



GOLDEN PLAINS SHIRE
TRANSPORT
CONNECTIONS
STUDY 2022

ACKNOWLEDGEMENT OF COUNTRY

Golden Plains Shire spans the Traditional lands of the Wadawurrung and Eastern Maar Peoples. Council acknowledges them as the Traditional Owners and Custodians and pays its respects to both Wadawurrung and Eastern Maar Elders past, present and emerging. Council extends that respect to all Aboriginal and Torres Strait Islander People who are part of Golden Plains Shire.



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1. INTRODUCTION

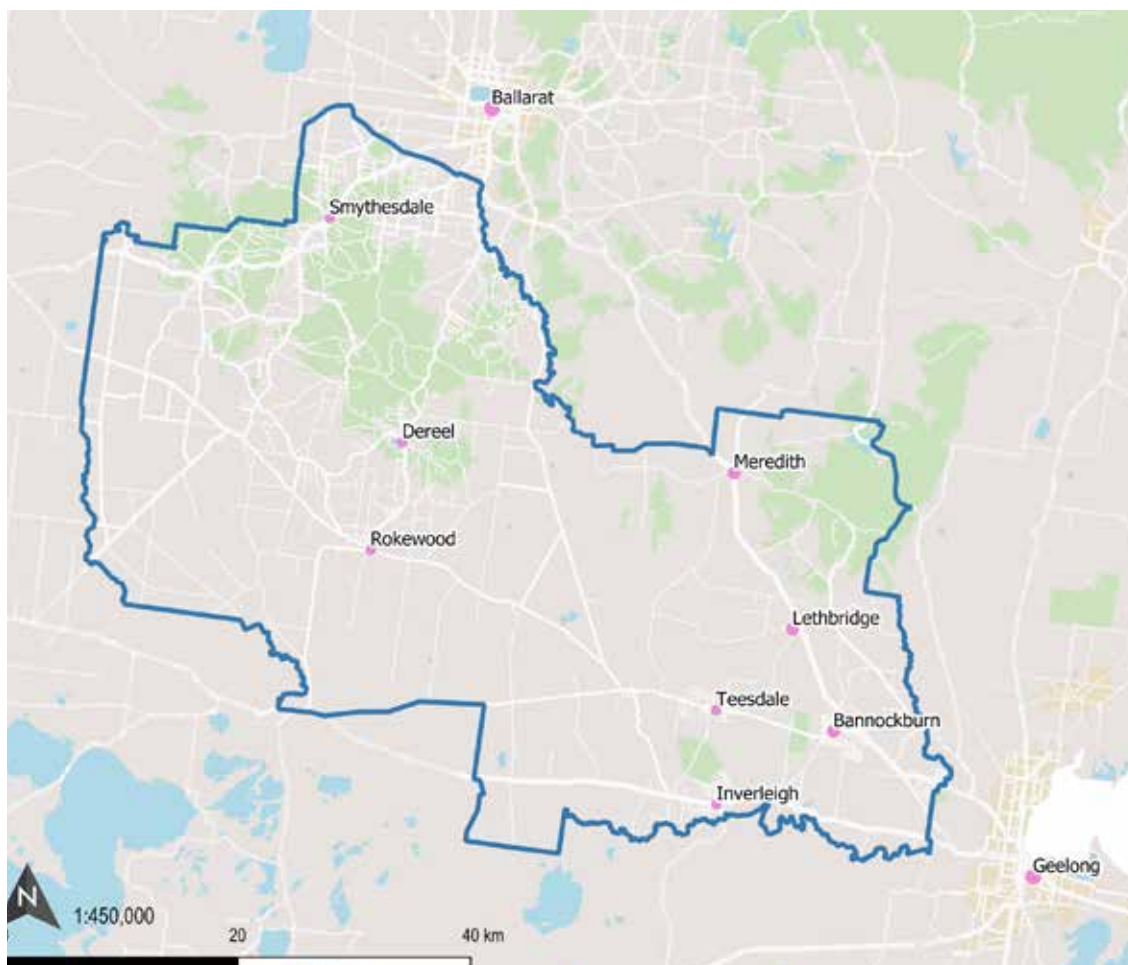
Golden Plains Shire (Golden Plains) has 16 townships and is projected to accommodate a population of 40,000 residents by 2040 (Golden Plains Shire Community Vision 2040, 2020). As a regional community with a geographically dispersed population and a high mode share for private car use, it is recognised that a shift toward alternative transport modes is preferred to maximise future mobility options.

1.1 PROJECT OBJECTIVES

SMEC worked with Golden Plains Shire Council (Council) to develop the Transport Connections Study. The objective of this project is to provide a benchmark of existing community and public transport connections that can be used to identify gaps and further develop opportunities to improve transport connectivity, accessibility, and therefore liveability. The study will help identify current and future transport needs in Golden Plains, and includes research and data collection, and engagement with key stakeholders.

As Figure 1–1 illustrates, the Shire is in south-western Victoria and at its furthest northern and western extents is within 10 kilometres of Ballarat and Geelong respectively.

Figure 1–1: Study area





1.2 PROJECT CONTEXT

As voiced in the Golden Plains Shire Community Vision, there is a communal aspiration for improved liveability while maintaining the Shire's rural character. This has been articulated by priorities for (1) access to services, facilities, and activities for people of all ages and abilities, (2) safe, connected pedestrian and transport infrastructure and services.

The key forms of transport considered in this project are:

- Community transport – consists mainly of services offered by councils and not-for-profit community organisations using cars, minibuses, brokered taxis, or a combination of these, to fill gaps in public and private transport.
- Public transport – operated by state-wide bus and train operators.

This study targets transport disadvantage, which occurs when transport options make access to services and community networks difficult, leading to social and economic exclusion. It is most common in outer metropolitan, regional, and rural areas with limited public transport, and for people with low mobility due to age, disability, health, or economic situation.

Liveability across Golden Plains will be addressed in this study by identifying gaps and opportunities in transport provision across Golden Plains and recommending solutions for innovative transport services and small-scale infrastructure projects that meet the needs of the community, including vulnerable and isolated residents.

The data and feedback from service providers and residents has informed Council's Community Transport Study in 2022. The study will inform the future design of Council's community transport services to ensure that new services increase connectivity and contribute towards a network of accessible locations.

It will also provide evidence-based data to support Council as it advocates for greater transport connections in the Shire – through internal Council strategies and externally from other levels of Government, such as the Department of Transport (DoT) 'Flexible Local Transport Solutions Program'. The findings can also be incorporated into promotional resources to inform residents and other stakeholders of the transport options available.

1.3 CONSULTATION

Stakeholder engagement was used to understand current transport needs, the transport services currently available and the barriers preventing access to these services. Consultation was undertaken via online surveys, community workshops and focus groups, and one-on-one stakeholder interviews. The objective of the stakeholder engagement was to generate a spread of responses from transport users and providers alike, including community residents of all ages and abilities.

Figure 1–2: Stakeholder engagement methods



A project workshop was held with community members on Wednesday 29 June 2022, to present the gaps and longlist opportunities identified for improved transport connections.

The main purpose of the workshop was to propose and explore opportunities for improved transport connections in the Shire. It also considered how Council could respond and assist in developing recommendations which align with Council's objectives, policies, and departments.

A final presentation was provided to the Councillors of Golden Plains Shire, on Tuesday 16 August 2022, to provide an overview of the study findings including the opportunity shortlist.

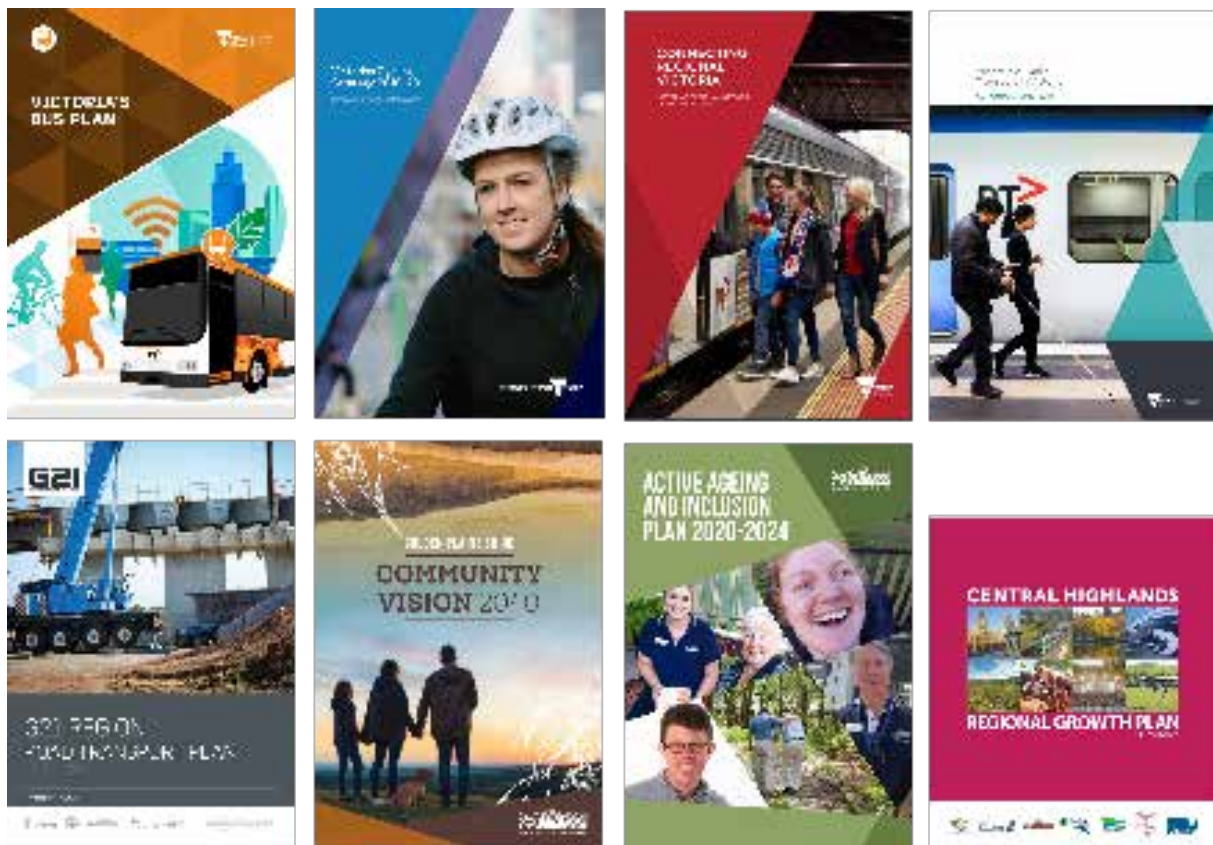
2. LITERATURE REVIEW

This chapter provides a review of relevant government policies and strategies to ascertain the transport priorities which are applicable to Golden Plains. It also outlines the challenges and opportunities identified in previous projects and discusses the recommendations that have been implemented to date.

2.1 STRATEGIC CONTEXT

This section examines the relevance and limitations of strategies present at the state, regional and local council level.

Figure 2–1: Snapshot of strategic documents



2.1.1 STATE POLICY AND PLANNING

2.1.1.1. REGIONAL NETWORK DEVELOPMENT PLAN

The Regional Network Development Plan (RNDP) in 2016 outlines medium to long term priorities to deliver a modern commuter-style service, accommodating the growth of regional Victoria. Local transport connections are highlighted as a key part of integrated transport networks, especially when public transport is not a viable option.

One of the plans aims is to support the trial of innovative and more flexible transport services and make better use of existing assets and infrastructure. The plan trials several new approaches, such as:

- Using school buses outside of school times to meet other local travel needs.
- Flexible routes operated by buses, taxis or hire cars.
- Community transport provided through partnerships with local government and community organisations.
- Dedicated non-emergency medical transport services to connect rural people to health facilities.

A case study was provided about ConnectU, a community transport initiative that uses donated cars and volunteer drivers to provide door-to-door access to community and self-care activities in Warrnambool, Koroit, and Port Fairy.

2.1.1.2. VICTORIA'S BUS PLAN

Victoria's Bus Plan, 2021, outlines the Victorian Government's strategy to deliver a modern, productive and environmentally sustainable bus network, focusing on safe, reliable, and comfortable journeys.

The Plan highlights the importance of buses as connectors routes, especially for those without the ability to drive. For regional townships such as those within Golden Plains Shire, the primary focus is to connect to major regional centres such as Geelong and Ballarat.

The Victoria Bus Plan also addresses several factors that may impact patronage levels, including service frequency, timeliness of services, reliability of journey times, span of service over the day, and personal security. The biggest driver for bus usage is related to the frequency of available services and the ease of access to these services from key employment, education or shopping areas.

2.1.1.3. ACCESSIBLE PUBLIC TRANSPORT IN VICTORIA ACTION PLAN 2020-2024

The Accessible Public Transport in Victoria Action Plan identifies opportunities to create a more connected public transport service and experience for those with disabilities. The five focus areas of the Action Plan are community engagement, access to public transport, accessible systems, access to facilities, and workplace access.

The Action Plan highlights that flexible and tailored transport services are appropriate ways to accommodate the diverse transportation issues arising from rural or regional living. In these areas, where there is limited public transport, accessibility can still be improved by:

- Ensuring information about taxi ranks and commercial passenger pick up points is available to assist with travel planning for people with disability.
- Continuing to improve access to our roads, shared path network including parking, pedestrian and bike riding infrastructure, and crossing points.

The Flexible Local Transport Solutions Program was outlined as a funding approach for small-scale initiatives across regional Victoria. The program is designed to address transport disadvantage and improve transport access in regional areas, particularly for those living in remote areas. It aims to support flexible, tailored transport services or trials in regional Victoria.

2.1.1.4. VICTORIAN CYCLING STRATEGY 2018-2028

The Victorian Cycling Strategy 2018-28 was released in 2017 with a vision to increase the number, frequency and diversity of Victorians cycling for transport. This is to be achieved by creating safer, lower stress and better-connected networks to make cycling a more inclusive experience. The strategy acknowledges declining cycling participation across regional Victoria. When addressing regional Victorian cycling needs, the strategy focuses on connecting cycling routes to existing public transport services or areas of activity within nearby regional cities.

2.1.1.5. REGIONAL POLICY AND PLANNING

The population growth expected in Golden Plains and neighbouring municipalities is considered in the Central Highlands and G21 Regional Growth Plans. This ensures that the inevitable growth is managed and sustainable.

The northern portion of Golden Plains Shire is in the Central Highlands region, it includes the townships of Smythesdale, Meredith, and Rokewood. The southern portion of Golden Plains Shire is part of the G21 Regional Growth Plan, it includes the townships of Bannockburn, Lethbridge, and Shelford.

2.1.1.6. G21 REGIONAL GROWTH PLAN

In 2013, the G21- Geelong Region Alliance developed the G21 Regional Growth Plan for the community on behalf of the five municipalities of the G21 region: Greater Geelong, Queenscliff, Colac Otway, Surf Coast and Golden Plains.

The Growth Plan provides a strategic framework for land use planning and growth until 2050.

The growth plan highlights Bannockburn as a future area of growth due to the strong relationships with Geelong for services and employment. Most actions suggested in the growth plan focus on the upgrade or duplication of key roads such as the Midland Highway.

The plan detailed an action to investigate the reinstatement of passenger rail services. As such a feasibility study, Rail Revival Study, was undertaken in 2013 for a service between Geelong, Ballarat, Castlemaine and Bendigo, and included a service to Bannockburn and Lethbridge. Despite the study, the railway line has remained freight-only.

An Integrated Transport Strategy (ITS) for G21 associated is underway and will be released in late 2022. The ITS will examine public transport and active trails, the road network and freight movements, electric vehicle transport infrastructure and rail shuttle connections in busy corridors across the G21 region. Another area of focus will be an over-reliance on road vehicles which is causing inactivity, pollution and a drag on productivity in the regional economy.

