

# Evaluation of the Wheatbelt Aged-Friendly Community Bus Trial

Lucienne Burnham<sup>1</sup>, Ying Huang<sup>2</sup>, Bec Arnold<sup>1</sup>, Mariana Aitkens<sup>1</sup>, Brett Smith<sup>2</sup> and Fiona McKenzie<sup>1</sup>

<sup>1</sup> Centre for Regional Development, University of Western Australia,  
35 Stirling Highway Perth WA 6009

<sup>2</sup> Planning and Transport Research Centre, University of Western Australia,  
35 Stirling Highway Perth WA 6009

Email for correspondence: Brett.Smith@uwa.edu.au

## Abstract

In Australia, there is a growing trend for older people to age-in-place, defined as a person's ability to live independently in their home and community with access to affordable services. Despite higher levels of social connectedness compared to urban areas, regional communities often face the challenges of reduced local aged services, health facilities and transport infrastructure. The Creating Age-Friendly Communities in Small Towns Project aims to improve community infrastructure and health care services to older residents living in Western Australia's Wheatbelt. Funded by the State Government's Royalties for Regions Program, a pilot bus service enabled through the project's Small Grants Scheme has provided valuable insight for the development of an integrated transport plan to identify innovative ways to provide improved transport options for the community.

## 1. Introduction

The Wheatbelt is situated in the south-west of Western Australia and comprises an area of 154,862km<sup>2</sup> extending out from the Perth metropolitan area. The region is divided into five sub-regions: the Avon, Central Coast, Central East, Central Midlands and Wheatbelt South. These sub-regions are made up of 42 Shires and approximately 160 towns and communities. The population of the Wheatbelt has been steadily growing by 0.9% over the past four years and is the second most populated country region in Western Australia (Department of Training and Workforce Development, 2014). Over half of the region's population is dispersed across 30 towns, with the remainder residing in towns of less than 200 people (Western Australia Country Health Service, 2012).

In the Wheatbelt, policy tends to focus on the ageing 'baby-boomer' generation (currently ranging between 51 and 71 years old). However, the major demographic change being experienced is the growth in the number of persons over the age of 85 (Stones & Gullifer, 2016). This makes age-friendly community planning, particularly for transport options, a key priority in the region (Wheatbelt Development Commission, 2014). A high reliance on self-drive and private vehicle ownership

coupled with widely dispersed services in the Wheatbelt can contribute to the social exclusion of the aged population by acting as a barrier for older people to participate in events, access healthcare, food shopping and other key activities (Social Exclusion Unit, 2003). Public transport in the Region currently exists where it is perceived that there is the greatest demand according to the highest concentration of users. As a result, in areas of low population densities there is a need for alternative models of public transport provision, such as small community transport or buses to fill the mobility gap.

This Integrated Transport Strategy forms part of the \$2.53 million dollar ‘*Creating Age-Friendly Communities in Small Towns*’ (CAFC) project which aims to improve community infrastructure and health care services to older residents living in the Wheatbelt. Funded by the State Government’s Royalties for Regions Program, this major undertaking represents the State’s single biggest investment into the Wheatbelt aged care industry in WA’s history. The CAFC *Integrated Transport Strategy* was developed to identify innovative ways to provide improved transport options for the Wheatbelt.

Three pilot bus services were trialled to investigate the potential demand and impact of a community transport model in the Wheatbelt. These three bus pilots were active for six months, between February 2016 and July 2016. The pilot routes included:

- **Wheatbelt South (fortnightly service)** – Shire of Kondinin (from Hyden) to Kulin, Wickepin and concluding in Narrogin
- **Central Midlands (weekly service)** – Shire of Wongan Hills to Calingiri, Bolgart and concluding in Northam
- **Coastal (weekly service)** – Jurien Bay to Cervantes, Lancelin, Sovereign Hill, Woodridge and concluding in Joondalup

The aim of this paper is to present the strategic and operational recommendations for the provision of alternative and innovative transport options for older residents travelling from small towns to service centres. A discussion on the mobility services for the aged living in regional Australia is presented in section 2. This is followed by a method to economically evaluate community aged-travel services under a limited data setting. Section 4 presents the three pilot community transport trials and recommendations are made in section 5. The paper’s conclusion is presented in section 6.

## **2. Aged Mobility Services in Rural and Regional Settings**

As regional services amalgamate around larger centres or service nodes, the question arises of whether elderly people in regional communities have the ability to overcome increasing distances for health care and social services (Giesel et al., 2013). Often the availability of hospitals and specialist care is related to population density in regional towns to cater to a larger demand, creating uneven supply in highly dispersed regional areas (Giesel et al., 2013). Fragmented development can lead to regional residents needing to travel longer distances to large regional centres for services and amenities (Carson & Koch, 2013). With centralised restructuring of health care services, whereby services move to larger towns, there is an increasing reliance on informal support networks for transportation in smaller regional towns (Ryser & Halseth, 2012). Despite growing demand for health services as the population ages, there have been cuts to public transport across OECD nations (the 34 countries that account for 63% of world GDP) that affect older residents' mobility and ability to access these services (Ryser & Halseth, 2012). In the United States and United Kingdom the absence of transport options and an increasing regionalisation of services have resulted in many seniors having to move out of their communities as they age (Ryser & Halseth, 2012).

### **2.1. Aging in Place**

In Australia, there is a growing trend for older people to age-in-place, defined as a person's ability to live independently in their homes and communities with access to affordable services (World Health Organisation, 2007). The Australian Government has included the concept of ageing-in-place in recent aged care reforms (Department of Health, 2016). In particular, the changes aim to offer choice and flexibility to ageing residents and support people to stay at home and in their communities for as long as possible (Burnett Inland Economic Development Organisation, 2011). The policy discussion around an individual's ability to age-in-place is more pronounced in regional Australia as access to health services, lifestyle amenities and transport are often less accessible in smaller communities.

