | 4.60%                     |
| Public Administration & Safety                | 46.7       | 107   | 4.60%                     |
| Other Services                                | 29.6       | 105   | 4.50%                     |
| Professional, Scientific & Technical Services | 43.4       | 104   | 4.40%                     |
| Wholesale Trade                               | 39.5       | 76    | 3.20%                     |
| Administrative & Support Services             | 53.0       | 69    | 2.90%                     |
| Electricity, Gas, Water & Waste Services      | 40.4       | 65    | 2.80%                     |
| Manufacturing                                 | 32.25      | 43    | 1.80%                     |
| Financial & Insurance Services                | 40.4       | 33    | 1.40%                     |
| Rental, Hiring & Real Estate Services         | 37.0       | 21    | 0.90%                     |
| Arts & Recreation Services                    | 40.6       | 12    | 0.50%                     |
| Information Media & Telecommunications        | 50.25      | 8     | 0.30%                     |
| Mining  | -          | 0     | 0.00%                     |
| Total   |            | 2,351 | 100                       |

Another noteworthy addition is how the age profile of the working population of Temora has changed over time. The table below outlines the percentages of the working population in older age brackets, highlighting those in the immediately before and over retirement age. Table 7 clearly shows that the percentage of the workforce who are approaching retirement age or who are already over retirement age is increasing with time.

Table 7 - Workforce close to or beyond retirement age

|       | 2006 (%) | 2011 (%) | 2016 (%) |
|-------|----------|----------|----------|
| 60-65 | 4.08     | 8.23     | 8.84     |
| 65+   | 4.59     | 5.83     | 8.11     |



# 6. Conclusion

In looking for links between the supply required by investment into Temora and the potential issues raised by the age demography of the current workforce, the following should be looked at:

- Education There are a very large number of jobs that will be created in the education sector due largely to Sydney Flight College. There will also be an increase in the number of pre-school, primary and high school educators required. The addition of more child care certainly provides a much-needed service; however, it will also create new jobs in the sector. It is probable that the current supply of childcare workers will not meet this demand from both direct changes and indirect demand of people moving into the region.
- Healthcare Similar to education, healthcare will be met with a burden of both direct and consumption effects. Increasing population from people moving into the area increases the need for healthcare workers. Additionally, healthcare is a sector that is already over the median age for workers in the region, and therefore has an ageing working population.
- Retail workers The current workforce of retail workers is heavily skewed towards younger people. The consumption effects from the investment in the region will require even more retail workers. It may therefore follow that either more young people will be required or that older people need to consider working in this sector. This is a similar finding to that in the accommodation and food services sector.
- Transport, postal and warehousing this sector already has a workforce well above the median age for the entire workforce. Many of the scenarios require an increase in this sector. There is likely to be supply issues for both the creation of demand in supply chain and consumption effects, as well as the need created by retirement of aging workers.
- Administration the average age of administrative workers is well above the median for the
  rest of the work force. This means that there is significant risk of supply issues due to
  retirement. In addition, there will be many administrative roles required to support the
  growth in various industries. A possible scenario is to find ways to entice younger people
  into these administrative support roles.
- Construction Presently construction only makes up 4.9% of the workforce. This proportion may remain constant, however there will be a need for more construction workers as can be seen in the distribution tables. Supply of construction workers and the associated trades, could act as a significant hindrance to growth, creating a limiting variable on the current projections.



# Appendix

Appendix A – Sydney Flight School Job Numbers

| Students                  | 25                 | <b>50 100</b>       |                     | 200                 | 200                 |
|---------------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
|                           |                    |                     |                     |                     |                     |
| Pilot<br>Training         | 2019               | 2020                | 2021                | 2022                | 2023                |
| Instructors               | 5                  | 10                  | 20                  | 40                  | 40                  |
| Base<br>Manager           | 1                  | 1                   | 1                   | 1                   | 1                   |
| Team<br>Leaders           | 0                  | 2                   | 3                   | 6                   | E                   |
| Admin                     | 0                  | 0                   | 1                   | 2                   | 2                   |
| Flight<br>Operations      | 0                  | 0                   | 2                   | 4                   | 2                   |
| Theory<br>Teacher         | 1                  | 2                   | 4                   | 7                   | 7                   |
| Sub Total                 | 7                  | 15                  | 31                  | 60                  | 60                  |
| Student<br>Accom          |                    |                     |                     |                     |                     |
| Operations<br>Manager     | 0                  | 0                   | 1                   | 1                   | 1                   |
| Cleaner                   | 1                  | 1                   | 2                   | 4                   | 4                   |
| Cook                      | 2                  | 2                   | 2                   | 4                   | Δ                   |
| Kitchen<br>Hand           | 1                  | 1                   | 2                   | 4                   | 2                   |
| Facilities<br>Maintenance | 0                  | 0                   | 1                   | 2                   | 2                   |
| Sub Total                 | 4                  | 4                   | 8                   | 15                  | 15                  |
| Aircraft<br>Maintenance   |                    |                     |                     |                     |                     |
| LAME                      | 1                  | 2                   | 4                   | 8                   | 8                   |
| TOTAL                     | 12                 | 21                  | 43                  | 83                  | 83                  |
|                           |                    |                     |                     |                     |                     |
| Turnover                  | \$<br>5,000,000.00 | \$<br>10,000,000.00 | \$<br>20,000,000.00 | \$<br>40,000,000.00 | \$<br>40,000,000.00 |
| Average<br>Wage           | 80,000.00          | 80,000.00           | 80,000.00           | 80,000.00           | 80,000.00           |
| Wages                     | 1,075,200.00       | 1,881,600.00        | 3,852,800.00        | 7,436,800.00        | 7,436,800.00        |
|                           | 22%                | 19%                 | 19%                 | 19%                 | 19%                 |
|                           | investment         | \$                  |                     |                     |                     |



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