

# **Technical Report**















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The City of Ipswich Transport Plan (branded 'iGO') is Ipswich City Council's masterplan for Ipswich's transport future. It responds to current and future transport challenges and outlines Council's aspirations to advance the city's transport system to accommodate a future population of 435,000 people<sup>1</sup>.

In particular, iGO recognises that to meet the future increased travel demands that come with Ipswich's forecast population growth, and also achieve the quality of life outcomes outlined in the *Advance Ipswich Plan*, that greater emphasis must be given to promoting and realising the opportunities and benefits associated with more sustainable forms of travel, such as active transport.

Consequently, iGO identified three active transport policy focus areas and a number of early actions arising from these. One of the key actions of iGO involved the preparation of a more detailed *Active Transport Action Plan* (refer Figure 1).

The aim of the Active Transport Action Plan is to guide the planning, delivery and promotion of quality facilities and programs for walking and cycling (and other active forms of travel) in Ipswich.

Focused consultation was undertaken with the Ipswich community in order to help shape a realistic plan. This was achieved via an online community survey undertaken in early 2016.

# 1.2 What is Active Transport?

iGO highlights active transport as being "an efficient, cost effective, healthy, sustainable and accessible form of transport which has many benefits for both the individual and the community." The most common forms of active transport are walking and cycling, though it also includes all forms of human powered movement including the use of wheelchairs and other mobility devices, skateboards, roller blades and scooters. These are further defined below:

Walking: Walking comprises all people using their feet solely to move, as well as those in wheelchairs and those pushing prams. A pedestrian, according to the Australian Road Rules, also includes people using wheeled recreational devices such as rollerblades, roller skates and skateboards, scooters and motorised scooters (travelling less than 10km/hr).

Cycling: Cycling specifically includes those people using bicycles (both manual and electric) as a form of movement. According to the Australian Road Rules, it can also include a motorised wheelchair which travels at a speed greater than 10km/ hr. A bicycle is classified as a vehicle under the Australian Road Rules<sup>2</sup>.

This Active Transport Action Plan focuses on walking and cycling as the primary forms of active transport, recognising that through the provision of a network and infrastructure for these users, it will also provide for other forms of active transport.

<sup>&</sup>lt;sup>1</sup> iGO: City of Ipswich Plan, 2016, page 3 <sup>2</sup> Logan City Council



# 1.3 Why Walking and Cycling?

# 1.3.1 Active Travel Can Reduce Traffic Congestion

In Ipswich, the car is currently a convenient transport option. However, if the prevalent use of the private vehicle continues, coupled with expected population growth, there will be a need to significantly upgrade the road network at a high cost. This will result in increased air and noise pollution and reduce the overall quality of life of Ipswich residents. Further, the additional congestion will impact on freight and commercial movements, making them slower and therefore more expensive. This will reduce the attractiveness of Ipswich for economic investment.

Almost 50% of car trips are less than 5km<sup>3</sup>. Travel change to more active modes of travel for these trips can result in a more liveable community with less traffic congestion. If people replace a car trip to work or school with a public transport, walk or cycle mode once per week, this can help reduce traffic congestion by 20%<sup>4</sup>.

# 1.3.2 Active Travel is Good for Health

Obesity is a nation-wide issue. The number of people who are overweight or obese nationally is increasing every day, creating significant health issues such as cardiovascular disease, type 2 diabetes and other chronic diseases. Physically inactive Australian adults are costing the health care system an avoidable \$1.5 billion a year<sup>5</sup>. This national trend is mirrored in the Ipswich LGA, with 5.9 out of 10 people classified as overweight or obese<sup>6</sup>.

Being physically active every day and limiting sedentary behaviour (including time sitting in a car) is essential for health and wellbeing. Guidelines recommend that 30 minutes of physical activity per day is required. Walking and cycling for some trips, to or from public transport or just for fun can contribute towards this daily activity requirement and help make exercise a habit rather than a chore.

Increasing levels of physical activity can also help people be more productive at work and contribute to reductions in depression, anxiety and sedentary lifestyle diseases.

# 1.3.3 Active Travel is Good for Business

More people walking and cycling can revitalise an area and bring increased economic dollars into a centre. Providing places for people to walk/cycle and improving the amenity and convenience of these activities can contribute to the centre's economy. A survey conducted by local businesses in Acland Street, St Kilda (Melbourne)<sup>7</sup> found that local residents made up 50% of the visitors to the centre and 85% of the expenditure. It also found that 57% of the expenditure is 'walked' to the centre and only 26% of total expenditure is driven to the centre.

Other economic benefits of active travel include:

- Reduced cost of infrastructure due to space for public transport, walking and cycling being less than a car (i.e. it is possible to move more people in a narrower corridor and less storage space is required at the beginning and end of a journey);
- High cost-benefit ratio of travel choice programs and walking, cycling and public transport facilities; and
- More vibrant and successful town centres.

The vibrancy and success of activity centres can be clearly demonstrated by the number of people who are not only walking around these streets but also spending time in the centre sitting, conversing and enjoying the area.

<sup>6</sup> Self-reported health statistics 2011-12, Health indicators: Chronic disease and behavioural risk factors - local government areas, Qld Health 2013

<sup>&</sup>lt;sup>3 & 4</sup> Connecting SEQ 2031, TMR 2011

<sup>&</sup>lt;sup>5</sup> http://www.activehealthycommunities.com.au/content/why-important

<sup>&</sup>lt;sup>7</sup> Rodney Tolley, Why walking is good for business, Presentation PedBikeTrans, November 2012

# 1.3.4 Active Travel is Equitable

There is a social need to ensure that those who are disadvantaged (i.e. have no car ownership, low income, low education attainment, unemployment or people under 17yrs and over 75yrs) have transport choices. Many of those in transport need are on the urban fringe as housing tends to be cheaper. However, these areas often have fewer services, less public transport and reduced access to walking and cycling facilities making them more reliant on the car.

With rising petrol and insurance prices, the running costs of private cars are an increasing burden on household income. Cycling costs are low to nil, with a minimal initial cost and negligible running costs. Walking only requires shoes and comfortable clothes. This makes walking and cycling a cost effective choice, particularly for short trips.

# 1.3.5 Active Travel is Good for the Environment

Greenhouse gas emissions and the volume of nonrenewable energy resources that a car uses are key issues for the environment. The production of greenhouse gases is increasing and contributing to the number and severity of climate change impacts<sup>8</sup>.

Our dependence on road transport is contributing to these high emissions. Transport is responsible for 12.1% of total greenhouse gas emissions in Queensland, with 85% from road transport<sup>9</sup>.

Research also shows that vehicle emissions are highest when the engine is cold and consequently, short trips by car (less than 5km) produce higher emissions per kilometre than longer trips<sup>10</sup>. Reducing car use could play a role in mitigating climate change and protecting our environment for future generations<sup>11</sup>.



<sup>8</sup> Australian Government Department of Environment and Energy, 2016, https://www.environment.gov.au/climate-change/climate-science/understanding-climate-change <sup>9</sup> Connecting SEQ 2031, TMR 2011

<sup>10</sup> P Hoglund and A Ydstedt "Reduced air pollution and fuel consumption with pre-heated car engines" Urban Transport and the Environment for the 21st Century, Lisbon, Portugal, 1998

<sup>11</sup>Australian Government Climate Change Authority 2016, http://www.climatechangeauthority.gov.au/reviews/light-vehicle-emissions-standards-australia/opportunitiesreduce-light-vehicle-emissions

# 1.4 Who Does This Plan Focus On?

# 1.4.1 Why Do Walkers and Cyclists Have To Be Treated Separately?

iGO recognises the need for a greater emphasis on walking and cycling. However, for the purposes of this *Active Transport Action Plan* these two topics have been separated where possible. This has been done due to the significant differences in needs and motivations of people undetaking these two activities, differences which are rarely recognised.

People on foot have different needs, motivations and abilities from people on bicycles. For example, planning for people on bicycles tends to be about getting from A to B and although planning for people on foot can also be about this, it is also about what happens in between. As a result, creating interesting areas for people to walk in and through, as well as sit and relax in, is very important in planning for people who walk.

It is also acknowledged that in some instances these modes are incompatible and conflicts can be prevalent.

# 1.4.2 User Group Types

There are a number of different user group types which could potentially use the walk and cycle network in Ipswich. It is important to understand these user groups to ensure the network and standards provided meet their needs (refer to Table 1). Like iGO, the *Active Transport Action Plan* focuses on school, commuter and utility groups acknowledging that through the provision of a network for these groups, other groups will also receive positive benefits. Table 1: iGO Active Transport Action Plan User Group Types\*





Less experienced or new commuter cyclists also want direct and efficient routes but desire a higher level of safety, preferring facility types which are separated from traffic.

Commuter pedestrians tend to travel much shorter distances to the same destinations using off-road paths.

Utility cyclists and pedestrians also use the network for trips to shops, public transport nodes and community facilities. Preference is for lower stress routes over shorter distances, using off-road paths and cycling on road via quiet local streets.

# Elderly and disabled persons

Primarily pedestrians using off-road paths for pleasure, fitness and potentially utility trips over relatively short distances and/or close to home.

Require good access to pleasant recreational circuits and community destinations (e.g. shops, medical facilities, public transport nodes.)

Paths at acceptable grades and widths, good surface quality, safe crossing points and support facilities (e.g. rest stops, shaded seating.)

Special mobility provisions, notably wide sealed paths with flat grades and firm, consistent surface, free of steps and obstructions, lipless kerbs and ramps, good lines of sight, tactile paving, audible warnings at crossings and hand rails.

Increasing use of wheelchairs and mobility scooters likely as the population ages.

Increasing need for the provision of paths to/from public transport nodes to facilitate a public transport journey from origin to destination (i.e. the whole of journey).

\* Table content adapted from the Cairns Regional Cycling and Walking Strategy Part A (Strategic Leisure Group, 2010) Pictures sourced from Ipswich City Council, ARUP and Zwart Transport Planning.









# Other wheeled recreation devices

Local paths will be used by a range of other nonmotorised modes, including parents with prams and wheeled recreation devices (e.g. roller blades, skateboards, scooters.)

Preference for off-road paths. Sufficiently wide paths for safe shared use by different groups.

Mix of trip purposes and skill levels.

Increasingly popular mode of transport for school children.

## Mountain Bikers and Hikers

Undertaken for recreation and exercise.

Occurs primarily on unsealed roads or tracks in natural environments.

Range of skill levels - novices to competitive cyclists and hikers.

Growing recreation activity.

As this use primarily occurs in natural environments (e.g. national parks), mountain bike and hiking tracks are not within the scope of the Ipswich *Active Transport Action Plan*.

### **Recreation Users**

Walking, jogging, cycling and dog exercise as a source of recreation and fitness, with use peaking at weekends, early morning and late afternoon/early evening.

Flat to moderate grades desirable with emphasis on support facilities along major routes (e.g. path lighting, drinking water, rest stops, seating.)

Preference for off-road paths with good scenic amenity and linked to recreational destinations/settings.

Circuits / loops popular in residential neighbourhoods via the local street network.

Increasing numbers of people are part of an organised walk or cycle group.

These groups are considered but are not a focus for the Ipswich Active Transport Action *Plan.* Specific treatments for these users will not be considered as part of this plan.







### Pictures sourced from Ipswich City Council, ARUP and Zwart Transport Planning.

# **Sports Groups**

Road bike racers and triathletes form this major user group.

Sport cyclists prefer high speed on-road facilities with diversity in topography, distance, endurance and circuit ride opportunities. Generally incompatible with lower speed groups

Road bike racers and triathletes use all elements of the road network, from highways to local streets.

These groups are considered but are not a focus for the Ipswich Active Transport Action Plan.

# 1.5 Consultation

Focused consultation was undertaken with both Council representatives and the community in order to help shape the identification of a realistic active transport network and action plan.

Council representatives were engaged through three targeted workshops:

- Workshop 1 Participants provided input into the preparation of the pedestrian and cycle networks and identified potential links, geographical features, growth areas, locations of future schools and further opportunities and constraints;
- Workshop 2 Participants contributed towards the strategy and actions, particularly towards the development of a new vision and objectives for the plan; and
- Workshop 3 Participants provided direction on the implementation of the strategy, including the prioritisation of actions and works.

The Ipswich community was engaged through an online community survey in early 2016, with the aim to consult with a broad section of the Ipswich community and collect feedback to help inform the development of the action plan. The survey asked the community to provide input on whether they were, or were not, currently walking or cycling for transport purposes, their level of comfort with respect to different conditions and what they identified as barriers/enablers for them.

The survey was promoted via a range of mediums including Council's Facebook page, e-newsletter, website, school e-newsletters, various community groups and a media release.

A total of 941 people responded to the community survey with over 500 being complete responses (i.e. 572 complete responses for the cycling questions and 510 complete responses for the walking questions). Of these responses, there was a broad range of ages represented for both walkers and cyclists and an almost 50% split between male and female respondents overall (refer to Figure 2).\*



Figure 2: Ipswich Community Survey Respondents by Gender and Age

\* A portion of respondents did not specify their gender/ age or may not have answered all questions in the survey for cycling and walking in Ipswich.





# Existing Situation

# 2.1 Policy Context

There are a number of state and local policies and studies which influence and provide guidance for the *Active Transport Action Plan* and these are summarised in Appendix A. Of note:

Table 2: Policy Context Summary

State	Local
Queensland Cycle Strategy 2011-2021 Queensland Government Department of Transport and Main Roads (2011) This strategy outlines the state government's vision for more cycling, more often on safe, direct and connected routes. These routes are typically the priority routes as outlined in the Principal Cycle Network Plan.	Advance Ipswich Plan Ipswich City Council (2015) This plan provides Council's overarching vision for the City's future. Priorities identified by the community in developing this plan included, 'delivery of infrastructure to match population growth', 'walkable, connected and serviced neighbourhoods', 'public and active (walking and cycling) transport to reduce private vehicle use', 'healthy and happy families' and 'active and healthy lifestyles'.
Connecting SEQ 2031: An Integrated Regional Transport Plan for South East Queensland Queensland Government Department of Transport and Main Roads (2011) In addition to providing guidance for the design and delivery of the region's active transport network and this action plan, this description of the transport network and this action plan, this	<b>Ipswich Planning Scheme</b> <i>Ipswich City Council (2006)</i> Council's statutory document to manage growth and guide how land in the region can be used and developed.
SEQ Principal Cycle Network Plan Queensland Government Department of Transport and Main Roads (2015) This document outlines the priority routes for treatment in partnership with the State Government. These treatments will be delivered with the assistance of the Cycle Network Local Government Grants Program.	IGO - City of Ipswich Transport Plan Ipswich City Council (2016) IGO outlines the aspirations to advance Ipswich's transport system. The plan identifies the three active transport policy focus areas for the Active Transport Action Plan. Springfield Town Centre Concept Plan Springfield Land Corporation (2015)
	This plan provides the primary planning and design mechanism for implementing development within the Springfield Town Centre, having regard to the context of the Springfield Structure Plan, Springfield Town Centre Infrastructure Agreement and Springfield Infrastructure Agreement. This masterplanned community will see a significant growth in population and employment and requires well designed walk and cycle networks to achieve higher active travel mode share targets
	Ripley Valley Development Scheme Urban Land Development Authority/Queensland Government (2011) The development scheme is the planning document which assists in planning, carrying out, promoting, coordinating and controlling the development of land in the Ripley Valley Priority Development Area. This future community will see a significant increase in population and there is great opportunity to influence these future residents by providing walkable and cyclable catchments early on.