2.1.1.7. CENTRAL HIGHLANDS REGIONAL GROWTH PLAN

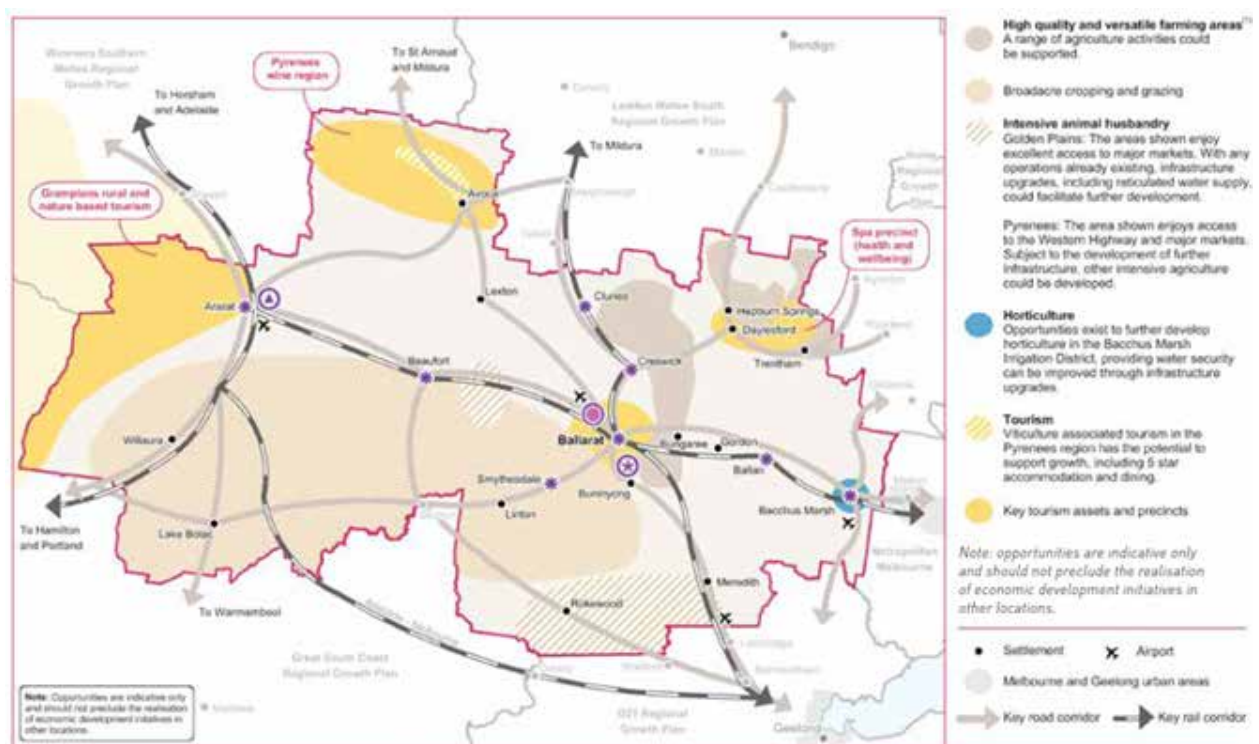
The Central Highlands Growth Plan (2014) provides a strategic framework to enable regional growth in a productive, sustainable and liveable manner. The Central Highlands Regional Growth Plan covers the municipalities of Ararat, Ballarat, Golden Plains (northern portion), Hepburn, Moorabool and Pyrenees.

The Growth Plan focuses primarily on infrastructure development surrounding Ballarat. The Growth Plan highlights that growth in rural residential zones will be limited to prevent encroaching onto sensitive land uses.

The plan supports higher quality regional rail connections to enable Ballarat and small towns along the route to become more accessible and attractive for growth. A key rail corridor is indicated from Ballarat, Meredith, Lethbridge, Bannockburn, and Geelong (as shown in Figure 2–2).

A transport study is currently underway for the Central Highlands region which will propose initiatives to improve regional connectivity along this route.

Figure 2–2: Key economic development opportunities and assets for the Central Highlands. Source: Central Highlands Regional Growth Plan, 2014.



2.1.1.8. INQUIRY INTO THE USE OF SCHOOL BUSES IN RURAL AND REGIONAL VICTORIA

The Legislative Council Economy and Infrastructure Committee of the Victorian Government released the findings of an inquiry into the use of school buses for other purposes in regional and rural communities. This inquiry recommended expanding access to school buses for the general public but firmly re-iterated that no students should be disadvantaged by changes to the School Bus Program. Finding 5 stated that:

“Although the School Bus Program could be modified to offer increased access to the general public, the program is not a suitable solution to transport disadvantage in rural and regional Victoria.”

The Chair’s foreword also identified that:

“We know that young people, the elderly and low-income households experience transport disadvantage in rural and regional areas. Providing public transport to small populations that must travel large distances to access services and employment is a significant challenge for all governments.”

2.1.2 GOLDEN PLAINS SHIRE COUNCIL PLANNING

The limited transport options in Golden Plains is highlighted as an issue in various Council documents, as it serves as a key barrier to socialisation and accessing services. The following Council documents were reviewed to identify common themes, challenges and opportunities related to transport:

- Active Ageing and Inclusion Plan 2020-2024
- Bannockburn Growth Plan 2020-2040
- Community Vision 2040
- Council Plan 2021-2025
- Sport and Active Recreation Strategy 2020-2030
- Youth Development Strategy 2015-2019.

The **2040 Vision** captures the community’s goals to achieve a community-focused, liveable, sustainable, and prosperous Shire. The lack of transportation options across Golden Plains is identified as a key barrier to socialisation and access to medical services. In direct response to this, the **Council Plan** highlights several key strategies such as the advocacy for return of passenger services between Geelong and Ballarat, advocacy for expansion of bus services from Ballarat and Geelong in addition to infrastructure upgrades to paths and trails. These key actions aim to provide access to services, facilities and activities for people of diverse ages and abilities.

The **Active Ageing and Inclusion Plan** emphasises that the lack of transport options and limited community-based services are a major concern for the ageing population. The plan identifies people with permanent or temporary disabilities, ageing population with reduced cognitive functions, linguistically diverse communities and carers for children in prams as several groups of people that require extra assistance for transport. Future transport solutions need to show how services can address transport needs for accessibility.

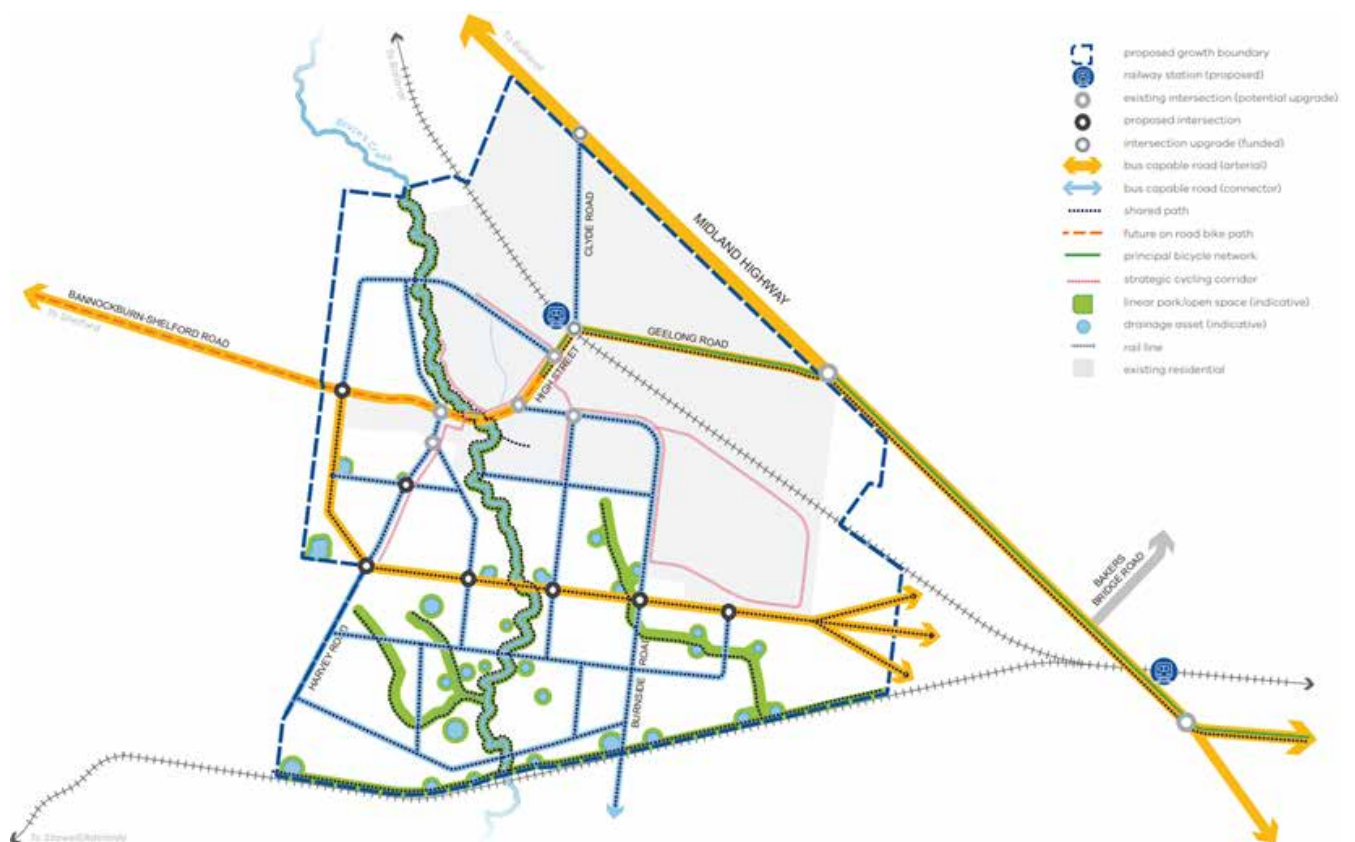
The **Youth Development Strategy** outlines the role transport has in the development of young people growing up in Golden Plains. It focuses on the role of transport as their means of connecting to social networks, employment options and recreational activities predominantly in Ballarat or Geelong. Transportation is outlined as a key issue for youth due to their inability to drive and reliance on parents for transport, which potentially imposes a strain on family environments.

The **Sport and Active Recreation Strategy** highlighted that residents wanted to see an improvement in

transportation options, particularly for youth, older residents and people with disabilities. The strategy suggests that improved transportation options, such as better utilisation of a community bus service, could enable better access to sport and recreational opportunities across Golden Plains.

The **Bannockburn Growth Plan** aims to produce an integrated and safe transport network supporting public and active transport throughout the broader region. Figure 2–3 illustrates the key actions to be achieved in relation to public transport and path network. The Growth Plan suggests the development of an intermodal transport hub in Bannockburn. The non-operational train station in Bannockburn may serve as a bus interchange which accommodates buses towards local towns and connects to Ballarat and Geelong. The hub could also provide end of trip facilities for future train passengers.

Figure 2–3: Public transport and path upgrades in the Bannockburn Growth Plan. Source: Victorian Planning Authority



2.2 PREVIOUS STUDIES AND PROJECTS

2.2.1 COMMUNITY BUS TRIAL

The Golden Plains Community Bus Trial was a free shuttle bus service with a twice-weekly run in the north and south of the Shire between 20 July to 23 December 2021. The service allowed socially isolated community members the opportunity to access medical and COVID related appointments as well as shopping and interaction with friends in Geelong and Ballarat. Paid drivers provided the service and bookings were essential.

As Figure 2–4 illustrates, in the south, the service was provided in Teesdale, Inverleigh, Shelford, Bannockburn, and Batesford, travelling to and from Geelong Waterfront every Tuesday. In the north, the bus service was provided in Linton, Scarsdale and Smythesdale, travelling to and from the Delacombe Town Centre and Stockland Wendouree in Ballarat every Thursday. The outcome of the trial was a total of 19 bus trips provided in the north and 19 in the south of the Shire.

Feedback from residents about the trial was provided as an input to this study. In summary the feedback was:

- General

Many residents were not aware the trial service was available despite the publicity in numerous local newspapers and signage.

There was some reluctance to use the trial service due to the waiting time between buses and the layout of the timetable. However, there was a lot of interest in additional bus services to Geelong.

- Youth – The trial service did not fit their school and activity times. However, there is a need for the service as there may only be one car per household.
- Aged – Unless convenient transport options were available, aged residents would choose to drive even if it was unsafe and they would prefer not to drive.

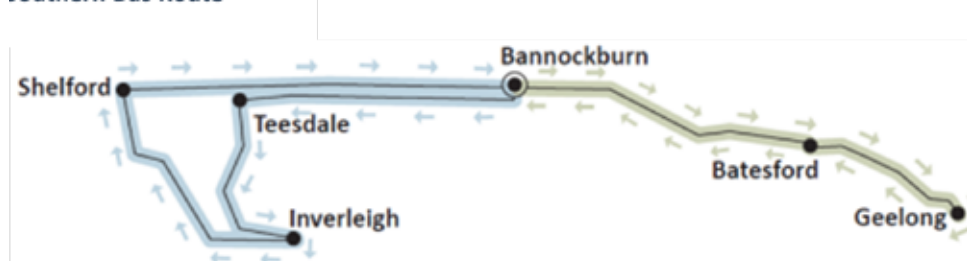
Drivers – As they already have a private car, local drivers would only use the trial service if they were not able to drive. For example, due to having a broken arm.

Figure 2–4: Community bus trial routes

Northern Bus Route



Southern Bus Route



2.2.2 PHASE 1 – GOLDEN CONNECTIONS PROJECT

2.2.2.1. OVERVIEW

Phase One of the joint state-Council funded Transport Connections Program (TCP) was initiated in 2003 and invested \$2.1 million in nine pilot projects over three years. The program was funded predominantly by the state Government with a smaller contribution from Council.

Grants were used to fund project coordinators who were responsible for forming local partnerships, mapping existing transport options and consulting with the community to identify local priorities. These services are targeted towards, but not restricted to, transport disadvantaged members of the community.

The TCP in Golden Plains was named the Golden Connections Project and it included four elements:

- door-to-door car service for medical and social trips within Golden Plains and to Geelong, Ballarat, and Melbourne
- community buses for community group activities and social events, including planned excursions
- community bus group hire (volunteer driver or self-drive) with rates based on distance travelled and petrol costs
- Dial-a-Ride booked bus service from Rokewood to Ballarat (discontinued early due to lack of demand).

The program actively promoted and advertised these services and all public transport options in the region through brochures, presentations to local groups and newspaper articles. The service would still run even if only one passenger had made a booking. If demand exceeded the achievable level of service using the available vehicles, other vehicles were brokered, such as private operators or school buses.

The Golden Plains Shire Council auspiced the Golden Connections services and a part-time coordinator employed by council managed the services and program. The project was overseen by a Steering Committee which met monthly and comprised Golden Plains Council officers and the project coordinator. The program also had a Community Transport Reference group that met quarterly to provide direction and advice on the project. The group included Council officers, regional public health officers, a state bus coordinator, bus and taxi industry representatives, school bus coordinators and community representatives. Project plans were updated annually, and an annual project report was produced.

2.2.2.2. OUTCOMES

For the period for which data is available, the ridership across all elements grew to 250 people in the first 5 months and was then generally consistent at around 200-450 client trips per month from July 2004 to June 2005. It included significant volunteer driver time and reached over 400 hours in June 2005 but was more consistently around 200 hours per month.

A case study of the TCP pilot for Golden Connections was undertaken and is attached in Appendix B (an extract is provided). It outlines the following summarised outcomes:

- Quick establishment of services was attributed to good preliminary work completed by Council prior to commencement of the project including:

- Significant community consultation and planning
- Demonstrated commitment by the Shire in several strategic planning documents
- Established linkages and partnerships within the community.
- Key workers within Council were critical in working with the defined target groups including the aged and disability worker, youth co-ordinator, and health promotion worker.
- Successful recruitment of 25 volunteer drivers including nine community co-ordinators. In addition to contribution of time and effort, they were also project champions.

An evaluation of the pilot program in 2005 found it had positive impacts for participating communities, by increasing their knowledge of local transport, improving coordination, and increasing transport options, this was noted in the Victorian Auditor-General Report 'Local Community Transport Services: the Transport Connections program' (2011). As such, there are many good lessons in the Golden Connections pilot which can inform development of future transport opportunities.

2.2.3 PHASE 2 – GOLDEN CONNECTIONS PROJECT

2.2.3.1 OVERVIEW

Phase Two of the TCP was rolled out as a four-year initiative (2006–2010) that built on the earlier pilot program. It supported 32 Victorian projects in rural, regional and outer-metropolitan municipalities to develop innovative transport solutions to meet local needs. The \$18 million program was managed through partnership across state departments.

The program sought to address transport disadvantage by enabling communities to develop local solutions that made better use of existing public, private and community transport options. Projects were mainly funded to hire coordinators to assist in identifying and implementing local initiatives.

Building on the success of the pilot program, the TCP increased the emphasis on community strengthening and developing community partnerships to deliver local transport solutions.