Despite higher levels of social connectedness compared to urban areas, regional communities often have issues with the availability of appropriate housing, support infrastructure and access to services and transport (Davis & Bartlett, 2008). In order for Australian residents to effectively age-in-place there must be transport options in place that enhance mobility and accessibility to essential services such as health care.

Access to essential services in the Wheatbelt is limited by the availability and by poor transport provision. The concentration of health care specialists in regional centres is due to service rationalisation and uneven development (Tonts, 1998) across the Wheatbelt. Rationalisation, while not a new concept to the Region, has resulted in people in regional and rural areas needing to travel outside their local towns to access essential services (McKenna, 2012) due to smaller regional towns being unviable for health care specialist infrastructure. High car dependency in the

Wheatbelt results in a loss of self-esteem and mobility when an individual is deemed unfit to drive or when they lose access to a private vehicle (Department of Health, 2016). Limited public transport options and underutilised Shire buses have resulted in an over-reliance on voluntary ambulance services for patient transfers, social isolation and expensive overnight stays in regional centres or metropolitan areas (Wheatbelt Development Commission 2014). The transport domain crosses into all aspects of community life, reducing the quality of life of aged residents when they are left with limited or no transport services (Council on the Ageing, 2013). These issues frequently result in older people leaving their Wheatbelt community and families in order to access the support and care services they require (Department of Health, 2016).

## **2.2. Social Inclusion**

Social exclusion and inclusion have been widely studied within a number of disciplines and is understood to be critical in determining an individual's quality of life and sense of wellbeing (Stanley & Vella-Brodrick, 2009). The UK government's Social Exclusion Unit has examined social exclusion in relation to poor mobility options (Social Exclusion Unit, 2003). Broadening the measure of disadvantage to include social exclusion identified that physical disability, ageing, or lack of education may limit an individual's capacity to participate in social, political or economic activities. Transport is an essential component to understanding exclusion since a lack of access to quality and affordable transport inhibits an individual's ability to engage in society. Mobility is central to rural activity and there is a direct link between community wellbeing and the availability of rural transport options (Shergold, 2012). Good rural transport infrastructure not only supports an individual's autonomy and social connectedness but also has wider social benefits for the whole community (Nordbakke & Schwanen, 2014).

Lastly, the impact of rural transport on health and physical wellbeing is also crucial to understand the overarching impacts on overall wellbeing. Within many rural communities, such as those involved in the pilot services, older inhabitants have problems with access to health specialists and services (Cancer Council, 2011).

## **2.3. Transport and Care Options in Regional Western Australia**

A number of existing aged transport assistance programs exist for citizens in regional Western Australia. TransWA operates three commuter railway services and twenty three bus fleet routes, including eight routes with stops throughout the Wheatbelt. However, most TransWA bus services are designed for travel between regional centres and service small towns 'along the way'. There are currently no regular bus services across the Wheatbelt that provide day-trips. The Wheatbelt currently has three Avon Link Working Group feeder bus services that provide regional towns across the Avon and Central East a connecting public transport route between their town and the closest embarking TransWA train service.

In addition to these structured services, 19 Local Governments across the Wheatbelt provide the option of community bus hire to their residents and senior residents. These buses are often used for seniors' activities. While community bus hire is an available option for some senior residents, there are implications surrounding this option including the need to provide a volunteer driver, organising and scheduling once-off trips and community buses that aren't well equipped for those with mobility difficulty. Community bus hire, while useful for occasional outings, is not a long-term solution for regular round-trip public transport services in the Region.

The Patient Assisted Travel Scheme (PATS) provides a subsidy towards the cost of travel and accommodation for eligible permanent country residents and their approved escorts, who are required to travel a long distance to access certain categories of specialist medical services. The eligibility criteria to qualify for a PATS subsidy are especially specific with limited flexibility to meet changing circumstances of regional users.

Country Age Pension Fuel Cards offer an alternative subsidy scheme on a State level. Fuel cards provide eligible pensioners with up to \$565 a year towards the cost of fuel and/or taxi travel to support transport needs of pensioners living in country areas (Department of Regional Development, 2016). The fuel card subsidy is a more inclusive scheme than the PATS and provides a form of transport support to rural residents who do not have particular medical conditions. The barriers of the fuel subsidy include the fact that it does not apply to public transport or community transportation, as it is assumed most public transportation already includes concession discounts.

There is an opportunity to provide regional public transport that caters to the needs of small regional towns and the older population in particular, such as scheduled service routes matching medical centre opening hours and same-day return journeys to avoid expensive overnight stays.

## **2.4. Valuing Community Transport**

Undertaking a robust economic appraisal for the provision of community transport in regional and rural settings is a challenge, not least because many welfare factors are difficult to quantify. Nevertheless, a number of US case studies have attempted to measure the value of a 'foregone trip' and have reported benefit-cost ratios in the order of 3:1 to 9:1 (Godavarthy et al., 2014). The dis-benefits incurred when a trip for medical purposes is foregone carry the highest value. Southerworth et al. (2005) estimate a value of US\$44.86 for the provision of a non-emergency medical trip (approximately AU\$77 in 2016). This high cost is in part due to the regulation that public transit operators must provide para-transit services to disabled passengers not able to access the current scheduled service (Battellino & McClain, 2011). However, they note that the results are sensitive to differing circumstances of the passenger or the type of treatment foregone. The value of social and shopping trips were approximately half the value of medical trips (AU\$40 in current terms).

