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MID WESTERN REGIONAL COUNCIL

POPULATION PROJECTIONS REVIEW(2005-2031) REPORT TO COUNCIL

Attachment to Item 6.7 Council Meeting -
16 November 2005
Population Projections Review (2005-2031)

Prepared by

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Prepared for

Mid Western Regional Council

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1 STUDY CONTEXT

1.1 INTRODUCTION

In September 2005, Ratio Consultants Pty Ltd was commissioned by Mid-Western Regional Shire Council to review housing and population projections for the Shire, taking account of four major projects which are planned for the Shire.

1.2 STUDY PURPOSE

The purpose of the study is to *"update current population projections in light of future predicted projects including Wilpinjong Coal Mine, Moolarben Coal Mine, re-opening of the abattoir and the Bulgong-Mudgee Vineyard Resort"*. (Refer Consultant Brief, September 2005.)

1.3 OUTCOMES REQUIRED FOR THE STUDY

The Consultants were required to prepare projections of residential development, households and the resident population for each of the following geographic areas:-

- Mudgee Statistical Local Area (SLA);
- Mudgee township;
- Gulgong township;
- Rural areas (balance of areas in the Mudgee SLA);
- Rylstone SLA;
- Rylstone township;
- Kandos township;
- Rural areas (balance of areas in the Rylstone SLA);
- Whole of Mid-Western Regional Local Government Area (LGA).

Projections were required from 2005-2006 and for each census year through to 2021.

In addition, projections were required of the following life-cycle groups:-

- the infant population (persons aged 0-4 years);
- primary school-age children (persons aged 5-12 years);
- secondary school age children (persons aged 13-18 years);
- tertiary education/training age population (persons aged 19-24 years);
- young adults (persons aged 25-39 years);
- middle aged adults (persons aged 40-64 years);

- senior population (persons aged 65-79 years);
- elderly population (termed "frail aged", persons aged 80 years and over).

Further to the above outputs, projections were required of dwelling unit approvals for each of the above geographic areas, showing:-

- the underlying housing demand, excluding the four development projects;
- revised housing demand, including the development projects.

On the basis of the above projections, and housing allotment supply information to be provided by Council, an assessment was required of the residential land demand-supply balance and the extent to which additional residential land may be required to cater for the projected housing demand.

2 PRINCIPAL FINDINGS

The principal findings of the research are set out in this section. They encompass the following:-

- employment and housing effects of the four planned development projects assessed in this Study;
- long-term residential development "base-trends" in the Mudgee and Rylstone SLA's;
- conjoint effect of the development projects on housing demand in the Mudgee and Rylstone SLA's;
- household and population projections, taking account of the development projects;
- projected changes in the age structure of the residential population;
- gross residential land requirements, taking account of the development projects;
- current residential land supply in the Mudgee and Gulgong townships;
- additional residential land supply requirements at Mudgee and Gulgong;
- impacts on rental housing stock.

2.1 EMPLOYMENT AND HOUSING EFFECTS OF THE DEVELOPMENT PROJECTS

The Study investigated the employment and housing effects of four development projects planned for the Mid-Western Regional Shire. These are:-

- Wilpinjong Mine;
- Moolarben Mine;
- Re-opening of the Mudgee Regional Abattoir;
- Mudgee-Gulgong Vineyard Resort.

Table A.1 shows a summary of the assessed employment population and housing effects of the development projects. The assessed effects of the Wilpinjong Project have been taken from the Environmental Impact Statement (refer Wilpinjong Coal Project, Environmental Impact Statement, May 2005, Volume 5, Sections J2.3-J5, report by ResourceStrategies). Projected employment figures for the planned Moolarben Mine, the re-opening of the Mudgee Regional Abattoir and the Mudgee-Gulgong Vineyard Resort have been provided by Council.

Table A.1 was compiled as follows:-

- as indicated above, details of the direct and indirect employment and population effects of the planned Wilpinjong Mine, together with the assessed likely housing effects of this project (including effects on the rental housing market) were taken from the Wilpinjong Coal Project EIS (reference cited above);
- base permanent employment projections for the other three projects were as indicated above, provided by Council;

- Table A.1 was then developed, assuming that the relationship between additional population likely to be generated by these three projects, together with housing effects would be in proportion to the assessed effects set out in the Wilpinjong Coal Project EIS (i.e. that once the base permanent employment effects had been estimated, then both peak employment effects and population and aggregate housing effects could also be estimated on the basis of the research undertaken for the Wilpinjong Mine EIS and assuming similar relationships would exist in the other three projects between base employment, population and housing).
- The main section of Table A.1 shows the aggregate population and housing effects, together with effects on the residential rental market, for the Mudgee SLA. A sub-table at the foot of the main table shows the housing distribution assumptions for each of the development projects. The distribution assumptions for Wilpinjong were taken from the EIS document (cited above). The distribution assumptions for the other three projects were provided by Council.

The analysis of employment, population and housing effects likely to be generated by the development projects found that:

- The cumulative employment effect of all four projects is projected to be approximately 1,230 jobs (including direct and local area flow-on jobs) as a lower estimate; and 1,992 jobs as a higher estimate;
- The total population increase attributable to the four projects is projected to be in the range of 950-1,535 persons;
- Additional housing demand attributable to the projects is projected to be in the range of 461–757 dwelling units that will be developed in the Mudgee SLA ;
- The development projects will generate demands for approximately 163 dwelling units as rental accommodation.

The likely timescale for the projects to come into operation is set out in Figure 1. This shows that:

- Approvals are likely to be completed for the Wilpinjong Mine and the Mudgee-Gulgong Regional Vineyard Resort by 2005/06, and for the Moolarben Mine and the Mudgee Regional Abattoir during the financial year 2006/07;
- Two projects are likely to have completed their initial operational phase by 2007/08 (Wilpinjong Mine and the Mudgee Regional Abattoir). The Mudgee-Gulgong Regional Vineyard Resort is likely to have completed its initial operational phase by 2008/09, and the Moolarben Mine is likely to have an extended initial operational phase to 2009/10;
- The full operational phases for two of the projects (Wilpinjong Mine and Mudgee Regional Abattoir) are anticipated to commence in 2008/09; and the other two projects in 2009/10 (Mudgee-Gulgong Regional Vineyard Resort) and 2010/11 (Moolarben Mine).

A conservative view of the development projects' housing effects has been adopted. For the purposes of the assessments, it was assumed that the permanent effects on housing demand (as distinct from effects on the rental market or temporary accommodation) would likely be at the lower end of estimates shown in Table A.1 during the operational phase. Permanent housing demands were allocated over a five-year period from the initial operational phase. In addition, a longer-term housing multiplier effect equal to approximately 40% of the housing developed in the initial and full operational phases would be likely to be generated; that is, the projects would be likely to sustain a second round of housing investment attributable to the ongoing business and social effects of the initial wave of immigrants to the Shire.

The overall effect of both the initial and longer-term multiplier impacts on the housing market in the Mudgee SLA is set out in Table C.8. This table shows the estimated temporal and spatial distributions of additional housing demand attributable to each of these projects. It will be seen that:

- Total additional housing demand in the Mudgee SLA attributable to the projects is approximately 658 dwelling units. It will be noted that the final housing effect of the development projects is in the range estimated in Table A.1, derived from relationships estimated for the Wilpinjong Mine;
- This additional dwelling unit demand will be generated in the Mudgee SLA over the period 2006/07-2020/21. Of the 658 additional dwellings likely to be required, it will be noted that some 321 dwellings (or about 49%) will be required in the first five-year period 2006/07-2011/12. A further 243 dwellings (or approximately 37%) will be required over the period 2011/12-2015/16; and the balance of 94 (or about 14%) of the additional dwelling units required will be demanded over the period 2016/17-2020/21;
- Some 515 dwelling units (or approximately 78%) of the additional housing demand in the SLA will be required in the Mudgee township;
- 112 dwelling units (or approximately 17%) of the additional housing demand in the SLA will be required in the Gulgong township;
- The balance of some 30 dwelling units (or about 5%) of the additional housing demand in the SLA will be required in the rural areas.

2.2 LONG-TERM RESIDENTIAL DEVELOPMENT BASE TRENDS IN THE MUDGEE AND RYLSTONE SLAS

An analysis was made of historic trends in dwelling unit approvals for the Mudgee and Rylstone SLAs, utilising ABS data from 1991/92 to 2004/05. The results are shown in Figure 2. It can be seen that :-

- For Mudgee SLA, the base trend in dwelling unit approvals indicates that from 1991/92 to 2005/06 there has been a marginal decline in annual approvals (from 111 per annum in 1991/92-1995/96 to 108 per annum in 1996/97-2000/01 to 93 per annum in 2001/02 -2005/06). This is forecast to stabilise in 2006/07-2010/11 to 100 dwelling unit approvals per annum, and projected to increase to 110 dwelling unit approvals per annum in the five year period 2011/12 - 2015/16 and continue to progressively increase to 140 dwelling unit approvals per annum in the five year period 2026/27-2030/31 (refer Figure 2, Table C.13);

- For Rylstone SLA the base trend shows consistent historic growth in dwelling unit approvals (from 9 dwelling unit approvals per annum in 1991/92-1995/96 to 12 dwelling unit approvals per annum in 1996/97-2000/01 to 18 dwelling unit approvals per annum in 2001/02-2005/06). Growth in dwelling unit approvals is projected to continue to increase for the foreseeable future (to 25 dwelling unit approvals per annum in 2006/07-2010/11 to 30 dwelling unit approvals per annum in 2011/12-2015/16 to 45 dwelling unit approvals per annum in the period 2026/27-2030/31 (refer Figure 2, Table C.13).

2.3 CONJOINT EFFECT OF DEVELOPMENT PROJECTS ON RESIDENTIAL DEMAND IN THE MUDGEES AND RYLSTONE SLAS

The housing effects of the development projects identified in Section 2.1 were added to the base trends described in Section 2.2. The results are shown in Figure 2 and Table C.13. It can be seen that :-

- Additional dwelling unit demands attributable to the development projects are likely to be confined to the Mudgee SLA in the Shire;
- Within the Mudgee SLA the impact of the development projects will be approximately 64 dwelling unit approvals per annum in the period 2006/07-2010/11, 48 dwelling unit approvals per annum in the period 2011/12-2015/16 and 19 dwelling unit approvals per annum in the period 2016/17-2020/21;
- The conjoint effects of additional housing demands generated by the development projects indicate that total housing demand in the Mudgee SLA is projected to increase to 164 dwelling unit approvals per annum in 2006/07-2010/11, 158 dwelling unit approvals per annum in 2011/12-2015/16 and 139 dwelling unit approvals per annum in 2016/17-2020/21;
- For the Shire as a whole, residential development demand is forecast to rise from 111 dwelling unit approvals per annum in 2001/02-2005/06 to about 188 dwelling unit approvals per annum over the period 2006/07-2015/16 and about 172 dwelling unit approvals per annum over the period 2016/17-2025/26, increasing to approximately 185 dwelling unit approvals per annum in the period 2026/27-2030/31;

In summary, the overall effect of the development projects on housing demand in the Mudgee SLA will be to lift projected dwelling unit approvals from 1,650 over the 15-year period 2006/07-2020/21 to exceed 2,300, an increase of approximately 40% over the base residential housing demand in the period.