# 2.2 Current Active Transport Use

# 2.2.1 ABC National Cycling Participation Survey

In 2011, the Australian Bicycle Council (ABC) conducted the National Cycling Participation Survey across Australia, including 603 households in the Ipswich City Council area. In Ipswich the following results were found.

# 20.3% of Ipswich residents ride a bicycle in a typical week, compared to 17.9% in Queensland



Figure 3: Cycling Participation – Frequency

(Source: ABC National Participation Cycling Survey, Ipswich LGA 2011)





25.8% of male Ipswich residents ride in a typical week compared with 14.7% of females. Male riders in Ipswich were slightly higher than the Queensland Average at 23.3%.



Figure 5: Cycling Participation – Age



(Source: ABC National Participation Cycling Survey, Ipswich LGA 2011)

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# Of those who rode in the week previous to the survey, 84% had ridden for recreation or exercise while 7% had ridden for commuting



# 2.2.2 Work Trips

In 2011, 0.3% of residents cycled to work, compared to 1.1% across Queensland.

This is a very low percentage when compared to Brisbane City Council whose bicycle mode share is 1.6%. However, this percentage is more comparable to neighbouring local governments where bicycle mode share to work is 0.4% in Redland Shire Council, 0.5% in Moreton Bay Regional Council and 0.3% in Logan City Council.

1.7% of residents walked to work in Ipswich, compared to 3.7% across Queensland. When compared to other local governments, the percentage is similar with walking mode share to work being 1.7% in Redland Shire Council, 1.8% in Moreton Bay Regional Council and 1.4% in Logan City Council. Brisbane City Council's walking mode share to work is much higher at 4.3%.

Notably, as illustrated in Figures 8 and 9, the percentage of residents cycling to work in Ipswich over the past 10 years has declined from 0.6% (280 people) in 2001 to 0.3% (220 people) in 2011. The percentage of residents walking to work has also declined slightly from 2006 to 2011, from 1.9% (1,179 people) to 1.7% (1,273 people).

Of those who did cycle to work in 2011, the majority (92%) were males. The Ipswich percentage of males cycling to work is higher compared to neighbouring local government areas such as Brisbane City Council with 80%, Redlands Shire Council with 82% and Moreton Bay Regional Council with 80%. However, it is acknowledged that the percentage of females cycling to work in Ipswich has slowly increased over time, as seen in Figure 10.

Aiming to increase female ridership can be demonstrative of the level of safety in the type of infrastructure provided in the region over a period of time (i.e. females are considered to be the 'indicator species' for bike friendly cities world-wide).

The gender balance of walkers is more equal with 51% being female.



Figure 8: 2011 Method of Travel to Work, Ipswich Residents



Figure 9: 2001 - 2011 Method of Travel to Work, Ipswich Residents

Figure 10: 2001-2011 Cycle to Work by Gender, Ipswich Residents



(Source: ABS 2001, 2006, 2011)

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Figure 11 spatially maps the locations of residents who cycle to work and shows some patches of higher bicycle mode share. The majority are located around the Amberley RAAF base<sup>\*</sup>. Other locations of higher bicycle mode share include Wulkuraka, Coalfalls, Silkstone, Gailes, Springfield Lakes and Augustine Heights. Spatially, as shown in Figure 12, many of the people who walk to work are located around Amberley, the Ipswich City Centre, Woodend and North Ipswich. The rural areas also show a higher number of people walking to work (which may be indicative of the nature/type of work in these areas).

Figure 11: 2011 People Who Cycled to Work By Location



(Source: ABS, 2011)

Figure 12: People Who Walked to Work By Location



\* This is likely due to co-location of work and residential facilities at the base

(Source: ABS 2011)



# 2.2.3 School Trips

Education trips are significant contributors to urban congestion with these trips making up about 20% of peak hour traffic<sup>12</sup>. These days most education related trips are made using private motor vehicles (74% of primary school journeys in SEQ and 44% of high school journeys in SEQ)<sup>13</sup>. Consequently, there is great potential for modal shift at schools and among students to encourage sustainable travel behaviour early on.

In SEQ, the active transport mode share for primary schools is 24% and for secondary schools is 21%<sup>14</sup>. However, there is no overall data available for the Ipswich LGA.

### Table 3: 2014-2016 Healthy Active School Travel (HAST) Active Transport Mode Share

			2014			
School	Division	Suburb	Baseline % Active	Average % Active	Peak % Active	Variance Peak Base
School 1	6	Brassall	18	29	38	20%
School 2	8	Churchill	21	33	40	19%
School 3	3	Collingwood Park	17	28	39	22%
School 4	5	Ipswich East	32	37	44	12%
School 5	1	Springfield	28	35	42	14%
School 6	4	Bundamba		Not in Program		
School 7	2	Goodna	15	24	26	11%
School 8	9	Redbank Plains	16	21	31	15
School 9	2	Leichhardt		Not in Program		
School 10	1	Springfield	16	21	33	17

Notes:

1. 2016 result as at mid Term 2 data (April 2016)

2. Special event days (National Ride 2 School Day, Walk Safely 2 School Day etc) = peak active figures

3. Statistics sourced from schools self reported 'Hands Up' data

<sup>12 & 13</sup> Connecting SEQ 2031, TMR (p 24 & p 77)
<sup>14</sup> Household Travel Survey 2009

Council have collected some mode share usage data whilst conducting the *Healthy Active School Travel* (HAST) program. The following table illustrates the active transport mode share at these primary schools before the program commences (Baseline Data), the average active transport mode share while the program is being conducted (Average % Active) and also the active transport mode share when a travel behaviour change event is being held (Peak). This data indicates that on average the active transport mode share across all schools in the program was 25%, increasing to 31% after the program was conducted. On event days, the active transport mode share was at 48%.

2015				2016				
Baseline % Active	Average % Active	Peak % Active	Variance Peak Base	Baseline % Active	Average % Active	Peak % Active	Variance Peak Base	
Not in Program					Not in Program			
Not Available		67	N/A		Not in Program			
24	27	65	41%	24	TBA	55	31%	
34	38	46	12%		Not in P	rogram		
Not Available		25	N/A	Not in Program				
39	40	46	7%	19	tba	46	27%	
Not in Program				Not in Program				
Not Available		42	N/A	26 Not Available N/A		N/A		
25	42	53	28%	42	31	58	16%	
15	24	28	13	24	ТВА	33	9%	

(Source: ICC 2016)

# 2.2.4 Bicycle Network Super Tuesday Counts

Ipswich participated in the Bicycle Network Super Tuesday counts in September 2015. The counts were conducted between 7-9am on a Tuesday across 11 sites. The weather was fine on the survey day. Figure 13 illustrates the results of the survey, which can be summarised as follows:

- Overall bicycle volumes increased by 37% compared to 2013;
- The busiest site was at Warwick Road and Carr Street with 12 bicycle trips per hour;
- Males represented 93% of the bicycle commuters across the local government area. This is higher than the National and Queensland averages; and
- The busiest 15 minute interval was between 8:00-8:15am.



(Source: Super Tuesday Count for Ipswich City Council, Bicycle Network 2015)

Figure 13: 7am-9am Bicycle Commuter Volumes Recorded

# 2.2.5 Health Statistics

Key drivers of obesity are the ready availability, affordability and consumption of foods high in energy and increasing sedentary lifestyles<sup>15</sup>. Indeed, the environment has undergone substantial change over the past few decades. High fat and high suger food and drinks are more accessible, many people now have sedentary jobs and transport options increasingly focus on car travel.

In 2011/12 Queensland Health conducted Self-Reported Health Status reports at a local government level. The health indicators surveyed include BMI and obesity, physical activity, smoking and fruit and vegetable consumption. The statistics that are relevant to active transport are the BMI/obesity statistics and levels of physical activity. The following figure summarises the key components of these indicators for Ipswich compared to the whole of Queensland. The data reported refers to adults only (18+) and currently no local government specific data is available for children.

As can be seen from the below graph, the Ipswich local government area recorded less people who are of a healthy weight compared to the Queensland average. Further, 5.9 out of 10 people in the Ipswich local government area were identified as overweight or obese, whilst only 56% do sufficient activity for a health benefit (30 minutes or more a day).

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(Source: Self-Reported Health Status 2011-12, Local Government Areas, Queensland Department of Health)

\* It is worth noting that many people responding to surveys often under-report their actual weight.

<sup>15</sup> The Health of Queenslanders 2014, Queensland Health (p 79)

### Figure 14: Health Indicators 2011/12\*

# 2.2.6 Ipswich Active Transport Community Survey

An online community survey was undertaken as part of the *Active Transport Action Plan* to gain understanding and insight into walking and cycling as modes of transport in Ipswich. A total of 941 people responded to the survey, with over 500 being complete responses (i.e. 572 complete responses for the cycling questions and 510 complete response for the walking questions).

## Who Responded to the Survey?

Of the complete responses to the survey, approximately 52% of the respondants were female and 48% male, of which the greatest proportion were in the 30-39 and 40-49 age ranges (refer to Figures 15 and 16).

Over 60% of respondents were in full-time employment, 16% part-time employment, 4% students, 7% retired and 3% unemployed. The remaining respondents identified themselves as a full-time/stay-at-home carer, self-employed or casual employee.\*

Of those that indicated that they were a tertiary student, nearly 40% studied at USQ Springfield campus, 26% at USQ Ipswich campus and the remaining 34% studied at universities in Brisbane.

\* Percentages based upon the completed number of surveys.



Figure 15: Ipswich's Walking Survey Respondants by Age, Gender and Walking Habit

Figure 16: Ipswich's Cycling Survey Respondants by Age, Gender and Cycling Habit



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# 2.2.6.1 Ipswich's Cyclists

Of those that responded to the cycling set of questions, they were asked if they do or don't currently cycle. This is represented in the data as 'YES' for those who currently cycle and 'NO' for those who do not currently cycle (i.e. non-cyclist). 52% of the respondents currently cycle in Ipswich and 48% do not currently cycle. Figure 17 shows the split of YES and NO cyclists by gender in Ipswich. The lower proportion of female cyclists is consistent with most results for Australia.

For those that do not currently cycle in Ipswich, nearly 14% indicated that they were not interested in cycling, 35% did not own a bicycle and 10% did not have access to a bicycle that was in working condition<sup>\*</sup>.

Ipswich's existing cyclists travelled a range of distances, with over 80% cycling greater than 5 kilometres to travel

to work, for recreation and for other purposes. Of these cyclists, a significant number noted that they cycled 30 to 40km or more mostly for recreation purposes.

### Cyclist Trip Purpose

As shown in Figure 19, for those who currently cycle, recreation or fitness, sport training or travel to work were the most frequently cited as reasons for cycling. A significant proportion of those who cycled regularly for recreation or fitness did so 1 to 4 times a week (58%). Of the respondents that cycled regularly for work purposes, the proportion that rode 1 to 4 times a week was 19.7%, 6.7% every weekday and 5.6% every day. Of those that travelled for tertiary education, a total of 1.5% travelled 1 to 4 times a week by bicycle.

Other reasons for cycling in Ipswich included cycling for fun, riding with children/family or touring.



### Figure 18: Distances Travelled by Ipswich Cyclists



(Source: Community Survey 2016)

\*Remaining 40% of respondents indicated 'other' reasons for why they did not cycle

Figure 19: Ipswich Cyclist Trip Purpose and Frequency



### 2.2.6.2 Ipswich's Walkers

Of those that responded to the walking set of questions, they were asked if they walked or travelled by foot more than 400m on the way to work, education, public transport, recreation or other place. This is represented in the data as 'YES' for those who currently walk and 'NO' for those who do not currently walk more than 400m. Of the complete responses, 70% of respondents currently walk or travel by foot more than 400m and 30% do not currently walk for these purposes (or at all).

Figure 20 shows the split of current and non-walkers by gender in Ipswich, illustrating that a greater proportion of current walkers are female compared to male.

Ipswich's current walkers travelled a range of distances, with the majority (30%) walking between 2 and 5 kilometres, 11% 1 to 2 kilometres and 23% less than 1 kilometre.

Figure 20: Ipswich Walker Responses by Gender

# Walker Trip P urpose

For those in the Ipswich community who currently walk, the key reasons for walking were cited as recreation or fitness, travel to work, shopping, personal business and public transport.

As shown in Figure 22, a significant proportion of those who walked regularly for recreation or fitness did so 1 to 4 times a week (44.1%). Of those who walked regularly for work purposes, 12.8% did so every weekday and 12.5% 1 to 4 times a week. For those who walked for shopping, 18.8% did so 1 to 4 times a week and 13% a few times a month. Very few respondents walked to school, or to tertiary education, which is likely due to the age of the respondents to the survey (i.e. 12% of respondents were under the age of 30 years old).

Several respondents noted that the other purpose they walked for was to walk their dog or walk between their car and origin/destination.



Figure 21: Distances Travelled by Ipswich Walkers



(Source: Community Survey 2016)

(Source: Community Survey 2016)



Figure 22: Ipswich Current Walker Trip Purpose and Frequency

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# 2.3 Existing Active Transport Network

# 2.3.1 Existing Active Transport Facility Types

Existing pedestrian and bicycle facilities in Ipswich vary by location, proximity to different land uses and by age of suburb.

The following provides a brief summary of existing facilities in Ipswich which include shared use paths and on-road cycle lanes.