The US studies typically addressed regional centres with far greater populations than the Wheatbelt communities analysed in this report. Elderly residents in Australian rural towns are particularly vulnerable to social exclusion due to low incomes and poor social networks (Dempsey, 1990) and poor levels of access to transport (Byles

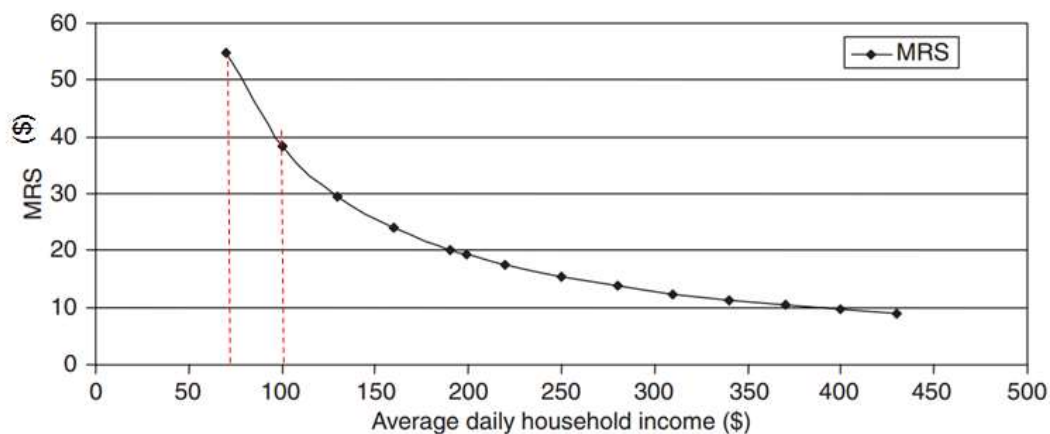
et al., 2007). However, delivering transport alternatives for such small communities can carry a relatively high per passenger cost. Despite this, Battellino et al. (2011) note that flexible community-based transport, as adopted in NSW, are a lower cost option than the US model and require lower subsidies. The cost of the service for the North Sydney, NSW, trial was AU\$25 per person (approximately AU\$30 in current values). No benefit calculation was provided by this study.

A thorough cost benefit study would aim to capture money equivalences for mental wellbeing, the benefits due to physical activity, the potential community savings in delivery of health services, as well as the wider impacts due to greater economic activity within the community (Battellino & McClain 2011). However, due to the low number of responses received in the pilot survey (19 respondents) it is impossible to estimate parameters from the data. The following section outlines a method of valuation that makes use of a previous study by Stanley et al. (2011) examining the marginal rate of substitution (MRS) between the number of daily trips and the daily household income.

### 3. Method for Economic Cost Benefit Analysis for Community Transport

In the Stanley et al. (2011) paper the authors specifically looked at the value of a trip in terms of alleviating levels of social exclusion, a similar context to the Wheatbelt study. The parameters were estimated using an ordered logit regression where the dependent variable was the self-reported social level of exclusion. The average MRS of \$20 per trip is determined by the ratio between the marginal benefit (reduction in level of exclusion) of an additional dollar of income to the marginal benefit of an additional trip. However, the authors argue that lower income households place a higher value on an additional trip because they are more likely to be making few trips: “Our interpretation is that, in our sample, people on lower incomes take fewer trips. If we can add a trip, this is a large relative increase in mobility and associated activity levels and a relatively high willingness to pay is not surprising, compared to the marginal trip value of someone who undertakes more trips (and has higher income)” (page 214). The relationship between income and the value of an additional trip (MRS) is reproduced in Figure 1.

**Figure 1: Marginal Rate of substitution between an additional trip and daily household income (Source: Figure 1 Stanley et al. 2011. Page 214)**



Whilst, Stanley et al. (2011) examined all households on the outer fringes of metropolitan Melbourne, the community trial presented here is targeted at seniors in regional areas. Fifteen of the 19 surveys were completed by respondents older than 65 years of age. Furthermore, the residents of the Western Australian rural towns had lower incomes than average reported in Stanley et al. The 2011 census data revealed that the average daily household incomes in Kondinin and Wickepin are \$87 and \$71, respectively. It is expected that the elderly passengers undertaking the Wheatbelt pilot services would have lower than average incomes, but income data with respect to age at these locations is unavailable.

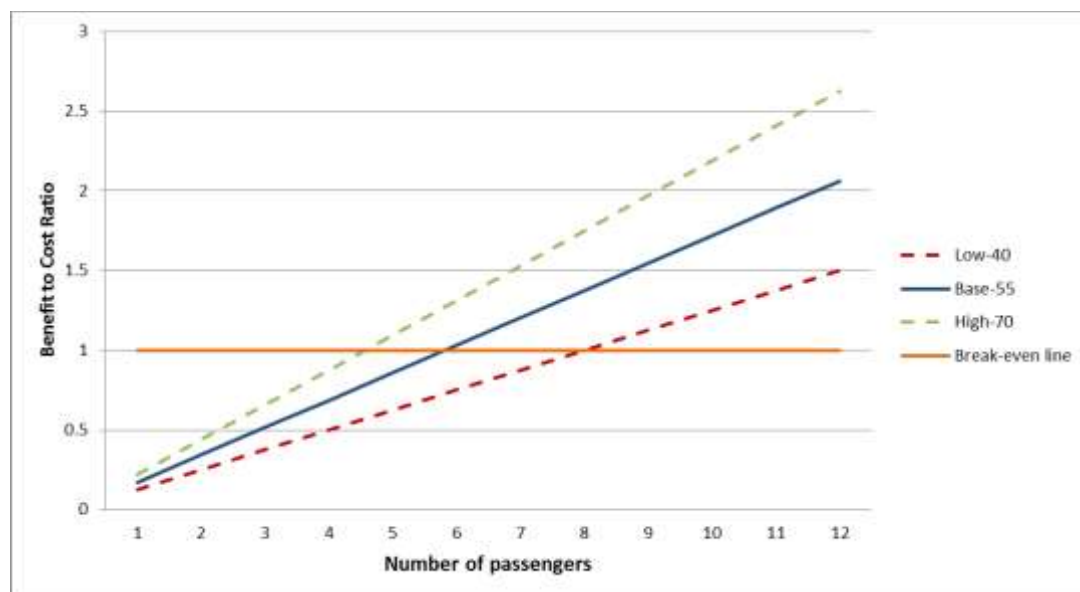
A lower limit of \$40 per person trip is arrived at by assuming a \$100 per day income as shown by the dashed line in Figure 1. However, this is considered to be a minimum value, based on income alone. The other factors, including infrequent travel to regional centres, relying on family members, accessing medical services and the social value of the trip, suggest a higher welfare benefit. We chose a conservative estimate of \$55 per trip based on the average incomes in the target areas and an