2.4 HOUSEHOLD AND POPULATION PROJECTIONS TAKING ACCOUNT OF THE DEVELOPMENT PROJECTS

The overall effects of the development projects on projected households and population have been assessed. The results are shown in Table Set B. It will be seen that:-

- Total dwelling stock is projected to increase for all designated local areas in the Shire for the foreseeable future. In particular (refer Table B.2):-
 - Total dwelling stock in the Mudgee township is projected to increase from 3,610 dwelling units in 2001 to 4,960 dwelling units in 2016 and 6,220 dwelling units in 2031;
 - In the Gulgong township the total dwelling stock is projected to increase from 850 dwelling units in 2001 to 1,000 dwelling units in 2016 to 1,100 in 2031;
 - In the rural areas balance in the Mudgee SLA total dwelling stock is projected to increase from 3,480 dwelling units in 2001 to 3,940 dwelling units in 2016 to 4,500 dwelling units in 2031;
 - In the Rylstone SLA total dwelling stock is projected to increase in the Rylstone township from 320 dwelling units in 2001 to 360 dwelling units in 2016 to 440 dwelling units in 2031;
 - In the Kandos township the dwelling stock is projected to remain steady at 680 dwelling units over the period 2001–2016 and to increase to 700 dwelling units by 2031;
 - In the rural areas balance total dwelling stock is projected to increase from 1,060 dwelling units in 2001 to 1,370 dwelling units in 2016 to 1,870 dwelling units in 2031.
- Households are projected to increase in all designated local areas in the Shire in the foreseeable future. In particular (refer Table B.3):-
 - In the Mudgee township resident households are projected to increase from 3,330 in 2001 to 4,610 in 2016 to 5,880 in 2031;
 - In the Gulgong township resident households are projected to increase from 760 in 2001 to 920 in 2016 to 1,020 in 2031;
 - In the rural areas balance (Mudgee SLA) resident households are projected to increase from 2,650 in 2001 to 3,080 in 2016 to 3,580 in 2031;
 - In the Rylstone township resident households are projected to increase from 260 in 2001 to 330 in 2016 to 410 in 2031;
 - In the Kandos township resident households are projected to increase from 590 in 2001 to 600 in 2016 to 630 in 2031;
 - In the rural areas balance (Rylstone SLA) resident households are projected to increase from 690 in 2001 to 930 in 2016 to 1,330 in 2031.
- The resident population is projected to increase in all designated local areas in the Shire in the foreseeable future with the exception of the Kandos township (refer Table B.1):-
 - In the Mudgee township the resident population is projected to increase from 8,930 persons in 2001 to 11,470 persons in 2016 to 14,070 persons in 2031;
 - In the Gulgong township the resident population is projected to increase from 2,080 persons in 2001 to 2,430 persons in 2016 to 2,620 persons in 2031;

- In the rural areas balance (Mudgee SLA) the resident population is projected to increase from 7,340 persons in 2001 to 8,270 persons in 2016 to 9,330 persons in 2031;
- In the Rylstone township the resident population is projected to increase from 700 persons in 2001 to 860 persons in 2016 to 1,040 persons in 2031;
- In the Kandos township the resident population is projected to decrease from 1,360 persons in 2001 to 1,230 persons in 2016. It is projected to stabilise at approximately 1,220 persons over the period 2031–2026, and to marginally increase to 1,240 persons by 2031;
- In the rural areas balance (Rylstone SLA) the resident population is projected to increase from 1,810 persons in 2001 to 2,270 persons in 2016 to 3,190 persons in 2031;
- The overall resident population of the Mudgee SLA is projected to increase from 18,350 persons in 2001 to 22,170 persons in 2016 to 26,020 persons in 2031;
- The overall resident population of the Rylstone SLA is projected to increase from 3,870 persons in 2001 to 4,360 persons in 2016 to 5,470 persons in 2031;
- The overall resident population of the Shire is projected to increase from 22,220 persons in 2001 to 26,530 persons in 2016 to 31,490 persons in 2031;

2.5 PROJECTED CHANGES IN THE AGE STRUCTURE OF THE RESIDENTIAL POPULATION

Projected changes in the age structure of the residential population have been analysed. The results are shown in Table Set D and Figure 3. It was found that:-

- The infant population (children aged 0-4 years) is projected to be stable for the Mudgee township over the period 2001-2016 and to fall thereafter in the period 2016-2031 (refer Table D.1). For the Shire as a whole, the infant population is projected to progressively fall between 2001 and 2016 (from approximately 1,530 children in 2001 to 1,520 in 2016 and 1,390 in 2031). Further detailed results by designated local area are shown in Table D.1;
- For the Mid-Western Region Shire as a whole, the primary school age population (children aged 5-12 years) is projected to fall from 2,700 children in 2001 to 2,670 by 2016 and 2,410 by 2031. Further detailed results by designated local area are shown in Table D.2;
- For the Shire as a whole, the secondary school aged population is projected to be stable over the period 2001-2016 (at approximately 2,000-2,010 persons). After 2016, the secondary school aged population is projected to marginally fall (from 2,010 persons in 2016 to 1,810 persons by 2031). Further detailed results by designated local area are shown in Table D.3;
- For the Shire as a whole, the tertiary education/training age population (persons aged 19-24 years) is projected to progressively increase during the forecast period (from 1,260 persons in 2001 to 1,440 in 2016 to 1,610 in 2031). Further detailed results by designated local area are shown in Table D.4;
- Projections for the Shire indicate that the young adult population (persons aged 25-39 years) is projected to progressively fall during the forecast period (from 4,200 persons in 2001 to 4,080 in 2016 to 3,680 in 2031). Further detailed results by designated local area are shown in Table D.5;

- The projections indicated that the Shire's middle-aged population (persons aged 40-64 years) is projected to significantly increase during the forecast period (from 7,400 persons in 2001 to 9,940 in 2016 to 13,290 in 2031). Further detailed results by designated local area are shown in Table D.6;
- Projections of the senior population for the Shire (persons aged 65-79 years) indicate that this population group is projected to significantly increase during the forecast period (from 2,390 persons in 2001 to 3,390 in 2016 to 4,610 in 2031). Further detailed results by designated local area are shown in Table D.7;
- Projections of the Shire's population aged 80 years and over (termed "frail aged") indicate that this population group is projected to significantly increase during the forecast period (from 740 persons in 2001 to 1,480 in 2016 to 2,690 in 2031). Further detailed results by designated local area are shown in Table D.8.

In summary, the analysis and projections have indicated that the Shire's population is projected to age, as well as increase in numbers, over the forecast period. In particular:-

- The infant population (children aged 0-4 years), which at the 2001 census comprised 6.9% of the Shire's population, is projected to fall to 5.7% by 2016 and 4.4% by 2031;
- The primary school aged population (children aged 5-12 years) is projected to fall from 12.2% of the Shire's population in 2001 to 10.1% in 2016 and 7.7% by 2031;
- The secondary school aged population (persons aged 13-18 years) is projected to fall from 9% of the Shire's population in 2001 to 7.6% in 2016 and 5.7% by 2031;
- The tertiary education training aged population (persons aged 19-24 years) is projected to increase from 5.7% of the Shire's population in 2001 to 5.4% in 2016 and 5.1% by 2031;
- The young adult population (persons aged 25-39 years) is projected to fall from 18.9% of the Shire's population in 2001 to 15.4% in 2016 and 11.7% by 2031;
- The middle-aged population (persons aged 40-64 years) is projected to increase from 33.3% of the Shire's population in 2001 to 37.5% in 2016 and 42.2% by 2031;
- The senior aged population (persons aged 65-79 years) is projected to increase from 10.8% of the Shire's population in 2001 to 12.8% in 2016 and 14.6% by 2031;
- The population aged 80 years and over (termed "frail aged") is projected to increase from 3.3% of the Shire's population in 2001 to 5.6% in 2016 and 8.5% by 2031.

2.6 GROSS RESIDENTIAL LAND REQUIREMENTS TAKING ACCOUNT OF THE DEVELOPMENT PROJECTS

The residential land requirements taking account of the development projects have been assessed for the designated local areas in the Shire. The results shown in Table E.1 indicate the following :-

- Residential allotment demand is currently estimated at 71 allotments per annum in the Mudgee township. Demand is projected to rise sharply in 2006/07-2010/11 and then to ease down to 126 allotments per annum in 2011/12-2015/16 and to 109 allotments per annum over the period 2016/17-2020/21 and to 99 allotments per annum over the period 2021/22-2025/26 prior to increasing to 107 allotments per annum in 2026/27-2030/31;
- In the Gulgong township residential allotment demand is projected to increase sharply from approximately 5 allotments per annum at present (2001/02 – 2005/06 to 17 allotments per annum over the period 2006/07–2015/16 before reducing to approximately 9 allotments per annum in 2016/17 – 2020/21 and 7 allotments per annum over the period 2021/22-2030/31;
- In the rural areas balance (Mudgee SLA) residential allotment demand is projected to steadily increase from 32 allotments per annum in 2001/02-2005/06 to 38 allotments per annum in 2006/07–2010/11 to 41 allotments per annum in 2011/12-2015/16 and progressively increase 49 allotments per annum by 2026/27-2030/31. It should be noted that, as identified in Council's Rural Strategy, the primary objective in the rural zones is to promote agriculture. The Rural Strategy identifies that there is vacant land within the small rural holding zone that may be developed for the purpose of dwellings. Council will need to closely monitor this demand and supply and implications for residential land supply in the town areas;
- In the Rylstone township residential allotment demand is minimal but is projected to steadily increase from 3 allotments per annum in 2001/02-2005/06 to 4 allotments per annum in 2006/07-2010/11 and 5 allotments per annum in the period 2011/12 – 2020/21 and to 7 allotments per annum over the period 2026-27 – 2030/31;
- In the Kandos township the demand for residential land is negligible over the forecast period to 2010/11 and minimal (approximately 1 allotments per annum) thereafter to 2030/31;
- In the rural areas balance (Rylstone SLA) residential land demand is projected to steadily increase from approximately 18 allotments per annum over the period 2001/02-2005/06 to 29 allotments per annum over the period 2011/12-2015/16 to 44 allotments per annum by 2026/27-2030/31;
- For the Shire as a whole the effect of the development projects on residential land requirements is that current allotment demand estimated at approximately 129 allotments per annum (2001/02-2005/06) is projected to increase sharply to approximately 220 allotments per annum over the period 2006/07 – 2015/16 and to stabilise at approximately 200 allotments per annum over the period 2016/17 – 2025/26 prior to increasing to 215 allotments per annum over the period 2026/27 – 2030/31.

