



Walking in Queensland Report

2019 | Walking: for everyone, every day



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Queensland Walking Strategy suite



Our 10-year vision



Our actions for the next two years



Monitoring our progress



View online at: www.tmr.qld.gov.au/walking

Introduction

Walking is fun, free and inclusive and benefits all Queenslanders.

Walking for transport can reduce traffic congestion and pollution and help tackle climate change. Walking contributes to the vitality of our cities and towns — walkable environments attract people who in turn support local businesses. People who walk regularly can improve their overall health and reduce their risk of chronic diseases.

The Queensland Government’s vision for walking as set out in the *Queensland Walking Strategy 2019-2029* is for walking to be an easy choice for everyone, every day.

When we talk about walking, we also include jogging, running, and moving with the help of a mobility device (such as a wheelchair, mobility cane or a walking frame).

Getting more people walking will help to achieve the objectives of *Our Future State: Advancing Queensland’s Priorities* to keep Queenslanders healthy, keep communities safe, and give all our children a great start.

The *Queensland Walking Strategy 2019–2029* delivers on objectives in the *Transport Coordination Plan 2017–2027* by contributing to connected communities, improving efficiency of the transport system and creating a safe and secure transport network.

This report provides a snapshot of current levels of walking in Queensland and provides the baseline for monitoring progress. The *Action Plan for Walking 2019–2021* will be updated every two years and progress reported against these baseline measures. These updates will help us track our progress towards the *Queensland Walking Strategy 2019-2029* over the next ten years.

The objectives of the *Queensland Walking Strategy 2019–2029* are:

- Objective 1:** More walking, more often
- Objective 2:** Our communities are planned to make walking enjoyable and convenient
- Objective 3:** Our streets and paths are welcoming, safe, connected and comfortable for all ages and abilities, and support vibrant local economies
- Objective 4:** Walking is an irresistible and easy choice, particularly for short trips, tourism, recreation and health
- Objective 5:** Walking is a high priority in policy and planning, delivered through partnerships and supported by evidence.

Community engagement



1200
Phone
surveys



1149
Online
surveys



31
Written
submissions



42
Walking
stories



1880
Ideas Wall
visits and 254
comments



78
Community
summit

2713 Queenslanders told us
what they want

Queenslanders have told us their walking patterns, barriers and ideas for the future of walking.

The information provided by the community helped to form the *Queensland Walking Strategy 2019–2029* and informed the *Walking in Queensland Report 2019*.

Objective 1: More walking, more often

Everyone walks, but how much they walk can vary greatly. Knowing why and where people walk, and their needs, desires and motivations can help us understand what we need to do to make walking an easy choice for everyone, every day.

Why Queenslanders walk

One in five Queensland adults walk for recreation.²

The most common reason why Queenslanders walk is for recreation and exercise.⁴ Walking, running or jogging and bushwalking are in the top five physical activities for Queenslanders.⁵

Short trips, generally less than one kilometre, are ideal for walking. Longer trips are also possible if attractive, safe and comfortable routes are provided. Despite this, 39 per cent of journeys in South East Queensland under one kilometre are made by private vehicle. The trend in regional Queensland is similar.

Walking is often part of a longer journey, frequently making up two or more stages. For example, most public transport trips start and end with a walking stage to the bus stop or train station.

The community survey for the *Queensland Walking Strategy 2019–2029* found five per cent of respondents walk to work.

Official Australian census data found that on average, around four per cent of Queenslanders walk to work (that is, they do not use any mode other than walking to make the journey).⁶

This total proportion of people walking to work has remained steady in Queensland since 1991, but rates vary considerably between centres across Queensland.

To track our progress, we will measure	Baseline data
Percentage of trips made by walking*	9% ¹

* South East Queensland only. Baseline for regional towns to be determined in future Household Travel Surveys.

Reasons Queenslanders walk³



70%
Walk for recreation and exercise



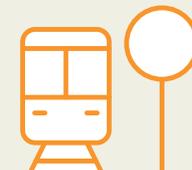
38%
Walk as part of a journey (bus stop)



35%
Walk to the shops



28%
Walk to exercise their dog



19%
Walk to public transport



6% Walk to school with children



5% Walk to work

How much time do Queenslanders spend walking?

Fifty-seven per cent of Queenslanders are happy with the amount of walking they do, but almost half would like to walk more.⁸ That translates to around two million Queenslanders.

The *Australian Physical Activity and Sedentary Behaviour Guidelines* recommend adults do at least 150 minutes of moderate intensity physical activity (such as brisk walking) each week and children do at least 60 minutes of moderate to vigorous physical activity (such as running) every day.