Table 4: Examples of Existing Active Transport Facility Types in Ipswich\*

### Footpaths





## Shared Use Paths

- Shared use paths are typically provided where pedestrians and cyclists can safely operate together and where the intensity does not require the need to provide separate facilities<sup>77</sup>. Such paths have a minimum width of 2.5 metres and a desirable width of at least 3m.
- Example shared paths in the City of Ipswich include:

  - Brassall Bikeway
  - Goodna Creek Bikeway River Heart Parkland

# **On-road Facilities**

- These may take many forms including advisory treatments (Bicycle Awareness Zones), dedicated bicycle lanes and wide sealed shoulders.
- Exclusive bicycle lanes are desirably 1.5m wide for 60km/h roads.
- Where parallel parking exists, an acceptable maximum width of 4.5m provides adequate clearances particularly where turnover is significant.
- Examples of on-road facilities include:
  - Old Toowoomba Road towards the RAAF base at Amberley
  - Sinnathamby Boulevard, Springfield



# **Recreational Trails**

- Path is primarily for recreation use by cyclists, walkers or horse riders. Mountain bike riders may also use these paths.
- Tend to be liner paths through natural areas with low cost construction such as cleared grass, dirt or gravel path. Often along disused rail corridors.
- Aim to encourage cycling for recreational and tourism purposes.
- Example recreational trails in Ipswich include: Brisbane Valley Rail Trail
- **Active Transport Bridge Crossings**



\* Pictures sourced from Ipswich City Council.

<sup>16 & 17</sup> Austroads Guide to Road Design Part 6A: Pedestrian and Cyclists Paths, 2009
# 2.3.2 Existing Cycle Networks

For cyclists, the active transport network in Ipswich is not well developed, with limited existing shared paths and cycle lanes. As detailed in Table 5, there are approximately 100kms of shared paths and 140kms of dedicated cycle lanes/Bicycle Awareness Zones (BAZ) within the local government area (on local government roads).

In comparison, there is 1,395km of sealed local government controlled roads within the local government area.

The key existing cycle links are as follows (it is acknowledged that there are gaps in some of these links:)

- Brassall Bikeway (between North Ipswich and Brassall/ Wulkuraka). Council are currently extending the bikeway north along Iron Pot Creek with future stages including North Ipswich to the City Centre and Brassall to Pine Mountain and Karrabin;
- Goodna Creek Bikeway (between Redbank and Redbank Plains). Council has completed shared pathway connections through the Peter Beattie Park Reserve, Deborah Drive Park Reserve and Goss Drive unformed road reserve linking with existing facilities around Redbank shopping centre and to the Redbank rail station. Facilities have also been provided at the Redbank Plains Recreation Reserve with future stages to provide the missing link through Collingwood Park;
- Redbank to Springfield (via Collingwood Drive and Redbank Plains Road). There are some gaps in this on-road link but the majority has been constructed and/or proposed to be constructed in the short term;
- Ipswich Motorway (between Ebbw Vale and Gailes). As part of the Ipswich Motorway upgrade, the adjacent

active transport network was also upgraded. This included five new active transport bridges across the Motorway at Dinmore, Redbank, Riverview and two at Goodna;

- Centenary Highway (between Springfield and Yamanto). The highway was constructed with cycle lanes on the road shoulders. However there is no provision at roundabouts along this route;
- Old Toowoomba Road (towards the RAAF base at Amberley). The road has on-road cycle lanes from the Toongarra Road roundabout and Three Mile Bridge;
- Various new development areas around Augustine Heights, Redbank Plains, Redbank Plains South and Springfield: and
- There is a limited network within the Ipswich City Centre with cycle lanes only present along King Edward Parade.

Appendix D contains maps of the existing cycle network in Ipswich.

# 2.3.3 Existing Pedestrian Networks

The pedestrian network is more developed than the cycle network, consisting of 787kms of footpaths 2.4m wide or less, approximately 100kms of shared paths and 117km of footpaths where the widths have not yet been categorised (See Table 5). Approximately 82% of these footpaths are beside roads or within road reserves while approximately 18% are located within parks and nature reserves etc. Approximately 182kms (16%) of the total amount of footpaths in Ipswich are deficient in width (i.e. less than 1.2m wide) and many areas in Ipswich do not have footpaths at all.

Width	Total (kms)	Total (%)
Paths - 1.2m or less	182.14	15.90%
Paths - 1.3-2.4	604.43	52.77%
Paths - 2.5 or greater	101.05	8.83%
Cycle Lanes / BAZ	140.30	12.25%
Paths unknown width	117.45	10.25%
TOTAL	1,145.37	100%

Table 5: Existing Active Transport Network – Widths\*

### (Source: ICC GIS Layers)

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\* These figures are based off ICC GIS active transport layers and mapping which is noted as not being complete and containing gaps throughout the ICC local government area

# 2.4 Existing Active Transport Resident Profile

# 2.4.1 Who is Cycling in Ipswich?

The Portland Office of Transport published a paper in 2006 titled 'Four Types of Cyclists' which provides a classification method for cyclists that has been used widely in active transport planning. The paper outlines that cyclists can be placed into one of four groups based on their relationship to bicycle transportation, as shown in Table 6<sup>18</sup>.

This methodology has been used to profile Ipswich's cyclists based on responses to the online community survey. Figure 23 shows the classification of Ipswich's cyclists compared to the findings of the Portland study.

As illustrated in Figure 23, the largest number of respondents identified with 'Interested but concerned', followed by 'Enthused and confident'. There are less

'No way no how' cyclists and almost three times more 'Enthused and confident' cyclists in Ipswich compared to Portland.

The cyclist type data has also been analysed, as shown in Figure 24 by 'Type' and Figure 25 by 'Gender' and if they were already cycling or were non-cyclists. In all types, the proportion of men or woman were different. Most men were identified as 'Strong and fearless' and 'Enthused and confident', with the majority already cyclists.

While there are higher percentages of females in the 'Interested but concerned' and 'No way no how' types, the majority of these were non-cyclists (21% and 11%) as illustrated in Figure 25 (see Female 'NO'). This result is as expected by the typology findings from Portland.

Table 6: Roger Geller Four Types of Cyclists<sup>19</sup>

Туре	Characteristics
Strong and fearless	Will ride in almost any traffic conditions.
Enthused and confident	Comfortable riding in most situations, including bike lanes along arterial roads.
Interested but concerned	Find situations in which they have to negotiate with traffic streams uncomfortable but respond well to stand alone paths and streets with little and slow traffic.
No way no how	These people have no interest in riding a bicycle.



Figure 23: Types of Cyclists in Ipswich

18 & 19 Geller, R. Four Types of Cyclists. Portland, OR: City of Portland Office of Transportation, http://www.portlandonline.com/transportation/44597?a=237507



Figure 24: Cyclist Types by Gender and Hbait (percentage)





Figure 26: Ipswich's Cyclists Types by Age and Gender



Figure 26 aims to illustrate the proportion of Ipswich's cyclists (based on the online community survey) by type, gender and age range. Those respondents in the 30-39 and 40-49 age range (representing the largest proportion of respondents) appear to be spread through each of the four cyclist types. What is of interest is the greater proportion of 50-59 age range in the 'Strong and fearless' type, which is likely illustrative of Ipswich's recreational/ sports cyclists.

There is also a greater proportion of female cyclists in the 30-39 age range that identified with 'Interested and concerned'. The proportion of females in the 'Strong and fearless' is much less than males, but is greater in the 'No way no how' type.

# 2.4.2 Ipswich's 'Interested but Concerned' Cyclists

The results for Ipswich indicated that 57% of the survey respondents fall within the 'Interested but concerned' category/type. This group, based on the research, are those who are curious about cycling but may have barriers which are preventing them from riding. Targeting this group offers the greatest opportunity for increasing cycling in the City as they are interested and are more likely to take up cycling or cycle more frequently if some of their barriers are addressed.

The proportion of this group who were already cycling and those that were non-cyclists was closely split at 26% and 32% respectively.

The majority of this group in Ipswich who are already cycling are predominately doing so for recreational purposes and less so for utilitarian purposes (e.g. travel to work, shops, public transport etc.). This contrasts with the Portland results which show a higher proportion who were utilitarian cyclists as opposed to recreational.

\* 'Strong and fearless' n =24, 'Enthused and confident' n=115, 'Interested and concerned' n=273, 'No way no how' n=65

A significant proportion of the survey responses by all non-cyclists cited 'safety' as the key issue that would need to be addressed to encourage them to ride in the future.

By further analysing the responses to the online community survey, it has been possible to further define this group as it relates to Ipswich based upon: • Reason for cycling;

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- Facilities used (on-road/off-road);
- Main concerns relating to cycling; and
- Types of cycling infrastructure that would encourage Ipswich's residents and visitors to ride or ride more often than they currently do.

A summary of the results of this analysis are provided in Table 7.

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Interested but Concerned Cyclists	Ipswich's Current Cyclists	Ipswich's Non-cyclists
Current ride frequency	Once or more per weekday/once per month	n/a
Main reason for riding (Based on Figure 27)	<ul> <li>Majority of current cyclists cycle for recreation and fitness 1 to 4 times a week/few times a month.</li> <li>Of those who currently cycle to work, most do so 1 to 4 times a week</li> </ul>	<ul> <li>36% do not own a bicycle, 11% do not have access to a bicycle in working condition, 5% are not interested in cycling and 48% stated they have other reasons for not riding</li> <li>Factors that deterred non-cyclists from cycling (verbatim response):</li> <li><i>"ideal time for me would be on the way to and home from work, unfortunately I have to drop children off at school and need a car for this purpose."</i></li> </ul>
Main facility type (Based on Figure 28 and 29)	<ul> <li>Off road, on a designated bicycle only path through parklands or along a creek/river</li> <li>Off road, on a designated bicycle only path along a road (speed limit of 60km/h or less)</li> <li>Separated cycle tracks or protected bicycle lanes</li> <li>Off-road, on path shared with pedestrians though a park or along a creek/river</li> </ul>	<ul> <li>Off road, on a designated bicycle only path through parklands or along a creek/river</li> <li>Off road, on quiet residential streets</li> <li>Separated cycle tracks or protected bicycle lanes</li> <li>Off road, on a designated bicycle only path along a road (speed limit of 60km/h or less)</li> </ul>
Uncomfortable conditions* (Based on Figure 30)	<ul> <li>Do not feel comfortable on road, on a designated bil</li> <li>Do not feel comfortable on-road, on a designated bike</li> <li>Do not feel comfortable on-road, with shared lane material</li> </ul>	ke lane next to car parking lane on a busy main road (speed limit of 60km/h and above) parkings
Main concerns (barriers) (Based on Figure 31)	<ul> <li>82% are concerned about being hit by a motor vehicle (chose strongly agree or agree for this barrier)</li> <li>81% stated there were no suitable paths or cycle lanes between the places they wished to travel to/from</li> <li>55% do not feel safe when riding (chose strongly agree or agree for this barrier)</li> <li>45% stated they were concerned about bicycle theft</li> </ul>	<ul> <li>83% stated that there was no suitable paths or cycle lanes between the places they wished to travel to/from</li> <li>81% are concerned about being hit by a motor vehicle (chose strongly agree or agree for this barrier),</li> <li>65% do not feel safe when riding (chose strongly agree or agree for this barrier)</li> <li>55% stated they needed their motor vehicle before/during /after work</li> </ul>
Top three wants (enablers) (Based on Figure 32)	<ul> <li>Continuous linkages</li> <li>safer ways for cyclists to cross or travel through intersections</li> <li>Improved motor vehicle driver behaviour</li> </ul>	<ul> <li>Continuous linkages</li> <li>Smooth-well surfaced paths</li> <li>safer ways for cyclists to cross or travel through intersections</li> </ul>

Table 7: Ipswich's 'Interested but Concerned' Cyclists Defined

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\* Current and non-cyclists feel uncomfortable in the same cycling conditions.

(Source: Community Survey 2016)

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Figure 27: Trip Purpose for Ipswich's 'Interested but Concerned' Current Cyclists



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Figure 28: Where Ipswich 'Interested but Concerned' Non-cyclists Feel Most Comfortable



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(Source: Community Survey 2016)

Figure 30: Where Ipswich 'Interested but Concerned' Cyclists Felt Uncomfortable



(Source: Community Survey 2016)

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Non-Cyclists

(Source: Community Survey 2016)

Other barriers to cycling in Ipswich for the 'Interested but concerned' that were captured from the survey (open response) included the following:

"If facilities were available, I would certainly have a bike to take advantage of them, maintain fitness and enjoy our city."

"Ipswich needs more tree lined streets for shade, as our blistering summers send us to our air conditioned comforts."

Other influencing factors to cycling in Ipswich for the 'Interested but concerned' that were captured from the survey (open response) included the following:

"Cycle lanes on roads are frequently covered in gravel and stone flung from vehicle wheels, and broken glass from vehicles and idiots throwing some from cars- these deter me from cycling further." (current cyclist)





(Source: Community Survey 2016)

"Also lack of safe bike paths, I have to tow a trailer carrying my young children behind me and I don't feel safe travelling on the road doing so." (current cyclist)

"Safety - I want to feel safe and comfortable when I ride without having the threat of being potentially hit by a motor vehicle. Wish there was more off-road bikeways such as the Brassall Bikeway, or at least more protected bike lanes." (current cyclist)

"Off road designated well lit smooth bicycle paths where at the end of my journey I could shower & change, go to work then ride home in complete safety." (non-cyclist)

# 2.4.3 Who is Walking in Ipswich?

Council recognise that Roger Geller's work for cyclists does not correlate directly to walkers. With this in mind, and recognising that the majority of short trips and the beginning and end of longer trips have the potential to be undertaken by foot, the *Active Transport Action Plan* endeavours to define a set of walking types to assist with identifying 'walking improvements' in Ipswich (refer to Table 8).

The online community survey asked similar questions to those used to identify the type of cyclists in the City with respect to the level of comfort in different walking environments and overall willingness to walk. Based on the below categorisation and the online community survey responses, 51% of Ipswich's community were identified as 'Willing but constrained' walkers. 31% identified with 'Willing and motivated' walkers, with 10% 'Willing and committed' walkers. A small 8% of Ipswich identified with the 'Unwilling walker' category (which is almost half of the number of cyclists that identified with the 'No way, no how' cyclist type).

Due to the series of questions asked, it was difficult to ascertain for those who may be unwilling to walk more than they currently do if this was due to a disability or if they would like to walk less than they currently do but are unable to (i.e. do not have access to other modes of transport). Only one respondent specifically noted that their disability restricted them from walking/access in general.

