

Guide to existing and lost Victorian Rural Medical Services from 1983 onwards to November 2008



In 1982 virtually all rural hospitals had active labour wards, operating theatres, and access to skilled doctors with anaesthetic and life-saving emergency skills. Statistically since 1982 there has been a steady retraction of Victorian rural acute services away from the periphery. Details are attached. Whilst the small hospitals network has been subject to rationalization, it is not certain that the same is entirely intended for the medium to large sector, where to us there are very distinct signs of impending attrition.

In terms of outer regional areas we have a large population of perhaps 600,000 which has a measure of isolation, is progressively poorer towards the periphery, has reduced life expectancy, is more vulnerable to injury in terms of work capacity, and so needs prompt and effective acute services to prevent all measure of physical incapacity.

An additional statistic required is the significant number of centres with a token number of beds and capacity to manage acute medical conditions well below 1983 levels. Quite a number no longer have XRay facilities either.

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Locations with full acute bed closure since 1983 (34) At least 22 now with no resident doctor.

Avoca, Anglesea, Beac, Beulah, Birregurra, Chiltern, Clunes, Cobden, Dunolly, Eildon, Gisborne, Kooweerup, Koroit, Lismore, Lake Bolac, Lancefield, MacArthur, Maldon, Mirboo, Mortlake, Murchison, Murrayville, Natimuk, Neerim, Nyah, Pyramid Hill, Redcliffes, Rushworth, Rutherglen, Tongala, Trentham, Warley, Wedderburn, Yarra Junction.

Locations with full acute bed closure since 1990 (25)

Kooweerup, Rutherglen, Chiltern, Rutherglen, Eildon, Tongala, Rushworth, Maldon, Dunolly, Clunes, Trentham, Lismore, Mortlake, Cobden, Birregurra, Beac, Koroit, Avoca, Lake Bolac, Beulah, Natimuk, Pyramid Hill, Wedderburn, Redcliffes, Murrayville.

Survival of Rural Bush Nursing Hospitals (BNH) listed in 1983: (30).

Still with beds: 8.

Birchip, Charlton, Euroa, Heyfield, Hopetoun, Rainbow, Sea Lake, Yackandanda

Beds closed: 22

Anglesea, Avoca, Chiltern, Cobden, Gisborne, Lancefield, Merino, Mirboo, Murchison, Murrayville, Nagambie, Natimuk, Neerim, Nyah, Pyramid Hill, Tongala, Toora, Trentham, Walwa, Warley, Wedderburn, Yarra Junction.

NB: All had obstetrics, none do now. Annual Victorian BNH Obstetric morbidity statistics were consistently at world's best. State support ceased in 1986, resumed in 1994 in a small way, and subsumed the network from 1997 onwards.

Towns classed in 2000 as providing after-hours care but currently having-non resident doctors: (11) Murtoa, Willaura, Skipton, Rainbow, Chiltern, Heywood, Kooweerup, Lismore, Mortlake, Birregurra, Beac. (This list varies. Some locations still have beds but intermittent cover)

Hospitals reduced to HS or Aged care without beds: (19) Cobden, Dunolly, Eildon, Kooweerup, Koroit, Lismore, Minyip, Maldon, Murtoa, Nyah, Pyramid Hill, Rupanyip, ? Rushworth-Waranga, Tallangatta, Tatura, Walwa, Wedderburn, Winchelsea, ? Yackandanda

Town Hospitals saved by recruitment of doctors from overseas (28):

Ballan, Beaufort, Birchip, Boort, Charlton, Cobram, Donald, Edenhope, Heathcote, Hopetoun, Jeparit, Kaniva, Manangatang, Nagambie, Neerim, Nhill, Orbost, Ouyen, Peshurst, Portland, Robinvale, Rochester, Sea Lake, St Arnaud, Warracknabeal, Wedderburn, Wycheproof, Yarram.

Towns sharing cooperative after hours and week-end on call arrangements:

Mt Beauty and Bright

Yea and Alexander

Stawell and Ararat (all services)

Wycheproof, Charlton and Birchip

St Arnaud and Donald

Minyip and Rupanyip,

Foster and Wonthaggi (for Caesarean)

Leongatha and Korumburra (intermittent all services)

Terang, Camperdown and Timboon (Obstetrics)

Nhill and Kaniva

Rainbow and Jeparit

Hopetoun and Warracknabeal

Sea Lake often on bypass to Swan Hill.