Encouragingly, 15 per cent more Queensland adults meet these physical activity guidelines today compared to a decade ago. In 2004, Queenslanders spent an average of around 120 minutes per week walking but this increased to 220 minutes per week in 2018.⁹

Unfortunately, around 1.4 million adult Queenslanders are still not getting enough physical activity.¹⁰

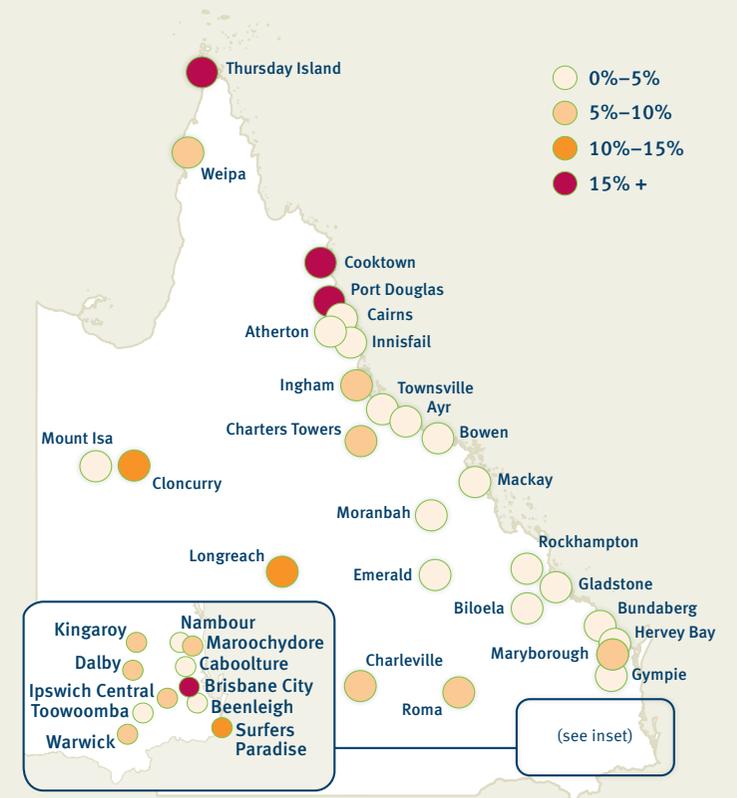
The risk of early death is higher in non-walkers than regular walkers.¹¹

In 2017–18, 66 per cent of adults and 25 per cent of children were measured as overweight or obese.¹²

The greatest health benefits can be achieved when those who are currently doing no physical activity start to do any amount of physical activity.¹³

Walking is an easy and accessible way to increase the physical activity levels of Queenslanders and can help people build up to the recommended amount of physical activity.¹⁴

Proportion of journeys to work by walking⁷



What motivates Queenslanders to walk?

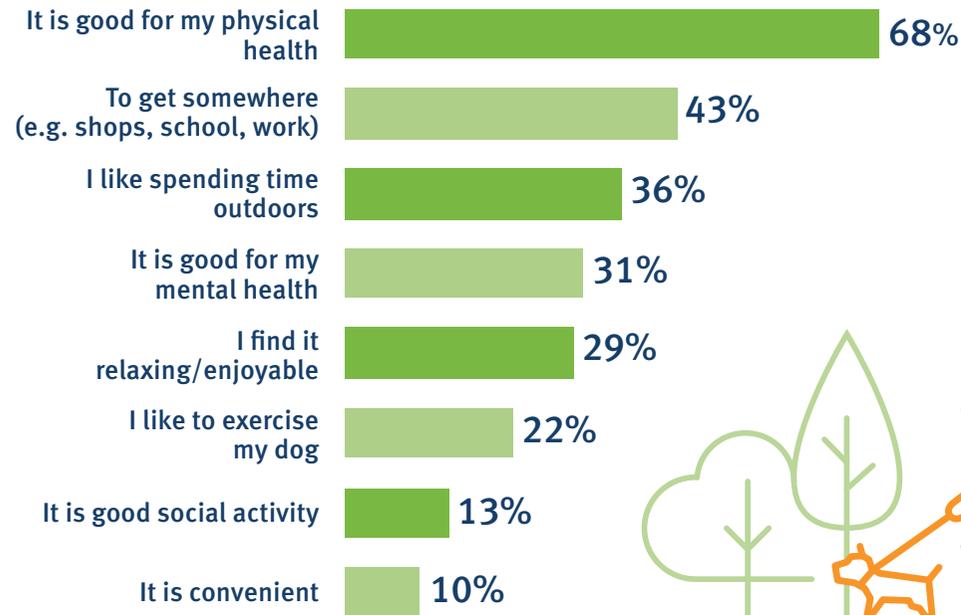
Health and enjoyment are the key motivations for walking.¹⁵ Queenslanders walk for both their physical and mental health. They also enjoy being outside and they walk to get places such as shops, school, work or public transport.

In Queensland, most regular walkers walk for exercise (51 per cent), to walk their dog (19 per cent) and for transport (15 per cent).¹⁶ Women are more likely than men to walk for these reasons.

We want more Queenslanders to walk for their health and for transport trips. Currently, 40 per cent of adults and 59 per cent of children do not get enough physical activity, resulting in \$361 million in health costs to Queensland every year.¹⁷

Only 23 per cent of Queenslanders walk because it is convenient. To get more people walking, more often, our communities need to be planned to make walking an attractive and convenient option.

What motivates Queenslanders to walk?¹⁸



Objective 2: Our communities are planned to make walking enjoyable and convenient

Planning communities that have connected street systems, interesting local places for people to walk to and comfortable and safe walking infrastructure can influence the number of people walking as part of their daily routine.

Research shows that living within 400–800 metres of a mix of destinations is associated with higher levels of walking (and bike riding) across all age groups.²⁰

Eighty-four per cent of trips to and from public transport are made by walking.²²

Most people are prepared to spend about 10 minutes (or 800 metres) walking to a high-frequency, direct public transport service such as a train or express bus. For less frequent or indirect local services, people are generally prepared to walk for up to five minutes, or about 400 metres.^{23 24}

Well planned infrastructure has proven benefits for connecting communities. Evaluations of walking infrastructure projects delivered by the Queensland Government over the last ten years have shown their positive impacts for recreation and transport.

