

Transport Access Strategy

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# Foreword

Tasmania’s population is dispersed across larger cities, country towns and smaller rural communities, resulting in many challenges for the public transport system, particularly for those in our community who are transport disadvantaged, such as the elderly or people with disability.

In particular, there has traditionally been little coordination between regional, urban fringe and metropolitan services that would, if addressed, increase the coverage and frequency of services across the State to the benefit of all road users.

The Tasmanian Government committed to developing a Transport Access Strategy to provide better integrated and coordinated transport services for transport disadvantaged Tasmanians, to reduce social isolation. This Strategy is the first cornerstone in our longer term approach to improving transport for all Tasmanians.

Hon M.T. (Rene) Hidding MP

Minister for Infrastructure

# Purpose

The *Transport Access Strategy* sets out the Tasmanian Government’s approach to providing better integrated and coordinated land-based passenger transport services for all Tasmanians, particularly those disadvantaged through economic circumstances, age or disability. While there are a number of actions in the Strategy that are specifically targeted at urban areas, this document is a statewide strategy, with many of the actions being deliberately designed to apply on a statewide basis.

This Strategy will help give effect to the Government’s commitment to building a modern economy for Tasmania and providing essential services that create resourceful and resilient people, strong communities, and viable industry.

The *Transport Access Strategy* aims to improve social connectivity and access to employment (paid and voluntary), training and education, services and recreational opportunities through progressing the following priority areas -

1. **Living closer**: improving opportunities for people to live closer to employment, education, services, recreational opportunities and key transport corridors.
2. **Working together**: fostering stronger collaboration and partnership between governments, key service providers, and public, private and not-for-profit transport providers.
3. **Connected transport** **system:** focusing on frequent, efficient, accessible, affordable and reliable transport services.
4. **Better integration**: ensuring public transport is easier to use through better coordination and integration of services.
5. **Closing transport gaps**: developing innovative approaches to enable transport-disadvantaged members of the community to overcome transport barriers.
6. **Innovative pricing**: developing innovative pricing mechanisms to support the greater use of public transport in order to make it more viable.
7. **Improved infrastructure**: providing more opportunities for people to walk, cycle and use public transport by making sure infrastructure is safe, accessible and attractive to use.

This Strategy will be one part of a broader framework for public transport in the state.

# Policy context

Transport access issues are often complex and are unlikely to be effectively resolved in isolation from the broader policy environment. Consequently the *Transport Access Strategy* favours a holistic, collaborative approach to addressing transport issues and gaps.

A number of new Tasmanian Government initiatives are already underway that will contribute towards improving access to employment, education and training, services and public transport. For example the state-wide land use planning reform process and *Tasmania’s Affordable Housing Strategy 2015-25*.

In implementing this Strategy, the Department of State Growth will need to engage and collaborate with a wide range of community, transport, local and state government stakeholders on the identified initiatives. For initiatives where there is shared responsibility, negotiation and flexibility will be required.

The development and implementation of initiatives will also need to take into account, and be responsive to, differences between urban and non-urban environments, and differing local community needs.

The *Transport Access Strategy* complements the *Tasmanian Urban Passenger Transport Framework,* which aims to provide a safe and responsive passenger transport system that supports improved accessibility, liveability and health outcomes in our urban areas.

The *Transport Access Strategy* will extend the considerations set out in the *Tasmanian Urban Passenger Transport Framework* by:

* improving transport access for those who may experience disadvantage due to economic circumstances, age or disability;
* addressing ‘transport gaps’ in urban areas; and
* addressing the transport disadvantage faced by many Tasmanians living in urban-fringe, rural and regional areas.

## Development

The Strategy was developed in multiple stages, in collaboration with transport industry representatives, state and local government agencies and community stakeholders. A total of 22 submissions were received through the public consultation stage, showing a strong level of interest and engagement in improving public transport in Tasmania. Most submissions supported the initiatives outlined in the draft Strategy and also provided constructive feedback, which the Government has taken on board and used to inform the final Strategy.

Some feedback sought to expand the Strategy beyond its original scope, and these submissions provided strong arguments in support of these views. However, the Government considers that the original intent of focussing on transporting disadvantaged people must remain intact, as it is a key priority for the Government to ensure acceptable levels of mobility for these Tasmanians. For this reason some proposed changes to the Strategy have not been adopted, but will be considered in future work.

A strong theme that arose during consultation was a desire to see funding allocated to the future opportunities as well as firm milestones identified for delivering these opportunities. However, many of the activities identified in the Strategy require further consideration before the Government can put them through the normal budget processes.

## The nature of transport disadvantage in Tasmania

Transport disadvantage occurs where those members of the community are not able to access either public or private transport to get to where they need to go.

Transport disadvantage is often experienced by specific sections of the community such as young people, people with disability or single parents. However, transport disadvantage can also occur as a result of where you live. For example, people living in urban fringe and regional areas are more likely to experience difficulty in accessing transport than people who live closer to the main population centres.

Australian Bureau of Statistics (ABS) research conducted in 2010 shows that:

* 26 per cent of Tasmanians in the lowest income quintile could not easily get to the places they needed to go;
* for unemployed adults, the figure was higher at 34 percent;
* for those with poor health, the figure was even higher at 40 percent; and
* 42 percent of Housing Tasmania renters reported not being able to get to places they needed to go, with 46 percent lacking access to a vehicle[[1]](#footnote-1).

State-wide community consultation conducted by the Tasmanian Council of Social Services (TASCOSS) in 2013 found that the group currently most likely to experience transport disadvantage are people who are not necessarily aged or living with disability but are:

“…not eligible to drive or who cannot afford a vehicle and who live outside the catchment of regular services, cannot afford existing taxi fares and are not formally eligible to use existing not-for-profit services[[2]](#footnote-2).”

TasCOSS notes that younger people currently constitute a high proportion of those falling into this category. Being able to access post-secondary education and training, employment, essential services, recreation and social networks is vital if young people are to contribute to the economic and social fabric of our communities.

During the TasCOSS consultation process[[3]](#footnote-3) participants identified a range of issues specifically relating to public transport:

* Bus services are limited to particular areas and people have trouble getting to the bus and getting from the bus to their destination;
* People often need transport outside the span of hours in which buses (and community based transport) operate;
* People often need to catch more than one bus. These are often operated by different companies and the timetables are often not coordinated;
* It is often physically difficult for people to transfer between services as the bus stops or interchanges used by different operators are often not co-located or near each other;
* Public transport fares are unaffordable for many people and it is necessary to buy separate tickets for each different bus service. Concessions are not available to people on low wages;
* It is difficult to find information about bus services as there is no centralised source of information about services in particular areas, timetables, fares or routes; and
* It is difficult to provide feedback to transport operators about their services.

## Challenges for public transport

Tasmania’s small and highly dispersed population makes it difficult for our public transport system to meet the needs of all users. In addition, Tasmanians are highly dependent on the car as a means of travelling to work, accessing education, training and services and participating in recreational and social activities. People without access to a car are likely to have difficulties accessing the places they need to go. This affects individuals’ quality of life and the productivity and vibrancy of our communities.