2.7 CURRENT RESIDENTIAL LAND SUPPLY IN THE MUDGEES AND GULGONG TOWNSHIPS

Information on the current state of residential land supply in the Mudgee and Gulgong townships was provided by Council. No comprehensive information was available for the Rylstone SLA. The information in relation to Mudgee and Gulgong is provided in Table E.2. It can be seen that:-

- At October 2005 total existing and likely residential supply in the Mudgee township was estimated at approximately 1,218 allotments. This was comprised of 493 allotments on both developed and zoned land. The balance of 725 allotments comprised 675 allotments likely to be yielded through rezoning of land to residential purposes currently underway through the interim LEP;
- At October 2005 total existing, approved and likely residential supply in the Gulgong township was estimated at 478 allotments comprising 333 allotments in land developed or currently zoned for residential purposes, and a further 145 allotments likely to be yielded in land that has been rezoned to residential through the interim LEP.

2.8 ADDITIONAL LAND SUPPLY REQUIREMENTS AT MUDGEES AND GULGONG

An assessment was made of the projected residential land demand-supply-balance taking account of existing supply and projected demands in the Mudgee and Gulgong townships. The results are set out in Table E.3. It can be seen that:-

- The estimated allotment supply for the Mudgee township at 30 June 2006 is 1,165 allotments after making adjustments for ongoing take up of residential land in the period October 2005 – June 2006;
- The estimated 15 year residential allotment demand at 2006/07 is 1,855 allotments for the Mudgee township (refer Table E.3, column 5);
- Therefore at 2006/07 it is likely that there will be an allotment supply deficiency in the Mudgee township of 690 allotments taking account of existing, approved and likely-to-be-approved supply through the interim LEP. If this supply is met in 2006/07, then a further 495 allotments will be required by 2011/12 to meet ongoing residential land demand in the Mudgee township, and a further 535 allotments will be required in 2016/17 in the township. Thus from 2006/07 to 2016/17 a total of 1,720 additional residential allotments will be required to meet projected residential land requirements for the township in this period.
- For the Gulgong township a 15 year allotment demand at 2006/07 is estimated to be approximately 215 allotments (refer Table E.3, column 5). However, no additional land is required for residential development to meet the township requirements and at 2006/07 some 259 allotments would still remain in the supply reserve after allowing for a 15 year residential land allocation. No additional residential land supply is required at Gulgong over the period 2006/07 – 2016/17 taking account of a 15 year demand supply. The current analysis indicates that by 2016/17 some 189 allotments would remain in the residential land supply reserve.

2.9 IMPACTS ON RENTAL HOUSING STOCK

An assessment was made of the likely impacts of the development projects on rental housing stock in the Mudgee SLA. No detailed inventory is available on the stock of occupied and vacant rental housing stock in the Mudgee SLA at the present time (September/October 2005). However, estimates provided by Council indicate that there is only an approximate 2% vacancy rate in the rental housing market in the Mudgee SLA.

The Census of Housing and Population indicated that there were approximately 1,580 occupied residential rental units in the Mudgee SLA at June 2001. This amounted to 23.5% of the occupied residential dwelling stock in 2001. An analysis of the long term trend in residential rental accommodation in the Mudgee SLA has found that over the period 1991–2001 there has been a long term upward trend in the proportion of occupied dwellings that are utilised as rental accommodation (from 22.8% of occupied dwelling stock in 1991 to 23.5% in 2001).

It is therefore conservatively estimated that by 2006 Census no less than 24% of occupied dwellings in the Mudgee SLA will be utilised as rental dwelling stock. On this basis the future rental dwelling stock for the Mudgee SLA has been projected, linked to the projections for occupied dwellings in the SLA (refer Table F.1). Occupied rental dwelling stock is projected to rise in the Mudgee SLA from approximately 1,580 dwelling units in 2001 to 1,720 units in 2006, rising progressively to 2,520 units by 2031.

Based on the estimates by Council the current vacant rental dwelling stock in the Mudgee SLA was only approximately 30 dwelling units in 2001, and is projected to be approximately 40 dwelling units by 2006 assuming that a 2% vacancy rate is still maintained at this stage.

The housing rental requirements of the development projects are set out in Table F.1. The analysis indicates that there is likely to be a requirement for approximately 160 dwelling units as rental stock attributable to the projects (refer Table F.1).

Given the current tight rental housing market in the Mudgee SLA the development projects are likely to trigger demand for additional rental housing stock. Over the period 2006–2021 at least 160 dwelling units will be required to meet the additional demands likely to be generated by the development projects. This is likely to represent the lower estimate of additional rental housing requirements in the Mudgee SLA for this 15 year period. The provision of these dwelling units (that is, the 160 additional units) would still leave the market with a very low vacancy rate and prone to excessive rental pressures and being pushed to capacity constraints in the future.

Column 6 in Table F.1 shows the identified shortfall in rental housing stock for the Mudgee SLA. The lower estimates for the period 2006–2021 are targeted to meet the additional requirements likely to be generated by the development projects. The higher estimates are targeted to increase the vacancy level in the rental housing market to 4% which more closely reflects an industry mean in regional and major cities. The analysis indicates that over the period 2006–2031 an additional 250 to 430 rental housing units are likely to be required in the Mudgee SLA to meet projected demands.

3 RECOMMENDATIONS

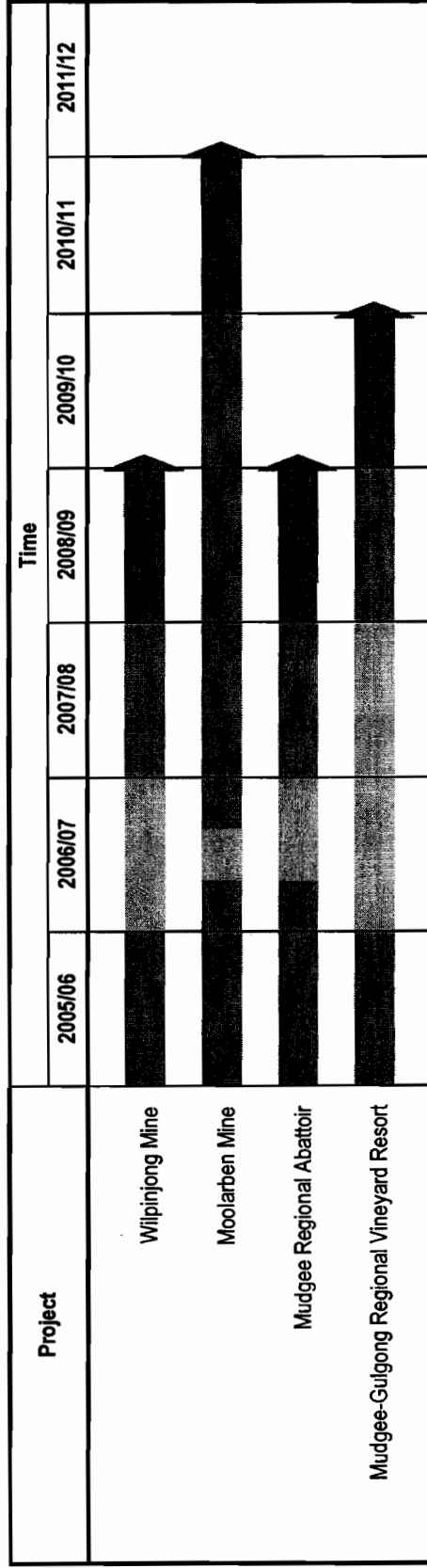
It is recommended that Council undertake the necessary land capability, structure planning and development planning assessments to identify and provide a strategic framework for additional residential land requirements together with road access, open space, education and ancillary servicing requirements to accommodate identified residential demands for the Mudgee township over the period 2006/07–2030/31.

It is recommended that provision be made for no less than 1,720 additional residential allotments capable of being progressively released in three phases with the first release phase to occur as close as possible to 2006/07 and to provide for no less than 690 allotments. A second release phase should occur no later than 2011/12 and this should provide for no less than 495 allotments. A third release phase should occur no later than 2016/17 and this should provide for no less than 535 allotments.

It is recommended that Council regularly monitor the supply and demand of residential housing accommodation in the Shire. It is further recommended that Council publicly release information on available residential properties and on the vacancy rate to the development industry. As a matter of policy it is recommended that the Council seek to facilitate the development industry to ensure that a vacancy rate for rental housing accommodation does not fall below 2% of existing rental stock.

Figure 1
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Timeline of Development Projects

Source: Wilpinjong Coal Project, EIS, May 2005; Mid Western Regional Council.



Legend-

- Completion of approvals
- Construction phase
- Initial operational phase
- Full operational phase

Figure 2
Mid Western Regional Shire Population Projections Review (2005-2031)
Mudgee & Rylstone SLAs : Housing Approvals Projections