Ouyen often on bypass to Mildura

Orbost on regular bypass to Bairnsdale for Obstetrics

Beechworth bypasses to Wangaratta

NB Rural Generalists supply significant obstetric, emergency and anaesthetic shift and on-call assistance to regional hospitals, and in a number of instances have spent periods as emergency department heads.

Obstetric Units closed since 1983: (88):

Alexander, Apollo Bay, Avoca, Ballan, Beechworth, Beulah, Beeac, Birchip, Birregurra, Boort, Casterton, Charlton, Clunes, Cobram, Coleraine, Corryong, Cowes, Creswick, Dimboola, Donald, Dunolly, Eildon, Edenhope, Elmore, Euroa, Gisborne Heyfield, Heywood, Hopetoun, Inglewood, Jeparit, Kaniva, Kooweerup, Koroit, Korumburra, Lancefield, Lismore, Lorne, MacCarthur, Maffra, Maldon, Manangatang, Minyip, Mirboo Nth, Moe, Mortlake, Murchison, Murrayville, Murtoa, Nagambie, Nathalia, Natimuk, Neerim South, Nhill, Numurkah, Nyah West, Omeo, Orbost, Ouyen, Peshurst, Port Fairy, Pyramid

Hill, Rainbow, Redcliffes, Robinvale, Rochester, Rupanyip, Sea Lake, Seymour, Skipton, Sunbury, Talangatta, Tatura, Terang, Timboon, Tongala, Trentham, Walwa, Warley, Warracknabeal, Wycheproof, Wedderburn, Willaura, Yackandanda, Yarra junction, Yarram, Yea.

Obstetric Units closed since 1997: (37):

Alexander, Beechworth, Birchip, Boort, Casterton, Charlton, Cobram, Coleraine, Corryong, Cowes, Creswick, Dimboola, Donald, Edenhope, Hopetoun, Korumburra, Lorne, Maffra, Maldon, Nathalia, Nhill, Numurka, Omeo, Ouyen, Penshurst, Port Fairy, Rosebud, Rupanyip, Seymour, Talangatta, Tatura, Terang, Timboon, Warracknabeal, Wycheproof, Yarram, Yea.

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Obstetric locations still open (42):

- **Small 5:** Bright, Castlemaine, Daylesford, Healsesville, Mt Beauty, St Arnaud
- **Medium: 22:** Ararat, Benalla, Camperdown, Castlemaine, Cohuna, Colac, Foster, Kerang, Kilmore, Kyabram, Kyneton, Leongatha, Mansfield, Seymour (just reopened), Maryborough, Myrtleford, Orbost (intermittently operational), Portland, Stawell, Wonthaggi, Yarrawonga.
- **Larger Centre: 9:** Bacchus Marsh, Bairnsdale, Echuca, Hamilton, Horsham, Kilmore, Sale, Swan Hill, Warragul.
- **Regional/Subregional: 8:** Ballarat, Bendigo, Mildura, Shepparton, Traralgon, Wangaratta, Warrnambool, Wodonga.

Comment on Obstetrics: Services require both Obstetricians and Anaesthetists on full roster. Intermittent closure of centres, going on bypass, shared rosters between centres all compromise patient safety. The median age of GP Obstetricians is now 50 but there are very few under 40. Substantial retirement occurs after 50 and the workforce will be terminally depleted within 10 years without a major training and retention exercise paralleled by a similar process for midwives, who share the same age profile. This means that most of the small and medium maternity centres, and possibly some of the larger, will close, leaving quite a bleak landscape, and adding to rural morbidity. For large centres the supply of obstetricians is meagre and rural specialist obstetricians are in very short supply.

RDV Procedural GP Statistics (Collated 2006 from register compiled from all locations. Note the paucity of entry into younger age groups and significant shift between 04 and 06. Continuation of frequent on call after age 55 is not safe. Work in excess of 50 hours per week is deemed unsafe and uninsurable in the UK but common practice in rural Australia.)