2.2.3.2 OUTCOMES

As part of the TCP, Phase Two of the Golden Connections Project addressed demographic challenges which included an aging population, very limited public transport network, small communities 'isolated' from health and social interactions and a significant population which cannot access services by non-motorized transport.

The goals of the project in Phase Two were to:

- Work with local communities and other strategic partners to improve transport services across the Shire and to make better use of available transport resources.
- Increase community awareness of available transport services.
- Increase participation in walking and cycling, made possible by improving paths and trails infrastructure network across Golden Plains.
- Improve provision and extend the catchment of community transport services in Golden Plains and surrounding communities.

In response four services were developed using funding from the Department of Transport:

- The Wiggly Bus – A community bus service in the north of the Shire. The service provided

demand responsive transport for shopping and medical needs. It had a route that morphed to connect residents to services in Ballarat.

- Trial Bus Service – A Rokewood to Ballarat service, which ran 2 days a week and stopped at the Rokewood Health Centre, Dereel Community Centre, Enfield Hotel, Enfield Community Hall, Napoleons Community Centre, Ross Creek Shop, Lydiard Street Train Station, Ballarat City Centre and the Stocklands Plaza in Wendouree.
- Trial Bus Service – A Bannockburn Loop service, which provided a connection between the neighbouring townships of Inverleigh, Teesdale and Shelford to the Bannockburn V-line Bus Service to Geelong.
- Trial Bus Service – A Bannockburn to Geelong service, which ran on weekdays and provided a connection to the townships along the Midland Highway.

Despite enthusiasm for the trial bus services during community consultation the patronage was lower than expected, based on a report by the Turning the Wheel of Geelong's Community Transport Network Syndicate Group in 2010. Each day one person on average used the Bannockburn loop service and five people used the Bannockburn to Geelong service.

The Wiggly Bus had a positive reception and the demand for those services provided an indication of the demand for increased transport in the north of the Shire.

2.2.4 THREE TRAILS PROJECT

Council received State Government funding for infrastructure upgrades along three multi-use trails within the council: Ballarat-Skipton Rail Trail, Kuruc-a-Ruc Trail, and Rainbow Bird Trail. The Three Trails Project included community consultation between April and May 2021 to gather feedback from walkers, cyclists, horse-riders and community members. The project aims to provide active transport connections between 15 townships in the north of areas of Golden Plains Shire, in addition to City of Ballarat and Corangamite Shire.

2.3 LITERATURE SUMMARY

The available literature indicates that there is a need and appetite for greater transport provision within Golden Plains based on community feedback and policy at regional and local levels. There have been several attempts to address the transport disadvantage in Golden Plains and remove the barriers to socialisation and services access.

Previous transport pilots and trials demonstrate the difficulty of establishing a scheduled public transport style bus service due to low demand. Greater success and patronage were seen by enhancing community transport services as their flexibility enables a wider audience to be reached. These services are also better able to adapt and respond immediately to changing community needs.

Previous community transport services have included: door-to-door car services, community group buses, community bus group hire, demand responsive community bus services.

Key success factors were in strong community partnerships, engagement with community and council co-ordinators, and promotional activity. Word-of-mouth also proved a powerful tool however there was a lag time of up to 5 months before demand became more consistent.

3. TRANSPORT NEEDS AND DEMAND

The transport choices of Golden Plains residents are a product of their mobility needs and the accessibility of the available transport options. This chapter provides a demographic profile of Golden Plains that defines the social characteristics which may influence the way residents travel. It also provides an analysis of the travel patterns of residents to gain an understanding of local transport choices and demand.

3.1 DEMOGRAPHIC PROFILE

3.1.1 LAND USE AND SETTLEMENT

Golden Plains Shire is a rural municipality with 16 townships and 56 rural communities. The largest town is Bannockburn, with smaller townships at Batesford, Enfield, Inverleigh, Lethbridge, Linton, Meredith, Smythesdale and Teesdale, and numerous small villages and communities.

Golden Plains Shire is located on 2,702 square km of land and is situated about 70 kilometres to the west of Melbourne. As Figure 3–1 indicates, the majority of land use in the Shire is for primary production with a small proportion serving as residential land. Historically Golden Plains was derived from agricultural and gold mining activity. Currently, land is predominantly used for grazing, cropping, and intensive animal industries including poultry, pigs, beef and goat dairy. There has also been an expansion of viticulture in the Moorabool Valley.

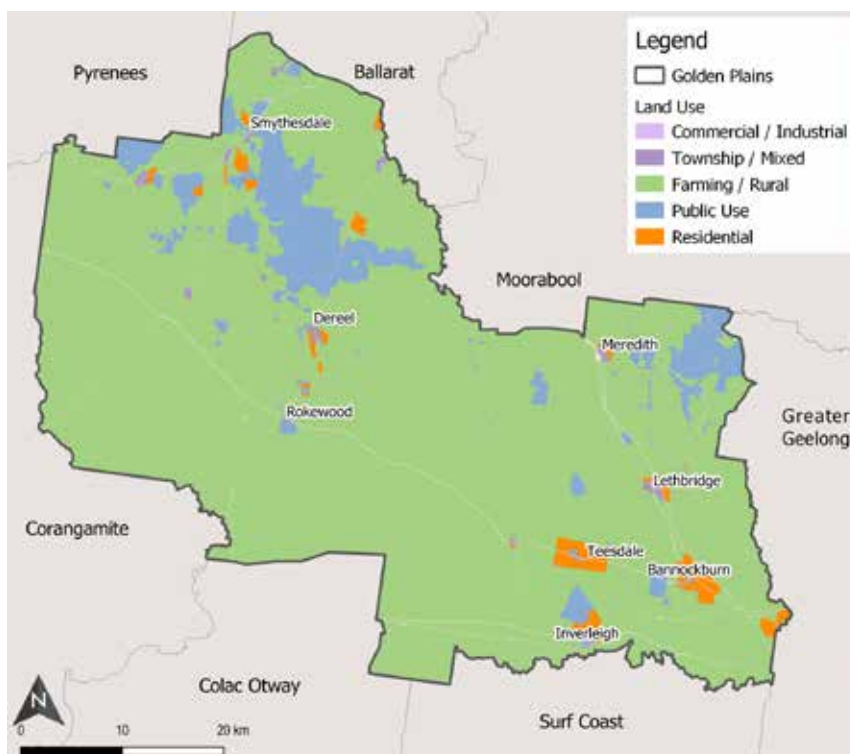


Figure 3–1: Land use

3.1.2 CURRENT POPULATION

Golden Plains Shire had a population of 24,765 in 2020, the majority of which live in the south based on the Australian Bureau of Statistics (ABS) estimated resident population by .id (informed decisions). The Bannockburn region has the largest population with nearly 7852 persons, or over 30 percent of the Shire's total. Smythesdale, in the north, is the second largest region by population, with approximately 5279 persons. Other notable regions are Teesdale and Lethbridge with populations of 3,985 and 2,577 persons respectively.

The population density in the Shire, 9.17 persons per square km, is higher than the average of 7.14 persons per square km for regional Victoria, based on an estimated resident population of 1,552,768 in regional Victoria. The average household size in Golden Plains was 2.8 people.

3.1.3 POPULATION FORECASTS

In the Community Vision 2040, Council has forecast the Golden Plains Shire to grow at an average rate of 2.7 percent between 2020 and 2040. By the end of that period, Golden Plains is projected to have a population of over 40,000 persons. The population and household forecasts for Golden Plains Shire have also been undertaken by .id, informed decisions, on behalf of Council, as Figure 3–2 and Table 3–1 show.

Most recent development in Golden Plains has been in the regions closest to Ballarat and Geelong, in the north-east and south-east of the Shire and this pattern is set to continue. The Golden Plains Planning Scheme and Bannockburn Growth Plan (2021) outline plans for significant growth in Bannockburn due to progressive land rezoning and staged urban development within Bannockburn north and south, at an average annual rate of 3.3 percent and 28.5 percent respectively. Bannockburn's population is forecast to increase from a combined population of 5,118 in 2016 to 20,120 in 2041. In addition, the Golden Plains Northern Settlement Strategy supports accommodating an additional 2,000 people in the north of the Shire by 2030.

Population Forecast, 2016 to 2041

Figure 3–2: Percentage change in population forecasted for 2016 and 2041. Source: Forecast.id by .id, 2020

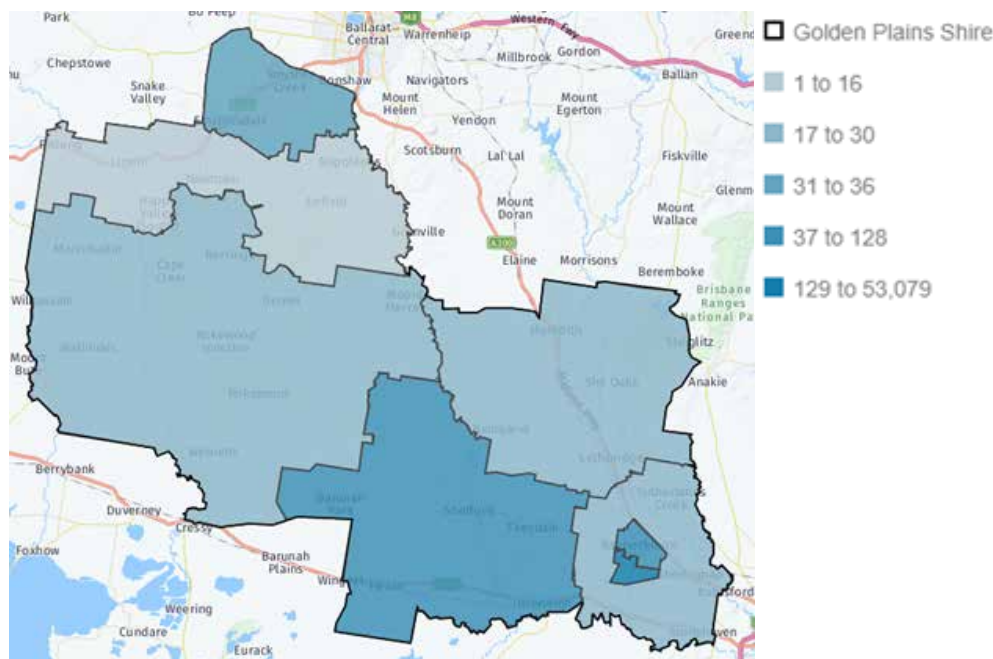




Table 3–1: Population forecast. Source: Forecast.id by .id, 2020

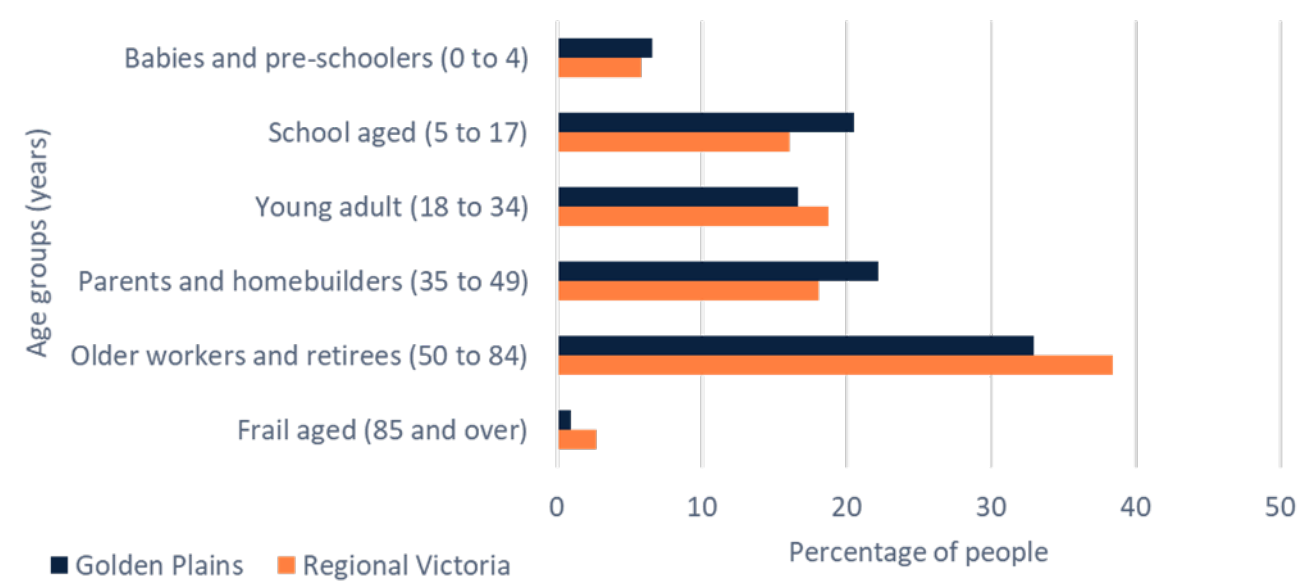
Population Forecast	Forecast year		Change between 2016 and 2041	
Area	2016	2041	Avg. annual percentage change (%)	Percentage change (%)
Golden Plains Shire	22,016	42,193	2.6	92
Bannockburn North	5,102	11,612	3.3	128
Bannockburn South	16	8,508	28.5	53,075
Central West	1,680	1,985	0.7	18
Haddon - Smythesdale and District	4,951	6,758	1.3	36
Lethbridge and District	2,312	3,007	1.1	30
North West (Balance)	2,914	3,379	0.6	16
South East	1,552	2,012	1.0	30
Teesdale and District	3,490	4,933	1.4	41

3.1.4 HOUSEHOLD STRUCTURE

Golden Plains is a popular location for young families. Almost half of households (47.8 percent), have children within them (ABS Census of Population and Housing, 2016). Primary and secondary school aged students are overrepresented in the Shire, as are the “homebuilder” group aged between 35 and 49, when compared to Regional Victoria. Typically, car-based travel suits the needs of young children, but as the cohort ages there will likely be an increasing need for non-car-based transport. A common concern for families with teenagers is to have an ability to travel independently to and from their destinations, and to do it safely.

Once people reach the age for tertiary education or full-time work, at ages 18 to 34, they tend to leave Golden Plains at a greater rate than Regional Victoria. Similarly, older workers and retirees (aged 50 to 85) are also underrepresented compared to Regional Victoria. It is unclear how significant transport concerns are in the decision to leave Golden Plains, however the smaller cohort of these groups makes it more difficult to have enough demand for transport services.

Table 3–2: Age structure. Source: .id. Based on ABS, Census of Population and Housing 2016

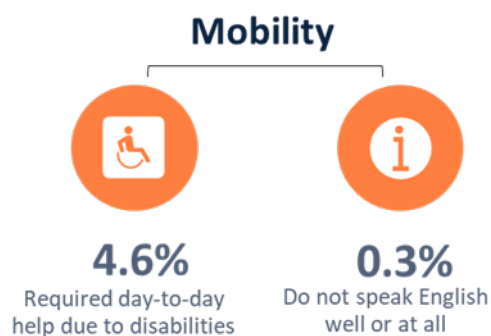


Analysis of the age groups of Golden Plains Shire and Regional Victoria in 2016 indicates that Golden Plains has a higher proportion of younger residents and lower proportion of older age groups. As Table 3–2 shows, 27 percent of the population was under 17 years of age and over 30 percent were aged over 50 years old, compared with over 20 percent and over 40 percent respectively for Regional Victoria.

3.1.5 MOBILITY DISADVANTAGE

Population groups may have low mobility due to age, disability, health issues or economic circumstances. In 2016, 4.6 percent of the population reported needing help in their day-to-day lives due to a severe or profound disability.

Analysis of the proficiency in English data of the population of Golden Plains Shire in 2016 compared to Regional Victoria indicates that a lower proportion of people who spoke another language and English not well or not at all. Overall, 0.3 percent spoke another language and English not well or not at all, compared with 1 percent for Regional Victoria.



Household income is an indicator of socio-economic status that can be used to assess the accessibility barriers. As Table 3–3 shows, Golden Plains Shire has a lower proportion of low-income households, those earning less than \$650 per week, at 15.3 percent compared to 22.9 percent in Regional Victoria.