For example, without the new facilities, on average 19 per cent of those using the new infrastructure for recreation would not have made the walking trip, and 56 per cent of people walking for transport would have travelled by car or public transport instead.²⁵

Bridge projects such as the Galeen-Honeyeater Bridge on the Gold Coast have a big impact on travel time and accessibility for people walking.

To track our progress, we will measure	Baseline data
Proportion of the population with good accessibility to a range of essential services by walking	2.0% (less than 15 minutes) 11.5% (15–30 minutes) ¹⁹

I live within comfortable walking distance of²¹

Per cent of responses

0 20 40 60 80 100

Greenspaces



Public transport



Cafes or restaurants



Shop with fresh vegetables/groceries



Sport facilities



Educational facilities



Work



● Agree ● Disagree ● Not applicable

Objective 3: Our streets and paths are welcoming, safe, connected and comfortable for all ages and abilities, and support vibrant local economies

Our communities and transport network must be accessible and inclusive for all Queenslanders.

This means planning, designing and building comfortable and safe walking environments accessible to all, especially children, the elderly and people with disability. Creating interesting and inclusive places will also support vibrant local economies.

What are the physical barriers to walking in Queensland?

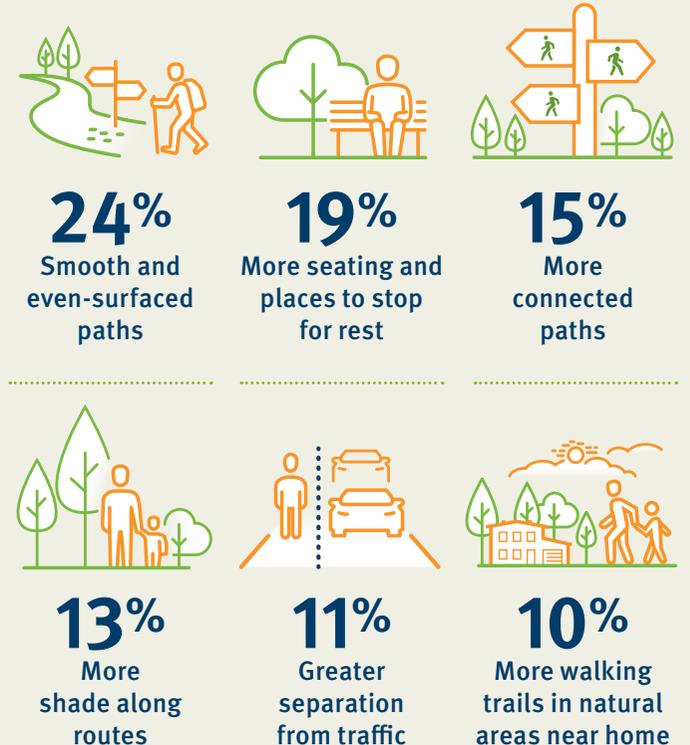
There are a number of physical barriers that stop Queenslanders from walking more, including distances to destinations (23 per cent), lack of shade and shelter along routes (10 per cent) and lack of suitable paths to destinations (12 per cent).²⁹

Better walking infrastructure will help overcome these barriers.

Shade trees reduce temperatures and make it more pleasant to walk. Research shows that the more street trees along the footpath network, the more likely residents are to walk for 60 minutes each week.³⁰

To track our progress, we will measure	Baseline data
Number of pedestrian fatalities and hospitalised casualties per 100,000 population	8.6 ²⁶
Percentage of Queenslanders who rate the comfort level of walking in their area as 'comfortable' or 'very comfortable'	69.4% ²⁷

What would encourage Queenslanders to walk more?²⁸



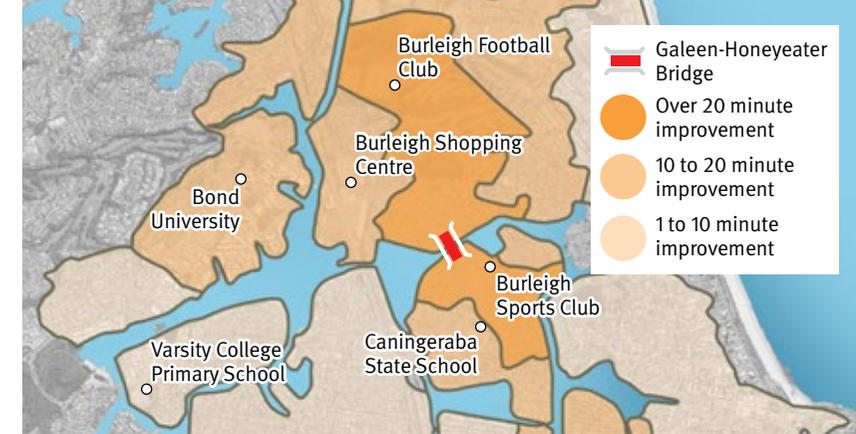
Providing for Queenslanders of all ages and abilities

Older persons will comprise an increasingly greater proportion of Queensland's population in the future. Over the next 30 years the number of older Queenslanders aged 65 years or more is projected to more than double, reaching around 1.7 million people by 2047 – or one in five Queenslanders.³¹

Walking is the preferred physical activity for older people, with 64 per cent of people aged more than 60 years walking for exercise.³² Walking provides positive benefits to the health, wellbeing, independence, personal mobility and social connectedness of older people and people with disability.³³

At the other end of the spectrum, Queensland's children and young people need to become more active.