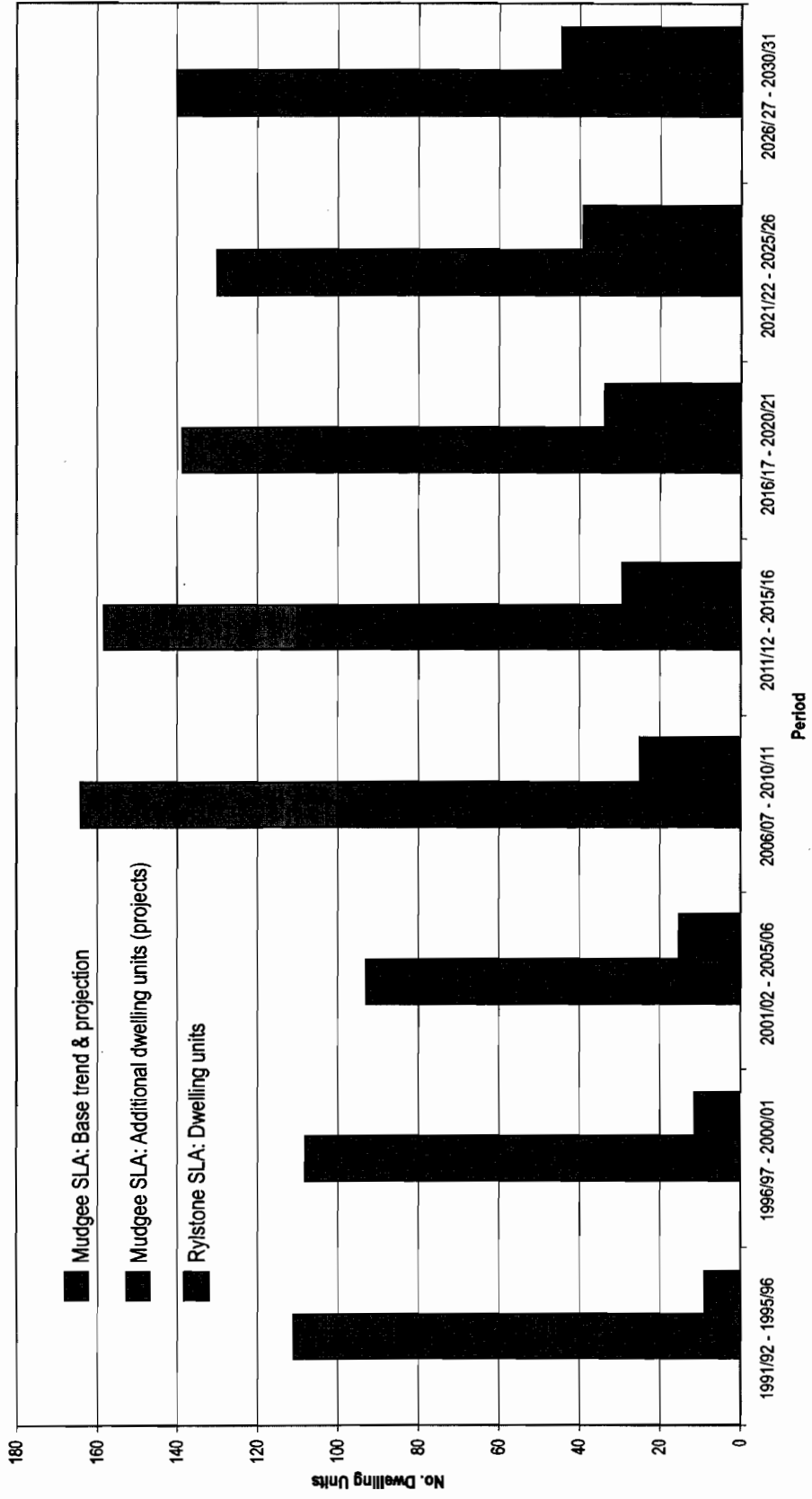
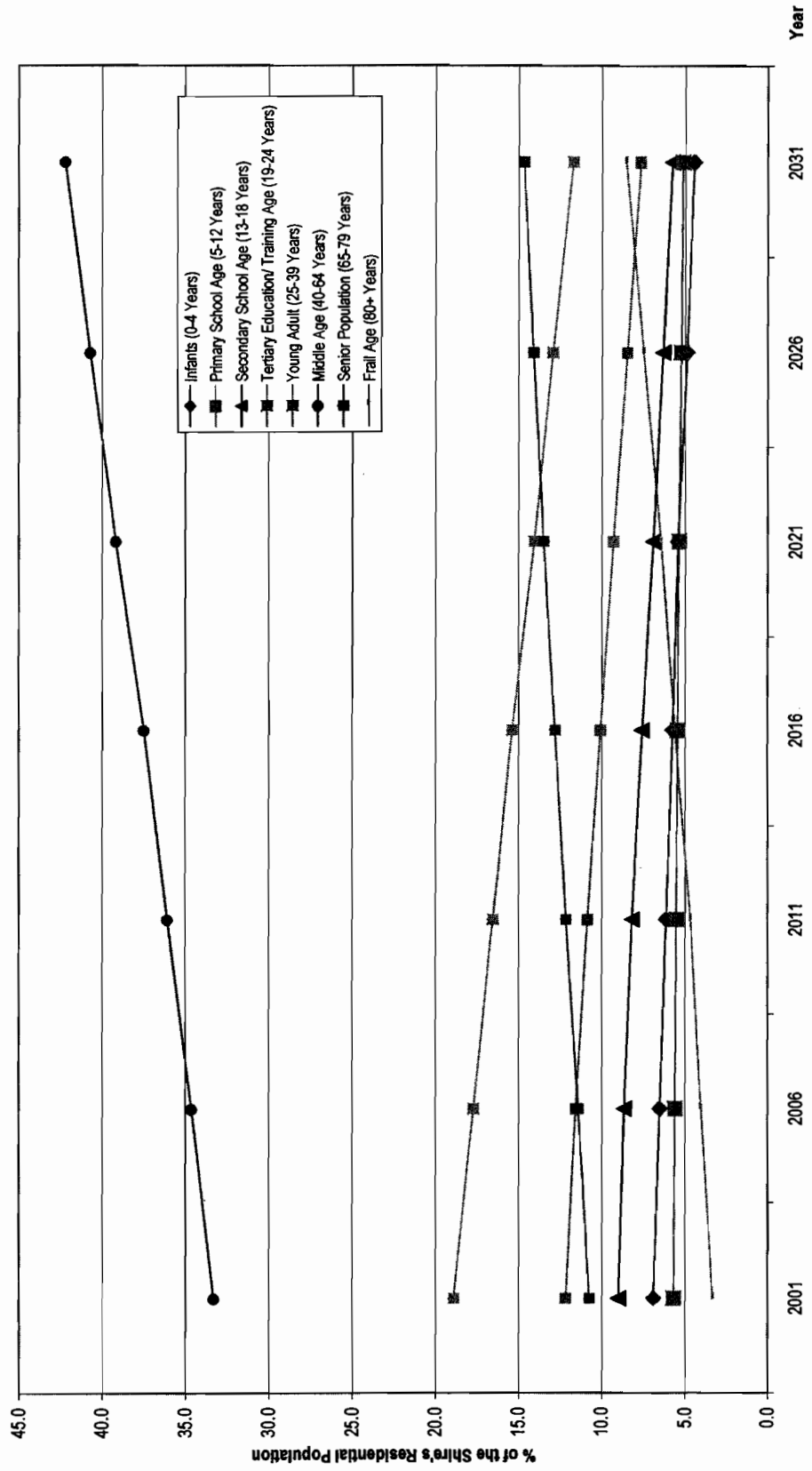


Figure 3
Mid Western Regional Shire Council : Population Projections Review (2005-2031)
Projected Changes in the Age Structure of the Residential Population (2001-2031)



**MID WESTERN REGIONAL SHIRE COUNCIL :
POPULATION PROJECTIONS REVIEW (2005 – 2031)**

TABLE SET A

**Major Development Projects : Assessed Employment,
Population and Housing Effects**

Table A.1
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Major Project Employment, Population and Housing Assumptions
Prepared by Ratio Consultants, September 2005.

Project	Total Employment Effect	Jobs (Direct & Flow-On)	Population Effects					Housing Effects **				Effects on Residential Rental Market (Short-Term Effect During Construction Phase)	
			Adult Males	Adult Females	Children	Total Population Increase	Family Households	Other Households	Mudgee	Gulgong	Rural Areas		Total
Whipjong Mine	Operational Phase: Average Effects	260	70	65	48	183	48	31	78	10	9	95	55 units
	Operational Phase: Peak Effects	405	129	104	79	312	79	50	123	18	15	154	
Moolahen Mine	Operational Phase: Average Effects	420	133	109	82	324	82	52	128	24	8	160	84 units
	Operational Phase: Peak Effects	680	217	175	133	524	133	84	207	38	13	259	
Re-Opening of the Mudgee Regional Abattoir	Operational Phase: Average Effects	420*	133	109	82	324	82	52	152	5	3	180	
	Operational Phase: Peak Effects	880	217	175	133	524	133	84	246	8	5	259	
Mudgee-Gulgong Vineyard Resort	Operational Phase: Average Effects	140**	44	36	27	106	27	17	11	43	-	53	24 Units
	Operational Phase: Peak Effects	227	72	58	44	175	44	28	17	89	-	88	
Total Operational Phase: Average Effects		1,230	369	320	241	950	241	151	366	81	20	467	
Total Operational Phase: Peak Effects		1,992	634	512	389	1,535	389	246	583	132	33	757	163 Units

* Compiling a direct employment component of 300 persons and multiplier employment of a further 120 jobs.
 ** Compiling a direct employment component of 100 persons and multiplier employment of a further 40 jobs.

Table A.2
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
New Housing Distribution Assumptions **

Project	Mudgee %	Gulgong %	Rural Areas %	Total %	Source
Whipjong Mine	80	10	10	100	Whipjong Coal Project, Environmental Impact Statement (May 2005)
Moolahen Mine	80	15	5	100	Mid Western Regional Council (September 2005)
Re-Opening of the Mudgee Regional Abattoir	85	3	2	100	Mid Western Regional Council (September 2005)
Mudgee-Gulgong Vineyard Resort	20	80	-	100	Mid Western Regional Council (September 2005)

Table A.3
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Distribution of Additional Permanent Housing Demand by Time Period
 Prepared by Ratio Consultants, October 2005.

Project	Proportion of Additional Housing Demand (% of Total Permanent Demand by Year)									
	2007/08 %	2008/09 %	2009/10 %	2010/11 %	2011/12 %	2012/13 %	2013/14 %	Total 2007/08 - 2013/14 %		
Wilpinjong Mine	10	25	25	25	15			100		
Moolarben Mine	15	10	10	10	25	25	5	100		
Mudgee Regional Abattoir	10	25	25	25	15			100		
Mudgee-Gulgong Regional Vineyard Resort		10	25	25	25	15		100		

Table A.4
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Distribution of Longer Term Multiplier Effects on Permanent Housing Demand
 Prepared by Ratio Consultants, October 2005.

Project	Additional Proportion of Housing Demand % Original Project Demands										Total 2012/13 - 2019/20 %
	2012/13 %	2013/14 %	2014/15 %	2015/16 %	2016/17 %	2017/18 %	2018/19 %	2019/20 %			
Wilpinjong Mine	8	8	8	8	8						40
Moolarben Mine				8	8	8	8	8			40
Mudgee Regional Abattoir		8	8	8	8	8					40
Mudgee-Guigong Regional Vineyard Resort		8	8	8	8	8					40

**MID WESTERN REGIONAL SHIRE COUNCIL :
POPULATION PROJECTIONS REVIEW (2005 – 2031)**

TABLE SET B

**Mid Western Regional Shire :
Summaries of Housing and Population Projections
(2001 – 2031)**

**Table B.1
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Summary of Historic and Projected Population Statistics by Small Area (1991 - 2031)**

SLA and Small Area	Total Population *												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	7,930	8,290	8,930	9,400	10,440	11,470	12,290	13,150	14,070				
Gulgong Township	2,030	2,060	2,080	2,120	2,270	2,430	2,500	2,560	2,620				
Rural Areas Balance	6,680	7,050	7,340	7,650	7,930	8,270	8,600	8,940	9,330				
Total Mudgee SLA	16,640	17,400	18,350	19,170	20,640	22,170	23,390	24,650	26,020				
Rylstone SLA													
Rylstone Township	770	770	700	740	790	860	910	970	1,040				
Kandos Township	1,600	1,530	1,360	1,320	1,250	1,230	1,220	1,220	1,240				
Rural Areas Balance	1,720	1,550	1,810	1,910	2,050	2,270	2,530	2,840	3,190				
Total Rylstone SLA	4,090	3,850	3,870	3,970	4,090	4,360	4,660	5,030	5,470				
Total Mid Western Region	20,730	21,250	22,220	23,140	24,730	26,530	28,050	29,680	31,490				

* Rounded to the nearest 10 units.