Source: .id. Based on ABS, Census of Population and Housing 2016

Table 3–3: Household income. Source: .id. Based on ABS, Census of Population and Housing 2016

Household Income	Golden Plains	Golden Plains	Regional Victoria
	Number	Percentage	Percentage
Less than \$650 (low)	1,110	15.3	22.9
\$650 to \$1,449 (lower middle)	2,282	31.5	34.0
\$1,449 to \$2,499 (upper middle)	1,852	25.5	19.8
\$2,500 or more (high)	1,247	17.2	12.5
Incomes not stated	761	10.5	10.7

Another indicator of the socio-economic barriers to movement are the Socio-Economic Indexes for Areas (SEIFA), they are indexes based on a range of Census characteristics. Two of the SEIFA indexes are: The Index of Relative Socio-Economic Disadvantage (IRSD) and the Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD).

The IRSD contains only disadvantage indicators such as unemployment, low incomes or education levels, lack of internet access. It can be used to distinguish between disadvantaged areas and those just lacking a lot of disadvantage, rather than areas which are highly advantaged. The IRSAD contains the indicators of disadvantage in the IRSD as well as additional indicators of advantage, such as professional occupations, high income, higher education levels, larger houses.

3. TRANSPORT NEEDS AND DEMAND

As Table 3–4 shows, the SEIFA Indexes for Golden Plains in 2016 were 1035 and 1004 for the IRSD and IRSAD, respectively. For Regional Victoria the IRSD and IRSAD were 977 and 959, respectively. The high scores for both indexes indicate a low level of disadvantage in the Shire relative to other areas in Victoria. There are three suburbs or localities within the Shire with lower SEIFA ratings than the Shire as a whole: Lethbridge and District, Central West (which contains Rokewood), Linton and District. This indicates a lower socio-economic status for those areas.

Table 3–4: Socio-Economic Indexes for Areas. Source: .id. Based on ABS, Census of Population and Housing 2016

Area	Index of Relative Socio-Economic Disadvantage (IRSD)	Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD)
Inverleigh Planning Area	1,081	1,047
Bannockburn and District	1,062	1,029
Teesdale and District	1,060	1,029
Enfield - Napoleons and District	1,045	1,011
Haddon - Smythesdale and District	1,045	1,005
Golden Plains Shire	1,035	1,004
Lethbridge and District	1,010	986
Regional Victoria	977	959
Central West	955	939
Linton and District	953	924





3.1.6 HEALTH AND ACTIVITY

Health indicators for Golden Plains have been derived from the Victorian Population Health Survey (VPHS). The VPHS provides an annual assessment of the health status and wellbeing of adults in Victoria. The health indicators for Golden Plains in the 2020 survey are shown in Figure 3–3. Obesity was significantly lower among adults who reside in Golden Plains (20.9 percent), compared with those who lived in rural Victoria (27.6 percent). However, a greater portion of people were overweight in Golden Plains (35.7 percent) compared to rural Victoria (30.9 percent).

Data on activity levels in 2020 were impacted by the COVID-19 pandemic, therefore the results from the 2017 survey have been used. In the 2017 survey, a higher proportion of adults in Golden Plains met the Australian Physical Activity Guidelines, 58.6 percent were sufficiently active as compared with only 50.9 percent of Victorians. However, 35.5 percent of adults were sedentary or insufficiently active and 81 percent of children and young people do not participate in at least an hour of physical activity per day.

Figure 3–3: Health indicators – Obesity levels. Source: Victorian Population Health Survey, 2020



3.2 TRAVEL PATTERNS

3.2.1 TRIP DESTINATIONS

Journey to work data from the 2016 Census indicates that 72.4 percent of working residents of Golden Plains Shire travelled outside the area to work. Their major destinations were: Greater Geelong (31.3 percent), Ballarat (28.1 percent), and other (13 percent).

Figure 3–4 illustrates journey to work movements, excluding internal movements, for two regions in Golden Plains – Golden Plains – North, including Smythes Creek, and Golden Plains – South, including Bannockburn. The trip data indicates that:

- residents in the north of the Shire tend to travel to the Ballarat region
- residents in the south of the Shire tend to travel to the Greater Geelong region.

Major Movements in Golden Plains

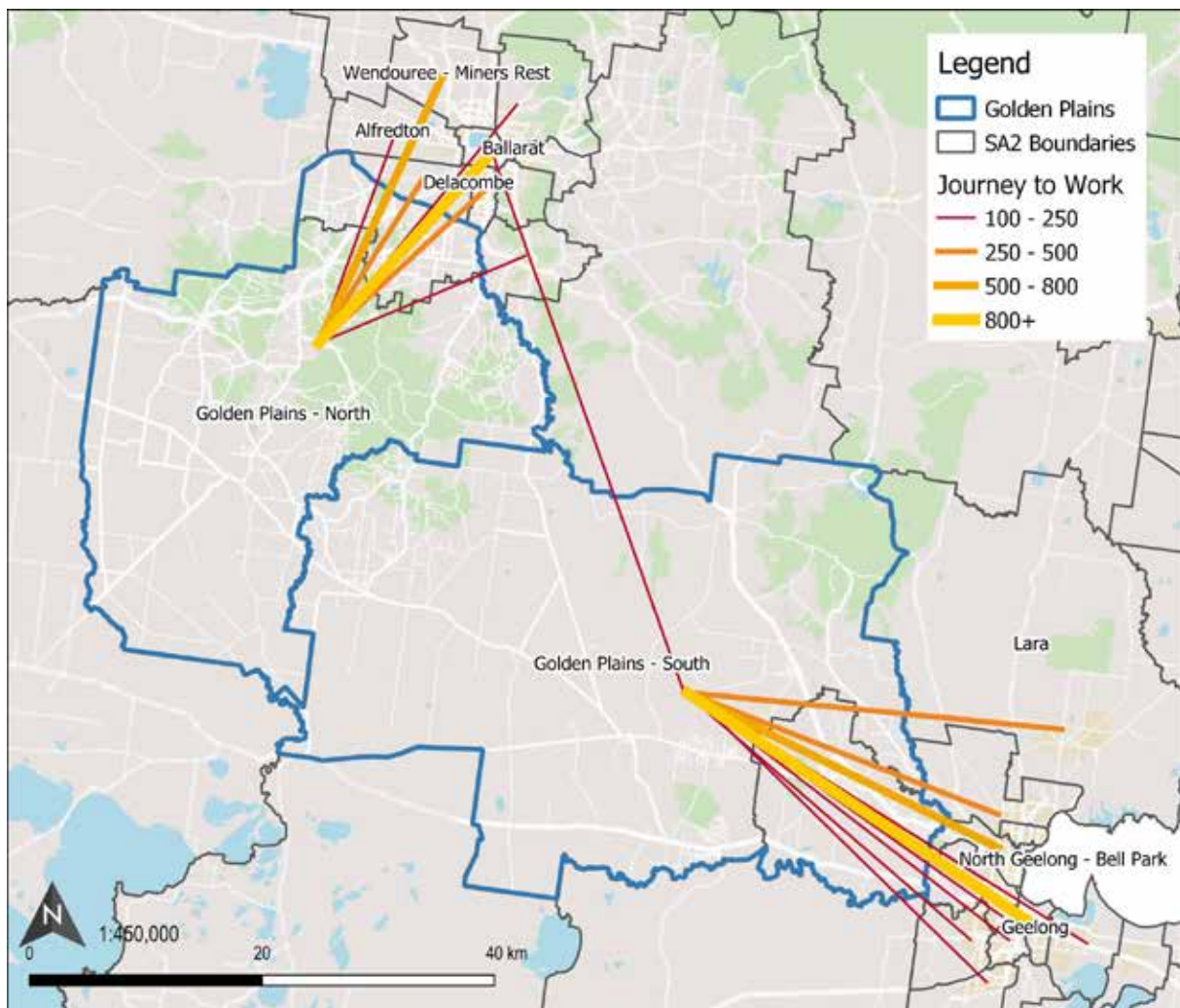


Figure 3–4: Major journey to work movements for Golden Plains (excluding internal movements).

Source: ABS, Census of Population and Housing 2016

3.2.2 MODE CHOICE

As a rural municipality without a train station the mode share of private vehicle travel in Golden Plains is high. The 2016 Census indicates that car ownership levels are high in Golden Plains, with 75 percent of households having access to two or more motor vehicles, compared to 54 percent in Regional Victoria. Further, only 1 percent of households have no access to a motor vehicle in Golden Plains, compared to 5 percent in Regional Victoria. As such, the number of people that cannot access a car and driver at home is small, this indicates a limited user group for scheduled bus services in Golden Plains.

Figure 3–5 compares the mode split in Golden Plains with that of Regional Victoria, based on the Victorian Integrated Survey of Travel and Activity (VISTA). In 2012–13 VISTA collected data from 5,780 households in several major regional cities – Greater Geelong, Ballarat, Bendigo, Latrobe, Shepparton.

Around 7800 people travelled to work by car as driver or passenger in the 2016 Census. Private vehicle travel accounted for 77 percent of journey to work trips by Golden Plains residents (ABS, 2016) and 83 percent of all trips for other regional centre residents (VISTA, 2013). While active transport made up 2 percent and 14 percent of all trips respectively. In Golden Plains and other regional centres, public transport use only accounts for 2 percent of trips.

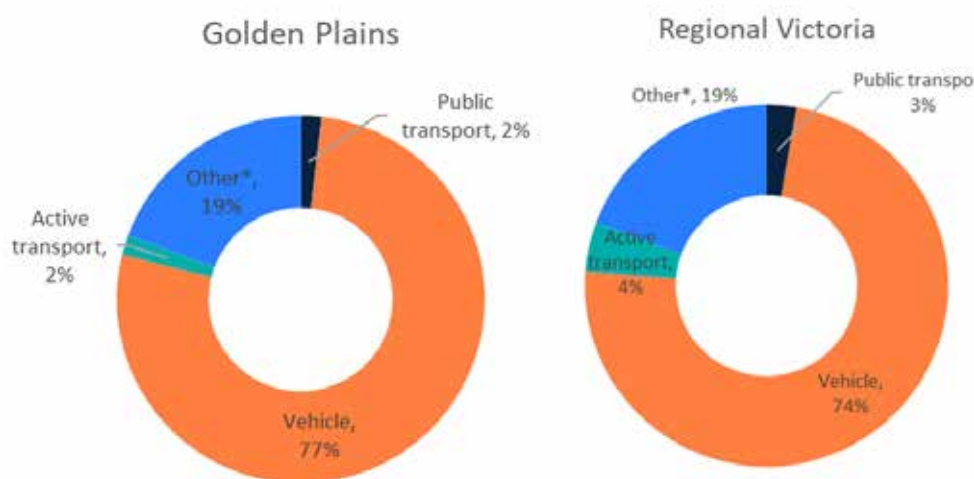


Figure 3–5: Weekday trip mode share. Source: ABS, Census of Population and Housing 2016 (left). VISTA, 2013 (right) Note: *Includes responses for worked from home, other modes, and mode not stated.

3.2.3 TRIP PURPOSE

Based on the VISTA survey, regional centres across Victoria have an average trip distance of 9.5km and trip time of 17 minutes, with 3.3 trips per day per person (VISTA, 2013). These statistics may not be representative of Golden Plains as it is a more rural region than those surveyed, trips in Golden Plains are likely to cover greater distances and time frames.

Travel for work and social or recreational activities were the most common trip purposes across surveyed regions for VISTA. Over 20 percent of weekday trips are work related and 22 percent are for social or recreational purposes, however 36 percent of distance travelled is for work. In regional centres the average distance for primary school journeys was 3km, 6km for secondary school travel and 16km for tertiary travel.

Other trip purposes were shopping (over 15 percent), pick up or drop-off (12 percent), personal business (8 percent), accompany someone (6 percent), education (6 percent), other (under 5 percent).

4. EXISTING TRANSPORT CONNECTIONS

Golden Plains Shire is situated between Ballarat, Geelong and Melbourne. Golden Plains Shire is serviced by three major arterial roads. The Midland Highway (A300) travels through Bannockburn and provides north-south travel between Ballarat and Geelong. The Glenelg Highway (B160) connects Ballarat to the northern townships in Golden Plains such as Smythesdale, Scarsdale and Linton. On the southern border of the Shire, the Hamilton Highway (B140) provides east-west road connections through Inverleigh. Several other arterial roads provide internal road connections between townships.

The following sections highlight key transport connections for residents in Golden Plains.

4.1 PRIVATE MOTOR VEHICLE

Overwhelmingly, the predominant mode of travel within the Shire is private motor vehicle. Due to the rural nature of Golden Plains and development patterns along existing roads (or roads developed to connect towns within and outside the Shire) this is consistent with other regional areas of Victoria.

4.1.1 ROAD NETWORK

The road network has been well-established over time, however there are few through routes within the municipality with most long-distance routes established via Geelong or Ballarat, around the Golden Plains Shire. The major highways through the Shire are:

- Midland Highway (A300) which runs from Geelong to the Shire via Gheringhap, Bannockburn, Lethbridge and Meredith before passing through to Ballarat. The Midland Highway carries Annual Average Daily Traffic (AADT) in the following ranges:

16,000 between Gheringhap and Bannockburn (including 9 percent heavy vehicles)

6,600 between Bannockburn and Lethbridge (including 11 percent heavy vehicles).

- Glenelg Highway (B160) which runs between Ballarat and Western Victoria and passes through Smythesdale, Scarsdale and Linton before passing through to Corangamite Shire via Skipton. The Glenelg Highway carries AADT in the following ranges:

4,800 between Smythesdale and Scarsdale (including 9 percent heavy vehicles)

2,400 between Scarsdale and Linton (including 7 percent heavy vehicles).

- Hamilton Highway (B140) which runs between Geelong and Western Victoria and passes through Inverleigh. The Hamilton Highway carries AADT in the range of:

5,300 between Fyansford and Inverleigh (including 13 percent heavy vehicles)

3,500 between Inverleigh and Cressy (including 16 percent heavy vehicles).

- The C143 runs between Bannockburn and Skipton and carries various names between the towns as it passes through including Teesdale, Shelford, Rokewood and Pitfield. It carries approximately 3,600 vehicles per day to the west of Bannockburn, down to around 1,000 vehicles per day west

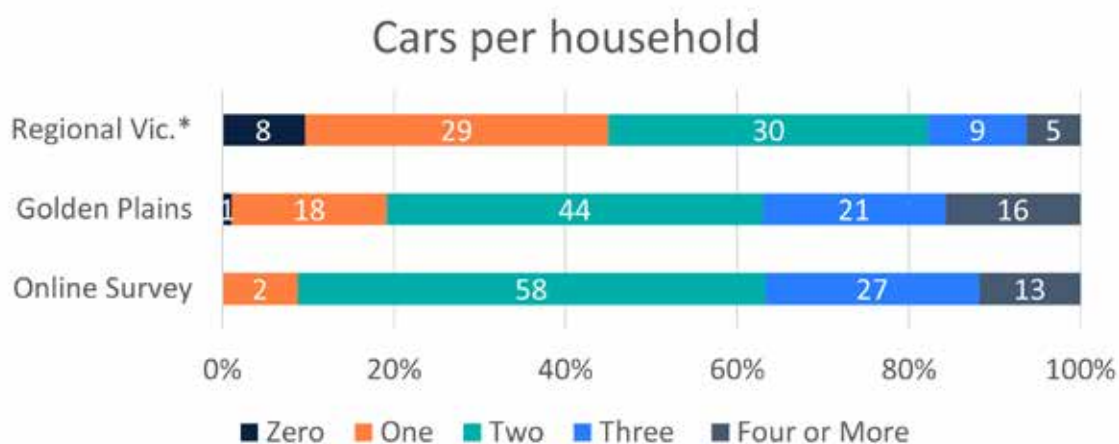
of Shelford.

- Colac-Ballarat Road runs from Ballarat through the townships of Enfield, Dereel, Corindhap and Rokewood and on to Cressy.

4.1.2 CAR OWNERSHIP

Car ownership rates are shown in Figure 4–1 and compare Regional Victoria (excluding large cities such as Shepparton, Bendigo, Ballarat) and Golden Plains. Cars per household from the online survey undertaken within this study are also shown.

Figure 4–1: Cars per household (ABS, *VISTA, Online Survey)



This data shows the high proportion of car ownership within Golden Plains compared to other regional areas as well as the high proportion of multiple-car-owning households within Golden Plains and amongst the online survey. These car ownership rates may be due to the relatively high-income level compared to other regional areas and the proximity to services within driving distance (i.e. Ballarat and Geelong).

Using the same sub-section of Regional Victoria, method of travel to work was compared against Golden Plains as shown below in Figure 4–2. Again, the private vehicle is shown as the predominant mode of transport with 77 percent private vehicle use, though there was 2 percent public transport use as well as 2 percent active transport. The 20 percent “other” is consistent with other regional areas and contains people who may work from home (i.e. farming).