Twenty-five per cent of children in Queensland are overweight or obese.³⁴ Walking increases independence for children and young people and can help to address physical inactivity levels.



Case study: Galeen-Honeyeater Green Bridge

The Galeen-Honeyeater Green Bridge helps connect the community of Burleigh Waters on the Gold Coast. The bridge has improved walking access to local facilities and shows how well-planned infrastructure can make walking for short trips an attractive and convenient option.

For the local community, the bridge has improved pedestrian access to nearby facilities by up to 25 minutes (see map). For residents living north of the bridge, a walking trip to Burleigh Sports Club that was previously 30 minutes now takes 5 minutes. Locals south of the bridge have benefited from reduced walking distances to Bond University, shopping precincts and sporting facilities.

Built in 2012, the \$2 million bridge was jointly funded by the Queensland Government and the City of Gold Coast. An independent evaluation of the bridge found it delivers \$4.20 in benefits to the community for every dollar spent on the project. The evaluation also found the bridge has led to an uptake in walking in the community, with up to 40 per cent of users stating they would have travelled either by car, bus or not at all if not for the bridge.

Accessibility measurement tools, such as LUPTAI (land use and public transport accessibility index), are being used to identify opportunities for improved walking access and to measure the benefits of these changes.

Road safety and personal security

Another barrier to walking more is concern about road danger.

Speed limits of 40 kilometres per hour or lower are safer for vulnerable road users (including people walking and on bicycles).

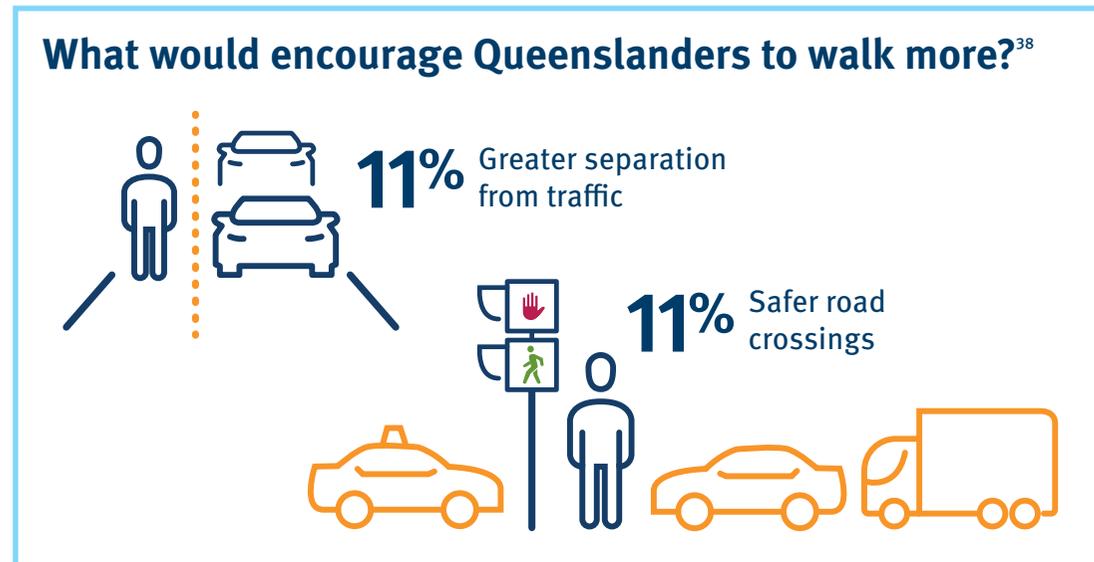
There is a strong association between vehicle speed and safety of people walking. There is a large increase in the risk of pedestrian death when speed limits are above 40 kilometres per hour in the event of an accident.

Seventy-eight per cent of drivers in Queensland are in slight or strong support of reduced speed limits in areas with high numbers of people on foot.³⁶

Slower streets are also more social³⁷ and create opportunities to revitalise local centres.

In Australia, only half of women say they feel safe walking alone at night (compared to 80 per cent of men).⁴¹ This is the biggest gap between men and women of all 36 Organisation for Economic Co-operation and Development (OECD) countries.

Six per cent of Queenslanders do not feel safe when walking by themselves, day or night. Six per cent also said more lighting along walking routes would encourage them to walk more often.⁴²

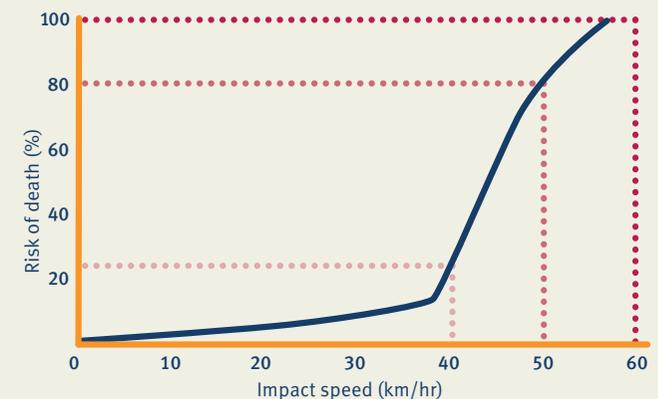


Lower speeds save lives

Research shows that a fatal injury to a pedestrian is at least three times as likely to occur in a crash when the impact speed is 50 kilometres per hour rather than 40 kilometres per hour.