Public transport patronage in Tasmania is low. The *Greater Hobart Household Travel Survey 2010* found that 75 percent of all trips are made by car, with public transport accounting for only four percent of all trips[[4]](#footnote-4) .

In Tasmania 85 percent of journey to work trips are undertaken by car, with bus travel accounting for six percent of mode share in Hobart, two percent in Launceston and well under one percent in Burnie and Devonport. Across Tasmania, six percent of people walk to work, three percent catch a bus and less than one percent cycle[[5]](#footnote-5).

For school related trips within Tasmania, 53 percent of students travel by bus, 30 percent by car and 15 percent walk or cycle[[6]](#footnote-6).

People who live in rural or urban fringe areas, and those who need to travel to the urban fringe (for example, to industrial estates) or rural areas to work may experience difficulty accessing public transport. Where bus services are available in regional, rural and urban fringe areas, they are likely to be less frequent and operate over a shorter span of hours compared with urban services.

Therefore people who live in these areas may be forced into car ownership through a lack of alternative transport options. For low income households this is likely to result in a higher proportion of spending on transport, meaning they have less money available for other household purposes. Low income households are also likely to be more vulnerable to increases in costs associated with car use, including rising fuel prices[[7]](#footnote-7). Further, they are more likely to own cheaper, older vehicles that are less efficient and contribute more pollution to the environment.

Where public transport is available in these areas, journey times are likely to be slower than by car, which decreases their attractiveness to potential users. This is exacerbated if bus services travel on circuitous routes, or if transfers between services involve long waiting times.

People who start and finish work outside the weekday 8:00am-6:00pm span of hours (hospitality and food industry workers, some retail employees, shift workers, agriculture and aquaculture industry employees) are likely to have difficulty using public transport to commute to work. For these groups, and those who use public transport for social and recreational outings, the provision of services across all days of the week and a wide span of hours is important.

Given that Tasmania’s population is ageing faster than the rest of Australia and there is a high level of car dependency, it is likely that there are greater numbers of older people experiencing difficulty in accessing essential services[[8]](#footnote-8), particularly for those living in urban fringe and regional areas.

As a consequence of the challenges in providing public transport that meets the needs of all Tasmanians and of the factors that support widespread private car use, cars will continue to be the dominant transport mode in Tasmania.

Tasmania’s terrain and dispersed population dictates that, despite the challenges of providing bus services that meet the needs of all users, buses should continue to be the cornerstone of public transport into the near future[[9]](#footnote-9).

## Public transport needs

The needs of public transport users are varied – which is in itself a challenge for public transport provision.

People commuting to employment, education and training generally aim to minimise their total journey time and, consequently, value frequent, fast, reliable and direct services. They also may be prepared to walk further, particularly in urban areas, to access efficient services that minimise their overall journey time.

Some people, including those who have mobility limitations because of age or disability (or the need to carry the weekly shopping or manage a pram), may place a higher value on being able to access public transport close to where they live or their travel destination. For people with mobility limitations, the distance (however short) between their home or travel destination and the bus stop can be a major barrier to the use of public transport, particularly if there are no footpaths or if the footpaths are difficult to negotiate. The accessibility of bus stops and buses can also be a major barrier for people with personal mobility limitations.

For some people with mobility limitations, using a bus is impractical or impossible and, if they don’t have their own vehicle, Wheelchair Accessible Taxis (WATs) might be their only transport option. Transport issues arise in areas where WATs are not available at all, or not available when required, or are too expensive for people to use for long trips, even with a Transport Access Scheme subsidy.

For people with greater physical mobility, walking and cycling as part of their daily transport journeys can be cost effective. These activities can form part of a daily physical activity regime that can deliver social, physical and mental health benefits, including reducing the risk of chronic diseases like cardiovascular disease[[10]](#footnote-10). However, people need safe, well connected walking and cycling routes so that they can walk and cycle as part of their transport journeys.

In order to use public transport, people living or working in non-urban or urban fringe locations need to be able to physically get to the bus stop from their home or place of work. In many of these areas, the nearest bus stop could be beyond a reasonable walking distance away, which makes it less likely that a person will use public transport. Such issues are referred to as “first mile/last mile” issues.

The provision of early, late and weekend services are important in meeting the needs of those travelling for recreation or social purposes, and those who work outside the typical weekday 8:00am-6:00pm span of hours.

Tasmania is experiencing a boom in tourism, which has become an important cornerstone of our economy. This has generated growth in demand for both self-guided transport and bus/coach travel. Such demand is largely met by commercial services without government intervention; however, there are also a number of Government-contracted bus services that are used by both tourists and locals alike. In these instances, while tourist demand does not necessarily drive decisions on service levels, it can be relevant to service design.

Service provision needs to reflect a balance between providing fast, efficient, direct and reliable services on key public transport corridors, and ensuring that people who live away from key corridors, have mobility limitations or need to travel outside peak periods have access to transport. The Transport Access Strategy is intended to bring together initiatives that go towards achieving this goal.

## Addressing transport gaps: focusing on supporting mobility

Whilst regular bus services should form the ‘spine’ of public transport into the future, the bus network alone cannot efficiently and effectively meet the disparate needs of all users, especially given Tasmania’s small and dispersed population.

Addressing ‘transport gaps’ demands a holistic, collaborative approach to passenger transport, from all levels of Government and commercial and community transport operators, as well as other community organisations. Such an approach will promote the innovative use of a range of public, private and not-for-profit services to facilitate transport access for a diverse public. Taxis, ride-sourcing vehicles, community cars, under-utilised school buses and private car pools are resources that might potentially be used in various ways to address identified transport issues and gaps.

Some potential uses of these services are outlined below -

* In urban areas and some larger regional centres, taxis provide a flexible, though relatively expensive, transport alternative to buses or private cars. There may be potential to use taxis as an adjunct to bus transport. For example, taxi operators could be contracted to collect passengers from areas that cannot be efficiently serviced by buses and deliver them to key bus routes.
* Ride-sourcing has recently emerged as an alternative to taxis in Hobart. It can provide a convenient point to point transport option through the use of application-summoned rides, but might not be suitable for everyone and is subject to peak pricing. For example, some people don’t own mobile devices that provide access to the booking service and there is not necessarily a ready supply of WATs in all areas.
* The Tasmanian Government funded Transport Access Scheme provides Tasmanians with disability who qualify for the scheme with subsidised taxi travel. In combination with the availability of WATs, the Transport Access Scheme provides people living with disability with a ‘door to door’ transport option. A ‘door to door’ service may be the best way to meet the needs of some users, but there may be potential for combining subsidised taxi transport and regular bus services to provide a more cost-effective option for some taxi users.
* The provision of permit-based ‘disability parking’ is another measure that aims to address transport access issues for people with disability – providing that person has access to a car. It authorises permit holders to park in accessible parking spaces and to park for longer than the designated times in non-accessible spaces.
* Australian Government and Tasmanian Government funded community transport services provide transport for eligible people – generally aged people or those with disability. Community-type transport services are also provided by a number of other bodies, such as neighbourhood houses, councils, clubs and religious groups that do not necessarily receive funding through Australian Government programs. There may be scope to utilise these vehicles in combination with regular public transport services in order to address service gaps.
* On-line car-pooling schemes could be used to provide cost-effective alternatives and/or adjuncts to public transport for some people.