Туре	Characteristics	
Willing and committed	Walk everywhere. Comfortable walking in most situations.	
Willing and motivated	Comfortable walking in most situations, however somewhat less comfortable walking at night in areas with no lighting. These walkers may walk often for fitness and leisure.	
Willing but constrained	Willing to walk more than they currently do but feel constrained by time or other priorities. Safety is a key concern and they are happier on designated paths (separated from cyclists) and do not feel comfortable walking at night in areas with no lighting.	
Unwilling walkers	These walkers are unwilling to walk any more than they currently do.	

### Table 8: Categorisation of Ipswich's Walkers

### Figure 33: Ipswich's Walkers by Type



Figure 34: Ipswich's Walker, by Type, Gender and Age



Figure 34 illustrates that approximately 34% of respondents were woman who identified with the 'Willing but constrained' type of walker. A similar proportion of male respondents identified with 'Willing and motivated' as well as 'Willing but constrained'. A high proportion of male respondents were 'Unwilling walkers' and a higher proportion of male respondents were 'Willing and committed' walkers compared to female walkers of the same category/type.

# 2.4.4 Ipswich's 'Willing but Constrained' Walkers

The results of the online community survey indicated that the majority of the respondents fall within the 'Willing but constrained' category type (i.e. 51% of Ipswich's walkers, of which 23% were non-walkers and 77% were current walkers)\*.

This group indicated that they were willing to walk more than they currently do, however they had concerns with respect to safety and the quality of the walking environment. Constraints such as children, distances required to travel and lack of time were also cited as factors that influence these walkers and their decision to travel by foot.

A significant proportion of the responses to what would influence them to walk or walk more made reference to the need for shading due to the weather, lighting or better lighting, places to rest and the lack of footpaths in general. By further analysing the responses to the online community survey, it has been possible to further define this group as it relates to Ipswich based upon:

- Reason for walking;
- Facilities used;
- Main concerns relating to walking; and
- Types of walking infrastructure that would encourage Ipswich's residents and visitors to walk or walk more often than they currently do.

A summary of the results of this analysis are provided in Table 9.

\*510 complete walking survey responses. 51% 'Willing but constrained' walkers where n=259 and of which, 199 are current walkers (77%) and 60 are non-walkers (23%)

# Table 9: Ipswich's 'Willing but Constrained' Walkers Defined

Willing but Constrained Walkers	Ipswich's Current Walkers	Ipswich's Non-walkers	
Current walk frequency	Once or more per weekday/once per month	n/a	
Main reason for walking (Based on Figure 35)	<ul> <li>Majority of current walkers walk for fun, social/ leisure (recreation) and fitness (e.g. walking dog, walking with family) 1 to 4 times a week/everyday</li> <li>Of those who currently walk to work, most do so every weekday/1 to 4 times a week</li> </ul>	<ul> <li>Factors deterring 'Willing but constrained' non-walkers from walking included (verbatim response)</li> <li>"Time constraints and also need to ferry children around"</li> <li>"Work from home"</li> <li>"Not enough shade, too many roaming dogs"</li> </ul>	
Main facility type* (Based on Figure 36 and 37)	<ul> <li>During daylight</li> <li>On footpaths of quiet residential streets</li> <li>Off road, on designated footpaths through parklands or alongside creeks/rivers (away from roads/traffic)</li> <li>Off road, on designated footpaths along a major road (speed limit of 60km/h or greater)</li> </ul>		
Uncomfortable conditions* (Based on Figure 38)	<ul> <li>At night (no street lighting)</li> <li>At night (with street lighting)</li> <li>On quiet residential streets without any concrete foot</li> <li>On shared streets with traffic calming (e.g. speed hump</li> </ul>	paths vs, raised paving)	
Main concerns (barriers) (Based on Figure 39)	<ul> <li>43% stated that there were no suitable paths where they would like to travel</li> <li>34% stated that the distances between places they would like to go is too far to walk</li> <li>32% stated they need to carry goods or equipment</li> <li>31% stated that they require a motor vehicle before, during or after work</li> <li>25% do not feel safe when walking</li> </ul>	<ul> <li>80% stated that the distances between places they would like to go is too far to walk</li> <li>58% stated they require a motor vehicle before, during or after work</li> <li>43% stated that there were no suitable paths between places they would like to travel</li> <li>38% felt that the weather/climate was not suitable for walking</li> <li>35% had nowhere to change and shower at their destination</li> </ul>	
Top three wants (enablers)* (Based on Figure 40)	<ul><li>Continuity of the path network</li><li>Smooth/well surfaced paths</li><li>Separation from traffic</li></ul>		
Other wants	<ul><li>Safe road crossings</li><li>Lighting and visibility</li><li>Attractive scenery</li></ul>	<ul><li>Lighting and visibility</li><li>Attractive scenery</li></ul>	

 $^{\rm *} Current$  and non-walkers prefer the same infrastructure, feel uncomfortable in same walking conditions and have the same top three wants.

(Source: Community Survey 2016)

Figure 35: Trip Purpose for Ipswich's 'Willing but constrained' Current Walkers





Figure 36: Where Ipswich's 'Willing but Constrained' Current Walkers Feel Most Comfortable

(Source: Community Survey 2016)









Figure 37: Where Ipswich's 'Willing but Constrained' Non-Walkers Feel Most Comfortable









Figure 38: Where Ipswich's 'Willing but Constrained' Walkers Feel Uncomfortable

In regards to Figure 38, for the locations on a major road or through parklands or along a creek/river, it can be surmised via the open-responses given that the respondents level of comfort/stress related to the overall perception of safety and lack of passive surveillance along these routes.

Additional open-responses for Figure 39 are noted below:

"More extensive footpath network. Safe walks in attractive areas."

"Safe well lit level or low gradient areas."

# "Provision of safe, stroller-friendly paths. Would be great to have more of these throughout the centre rather than mostly within parks."

"Lack of footpaths as well as no really lovely picturesque locations to walk."

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Figure 39: Ipswich Community Identified Barriers to Walking for the 'Willing but Constrained' Walkers

"Having it safe for me to bring my 3 year old along."

"Everything is too far. Not practical to walk at all unless you're simply doing exercise. To destinations etc. this will never happen. Doesn't make sense."

"I find that the walkway near the Springfield station does not feel safe enough to use at night." (Source: Community Survey 2016)

"If it is a km or less we always walk. The kids see and explore a lot more of their surroundings when we walk. The parks are very close so they warrant walking to, frequently."

"A lot of cars are parked on my street and the footpath is not suitable for walking on - I am afraid of being run over."



### Figure 40: Enablers to Walking in Ipswich for the 'Willing but Constrained' Walkers



(Source: Community Survey 2016)

With regards to Figure 40, other influencing factors to walking in Ipswich for the 'Willing but constrained' walker that were captured from the survey (open response) included:

"More shade for the warmer months and designated footpaths."

"Good lighting and safe environment for families."

"More extensive footpath network. Safe walks in attractive areas."

"Safety. Lit up popular spaces to walk."

"More lit pathways for people who can't walk through the day/afternoon due to work."

"Lighting at night. When the weather is cooler I do enjoy walking at night. There has been a few occasions where the lighting at the riverside park hasn't been working. It makes evening walking very uncomfortable. In saying that, I love the riverside redevelopment, and when it's not extremely hot I love taking advantage of the walking path up to the waterpark."

"Footpaths with seating at regular intervals."

# 2.5 Opportunities

## 2.5.1 Converting Short Trips to Active Transport

There is a rule of 10/30/50 which generally applies across the western world whereby of all trips undertaken, 10% are less than 1km, 30% are less than 3km and 50% are less than 5km. This means that many trips for work, shopping, education, recreation and business which are currently taken by car could be walked or cycled. Figure 41 below outlines typical walk and cycle trip distances and times.

### 2.5.2 Encouraging More Active Travel to School

Forty years ago up to 75% of children walked or rode to school and only 25% were driven or used other means of transport. These days, more than 70% of primary school children are driven to and from school every day. This recent trend has negative repercussions on children's health and traffic demands.

Indeed, nowadays only 56% of Queensland children are involved in sufficient physical activity to gain health benefits<sup>20</sup>. Encouraging more children to walk and cycle to school can contribute towards improving this. Further, education trips account for up to 20% of all trips on the transport network and if a large portion of these were changed to walking and cycling, it will have a significant impact on the traffic demands within the City, particularly around schools.



<sup>20</sup> Nicolee Dixon, Childhood Obesity, Queensland Parliamentary Library Research Brief No. 2004/10

The *Queensland Cycle Strategy 2011-2021* notes that about two-thirds of primary school students and one half of all secondary school students live within three kilometres of their closest school.

In Ipswich, the majority of students (63%) can potentially access a primary school by public transport or walking within 15-30 minutes, if not quicker (light and dark green in Figure 42 below), whilst 15% of students can potentially access a secondary school via these modes within 15-30 minutes (see Figure 43 below). These students are key targets to encourage public and active transport options.

In 2014, Ipswich City Council had over 18,870 students enrolled across 47 primary/special schools and 17,384 students enrolled across 19 secondary/prep-yr12 schools\*.

In 2009, TMR undertook a student density analysis of primary and secondary schools throughout Ipswich. Figures 44 and 45 show the results on this analysis. Schools which are located in areas with a high student density may be ideal targets for increases in active transport given the higher number of students living close by.

Figure 42: Primary School Accessibility – LUPTAI



(Source: TMR Travelsmart School Analysis 2011)

# Figure 43: Secondary School Accessibility – LUPTAI



(Source: TMR Travelsmart School Analysis 2011)

\* These values exclude schools open after 2014 (e.g. Deebing Heights State School).

Council have had success in the delivery of the Healthy Active School Travel (HAST) program indicating that behavioural change programs are a key component in encouraging more children to travel to school via active transport modes. Expanding this program to more schools throughout Ipswich could see even greater health and transport benefits to the community.

Figure 44: Primary School Density



(Source: TMR Travelsmart School Analysis 2011)

Figure 45: Secondary School Density



(Source: TMR Travelsmart School Analysis 2011)

# 2.5.3 Encouraging Active Travel to Public Transport

Providing walking and cycling connections to key public transport stations and stops is also an opportunity to promote more walking and cycling trips. There are also the associated benefits of increasing public transport patronage and further managing congestion.

Walking is already an essential part of public transport, making up the beginning and end of every journey. Provision of better quality infrastructure to support these trips could encourage users to walk further, potentially from their front door and removing the need for a car. Similarly, cycling can also form a part of a public transport trip if supported by quality connections and bicycle parking at public transport stations and major stops.

# 2.5.4 Influencing New Development

Ipswich has a number of new development areas ('greenfield developments') such as Springfield, Ripley Valley, Redbank Plains South, Deebing Heights, Walloon and Thagoona. The Ipswich Planning Scheme currently encourages these developments to be designed around walkable and cycle catchments.

Further influencing new development based on the 'complete communities' 10 minute neighbourhood concept has the potential to further support walking and cycling in these emerging areas. The 'complete communities' 10 minute neighbourhood concept aims to have residential communities within a 10 minute walk, cycle or public transport trip to services and amenities via good land use planning, street network connectivity and provision of footpaths, shade trees and other design elements.

# 2.5.5 Targeting Demographic Characteristics

The United Kingdom Cycle Demonstration Towns project proves that when efforts are focused, greater behaviour change is possible. This philosophy has also been applied to the pilot 'Active Towns' projects in Mackay, Cairns and the Gold Coast in Queensland.

As a result, a broad examination of demographic characteristics in Ipswich (based on 2011 Australian Bureau of Statistic (ABS) data<sup>21</sup>) was undertaken to provide guidance on target areas for the *Active Transport Action Plan*.

Potential Demographic Groups In Need/Interested in Active Transport:

- Population under 18 yrs old (no access to a car the age profile for Ipswich is projecting to a younger cohort when compared to the majority of Queensland and South-East Queensland);
- Population over 65 yrs old (less access to a car but more leisure time);
- Households with Dependent Children couples (opportunity for family activities, trips to school);
- Households with Dependent Children lone parents (opportunity for family activities, trips to school, may be lower income therefore looking for ways to save on household income);
- Index of relative social disadvantage (generally lower income therefore looking for ways to save on household income, limited access to a car);
- Low income households (lower income therefore looking for ways to save on household income);
- Households without a car (no access to a car);
- Unemployment (lower income therefore looking for ways to save on household income);
- Population density (high demand locations); and
- Employment density (high demand locations).

### Travel Behaviour:

- Travelled to work by public transport;
- Cycled to work; and
- Walked to work.

Taking the above analysis into consideration, there could be a number of key target suburbs for implementation of an 'Active Towns' style program, as follows:

- Under 18 years Karalee, Goodna, Redbank Plains, Redbank Plains South, Augustine Heights, Collingwood Park, Springfield, Flinders View, Brassall /Pine Mountain, Thagoona, Willowbank, Walloon (emerging, Rosewood (emerging) and Ripley Valley (emerging);
- Index of Social Disadvantage Ebbw Vale to Goodna Corridor, North Ipswich/CBD, Leichhardt/Wulkaraka;
- Households without cars Woodend, Flinders View and Booval; and
- Population Density Springfield, Augustine Heights, Redbank Plains, CBD south eastern suburbs (Silkstone to Yamanto).

# 2.6 Physical Constraints

The region's constraints are illustrated on the map provided in Appendix D. This map highlights physical barriers/ constraints such as the topography, river/creek corridors, existing transport corridors and heavy vehicle routes.

# 2.6.1 Topography

Ipswich is relatively easy to traverse. However, there are some areas of difficult topography, with slopes greater than 10% particularly present in areas such as the emerging Ripley Valley, areas in the vicinity of Yamanto and Churchill, Springfield Central (south) and White Rock, Brassall and Karalee also have difficult terrain as do the areas around the Ipswich CBD.

# 2.6.2 River/Creek Corridors

Ipswich is fortunate to have both the Bremer River and Brisbane River flowing through the city centre and along our northern boundary. There are also a number of creeks that feed into both these rivers within the City, including Black Snake Creek, Iron Pot Creek, Deebing Creek, Bundamba Creek and Goodna Creek. These rivers/creeks provide a great opportunity to achieve low stress active transport solutions separate from traffic, yet require careful consideration when it comes to creek crossings and impact on native vegetation and wildlife.