Pedestrians are comparatively safer in areas with speed limits of 40 kilometres per hour or lower, when potential collisions can be more easily avoided and the likely consequence of a collision is significantly lower.

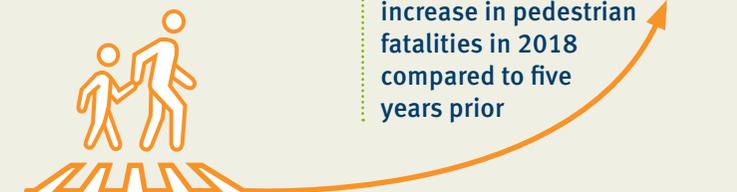
Risk of pedestrian death as a function of vehicle impact speed³⁵



Did you know?^{39 40}

Pedestrians account for **14%** of road fatalities in Queensland

There was a **32%** increase in pedestrian fatalities in 2018 compared to five years prior



Supporting local economies

National parks are a significant contributor to the Queensland economy. Research indicates national parks receive 51 million visits from domestic travellers and 7.9 million visits from international travellers each year, many of whom walk as part of their visitor experience. Visitors who include a visit to a national park in their holiday itinerary add \$4.43 billion to the state's economy.⁴³

Research into the economic benefits of making shopping areas and streets attractive places for walking, sitting and lingering indicates that retail turnover and property values are increased.

Measures such as widening footpaths, reducing traffic speeds, providing landscaping and street furniture can increase the number of people entering shops and trading by up to 40 per cent and retail rents by 20 per cent.⁴⁴



The Queensland Government supports revitalisation of town centres through the *Building Our Regions* investment program. For example, the Burnett Heads Town Centre redevelopment transformed the town centre by revitalising Zunker Street with wider footpaths, landscaping, public art and other treatments. These enhancements created about 19 local jobs and delivered a more vibrant town centre that will be enjoyed by local residents and visitors to the community. The \$6.6 million project was jointly funded by the Australian Government and Queensland Government in association with Bundaberg Regional Council.



Case study: Reducing speed limits in areas with high walking and bike riding activity

The Department of Transport and Main Roads implemented safer speed limits in Cairns Central Business District (CBD) on David Low Way in Coolum as an effective and relatively low-cost measure to improve safety for all road users.

These sites were chosen due to an over-representation of pedestrians in crash data.

The projects demonstrate that low cost infrastructure upgrades and an effective community engagement strategy can change behaviour and attitudes towards speeding. The key to achieving this was to reach out to the community and stakeholder groups to promote the benefits of lower speeds and dispel some of the myths and misconceptions around speeding.

In December 2018 the speed limit along a 750-metre section of David Low Way in Coolum was reduced from 50 kilometres per hour to 40 kilometres per hour to slow traffic through the busy retail precinct along the coast. In February 2019, the speed limit in the Cairns CBD was also reduced by 10 kilometres per hour to 40 kilometres per hour.

Objective 4: Walking is an irresistible and easy choice, particularly for short trips, tourism, recreation and health

Walking is already a popular choice among Queenslanders for recreation and health, and more than eight in ten Queenslanders believe that walking is a critical mode of transport.⁴⁷

Promoting the benefits of walking to the broader community through education, encouragement and behaviour change programs will encourage more people to walk and help to make walking an irresistible and easy choice for short trips, tourism, recreation and health.

What are the top personal barriers to walking in Queensland?

Around a third of Queenslanders report our climate as the most common personal barrier to walking.⁴⁹

Planting shade trees and installing awnings along walking routes will protect walkers from weather extremes. The installation of lighting will encourage more walking in the early mornings and evenings.

Developing a culture that supports walking

Improving the relationship between drivers and people walking is important. The need for drivers to understand the ‘give way’ road rules for pedestrians was frequently raised by the community as an issue during engagement to inform the *Queensland Walking Strategy 2019–2029*.

State government education campaigns such as StreetSmarts aim to build a respectful and safe driving culture by addressing specific road safety issues and can be extended to include walking.

To track our progress, we will measure	Baseline data
Percentage of trips under 1 km that are walked*	58.5% ⁴⁵
Number of new participants in walking groups/events**	103 groups 11,642 individuals ⁴⁶

* South East Queensland only. Baseline for regional towns to be determined in future Household Travel Surveys

** Heart Foundation Walking Groups and 10,000 Steps

Personal barriers to walking⁴⁸



29%
Climate not suitable



23%
Prefer to use other transport methods – train, bus, bike, car



20%
Not enough time



19%
Have physical or mental conditions that prevent me



12%
Rely on car before, during or after work



6%
I don't feel safe when walking by myself

Building and supporting walking habits for life

Campaigns like 'Healthier. Happier.' and health promotion activities such as 10,000 Steps and Heart Foundation Walking groups are successfully working to encourage people to increase their physical activity by walking.