GP proceduralists in Rural Victoria 2006 (Obstetrics, Anaesthesia or dual) by age and sex.

Age	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total
M/F	0/2	5/4	11/3	29/5	40/8	44/4	24/1	11/0	163/27

GP Obstetricians in Rural Victoria 2006 by Age and Sex

Age	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total	Grand Total
M/F	0/2	3/3	7/3	20/3	36/6	37/3	17/1	11/0	131/21	152

GP Obstetricians in Rural Victoria 2004 and 2006 Compared to show attrition

Age	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total
04/06	2/2	8/6	15/10	39/27	42/42	35/40	17/17	9/11	167/155

GP Anaesthetists in Rural Victoria 2006 by Age and Sex

Age	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total	Grand Total
M/F	0/0	2/0	8/1	16/1	22/4	30/1	12/1	8/0	98/8	106

GP Anaesthetists in Rural Victoria 2004 and 2006 Compared to show attrition

Age	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total
04/06	0/0	4/2	19/9	22/17	25/26	25/31	17/13	6/8	118/106

Specialist Obstetricians in Rural Victoria 2004 and 2006 Compared for age progression

Age	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total
04/06		1/1	3/1	5/6	2/3	12/7	3/8	6/7	32/32

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Existing Rural Victorian Hospitals in functional Groups (* Still have Obstetrics) Some related NSW locations are added in brackets. TWOH means practises in locations that often have to exercise hospital function in the community.

East Gippsland: Bairnsdale*, Orbost*, Omeo, TWOH Mallacoota, Lakes Entrance

Central Gippsland: Base Traralgon*, Sale*, Yarram, Maffra, Heyfield, Neerim, Warragul*

South Gippsland: Wonthaggi*, Leongatha*, Korumburra, Foster* TWOH Phillip Island

North East Vic: (Albury) Base Wodonga*, Mt Beauty*, Corryong, Walwa, Tallangatta (Corowa)

Central North East: Base Wangaratta*, Bright*, Myrtleford*, Beechworth, Yackandanda, Yarrawonga*, Benalla*, Euroa

North Metropolitan Penumbra: Seymour, Kilmore*, Alexandra, Yea, Mansfield*, Healesville*

Central North: Base Shepparton*, Kyabram*, Numurka, Nathalia, Cobram, Nagambie, Rushworth, (Tocumwal)

Central Northwest: Echuca*, Rochester, Cohuna*, (Barham)

Bendigo and surrounds: Base Bendigo*, Castlemaine*, Inglewood, Heathcote

Central Mallee: Charlton, Wycheproof, Birchip, Boort, Donald, St Arnaud

Western Metropolitan Penumbra: Kyneton*, Bacchus Marsh* TWOH Woodend, Gisborne

Ballarat and surrounds: Base Ballarat*, Daylesford,* Creswick, Ballan, Beaufort, Skipton

Bellarine: Base Geelong*, Winchelsea, Colac*

Corangemite: Camperdown*, Terang, Timboon

Great Ocean Road: Apollo Bay, Lorne

Mid Otway: Base Warrnambool*, Port Fairy

West Otway: Sub-Regional Hamilton*, Coleraine, Casterton, Peshurst, Portland*, Heywood

West Wimmera, Sub-Regional Horsham*, Murtoa, Rupanyip, Dimboola, Nhill, Kaniva, Natimuk, Edenhope, Warracknabeal, Jeparit, Rainbow, Hopetoun

East Wimmera: Stawell*, Ararat*, Willaura, Maryborough*, Dunolly

Mid- Northern Mallee: Swan Hill*, Kerang*, Manangatang

Northern Mallee: Mildura*, Robinvale, Ouyen, (Wentworth, Balranald)

NB: TWOH towns without hospitals having GP practices significantly contributing to acute Health Care

Existing hospital Network

Apart from 7 Base hospitals, there are 94 hospitals with < 500-550 local GPs who are mostly VMOs. (No reliable statistics available). 11 have additional specialists who in sub-base hospitals work with GP VMOs. 35 have Obstetrics, 51 no obstetrics. 46 have no theatre or anaesthetics or GP anaesthetists to provide emergency airway management. A number of these towns do not have ambulance services either. Most smaller hospitals are staffed by Overseas doctors who in the main are a transient workforce awaiting the opportunity to practice in or near to a metropolitan zone. Many end up in Perth and Sydney. A considerable number have worked as proceduralists in South Africa but only a proportion are practising their skills in larger locations that need them and are currently absolutely dependent on their recruitment for continuation of obstetrics and other major hospital functions.