# Structure of the Strategy

The *Transport Access Strategy* identifies seven priority areas for improving transport access for Tasmanians, particularly those who are disadvantaged through economic circumstances, age or disability. The priority areas are mutually reinforcing, and some of the initiatives contribute to more than one priority area.

The priority areas contain initiatives that are already underway including existing commitments by the Tasmanian Government. The future opportunities section of the *Transport Access Strategy* provides direction on how transport access can be further improved in the future. The future opportunities do not commit Government to action, instead they present options that Government may wish to consider, subject to further analysis and resource availability.

The Transport Access Strategy is a ‘living document’. This means some initiatives may be added or deleted and others may be modified through a process of review, as the implementation of the Strategy progresses. New initiatives might also be added as the environment changes and new programs are introduced. The Strategy is flexible so that it can respond to technology changes and product innovation, and ensure that the best use of the available, finite, resources is made.

# Priority areas

1. **Living closer**: improving opportunities for people to live closer to employment, education, services, recreational opportunities and key transport corridors.

Growth in urban fringe areas has been a key characteristic of Tasmania’s development pattern over recent decades. This has resulted in dispersed, low density residential development, separation of land uses and the location of large public housing areas on the fringe of major urban areas. Greater Hobart has a larger geographic footprint than Manhattan but only 13 percent of the population[[11]](#footnote-11) and the trend continues with 85 percent of new dwellings in Hobart being constructed in greenfield areas[[12]](#footnote-12). This pattern of development makes it difficult for people to walk and cycle for transport, and poses significant challenges to the provision of fast, frequent and reliable public transport services.

Where students live and go to school, particularly if they attend schools beyond their home area can add to travel demand. It is estimated that 10-15 percent of car traffic in the morning peak in Launceston is generated by school-related trips[[13]](#footnote-13). Encouraging attendance at local schools has the potential to reduce the need for travel and support more active travel options to school.

Providing opportunities for people to live closer to employment, education, services and key public transport corridors, especially affordable and social housing, increases the transport options available to them, thereby reducing car dependency and transport disadvantage. It will be particularly important to provide more opportunities for people to live in existing urban areas which are well serviced as Tasmania’s population grows.

The three regional land use strategies[[14]](#footnote-14) establish a framework for the state and local governments to work together to manage growth and development. The strategies promote liveability, including improved access to transport, through facilitating higher residential densities and managing urban growth boundaries. The Tasmanian Government’s initiative to prepare Tasmanian Planning Polices will directly inform the future review of these strategies.

The Department of State Growth has collaborated with local government to commission the *Infill Development Report* (2014), which identified barriers, enablers and potential measures to facilitate greater levels of infill development in Greater Hobart.

As part of progressing the first two actions in the *Infill Development Report*, the Department and the Hobart and Glenorchy City Councils have contributed funding to investigate priority sites for infill development along the Main Road Corridor between Hobart CBD and Glenorchy.

Housing Tasmania has developed the *Tasmania’s Affordable Housing Strategy 2015-2025* and the *Tasmania Affordable Housing Action Plan 2015-2019* to decrease the number of low income Tasmanian households experiencing housing stress and to decrease the number of people experiencing homelessness.  The Strategy aims to ensure that affordable housing is better located in areas that are well serviced and that are close to transport corridors and employment and education opportunities.

In the medium to long term, there is potential for improving transport access through better integration between land use and passenger transport planning. Strategies to improve integration could include -

* As part of the development of the Tasmanian Planning Policies, and in the implementation and review of regional land use strategies, consideration of how the design and location of significant new developments, such as greenfield residential or commercial developments or education, training and health services can ensure the effective use of the transport network.
* Development of public transport network plans that identify land for future development that can be effectively serviced by public transport.
* Development and adoption by local government of street design guidelines that support walking, cycling and public transport, including accessibility for people with disability.

Initiatives:

|  |  |  |
| --- | --- | --- |
|  | Underway | Responsibility |
| 1.1 | Implement *Tasmania’s Affordable Housing Strategy 2015-2025* and *Tasmania’s Affordable Housing Action Plan 2015-2019* to ensure that new residential development commissioned by Housing Tasmania meets the liveability and universal design policy requirements of the Minimum Standards for Social Housing and is well located, close to services and transport. | Department of Health and Human Services (Housing Tasmania)  By when: Action Plan implemented by 2019 |
| 1.2 | Uphold urban growth boundaries and ensure residential density targets outlined in the regional land use strategies are met. | Tasmanian Planning Commission, Department of Justice, councils  By when: on-going |
| 1.3 | Develop state planning policies to guide the location of development to ensure effective use of the transport network. | Department of State Growth, Department of Justice  By when: 2017-18 |
| 1.4 | Identify and undertake strategic planning for priority sites for infill development, focusing on the Main Road corridor between Hobart and Glenorchy. | Department of State Growth, City of Hobart, Glenorchy City Council  By when: 2017-18 |
|  | Future opportunities |  |
| 1.5 | Investigate planning mechanisms to provide stronger integration between land use planning and passenger transport provision. | Department of State Growth, Department of Justice |

1. **Working together**: fostering stronger collaboration and partnership between governments, key service providers, and public, private and not-for-profit transport providers

Developing transport options that address ‘transport gaps’ and effectively and efficiently meet the needs of communities, requires:

* collaboration between stakeholders to achieve better integration of land use and transport planning;
* facilitating partnerships and alliances between public, private and not-for-profit transport providers to deliver cost effective and efficient transport outcomes;
* partnerships and alliances between transport providers, essential service providers and businesses to facilitate access to services; and
* collaboration between all levels of government in relation to the provision of infrastructure, services and information to the public that supports transport access.

Addressing ‘transport gaps’ and issues demands a holistic approach to transportation – it is about supporting transport providers, service providers and various levels of government to form partnerships and alliances to facilitate and deliver transport that best meets the needs of the community.

The Ride2School initiative is an example of how the Bicycle Network, which is a not-for-profit organisation, can work with government, schools and the local community to encourage students to walk and ride to school.

The Tasmanian Council of Social Services (TasCOSS) *Transport in the Community Report* recommends that Government service agencies:

* conduct transport needs/gap analysis;
* create transport access plans; and
* provide information to their clients about travel options available to them.

Working with organisations to facilitate travel planning (including ‘travel training’ appropriate to specific audiences) is an opportunity to increase the number of people who walk, cycle and use public transport.