# 2.6.3 Transport Corridors and Heavy Vehicle Routes

There are several heavy vehicle routes which traverse the Ipswich local government area as indicated on the map in Appendix D. These generally travel via state controlled roads, including the Ipswich Motorway, Cunningham Highway, Warrego Highway, Logan Motorway and Centenary Highway. These routes then access the Business and Industry land uses in Ipswich via roads such as Redbank Plains Road, Swanbank Road, Monash Road, Toongarra Road and Warwick Road etc.

Although the major roads, highways, rail lines (existing and proposed) all present physical constraints to achieving a comprehensive pedestrian and cycle network for the City, they also present significant opportunities for providing direct and convenient linear connections between significant attractors and generators.



North Ipswich 1.5 Ipswich Central 4.5 Brassall Shopping Centre 1.5

En

SV



# 3.1 Vision

iGO, the *City of Ipswich Transport Plan*, provides the following transport vision for the City of Ipswich:

Ipswich's transport system is safe, reliable and provides for the sustainable movement of people and goods for all travel modes.

This vision is supported by the following five iGO objectives:

- 1. Ipswich has a safe, effective, affordable and connected transport system for all modes;
- 2. Ipswich has a convenient and competitive public transport system;
- 3. Ipswich is well connected for business, freight and visitors, including excellent connections to and from Brisbane;
- Ipswich's transportation system provides a platform for sustainable travel choices and the city's dependence on the car is reduced;
- 5. Ipswich's urban form creates high levels of accessibility to key destinations such as employment, education, retail, healthcare and recreation.

iGO recognises that to meet the increased future travel demands that come with Ipswich's forecast population growth, and also achieve the quality of life outcomes outlined in *Advance Ipswich*, greater emphasis must be given to promoting and realising the opportunities and benefits associated with more sustainable forms of travel such as active transport.

Consequently, iGO also outlined the following active transport policy focus areas for Ipswich:

- Building Quality Active Transport Networks
- Developing Supportive Active Transport Communities
- Growing an Active Transport Culture

Further building on these policy focus areas and the information provided in the online community survey, a vision was developed which portrays the key desired outcome for active transport in Ipswich.

Active transport in Ipswich is connected,

This being:



This vision not only speaks to three of the '5C's' of good pedestrian networks<sup>22</sup>, but also to the best-practice principles of delivering exemplary walk and cycle networks.<sup>23</sup>

<sup>22</sup> Connected, Comfortable, Convenient, Convivial and Conspicuous (Gardner, K et al , 1996, "Developing a pedestrian strategy for London http://abstracts.aetransport.org/ paper/index/id/451/confid/2

<sup>23</sup> Coherent, attractive, safe, comfortable, direct.

Figure 46: iGO Summary Diagram

AFFORDABILITY

PARTNERSHIPS



ONE NETWORK

# HORIZON

Future citywide population of 435,000

# VISION

Ipswich's transport system is safe and reliable and provides for the sustainable movement of people and goods for all travel modes

		OBJECTIVES		
1.	2.	3.	4.	5.
Ipswich has a safe, effective, affordable and connected transport system for all modes	Ipswich has a convenient and competitive public transport system	Ipswich is well connected for business, freight and visitors including good connections to and from Brisbane	Ipswich's transport system provides a platform for sustainable travel choices and the city's dependance on car travel is reduced	Ipswich's urban form creates high levels of accessibility to key destinations such as employment, education, retail, healt care and recreation

		P	<b>OLICY FOCU</b>	JS		
Land Use/ Transport Integration	Public Transport	Active Transport	Roads	Parking	Freight	Travel Demand Management
Complete communities	Attracting choice riders	Building quality active transport networks	Safe, reliable and resilient road network	Balance supply and management outcomes	Identifying, planning and protecting	Quadruple bottor line outcomes
Strong activity centres	Connecting key activity centres	Developing	Effectively balance	Support and enable	'places for freight'	Influencing administration
Increase density	Servicing greenfield development areas	active transport communities	needs of all road users	innovations	safe and efficienct	Public education
	Enhancing existing systems	Growing an active transport cultures	Support and enable technology	Public education and awareness	movement of freight	and awareness
	Accessibility		and transport infrastructure innovations		Supporting freight network enhancements	

SUSTAINABILITY

(Source: iGO 2016)

RELIABILITY

SAFETY

<sup>65</sup> 

# 3.2 Objectives

From this vision, a series of objectives for the Active Transport Action Plan were identified.

# Table 10: Active Transport Action Plan Objectives

Policy: Building Quality Active Transport Networks		
Vision	Objectives	
Connected	Create a safe, connected, effective and integrated active transport network which links major centres, education facilities and public transport nodes.	
Convenient	Provide choice within the active transport network for different types of users to travel to their desired destinations.	
Comfortable	Provide quality active transport infrastructure that is safe and attractive, considering the user experience and requirements.	
Policy: Developing Suppor	tive Active Transport Communities	
Vision	Objectives	

	,
Connected	Facilitate holistic active transport planning and delivery across Ipswich.
Convenient	Provide infrastructure and facilities which support the network and make active transport easy, including way finding, mid-trip facilities along active transport routes and end-of-trip facilities.
Comfortable	Make active transport comfortable, enjoyable and attractive for the people of Ipswich

# Policy: Growing an Active Transport Culture

Vision	Objectives
Connected	Seek, develop and maintain partnerships which will promote, facilitate and support active transport in Ipswich.
Convenient	Ensure active transport information and tools are easily accessible to the Ipswich community.
Comfortable	Continue to facilitate respect between road users and foster a culture of safe walking and cycling in Ipswich through educational, promotional and behavioural change programs.

# 3.3 Targets

iGO proposes mode share targets to meet its vision and objectives and address the significant increase in the number of trips on Ipswich's transport system. The aim is to increase the share of daily trips made by public transport, walking and cycling from the current 15% to 25% of all trips.

For walking, the aim is to increase the current mode share from 8.5% to 11% (55,000 trips per day to 165,000 trips per day) and for cycling the aim is to increase from 0.5% to 3% (3,000 trips per day to 45,000 trips per day).

Figure 47 provides further details of the mode share targets illustrating current, future trend and targets for all modes of transport based on population.



### Figure 47: Mode Share Targets (Source: iGO)

(Source: iGO 2016)



# Pedestrian and Cycle Network Plans

# 4.0 Pedestrian and Cycle Network Plans

This section provides details on the proposed pedestrian and cycle network plans. It is noted that the implementation of facilities along identified corridors in Ipswich will require specific feasibility studies to determine the most appropriate treatment for each corridor based on user type/profile (commuter vs recreation user, 'Interested but concerned' cyclist and 'Willing but constrained' walker etc.), objectives/function of the cycle/ pedestrian route, function of the road in Council's road hierarchy and localised constraints.

# 4.1 Network Hierarchy

In order to develop an appropriate pedestrian and cycle network, a hierarchy system was developed. A hierarchal structure provides detailed information on the purpose, function and desirable management characteristics for each type of route. Identifying a hierarchy enables designation of a management philosophy for the treatment of facilities within the network and subsequently appropriate desirable design standards.

The pedestrian and cycle hierarchy levels for Ipswich are defined as follows:

- *Purpose (Level 1)* relates to the primary objective of the facility (e.g. regional connections vs local access).
- Function and Management (Level 2) relates to whether the route has a primary transport or recreation (touring/training) focus and the policies which will assist in ensuring the facility meets its proposed role and objectives.

# 4.1.1 Cycle Network Hierarchy

The following table provides further information on the cycle hierarchy, particularly the purpose, function and desirable management characteristics of each type of route. It is noted that the identification of suitable infrastructure type and widths will be based on relevant Austroads guidance and TMR technical notes where possible<sup>24</sup>. This includes:

- Austroads (2014) Cycling Aspects of Austroads Guides;
- Austroads (2009) Guide to Road Design Part 6A: Pedestrian and Cyclists Paths (AGRD6A/09);
- TMR TN128 Selection and Design of Cycle Tracks;
- TMR Technical Notes; and
- TMR Road Planning and Design Manual (RPDM).

Infrastructure selection will also take into consideration the road hierarchy and function of the road when selecting an appropriate standard of treatment.

<sup>24</sup> Austroads (2014) Cycling Aspects of Austroads Guides. Transport and Main Roads Cycling Technical Notes http://www.tmr.qld.gov.au/business-industry/Technicalstandards-publications/Technical-Notes/Technical-Notes-Index

# Table 11: iGO Active Transport Action Plan Cycle Hierarchy

Principal Route – connects major regional destinations (primarily utilises the PCNP for this category)			
Principal Transport			
<ul> <li>Function</li> <li>Primary transport route between key attractors/ destinations</li> <li>Major route access to city centre and regional centres</li> <li>Majority of users are commuters</li> <li>Utility trips throughout the day</li> <li>Most direct, convenient route</li> <li>Favourable topography</li> <li>Encourages new users</li> </ul>	<ul> <li>Desirable Management Characteristics</li> <li>Safe and visible route</li> <li>Continuous route with limited interruptions i.e. limited delays, limited road crossings, free of barriers</li> <li>Caters for higher speed cyclists (20-40km/h)</li> <li>Lighting for morning/evening trips</li> <li>When on road, routes should ideally be separated from cars</li> <li>When off road, routes should be separated from pedestrians when demand warrants. Particular attention may be required where this route coincides with Pedestrian Activity Streets.</li> <li>Way finding signage</li> </ul>	<ul> <li>Examples of Suitable Infrastructure</li> <li>Cycle Tracks</li> <li>Off road paths (refer to Austroads for appropriate widths relevant to road environment/function)</li> <li>On road bicycle lanes (refer to Austroads for guidance on appropriate widths relevant to the road environment/function)</li> </ul>	
Secondary Route – provides of	connection to principal route and serves minor land use p	recincts/generators	
Secondary Transport			
<ul> <li>Function</li> <li>Distributes cyclists to land use precincts/generators</li> <li>Feeder route to/from principal routes</li> <li>Likely caters for utility and education trips, as well as commuter cyclists feeding to Principal Routes</li> <li>Can sometimes form a less direct route to an activity centre or generator on quieter roads</li> </ul>	<ul> <li>Desirable Management Characteristics</li> <li>Safe, continuous and visible</li> <li>Lighting dependant on demand</li> <li>When on road, routes should ideally be bicycle lanes</li> <li>When off road, routes can be a shared path</li> <li>Way finding signage</li> </ul>	<ul> <li>Examples of Suitable Infrastructure</li> <li>On road bicycle lanes (refer to Austroads for appropriate widths relevant to road environment/ function)</li> <li>Off road paths (refer to Austroads for appropriate widths relevant to road environment/function)</li> </ul>	
Secondary Recreation (Touring / Tro	ining)		
<ul> <li>Function</li> <li>Caters for sporting, training or touring longer distance cyclists</li> </ul>	<ul> <li>Desirable Management Characteristics</li> <li>Safe, continuous and visible</li> <li>Sport training signage</li> <li>Squeeze points/hazardous locations managed</li> </ul>	<ul> <li>Examples of Suitable Infrastructure</li> <li>Sport training signage (TMR)</li> <li>Road shoulders</li> <li>Kerbside lanes</li> </ul>	
Local Route – provides connect	ion to principal route and serves access to minor land use	precincts	
Local Transport			
<ul> <li>Function</li> <li>Access links to local land uses or feeder route from residential areas</li> <li>Used by all user group types</li> <li>Shared space</li> </ul>	<ul> <li>Desirable Management Characteristics</li> <li>Safe and convenient routes</li> <li>When on road, ideally routes should be on a street shared with motor vehicles and pedestrians at low speeds, ideally 50km/h or less.</li> <li>When off road, routes should be a shared path</li> <li>Way finding signage and pavement markings (e.g. bicycle sharrows)</li> </ul>	<ul> <li>Examples of Suitable Infrastructure</li> <li>Bicycle boulevards</li> <li>On road bicycle lanes and off road paths (refer to Austroads for appropriate widths relevant to road environment/function)</li> <li>Shared streets</li> </ul>	

# 4.1.2 Pedestrian Network Hierarchy

The following table provides further information on the pedestrian hierarchy, particularly the purpose, function and desirable management characteristics of each type of route. The pedestrian hierarchy is closely linked to land uses and activity areas where there are the greatest demands for walking for transport purposes.

It is noted that the identification of suitable infrastructure (in particular footpath widths) will be based on relevant Austroads guides and TMR publications and technical notes where possible.

### This includes:

- Austroads (2009) Guide to Road Design Part 6A: Pedestrian and Cyclists Paths (AGRD6A/09);
- TMR Technical Notes; and
- TMR Road Planning and Design Manual (RPDM).

Infrastructure selection will also need to take into account the role/function of the road (or street), with respect to it having a high place or movement function, in order to identify appropriate solutions (refer to Figure 49 for more information).