Table B.2
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Summary of Historic and Projected Total Dwelling Stock by Small Area (1991 - 2031)

SLA and Small Area	Total Dwelling Stock *												
	Historic					Projected							
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	2,930	3,260	3,610	3,890	4,440	4,960	5,390	5,790	6,220				
Guilgong Township	800	830	850	870	930	1,000	1,040	1,070	1,100				
Rural Areas Balance	3,170	3,270	3,480	3,620	3,780	3,940	4,120	4,300	4,500				
Total Mudgee SLA	6,900	7,360	7,940	8,380	9,150	9,900	10,550	11,160	11,820				
Rylstone SLA													
Rylstone Township	290	330	320	330	340	360	390	410	440				
Kandos Township	670	670	680	680	680	680	690	690	700				
Rural Areas Balance	920	1,000	1,060	1,130	1,240	1,370	1,510	1,680	1,870				
Total Rylstone SLA	1,880	2,000	2,060	2,140	2,260	2,410	2,590	2,780	3,010				
Total Mid Western Region	8,780	9,360	10,000	10,520	11,410	12,310	13,140	13,940	14,830				

* Rounded to the nearest 10 units.

Table B.3

**Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Summary of Historic and Projected Households (Occupied Private Dwellings) by Small Area (1991 - 2031)**

SLA and Small Area	Households * (Occupied Private Dwellings)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	2,710	3,040	3,300	3,580	4,110	4,610	5,040	5,450	5,880				
Gulgong Township	720	760	760	790	850	920	960	990	1,020				
Rural Areas Balance	2,360	2,480	2,650	2,790	2,930	3,080	3,230	3,400	3,580				
Total Mudgee SLA	5,790	6,280	6,710	7,160	7,890	8,610	9,230	9,840	10,480				
Rylstone SLA													
Rylstone Township	270	290	260	280	300	330	350	380	410				
Kandos Township	590	580	590	590	600	600	610	620	630				
Rural Areas Balance	640	650	690	750	830	930	1,040	1,180	1,330				
Total Rylstone SLA	1,500	1,520	1,540	1,620	1,730	1,860	2,000	2,180	2,370				
Total Mid Western Region	7,290	7,800	8,250	8,780	9,620	10,470	11,230	12,020	12,850				

* Rounded to the nearest 10 units.

Table B.4
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Summary of Historic and Assumed Future Occupied Dwelling Rates by Small Area (1991 - 2031)

SLA and Small Area	% Total Dwelling Stock Occupied												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	92.5	93.3	91.4	92.0	92.6	92.9	93.5	94.1	94.5				
Gulgong Township	90.0	91.6	89.4	90.8	91.4	92.0	92.3	92.5	92.7				
Rural Areas Balance	74.4	75.8	76.1	77.1	77.5	78.2	78.4	79.1	79.6				
Total Mudgee SLA	83.9	85.3	84.5	85.4	86.2	87.0	87.5	88.2	88.7				
Rylstone SLA													
Rylstone Township	93.1	87.9	81.3	84.8	88.2	91.7	89.7	92.7	93.2				
Kandos Township	88.1	86.6	86.8	86.8	88.2	88.2	88.4	89.9	90.0				
Rural Areas Balance	69.6	65.0	65.1	66.4	66.9	67.9	68.9	70.2	71.1				
Total Rylstone SLA	79.8	76.0	74.8	75.7	76.5	77.2	77.2	78.4	78.7				
Total Mid Western Region	83.0	83.3	82.5	83.5	84.3	85.1	85.5	86.2	86.6				

Table B.5
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Summary of Projected Changes in the Age Structure of the Residential Population (2001-2031)

Major Life Cycle Group	% of the Shire's Residential Population									
	2001	2006	2011	2016	2021	2026	2031			
Infants (0-4 Years)	6.9	6.5	6.1	5.7	5.4	4.9	4.4			
Primary School Age (5-12 Years)	12.2	11.5	10.8	10.1	9.3	8.5	7.7			
Secondary School Age (13-18 Years)	9.0	8.6	8.2	7.6	6.9	6.3	5.7			
Tertiary Education/ Training Age (19-24 Years)	5.7	5.6	5.5	5.4	5.3	5.2	5.1			
Young Adult (25-39 Years)	18.9	17.7	16.5	15.4	14.0	12.9	11.7			
Middle Age (40-64 Years)	33.3	34.6	36.1	37.5	39.1	40.7	42.2			
Senior Population (65-79 Years)	10.8	11.4	12.1	12.8	13.5	14.1	14.6			
Frail Age (80+ Years)	3.3	4.0	4.7	5.6	6.4	7.5	8.5			
Total Population	100.0	100.0	100.0	100.0	100.0	100.0	100.0			

**MID WESTERN REGIONAL SHIRE COUNCIL :
POPULATION PROJECTIONS REVIEW (2005 – 2031)**

TABLE SET C

**Mid Western Regional Shire :
Residential and Population Projections
(2001 – 2031)**

Table C.1
 MtW Western Regional Shire Council : Population Projections Review (2005 - 2031)
 Mudgee SLA : Forecast Total Dwelling Stock (2001 - 2031)

Mudgee SLA Small Area	Total Dwelling Stock 2001 (census)		Forecast Dwelling Unit Approvals 2001/02 - 2005/06		Total Dwelling Stock 2006		Forecast Dwelling Unit Approvals 2006/07 - 2010/11		Total Dwelling Stock 2011		Forecast Dwelling Unit Approvals 2011/12 - 2015/16		Net Additions to Total Dwelling Stock	
	Base Trend	Projects	Base Trend	Total	Base Trend	Projects	Base Trend	Total	Base Trend	Projects	Base Trend	Projects	Total	Net Additions to Total Dwelling Stock
Mudgee Township	3,698	-	304	304	3,694	327	258	585	4,444	360	183	543	511	
Gulgong Township	845	-	21	21	865	23	48	71	932	25	48	73	68	
Rural Areas Balance	3,460	-	140	140	3,622	150	15	165	3,777	168	11	177	166	
Total Mudgee SLA	7,933	-	465	465	8,381	500	321	821	9,154	550	242	792	745	

Column (1)

(Continued)

Mudgee SLA Small Area	Total Dwelling Stock 2016		Forecast Dwelling Unit Approvals 2016/17 - 2020/21		Total Dwelling Stock 2021		Forecast Dwelling Unit Approvals 2021/22 - 2025/26		Total Dwelling Stock 2026		Forecast Dwelling Unit Approvals 2026/27 - 2030/31		Net Additions to Total Dwelling Stock	
	Base Trend	Projects	Base Trend	Total	Base Trend	Projects	Base Trend	Total	Base Trend	Projects	Base Trend	Projects	Total	Net Additions to Total Dwelling Stock
Mudgee Township	4,955	392	74	466	5,394	425	-	425	5,794	458	-	458	431	
Gulgong Township	1,000	27	13	40	1,038	29	-	29	1,065	32	-	32	30	
Rural Areas Balance	3,943	181	4	185	4,117	198	-	198	4,301	211	-	211	198	
Total Mudgee SLA	9,898	600	91	691	10,549	650	0	650	11,161	700	0	700	659	

Column (1)

Table C.2
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Rylstone SLA : Forecast Total Dwelling Stock (2001 - 2031)

	Total Dwelling Stock 2001 (census)	Net Additions to Total Dwelling Stock	Total Dwelling Stock 2006 (census)	Net Additions to Total Dwelling Stock	Total Dwelling Stock 2011 (census)	Net Additions to Total Dwelling Stock	Total Dwelling Stock 2016 (census)	Net Additions to Total Dwelling Stock	Total Dwelling Stock 2021 (census)	Net Additions to Total Dwelling Stock	Total Dwelling Stock 2026 (census)	Net Additions to Total Dwelling Stock	Total Dwelling Stock 2031 (census)
Rylstone Township	315	12	327	17	344	20	363	23	386	26	413	30	443
Kandos Township	676	2	678	3	681	4	685	4	689	5	694	6	700
Rural Areas Balance	1,058	76	1,134	105	1,239	126	1,366	148	1,513	169	1,682	190	1,872
Total Rylstone SLA	2,049	90	2,139	125	2,264	150	2,414	175	2,589	200	2,789	225	3,014

Column (1)

(2)

(3)

(4)

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(14)

Table C.3**Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)****Mid-Western Regional Shire : Trends in Housing Approvals (1991/92 -2005/06)**

Source: ABS, Cat. No. 8731.0 Building Approvals

Period	New Houses (No.)		
	Mudgee SLA	Rylstone SLA	Total : Mid-Western Region (Approx.)
1991/92	159	12	171
1992/93	145	8	153
1993/94	97	9	106
1994/95	93	11	104
1995/96	63	3	66
Average 91/92 - 95/96	111	9	120
1996/97	118	18	136
1997/98	100	3	103
1998/99	89	8	97
1999/2000	159	18	177
2000/01	75	14	89
Average 1996/97 - 2000/01	108	12	120
2001/02	91	13	104
2002/03	72	19	91
2003/04	89	23	112
2004/05	119	16	135
2005/06 (Estimated)	93	18	111
Average 2001/02 - 2005/06	93	18	111

Table C.4

Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)

Housing Approvals Projections

Mudgee and Rylstone SLAs : Historic and Projected Underlying Base Trend

Source: Based on ABS, Cat. No. 8731.0 Building Approvals

Period	Average Dwelling Units Approved/ Annum		
	Mudgee SLA	Rylstone SLA	Total : Mid Western Region
1991/92 - 1995/96 *	111	9	120
1996/97 - 2000/01 *	108	12	120
2001/02 - 2005/06 *	93	18	111
2006/07 - 2010/11	100	25	125
2011/12 - 2015/16	110	30	140
2016/17 - 2020/21	120	35	155
2021/22 - 2025/26	130	40	170
2026/27 - 2030/31	140	45	185

Table C.5
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Mudgee SLA

Forecast Impacts on Housing Approvals Arising from Development Projects

Prepared by Ratio Consultants Pty Ltd, October 2005.

Project	Additional Housing Demand by Financial Year										Total 2007/08 - 2013/14
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	Dwelling Units			
Wilpinjong Mine	10	24	24	24	14	-	-	-	-	-	95
Moolarben Mine	24	16	16	16	40	40	8	-	-	-	160
Mudgee Regional Abattoir	16	40	40	40	24	-	-	-	-	-	160
Mudgee-Gulgong Regional Vineyard Resort	-	5	13	13	13	8	-	-	-	-	53
Total : All Projects	49	85	93	93	91	48	8	8	8	8	467

Table C.6
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Mudgee SLA

Forecast Additional Impacts on Permanent Housing Demand Arising from Development Projects
 Prepared by Ratio Consultants Pty Ltd, October 2005.