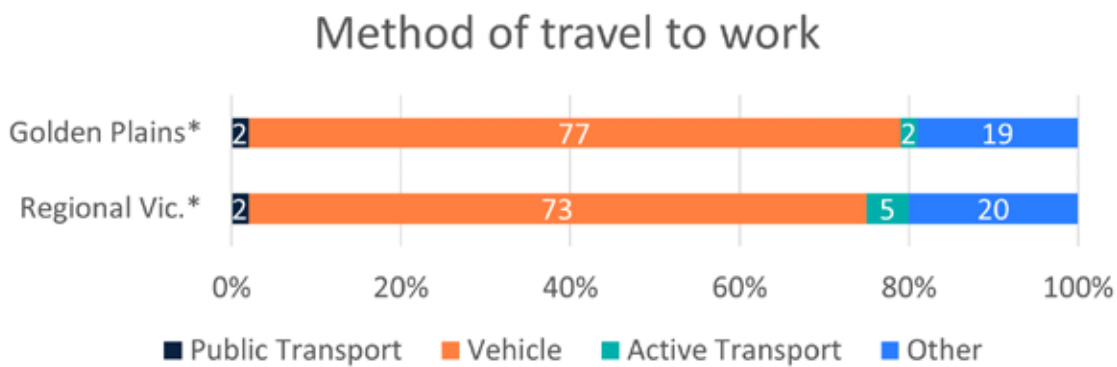


Figure 4–2: Method of Travel to Work (ABS – Golden Plains, VISTA – Regional Vic)

Parking within Golden Plains is generally free, though other destinations for Golden Plains Residents such as within central Geelong and Ballarat are moving to more paid parking.

4.2 PUBLIC TRANSPORT

Historically the Geelong-Ballarat railway line traversed through Bannockburn, however this line is not currently operational for passenger services and is only available for freight services. There are no passenger rail services that operate through the Shire, with the closest operational train stations being in Ballarat or Geelong.

Public transport patronage is low in Golden Plains Shire due to the limited services and infrastructure available. As Figure 4–3 illustrates, there are public bus routes that traverse the Shire, however most residential properties are not within walking distance (500 metres) of a bus stop and services are infrequent.

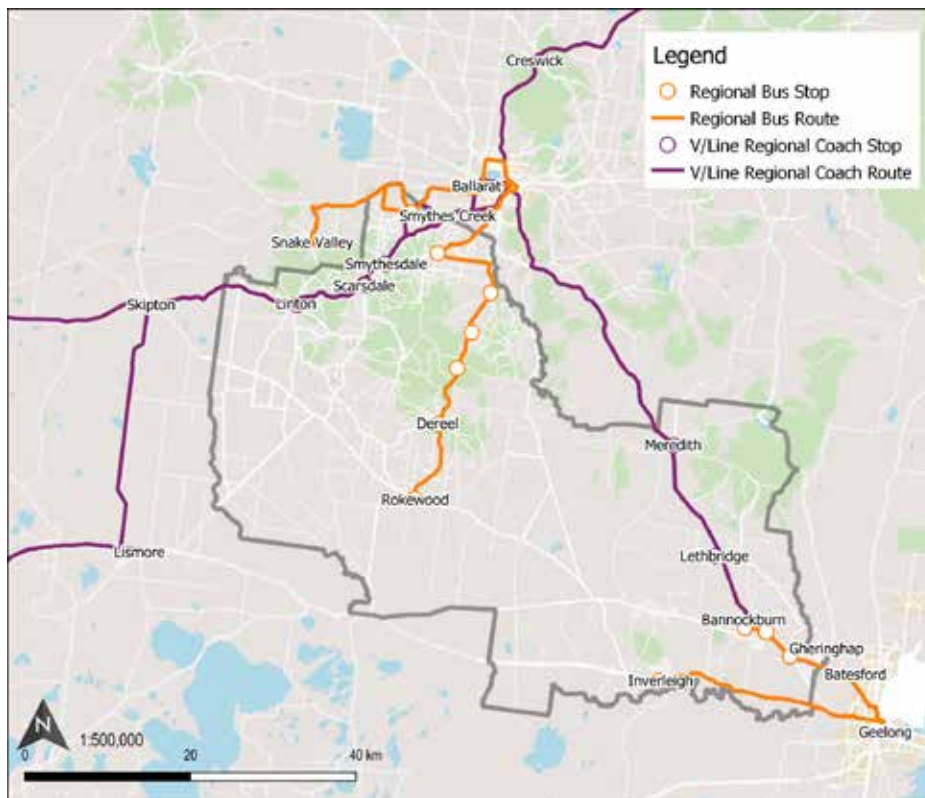


Figure 4–3: Locations of bus routes and stops

4.2.1 RAIL SERVICES

Declining patronage and infrastructure investment since the mid-20th century saw a decline in passenger railway services across much of Victoria, including the Golden Plains region.

The Ballarat–Skipton Rail Trail in western Victoria, Australia, was a historic railway line from western Ballarat, southwest through Haddon, Smythesdale and Pittong to Skipton. The line is no longer in use and rail trail is currently used for recreation as a route for walking and cycling.

The Ballarat-Geelong rail line was historically used for passenger services but is currently used by freight rail services only and V-Line for moving passenger trains (without passengers) to maintain facilities. The strategic value of reinstating the Ballarat-Geelong line for passenger services has been recognised. This network change would enable passenger trains currently terminating at Maryborough to be extended to Dunolly, St Arnaud and Donald as mentioned in the Rail Futures InterCity Report

(2017).

4.2.2 REGIONAL COACH SERVICES

Regional coach services provide access to long-distance regional travel. These services are operated by V/Line and typically require paper tickets. Tickets can be purchased online, at existing train stations or can also be purchased at the following locations: Bannockburn Newsagency, Lismore Newsagency and Post Office, Meredith Corner Store, and Skipton Roadhouse and Newsagency.

Table 4–1 provides a summary of the three available coach services in Golden Plains, their frequency and their estimated costs. It is noted that the costs of services vary according to the distance travelled. V/Line coach services to both Geelong and Ballarat primarily run at non-commuter times, even though most employed people in Golden Plains travel to Geelong or Ballarat for their employment.

Table 4–1: Summary of regional coach services

Line or Network	Description	Weekday Services	Weekend Services	Typical Adult Fares (One way)
Bendigo – Geelong via Ballarat	V/Line coach providing north-south connections through Batesford, Gheringhap, Bannockburn, Lethbridge and Meredith.	Mon – Thu: 3x each way Fri: 4x each way	Sat: 3x each way Sun: 2x each way	Bannockburn to Geelong: \$4.80 Bannockburn to Ballarat: \$8.60 Max: \$33.80
Melbourne – Mount Gambier via Ballarat and Hamilton	Utilises a combination of train and coach services. The coach component services between Ballarat and Mount Gambier, and travels through the northern part of Golden Plains with stops at Smythesdale, Scarsdale, Linton, and Skipton.	2x each way	2 x each way	Smythesdale to Ballarat: \$4.80 Skipton to Hamilton: \$19.00 Max: \$52.00
Ballarat –	The coach services the northern part of Golden Plains, with stops at Smythes Creek, Haddon, Smythesdale, Scarsdale, Linton, Skipton.	1x each way	None	Smythes Creek to Ballarat: \$2.40 Smythes Creek to Warrnambool: \$20.80 Max: \$20.80

The implications of these low frequencies is that the services are useful for one-off long distance trips or very specific repeat usage, but not for short commutes to Ballarat, Bannockburn or Geelong for short-duration stays (such as social visits) because the waiting time at each end could be extensive.

Regional coaches are also provided with high-floor buses to accommodate luggage. This high-floor and stair arrangement makes the coaches less accessible.

4.2.3 REGIONAL BUS SERVICES

Four regional bus services provide intertown travel. These services are operated by local operators including Christian's Bus Ballarat (formerly Golden Bus Ballarat) and McHarry's Buslines. Tickets are predominantly in the form of Myki cards, unless otherwise stated.

Table 4–2 provides a summary of the three available coach services in Golden Plains Shire, their frequency and their estimated costs.

Table 4–2: Summary of regional bus services

Line or Network	Description	Weekday Services	Weekend Services	Maximum Adult Cost (One way)
Ballarat – Snake Valley via Haddon	Bus service travelling through northern portions of Golden Plains via Glenelg Highway.	Monday and Friday only. 1x each way	None	\$4.80
Geelong - Bannockburn	Route 19 bus service connecting Geelong to Bannockburn via Midland Highway.	1x each way	None	\$4.80 (paper ticket)
Ballarat – Rokewood via Napoleons, Enfield & Dereel	Bus service provides a service between Ballarat to central-Golden Plains. This service allows pick up and set down at any location along route.	Tuesday and Thursday only. 1x each way	None	\$10.00
Geelong – Inverleigh via Fyansford	This bus service is a direct service between Geelong and Inverleigh, with only two stops.	Friday only. 1x each way	None	\$4.80

Similar to the V-Line services, these services have frequencies which might be suitable for very specific travel needs, but provide a poor level of service with likely long wait times for return journeys, or suitable only for one-way trips and require seeking alternatives for the other leg of travel.

4.3 ACTIVE TRANSPORT

4.3.1 CYCLING

Transport corridors designated for cycling exist in Golden Plains as part of the Principal Bicycle Network (PBN), Strategic Cycling Corridor (SCC) network, and as recreational cycling paths.

Cycling is predominantly a recreational activity, with facilities promoting mixed usage between cycling and other active transport modes. The key recreational cycling paths are highlighted as part of the Three Trails Project and include:

- Ballarat-Skipton Rail Trail
- Kuruc-a-ruc trail from Dereel to Rokewood
- Rainbow Bird Trail from Scarsdale to Dereel.

Both the PBN and SCCs cater to cycling for transport, which includes riding bicycles to work, to school, shopping, visiting friends. However cycling patronage for the purpose of transport in Golden Plains is low due to limited cycling facilities between townships.

The PBN is a network of proposed and existing cycle routes that help people cycle for transport and provide access to major destinations in Victoria. VicRoads published the PBN in 2012 also served as a 'bicycle infrastructure planning tool' to guide State investment in the development of transport bicycle network. The PBN in Golden Plains extended from Geelong to Bannockburn and Inverleigh as Figure 4-4 shows.



Figure 4-4: Principal Bicycle Network. Source: VicRoads

The SCC network links up important destinations, including central Melbourne city, employment and activity centres, and other destinations of metropolitan and regional significance. SCCs are designated by the Department of Transport to provide a safe, lower-stress cycling for transport experience. In regional towns, SCCs connect destinations of regional importance such as activity areas, schools and railway centres. As Figure 4–5 illustrates, SCCs within Golden Plains are limited to Bannockburn.



Figure 4–5: Strategic Cycling Corridors in Golden Plains Shire. Source: Department of Transport

4.3.2 WALKING

Due to the largely rural nature of Golden Plains, walking is primarily seen as a recreational activity rather than a means of transport between towns. Therefore, walking for transport is generally concentrated to town centres.

Recreational walking trails include the Inverleigh Walking Trail, Bannockburn Park, and Dereel Swamp Trail. Recreational walks are undertaken at other parks and reserves however these have limited relevance to this study.

4.4 LOCAL TRANSPORT

4.4.1 COMMUNITY TRANSPORT

The Golden Plains Connections Community Transport service is available to residents who require support to attend medical appointments or community social events. The Community Transport service provides a flexible, responsive transport service for isolated residents to stay connected to services within the Shire and beyond.

Paid staff and volunteers provide the transport service and eligibility is based on individual circumstances. A fleet of buses, one minibus, and a wagon are available for transportation to and within Golden Plains. To access the service, residents need to call and book a trip.

In the 6-month period between January and June 2020, the buses in the community transport service were used for 71 bookings for a total of 440 hours, as Table 4–3 indicates,. There were six buses utilised for these bookings to provide access to Meals on Wheels, medical appointments, community transport, ad hoc urgent appointment, and aged care shopping trips, amongst other uses.

The station wagon car was used to provide individual transport for 26 bookings between 2021 and 2022. The typical pick-up points were Corindhap and Gheringhap, and the most common drop-off points were Ballarat, Geelong, and Winter Valley. There were recurring trips between Gheringhap and Geelong at a cost of \$28, and between Corindhap and the Ballarat region at a cost of around \$69.

Table 4–3: Summary of community transport services

Vehicle	Time Period	Total Bookings	Total Hours	Average Charge
Individual Transport Car	January 2021 to March 2022	26 bookings	-	\$49 per booking
Community Transport Buses	January to June 2020	71 bookings	440 hours	-
Community Transport Youth Van	July 2019 to June 2020	53 bookings	225 hours	-

4.4.2 TAXIS

Taxis are theoretically available for use within Golden Plains. Anecdotal evidence provided during consultation indicated that services are likely only provided by taxi companies based in Geelong or Ballarat. A trip would need to be booked in advance and even in those cases, some taxis do not arrive.

The prohibitive cost of a taxi trip from Geelong or Ballarat to or from destinations within Golden Plains were often stated as reasons for not considering utilising taxis. Some in the northern part of the Shire had been relying on Taxis for medical appointments as they were not aware of the availability of other services.

An estimate of likely costs between public transport, community transport services and taxi services for some regular one-way trips undertaken on the Community Transport Service show that the community transport option is around half the price of the taxi service with the public transport option being cheaper but far less frequent.

Table 4–4: Taxi cost comparison example

Transport Service	Services	Cost	
		Gheringhap to Geelong	Corindhap to Ballarat
Public Transport – Regional Buses and V/Line coaches	Gheringhap – 3 per day on weekday Corindhap – 1 per day on Tuesday and Thursday	\$4.80 (coach) one-way	\$10 (Bus) one-way
Community Transport Service	Car – 26 bookings (3 months, 2020) Bus – 71 bookings (6 months, 2020) Youth Van – 53 bookings (12 months, 2019)	\$30 (car) return	\$70 (car) return
Taxi		\$40 (estimate, excluding booking fee) one-way	\$70 (estimate, excluding booking fee) one-way

4.4.3 SCHOOL TRANSPORT

Within Golden Plains Shire there are 14 primary schools and one secondary school, Bannockburn P-12 College, which first opened in 2018. Several schools within Golden Plains are serviced by country school bus services. Students that attend their nearest school and live more than 4.8km away are eligible for free bus travel where available.

There are around 2000 secondary school aged children in Golden Plains (ABS, 2016). However, as there is only one local secondary school in the Shire, many students (particularly in the northern part of the Shire) must travel out of the Shire to attend secondary school. The school catchments in the north of the Shire fan out from multiple schools in Ballarat.

Access to Bannockburn P-12 College is provided through four bus routes privately contracted through PTV: Inverleigh, Meredith, Meredith via Shelford, and Steiglitz via Gheringhap. Other schools such as Haddon, Inverleigh, Meredith and Rokewood Primary Schools have dedicated school buses.

Government and non-Government schools in Ballarat provide bus services for students within their catchment where qualifications are met for services, currently provided by Christians, CDC or other bus companies.

5. STAKEHOLDER ENGAGEMENT ANALYSIS

The community engagement program was conducted from March to May 2022, with results that have been collected and analysed. Analysis of results will enable a holistic understanding of different user groups, and how vulnerable groups may be disadvantaged by current transport options available.

5.1 APPROACH

5.1.1 ONLINE SURVEY, WORKSHOPS, FOCUS GROUPS

5.1.2 INTERVIEWS

The engagement program was conducted with different approaches to cater for different user groups, it included:

1. an online survey with 68 respondents from across Golden Plains
2. 5 drop-in workshops held across Golden Plains, in an online and face-to-face format in Linton, Meredith, and Inverleigh
3. 4 focus groups for interested or vulnerable groups, such as young people or people with disabilities. These were held in a face-to-face format.

In all forums, the community was asked to share about the topics in Table 5–1. The survey questions have been included in Appendix A.

Table 5–1: Consultation topics

Project Phase	Consultation Topics
Current State	Demographics profile
	Trip purposes
	Existing movement and services
	Perception of transport connections
Gap Identification	Latent demand (trips not taken)
	Barriers to transport use
	Desire (purpose of potential trips)

Project Phase	Consultation Topics
Opportunity Identification	Service and infrastructure opportunities
	Perception of improvement opportunities
	Mode choice preferences

Refer to Appendix C for the full results of the survey and further discussion about the survey demographics

5.1.3 INTERVIEWS

One-on-one interviews were conducted to understand the nature of existing services, constraints in transport connection, and opportunities for improvement. The stakeholders interviewed have been summarised in Table 5–2. Generally, they are owners and organisations that oversee transport services in Shire.