Regional Base with full specialist roster: Wodonga (Albury) (7)

Wangaratta (shaky obstetrics), Shepparton, Bendigo (concerned about obstetrics), Geelong (regarded as rural by State), Ballarat, Warrnambool (shaky obstetrics).

Sub-Regional: specialist roster complemented by VMOs (4):

Hamilton, Horsham. Sale, Warragul.

Procedural GP VMO hospital with obstetrics and active theatre (35):

Major: Bacchus Marsh, Bairnsdale, Echuca, Kilmore, Swan Hill, **Large:** Benalla, Colac, Kilmore, Kyabram Wonthaggi, **Medium:** Ararat, Camperdown, Castlemaine, Cohuna, Foster, Kerang, Kyneton, Leongatha, Mansfield, Seymour (Just reopened), Maryborough, Myrtleford, Orbost (intermittent), Portland, Stawell, Terang, Timboon (? operational), Yarrowonga. **Small:** Bright, Castlemaine, Mt Beauty, Orbost (intermittent), St Arnaud, Terang. (Closed '08 Daylesford and Timboon).

Hospitals with small degrees of theatre activity (5)

Corryong, Korumburra, Lorne, ? Maffra, Port Fairy.

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Non-procedural GP VMO hospital locations. (46):

Alexandra, Apollo Bay, Ballan, Beaufort, Beechworth, Birchip, Boort, Casterton, Charlton, Cobram. Cohuna, Coleraine, Corryong, Creswick, Dimboola, Donald, Edenhope, Euroa, Heathcote, Heyfield, Heywood, Hopetoun, Inglewood, Jeparit, Kaniva, Manangatang, Nagambie, Nathalia, Neerim, Nhill, Omeo, Ouyen, Penhurst, (Rainbow) Robinvale, Rochester, Sea Lake, Skipton, St Arnaud, Warracknabeal, Wedderburn, (Willaura) Wycheproof, Yackandanda, Yarram, Yea. (=no resident doctor).

Note: These hospitals have mostly had major bed cuts with closure of obstetrics and theatre. Most of them operate shared on-call rosters with neighbouring towns. Having lost the viable mix of services they are not cost-effective in terms of inpatient care. Doctors are often pressured to transfer rather than offer potentially life-saving treatment such as thrombolysis. Many if not most will lose inpatient beds unless there is in principal agreement to continue local inpatient management of acute geriatric conditions and palliative care. An alternative is to manage more conditions in local extended care units. There will however be problems keeping resident doctors in such locations as already happened (see below).

On-call Rural VMO Enhancement Package locations (89) 2007 DHS list. (* No Beds 9)

Alexandra DH, Apollo Bay, Ararat, Bacchus Marsh, Birchip, Ballan DHC , Beaufort, Beechworth HS, Benalla Dand MH, Boort DH, Bright,, Camperdown, Casterton, Castlemaine, Charlton, Cobden DHS*, Cobram DH , Cohuna DH, Colac Area HS, Coleraine, Corryong, Creswick DH, Daylesford DH, Dimboola DH, Donald, Dunolly*, Edenhope and DH, Euroa H, Foster, Healesville, Hopetoun, Heathcote, Heyfield H, Heywood RH, Inglewood DandHS, Jeparit , Kaniva, Kerang DH, Kilmore and DH, Kooweerup RHS*, Korumburra, Kyabram and DHS, Kyneton DHS, Leongatha MH, Lorne CH, Maffra, Maldon H?*, Manangatang and DH, Mansfield DH, Maryborough, Mt Beauty, Myrtleford, Nagambie H, Nathalia DH, Neerim D Soldiers Memorial H, Nhill, Numurka DandHS, Omeo DH, Orbost RH, Ouyen, Penshurst DandMH, Port Fairy H, Portland DH, Rainbow, Robinvale DHS, Rochester and Elmore DHS, Rupanyip*, Rushworth (Waranga)*, Sale, Sea Lake DandH, Seymour DMH, Skipton (GP non- resident), Stawell RH, St Arnaud, Tallangatta HS, Tatura*, Terang and Mortlake, Timboon and District HS, Walwa*, Warley H, Warracknabeal, Warragul, Winchelsea?*, Willaura (no doctor), Wonthaggi, Yackandanda BNH, Yarram and DHS, Yarrowonga DHS, Yea and DHS.