Project	Additional Housing Demand by Financial Year											Total 2012/13 - 2019/20
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Dwelling Units			
Wilpinjong Mine	8	8	8	8	8	-	-	-	-	-	-	38
Moolarben Mine	-	-	-	13	13	13	13	13	13	-	-	64
Mudgee Regional Abattoir	-	13	13	13	13	13	-	-	-	-	-	64
Mudgee-Gulgong Regional Vineyard Resort	-	4	4	4	4	4	-	-	-	-	-	21
Total : All Projects	8	25	25	37	37	30	13	13	13	13	13	187

Table C.7
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Mudgee SLA
Forecast Total Impacts on Housing Approvals Arising from Development Projects
 Prepared by Ratio Consultants Pty Ltd, October 2005.

Project	Additional Housing Demand by Financial Year *													Total 2007/08 - 2019/20
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	
Wiprijong Mine	10	24	24	24	14	8	8	8	8	8	-	-	-	133
Moolarben Mine	24	16	16	16	40	40	8	-	13	13	13	13	13	223
Mudgee Regional Abattoir	16	40	40	40	24	-	13	13	13	13	13	-	-	223
Mudgee-Gulgong Regional Vineyard Resort	-	5	13	13	13	8	4	4	4	4	4	-	-	74
Total : All Projects	49	85	93	93	91	55	33	25	37	37	30	13	13	654

* Please note minor discrepancies in the totals in Tables C.7 & C.8 are due to rounding off of decimal places in the modelling process.

Table C.8
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Mudgee SLA

Forecast Total Impacts on Housing Approvals from Development Projects: Likely Geographic Distribution
 Prepared by Ratio Consultants Pty Ltd, October 2005.

Project	Additional Housing Demand by Financial Year * Dwelling Units														Total 2006/7 - 2019/20
	2006/07 - 2010/11				2011/12 - 2015/16				2016/17 - 2020/21				TOTAL SLA		
	Mudgee Township	Gulgong Township	Rural Areas	TOTAL SLA	Mudgee Township	Gulgong Township	Rural Areas	TOTAL SLA	Mudgee Township	Gulgong Township	Rural Areas	TOTAL SLA			
Wipirijong Mine	66	8	8	82	36	5	5	46	6	1	1	8	136		
Moolarben Mine	57	11	4	72	81	15	5	101	42	8	3	52	225		
Mudgee Regional Abattoir	129	4	3	136	60	2	1	63	24	1	1	26	225		
Mudgee-Gulgong Regional Vineyard Resort	6	25	-	31	7	26	-	33	2	6	-	8	72		
Total : All Projects	258	48	15	321	183	48	11	243	74	16	4	94	658		

* Please note minor discrepancies in the totals in Tables C.7 & C.8 are due to rounding off of decimal places in the modelling process.

Table C.9

Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)

Mudgee SLA Small Area

Model of the Relationship Between Dwelling Unit Approvals and Changes in Total Dwelling Stock (1991 - 2001)

Prepared by Ratio Consultants Pty Ltd, October 2005.

Mudgee SLA Small Area	1991/92 - 2000/01					
	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Geographic Distribution of Net Change in Dwelling Stock (%)	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals
	1991	2001	1991 - 2001	1991 - 2001	1991/92 - 2000/01	1991 - 2001 %
Mudgee Township	2,932	3,608	676	65.4	659	102.6
Gulgong Township	799	845	46	4.5	77	59.8
Rural Areas Balance	3,169	3,480	311	30.1	362	86.0
Total : Mudgee SLA Small Area	6,900*	7,933*	1,033	100.0	1,098**	94.1

* Marginal errors exist between these CCD-based Total Dwelling Stock and Occupied Dwellings, and those of Mudgee SLA.

** Refer Table C.3

Table C.10
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Mudgee SLA Small Area
Model of the Relationship Between Dwelling Unit Approvals and Changes in Total Dwelling Stock (1991 - 2001)
 Prepared by Ratio Consultants Pty Ltd, October 2005.

Mudgee SLA Small Area	1991/92 - 1995/96						1996/97 - 2000/01						1991/92 - 2000/01					
	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals %	1991 - 1996	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals %	1996 - 2001	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals %	
	1991	1996	1991 - 1996	1991/92 - 1995/96	1991 - 1996		1996	2001	1996 - 2001	1996/97 - 2000/01	1996 - 2001		1996 - 2001	1991	2001	1991 - 2001	1991/92 - 2000/01	1991 - 2001
Mudgee Township	2,932	3,260	328	334	98.1	3,260	3,608	348	325	107.2	2,932	3,608	676	659	102.6			
Gulgong Township	799	830	31	39	79.5	830	845	15	38	39.6	799	845	46	77	59.8			
Rural Areas Balance	3,169	3,272	103	184	56.1	3,272	3,480	208	178	116.9	3,169	3,480	311	362	86.0			
Total : Mudgee SLA Small Area	6,900*	7,362*	462	557**	82.9	7,362*	7,933*	571	541**	105.5	6,900*	7,933*	1,033	1,098**	94.1			

* Marginal errors exist between these CCD-based Total Dwelling Stock and Occupied Dwellings, and those of Mudgee SLA.
 ** Refer Table C.3

Table C.11

Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)

Rylstone SLA Small Area

Model of the Relationship Between Dwelling Unit Approvals and Changes in Total Dwelling Stock (1991 - 2001)

Prepared by Ratio Consultants Pty Ltd, October 2005.

Rylstone SLA Small Area	1991/92 - 2000/01					
	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Geographic Distribution of Net Change in Dwelling Stock (%)	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals
	1991	2001	1991 - 2001	1991 - 2001	1991/92 - 2000/01	1991 - 2001 %
Rylstone Township	294	315	21	13.2	62	33.7
Kandos Township	672	676	4	2.5	7	54.9
Rural Areas Balance	924	1,058	134	84.3	34	394.1
Total : Rylstone SLA Small Area	1,890*	2,049*	159	100.0	104**	152.9

* Marginal errors exist between these CCD-based Total Dwelling Stock and Occupied Dwellings, and those of Rylstone SLA.

** Refer Table C.3

Table C.12
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Rylstone SLA Small Area
Model of the Relationship Between Dwelling Unit Approvals and Changes in Total Dwelling Stock (1991 - 2001)
 Prepared by Ratio Consultants Pty Ltd, October 2005.

Rylstone SLA Small Area	1991/92 - 1995/96					1996/97 - 2000/01					1991/92 - 2000/01				
	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals	Total Dwelling Stock (No.)		Change in Total Dwelling Stock	Estimated Dwelling Unit Approvals	Change in Total Dwelling Stock/ Dwelling Unit Approvals
	1991	1996	1991 - 1996	1991/92 - 1995/96	1991 - 1996 %	1996	2001	1996 - 2001	1996/97 - 2000/01	1996 - 2001 %	1991	2001	1991 - 2001	1991/92 - 2000/01	1991 - 2001 %
Rylstone Township	294	325	31	26	120.2	325	315	-10	37	-27.3	294	315	21	62	33.7
Kandos Township	672	670	-2	3	-66.4	670	676	6	4	140.5	672	676	4	7	54.9
Rural Areas Balance	924	1,001	77	14	542.5	1,001	1,058	57	20	265.0	924	1,058	134	34	394.1
Total : Rylstone SLA Small Area	1,890*	1,996*	106	43**	246.5	1,996*	2,049*	53	61**	86.9	1,890*	2,049*	159	104**	152.9

* Marginal errors exist between these CCD-based Total Dwelling Stock and Occupied Dwellings, and those of Rylstone SLA.

** Refer Table C.3

Table C.13
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Housing Approvals Projections
Mudgee and Rylstone SLAs : Historic and Projected Underlying Base Trend
 Prepared by Ratio Consultants, October 2005.

Period	Average Dwelling Units Approved/ Annum					Total : Mid Western Region
	Mudgee SLA			New Projection	Rylstone SLA	
	Base Trend and Projection	Additional Dwelling Units				
1991/92 - 1995/96 *	111	-		111	9	120
1996/97 - 2000/01 *	108	-		108	12	120
2001/02 - 2005/06 *	93	-		93	18	111
2006/07 - 2010/11	100	64		164	25	189
2011/12 - 2015/16	110	48		158	30	188
2016/17 - 2020/21	120	19		139	35	174
2021/22 - 2025/26	130	-		130	40	170
2026/27 - 2030/31	140	-		140	45	185

* Refer Table C.1

**MID WESTERN REGIONAL SHIRE COUNCIL :
POPULATION PROJECTIONS REVIEW (2005 – 2031)**

TABLE SET D

**Mid Western Regional Shire :
Age-Specific Population Projections
(2001 – 2031)**

Table D.1
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Infant Population

SLA and Small Area	Infants * (0 - 4 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	690	780	690	670	690	710	690	670	650				
Gulgong Township	170	150	170	160	160	150	140	130	120				
Rural Areas Balance	600	510	420	430	430	440	440	410	390				
Total Mudgee SLA	1,460	1,440	1,280	1,260	1,280	1,300	1,270	1,210	1,160				
Rylstone SLA													
Rylstone Township	80	40	40	40	40	40	50	50	40				
Kandos Township	120	110	100	90	80	70	70	60	60				
Rural Areas Balance	120	110	110	110	110	110	120	120	130				
Total Rylstone SLA	320	260	250	240	230	220	240	230	230				
Total Mid Western Region	1,780	1,700	1,530	1,500	1,510	1,520	1,510	1,440	1,390				

* Rounded to the nearest 10 units.

Table D.2
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Primary School Age

SLA and Small Area	Primary School Age * (5 - 12 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	980	970	1,090	1,090	1,140	1,160	1,140	1,110	1,070				
Gulgong Township	270	270	260	250	250	250	230	220	200				
Rural Areas Balance	860	890	950	940	920	890	860	810	760				
Total Mudgee SLA	2,110	2,130	2,300	2,280	2,310	2,300	2,230	2,140	2,030				
Rylstone SLA													
Rylstone Township	80	120	80	80	80	80	80	70	70				
Kandos Township	200	170	140	130	110	100	100	90	90				
Rural Areas Balance	220	180	180	180	180	190	200	210	220				
Total Rylstone SLA	500	470	400	390	370	370	380	370	380				
Total Mid Western Region	2,610	2,600	2,700	2,670	2,680	2,670	2,610	2,510	2,410				

* Rounded to the nearest 10 units.