Table 12: iGO Active Transport Action Plan Pedestrian Network Hierarchy

Pedestrian Activity Street	$\mathbf{S}$ – provide high quality access to adjacent commercial, retail and employment land uses
Place Function	
<ul> <li>Function</li> <li>Comfort and amenity a priority</li> <li>Primarily provides access to the adjacent land uses in an activity centre</li> <li>Mix of users including shoppers and people with no particular purpose or destination (wonderers, window shoppers, recreation)</li> <li>Also forms a movement function due to the uses it will access but this function will be secondary to creating an attractive pleasant place</li> <li>This category is relevant to both rural and urban environments</li> </ul>	<ul> <li>Desirable Management Characteristics</li> <li>Safe, continuous, obstruction free, clear path to be provided within total width of verge</li> <li>An environment that is conducive to people lingering/enjoying – i.e. 'sticky street'*</li> <li>Pedestrian priority signal phasing (i.e. sequential) to walking speed at intersections (especially during peak periods, including the mid-day period)</li> <li>Kerb/ pram ramps at all crossing points</li> <li>High intersection capacity (i.e. storage whilst waiting e.g. kerb build outs, wider crossing areas on pavement)</li> <li>ideally vehicle access points to be minimised where possible</li> <li>Wide path free of barriers, both sides of the road</li> <li>Path protected from elements (e.g. shade, shelter). Covered walkaways are desired at least continuous for one side of street</li> <li>Audio cues at traffic signals</li> <li>Tactile paving (TGSI) at hazard points (e.g. kerb ramps)</li> <li>Active street frontage</li> <li>Regular directional, distance and points of interest signage</li> <li>Need to balance public transport provision and pedestrian movements (e.g. Bus stop facilities located on the kerb)</li> <li>Mixed use development preferred</li> </ul>

<sup>\* &</sup>quot;Streets aren't just for moving people – streets [are] for people to enjoy and linger, not just move through. Great places are both initially attractive, and 'sticky' once you get there. A place is sticky if people love it and don't want to leave." - Brent Toderian, http://www.treehugger.com/public-transportation/whats-sticky-street-and-why-do-you-want-one.html.
redestrian transport Con	<b>FIGOF</b> – key spines providing access to and between major destinations (e.g. centres, schools, bus/rail stations)
Movement Function	
<ul> <li>Function</li> <li>Primary transport route</li> <li>Majority commuters</li> <li>Most direct, logical and convenient route</li> <li>Good links to public transport</li> <li>Comfort a priority</li> </ul>	<ul> <li>Desirable Management Characteristics*</li> <li>Safe, continuous, obstruction free, clear path</li> <li>Pedestrian signal phasing coordinated for reduced delays and ideally sequential to walking speed at intersections (especially during peak periods)</li> <li>Pedestrian crossing phases on all legs at signalised intersections</li> <li>Kerb/pram ramps at all crossing points</li> <li>Pedestrian priority at mid-block crossings</li> <li>Reduced crossing distances at intersections (i.e. by providing kerb build outs or pedestrian refuges)</li> <li>Wide path free of barriers, both sides of the road. Width as per Austroads guides.</li> <li>Intermittent shade and shelter. Ideally street trees for shade majority of length</li> <li>Audio cues at traffic signals</li> <li>Tactile paving at hazard points (e.g. kerb ramps)</li> <li>Active frontages preferred for surveillance (mixed use or residential frontage – no blank walls/fences)</li> <li>Directional and distance signage provided at key locations</li> <li>Bus stop areas provided with seating and shade, however clear route still provided for pedestrians</li> </ul>
Pedestrian Access Streets	5 – high quality access streets surrounding major pedestrian generators (e.g. centres, schools, bus/rail stations)
Movement Function	
<ul> <li>Function</li> <li>Access links to major pedestrian generator or feeder route from residential areas</li> <li>Mix of users</li> <li>Comfort and safety a priority</li> </ul>	<ul> <li>Desirable Management Characteristics*</li> <li>Safe, continuous, obstruction free, clear path</li> <li>Pedestrian signal phasing coordinated for reduced delays (especially during peak periods)</li> <li>Pedestrian priority at mid-block crossings</li> <li>Reduced crossing distances at intersections (i.e. by providing kerb build outs or pedestrian refuges)</li> <li>Kerb/ pram ramps at all crossing points</li> <li>Wide path free of barriers, ideally both sides of the road particularly if a collector street or greater (urban areas). In Principal/Sub-regional activity centres, paths on both sides of the streets on all road classifications may be appropriate. Width as per Austroads guides.</li> <li>Intermittent shade and shelter. Ideally street trees for shade majority of length</li> <li>Audio cues at traffic signals</li> <li>Tactile paving at hazard points (e.g. kerb ramps)</li> <li>Active frontages preferred for surveillance (mixed use or residential frontage – no blank walls/fences)</li> </ul>

\* The desirable management characteristics are more suited to an urban environment and a lessor provision may be appropriate in rural environments.

## 4.2 Network Development

#### 4.2.1 Cycle Network

The cycle network plans which have been developed for Ipswich are shown in Appendix E. The network plan has been developed taking into consideration the following:

- a cycle hierarchy, comprising of the PCNP routes as the higher order network and including additional principal routes in the Springfield Central Town Centre as per the Springfield Town Centre Structure Plan;
- review of strategic priorities identified in iGO;
- review of existing network and deficiencies in network;
- evaluation of key generators and attractors;
- identification of opportunities and constraints;
- results of consultation from iGO and internal Council workshops;
- analysis of user groups; and
- consideration of the traffic volumes, speeds, heavy vehicle routes, open space network and creek/ drainage corridors. This included review of Council's creek corridor plans for incorporation when the route provided a transport function.

In order to develop a useful and connected cycling network, one of the key inputs was the attractors and generators with the plan aiming to connect these destinations via the cycle network. The key attractors and generators considered in the network plan were:

- Principal, Sub regional, District and Neighbourhood Activity Centres;
- Rail and bus stations;
- Employment business and industrial areas, hospitals, shopping centres;
- University and TAFES; and
- Primary and secondary schools.

Connecting these generators complement iGO, *Connecting SEQ 2031* and the *Queensland Cycle Strategy* priorities of completing an active transport network within 5km of activity centres, providing improved cycle access to major public transport stations and improving walking and cycling routes in the vicinity of educational facilities (refer to Figure 48).

The proposed approach for delivery of the cycle network is to target links between and to/from major generators such as activity centres, schools and public transport hubs.

The network hierarchy levels will guide implementation:

- Principal cycle routes connect major regional destinations and are the top priority for implementation by Council in order to create a base arterial cycle network. These routes can be delivered in partnership with the Queensland Government through the Department of Transport and Main Roads Cycle Network Local Government Grants Program;
- Secondary cycle routes connect to principal routes and minor land uses and are the next priority for implementation by Council; and
- Local cycle routes provide connections to principal and secondary cycle routes and to local destinations. These links are likely to be delivered via divisional funding allocations.

#### 4.2.2 Pedestrian Network

The pedestrian network plans which have been developed for Ipswich are provided in Appendix E.

The pedestrian network was developed utilising a different methodology to the cycle network. Whilst it is acknowledged that ideally, all streets and roads in the transport network should have footpaths on both sides to encourage people to walk wherever they desire, realistically this cannot happen all at once due to funding constraints.

Council already have approximately 1,000kms of footpaths and shared paths in the local government area to form the walking network. A more targeted approach to expanding the network is required. The proposed approach involves targeting major generators in the local government area to extend the existing pedestrian network as follows:

- Within retail/commercial centres, provide higher quality pedestrian facilities with wider footpaths, as well as comfort and amenity improvements (Pedestrian Activity Streets);
- Provide pedestrian movement spines for access to the major retail/commercial centres from surrounding areas (between 1.2 to 3kms from middle of the centre) to allow people to walk into these centres, as well as connections between centres (Pedestrian Transport Spines);
- Complete the footpath network as a minimum on one side of the road within 400m (5 minute walk) of key generators of retail/commercial centres; rail and major bus stations and primary, secondary and tertiary

educational facilities (noting that paths should be provided on both sides of the road for a collector street and above). Provide footpaths on both sides of roads within 1.2 km of Principal and Sub-regional Activity Centres regardless of road classification as part of Council's capital works program. Due to the proximity of many of these generators to each other, several of the 400m buffers are combined around centres and in denser urban areas (Pedestrian Access Streets); and

Provide short cuts mid-block and through parks etc. wherever opportunities exist.

As Council complete the above network, the next step aims to provide as a minimum footpaths on one side of the road up to 800m (10 minute walk) from the key generators, followed by paths within a 1.2km buffer (15 minute walk). Consideration of footpaths on both sides of the road from key generators should be made after this, following the same 400m, 800m and 1.2km principle.



Figure 48: iGO and Queensland Cycle Strategy Active Transport Focus Areas



(Source: Queensland Cycle Strategy 2011-2021)

## 4.3 Cross Sections

#### 4.3.1 Existing Standard Cross Sections

Pedestrian and cycle facilities for development applications and road upgrades are guided by Ipswich City Council standard drawings, particularly the typical cross sections by road hierarchy type. Positives of the current standards include the provision of minimum 2.5m concrete shared paths on both verges for sub-arterial and arterial roads (with kerb and channel), minimum 2m wide painted bicycle lanes on sub-arterials and minimum 1.5m bicycle lanes on no-access major collector residential streets.

Nevertheless, there are some improvements to the standard drawings which could be made to better facilitate walking and cycling at all levels of the road hierarchy.

Ideally on streets below major collector streets, footpaths should be provided on both sides of the road corridor, however it is acknowledged that cost will be a factor to this provision. The existing typical cross sections also currently propose a shared Bicycle Advisory Zone/Parking Lane for major collector streets which no longer meets Austroads guides and hence will be revised.

For rural collector roads, the shoulder width indicated is 1.0 metre, providing little opportunity for walking or cycling or any separation from traffic.

The current cross sections also offer little guidance/ provision for separated one-way or two-way cycle tracks/ protected bicycle lanes and the separation of pedestrians from cyclists on off-road facilities.

Council will look to further analyse the existing standard cross sections to determine where appropriate and balanced solutions for all road users can be identified and make changes where required.

# 4.3.2 Retrofitting To Accommodate Walking and Cycling

In order to further encourage active travel in existing parts of the city, retrofitting road corridor spaces for walking and cycling is required. Ideally this involves consideration of the necessary separation from busy traffic to encourage the City's 'Interested but concerned' cyclists and 'Willing but constrained' walkers. For cyclists, separated bicycle lanes, quiet local streets and off-road paths typically encourage and suit a wider range of potential riders and allow a wider cross section of the community to ride. For walkers, shading, lighting, seating and sufficient width where demand requires should be considered.

A key issue for retrofitting is that the majority of the road cross sections in the older suburbs of the Ipswich local government area are generally between 9-10m and 11-12m wide. These widths make it difficult to achieve dedicated bicycle lanes on road without reducing car parking. In addition, provision of off-road shared paths in the verge is often difficult to achieve due to the multiple driveways, trees, light poles and services also located in the verge.

As a result, where improved walking and cycling connections may need to be retrofitted into existing suburbs/developments, this may require:

- Narrowing of traffic lanes to provide for on-road cycle facilities such as cycle tracks or cycle lanes;
- Rationalisation of car parking provision, particularly where this is provided on both sides of the road;
- Traffic calming to enable cycle users and pedestrians to share/cross the road carriageway;
- Sealing shoulders, particularly to facilitate on-road facilities in rural areas; and
- 'Road dieting' (reallocating space)/removing traffic lanes to create 'bike boulevards' or 'home-zones'\* style treatments.

<sup>\* &</sup>quot;A 'home zone' combines various traffic calming devices to create a street where there is no clear separation between space which is designated for the car and space assigned for pedestrians and other street users. The effect is to limit through traffic in neighbourhoods, reduce vehicle speeds and create space for play and other social activity" – TMR TNB8 – Cycling and traffic calming, http://www.tmr.qld.gov.au/-/media/Travelandtransport/Cycling/Bike-user-guide/Technical-information/B8\_Cycling\_ and traffic\_calming.pdf?la=en. Link & Place: A Guide to Street Planning and Design, Jones, Boujenko, Marshall, 2007

In particular, for the introduction of walk and cycle infrastructure in line with the suggested treatments for the pedestrian and cycle hierarchy identified in this Action Plan, initial consideration may need to be given to the rationalisation of parking and reduced lane width. This is particularly so on those links which have a higher place function for pedestrians or a higher movement function for cyclists (as discussed below). However, it is acknowledged that each location will need to be individually assessed by Council to understand the impacts of these changes and mitigation strategies developed where possible.

Ipswich's road/street network cross sections and designs should consider both the movement and place function of the street. The Link and Place approach (refer Figure 49) acknowledges two variants being streets as movement conduits (links) and destinations in their own right (places). The place value of streets may include sidewalk cafes, places to sit and gather, shop, public performance and parking. Therefore the design objective is to spend time along the street. The link value of a street refers to its ability to support the efficient movement of pedestrians, cyclists, public transport, private cars and freight. The design objective is to save time. The level of link status may be informed by the spectrum of types from strategic to local (very similar to a traditional road hierarchy).

Council's streetscape hierarchy also takes these principles into consideration with respect to the level of amenity required.



Figure 49: Link and Place Matrix

(Source: Ipswich Streetscape Design Guideline 2013)

## 4.4 Example Active Transport Facility Types

As mentioned previously, the identification of the required facility type for each pedestrian or cycle route and its corresponding hierarchy category is not feasible at this stage in planning the network. This is because each corridor is unique and will require specific studies to determine the most appropriate solution that considers affordability, the desired user needs, local constraints and continuity along the link/route.

The identification of suitable infrastructure also needs to consider where the identified pedestrian network coincides with the cycle network.

Nevertheless, there are a myriad of good examples of facility types for walking and cycling, locally, nationally and internationally which will be considered by Council as part of future corridor studies.

#### *4.4.1 Cycling Infrastructure Examples*

Table 13: Cycling Infrastructure Examples

#### **Off-Road Exclusive Bicycle Paths**

- Significant cycling demand and few pedestrians;
- Alternative path for other users available/nearby;
- Facilitates uninterrupted travel for cyclist and high speeds; a





#### **Separated Paths**

- ar delineation using coloured paint, markings and surface treatments:
- Smooth paths with hazards clearly indicated;
- Clear separation of cyclist and pedestrian; and
- Width varies according to number of cyclists/pedestrians, physical constraints and



#### **Separated Cycle Tracks**

- Separated from roadway and pedestrian footpaths;
- Clear delineation using visual, physical or audible separation;
- Smooth paths with hazards clearly indicated;
- Cyclist provisions/treatments
- provided at intersections; andIdeal for cautious cyclists required
- to use on-road facilities.





#### **Off-Road Shared Paths**

- Wide paths with smooth surfaces and low grades;
- Cyclist provisions provided at crossings;
- Natural shading from trees (particularly when located in parks, recreational areas, river/creeks/waterways);
- Separation from roadway by kerbs and vegetation strips;
- Amenity in the form of trees and vegetation;
- Mid trip facilities such as seating, bubblers, bins and resting areas; and
- On shared paths, clear delineation between direction of travel.



A: Brisbane (Source: Zwart Transport Planning), B: Brisbane (Source: Zwart Transport Planning), C: Brisbane (Source: Zwart Transport Planning), D: Brisbane (Source: Zwart Transport Planning), C: Brisbane (Source: Zwart Transport Planning), G: Sydney (Source: Bicycle Dutch 2013), H: Melbourne (Source: ARUP), I: Ipswich (Source: Ipswich City Council), J: Brisbane (Source: ARUP), K: Ipswich (Source: Ipswich City Council), L: Melbourne (Source: ARUP), M: Melbourne (Source: The Bike Lane 2016), N: Rockhampton (Source: Zwart Transport Planning), O: Gladstone (Source: Zwart Transport Planning), P: Brighton, UK (Source: ARUP), R: Melbourne (Source: ARUP), Q: Brighton, UK (Source: ARUP), R: Melbourne (Source: ARUP), S: Frankfurt, Germany (Source: Zwart Transport Planning), T: Ipswich (Source: ARUP), U: Sydney (Source: Nearmap 2016), V: Brisbane (Source: Ipswich City Council), W: Melbourne (Source: Bicycle Network Incorporated 2016), X: Melbourne (Source: Bicycle Network Incorporated 2016), Y: Melbourne (Source: Bicycle Networ

#### **On-Road Bicycle Lanes**

- Clear delineation using coloured paint and markings;
- Smooth paths with hazards clearly indicated;
- Kerb ramps provided to allow exit onto footpath/ off-road where required;
- Cyclist provisions / treatments provided at intersections;
- Sport training signage for road shoulder cycle lanes;
- Width varies according to speed of adjacent traffic lane, number of cyclists,
- physical constraints and needs of other road user groups; and
- Generally only in locations where there is no kerbside car parking.