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VMO hospital towns	Total GP	Solo Practice	Group Practice	GP workforce	Procedural	Additional Specialists
Alexandra	3		2			
Apollo Bay	4		2			
Ararat	9		1		Obstetrics/Theatre	
Bacchus M	13		2		Obstetrics/Theatre	y
Bairnsdale	22	1	2		Obstetrics/Theatre	
Ballan	2		1			
Beaufort	1	1				
Beechworth	6		1			

Benalla	16		2		Obstetrics/Theatre	
Birchip	1	1				
Boort	1	1				
Bright	3		1		Obstetrics/Theatre	
Camperdown	8		2		Obstetrics/Theatre	
Casterton	5		1			
Castlemaine	15		4		Obstetrics/Theatre	
Charlton	1	1				
Cobram	10		2			
Cohuna	4		1		Obstetrics/Theatre	
Colac	13		2		Obstetrics/Theatre	
Coleraine	5		1			
Corryong	3		1		Theatre	
Creswick	4		1			
Daylesford	8		2		Obstetrics/Theatre	
Dimboola	2		1			
Donald	1		1			
Echuca	19		2		Obstetrics/Theatre	
Edenhope	3		1			
Euroa	5		1			
Foster	6	1	2		Obstetrics/Theatre	
Hamilton	11		1		Obstetrics/Theatre	y
Healesville	4		1		Obstetrics/Theatre	
Heathcote	2	1				
Heyfield	2		1			
Heywood	2	2				
Hopetoun	1	1				
Horsham	11		3		Obstetrics/Theatre	y
Inglewood	1		1			
Jeparit	1					
Kaniva	1		1			
Kerang	7		2		Obstetrics/Theatre	
Kilmore	8	1	2		Obstetrics/Theatre	
Korrumburra	8		1		Theatre	
Kyabram	10	1	1		Obstetrics/Theatre	
Kyneton	4	1	1		Obstetrics/Theatre	
Leongatha	11+		1		Obstetrics/Theatre	
Lorne	1	1				
Maffra	7		2			
Manangatang	1	1				
Mansfield	9		2		Obstetrics/Theatre	
Maryborough	6		2		Obstetrics/Theatre	
Mt Beauty	5	1	1		Obstetrics/Theatre	
Myrtleford	6		1		Obstetrics/Theatre	?closing
Nagambie	1	1				
Nathalia	3		1			
Neerim	2		1			
Nhill	3		1			
Numurkah	7		2			
Omeo	4		1			
Orbost	2		1		Obstetrics/Theatre	
Ouyen	1	1				

Penshurst	1	1				
Phillip Island	5		1			
Port Fairy	5		1			
Portland	13	1	3		Obstetrics/Theatre	
Rainbow				no resident		
Robinvale	2	2				
Rochester	2	1				
Rosebud				no info		
Rupanyup	1			no resident		
Rushworth	1	1				
Sale	25		4		Obstetrics/Theatre	y
Sea Lake	2		1			
Seymour	11	1	2		Theatre/? Obstetrics soon	
Skipton	1	1				
St Arnaud	2		1		Obstetrics/Theatre	
Stawell	9		2		Obstetrics/Theatre	
Swan Hill	10		1		Obstetrics/Theatre	
Tallangatta	2		1			
Terang	4		1		Obstetrics/Theatre	
Timboon	2		1		Obstetrics/Theatre ? closing	
Traralgon	17	2	2		Obstetrics/Theatre	y
Walwa	1		1			
Warburton	5		2		Obstetrics/Theatre	
Warracknabeal	1	1	3		One practice closing	
Warragul	28	3	3	Few at hospital	Obstetrics/Theatre	y
Willaura				no resident		
Winchelsea	1	1				
Wodonga	Inadequate Info		>2	12 GP Obstetricians	Obstetrics/Theatre	y
Wonthaggi	17		2		Obstetrics/Theatre	
Wycheproof	1	1				
Yarram	2	2				
Yarrawonga	11		2		Obstetrics/Theatre	
Yea	4		2			
locations = 93	<u>525</u>	<u>37</u>	<u>103</u>		Obstetrics 37	