Schools and other educational institutions can use travel planning to help students to travel safely, sustainably and affordably, and to manage issues such as traffic movement and parking demand around their institutions.

For other organisations such as private business and not-for-profit organisations, travel planning provides opportunities for identifying transport issues for staff and clients and developing plans that address these issues. Travel planning can assist in attracting and retaining staff and volunteers, meeting client needs, managing parking demand, and reducing parking impacts on surrounding areas.

Initiatives:

|  |  |  |
| --- | --- | --- |
|  | Underway | Responsibility |
| 2.1 | Encourage higher levels of active travel to school, by:   * Working with the Bicycle Network to rollout the Ride2School program to primary schools. * Implementing the ‘Part Way is OK’ walk to school initiative for primary schools. | Bicycle Network - initial and one-off extension funding provided to position Bicycle Network to take the program forward  By when: one-off extension funding provided to Bicycle Network for 2017  “Part Way is OK’: Department of Health and Human Services  By when: ongoing |
|  | Future opportunities |  |
| 2.2 | Develop a framework for schools and large employers to:   * Ensure transport access is considered when planning new development. * Provide guidance in developing travel plans for students, clients and staff. | Department of State Growth, Department of Justice |

1. **Connected transport system**: focusing on frequent, accessible, affordable, efficient and reliable services to connect people to employment, education, services and recreational opportunities

Improving public transport on both key urban corridors and in urban fringe and rural areas will improve access to employment, education and services for people living in these areas. For key urban corridors the emphasis is on achieving faster overall journey times, a higher level of frequency and services operating over a wider span of hours. For urban fringe and rural areas, service frequencies will be lower due to less demand, but the emphasis is still focused on providing services which are efficient and direct.

The Tasmanian Government is working with stakeholders to plan and deliver better bus services on key transport corridors in urban areas. In Hobart, the draft *Main Road Transit Corridor Plan* focuses on introducing measures to improve bus frequency, travel time and reliability on the Main Road corridor, including the introduction of the very successful[[15]](#footnote-15) ‘Turn Up and Go’ Metro Tasmania high frequency service between Hobart and Glenorchy.

Metro has introduced a new, more efficient public transport network in Greater Hobart that provides more direct and express services, better connections at main interchanges and increased weekend services in some areas. The new network also improves frequency on key urban corridors such as the Hobart to Shoreline ‘Turn Up and Go’ service.

A draft *Greater Launceston Metropolitan Passenger Transport Plan* has also been developed to improve passenger transport in Greater Launceston. The key focus of the Plan is to improve the efficiency, reliability and effectiveness of the bus network. As an initial step in the development of the Plan the Tasmanian Government partnered with the University of Tasmania to trial a high frequency Metro 'Turn Up and Go' service on the Mowbray corridor between the Launceston CBD and the Newnham Campus. This trial was a success due to an increase in patronage by students (30 per cent increase in concession travel[[16]](#footnote-16)) and is now a standard inclusion in the timetable.

In regional areas, the Tasmanian Government has established a service between Strahan and Burnie, providing west coast residents with better access to their nearest service centre. The Tasmanian Government has also established a new bus service between Latrobe and Burnie to improve access across the north west coast and, in particular, to support travel between the Mersey and Burnie hospitals.

In the Public Bus Service Recontracting Project (Project 2018) the Tasmanian Government is finalising state-wide public transport service standards that will be used to guide network planning and inform the procurement of general access public transport services when existing contracts expire in 2018-2019.

Developing a new public transport network provides the opportunity to reduce route duplication (including routes on closely spaced parallel roads) and circuitous deviations. For example, route duplication may be reduced by allowing urban fringe bus operators that travel through metropolitan areas to collect passengers within the urban boundary. This may be particularly applicable where:

* identified Metro routes/services are under-patronised, enabling Metro to withdraw its services and better utilise the resources elsewhere;
* allowing an urban fringe operator to collect passengers at some or all stops may increase the efficiency of the network by providing additional service frequency and capacity without incurring additional costs; and
* private operators can fill in the gaps of Metro timetables, particularly during peak times.

There may be potential to change the way that student services are delivered in order to create greater network efficiency. This might involve removing some student-only services and using general access services to carry students, and/or requiring students to transfer between services.

Any network improvements can result in potentially more resources being made available to provide a greater service frequency, or services over a broader span of hours, which would help to better match services to current and projected demand.

Analysing people’s transport needs as part of developing a new public transport network may reveal opportunities for improving transport access. For example, routes might be altered to service existing and emerging needs, or timetables might be amended to better match the needs of the travelling public, local employers and training providers.

Developing a better understanding of people’s travel needs, for example those with limited mobility, the aged or young people may also reveal a need for specific training to ensure that transport operators and providers of transport infrastructure are aware of the perspectives and requirements of particular groups of users.

There may be scope for businesses, education institutions and other stakeholders to enter into partnerships with transport providers to develop services and products that best meet the needs of current and potential public transport users within their organisations.

The *Disability Standards for Accessible Public Transport 2002* require that all new vehicles for general access bus services are accessible. State Growth, through its current contract payment system, has taken positive steps to support the progressive updating of Tasmania’s bus fleet, including providing funding for the purchase of new, compliant buses, and requiring that general access bus operators develop accessibility action plans.

Initiatives:

|  |  |  |
| --- | --- | --- |
|  | Underway | Responsibility |
| 3.1 | Develop and implement state-wide public transport service standards to inform general access public transport planning and procurement. | Department of State Growth  By when: 2019 |
| 3.2 | Progressively improve the accessibility of public transport through:   * Providing a funding model to incentivise the purchase of compliant vehicles * Requiring all general access bus operators to provide an Action Plan to the ‘Australian Human Rights Commission’. | Department of State Growth (for contracted bus services), bus operators  By when: ongoing |
| 3.3 | Finalise the *Greater Launceston Metropolitan Passenger Transport Plan*. | Department of State Growth  By when: 2017 |
| 3.4 | Improve transport needs on the north west and west coasts by:   * Improving bus services between Latrobe and Burnie to minimise travel times and improve connectivity, particularly between the North West Regional Hospital and the Mersey Community Hospital to support the implementation of health reform, as well as to the Burnie campus of the University of Tasmania * Establish bus services between the west coast and Burnie. | Department of State Growth, Department of Health and Human Services, bus operators  By when: 2016-2017 (completed) |
| 3.5 | As part of the Public Bus Service Recontracting Project (Project 2018), develop a public transport network which is integrated, direct and easy to understand. | Department of State Growth  By when: 2019 |
|  | Future opportunities |  |
| 3.6 | Implement the Main Road Transit Corridor bus priority and bus stop optimisation measures to improve travel time reliability. | Department of State Growth, City of Hobart, Glenorchy City Council |
| 3.7 | Investigate other opportunities to reduce congestion, including measures to improve bus priority and bus stop optimisation on other corridors. | Department of State Growth, councils |
| 3.8 | Review existing data, identify gaps and determine requirements for new data collection to improve public transport services. | Department of State Growth |

1. **Better integration**: ensuring public transport is easier to use through better coordination and integration of services.