#### Wide Kerbside Lane

- Sufficient width to allow cyclists to travel beside the main stream of traffic (70km/h or less);
- Appropriate on roads where parking is minimal or prohibited during peak periods; and
- Width varies according to traffic speed, with desirable
   minimum 4 2m in Column having speed.
- minimum 4.2m in 60kmph environmeni

#### Traffic Calmed Streets/Shared Streets/Bicycle Boulevards/Greenways

- Shared Streets aim to reduce traffic speeds through traffic calming and public realm upgrades to create a space where pedestrians, cyclists and cars all have equal priority;
- Bicycle Boulevards aim to reduce traffic speeds through traffic calming to make it safer for cyclists to travel along the street. These treatments are combined with pavement markings such as bicycle sharrows to increase awareness that cyclists are on this road, as well as assist with way finding for cyclists:
- Traffic calmed streets and bicycle boulevards/greenways see calming devices or low speed environments.
- Provides convenient access to destinations, safe crossings at intersections and minimal bicycle delay;
- Allows for children, families and less confident cyclists to ride in a lower stress environment;
- Addresses the ability to achieve a 'Sticky Street '; and
- Complements 'Link and Place ' approach, as well as 'Complete Streets ', 'Living Streets/ Naked Streets '.



#### Priority Crossings at Intersections

- Addresses delay to off road cycle route at side road by providing priority;
- Coloured lanes, raised crossings, clear line
- Complemented by turn bans, signage and bent-in/out cycle paths.

#### **Intersection Treatments and Crossings**

- Continuity and connectivity are key considerations;
- Provide safe crossings (signals, refuges) or well designed transitions to off-road shared paths;
- Consider the six elements of a signalised intersection (midblock, transition, approach, waiting, through, departure);
- Provide adequate width, clearances and sight distances;
- Provide suitable gradients (for all users);
- Security, lighting, visibility; and
- Consider location such that a proposed overpass/underpass does
   not increase the journey distance for users (meets desire lines).













#### 4.4.2 Pedestrian Infrastructure Examples

#### Table 14: Pedestrian Infrastructure Examples

#### **Off-Road Paths**

- Wide paths with smooth surfaces and low grades;
  Natural shading from trees (particularly when located in the second s
- parks, recreational areas, river/creeks/waterways),
- Lighting to allow for night use of the path (unless lit by adjacent street lighting);
- Mid-trip facilities such as seating, bubblers, bins and resting areas; and
- Pedestrians will mix with cyclists on shared paths unless delineation between users has been provided for.





#### Pedestrian Priority/Shared Space

- Natural and constructed shading;
- Amenity in the form of gardens or public artwork and paving choice;
- Accessible and legible clear path of travel;
- Mixed use development with active frontage such as shops and cafes;
- Seating, resting and meeting areas;Way-finding signage and markings to key
  - locations, such as public transport stations; andPedestrian priority crossings between streets.



#### Safe Crossings

- Continuity and connectivity are key considerations (meeting desire lines);
- Provide safe crossings (signals, refuges) including kerb/pram ramps:
- Reduce crossing distance with kerb build outs;
- Provide priority crossings in appropriate locations; and
- Minimise delay for pedestrians when crossing streets.







A: Ipswich (Source: Ipswich City Council), B: Brisbane (Source: ARUP), C: Brighton, UK (Source: ARUP), D: Townsville (Source: Ipswich City Council), E: New York, USA (Source: ARUP), F: Ipswich (Source: Ipswich City Council), G: Cairns (Source: Zwart Transport Planning), H: Brisbane (Source: Zwart Transport Planning), I: Brisbane (Source: Zwart Transport Planning),





# Strategy and Actions

## 5.1 Strategy and Actions

iGO has proposed three key policy directions for the *Active Transport Action Plan*, as follows:

- Building Quality Active Transport Networks
- Developing Supportive Active Transport Communities
- Growing an Active Transport Culture

This report builds upon the direction proposed in iGO, expanding the actions to address the opportunities and constraints identified in previous sections of this report as well as developing specific actions to address the barriers and enablers identified in the online community survey.

#### Cycling

In addition to the guidance provided by iGO, the cycling strategies have also taken into account PRESTO research, a European research program aiming to promote cycling for everyone as a daily transport mode. PRESTO proposes the use of varying approaches depending on where a city is at in its development as a cycling city. PRESTO trialled and tested different measures and programs for 'starter', 'climber' and 'champion' cities.

The classification of the city is based on two indicators – cycling conditions and number of cyclists. Starter cities have a low score on both indicators, also having a cycling mode share up to 5%, a minimal cycling infrastructure and a road design which is mostly car orientated – Ipswich therefore fits into this category.

Below, Figure 50 proposes the level of effort required for infrastructure vs promotion for each type of city, indicating that to initially get people cycling in a 'starter' city, provision of safe and direct infrastructure is the most important component and where the most effort is required. Effort is still required for promotion in a 'starter' city but this needs to be targeted to particular user groups and the promotion of existing infrastructure. Similar findings were found in Cycling England's Cycling Demonstration Towns where success was achieved when the city focussed their efforts to a particular user group (e.g. school students) and/or locations.

#### Figure 50: PRESTO Cycling City Classifications



PRESTO recommends the following for starter cities:

- Infrastructure is the best promotion provision of safe and direct infrastructure is a basic requirement to get more people cycling. This involves improving infrastructure and giving cyclists room in urban environments. The facilities provided do not need to be high quality immediately, and quick win solutions such as contra-flow cycling in one way streets, advance stop lines and a neighbourhood by neighbourhood approach can work. Once the infrastructure is attractive, then the City can start promoting it, rebranding cycling as an attractive way to get around;
- Inexpensive infrastructure can make a difference in cities where priority is still given to cars it is not realistic to reallocate car space to cycle facilities straightaway. Therefore 'invisible' cycling measures such as traffic calming, intersection treatments, traffic reduction and speed management can help create safer environments for cycling. Provision of cycling routes on safe and quieter streets away from heavy traffic is more attractive to potential cyclists then cycle lanes or paths alongside heavy and fast traffic. These measures can be inexpensive and quickly implemented. A similar strategy was employed in the Melbourne suburb of Carlton where local routes parallel to major roads are promoted to encourage new cyclists.
- Reach for low hanging fruit first start promotion with groups more open to the message of more cycling such as people not yet habitually car drivers (e.g. students);

people who already cycle for leisure purposes and people who are receptive to health or environmental measures (e.g. families with children). Targeting these groups can get the ball rolling, slowly creating a critical mass to motivate others to join in and higher level of awareness by other road users.

#### Walking

The walking strategies in this document have also taken into account best practice approaches and research findings. For example, each person walks every day and all modes of transport involve walking and yet walking itself is independent of all other transport modes. As such, a key element for best practice walking strategies is acknowledging that people on foot choose to walk for a variety of purposes and needs and that many walking trips don't necessarily have a purpose. Therefore the planning and needs for people on foot varies significantly to that of people on bicycles.

There are also a range of factors which affect the decision to walk (refer to Figure 51). Addressing or minimising barriers which impact on the decision to walk is therefore key to encouraging more people to take up walking, walk further or walk more often. Indeed, Giles-Corti (2001) found that people are 50% more likely to walk for recreation or transport if they have a footpath in their street, twice as likely to walk if they have a pleasant physical environment and over twice as likely to walk if they have friends or social influences encouraging them to walk.



Figure 51: Factors Affecting the Decision to Walk

## 5.2 Policy: Building Quality Active Transport Networks

AT Vision	AT Action Plan Obje	ectives
Connected	Create cohesive, safe, effective ntegrated active transport new around and linking major centre education facilities and public ransport nodes.	e and :work :es,
Convenient	Provide choice within the acti- network for different types of ravel to their desired destinat	ve transport users to ions.

To achieve the objectives of a connected and convenient walk and cycle network in Ipswich, it is important that in all infrastructure provisions, walking and cycling are seriously considered. Over time the quality of the pedestrian environment has been eroded, with roads used more intensively and often widened at the expense of pedestrian space. Traffic priority measures have dominated, even in areas used mainly by pedestrians.

To achieve a more balanced approach to the provision of facilities for a range of users, often with conflicting requirements, it is proposed that the Link and Place approach be relied upon. This is where the user priority for walking and cycling is given higher importance on those links with a higher place function (as outlined in Section 4).

Section 4 of the report also provides details of the pedestrian network and the cycle network for the City. It defines the key focus areas in developing the network, outlines details on desirable characteristics for facilities based on the pedestrian and cycle hierarchy and provides examples of different facility treatment types, acknowledging that Council needs to undertake future planning studies to identify the most appropriate treatment for each route given localised constraints.

AT Vision	AT Action Plan Objectives	
Comfortable	Provide quality active transport infrastructure that is safe and attractive, considering the user experience and requirements.	

In delivering best practice outcomes, it is important to note that the detail of the design is one of the most important factors in getting it right. More specifically, understanding who walking and cycling infrastructure and facilities are provided for is an important step in providing appropriate facilities. Particular focus for the Ipswich walk and cycle networks has been made and should continue to be made to address the barriers and enablers identified in the online community survey results. The survey identified that for 'Interested but Concerned' cyclists and 'Willing but Constrained' walkers that the infrastructure outlined in Table 15 was preferred.

Width of facilities should meet demands and be comfortable for use. Consideration of future demands is also important in getting the width right. Well-designed crossing facilities that pay attention to details such as kerb crossings, islands, kerb build-outs and platforms as well as intersection details to make crossing the road easier can also make a real difference to safety and convenience for walkers.

Further, maintaining existing facilities is also just as important as providing new facilities when trying to create a walking and cycling friendly network and environment.

#### Table 15: Preferred Infrastructure Types by User

#### 'Interested but Concerned' Cyclists Off road, on a designated bicycle only path Off road, on a designated bicycle only path Main facility type • through parklands or along a creek/river through parklands or along a creek/river Off road on quiet residential streets Off road, on a designated bicycle only path • Separated cycle tracks or protected bicycle lanes • along a road ( $\leq 60$ km/h) Off road, designated bicycle only path along a • On shared streets with traffic calming • road (<= 60km/h) • Separated cycle tracks or protected bicycle lanes Continuous linkages • Top three wants Continuous linkages • Smooth-well surfaced paths • Safer ways for cyclists to cross or travel • (enablers) • Safer ways for cyclists to cross or travel through intersections through intersections Improved motor vehicle driver behaviour •

'Willing but Constrained' Walkers				
	In suich's Courset Wallows			
	Ipswich's Current Walkers Ipswich's Non-Walkers			
Main facility type*	<ul> <li>During daylight</li> <li>On footpaths of quiet residential streets</li> <li>Off road, on designated footpaths through parklands, or alongside creeks/rivers (away from roads/traffiered), on designated footpath along a major road (speed limit of 60 km/h or greater)</li> </ul>	c)		
Top three wants (enablers)	<ul> <li>Continuity of the path network</li> <li>Smooth / well surfaced paths</li> <li>Separation from traffic</li> </ul>			
Other wants	<ul> <li>Safe road crossings</li> <li>Lighting and visibility</li> <li>Attractive scenery</li> </ul>			

\* Current and non-walkers prefer the same infrastructure and have the same top three ranks.

The strategies and actions proposed to achieve this iGO policy focus area are outlined below in Table 16. It is noted that these strategies and actions are aimed at addressing infrastructure projects that would occur as part of Council's capital works program. Network infrastructure provided as part of new development (i.e. through development conditions) has not specifically been addressed in this table or in the network plan though they can be used for guidance.

#### Table 16: Building Quality Active Transport Networks

Action No.	Action	Timing
Strategy 1: Adopt and	d implement a direct, safe and connected cycle network plan to and within destinations in	a timely manner
1.1 (ATI in iGO)	Prioritise and provide active transport connections within 5km of Principal and other major activity centres and within 3kms of schools to encourage walking and cycling trips.	Ongoing
1.2 (AT2 in iGO)	Develop a connected network of pedestrian and cycle paths surrounding train stations, bus stops and transport hubs. Prioritise the delivery of these works based upon consumer profiles, demands and frequency of service.	Ongoing
1.3 (AT3 in iGO)	Plan, prioritise, advocate and deliver strategic bikeway projects in Ipswich that form part of the Principal Cycle Network Plan.	Ongoing
1.4 (AT9 in iGO)	<ul> <li>Undertake route and corridor studies (and if feasible, deliver) on strategic commuter bikeway corridors as outlined on Map 5 in iGO. This includes:</li> <li>Ipswich City Centre to the existing Brassall Bikeway via Riverlink Shopping Centre;</li> <li>Ipswich City Centre to Yamanto and Deebing Heights (with possible expansion to Flinders View and Ripley) via Deebing Creek</li> <li>Ipswich City Centre to existing RAAF bikeway</li> <li>Ipswich City Centre to Booval</li> <li>Extension of Goodna Creek Bikeway south from Gos Drive to Redbank Plains</li> <li>Springfield Central to Camira</li> <li>Springfield Central to Redbank Plains South</li> </ul>	Short
1.5 (AT14 in iGO)	Develop a citywide Road Safety Strategy that will consider all road users. This should include analysis of historic data of incidents involving pedestrians and cyclists across the city to identify trends and safety issues. Develop a program of improvements to address these safety concerns.	Short
Strategy 2: Improve and loca	pedestrian connectivity to and within activity centres, public transport hubs, schools l shops.	
2.1 (AT12 in iGO)	Identify and implement pedestrian priority zones in areas with high pedestrian activity such as the Ipswich City Centre, Springfield Central Town Centre, Goodna and Ripley Town Centre. This involves undertaking a review of signal timing and speed limits to prioritise pedestrian movements over vehicular movements.	Ongoing