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Bush Nursing Centres with no resident doctor, (many branch surgery): (33)

Balmoral, Beac*, Beulah, Buchan, Cann Valley, Chilten, Dartmoor, Eildon, Elmhurst, Gelantipy, Dargo, Dingee, Harrow, Lake Bolac, Lockington, Mallacoota, Merino, McCarthur, Murrayville*, Patchewollock, Pyramid Hill*, Quambatook, Swifts Creek, Trentham*, Underbool, Violet town, Woomelang. Role of nurses not ascertained in: Yackandandah, Maldon, Lismore, Mortlake, Birregurra, Tatura. *hospital closed since 1983.

Victorians living in poverty by electorate. Age Newspaper 24.5.05

- **11.1% or more:** All rural Victoria and Gellibrand except below
- **9.6 - 11%:** Calwell, Lalor, Gorton, Maribynong, Melbourne, Wills, Batman, Scullin
- **7.6 - 9.5%:** McEwan*, Corangemite*, Hotham, Bruce, Issacs, Dunkley (*Rural)
- **5.1 – 7.5%:** Casey, LaTrobe, Jagajaga, Menzies, Deakin, Chisolm, Aston, Holt, Ports.
- **5% or less:** Kooyong, Higgins, Goldstein

NB. Henderson half average poverty line = ½ average equivalent disposable household income for a standard household.

First (worst) quintiles of Victorian poverty by postcode. Jesuit studies 2003

3242 Birregurra**; 3322 Cressey; 3324 Lismore**; 3333 Meredith; 3360 Linton; 3370 Clunes**; 3371 Talbot (Clunes hospital); 3412 Goroke; 3424 Jeparit*; 3475 Bealiba; 3448 Elphinstone; 3462 Newstead; 3467 Avoca**; 3472 Bet Bet; 3518 Wedderburn**; 3523 Heathcote*; 3563 Lockington; 3580 Koondrook (Barham hospital*); 3594 Nyah (Nyah West Hospital); 3595 Nyah West**; 3612 Rushworth; 3821 Neerim*; 3833 Noojee; 3887 Nowa Nowa; 3889 Cape Conran. **Hospital closed; *Loss of Hospital Services.

Australian Life Expectancy at birth by Region 1997 – 2000 (AIHW)

	Major City	Inner Regional	Outer Regional	Remote	Very Remote
M / F	76 / 81	75 / 80.5	74 / 79.5	73 / 78.5	68.5 / 73.5

Note: blanket statistics such as Life expectancy are a very crude measure of health, seriously mask discrepancies with groups, and do not register physical incapacity.

Relationship between distance to hospital and patient mortality in emergencies:

Increased journey distance to hospital (by ambulance in the UK in distances up to 58 Km) appears to be associated with increased risk of mortality. Data suggest that a 10-km increase in straight-line distance is associated with around a 1% absolute increase in mortality.

Emergency Medicine Journal 2007;24:665-668

<http://emj.bmj.com/cgi/content/abstract/24/9/665>

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Some sample distances in Victoria:

- Mallacoota to Orbost 147
- Orbost to Bairnsdale 90
- Bairnsdale to Traralgon 132
- Wonthaggi to CBD 118
- Mansfield to CBD 210
- Seymour to CBD 90
- Colac to Geelong 74
- Camperdown to Warrnambool 69
- Portland to Hamilton 86
- Nhill to Horsham 74
- Ararat to Ballarat 92
- Wycheproof to Bendigo 128
- Birchip to Horsham 123
- Hopetoun to Horsham 121