upper limit of \$70 per trip that takes into account that the community bus trial targeted members of the public that otherwise relied on family or friends to undertake long distance trips. Most respondents indicated that the provision of the community bus service increased the frequency of making the trip to the regional centre. In total, these factors point to a higher value of an additional trip for the Wheatbelt target population than for the population residing in the outer fringes of Melbourne.

MRS is often referred to as *willingness to pay*. However, the concept does not translate directly to capacity to pay. In micro-economic terms willingness to pay is equated to *income equivalence*. This is the amount of income – which may be in the form of other subsidised services – an individual is willing to forgo to receive the benefit of the community transport. From a policy perspective, this is the level playing field used to prioritise social investments. An alternative way of looking at income equivalence is the *willingness to accept*, which is the amount of income (possibly through subsidised services) required to compensate the individual for removing the community bus.

Translating the MRS estimates into policy decisions may be presented as a breakeven point -- when the accrued welfare for the passengers is equal to the total cost of the service. In Figure 2 this is presented as the line when the benefit to cost ratio is equal to one. The analysis given is a function of the number of passengers on board per trip. There has been no attempt to investigate a longer time horizon (i.e., net present value analysis) because it appears that the program will not include capital outlay on a new bus. The solid blue line indicates the total welfare for the passengers using the base MRS of \$55 per passenger, showing a breakeven point for around six passengers. The dashed lines indicate the sensitivity of the breakeven point if the assumed MRS per passenger is lower (\$40) or higher (\$70).

**Figure 2: Illustration of breakeven and sensitivity analysis**





## 4. Case Studies

The pilot transport services for this project took place across four of the five Wheatbelt sub-regions and made the following stops:

- Hyden - **Kondinin** - Kulin - Wickepin - Narrogin (Wheatbelt South);
- **Jurien Bay - Cervantes** - Lancelin - Sovereign Hill - Woodridge - Joondalup (Central Coast and Metropolitan Perth); and
- **Wongan Hills** - Calingiri - Bolgart - Northam (Central Midlands and Avon).

The shires that hosted the trial (contributed resources) are highlighted in bold text.

The cost of running the service varied across the trials. Jurien Bay to Cervantes had a much higher cost than the other two trials on account of being a longer trip and that it was contracted to a private operator. The operational costs are listed in Table 1 and a map of these routes is provided in Appendix 1, Figure A1.

**Table 1: Service Cost for Pilot Services**

Route	Trip distance (Km)	Operation cost (\$ per trip)	Maintenance and repairs (\$ per trip)	Bus depreciation (\$ per trip)	Total cost \$ per trip
Round trip between Hyden and Narrogin	280km	\$270	\$42	\$8	\$320
Round trip between Jurien Bay and Joondalup	427km	\$540	\$90	\$250	\$880
Round trip between Wongan Hills and Northam	254km	\$232	\$36	\$7	\$275

In the context of this study, it is important to note that not all regional and urban centres are equal. The three destinations for each pilot transport service offered different amenities and services and therefore met different needs. Each participating town in the pilot transport service must be understood in terms of comparative isolation, whereby each town is a different distance from a regional centre, has different associated costs and each regional centre has different services available.

### 4.1. Hyden to Narrogin Pilot Transport Service

The service ran fortnightly on a Thursday setting off from Kondinin and collecting pre-booked passengers in Hyden (if applicable), Kulin and Wickepin on the way to Narrogin. The return service set off once the day's activities were completed. The cost of the service set at \$15 per person for a return trip from Hyden, \$10 per person for a return trip from Kondinin and Kulin, and \$5 for a return trip from Wickepin. Service requirements included having to book by midday the day prior to the service running and having a maximum of two shopping bags per passenger. All information

was publically available in the form of a community flyer and was distributed at Shire offices and in community newsletters.

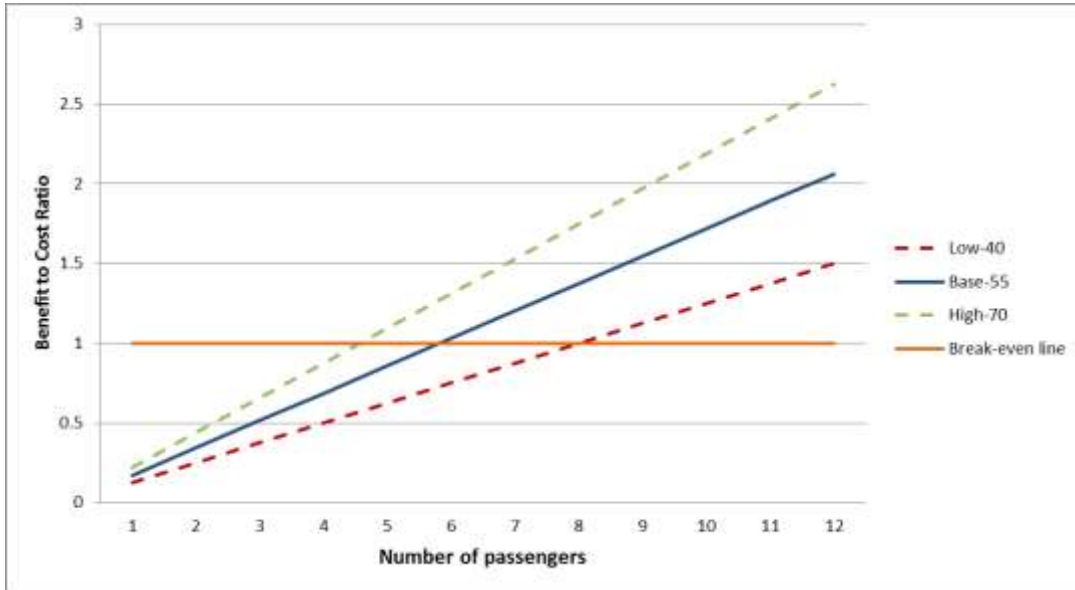
The key findings from the Hyden to Narrogin pilot service were (Kulin Shire Council, 2015):