- The interview agenda explored the organisation's:
- Background and service provision
- Current demand and service demographics
- Perception of the constraints and challenges of existing public and local transport
- Perception of proposed transport investments.

Table 5–2: Stakeholder groups interviewed

Stakeholder Interview Groups		
Public transport operators	Tourism operators	Aged care providers
Local transport operators	Sporting and social clubs	Local business owners
Taxi service providers	Education providers	Residents invited to comment
GPSC employees and volunteers	Health care providers	

5.2 TRANSPORT PATTERNS

Transport patterns were analysed with key destinations located outside of Golden Plains. Golden Plains was found to be largely reliant on Geelong and Ballarat, with residents predominantly travelling to the closer city from their home locations for everyday needs.

5.2.1 MODE OF TRAVEL

Based on feedback from stakeholder consultation and desktop analysis, there are two key groups identified with significant transport gaps including:

- **Transport Disadvantaged-** Residents who do not have access to private motor vehicles either due to age, economic disadvantage, or physical limitations on their ability to drive. These groups are typically supported by others that own a car, however there is a desire for more independent travel.
- **Transport Limited-** Residents with cars looking for alternatives to private vehicle transport to enable more recreational and social trips.

Feedback from surveys suggested use of cars to be the dominant mode of transport, which is consistent with our analysis from previous Section 3.3.2. The results, however, are indicative of challenges associated with car dependency, with a key issue being the restriction of travel freedom for those user groups that cannot drive, such as young people or older adults. This is especially true for 25 percent of survey respondents, who have stated they rely on others for transport.

An underlying factor driving car dependency in the region is the lack of services in the region. Proximity to regional centres draws away investment in services within the region, resulting in people having to drive outside of Golden Plains.

5.2.2 CURRENT TRAVEL DEMANDS

Current travel demands suggested that half the respondents are leaving Golden Plains more than 3 times a week for work, education, shopping, medical, and recreational and social activities, whilst a quarter do not work beyond the house. The most common destinations are the Geelong City Centre, Waurn Ponds, Bannockburn and Ballarat, which are destinations with a large majority of services available.

The frequency of current demands was surveyed, and it was found that:

- 50 percent of respondents travel for shopping two or three times a week, whilst 30 percent travel to shop once a week.
- 25 percent of respondents travel for education more than 3 times a week.
- 40 percent of respondents travel for recreation and entertainment two to three times per week, followed by 27 percent who travel once a week.
- 60 percent of respondents travel for medical care once a month, followed by 21 percent of respondents who travel once a fortnight.
- 28 percent of respondents travel to visit family and friends two or three times a week, followed by 28 percent who travel once a week.

Therefore, most respondents are travelling multiple times a week for shopping, recreational and social activities, which covers sensitive user groups including young people who are less travel independent.

5.2.3 LATENT TRAVEL DEMANDS

Stakeholder consultation has shown that a significant amount of latent demand is not being met. Around 80 percent of residents have expressed dissatisfaction with current transport options available while 60 percent of residents have stated they would travel more frequently if transport was more readily available.

With young people and those who can't drive being underrepresented in the survey, many older groups, such as those with dependents have expressed challenges with primary demands not being met for young people and those who are unable to drive, for purposes for recreation and social activities.

In the survey, individuals outlined whether they would increase or decrease their travel for certain activities if transport was more readily available, which is shown by Table 5–3. Activities with the greatest change in travel patterns are highlighted in blue.

Of all the different trip categories, the most latent demand is 35 percent for social activities, followed by 21 percent for recreational activities. From this, the most sensitive user groups affected are elderly or young people, as the lack of travel independence restricts their flexibility to plan additional social activities.

In contrast, respondents expressed willingness to decrease travel for shopping, work and medical activities. This may be indicative of people wanting services more locally due to the transportation costs currently associated with the frequent travel patterns. This also potentially shows that there are greater incentives to participate in these activities in bulk, rather than in greater frequencies, when using provided timetable services compared to on-demand methods such as cars.

Table 5–3: Trip Purpose

Trip Purpose	Work			Medical		Social
Percentage (%) of Respondents Increasing Travel	9	12	12	7	21	35
Percentage (%) of Respondents Decreasing Travel	18	10	21	10	12	1
No change in travel patterns (%)	74	78	68	82	68	63
Average Score	2.94	16.18	-10.29	0.00	10.29	55.88

Interviews were conducted with several different service providers to explore the challenges faced by providers, as well as the different opportunities that can be sought to meet the needs of both the provider and customers that use their service.

Common latent demands summarised from the interviews have been related to the lack of connecting services from smaller townships to Bannockburn, which had been suggested by the local primary school, bus operator and a community member. Furthermore, majority of interviewees expressed challenges with low frequency of current services and last mile gaps for vulnerable user groups.

Direct shuttle services to regional town centres had also been suggested in both interviews and surveys by sensitive user groups such as older adults and young people. This was followed by on demand services and increase in frequency of existing services.

5.2.4 TRANSPORT BARRIERS

In order to meet the mobility needs of largely rural communities, it is important to understand the local socio-economic conditions and service offerings. The following sections identify the main transport barriers impacting modal choice in Golden Plains Shire.

Availability:

The largest transport barrier is the lack of available alternatives to private vehicle usage. 80 percent of respondents to the online survey responded that they were dissatisfied with current transport options, with respondents citing the limited destinations and low frequency of buses as key barriers to using public transport.

“Bus service through Shelford they could connect with Rokewood or Bannockburn to reconnect to a Ballarat Bus or Bannockburn to Geelong”

- Primary School

Bannockburn is the township with the most available services, with up to 5 trips per day in either direction. During focus groups, both students and the elderly highlighted that these buses were too infrequent to be a reliable option. The adherence of buses to a strict timetable was claimed to be too inflexible of a service as if residents were to miss a connection, they would be stranded without means of reaching their destination.

Beyond Bannockburn, public transport services are even more limited. Townships in central Golden Plains such as Rokewood are serviced by one route twice a week, whilst Inverleigh is serviced once a week. Teesdale, the second largest township by population, has no public transport routes.

Active transport modes are also largely made redundant due to the geographical spread between towns. Where cycling routes are available, these are not segregated from highways. The lack of road separation and large geographical distances results in cycling being viewed as an unsafe and undesirable transport option.

The lack of available alternative transport options risks residents being cut off from basic services if they do not have access to car. The lack of publicly accessible transport may result in inequity of access to opportunities and encourage those without available options to move out of Golden Plains.

Affordability:

There is a strong need for affordable services in order to cater for low income earners or for those that are unemployed. Table 4–1 and Table 4–2 highlight that existing public transport services are affordable, with usual trips to Geelong or Ballarat costing less than \$10.

However, consultation has found that the lack of available public transport services has led to residents turning to more costly alternative transport modes such as on-demand rideshares. As a result, trips from Geelong to Bannockburn can cost up to \$85 for residents. In addition, in instances where public buses are unavailable, residents may become more reliant on other others such as family and friends for travel leading to a lack of independence.

Proximity:

Proximity is determined by the spatial concentration of both trip origins and potential destinations. A key barrier for transport within Golden Plains is the large geographic area covered by the Shire. The largely rural nature of the Shire is reflected in the low density of potential trip destinations, with residents requiring travel beyond the Shire for basic needs such as shopping, medical appointments and education. The online survey revealed that at least half of the respondents travel beyond Golden Plains at least three times a week. The proximity of townships to denser cities such as Geelong and Ballarat will also impact the destination choice of residents.

Different modes of transport also have different acceptable levels of travel distance and proximity. For public buses, it is recommended that bus stops are within 400m of living areas to be considered walkable. The dispersed pattern of settlements within Golden Plains results in most residents not having any public transport options within an appropriate proximity. Similarly, cycling options are limited by the large distances between townships. It is recommended that cycling trips are within 5km, however the proximity between townships are largely greater than this. Private vehicles instead provide a greater degree of accessibility. Door to door services may be considered more feasible for those that have reduced mobility. Otherwise, central pooling to locations of key activities may be required to ensure trips are still within an appropriate proximity.

Connectivity:

It is important to integrate public transport services into the broader land use and public transport network to increase connectivity, reduce unnecessary trips and reduce connecting stops. As the Shire is reliant on public transport (coaches and buses) to connect to the wider public transport network at Geelong and Ballarat stations, improving connectivity will be essential when it comes to supporting tourism and long-distance travel for work, shopping and education.

As a result, lack of connectivity is perceived as a barrier that increases travel time. For those that require travel to the Melbourne CBD, public transport from Golden Plains was inefficient and too long of a route to be considered viable.

The lack of connectivity has also inhibited the freedom of travel within Golden Plains. For example, consultation revealed a large latent demand for transportation between routes that are not covered by existing public transport, such as between townships within Golden Plains. As a result, this was found to be preventing residents from accessing recreation and social opportunities more frequently. This has not only restricted younger residents, such as high school students from travelling to social activities, but is also preventing these young people from developing travel independence. From consultation, Bannockburn and Smythesdale are the two key hubs, but not all townships have connections to these two suburbs. For example, Inverleigh does not connect to Bannockburn.

“Another operator did a shuttle between several locations in Golden Plains that went to Bannockburn however that part of the trial network failed as they didn’t connect with the Geelong Service”

- Bus Service Provider

Flexibility:

Mobility demand requires flexibility to respond to the more erratic and dispersed travel patterns in Golden Plains. These travel patterns are a result of a low regional population density and large proximity of activity centres within the area. In addition, the lack of services add to hampered flexibility, which result in difficulties for people who are seeking ease of travel to their activities in the Shire.

Due to the lack of available services, there is little flexibility when it comes to planning direct trips to destinations that residents want to travel to. For example, majority of respondents from the survey have indicated irregularity of services between towns which have resulted in little trip options, leading to increased unnecessary travel times or connecting trips to get to the required destination. Furthermore, the usage of community buses from the previous Golden Plains Community Bus trial was concluded as ineffective in addressing flexibility challenges, as a result of findings addressed in Section 2. It is therefore important to consider solutions that can address erratic and dispersed travel demands through a more targeted approach. These solutions consist of transport services that target young people through matching the times of key social, recreational or educational activities throughout the week. It is also important to consider flexibility in vehicle sizes to match varying levels of demands and ease of use of timetables to increase the appeal to use such service.

“In a very low-density, rural LGA like Golden Plains, on-demand services have potential – could link people to Ballarat, to Geelong, maybe to Meredith to connect with a train”

- Ballarat resident

Accessibility:

Accessibility refers to people's ability to use services and opportunities. Disability access is not a significant barrier as there are appropriate modes of transport provided for those with additional requirements i.e. Council's services are wheelchair accessible in addition to public transport options. Services can be easily accessible for persons with physical disability.

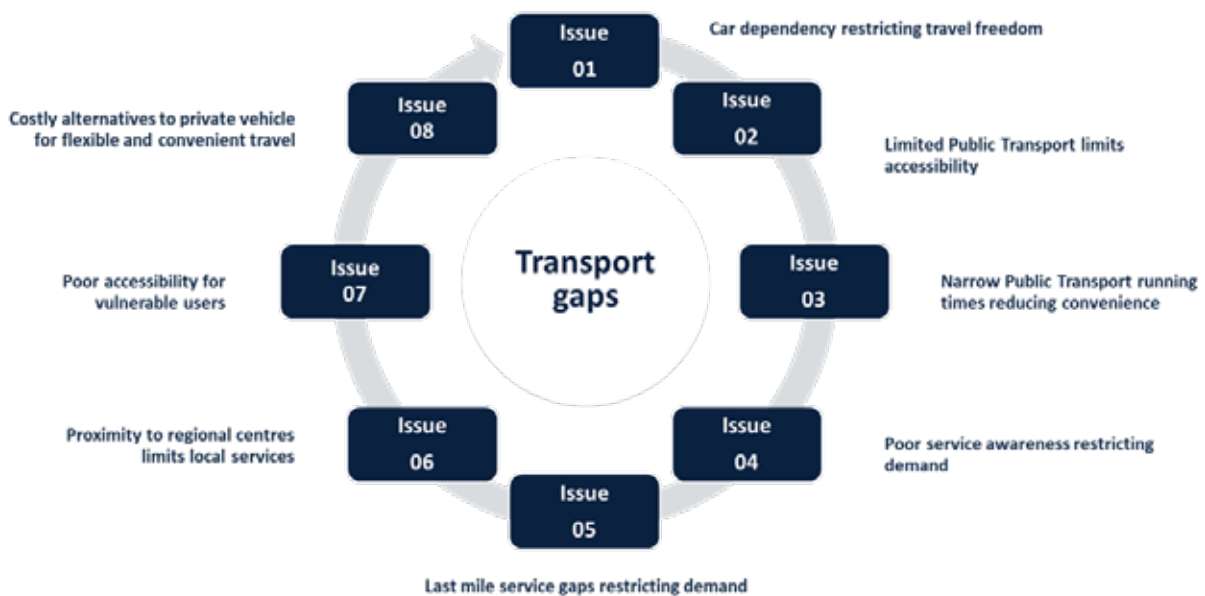
Information provided to access public services can be difficult to interpret. Accessibility to public transport is also limited by the requirements of physical tickets. The requirement to purchase tickets beforehand and limited live modes may serve as a barrier.

6. TRANSPORT ISSUES

Most residents in Golden Plains utilise privately owned vehicles as their predominant mode of transport. Due to the rural nature of the Shire, there are few services or employment opportunities available within the catchment of active transport distance and residents are reliant on cars.

For those in rural and regional areas, private vehicle use is flexible, relatively affordable and utilises publicly funded and maintained road infrastructure. Car parking also is often readily available in destinations in high demand for Golden Plains residents.

However, several transport gaps have been identified in this Study, they represent local needs which are not currently being fulfilled by private vehicle use. There is a focus on public transport given the distances involved with most trips in rural areas. Opportunities are those identified which can fill the identified gaps or which could be used as alternatives to private vehicles travel, or perhaps as complementary services to existing modes.



6.1 CAR DEPENDENCY RESTRICTING TRAVEL FREEDOM

With high household car ownership rates, it would appear that most trips are undertaken safely and conveniently in the most efficient method for a regional or rural area. However, there are drawbacks to heavy reliance on motor-vehicle use including:

- Increasing parking restrictions in destinations such as Ballarat and Geelong will drive up costs and will affect Golden Plains residents more than Geelong/Ballarat residents who have alternative modes.
- Road safety with large portions of the road network having few road safety treatments (barriers, wide shoulders etc). This also impacts walkability and cycling safety with high traffic volumes through most towns.
- Environmental impacts including noise and vehicle emissions
- Limitations and potential social exclusion for those who cannot drive including:
 - Those with permanent or temporary limitations which means they cannot drive
 - Those not yet age-eligible to drive
 - Those who cannot afford a motor vehicle, maintenance and upkeep
 - Those who have not learned, or do not wish to learn, to drive.

For many residents (63-78 percent), our survey revealed, there would be no change in travel patterns with improved transport availability. However, for recreation and social trip purposes there was 21 percent and 35 percent respectively of respondents who said they would increase their travel. As all respondents to the survey had a vehicle in the household, this revealed a demand for transport even with access to a private vehicle.

This shows that there is still demand for greater transport accessibility even amongst people with access to private vehicles.

“Not having a regular bus service from Rokewood to Ballarat impacts a lot of residents who are unable to drive or to even just get in for shopping. We rely on family members to drive us but a lot of us do not want to be that burden, or a lot of the time family may be working.”

- Community Club

6.2 LIMITED PUBLIC TRANSPORT LIMITS ACCESSIBILITY

There is a small, but important, group of potential transport users who currently have limited access to transport. Those who cannot drive, who may have short-term or permanent reasons for being unable to drive, are at an accessibility disadvantage across most areas of Golden Plains.

Many of these people are already challenged with regards to accessibility such as those with wheelchairs or visual impairment. With low frequencies of public transport, the ability to access services required or desired inside and outside of Golden Plains are limited. The current low-frequency buses allow for limited opportunities to visit larger towns which will impact accessibility to health care, financial, educational and employment opportunities.

Current services are designed based around trips to and from Ballarat and Geelong and do not cater for intra-Local Government Area (LGA) movements and therefore trips such as Teesdale-Bannockburn or Inverleigh-Bannockburn are not catered for. Given the importance of Bannockburn in providing services not available elsewhere in the Shire (i.e. banking, supermarket, Council services), this presents a limitation on access to those within the LGA who have no private transport.