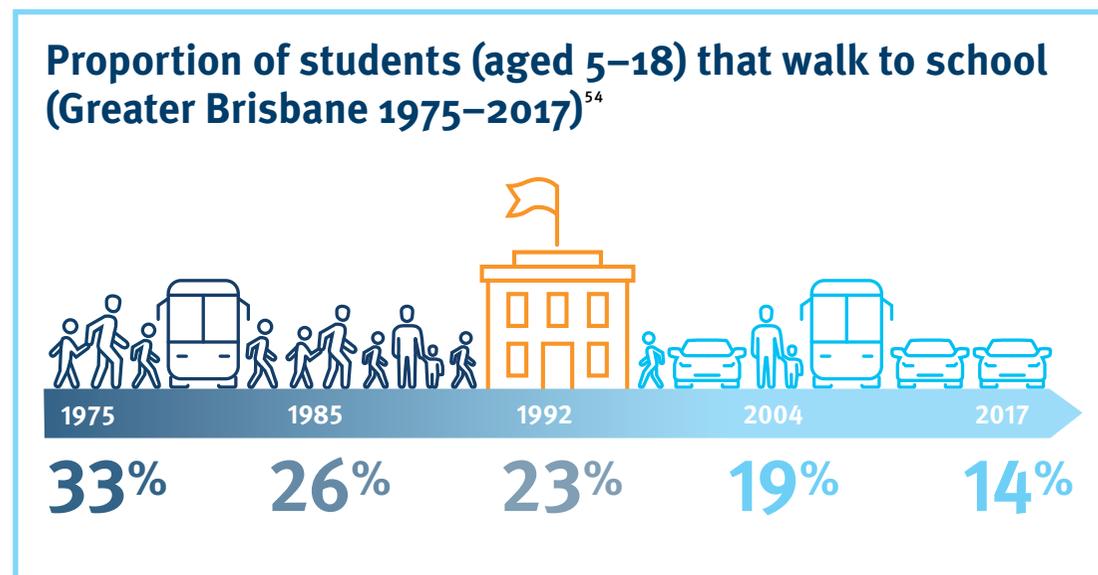
The number of children walking to school has declined steadily over the last 45 years, from 33 per cent of all school students in South East Queensland in 1975 to just 14 per cent in 2017.⁵⁰

Between 8am and 9am, parents dropping children to school account for 20 per cent of all kilometres driven in South East Queensland.⁵¹

Three out of four Queensland parents want their children to be more physically active.⁵² Improving walking networks around schools and supporting families and children to walk (scoot or ride) to school increases physical activity levels for families can reduce congestion.

Active school travel programs run by local governments have increased walking by 16 per cent on average.⁵³

The Queensland Walking Strategy 2019–29 demonstrates the high priority the Queensland Government places on walking.



Case study: Changing school travel habits

Active school travel programs encourage children to walk, bike ride, scoot or take public transport to and from school.

Delivered by local governments, the programs aim to educate and motivate students, families and teachers to reduce car use and actively travel to and from school.

Brisbane City Council's award-winning Active School Travel (AST) program has been running since 2004. In 2018, 51 per cent of students at schools involved in the program were actively travelling to school each day. Walking trips increased from 19 per cent to 35 per cent and car trips reduced from 70 per cent to 49 per cent.

Resources to support schools in Brisbane's AST program include:

- a dedicated council expert working closely with the school's AST committee and providing specialist advice
- an AST passport for every student, plus rewards and incentives
- customised active travel maps
- bike and scooter skills training
- road safety sessions.

Objective 5: Walking is a high priority in policy and planning, delivered through partnerships and supported by evidence

Working together across all levels of government, and with our partners in the community and private sector, we can ensure that walking is incorporated into all relevant plans and projects.

Working together to prioritise walking

Government interest in walking spans across transport, health, environment, sport and recreation, tourism, and economic development. This means it is essential that departments work together to deliver initiatives cost effectively.

The Department of Transport and Main Roads will be leading the coordination and delivery of the *Queensland Walking Strategy 2019–2029* with many actions to be delivered by other Queensland Government departments. The department is also partnering across agencies to deliver on common goals, as outlined in strategies and plans including:

- *Queensland Cycling Strategy 2017–2027*
- *Queensland’s Road Safety Strategy 2015–2021*
- *Queensland: an age-friendly community*
- *All abilities Queensland: opportunities for all*
- *Queensland Tourism and Transport Strategy*
- *Activate! Queensland 2019-2029.*

Local governments play a key role in the planning, delivery and maintenance of walking infrastructure and environments. Many local governments in Queensland have current plans or strategies that include walking. Most of these form part of another plan or strategy, such as an active transport (bike riding and walking) plan or a sport and recreation plan.

To track our progress, we will measure	Baseline data
Number of Queensland local governments supported to develop a walking strategy and/or walking network plan	To be monitored from 2019

Health and Wellbeing Queensland (HWQ)

Newly formed in 2019, HWQ is a health promotion agency and statutory body that will contribute to:

- improving the health and wellbeing of Queenslanders
- reducing the risk factors associated with chronic disease
- reducing health inequities.

HWQ aims to target risk factors for disease such as poor nutrition, physical inactivity and unhealthy weight.



Photo by Rockhampton Regional Council

Local governments have told us they would like more support and funding to deliver walking infrastructure and encouragement programs. Improved planning for connected walking networks is important to justify and prioritise funding for walking infrastructure improvements.