- Most users were female and over the age of 60;
- The most common reason for travel was for medical or social reasons;
- The majority of users were very happy with the service and wanted it to continue;
- It was felt that advertising and awareness of the service could be improved;
- Some passengers would be willing to pay more for the service for it to continue;
- The obliging nature and dedication of the bus driver enhanced the experience for many users and was critical to the success of the service.

Whilst the price was considered fair, the need to subsidise the service for some users was raised. Furthermore, it was noted that having a dedicated paid driver was important to the success of the service. It was acknowledged that a simple and effective booking system reduced the time required to manage the service.

The service was sponsored by the local councils and a paid bus driver was used. The reported cost was \$320 per trip. A cost benefit analysis was carried out to determine the number of passengers required to breakeven. Assuming an MRS of \$55 (i.e., per person trip benefit), the number of passengers required for the economic benefits to exceed the costs is at least six passengers. A sensitivity analysis shows the degree to which the breakeven passenger number is affected by the assumption of MRS between income and the value of the trip. The sensitivity graph shown in Figure 3 indicates that to exceed a benefit-cost ratio of one, the number of passengers would need to be eight, if a low estimate of benefit per person trip is assumed. For a high estimate, five passengers per service are required. The range of five to eight passengers for economic viability is reasonable. The level of subsidy required is approximately 80% when six passengers travel which is similar to current TransWA services.

**Figure 3: Marginal Rate of substitution between Number of Daily Trips and Daily Household Income in Round trip between Hyden and Narrogin**

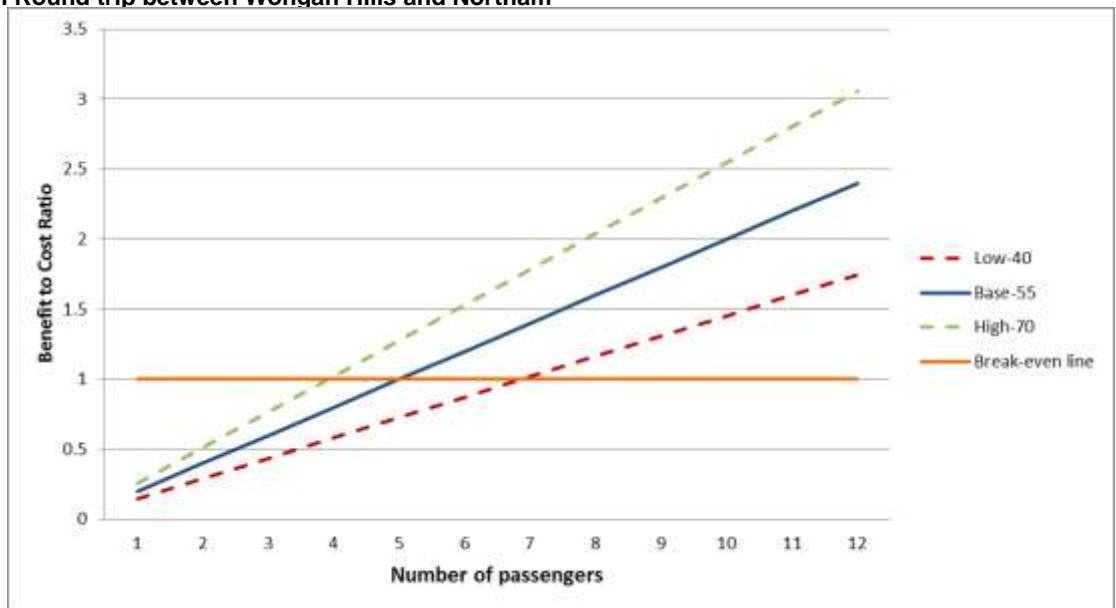


## 4.2. Wongan-Ballidu to Northam Pilot Transport Service

For the pilot service the Shire of Wongan-Ballidu supplied the community bus and played the primary planning and organisational role through the Wongan-Ballidu Community Resource Centre. The aim of this pilot service was to provide a service from the Shires of Wongan-Ballidu, through Calingiri and Bolgart into Northam returning on the same day, allowing older residents improved access to key services. Following from meetings between the Shire of Wongan-Ballidu and the WDC, it was agreed that the Shire subsidise the project by \$2.50 per kilometre. Passenger fees were used to subsidise the running costs of the project, and were set through community consultation. Ticket price and was set at \$15 per person for a return trip from Calingiri or Wongan Hills, \$10 for a one-way trip from Calingiri or Wongan Hills and \$5 for a return trip from Bolgart. The key findings from the Wongan Hills to Northam pilot service were as follows:

- Users were mainly female, mostly over the age of 75;
- The most common reasons for travel were shopping and health services;
- The service peaked towards the final weeks, once awareness had grown; and
- Word of mouth was the most effective form of promotion, with one individual taking the initiative to advertise the service and notify relevant community members.