“There are people in Dereel that do rely on public transport and lifts from friends – these clients have trouble accessing our services if they are unable to access transport during allocated times.”

- Community Health Centre

6.3 NARROW PUBLIC TRANSPORT RUNNING TIMES REDUCING CONVENIENCE

For the high proportion of survey respondents who would travel more with greater access, many identified they would travel more for recreational and social reasons. This likely includes trips for dinner, social outings and other trips which would require alternative transport options.

The latest service to Bannockburn from Geelong departs Geelong at 5:54pm on weekdays, except for Friday which has a later 9:25pm service. The latest service on Saturday is at 1pm and on Sunday there is a later 8:23pm service, but there are only two services into town on those days.

For recreational and social reasons, such rigid timetables, limited late night services and inconsistent scheduling, it is very difficult to plan trips incorporating public transport. As no alternative often exists, either trips are not undertaken or are modified to suit available transport options.

6.4 POOR SERVICE AWARENESS RESTRICTING DEMAND

Communication for existing and new services is an important component of a successful transport network. Due to the infrequency of bus routes and combination of PTV-run and V-Line run services, information on services is stored in separate locations.

Other services such as community and health transport services are not well-known. This is reflected in the high repeat usage of a limited number of users. Workshop attendees in Linton were unaware of the available health transport services provided by Council or health providers in nearby Ballarat.

There is no current central location for transport information in either an accessible or centralised location. Providing specific details about bus timetables, potential hiring arrangements, community transport options and active transport maps would assist those seeking information about travel in Golden Plains.

6.5 LAST MILE SERVICE GAPS

Low population densities such as those within and around the towns in Golden Plains means centralised bus stops have limited walking-catchments. This disadvantages those without access to vehicles by placing bus stops outside accessible reach.

Likewise, the destinations for most PT trips in central Ballarat and Geelong are not necessarily near preferred social and recreational destinations. In Ballarat and Geelong connecting services are often available. At the Golden Plains end of the trip there is no alternative to finding one's own way to/from the bus stop.

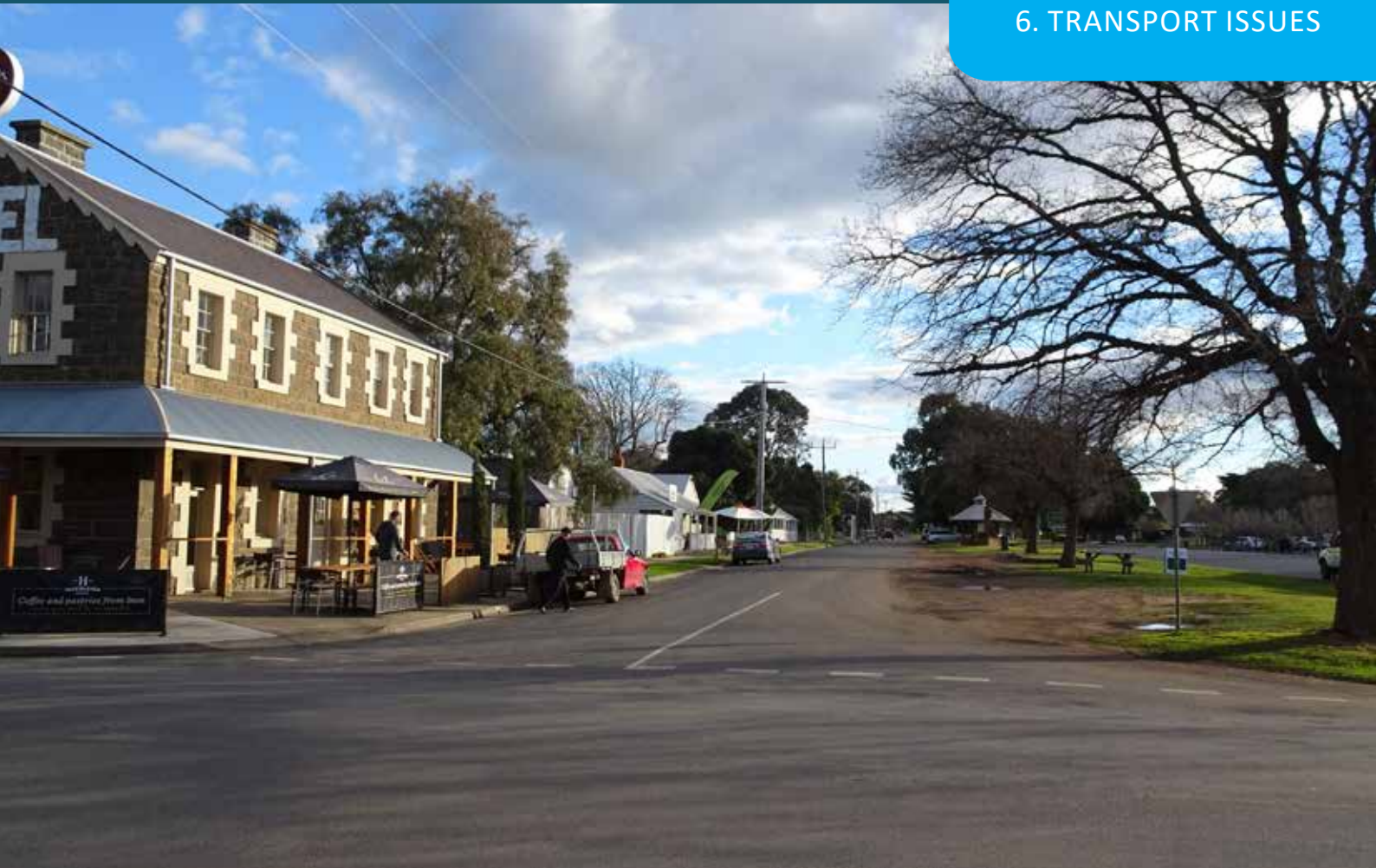
Providing more bus stops within towns is one option to improve the overall walking catchment of public transport. Another option is to provide on-demand feeder services for well-patronised services or where latent demand exists. For example, the twice weekly service to Rokewood or the weekly service to Inverleigh could benefit from regular provision of feeder services to connect residents from around the towns to the bus stop to connect with the bus to Geelong.

6.6 PROXIMITY TO REGIONAL CENTRES LIMITS LOCAL SERVICES

In this context, the reference to services includes those services sought by Golden Plains residents. Many day-to-day requirements are met within the Shire, though a lot of residents regularly travel outside Golden Plains (more than half of survey respondents travel outside Golden Plains 3 times per week or more). This could be for more specialist services unavailable within the Shire, such as specialist health services, Government services such as Centrelink, or larger entertainment, social and recreational venues.

The proximity of population centres in northern Golden Plains to Ballarat and of southern Golden Plains to Geelong means that it is unlikely that more of these specialist services would be developed within Golden Plains itself, with these towns considered a catchment to services within the regional city.

There is some scope to provide temporary services, such as dental vans, library vans and other moving services, but increasingly these are being replaced by telehealth and internet or phone-based services.



6.7 POOR ACCESSIBILITY FOR VULNERABLE USERS

Accessibility for vulnerable users is limited to the services available. V-Line coach services have accessible lifts for wheelchairs and mobility aids with some restrictions though this is not guaranteed (limitations on mobility aid size and number of aids which can be accommodated). The new agreement (2022) with PTV for regional bus and coach services should improve accessibility with all coaches and buses being accessible by the end of 2023.

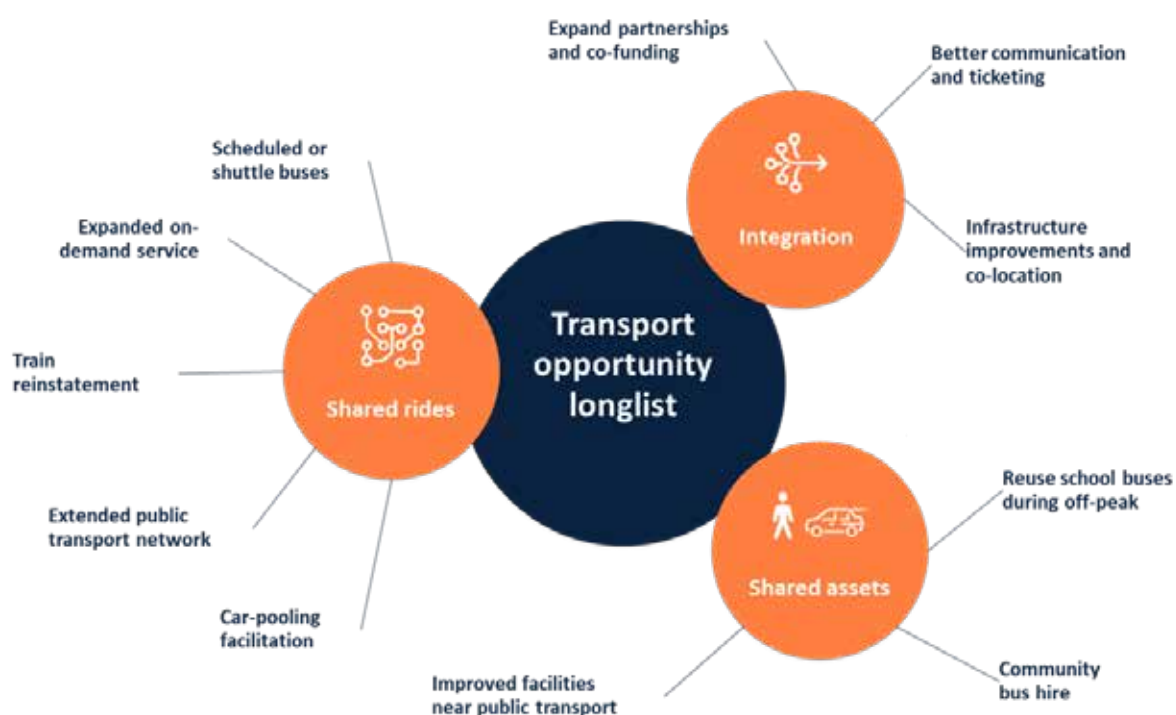
Journey distances to bus stops and poorly provisioned bus stops lacking shelters and waiting areas also discourages those with mobility challenges who are transport disadvantaged.

6.8 COSTLY ALTERNATIVES TO CAR FOR FLEXIBLE AND CONVENIENT TRAVEL

There is a large gap between flexible and convenient private vehicle travel and the infrequent and narrow-timing for public transport from a discrete number of isolated locations. With few alternatives, any trips which must be taken necessitate the use of expensive alternatives such as taxis or private vehicle hire. Proliferation of car share options for those without vehicles in urban areas might be appropriate for those within the Shire with temporary lack of access to their own private vehicle.

7. TRANSPORT OPPORTUNITY LONGLIST

These opportunities were developed to undertake a workshop with Council staff to explore each of the potential options and their effectiveness and what role Council would have in implementation. Those presented below include a summary of the opportunity and some benefits and limitations for implementation.



7.1 SHARED RIDES

Shared Rides look to strike a balance between the flexibility and convenience of private vehicles with trips attuned to demands, while utilising shared transport services to reduce costs on individuals and service providers.

Scheduled buses:

- Commonly suggested option by Council staff and the community.
- Two trials of scheduled buses have been undertaken over the past 2 decades: The Golden Plains Community Bus Trial, in 2021, and the Golden Connections Project – Phase 2 in 2006 (see sections 2.2.1 and 2.2.3).
 - The 2006 trial had 3 scheduled bus services across the Shire with low patronage.
 - The 2021 trial was impacted by Covid-19 but also saw low patronage.
 - Services largely mirror or extend on existing services.
- Potential barriers include the cost commitment. Also scheduled public transport is under State Government jurisdiction.
- Literature review of rural and regional transport suggests on-demand services would be more efficient than scheduled services due to limited walking catchment of scheduled services and efficiency of on-demand services for covering low-density populated areas.

Shuttle transport between towns targeting services:

- Increase the number of community-based services in key towns within Golden Plains and increase local transport to these services. For example, providing improved transport for all community members across Golden Plains to facilities such as the Youth Hub in Bannockburn.
- As above for services in Inverleigh.
- Note: One of the benefits of the Youth hub is that it gives students a place to go before parents pick them up, if they miss the bus. So, it is a car-pooling and an information transport hub already.
- Feeder services for existing transport and Council services.

Train reinstatement:

- Replace Ballarat-Bendigo bus with reinstatement of rail services, linking with existing rail services in Geelong, Ballarat and Bendigo and expanding network connectivity and tourism potential. The current bus service replicates train service with lower levels of service.
- Historical rail lines in the region have been closed or become freight-only lines however, the population growth in Ballarat, Geelong, and the growth expected in smaller towns such as Bannockburn indicate that investigation into passenger rail services returning to some lines may be warranted.
- The recent Victorian Budget focused on regional investment into infrastructure, ahead of the Commonwealth Games in 2026. In preparation, the state government is planning to allocate \$2.6 billion across Geelong and other regional centres. The Commonwealth Games present an opportunity for major road and public transport improvements, including advocacy for returning rail passenger services from Ballarat to Geelong, including Bannockburn and Meredith.
- In the long term, this advocacy would lead to tourism benefits through increased connections to the Grampians and Central Goldfields in the Pyrenees region.
- Growth in western Geelong and Bannockburn could also see shorter sections of the network reinstated to include passenger services if longer regional trains are yet to become viable.

Expanded on-demand service:

- Golden Connections Project – Phase 1 in 2003 (see section 2.2.2) – door-to-door car service to appointments and social activities trialled with some success. Separate Dial-a-ride booked bus service was discontinued.
- Golden Connections Project – Phase 2 in 2006 (see sections 2.2.3) – there was a positive response and demand for the “Wiggly Bus”, a demand responsive service in the north of the Shire with a flexible route.
- Stakeholder interest in a pick-up and drop off service where people miss the bus.
- On-demand services require greater up-front planning and investment but use transport services more efficiently.

Extended public transport network:

- Additional stops on public transport network to increase catchment.
- Extend public transport network to Teesdale.
- Connect Bannockburn to Teesdale and Inverleigh.
- Likely low catchment, but few alternatives and Bannockburn contains most everyday needs (i.e. chemist, supermarket, ATM).
- Increased weekend frequencies and late-night frequencies during the week to support recreational and social activities.

Car-pooling facilitation:

- Providing parking areas and online facilitation of car-pooling for regular trips may include re-designation of existing car parking and better communication facilitated by Council.

7.2 SHARED ASSETS

Community bus hire:

- Community buses already in use for planned excursions currently. The existing bus fleet can be made available for hire by community groups, with the appropriate organisational procedures in place.
- Golden Connections Project – Phase 1 in 2003 (see section 2.2.2) – bus hire trialled with some success. Used volunteer drivers and self-drivers.
- Insurance related constraints noted by Council staff and previous drivers during stakeholder engagement.

Reuse school buses during off-peak:

- School bus re-use opportunity highlighted in the Rural Network Development Plan (see section 2.1.1.1).
- Golden Connections Project – Phase 1 in 2003 (see section 2.2.2) – School buses were used when demand exceeded the achievable level of service using available Council vehicles.
- Legislative Council indicated this was a possibility but should not be to the detriment of school children using the service.
- Council already has a range of fleet available for use.

Improved facilities in and around public transport infrastructure:

- More bus shelters and seating would not only improve the public transport experience, but also neighbourhood experience.
- Greater connectivity to bus stops will provide improved experience for most users and provide critical minimum requirements for some disadvantaged users.
- Should be incorporated into other planning (i.e. shared trails).
- Two streams of desire, one is to enhance and improve, the other is to look for the bare minimum for accessibility. Each should be approached differently.

7.3 GREATER INTEGRATION

Better communication and ticketing:

- Traditional social media and newsletter notices should be supplemented with other forms of communication, as there is low awareness of the existing transport options within the community. This could reduce the friction involved in choosing public transport.
- Other forms of offline communications include posters and brochures that are distributed across Golden Plains, including post offices, community centres, and bookshops. Frankston Council provides brochure to residents about options for non-drivers or those transitioning away from driving.
- There is no single source of information for public transport, community transport and other associated information. A centralised and up-to-date website or location with transport specific information (i.e. ticketing outlets – including opening hours) could address this gap.