Public consultation conducted by TasCOSS in 2013 identified the lack of coordination between services, and the absence of common bus stops and interchanges as key transport issues for transport disadvantaged Tasmanians.

The Project 2018 bus procurement project provides an opportunity to ensure that bus services are better integrated, by providing a mechanism to ensure services and timetables are better coordinated.

Implementing a system of transfers, particularly on urban fringe and student-only services, may improve the efficiency of the network by bringing passengers from these areas into high frequency corridors or interchanges rather than endeavouring to deliver passengers to their final destination.

The use of transfers to deliver general access (urban and urban fringe) and student-only services has the potential to reduce route duplication and make the delivery of services more efficient. This would free up bus resources for more frequent services, or services over a wider span of hours.

Because transfers have not traditionally been part of network design in Tasmania, the benefits to passengers need to be promoted, and the following issues need to be addressed:

* waiting time between services must be acceptable;
* timetables must be harmonised;
* transfers must deliver an overall benefit to passengers in terms of overall journey time, service frequency and/or span of hours;
* ticketing arrangements must be convenient for passengers; and
* stops need to be co-located, safe, accessible and have a reasonable standard of passenger amenity.

Providing information and reassurance to passengers about the arrival time of connecting bus services is important. Timetable information at stops should be a minimum requirement, but ultimately initiatives such as providing ‘real time’ information represents a better benefit to customers.

The absence of common/integrated ticketing was identified as an issue in TasCOSS’ consultations. While common/integrated ticketing (together with harmonisation of fares and concessions) would provide greater convenience and potential cost savings for passengers, there are quite significant challenges for transport providers and the Tasmanian Government in achieving this.

TasCOSS’ consultations also found that lack of access to reliable information about services, timetables, fares and location of bus stops were issues. Where multiple providers are involved in the delivery of transport services, it is highly desirable that comprehensive information about all relevant services is available in one location.

Developing a ‘one stop’ passenger information resource on the internet would be one method of providing better public transport information. Developing a ‘journey-planner’ resource would enable passengers to identify and link together all the elements of their journey. This is particularly important to people who need to make complex journeys using a number of different services and could potentially be expanded to a real time passenger information system in the future. Such a resource would need to be accessible for people with disability and, to the extent possible, be whole of journey (that is, include the ability for the passenger to arrange other modes of transport, such as ride-sourcing, taxis and community transport) to address first-mile/last-mile issues.

Improving awareness of, and promoting the use of, public transport is an important strategy to ensure that it is at the forefront of people’s minds when making travel decisions and is seen as a normal and viable option for everyday travel.

Sometimes, even when people have made the decision to use public transport, it can be difficult to navigate to or from a bus-stop or within a facility or zone. It is, therefore, important to improve wayfinding to make this easier, including legible signage; well-designed space; and effective use of surface treatments, materials and lighting.

Initiatives:

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| --- | --- | --- |
|  | Underway | Responsibility |
| 4.1 | Finalise the planning and design of the Hobart and Launceston CBD bus interchanges. | Department of State Growth, City of Hobart, City of Launceston, bus operators  By when: 2017 |
| 4.2 | As part of the 2018 bus procurement project, ensure timetables are better coordinated to improve overall journey times for passengers. | Department of State Growth, bus operators  By when: 2019 |
|  | Future opportunities |  |
| 4.3 | Upgrade bus interchanges and bus stops to facilitate transfers, including:   * Implementing the Hobart CBD and Launceston CBD bus interchanges. * Identifying the location and upgrade requirements for major transfer points on the network. | Department of State Growth, bus operators, councils |
| 4.4 | Introduce common ticketing across bus companies, including consistency of fares and concessions. | Department of State Growth, bus operators |
| 4.5 | Improve the provision of consistent and reliable service information to passengers by developing a state-wide web based ‘one stop’ passenger information resource including a smart phone journey planner application. | Department of State Growth, bus operators |
| 4.6 | Investigate a real time passenger information system to reduce the uncertainty of waiting time for general access passengers. | Department of State Growth, bus operators |
| 4.7 | Improved wayfinding to/within public transport access points. | Councils, bus operators, Department of State Growth |
| 4.8 | Develop a strategy to promote increased use of public transport. | Department of State Growth, bus operators |

1. Closing transport gaps: developing innovative approaches to enable transport disadvantaged members of the community to overcome transport barriers.

Community transport, taxis and community buses/cars already help to fill some transport gaps for the wider public and those with particular needs. Through collaboration between community, industry and government stakeholders, there may be opportunities to use existing resources (including school buses in the off-peak), taxis (including WATs), council and community buses and cars, ride-sourcing vehicles and car-pooling arrangements in innovative and flexible ways to fill other gaps in the transport market.

Transport gaps may be spatial in the case of ‘first-mile/last-mile’ (getting to the bus stop/getting to the end destination) issues, or temporal where there is a need to provide early or late services to fulfil identified needs. Adjunct services could be ‘scheduled’ or ‘demand-responsive’, but the aim would be to augment and support regular bus services by connecting passengers to those services, rather than operating in competition with these services.

Car-pooling, car-sharing (subscription-based) and bike-share schemes may also help to fill transport gaps in limited contexts.

Barriers to using services such as taxis, community cars/buses, ride-sourcing vehicles and school buses to fill gaps in regular public transport services include:

* the school bus fleet (and school bus stops) are not currently required to be DDA (*Disability Discrimination Act 1992*) compliant, limiting the capacity to use those buses and stops for general access services;
* many community transport services are funded by the Tasmanian or Australian Government to deliver services to specific client groups, and have limited scope for operating outside this remit; and
* existing legislation limits the ways in which taxis can be used as adjuncts to regular passenger services, however there is scope for this to be reconsidered in the 2017 review of that legislation.

Scope may exist, however, to work through these issues to provide better and more accessible transport services for all Tasmanians. For example:

* *Drive 2 Work* (a project funded through the *Wheels for Work and Training Grant Program*) aimed to reduce transport-related barriers to employment in rural industries by facilitating car-pooling for work related travel. The project also supported people to gain their driver licence;
* The 2008 *Rural Rides Project*[[17]](#footnote-17) (a project funded through a Climate Connect Grant) explored the potential for, and barriers to, car-pooling in two rural Tasmanian communities; and
* *Youth Futures* (also funded through the *Wheels for Work and Training Grant Program*) focussed on providing specialised transport services to assist young job seekers to obtain employment in vineyards, orchards and forestry in rural areas where public transport is not available.

Evaluation of the outcomes of these projects may help to inform the development of innovative solutions to transport ‘gaps’ and related issues.