**Figure 4: Marginal Rate of substitution between Number of Daily Trips and Daily Household Income in Round trip between Wongan Hills and Northam**



A cost-benefit analysis reveals that between four to seven passengers are needed to meet the requirement of cost-benefit break-even points (Figure 4). Assuming the benefit from the trip for each passenger is \$55, the number of passengers would need to be greater than five to exceed a benefit-cost ratio of one. For a low estimate of trip benefit with a monetary equivalence of \$40, seven passengers are required, and for a high estimate (\$70) four passengers are needed.

The reported service cost for the Wongan Hills to Northam pilot service was \$275 per trip. Again it would seem that the shires did not take into account the full cost of the trip. There was no reported cost item for the 'rent' of the bus or the cost of providing a driver. The third case study, presented below, employed a private operator to run the service. The analysis gives a fairer indicator of a sustainable level of subsidy to continue these services.

### 4.3. Jurien Bay to Joondalup – private transport operator

Following the findings in the *Jurien Bay Age Friendly Community Plan* and the *Gingin Age Friendly Community Plan*, one of the immediate actions from both Shires was to engage in this pilot transport service in collaboration with the WDC and actively communicate any findings from the running of the pilot service for use in the Local Transport Plan. This pilot transport service was the only service (of the three) that used a **private transport provider**. The bus for this pilot service was provided and run by a private local business, Jurien Bay Adventure Tours, with both LGA's playing a joint role in the marketing and bookings for the service. The cost of the service was set at \$25 per person for a return trip from Jurien Bay and Cervantes, \$20 from Lancelin and \$15 from Sovereign Hill and Woodridge. The Shires of Gingin and Dandaragan agreed to cover the costs of any unfilled seats up to a maximum of eight seats in total per service; however if 12 seats were sold the Local Governments were not required to make a contribution. By underwriting up to eight unsold seats per service at the agreed fare, both Local Governments were incentivised to sell tickets, including marketing and awareness techniques to their local communities.

Passenger requirements for taking part in the service included having to book by midday the day prior to using service. This information was made available to the public in a flyer, distributed at Shire offices as well as in community newsletters. There is only one comparable existing service in the Region, with a TransWA bus and Integrity Coach Lines running one-way from Perth to Jurien Bay for approximately \$44. For seniors with a concession card the return trip to Joondalup from Jurien Bay costs \$41.30 (\$82.50 for standard users). However, TransWA bus service timetables do not allow for older residents to receive return day-trips, with the bus services only arriving in Perth at 3pm on Fridays and 10pm on Sundays.

The key findings from the Jurien Bay to Joondalup pilot service were as follows:

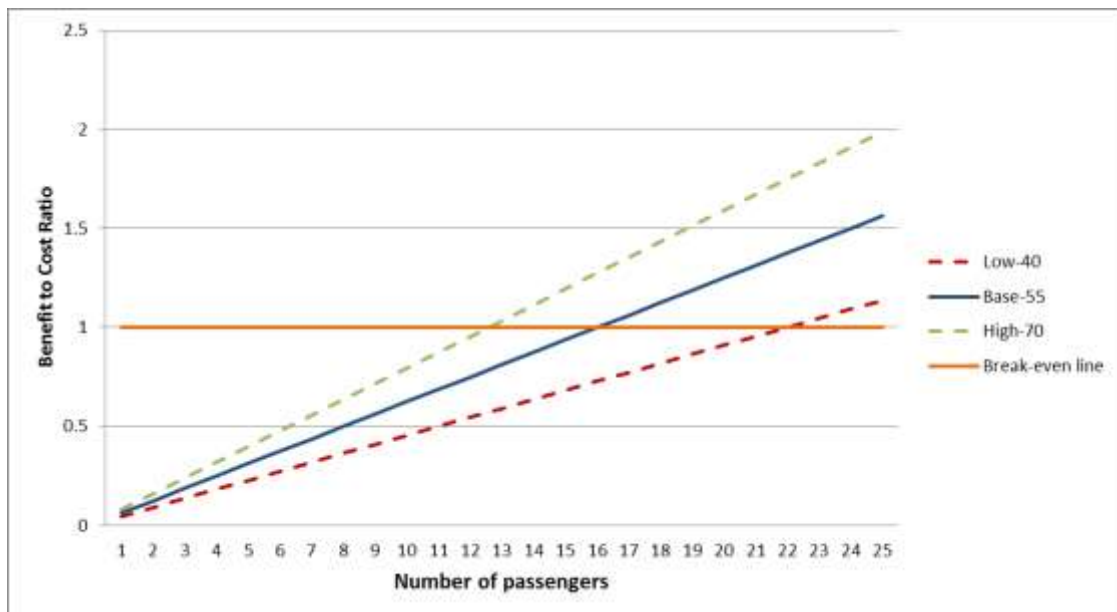
- Most of the passengers were female, with the majority being over the age of 65;
- Woodridge was the most common pick-up point;
- There is strong demand for the service throughout the year, with many passengers relying on it for ongoing specialist medical appointments;
- The number of passengers increased over time as more people became aware of the service;
- Family catch ups have become common as the drop off point at the bus/train station offers an easy commute to other suburbs of Perth;
- The Shire of Gingin sold 94 out of 132 tickets (71.2%) over the 22-week pilot period;
- There was a very strong desire from passengers for the service to continue;
- Rain and stormy weather was associated with lower passenger numbers;
- The social aspect and the enjoyment from meeting new people was highlighted as a big draw card to use the service; and
- More targeted advertising of the service is needed.