Local governments would also like more help developing policies and plans to support walking and more design and technical advice to in deliver walkable environments.⁵⁸

Investing in walking

Since 2006, the Department of Transport and Main Roads has supported the provision of shared walking and bike riding infrastructure through the *Active Transport Investment Program*. Other funding programs also invest in walking infrastructure and placemaking such as the Transport Infrastructure Development Scheme, the Building our Regions, and Works for Queensland programs.

The Department of Environment and Science provides public access to walking trails across diverse environments in Queensland's protected areas and forests, allowing people to connect with nature.

Understanding and promoting the economic benefits of investing in walking infrastructure and programs will help to build the business case for more investment in walking.

Using evidence to guide decision making about walking

The Queensland Government collects data on walking patterns and its benefits through surveys such as the Household Travel Survey, the preventive health surveys reported in the annual *Chief Health Officer* reports, and the *Queensland Sport, Exercise and Recreation Survey*. Methods of collecting data about travel patterns are being improved to better inform and track our planning for people walking

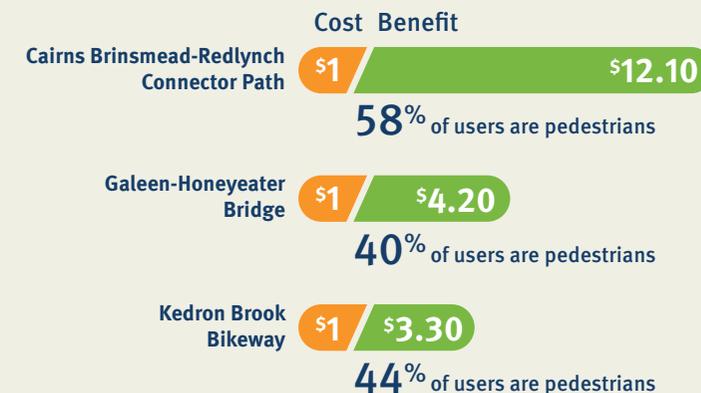
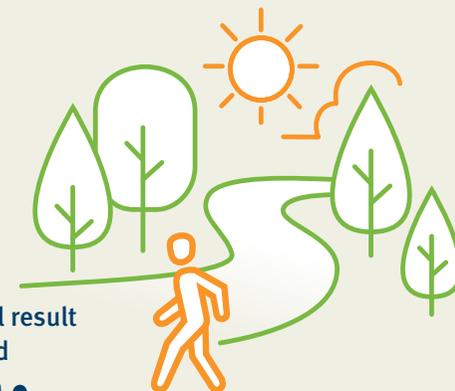
Gathering evidence and research on the benefits of walking and progress made against the objectives set out in the *Queensland Walking Strategy 2019–29* will assist with continuing to prioritise and deliver for walking in Queensland.

Walking benefits our economy^{55 56 57}

Over
1,000
pedestrians
per day

using a pathway will result
in benefits of around

\$8 million over a 30 year period.



Benefit-cost ratios for selected infrastructure projects show that for every dollar invested there are positive returns to the Queensland economy.^{59 60}

References

- 1 Department of Transport and Main Roads. 2017. *Household Travel Survey* Brisbane.
- 2 Australian Bureau of Statistics. 2015. *Participation in Sport and Physical Recreation 2013–14—Queensland*. Canberra.
- 3 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 4 Department of Transport and Main Roads. 2017. *Household Travel Survey*. Brisbane. Note: where a trip is defined as ‘a one-way movement between one address and another’.
- 5 Department of National Parks, Sport and Racing. 2016. *Queensland Sport, Exercise and Recreation Survey Adults*. Brisbane.
- 6 Australian Bureau of Statistics. 2016. *2016 Census—Journey to Work*. Canberra.
- 7 Australian Bureau of Statistics. 2016. *2016 Census—Journey to Work*. Canberra.
- 8 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 9 Queensland Health. 2018. *The health of Queenslanders 2018*. Report of the Chief Health Officer Queensland. Brisbane.
- 10 Queensland Health. 2018. *The health of Queenslanders 2018*. Report of the Chief Health Officer Queensland. Brisbane.
- 11 Hamer, M., Chida, Y. 2008. *Walking and primary prevention: a meta-analysis of prospective cohort studies*. *British Journal of Sports Medicine* 42: 238–243.
- 12 Australian Bureau of Statistics. *National health survey: first results 2017–18*. Cat. No. 4364.0.55.001. Canberra.
- 13 Warburton DER and Bredin SSD. 2017. *Health benefits of physical activity: a systematic review of current systematic reviews*. *Current Opinions in Cardiology*. 32(5). 541-556.
- 14 Queensland Health. 2018. *The health of Queenslanders 2018*. Report of the Chief Health Officer Queensland. Brisbane.
- 15 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 16 Department of National Parks, Sport and Racing. 2016. *Queensland Sport, Exercise and Recreation Survey Adults (QSERSA)*. Brisbane.
- 17 Queensland Health. 2016. *The health of Queenslanders 2016 based on VicHealth. 2009*. Cadilhac DA, Magnus A, Cumming T, Sheppard L, Pearce D, Carter C. The health and economic benefits of reducing disease risk factors. VicHealth, Melbourne.
- 18 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 19 Department of Transport and Main Roads. 2017. *Land Use and Public Transport Accessibility Index extract for 10 urban centres*. Brisbane.
- 20 Sallis, J. F., et al. 2012. *Role of Built Environments in Physical Activity, Obesity, and Cardiovascular Disease*. *Circulation* 125(5): 729–737.
- 21 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 22 Department of Transport and Main Roads. 2017. *Household Travel Survey*. Brisbane.
- 23 Burke M and Brown A. 2007, ‘Distances people walk for transit’, *Road and Transport Research*, 16(3) 17–29.
- 24 Pucher J and Buehler R. 2009, ‘Integrating Bicycling and Public Transport in North America’, *Journal of Public Transportation*, 12(3) 101–126.
- 25 CDM Research. 2016. *Measuring the benefits of active travel*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 26 Department of Transport and Main Roads. 2017. *Road Crash Database. Brisbane and Australian Bureau of Statistics*. Australian Demographic Statistics for Queensland, June quarter 2017. Canberra.
- 27 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 28 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 29 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 30 Hooper, P., et al. 2015. *The building blocks of a ‘Liveable Neighbourhood’: Identifying the key performance indicators for walking of an operational planning policy in Perth*, Western Australia. *Health & Place* 36: 173–183.