Initiatives:

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| --- | --- | --- |
|  | Underway | Responsibility |
| 5.1 | Evaluate the outcomes of the initiatives funded through the *Wheels for Work and Training Grants Program*, in respect of overcoming transport barriers to enable Tasmanians to participate in employment, education and training opportunities. | Department of Premier and Cabinet  (Communities, Sport and Recreation Division)  By when: 2017 |
|  | Future opportunities |  |
| 5.2 | Trial the use of taxis (including accessible taxis), ride-sourcing vehicles, school buses and community transport in urban, urban fringe and rural areas to:   * Replace existing bus routes which are poorly patronised, circuitous and inefficient. * Address ‘first-mile/last-mile’ issues. * Increase the span of operating hours. | Department of State Growth |
| 5.3 | Investigate car-pooling, car-sharing and bike-share schemes to help address transport ‘gaps’. | Department of State Growth, community advocacy groups |
| 5.4 | Provide consistent and appropriate disability awareness training to drivers. | Passenger transport operators |

1. **Innovative pricing**: developing innovative pricing mechanisms to support the greater use of public transport in order to make it more viable.

If public and private bus operators are to grow their businesses and continue to provide transport access for all Tasmanians, public transport mode share needs to rise from its current level of four percent for all trips[[18]](#footnote-18) and three percent for all journeys to work - and transport a greater number of full fare paying passengers.

Tasmania’s heavy reliance on cars for transport results in low numbers of full fare paying passengers on public transport. For example, Metro’s state-wide first boardings show that:

* full fare paying adults constitute 21 percent of patronage;
* student travel (which is heavily subsidised for travel to schools both within the local school area and to schools outside those areas) accounts for 46 percent of total passenger numbers in peak periods - when the cost of providing services is high; and
* adult concession passengers, who make up the majority of bus users in the off-peak, constitute 34 percent of the market[[19]](#footnote-19).

If the overall viability of public transport is threatened by lack of patronage and fare revenue, the most affected will be those who do not have access to a car. There is a need to better understand the needs of both existing and potential passengers in order to develop services and fare products that encourage mode shift from private cars to public transport.

Together with convenient ticketing arrangements, fare products that incentivise travel by full fare paying adults have the potential to increase bus ridership and fare revenue, whilst lowering costs associated with providing peak bus services[[20]](#footnote-20). For example, there may be opportunities to develop fare products that encourage full fare paying (commuter) adults to use buses before/after the early morning peak and in the inter-peak.

Examining the potential for removing some student-only services, and either removing or reducing the subsidy for student travel beyond local schools, might be considered as mechanisms for lowering costs associated with moving students during peak periods (when service provision is expensive), and enabling more effective use of public transport resources.

Parking pricing provides another mechanism for incentivising effective public transport usage both in general and for particular groups (for example, commuters). Low cost or free parking in and around Tasmania’s urban centres has been identified as a factor that contributes to on-going dependency on private cars for transport[[21]](#footnote-21).

The *Hobart Passenger Transport Case Study* modelled an increase in the price of car parking in central Hobart and found that it would result in a decrease in car vehicle kilometres travelled (VKT) by two percent and an increase in public transport share by around two percent, with a more significant change experienced in the peak periods. The *Tasmanian Urban Passenger Transport Framework* identified parking policy as one of the most effective support measures for promoting the greater use of public transport.

Policies that could be adopted include imposing maximum parking requirements for developments, Tasmanian Government imposed car parking levies, and/or creating car parking accords across local government areas to manage council operated, private and on-street parking in a way that results in better land use and higher public transport patronage[[22]](#footnote-22). These strategies will need to recognise, however, that restrictions may not be appropriate in all instances – for example, many people with disability rely on their cars and will need to continue to access accessible parking spots in these areas.

However, without access to attractive, accessible public transport services, car parking pricing will not in itself be effective in incentivising bus travel[[23]](#footnote-23).

Initiatives:

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| --- | --- | --- |
|  | Future opportunities | Responsibility |
| 6.1 | Undertake research to better understand the public transport market and develop ‘fare products’ that incentivise public transport use. | Department of State Growth, bus operators |
| 6.2 | In conjunction with local government explore the opportunity to manage the demand, supply and pricing of car parking through measures such as:   * Examining the way that car parking requirements are set for developments. * Shared parking provisions. * Developing an accord between councils to manage parking across municipalities. | Department of State Growth, Tasmanian Planning Commission, Department of Justice, councils |
| 6.3 | Identify mechanisms to reduce pressure on accessible parking spaces. | Department of State Growth, councils |

1. **Improved infrastructure**: providing more opportunities for people to walk, cycle and use public transport by making sure infrastructure is safe, accessible and attractive to use.

Walking and cycling are low cost, healthy transport options for short trips. Supporting people to walk and cycle for part or all of their everyday travel provides health benefits for individuals and a range of social and economic benefits to the wider community, including reducing traffic congestion, lower greenhouse gas emissions, increasing public safety and improving social connectivity[[24]](#footnote-24).

National data analysed and mapped by the Heart Foundation found that Tasmania has the highest rate of cardiovascular disease in Australia, with one in four people affected[[25]](#footnote-25). Tasmanians are among the most overweight and physically inactive people in Australia:

* Seven out of 10 people aged 18 years and older are classified as being inactive or having low physical activity levels;
* Seven out of 10 children aged between five and 11 years do not do enough physical activity;
* The statistics are even more alarming for Tasmanians aged between 12 and 17 years, with nine out of 10 not doing enough physical activity to deliver health benefits[[26]](#footnote-26); and
* Additionally, 64 percent of Tasmanians are overweight or obese[[27]](#footnote-27).

Participating in 30 minutes of moderately intense physical exercise daily can lower the risk of cardiovascular disease, diabetes and osteoporosis, and improve overall health and wellbeing. Supporting walking and cycling for transport can play an important part in increasing physical activity across the community.

There is evidence that people will cycle around six kilometres to work and other destinations, and three kilometres to access high quality public transport, providing there are suitable bike storage facilities at the transfer point[[28]](#footnote-28). Safe, well-connected, direct cycling routes are important in supporting people to cycle or ‘bike-bus’ for transport.

It is accepted that most people will walk around three kilometres to work and other destinations, and 400-800 metres to access quality bus services[[29]](#footnote-29). However in order for people to walk as part of their journeys, they need well-connected, navigable, direct and safe walking routes.

There is evidence that higher density, more compact environments encourage people to walk more because the places they need to go are located closer together[[30]](#footnote-30). This has clear links to the “Living Closer” initiatives in this Strategy.

The National Heart Foundation’s *Healthy by Design* (Tasmania) guidelines[[31]](#footnote-31) provide guidance to local practitioners around best practice support for active travel.

Accessible walking routes, including access to bus stops, is particularly important for people living with a mobility-related disability to use public transport for all or part of their everyday journeys. The *Disability Standards for Accessible Public Transport 2002* seek to improve transport access for people with disability, including supporting the development and maintenance of accessible routes to bus stops, and the provision of accessible bus stop infrastructure.