According to the operator, the ticket price was “cheap” yet very reasonably priced for elderly passengers. The estimated cost is around \$880 per trip for the Jurien Bay to Joondalup leg. The higher operating cost, coupled with no additional fare recovery (\$10 per passenger), leads to a break-even passenger head count of sixteen per trip. The fare subsidy requirement exceeds 80%.

Figure 5 presents the cost benefit analysis for this route. The main point being that under the full cost scenario the number of passengers required to justify the service is somewhat higher than the reported costs from the local administrations. The sustainability of a community bus service needs to account for the total cost as at some stage this will become apparent. The economic viability of the service is for approximately 12 to 20 passengers to make the trip.

In any case the community bus service will need to be heavily subsidised by State or local administrations. In the next section three subsidy options are discussed.

**Figure 5: Marginal Rate of substitution between Number of Daily Trips and Daily Household Income in Round trip between Jurien Bay and Joondalup**



#### 4.4. A Summary of Recommendations Based on the Trials

The Hyden to Narrogin pilot service was the least used of all three trial bus routes. To continue the service a re-evaluation of the service frequency and improved communication between council and community is needed. It is recommended that participating Local Governments improve the service promotion and do targeted mailbox drops. Targeted advertising needs to be accompanied by initiatives to make the destination more attractive via information flyers on specialist services available in Narrogin (e.g. a heated swimming pool). The Jurien Bay to Joondalup pilot service proved to be popular by those who frequented service. However, higher patronage numbers may be needed to justify the ongoing use of the service. It is recommended

that the service run fortnightly and expand eligibility to the whole community in order to fill empty seats and make the service financially viable. The Wongan Hills to Northam pilot service requires improvements in marketing and awareness of the service to increase patronage. Increasing communication between the bus driver and the Local Governments would allow the service to adapt according to demand. For example, on some occasions with lower patronage it may be more economical to take a car instead of the community bus.

## **5. Discussion on Subsidy Options**

Analysis of pilot services funded through WDC's Aged Friendly Communities project and the Avon Link Feeder trials have resulted in recommendations for cost effective subsidies that will encourage the ongoing operation of alternative public transport systems in the Wheatbelt.

Three scenarios are proposed – status quo, State Government involvement and Local Government only.

### **5.1. Status Quo**

Status quo assumes the continuation of aged transport services as they currently are, including TransWA bus services, HACC, PATS and the Country Age Pension Fuel Card. As stated previously, the TransWA bus services provided to Wheatbelt residents are predominantly a part of services directed to areas outside of the Region, such as Esperance, Albany and Geraldton. They do not allow for day trips to regional centres or outer metro health and lifestyle services. While the Avon and Merredin Link train services provide some transport to Perth and the outer metro from the Avon and Central East sub-regions, their services alone do not directly provide residents from smaller towns access to return day-trips. Additional bus services are needed which take into account the specific transport needs of Wheatbelt residents in these smaller towns.

At the current level of public transport services, aged residents in the Wheatbelt who are unable to drive are becoming increasingly reliant on volunteers, friends or family members to participate in basic everyday activities and health management, such as grocery shopping and attending specialist appointments. Government support through assistance schemes such as PATS or HACC<sup>1</sup> community transport will become more important in reducing these access barriers to regional or urban centres for their specialist services. However, funding for these schemes is quite limited and their administration can be complex that many of those who desperately need transport assistance do not seek it.

As the population ages and people continue to retire in rural areas, there is considerable concern that a more comprehensive, but cost effective suite of transport

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<sup>1</sup> Note that the WA HACC services for older people will transition to the Commonwealth Home Support Programme (CHSP) from 1 July 2018.

services and schemes will be required, including a strategic approach to providing more accessible, convenient and affordable transport for rural residents.

### **5.1. State Government Involvement**

The pilot projects were analysed with a view to recommending a State Government subsidy that initiated local investment in alternative public transport solutions. It is recommended that any subsidy considered as a rate per km would be sufficient to encourage Local Governments to run small bus public transport. Initially it is proposed to allocate a funding amount for two years that would allow six services to run on a weekly or fortnightly basis. Under this scenario it is recommended that the service be made available to non-concession holders as well in order to make the program more viable.

This scenario was tested using a realistic number of passengers based on average passenger numbers and utilising information from fully Local Government-run pilots. Information was also sought from the Jurien Bay to Joondalup pilot as it was the only pilot to involve a private bus provider partnership. Preliminary calculations found that a State Government subsidy of \$1.56 per km would be adequate to allow the cost of the services to be met. By providing a subsidy of \$1.56 per km, the following government funding would be needed:

- To run the six services fortnightly for a year, government subsidy would have to equal \$110,00 (including \$50,000 administration fees provided externally and separate to the service providers, to ensure successful reporting)
- To run the six services weekly for a year, government subsidy would have to equal \$170,000 (including \$50,000 administration fees provided externally and separate to the service providers, to ensure successful reporting)

It is recommended that two years of funding be made available; That is, approximately \$350,000 over the two years. Should fewer services be run, this funding would provide for a longer trial.

### **5.3. Local Government Subsidy without State Government Contributions**

Another option investigated is for Local Government to provide the necessary subsidies for the six bus services, without a contribution from State Government. This includes costs associated with maintenance repairs, operation costs, bus hire and bus depreciation costs, administration costs and contributions to achieve the types of fares charged in the pilots.

Without contribution from the State, Local Government will need to subsidise the services at a rate of \$1.95 per km. In this scenario, if Local Governments wanted to reduce the fares even further, or the service receives less patronage than the



average used to make these calculations, this per km would increase accordingly. It is important to note that these costs are shared across the Local Governments who participate. These calculations are to be used as a guide for the development of regional bus services, not necessarily confined to the same services provided during the pilot program. The provision of regional bus services should include an opt-in process whereby Local Governments and their community members can willingly decide to take up this opportunity or forgo it.