Table D.3
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Secondary School Age

SLA and Small Area	Secondary School Age * (13 - 18 Years)											
	Historic					Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031			
Mudgee SLA												
Mudgee Township	730	720	850	860	910	920	900	880	850			
Gulgong Township	200	210	200	200	200	200	180	170	160			
Rural Areas Balance	610	640	660	650	630	600	560	530	500			
Total Mudgee SLA	1,540	1,570	1,710	1,710	1,740	1,720	1,640	1,580	1,510			
Rylstone SLA												
Rylstone Township	60	70	70	70	70	70	60	60	60			
Kandos Township	140	130	100	90	80	80	80	70	70			
Rural Areas Balance	140	120	120	130	130	140	150	160	170			
Total Rylstone SLA	340	320	290	290	280	290	290	290	300			
Total Mid Western Region	1,880	1,890	2,000	2,000	2,020	2,010	1,930	1,870	1,810			

* Rounded to the nearest 10 units.

Table D.4
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Tertiary Education / Training Age

SLA and Small Area	Tertiary Education / Training Age * (19 - 24 Years)										
	Historic					Projected					
	1991	1996	2001	2006	2011	2016	2021	2026	2031		
Mudgee SLA											
Mudgee Township	650	570	620	640	690	740	780	810	840		
Gulgong Township	140	150	130	130	140	150	150	150	150		
Rural Areas Balance	390	320	310	320	330	340	350	360	370		
Total Mudgee SLA	1,180	1,040	1,060	1,090	1,160	1,230	1,280	1,320	1,360		
Rylstone SLA											
Rylstone Township	50	40	40	40	40	50	50	50	60		
Kandos Township	120	110	70	70	60	60	60	60	60		
Rural Areas Balance	100	60	90	90	100	100	110	120	130		
Total Rylstone SLA	270	210	200	200	200	210	220	230	250		
Total Mid Western Region	1,450	1,250	1,260	1,290	1,360	1,440	1,500	1,550	1,610		

* Rounded to the nearest 10 units.

Table D.5
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Young Adult

SLA and Small Area	Young Adult* (25 - 39 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	1,800	1,830	1,850	1,840	1,910	1,960	1,950	1,930	1,880				
Gulgong Township	440	350	390	370	370	360	350	320	300				
Rural Areas Balance	1,390	1,360	1,330	1,280	1,220	1,180	1,120	1,080	1,020				
Total Mudgee SLA	3,630	3,540	3,570	3,490	3,500	3,500	3,420	3,330	3,200				
Rylstone SLA													
Rylstone Township	180	150	110	110	110	110	100	90	90				
Kandos Township	330	280	230	220	200	180	150	140	120				
Rural Areas Balance	380	290	290	280	280	290	270	270	270				
Total Rylstone SLA	890	720	630	610	590	580	520	500	480				
Total Mid Western Region	4,520	4,260	4,200	4,100	4,090	4,080	3,940	3,830	3,680				

* Rounded to the nearest 10 units.

Table D.6
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Middle Age

SLA and Small Area	Middle Age * (40 - 64 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	1,960	2,150	2,480	2,730	3,190	3,670	4,120	4,600	5,140				
Gulgong Township	540	600	600	640	720	810	880	940	1,000				
Rural Areas Balance	2,250	2,620	2,850	3,100	3,360	3,650	3,960	4,280	4,630				
Total Mudgee SLA	4,750	5,370	5,930	6,470	7,270	8,130	8,960	9,820	10,770				
Rylstone SLA													
Rylstone Township	210	220	250	270	300	330	370	420	470				
Kandos Township	430	480	460	450	450	450	460	480	490				
Rural Areas Balance	620	590	760	820	900	1,030	1,190	1,360	1,560				
Total Rylstone SLA	1,260	1,290	1,470	1,540	1,650	1,810	2,020	2,260	2,520				
Total Mid Western Region	6,010	6,660	7,400	8,010	8,920	9,940	10,980	12,080	13,290				

* Rounded to the nearest 10 units.

Table D.7
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Senior Population

SLA and Small Area	Senior Population * (65 - 79 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	840	920	930	1,050	1,250	1,460	1,670	1,870	2,090				
Gulgong Township	200	250	230	250	290	330	360	380	410				
Rural Areas Balance	520	630	730	810	890	970	1,060	1,150	1,250				
Total Mudgee SLA	1,560	1,800	1,890	2,110	2,430	2,760	3,090	3,400	3,750				
Rylstone SLA													
Rylstone Township	80	100	70	80	90	100	110	130	140				
Kandos Township	210	210	200	200	200	210	210	220	230				
Rural Areas Balance	130	170	230	250	280	320	370	430	490				
Total Rylstone SLA	420	480	500	530	570	630	690	780	860				
Total Mid Western Region	1,980	2,280	2,390	2,640	3,000	3,390	3,780	4,180	4,610				

* Rounded to the nearest 10 units.

Table D.8
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Population Lifecycle : Frail Age

SLA and Small Area	Frail Age * (80+ Years)											
	Historic						Projected					
	1991	1996	2001	2006	2011	2016	2021	2026	2031			
Mudgee SLA	280	350	420	520	660	850	1,040	1,280	1,550			
Mudgee Township	70	80	100	120	140	180	210	250	280			
Gulgong Township	60	80	90	120	150	200	250	320	410			
Rural Areas Balance	410	510	610	760	950	1,230	1,500	1,850	2,240			
Rylstone SLA	30	30	40	50	60	80	90	100	110			
Rylstone Township	50	40	60	70	70	80	90	100	120			
Kandos Township	10	30	30	50	70	90	120	170	220			
Rural Areas Balance	90	100	130	170	200	250	300	370	450			
Total Rylstone SLA	500	610	740	930	1,150	1,480	1,800	2,220	2,690			

* Rounded to the nearest 10 units.

Table D.9
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Yield Rates : Infants

SLA and Small Area	Infants Yield Rates (0 - 4 Years)											
	Historic					Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031			
Mudgee SLA												
Mudgee Township	0.254	0.258	0.209	0.190	0.172	0.157	0.142	0.129	0.116			
Gulgong Township	0.240	0.197	0.220	0.200	0.181	0.165	0.148	0.134	0.120			
Rural Areas Balance	0.254	0.207	0.159	0.154	0.150	0.146	0.142	0.129	0.116			
Total Mudgee SLA	0.252	0.230	0.190	0.177	0.165	0.154	0.143	0.130	0.116			
Rylstone SLA												
Rylstone Township	0.280	0.128	0.151	0.149	0.147	0.145	0.142	0.129	0.116			
Kandos Township	0.202	0.188	0.174	0.160	0.155	0.140	0.130	0.120	0.116			
Rural Areas Balance	0.187	0.167	0.165	0.156	0.146	0.138	0.130	0.123	0.115			
Total Rylstone SLA	0.210	0.168	0.166	0.156	0.149	0.140	0.132	0.123	0.115			
Total Mid Western Region	0.244	0.218	0.186	0.173	0.162	0.151	0.141	0.128	0.116			

Table D.10
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Yield Rates : Primary School Age

SLA and Small Area	Primary School Age Yield Rates (5 - 12 Years)										
	Historic					Projected					
	1991	1996	2001	2006	2011	2016	2021	2026	2031		
Mudgee SLA											
Mudgee Township	0.364	0.319	0.329	0.306	0.283	0.258	0.233	0.213	0.192		
Gulgong Township	0.367	0.354	0.340	0.316	0.292	0.266	0.240	0.219	0.198		
Rural Areas Balance	0.365	0.358	0.358	0.340	0.322	0.300	0.277	0.252	0.227		
Total Mudgee SLA	0.365	0.339	0.342	0.320	0.298	0.274	0.249	0.227	0.205		
Rylstone SLA											
Rylstone Township	0.294	0.412	0.300	0.292	0.283	0.258	0.233	0.213	0.192		
Kandos Township	0.336	0.293	0.236	0.230	0.200	0.195	0.190	0.185	0.180		
Rural Areas Balance	0.352	0.277	0.260	0.250	0.240	0.230	0.220	0.210	0.200		
Total Rylstone SLA	0.335	0.309	0.258	0.250	0.234	0.224	0.213	0.203	0.193		
Total Mid Western Region	0.359	0.333	0.326	0.307	0.287	0.265	0.243	0.223	0.202		

Table D.11
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Yield Rates : Secondary School Age

SLA and Small Area	Secondary School Age Yield Rates (13 - 18 Years)												
	Historic					Projected							
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	0.271	0.237	0.256	0.241	0.225	0.205	0.185	0.169	0.152				
Gulgong Township	0.273	0.279	0.263	0.247	0.231	0.211	0.190	0.173	0.156				
Rural Areas Balance	0.258	0.257	0.250	0.235	0.220	0.200	0.180	0.165	0.150				
Total Mudgee SLA	0.266	0.250	0.255	0.239	0.224	0.204	0.184	0.168	0.152				
Rylstone SLA													
Rylstone Township	0.210	0.238	0.288	0.266	0.243	0.218	0.192	0.172	0.152				
Kandos Township	0.236	0.230	0.167	0.163	0.160	0.156	0.153	0.149	0.149				
Rural Areas Balance	0.213	0.179	0.180	0.175	0.170	0.165	0.160	0.155	0.152				
Total Rylstone SLA	0.222	0.210	0.193	0.186	0.179	0.171	0.163	0.156	0.151				
Total Mid Western Region	0.257	0.242	0.243	0.230	0.216	0.198	0.180	0.166	0.152				

Table D.12
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Yield Rates : Tertiary Education / Training Age

SLA and Small Area	Tertiary Education / Training Age Yield Rates (19 - 24 Years)										
	Historic					Projected					
	1991	1996	2001	2006	2011	2016	2021	2026	2031		
Mudgee SLA	0.240	0.188	0.188	0.180	0.170	0.165	0.160	0.155	0.150		
Mudgee Township	0.198	0.193	0.166	0.164	0.162	0.160	0.158	0.156	0.150		
Gulgong Township	0.164	0.130	0.117	0.116	0.115	0.114	0.113	0.112	0.111		
Rural Areas Balance	0.204	0.166	0.158	0.153	0.149	0.146	0.143	0.140	0.137		
Rylstone SLA	0.181	0.134	0.159	0.157	0.155	0.153	0.151	0.149	0.147		
Rylstone Township	0.210	0.197	0.120	0.119	0.118	0.117	0.116	0.115	0.114		
Kandos Township	0.163	0.096	0.137	0.130	0.128	0.126	0.124	0.122	0.120		
Rural Areas Balance	0.185	0.142	0.134	0.131	0.129	0.128	0.126	0.125	0.123		
Total Rylstone SLA	0.200	0.161	0.153	0.149	0.145	0.143	0.140	0.137	0.134		
Total Mid Western Region											

Table D.13
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Yield Rates : Young Adult