Infrastructure improvements and co-location:

- Mobility hub creation
 - A mobility hub is a location for switching modes of transport that can be formally or informally integrated around amenities, such as community halls, shops, village squares. Common elements include parking areas for cars and bikes, pick-up and drop-off areas for buses, taxis and carpooling, sheltered waiting areas and cafés.
 - The mobility hub concept could be feasible in townships with higher density activity areas, such as Bannockburn, Smythesdale, Linton, Teesdale. However, there is also demand for this type of service in the smaller townships or new areas with very little transport options, but they can be harder to service. Residents are interested in this type of service as they currently have to travel out of their townships in order to reach others, however, these areas often lack development and growth.
- The development of an intermodal transport hub in Bannockburn for public and active transport has been detailed in the Bannockburn Growth Plan 2020-2040.
- Infrastructure additions could include:
 - Bicycle parking at bus stops and more bicycle parking generally.
 - Improved hard-stands and waiting areas.
 - More taxi ranks in busy areas.
 - Mobility device (larger devices) parking.
 - Additional car parking at bus stops (low patronage and parking rates suggest this is low



priority).

Expand partnerships and co-funding:

- Reduce siloed-transport budgets and assets and instead partner with other public and private organisations with relevant skills and capacity, such as other Councils or transport providers with relevant skills. This could also improve the ability to service residents at the border of two Council areas.
- Social clubs and non-Council services of all types could benefit from Council support in seeking grants or assistance with funding or assets (i.e. golf clubs, tourism and recreation locations).
- International cases studies provide several approaches to better partnerships and co-funding:

Introducing common vehicle standards to all service contracts would remove many of the legal barriers to co-ordinated delivery across general public transport, education and health services.

Innovative funding: 1. Cross-subsidisation from urban to rural area, for example through larger tenders, including both urban and rural areas. 2. Cross-sectoral funding involving education, health services and local businesses (e.g. local sponsorship for community transport, already common in Europe).

Make regulations more flexible to allow for the development of innovative, cost-effective mobility solutions: Operators of a greater variety of mobility solutions should be given legal status as public transport service providers, in order to benefit equitably from subsidies or tax deductions. Specifically, tender and operator licensing requirements should be adapted to allow the following to bid for public service contracts in rural areas: local taxi, demand-responsive and community transport providers.

8. TRANSPORT OPPORTUNITY SHORTLIST

The opportunity shortlist is a set of actions that will enable Council to achieve the vision of improved transport connectivity and accessibility, which will facilitate higher living standards, economic prosperity and social inclusivity for the community.

In partnership with Council, the following 5 opportunities were shortlisted. These opportunities should empower Council to take local action, advocate with State Government level, or seek partnerships and funding in order to implement appropriate solutions for the benefit of residents.



8.2 SHORTLISTING PROCESS

Shortlisted opportunities have been selected from the longlist by:

- Assessing the opportunities against the transport gaps, in order to address all the gaps.
- Considering the ease of implementation and the role Council is able to play in delivering the solution. Actions that allow Council advocacy, facilitation, funding and partnerships were preferred as they encourage collaboration between Council and the State Government to deliver a shared outcome.
- Regional interdependencies are also considered, such as the need for collaboration with Ballarat and Geelong LGAs.
- Considering alignment with Council's strategy and priorities, shortlisted opportunities should align with Council's 2040 Vision, Active Aging and Inclusion Plan, Youth Development Strategy, Sport and Active Recreation Strategy and **Bannockburn Growth Plan**.

The shortlisted opportunities, shown in Table 8–1, have been grouped according to the type of action and how they might be delivered by Council with advocacy separated from infrastructure delivery and communications.

Most shortlisted opportunities target multiple issues identified in the previous Transport Gaps sections. These issues are represented by:

- Issue 1: Car dependency restricting travel freedom
- Issue 2: Limited public transport limiting accessibility
- Issue 3: Narrow public transport running times reduces convenience
- Issue 4: Poor service awareness restricting demand
- Issue 5: Last mile service gap restricting demand
- Issue 6: Proximity to regional centres limits local services
- Issue 7: Poor accessibility for vulnerable users
- Issue 8: Costly car alternatives to private vehicle for flexible and convenient travel.

Table 8–1: Shortlisted opportunities and targeted transport gaps and issues

Shortlisted Opportunities	Council Role	Transport Gaps Targeted							
		Issue-1	Issue-2	Issue-3	Issue-4	Issue-5	Issue-6	Issue-7	Issue-8
Improve Existing Public Transport Network	Advocacy	✓	✓	✓			✓	✓	✓
Complementary Services	Service or funding provider	✓	✓	✓			✓	✓	✓
Improved Communications and Ticketing	Information provider	✓			✓				✓
Moderate Infrastructure Enhancements	Advocacy or delivery	✓				✓	✓	✓	
Accessibility Enhancements	Service provider or advocacy	✓				✓	✓	✓	

8.3 SHORTLISTED OPPORTUNITIES

8.3.1 IMPROVE EXISTING PUBLIC TRANSPORT NETWORKS

Council's role in improving the public transport network is to advocate for improved services, provide support for existing services and work with DoT to review performance, suitability and alignment with Council and State Government strategies.

- **Improved service frequencies**
 - Increased weekend frequencies to facilitate more social and recreational trips
 - More frequent day-time services to connect local and inter-LGA movements to provide for those who rely upon public transport for critical trips, as well as for improved social and recreational trips.
- **Extended network**
 - Extend network to Teesdale and beyond (e.g., Rokewood, Inverleigh-Bannockburn) to improve intra-LGA movements
 - Additional stops within larger towns for greater catchment
 - New routes where appropriate.
 - **Reinstate passenger trains on Geelong-Ballarat-Bendigo**
 - Trains have greater ridership than buses due to greater reliability and comfort
 - Tracks are still in use by freight services and public transport is too infrequent for commuting despite the rapid population growth along the route
 - The G21 region is considering reinstating train services to growth areas in Geelong's west and to respond to investment opportunities presented by the 2026 Commonwealth Games. Council should leverage these regional advocacy efforts.

It is difficult for Council to effect changes directly. Gathering information and engaging with public transport operators and incorporating improved public transport advocacy into Council's strategic documents will assist to promote additional services and better targeting services.

Advocating and planning for improved Public Transport Services should be done in partnership with the City of Ballarat and the City of Greater Geelong including extension of existing services from suburbs of Ballarat and Geelong and in partnership with respect to reinstating passenger trains.

There have been recent political commitments to improve services in northern townships of Golden Plains from the extension of existing urban Ballarat services. Advocacy for improved services could come from all levels of Council. Councillors advocating for improved services from Government and Council officers should consider existing and future public transport needs in strategies and policies aimed at the target groups, as have already been identified in previous strategies.

8.3.2 COMPLEMENTARY SERVICES

Complementary services are those services which are transport services complementary to existing services. These are services to which Council can contribute either funding, facilitation or use of Council property/assets. Complementary services will address last mile, limited services, poor

accessibility for some vulnerable users and cost of alternatives.

- **Council to facilitate or assist social groups in organising transport options**
 - Work with existing groups to support transport connectivity and options
 - Ongoing partnerships with other community organisations such as sporting and social clubs.
- **Partnerships with state Government to run additional connecting services**
 - Similar to previous bus trials
 - Consider on-demand services for local destinations
 - Consider on-demand or scheduled feeder services for public transport services

Figure 8–1: Community Bus Trial (Golden Plains Shire website)

- **Transport to Council-run activities**
 - Youth group access in Bannockburn and Inverleigh
 - Consider on-demand or scheduled services for festivals and other Council events
- **Facilitation of trips**
 - Assist community groups to seek grants for transport funding
 - Provide Council assets (parking, buses) where appropriate
 - Engage with schools to re-use school buses during non-school use hours.



Many of these complementary services would run in partnership with other organisations or organisers. Previous feedback from transport trials indicated that the better the Council engagement and co-ordination with partners the better the outcomes would be for these services.

Literature review and consultation suggests that on-demand bus services may be more efficient than scheduled services to meet current gaps in transport needs. This would be a more efficient use of bus/vehicle costs but would require greater effort in communications and organisation.

It is not clear which department or officer within Council would be responsible for delivering these services or facilitation of the tasks outlined above with current responsibility for community transport being shared across the youth and positive ageing teams. These two groups are the most likely target audience and therefore a partnership between departments or officers may be appropriate.

Council's role would be one of service provision and partnership with community transport providers. Community transport providers and community organisations may be able to better access Commonwealth funded programs. In addition, they may also have existing booking systems in place for on-demand transport. For example, LINK Community and Transport is a not-for-profit community organisation that operates a community transport fleet of accessible vehicles, specially trained drivers, mobility assistants and in-home carers within Victoria.

8.3.3 IMPROVED COMMUNICATION AND TICKETING

A consistent issue raised by the public during one-on-one interviews and workshops was the lack of understanding of current transport options and lack of communication for previous trials resulting in poor patronage. Better communication would reduce car dependency, address poor service awareness and improve use of cheaper alternatives to the vehicle (such as taxis).

- **Provide centralised web-page with relevant information**
 - Links to public transport websites
 - Links and information of Community Transport options provided by Council
 - Links to other community transport providers
 - Publicise changes to services (in conjunction with DoT/PTV).
- **Provide information to disadvantaged users**
 - Include ticketing access information
 - Include accessible information (non-web-based) including timetables and relevant contacts
 - Targeted to audience (geographically and/or user group)
 - Advise of changes to services (in conjunction with DoT/PTV).
- **Consider ticketing alternatives for ticketed v-line services (Ballarat-Warrnambool line).**

Council's role is to provide information to residents for their benefit, as outlined in various strategies and policies. The Communications team would be the likely team to deliver the services, though would benefit from inputs from the youth and positive ageing team with respect to information required and target audiences. Due to the nature of providing links to external websites and risk of reliance on information, the establishment and ongoing maintenance of information provided should be well delineated with respect to responsibility as well as communications with external providers to advise of changes and updates.

Mailing lists of transport disadvantaged or registered/interested residents could be established to ensure timely and targeted information is provided to those users if any changes occur.

8.3.4 MODERATE INFRASTRUCTURE ENHANCEMENTS

Council could enhance the existing transport experience by providing moderate infrastructure enhancements to the network. Consultation and feedback from users of existing and trial services regularly identified poor waiting conditions at both ends of trips. Lack of protection from the elements as well as perceptions around security and safety were raised. Providing enhanced infrastructure at bus stops and surrounds would reduce car dependency, improve the last mile gap, enhance the local area to attract services to regional centres and improve accessibility for vulnerable users.

- **Provide infrastructure at bus stops**
 - A DoT responsibility to provide this infrastructure could be looked as a partnership opportunity where Council would benefit from these facilities for other users (walking, gathering) without specific PT usage.
 - Advocate to DoT and work with advertisers to provide enhanced amenities around bus stops and create attractive public areas.
 - Could include infrastructure such as drinking fountains, seating, shading, shelter, notice-boards, rubbish bins.
- **Provide areas for connecting services**
 - Provide specific car-pooling parking spaces in central locations
 - Provide park and ride facilities (long term parking) near bus stops including bicycle and other mobility device (i.e. scooter) parking
 - Consider new remote park and ride facilities for high-demand trips.

The delivery of infrastructure enhancements could be included in capital works budgets under a range of departments as they could be linked to nearby community facilities or established exclusively for transport use. It is not clear which area of Council would be responsible for driving delivery, but many Council departments would benefit from such streetscape enhancements.

8.3.5 ACCESSIBILITY ENHANCEMENTS

Specific enhancements for accessible use would benefit those within the Shire who are most disadvantaged. This opportunity covers a lot of the same issues/gaps as the Infrastructure Enhancements but should be specifically targeted at those vulnerable and disadvantaged users.

- **Improved accessibility of bus stops**
 - More accessible parking bays in close proximity to bus stops
 - Improved ramp and footpath access including new crossings
 - Protected waiting areas and loading areas for accessible buses.
- **Partnerships with state Government to prioritise improvements in service accessibility**

Council could advocate for improved accessibility as part of DoT/PTV remit in providing public transport services, however locations within Golden Plains likely to be low-priority given the extensive lack of accessible PT stops throughout the Victorian network. Council should take the lead in providing these facilities for its most disadvantaged users, whilst continuing to seek partnerships with DoT to deliver these outcomes. Council is well-placed to target improvements for specific regular users and well-used stops and engage with the community to prioritise locations for enhancements.

9. CONCLUSION

This study examined relevant literature, existing demographics, travel patterns and sentiment to establish the existing gaps in transport connections within Golden Plains and a set of strategies to action to address those gaps.

The two primary stakeholder groups that emerged in the study, as defined by their needs, are:

10. Residents who lack independent access to private motor vehicles and are therefore transport disadvantaged in ability to access critical services.
11. Residents with an ability to drive but are seeking alternatives to private motor vehicle use, to enable greater social and recreational trips.

The study identified transport gaps and themes, developed a longlist and prioritised shortlist of opportunities for Council to undertake, and provided an approach to implementation.

Shortlisting was undertaken with the aid of workshops and by assessing how well the opportunities were able to address transport gaps, whilst considering constraints such as limited Council resources and responsibilities. This led to a set of 5 implementable opportunities with a range of sub-components for action including:

- Improve Existing Public Transport Network – Advocating for improved public transport targeting the transport disadvantaged and latent demand for social and recreational trips.
- Complementary Services – Complementary Services to be provided in partnerships with other organisations to complement existing transport and Councils services.
- Improved Communications and Ticketing – Improved communications in the form of centralised information to be provided to target audiences.
- Moderate Infrastructure Enhancements – Moderate infrastructure enhancements for existing transport services.
- Accessibility Enhancements – Accessibility enhancements to improve connectivity for the transport disadvantaged.

APPENDIX

Key survey results from a total of 68 respondents were collected online through the study. As the survey respondents only represented a sample size of the overall population of Golden Plains, certain demographic groups were skewed relative to data from Golden Plains, resulting in either an over representation or underrepresentation of the population. Groups that are overrepresented are highlighted in blue, while those underrepresented are highlighted in orange.

As shown below survey respondents were skewed towards the older age groups, with ages 36 to 50 representing 38 percent of the cohort, followed by ages 51 to 65 representing 25 percent and ages 18 to 25 not represented at all.

Overrepresentation of ages 36 to 50 could be a potential result of greater interest expressed in transport in the Shire or lack of engagement with advertising channels of the survey. The needs of 18 to 25 age groups were not captured, which creates a gap in identifying the specific needs of this age group. These needs can also greatly differ from those in the other age groups, considering many 18 to 25-year-old may be entering the workforce or tertiary education.

Further, the survey may not fully represent the lifestyle choices and daily needs of younger age groups, such as under 18s, who experience less travel independent and instead rely on parents or other adults who are able to drive.

Survey Age Ranges

Age Range	Count	Percentage (%)
Under 18	3	4
18 to 25	0	0
26 to 35	9	13

Age Range	Count	Percentage (%)
36 to 50	26	38
51 to 65	17	25
65 and over	13	19

Household composition of respondents is presented below. The survey represented mostly respondents who lived with their husband, wife or de facto partner than those who live with children under 18 or are living with parents.

Therefore, those respondents, consisting of households who may have children relying on parents, who have less travel independence may be negatively impacted by challenges greater than other households, but underrepresented in the survey. In addition, needs of youth are also not fully represented e.g. travelling for recreation and entertainment multiple times a week.

Survey Household Structure

Household structure	Count	Percentage (%)
Children over 18	3	4
Children under 18	13	19
Husband, wife, or de facto partner	45	66

Household structure	Count	Percentage (%)
Parents	4	6
Unrelated flat mate or co-tenant	3	4

Geographically, there were 54 survey respondents from towns, or close to towns within the south, resulting in a strong representation relative to those from the North. Therefore, the survey responses may be biased to those who travel to Geelong rather than those who travel to Ballarat which is closer to the North.

Furthermore, although Smythesdale and Lethbridge are amongst the top 5 most populated towns in the region according to Census data, but there were only 1 respondent from Smythesdale and 5 from Lethbridge, therefore there is an underrepresentation of the needs of populations from these two towns.

Survey Top Townships

Top townships that respondents live in or live closest to	Count	Percentage (%)
Bannockburn	17	25
Inverleigh	10	15
Lethbridge	5	7
Linton	3	4
Meredith	3	4
Teesdale	14	21

There was greater participation by those with disabilities in the survey, with 6 percent who identified with a disability, compared to the Golden Plain average of 4.6 percent. This higher figure could be a potential indication of greater interest from this group of respondents, who may present greater need for transport within the region.

Survey Respondents with a Disability

Disability that impacts mobility	Count	Percentage (%)
I prefer not to disclose	4	6
No	60	88
Yes	4	6



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