While this scenario has been used to demonstrate full costs of the service without State Government contributions, discussions with the Wheatbelt Local Governments have indicated this to be an unlikely option for them without some form of State Government assistance.

## **6. Conclusion**

This local transport plan aimed to identify and improve transport options and access to key services for older residents in the Wheatbelt. Each of the three Wheatbelt pilot transport services successfully improved transport options for older residents to access key services such as medical and specialised shopping over the 22-week trial period. The critical barrier for the service to continue running was found to be the cost of the service, when compared to the passenger volumes. The key to success was identified as flexibility in the service that adapted to demand variability as well as the friendly and caring nature of the bus drivers. Further critical success factors were as follows:

- Affordable fares;
- Recognition that 'no one size fits all' for transport service delivery;
- Monitoring of emerging trends and flexibility to respond to changing preferences (routes, schedules, destinations etc.);
- Coordinated and consistent financial commitment and investment from participating Local Governments;
- Respected community champion facilitates implementation and reviews outcomes;
- External investment as opposed to building a transport system solely on user-pays revenue;
- Quality of service, in particular, the helpful nature of the bus driver; and
- Good communication, public awareness and engagement.

The combination of fair pricing together with social and medical opportunities has seen services become popular with the aged members of the respective communities.

Overall, this local transport plan determined that there is no one-size-fits-all approach to regional transport planning. Seeing that it was a pilot service, it has been very successful. When the services are formalised, the likelihood is that there will be more frequent users as people become familiar with the service. All services should continue into the future but should be adapted according to the capacity of each community. This transport model meets individual community needs and should be prioritized by Local Governments in order to have a higher chance of success.



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# Pilot Transport Services and Public Transport Options in the Wheatbelt

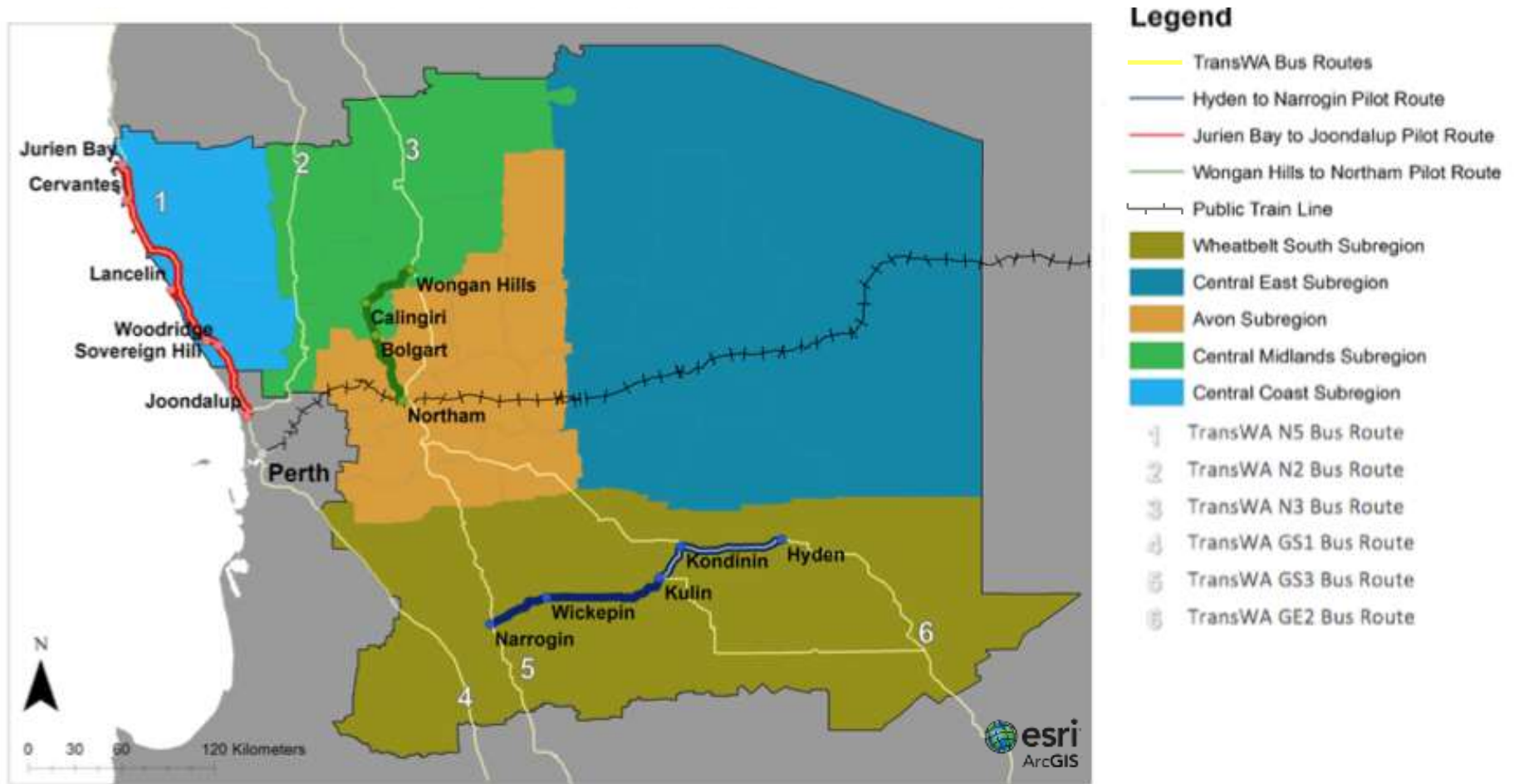


Figure 6: Map of pilot transport services and existing TransWA public transport rail and bus services in the Wheatbelt; derived from TransWA data (Public Transport Authority 2016)

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