The Tasmanian Government’s *Walking and Cycling for Active Transport Strategy 2010* provides a framework for supporting active travel. Planning instruments could be developed that support the creation of built environments that encourage active travel.

In addition to the above initiatives, the Department of Premier and Cabinet and the Council on the Ageing Tasmania (COTA Tas) are working to develop resources for older people that will support their active participation in the community.

Initiatives:

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| --- | --- | --- |
|  | Underway | Responsibility |
| 7.1 | Implement the *Positive Provision Policy* to support development of cycling infrastructure on key cycling routes. | Department of State Growth  By when: ongoing |
| 7.2 | Implement the State Road Cycling Infrastructure Fund priority projects. | Department of State Growth  By when: 2018-19 |
| 7.3 | Implement the Safer Roads Vulnerable Road User Program to implement infrastructure treatments to improve the safety of pedestrians, cyclists and motorcyclists. | Department of State Growth  By when: funded until 2017- 2018 |
| 7.4 | Implement the rural school bus stop grant program to improve safety at bus stops. | Department of State Growth  By when: 2017 |
| 7.5 | COTA Tas to develop a range of resources that can benefit older people and support their active participation in the community. | Department of Premier and Cabinet  By when: 2017 |
|  | Future opportunities |  |
| 7.6 | Continue to improve the safety, amenity and accessibility of bus stops, including access paths to stops and better placement of street furniture. | Department of State Growth, bus operators, councils, utility providers |
| 7.7 | Continue to implement the *Walking and Cycling for Active Transport Strategy 2010* focusing on:   * Working with stakeholders to implement the principal urban cycling network. * Implementing the State Growth *Cycleway Directional Resource Manual*. * Working with councils to improve walking and cycling connections to major destinations. | Department of State Growth, councils, cycling advocates |
| 7.8 | Adopt and implement a *Positive Provision Policy* to support development of local cycling infrastructure. | Councils |

# Appendix 1

## Links to other initiatives and policies

The Transport Access Strategy contains a number of critical links with other Government strategies as well as supporting the actions in those other strategies. The broader elements of the Strategy will be examined post 2017-18 as existing work priorities are completed. This will include a re-assessment of linkages with the wider policy environment.

* *Tasmanian Infrastructure Strategy – this Strategy aims to address the challenges facing Tasmania in the critical transport, telecommunications, energy and water sectors. A key initiative under the Tasmanian Infrastructure Strategy is the Tasmanian Urban Passenger Transport Framework (see below).*
* *Tasmanian Urban Passenger Transport Framework (TUPTF) – this framework aims to support liveable, connected urban communities and to guide the development and delivery of sustainable transport options over the long term. It shares many common themes with the Transport Access Strategy, including the need to integrate transport and land use planning, encourage walking and cycling, and improve service reliability, frequency and span of hours.*
* *Tasmanian Walking and Cycling for Active Transport Strategy – a key measure under the TUPTF, the Strategy aims to promote walking and cycling as viable and desirable forms of transport through improved infrastructure, land use planning and behavioural change. This Strategy is intended to guide development of walking and cycling as transport options in our urban areas over the long-term by creating a more supportive transport system for pedestrians and cyclists. In addition to supporting the goals of the TUPTF, the Tasmanian Walking and Cycling for Active Transport Strategy also supports a number of key priorities of the Transport Access Strategy.*
* *Draft Main Road Transit Corridor Plan – another key measure under the TUPTF, transit corridors are key public transport routes that should have high frequency bus services, bus priority measures, and appropriate off-bus infrastructure. The Main Road Corridor between Glenorchy and Hobart CBD is the first Transit Corridor Plan for Greater Hobart. In addition to supporting the goals of the TUPTF, Transit Corridors also support key priority 3 in the Transport Access Strategy (A focus on frequent, accessible, affordable, efficient and reliable services).*
* *Draft Greater Launceston Metropolitan Passenger Transport Plan – another key measure under the TUPTF, this is a ten-year strategic document to guide investment in passenger transport in Greater Launceston. It includes a five-year Action Plan. The Plan contains strategies to improve walking, cycling and public transport, support better integration of transport and land use planning and creating a passenger transport culture within the Greater Launceston area. In addition to supporting the goals of the TUPTF, the Greater Launceston Metropolitan Passenger Transport Plan supports many of the key priority areas in the Transport Access Strategy.*
* *Population Growth Strategy - under the Population Growth Strategy, the Tasmanian Government has set a target to grow the population to 650,000 people by 2050 to drive economic growth, create jobs and improve the standard of living for all Tasmanians. Over time this will add pressure to the transport system and will increase the need for regular reviews of routes and capacity to ensure that service levels continue to remain appropriate.*
* *Climate Change Action Plan – the Transport Access Strategy directly supports the actions to: (i) continue to improve the overall journey times for passengers with more frequent and direct services; (ii) pursue opportunities such as the availability of real-time data and prioritisation of buses; and (iii) use State Planning Policies to guide the location of development to ensure effective use of the transport network.*
* *review public transport networks to provide for more frequent and direct services to promote a greater uptake of public transport in Tasmania; (ii) identify opportunities for improved safety for cyclists to encourage greater uptake of cycling in Tasmania; (iii) make provision for cycling for new road projects or major upgrades on an identified Principal Urban Cycling Network; and (iv) ensure planning policies facilitate and encourage efficient and sustainable forms of transport.*
* Regional Integrated Transport Plans: *Northern Integrated Transport Plan, Southern Integrated Transport Plan, Cradle Coast Integrated Transport Strategy*.
* The Tasmanian Government’s planning reform agenda, including the development of the Tasmanian Planning Scheme and Tasmanian Planning Policies.
* Regional Land Use Strategies: [*Living on the Coast: The Cradle Coast Regional Land Use Planning Framework*](http://www.planning.tas.gov.au/__data/assets/pdf_file/0011/332984/Living_on_the_Coast_-_declared_27Oct2011.pdf)*,* [*Regional Land Use Strategy of Northern Tasmania*](http://www.planning.tas.gov.au/__data/assets/pdf_file/0003/332985/Northern_Tasmania_Regional_Land_Use_Strategy_-_Revised_-_Effective_06_Jan_2016.pdf)*,* [*Southern Tasmania Regional Land Use Strategy 2010-2035*](http://www.planning.tas.gov.au/__data/assets/pdf_file/0004/332986/STRLUS_-_01Oct2013.pdf).
* *Tasmania’s Affordable Housing Strategy 2015-25.*
* *Inclusive Ageing Tasmania 2012-2014 Strategy.*
* *2016 Traffic Congestion Analysis.*
* *Tasmania’s Plan for Physical Activity 2011 – 2021.*
* *Disability Framework for Action 2013-2017.*
* *Working in Health Promoting Ways* framework document.
* *A Hand Up for Vulnerable Tasmanians and Celebrating Seniors – The Plan to Rebuild Essential Services.*
* *Delivering Safe and Sustainable Clinical Services*, white paper 2015.