- 31 Queensland Government Statistician's Office. 2018. *Queensland Government population projections, 2018 edition: Queensland*. Brisbane.
- 32 Department of National Parks, Sport and Racing. 2016. *Queensland Sport, Exercise and Recreation Survey Adults*. Brisbane.
- 33 Garrard, J. 2013. *Senior Victorians and walking: Obstacles and opportunities*. Melbourne. Prepared for Victoria Walks.
- 34 Queensland Health. 2016. *The health of Queenslanders 2016*. Report of the Chief Health Officer Queensland. Brisbane.
- 35 Anderson et al. 1997. *Vehicle Travel Speeds and the Incidence of Fatal Pedestrian Crashes*. Accident Analysis and Prevention Vol. 29, 667–674.
- 36 Market and Communications Research. 2016. *Road Safety Perceptions and Attitudes survey. Brisbane*. Unpublished report prepared for the Department of Transport and Main Roads.
- 37 Kelly, J-F., Breadon, P.; Davis, C., Hunter, A., Mares, P.; Mullerworth, D., Weidmann, B. 2012. *Social Cities*, Grattan Institute, Melbourne.
- 38 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary. Brisbane*. Report prepared for the Department of Transport and Main Roads.
- 39 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary. Brisbane*. Report prepared for the Department of Transport and Main Roads.
- 40 Department of Transport and Main Roads. 2019. *Queensland Road Crash Weekly Report*. Report No. 1095a, Extracted 2 January 2019. Brisbane.
- 41 Organisation for Economic Cooperation and Development. 2017. *OECD Better Life Index*. Available at: <http://www.oecdbetterlifeindex.org/>.
- 42 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary. Brisbane*. Report prepared for the Department of Transport and Main Roads.
- 43 Queensland Parks and Wildlife Services, Department of Environment and Science. 2016. *Queensland Ecotourism Plan 2016-2020*.
- 44 Lawlor, E., 2013. *The Pedestrian Pound: The Business Case for Better Streets & Places*. United Kingdom: Living Streets & Just Economics Report. London, UK.
- 45 Department of Transport and Main Roads. 2017. *Household Travel Survey . Brisbane*.
- 46 Queensland Health. 2018. *Health and Wellbeing Strategic Framework 2017 to 2026. Performance review 2017–18*. Brisbane.
- 47 Heart Foundation. 2018. *Walking Survey 2018—executive summary*. Brisbane.
- 48 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary. Brisbane*. Report prepared for the Department of Transport and Main Roads.
- 49 Market Facts. 2019. *Queensland Walking Survey, Survey Analysis Report Summary. Brisbane*. Report prepared for the Department of Transport and Main Roads.
- 50 Department of Transport and Main Roads. 2018. *Household Travel Surveys (1976 to 2018)*. Brisbane.
- 51 Department of Transport and Main Roads. 2018. *Household Travel Survey (2018)*. Brisbane.
- 52 Queensland Health. 2018. *Free time physical activity of Queensland Children*. Brisbane.
- 53 Brisbane City Council. 2018. *2018 Active School Travel Results*. Brisbane.
- 54 Department of Transport and Main Roads. 2018. *Household Travel Surveys (1976 to 2018)*. Brisbane.
- 55 Sinclair Knight Merz and Pricewaterhouse Coopers. 2011. *Benefits of the inclusion of active transport in infrastructure projects*. Prepared for the Department of Transport and Main Roads. Brisbane.
- 56 Australian Government Department of Infrastructure. 2013. *Walking, Riding and Access to Public Transport*. Canberra.
- 57 Reserve Bank of Australia. 2019. *Inflation Calculator*. Available online at: <https://www.rba.gov.au/calculator/annualDecimal.html>
- 58 Department of Transport and Main Roads. 2018. *Queensland Walking Strategy Local Government survey results*. Brisbane. Unpublished report prepared for the Department of Transport and Main Roads.
- 59 CDM Research. 2016. *Measuring the benefits of active travel*. Brisbane. Report prepared for the Department of Transport and Main Roads.
- 60 Transport and Infrastructure Council. 2016. *Australian Transport Assessment and Planning Guidelines—M4 Active Travel*. Commonwealth Department of Infrastructure and Regional Development. Canberra.