SLA and Small Area	Young Adult Yield Rates (25 - 39 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	0.665	0.601	0.561	0.517	0.473	0.437	0.400	0.369	0.337				
Gulgong Township	0.602	0.464	0.506	0.465	0.425	0.391	0.357	0.329	0.300				
Rural Areas Balance	0.588	0.549	0.500	0.463	0.425	0.394	0.362	0.335	0.307				
Total Mudgee SLA	0.626	0.564	0.531	0.490	0.450	0.417	0.382	0.353	0.323				
Rylstone SLA													
Rylstone Township	0.654	0.531	0.421	0.390	0.370	0.350	0.300	0.270	0.250				
Kandos Township	0.568	0.473	0.401	0.390	0.370	0.350	0.300	0.270	0.250				
Rural Areas Balance	0.602	0.450	0.421	0.390	0.370	0.350	0.300	0.270	0.250				
Total Rylstone SLA	0.598	0.474	0.413	0.390	0.370	0.350	0.300	0.270	0.250				
Total Mid Western Region	0.620	0.547	0.509	0.472	0.436	0.405	0.368	0.338	0.310				

Table D.14
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Yield Rates : Middle Age

SLA and Small Area	Middle Age Yield Rates (40 - 64 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	0.726	0.705	0.751	0.770	0.789	0.817	0.844	0.882	0.920				
Gulgong Township	0.742	0.790	0.787	0.814	0.842	0.876	0.909	0.950	0.991				
Rural Areas Balance	0.951	1.058	1.074	1.122	1.171	1.224	1.276	1.334	1.391				
Total Mudgee SLA	0.820	0.855	0.883	0.912	0.936	0.968	1.002	1.045	1.088				
Rylstone SLA													
Rylstone Township	0.783	0.773	0.965	1.008	1.052	1.100	1.147	1.199	1.250				
Kandos Township	0.737	0.824	0.791	0.818	0.846	0.880	0.914	0.955	0.996				
Rural Areas Balance	0.977	0.910	1.097	1.146	1.196	1.250	1.303	1.362	1.421				
Total Rylstone SLA	0.848	0.851	0.958	1.003	1.050	1.103	1.157	1.218	1.279				
Total Mid Western Region	0.825	0.854	0.897	0.929	0.957	0.992	1.030	1.076	1.123				

Table D.15
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Estimated Yield Rates : Senior Population

SLA and Small Area	Senior Population Yield Rates (65 - 79 Years)												
	Historic						Projected						
	1991	1996	2001	2006	2011	2016	2021	2026	2031				
Mudgee SLA													
Mudgee Township	0.310	0.303	0.282	0.296	0.310	0.326	0.341	0.358	0.375				
Gulgong Township	0.270	0.325	0.304	0.319	0.334	0.351	0.368	0.387	0.405				
Rural Areas Balance	0.221	0.254	0.275	0.292	0.310	0.326	0.341	0.358	0.375				
Total Mudgee SLA	0.268	0.286	0.282	0.297	0.313	0.328	0.344	0.361	0.378				
Rylstone SLA													
Rylstone Township	0.288	0.348	0.266	0.288	0.310	0.326	0.341	0.358	0.375				
Kandos Township	0.366	0.366	0.345	0.362	0.380	0.399	0.417	0.438	0.459				
Rural Areas Balance	0.204	0.259	0.336	0.353	0.370	0.389	0.407	0.427	0.447				
Total Rylstone SLA	0.283	0.316	0.327	0.345	0.363	0.381	0.398	0.418	0.438				
Total Mid Western Region	0.271	0.292	0.290	0.306	0.322	0.338	0.354	0.371	0.389				

**MID WESTERN REGIONAL SHIRE COUNCIL :
POPULATION PROJECTIONS REVIEW (2005 – 2031)**

TABLE SET E

**Mid Western Regional Shire :
Residential Land Requirements**

Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)

Table Set E : Residential Land Requirements

Table E.1 : Gross Residential Allotment Demands (2001/02 - 2030/31)

SLA and Small Area	Average Allotments Required Per Annum									
	2001/02 - 2005/06	2006/07 - 2010/11	2011/12 - 2015/16	2016/17 - 2020/21	2021/22 - 2025/26	2026/27 - 2030/31				
Mudgee SLA										
Mudgee Township	71	136	126	109	99	107				
Gulgong Township	5	17	17	9	7	7				
Rural Areas Balance	32	38	41	43	45	49				
Total Mudgee SLA	108	191	184	161	151	163				
Rylstone SLA										
Rylstone Township	3	4	5	5	6	7				
Kandos Township	Neg (<1)	Neg (<1)	1	1	1	1				
Rural Areas Balance	18	25	29	35	39	44				
Total Rylstone SLA	21	29	35	41	46	52				
Total Mid Western Region	129	220	219	202	197	215				

Allows for 4% allotment vacancy rate

Allows for 10% demand contingency factor

Table E.2

Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)

Estimated Lot Yield

Source: Mid Western Regional Council, October 2005.

Area	Total Lots	Developed Vacant Lots	Estimated Lot Yield on Res Zoned Land	Estimated Lot on Land to be Rezoned in Interim LEP
MUDGEE				
West Mudgee				
Aarts		114	148	
Ingram/Heslin			53	
Malik			77	
Sub Total		114	278	
<i>Total Lots West Mudgee</i>	392			
South East Mudgee				
Batemans			101	
South East DCP Precinct				184
Low Density Residential (Est @5 lots per ha.)				215
Rural Residential (Est 2 lots per ha.)				276
SUB Total			101	675
<i>Total Lots South East Mudgee</i>	776			
Infill South West Mudgee				50
<i>Total Lots South East Mudgee</i>	50			
Mudgee Total Lots	1218			
GULGONG				
Homer St		15		
Wynella		28		
Ulan			81	
Gulgong DCP			109	
Railway St			40	
Lynne/ Wynella			20	
Rouse/ Wynella			40	
Medley North of Railway Line				30
Low Density Medley				65
Rural Residential - South				50
Sub Total		43	290	145
<i>Total Lots for Gulgong</i>	478			
RYLSTONE				
Fryers			6	

Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
 Table Set E : Residential Land Requirements
 Table E.3 : Residential Land Supply Requirements (2005/06 - 2016/17)

Township	Estimated Allotment Take-up October 2005 - 30 June 2006	Residential Supply at 1st October 2005 Equivalent No. Allotments	Estimated Residential Supply at 30 June 2006 No. Allotments	15 Year Allotment Demand at 2006/07	Additional Supply Required at 2006/07 No. Allotments	Further Supply Required at 2011/12 No. Allotments	Further Supply Required at 2016/17 No. Allotments
Mudgee	53	1,218	1,165	1,855	690 <small>No additional supply required (259 allotments would still remain in supply reserve)</small>	495 <small>No additional supply required (224 allotments would still remain in supply reserve)</small>	535 <small>No additional supply required (189 allotments would still remain in supply reserve)</small>
Gulgong	54	478	474	215	+ 690	+ 490	+ 535
Total: Mudgee & Gulgong	107	1,696	1,639	2,070	-(259)	-(224)	-(189)

Column (1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

**MID WESTERN REGIONAL SHIRE COUNCIL :
POPULATION PROJECTIONS REVIEW (2005 – 2031)**

TABLE SET F

**Mid Western Regional Shire :
Rental Requirements**

Table F.1
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Projected Rental Residential Requirements (2001 - 2031)
For Mudgee SLA

Year ended 30 June	Projected Occupied Dwellings (Refer Table B.2)	Projected Rental Dwelling Stock No.	Estimated Vacant Dwelling Stock (Base Trend)	Additional Rental Dwelling Stock Demand Attributable to Development Projects	Additional Rental Dwelling Stock Required Range No.
2001	6,710	1,580	30	-	-
2006	7,160	1,720	40	80	80 - 120
2011	7,890	1,890	40	60	60 - 100
2016	8,610	2,070	40	20	20 - 60
2021	9,230	2,220	50	-	30 - 50
2026	9,840	2,360	50	-	30 - 50
2031	10,480	2,520	50	-	30 - 50
Total Additional Rental Dwelling Stock Required for the Mudgee SLA (2006-2031)				160	250 - 430

Column (1) (2) (3) (4) (5) (6)

Table F.2
Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)
Residential Rental Properties In Relation to Occupied Dwelling Stock (1991 - 2001)
 Source: ABS, Census of Population and Housing, 2001 (Time Series)

SLA	1991			1996			2001		
	Residential Rental Properties No.	Occupied Dwellings No.	Residential Rental Properties % Occupied Dwellings %	Residential Rental Properties No.	Occupied Dwellings No.	Residential Rental Properties % Occupied Dwellings %	Residential Rental Properties No.	Occupied Dwellings No.	Residential Rental Properties % Occupied Dwellings %
Mudgee	1,322	5,792	22.8	1,488	6,294	23.6	1,577	6,716	23.5
Rylstone	332	1,487	22.3	320	1,523	21.0	284	1,537	18.5
Total	1,654	7,279	22.7	1,808	7,817	23.1	1,861	8,253	22.5

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Table F.3

Mid Western Regional Shire Council : Population Projections Review (2005 - 2031)

Residential Rental Stock Analysis (1991 - 2001)

Source: Based on ABS, Census of Population and Housing, 2001 (Time Series)

SLA	1991						
	Occupied Residential Rental Properties	Occupied Dwellings	Occupied Residential Rental Properties as a % of Occupied Dwellings	Total Dwelling Stock	Estimated Total/Potential Residential Rental Stock	Estimated Vacant Residential Rental Stock	Occupied Dwellings as a % of Total Dwelling Stock
	No.	No.	%	No.	No.	No.	%
Mudgee	1,322	5,792	22.8	6,898	1,574	252	84.0
Rylstone	332	1,487	22.3	1,881	420	88	79.1
Total	1,654	7,279	22.7	8,779	1,994	340	82.9

SLA	1996						
	Occupied Residential Rental Properties	Occupied Dwellings	Occupied Residential Rental Properties as a % of Occupied Dwellings	Total Dwelling Stock	Estimated Total/Potential Residential Rental Stock	Estimated Vacant Residential Rental Stock	Occupied Dwellings as a % of Total Dwelling Stock
	No.	No.	%	No.	No.	No.	%
Mudgee	1,488	6,294	23.6	7,383	1,745	257	85.2
Rylstone	320	1,523	21.0	1,999	420	100	76.2
Total	1,808	7,817	23.1	9,382	2,165	357	83.3

SLA	2001						
	Occupied Residential Rental Properties	Occupied Dwellings	Occupied Residential Rental Properties as a % of Occupied Dwellings	Total Dwelling Stock	Estimated Total/Potential Residential Rental Stock	Estimated Vacant Residential Rental Stock	Occupied Dwellings as a % of Total Dwelling Stock
	No.	No.	%	No.	No.	No.	%
Mudgee	1,577	6,716	23.5	7,927	1,861	284	84.7
Rylstone	284	1,537	18.5	2,052	379	95	74.9
Total	1,861	8,253	22.5	9,979	2,241	380	82.7