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1. *ABS General Social Survey*: Tasmania (2010) 4159.0.55.003, ABS. NB: 2014 data is being sought from the ABS to update these findings. [↑](#footnote-ref-1)
2. *Transport in the Community Project Final Report* Tasmanian Council of Social Services, October 2014 [www//tascoss.org.au/Portals/0/Documents/Publications/Reports/TasCOSS%20Transport%20in%20the%20Community%20Project%20report%20Oct%202014.pdf](http://tascoss.org.au/Portals/0/Documents/Publications/Reports/TasCOSS%20Transport%20in%20the%20Community%20Project%20report%20Oct%202014.pdf) . [↑](#footnote-ref-2)
3. *Transport in the Community Project Phase 1 Report*, Tasmanian Council of Social Services, February 2014. [↑](#footnote-ref-3)
4. *Greater Hobart Household Travel Survey 2010*, Department of Infrastructure, Energy and Resources. [↑](#footnote-ref-4)
5. *ABS Census 2011 – Journey to Work data,* Australian Bureau of Statistics 2012. [↑](#footnote-ref-5)
6. *ABS, Method of Travel to School*, Australian Bureau of Statistics 2011. [↑](#footnote-ref-6)
7. Currie G; and Z Sensberg, “*Exploring forced car ownership in metropolitan Melbourne*” (30th Australasian Transport Research Forum) 25-27 September 2007 Melbourne AUST. [↑](#footnote-ref-7)
8. *Riverline – Hobart Light Rail Strategic Assessment* PricewaterhouseCoopers for the Department of Infrastructure, Energy and Resources, March 2014, p25. [↑](#footnote-ref-8)
9. *Riverline – Hobart Light Rail Strategic Assessment,* PricewaterhouseCoopers for the Department of Infrastructure, Energy and Resources, March 2014 p3. [↑](#footnote-ref-9)
10. National Heart Foundation 2014 *Blueprint for an active Australia* 2nd edition Melbourne: National Heart Foundation of Australia 2014. [↑](#footnote-ref-10)
11. *Riverline – Hobart Light Rail Strategic Assessment* (PriceWaterhouse Coopers for the Department of Infrastructure, Energy and Resources) March 2014. [↑](#footnote-ref-11)
12. *Infill Development in Greater Hobart Stage 2 Report*, (Pitt and Sherry with PDA Hill) March 2014. [↑](#footnote-ref-12)
13. *Draft Greater Launceston Metropolitan Passenger Transport Plan*, Department of State Growth (2015). [↑](#footnote-ref-13)
14. [*Living on the Coast: The Cradle Coast Regional Land Use Planning Framework*](http://www.planning.tas.gov.au/__data/assets/pdf_file/0011/332984/Living_on_the_Coast_-_declared_27Oct2011.pdf)*,* [*Regional Land Use Strategy of Northern Tasmania*](http://www.planning.tas.gov.au/__data/assets/pdf_file/0003/332985/Northern_Tasmania_Regional_Land_Use_Strategy_-_Revised_-_Effective_06_Jan_2016.pdf)*,* [*Southern Tasmania Regional Land Use Strategy 2010-2035*](http://www.planning.tas.gov.au/__data/assets/pdf_file/0004/332986/STRLUS_-_01Oct2013.pdf)*.* [↑](#footnote-ref-14)
15. The Metro Turn Up and Go initiative has delivered a nine per cent increase in patronage on the Main Road (Hobart – Glenorchy) route. [↑](#footnote-ref-15)
16. Metro Tasmania, 2016. [↑](#footnote-ref-16)
17. *Increasing Car Pooling to Cut Carbon Emissions, Report to the Tasmanian Climate Change Office,* Waddell and Marshall 2008,  [www.climatechange.tas.gov.au/\_\_data/assets/pdf\_file/0004/130963/RURAL\_RIDES\_FINAL2\_2.pdf](http://www.climatechange.tas.gov.au/__data/assets/pdf_file/0004/130963/RURAL_RIDES_FINAL2_2.pdf). [↑](#footnote-ref-17)
18. *Greater Hobart Household Travel Survey*, Department of Infrastructure, Energy and Resources, December 2010. [↑](#footnote-ref-18)
19. Metro Tasmania first boarding data 2013. [↑](#footnote-ref-19)
20. *Riverline – Hobart Light Rail Strategic Assessment* PriceWaterhouse Cooper for the Department of Infrastructure, Energy and Resources March 2014 p86. [www.stategrowth.tas.gov.au/\_\_data/assets/pdf\_file/0005/88619/Hobart\_Light\_Rail\_2014\_-\_Strategic\_Assessment.pd](http://www.stategrowth.tas.gov.au/__data/assets/pdf_file/0005/88619/Hobart_Light_Rail_2014_-_Strategic_Assessment.pd)f. [↑](#footnote-ref-20)
21. Ibid p49. [↑](#footnote-ref-21)
22. Ibid p78 & 83. [↑](#footnote-ref-22)
23. Ibid p79. [↑](#footnote-ref-23)
24. National Heart Foundation 2014 *Blueprint for an active Australia* 2nd edition Melbourne: National Heart Foundation of Australia 2014. [↑](#footnote-ref-24)
25. Heart Foundation Top Twenty Regional of CVD Prevalence, [www.heartfoundation.org.au/SiteCollectionDocuments/140814%20CVD%20Prevalence%20Maps%20National%20MR%20-%20FINAL.pdf](http://www.heartfoundation.org.au/SiteCollectionDocuments/140814%20CVD%20Prevalence%20Maps%20National%20MR%20-%20FINAL.pdf) August 2014 (from ABS Australia Health Survey Data 2011/12). [↑](#footnote-ref-25)
26. ABS 2013. *Australian Health Survey*, 2013, Cat. No 43640DO014\_20112012 Table 114.1 Australian Health Survey: Physical Activity 2011-12 – Australia. [↑](#footnote-ref-26)
27. Ibid. [↑](#footnote-ref-27)
28. Ensor M and Slason J PE *Forecasting the Benefits of Integrating Cycling and Public Transport* IPENZ Transportation Group Conference: Auckland: March 2011. [↑](#footnote-ref-28)
29. Burke M and Brown A 2007 ‘Distances people walk for transit’ *Road and Transport Research,* 16(3) pp17-29. [↑](#footnote-ref-29)
30. *Does Density Matter* – Discussion Paper, Heart Foundation, 2014

    [www.heartfoundation.org.au/SiteCollectionDocuments/Heart\_Foundation\_%20Does\_density\_matter\_FINAL2014.pdf](http://www.heartfoundation.org.au/SiteCollectionDocuments/Heart_Foundation_%20Does_density_matter_FINAL2014.pdf). [↑](#footnote-ref-30)
31. [www.heartfoundation.org.au/SiteCollectionDocuments/Healthy-by-Design-Tasmania.pdf](http://www.heartfoundation.org.au/SiteCollectionDocuments/Healthy-by-Design-Tasmania.pdf). [↑](#footnote-ref-31)