	Develop a pedestrian network program encompassing (Refer to Appendix E):	
2.2	<ul> <li>Provision of footpaths on all streets within 400m (5 minute walk) of key generators of retail/ commercial centres, rail and bus stations and educational facilities (primary, secondary and tertiary facilities). Footpaths should be provided on both sides for collector streets and above – (Pedestrian Access Streets);</li> <li>Provide pedestrian movement spines for access to the major retail/commercial centres from surrounding areas (between 1.2 to 3kms from middle of the centre) to allow people to walk into these centres, as well as connections between centres (Pedestrian Transport Corridors);</li> <li>Within retail/commercial centres, provide higher quality pedestrian facilities with wider footpaths, as well as comfort and amenity improvements (Pedestrian Activity Streets); and</li> <li>Provide short cuts mid block and through parks etc. wherever opportunities exist.</li> </ul>	Ongoing and next planning scheme review
2.3	Develop and implement an investment program of crossing facilities such as kerb crossings, islands, kerb build-outs and platforms and intersection details to make crossing the road easier (such as reduced delays, 90 degree kerb radii and removal of free left turns) targeting Pedestrian Access Streets, Pedestrian Activity Streets and Pedestrian Transport Corridors as a priority.	Ongoing
2.4	Review parking policy in activity centres to encourage mode shift (e.g. demand managed supply and pricing) and investigate using revenue from parking for active transport improvements in a centre (in coordination with Parking Actions in iGO).	Short and next planning scheme review
Strategy 3: Develop	best practice infrastructure solutions to walking and cycling	
3.1	Adopt a 'Link and Place' hierarchy (from Council's Streetscape Manual), where pedestrians are placed first, cyclists second and the private motor vehicle is placed last in urban centres and utilise in all planning and design undertaken in the City. Undertake trial of concept and test ability of the planning scheme to incorporate at the next review.	Short and next planning scheme review
3.2 (ATI3 in iGO)	Identify locations where pedestrian and cyclist priority should be given over vehicular movements along strategic active transport routes. Prepare a suite of treatments for these locations and identify criteria to be considered when implementing these treatments.	Short. Coordinate with Action 1.4
3.3	Review ICC Standard Drawings to incorporate revised pedestrian and cycle standards as discussed in Section 4.3 of this plan.	Short and next planning scheme review
3.4	Trial and measure 'pop up' pedestrian and cycle infrastructure (e.g. pedestrian squares, protected bike lanes, lunch time street closure in activity centre) and tie with community events to gather feedback and interest.	Signature Project
3.5	Develop a program which trials innovative solutions (e.g. protected bike lanes, countdown systems at pedestrian traffic signals, scramble pedestrian crossings, cycle crossing areas at traffic signals, bicycle boulevards).	Ongoing
3.6	Design to reduce crime both for walking and cycling routes and spaces without making walking and cycling less convenient. Work with police to develop other strategies to reduce crime along pathways.	Ongoing
Strategy 4: Underta	ke regular maintenance of the walk and cycle network	
4.1	Incorporate maintenance of walk and cycle facilities as part of existing maintenance programs.	Short
4.2	Undertake an audit of existing walk and cycle facilities and identify quick fix maintenance works to make an immediate improvement to the network.	Medium

## 5.3 Policy: Developing Supportive Active Transport Communities

AT Vision	AT Action Plan Objective	
Connected	Facilitate holistic active transport planning and delivery across Ipswich.	

The built environment and urban form relates to how settlements are designed and structured. Characteristics of the built environment have the potential to influence travel behaviour and achieve greater levels of physical activity in the community. For example, characteristics such as residential density, proximity to destinations and grid-like street patterns make it easier for people to walk or cycle. New evidence also shows that children engage in more regular, sustained physical activity when they are able to walk or cycle from home to school or other local destinations. Consequently, the built environment is a key consideration for the *Active Transport Action Plan* as it affects the need to travel and the attractiveness of walking and cycling.

New and existing communities need to be planned/ retrofitted and designed to support and encourage walking and cycling. The *Ipswich Planning Scheme* provides guidance and requirements on how it would like new developments to look and other Council network planning activities guide the development of open space, waterways etc. Ensuring that the right information is in the planning scheme and other Council network planning documents makes sure that we get it right the first time.

AT Vision	AT Action Plan Objective	
Convenient	Provide infrastructure and facilities which support the network and make active transport easy, including way finding, mid- trip facilities and end-of-trip facilities along active transport routes.	

It is important to provide supporting infrastructure to the pedestrian and cycle network in order to make it easy and convenient for users. This should include:

- Regulatory and wayfinding signage; and
- End of trip facilities such a bike parking, showers and lockers at destinations.

Regulatory signage assists with safe and orderly movement and can consist of signs or pavement markings which regulate, warn or guide pedestrians, road and bicycle facility users. Directional line marking on walk/cycle paths also needs to be considered in high demand locations to improve the safety and usability of these paths. In addition to these signs, there is also a need to provide directional and distance signs which will increase the user friendliness of the network. Such signs are useful for visitors to the area and can also include information on key tourist/ recreation attractors.

End of trip facilities such as bike parking, showers and lockers are also an essential component of the network and can encourage use. There is currently a lack of such facilities within Ipswich at present, particularly with regard to publicly available showers and lockers and limited secure facilities are available at workplaces in the city. There is scattered open air bike parking at various parks, recreational facilities and other Council buildings in the City (i.e. the Ipswich Library), as well as bike lockers at most rail stations in the local government area. Appendix F identifies priority areas for end of trip facility improvements.

AT Vision	AT Action Plan Objective
Comfortable	Make active transport comfortable, enjoyable and attractive for the people of Ipswich.

Drinking fountains, toilets, seating and shelter along a pedestrian/cycle path all contribute to the comfort of users. Shade, through provision of non-deciduous trees, can also be provided along paths as part of streetscaping works and can greatly improve the comfort of users. However, these support facilities can significantly increase the cost of providing a pedestrian and cycle network if provided on all proposed routes. It is therefore proposed to target the provision of such facilities to locations where they would be used more frequently.

Lighting of paths can improve personal safety for night time (or early morning) users but can also be expensive to install and maintain. Provision of lighting along off road paths may only be necessary if there are regular night time users. Other lighting options on a path (i.e. other than street lighting) are through the use of solar-powered cat's eyes, reflective paint and luminous signage. These will provide secondary sources of light for path users. The location and design of a path should allow for informal surveillance by surrounding existing and future uses where possible. This could involve the development of a mix of uses, to increase the timescale during which the path is monitored. Appropriate treatment of surrounding landscaping to reduce opportunity for crime should also be implemented. However, it is noted that the most important element in ensuring the safety of the path will be the number of users. If the pathway is well utilised, it will reduce the risk, and fear, of crime.

In addition to infrastructure provided as part of the transport system, improvements to the public space in Ipswich needs to occur. Providing an attractive and comfortable space in which to walk needs to also be coordinated with spaces for people to relax, sit, socialise and congregate in. Improvements in the quality of the pedestrian environment have been proven to not only increase activity in the streets but also to increase visitors to an area, therefore providing economic benefits. For Ipswich, this level of improvement can be targeted to activity centres.

Table 17 below details the strategies and actions proposed to achieve this iGO policy area. It is noted that these strategies and actions are aimed at addressing both infrastructure projects that would occur as part of Council's capital works program and supporting facilities which can be provided as part of new development (i.e. through development conditions).

#### Table 17: Developing Supportive Active Transport Communities

Action No.	Action	Timing	
Strategy 5: Provide e visible loc	Strategy 5: Provide end of trip facilities to support the pedestrian and cycle network in convenient and visible locations		
5.1 (AT4 in iGO)	Plan, advocate and deliver end of trip facilities at all train stations, key bus stops and public transport hubs. Ensure that an appropriate number of different facility types are provided (i.e. secure bicycle cages for all day commuter parking, bicycle racks for shorter term parking).	Ongoing and next planning scheme review	
5.2 (AT10 in iGO)	Review the Ipswich Planning Scheme to ensure that the requirements specified for end of trip facilities are suitable and sufficient to accommodate the planned growth in active transport. Investigate whether additional incentives can be provided to ensure the provision of high quality facilities (i.e. reduction of car parking rates etc.).	Next planning scheme review	
5.3 (AT15 in iGO)	Identify and implement key locations within Principal Activity Centres for public end of trip facility centres including secure bicycle parking, showers, change rooms and lockers. Identify opportunities to partner with the private sector to construct and operate these facilities.	Medium	
Strategy 6: Develop	a user friendly and attractive pedestrian and cycle network by providing supporting infrastr	ucture.	
6.1 (AT12 in iGO)	Develop, advocate and implement a Way Finding Strategy (incorporating design standards) focused around railway stations, other key public transport hubs and activity centres.	Signature Project	
6.2	Where possible incorporate non-deciduous shade trees along pedestrian and cycle paths. Appropriate tree species should be provided where the roots will not impact on the paving and there are no significant leaves or fruit droppings onto the pavement. Coordinate/ integrate with other Council activities (e.g. precinct planning) where possible or develop a Shadeways Program.	Signature Project	
6.3	Develop and implement a program to provide mid-trip facilities along key pedestrian and cycle routes such as seating, drinking fountains, toilets, lighting, rest areas, shade or shelter.	Ongoing	
6.4	Ensure appropriate regulatory and guidance signage is provided on all existing and proposed walk and cycle facilities. Include directional and separation line marking on shared paths where usage is high.	Ongoing	
6.5	Develop principles for lighting bikeways taking into consideration user demands, safety and cost efficiencies and then implement a program for lighting of paths.	Ongoing	

Action No.	Action	Timing
Strategy 7: Ensure p priority	lanning scheme requirements support and facilitate walking and cycling friendly developm access to and through is given to these users over the car	ent, where
7.1 (LU3 in iGO)	<ul> <li>Promote and support the 'smart growth/complete communities' urban model in greenfield growth areas:</li> <li>EAST: Augustine Heights, Bellbird Park, Brookwater, Collingwood Park, Redbank Plains (South), Springfield and Springfield Lakes</li> <li>SOUTH: Deebing Heights, Ripley, South Ripley and Yamanto</li> <li>NORTH &amp; WEST: Brassall (North west), Rosewood, Thagoona and Walloon</li> </ul>	Ongoing and next planning scheme review
7.2 (LU4 in iGO)	<ul> <li>Promote compact, mixed use developments within 400-800 metres of the following public transport nodes:</li> <li>Ipswich Railway Station</li> <li>East Ipswich Railway Station</li> <li>Booval Railway Station</li> <li>Boundamba Railway Station (northern side)</li> <li>Ebbw Vale Railway Station (southern side)</li> <li>Riverview Railway Station (southern side)</li> <li>Robod Railway Station (southern side)</li> <li>Goodna Railway Station</li> <li>Rosewood Railway Station</li> <li>Walloon Railway Station</li> <li>Wulkuraka Railway Station</li> <li>Springfield Railway Station</li> <li>Springfield Central Railway Station</li> <li>School Road Redbank Plans Railway Station (future)</li> <li>Ripley Town Centre line haul public transport node (future)</li> <li>Ripley Subtrict Activity Centre line haul public transport node (future)</li> <li>Sputh Ipswich/University line haul public transport node (future)</li> <li>Yamanto District Activity Centre line haul public transport node (future)</li> <li>South Ipswich/University line haul public transport node (future)</li> <li>West Ipswich line haul public transport node (future)</li> <li>West Ipswich line haul public transport node (future)</li> </ul>	Ongoing and next planning scheme review
7.3 (LU6 in iGO)	Apply quality urban design principles to make public spaces attractive to users and prioritise sustainable forms of transport over the private vehicle.	Ongoing
7.4 (LU7 in iGO)	Consider and plan for all transport modes in Council's capital works and strategic land use planning projects.	Ongoing
7.5 (LU10 in iGO)	Request access to and use the Queensland Government's spatial mapping and modelling tool called the Land Use and Public Transport Accessibility Index (LUPTAI). This tool seeks to measure how easy it is to access common destinations (i.e. health, education, employment etc.) by walking and/or public transport and will assist with making informed land use and transport decisions which encourage and promote sustainable transport outcomes.	Medium
7.6 (LU11 in iGO)	In the next revision of the Ipswich Planning Scheme, focus on promoting development which supports walking, cycling and use of public transport.	Next planning scheme review
7.7	Council to lead by example and implement high quality facilities in any new development it undertakes, going above and beyond the requirements of its planning scheme to highlight worlds' best practice.	Ongoing

## 5.4 Policy: Growing an Active Transport Culture

AT Vision	AT Action Plan Objective	AT Vision	AT Action Plan Objective
Connected	Seek, develop and maintain partnerships which will promote, facilitate and support active transport in Ipswich.	Convenient	Ensure active transport information and tools are easily accessible to the Ipswich community.

As mentioned, just building infrastructure is only one part of getting more people walking and cycling. Promoting and encouraging people to use the infrastructure and making sure they use it correctly and safely is also important. As noted at the beginning of this section, the PRESTO research proposes that approx. 80% of effort be towards the provision of infrastructure (network and supporting facilities) and approx. 20% of effort be towards promotion for a 'starter city'. It is noted that this promotion effort needs to be targeted to particular interested user groups and to the promotion of existing infrastructure.

Developing partnerships with other organisations and industries which have an interest in active transport (e.g. Department of Transport and Main Roads, Bicycle Queensland, Heart Foundation, 24/7 Cycling Safety Fund, University of Southern Queensland, Queensland Police Service) can be a way to target these more open user groups and obtain assistance with funding and awareness of promotional/educational programs. Further, partnering with local businesses which are in proximity to existing infrastructure can help raise awareness of the infrastructure in the community and also improve the economic strength of the local business.

## Figure 52: Example of Good Practice Interactive Walk and Cycle Mapping



Convenient tools are easily accessible to the Ipswich community. Not knowing where walk and cycle facilities exist, where they may be going or how long it may take to get there are some of the reasons why people choose to drive rather than walk or cycle. Signage strategies are one way to address this (addressed previously in Developing Supportive Active Transport Communities). However, being aware of the travel choices is the first step towards changing which travel options people choose. Once users have knowledge, they can make more informed choices and plan trips more appropriately. Therefore the provision

of information, education and encouragement actions can

also address this issue.

Consequently, information on the benefits of walking and cycling and how, where and what options are available for any trip needs to be provided. In particular, information on how far an average walking/ cycling speed will take them is important. Results of the online community survey on the enablers and barriers to walking and cycling showed that 80% of non-walkers thought a main barrier to walking is that the distances between places was too far. What many people do not know is that the average walking speed for adults is 1km in 12 minutes and that many destinations they travel to by car could be comfortably walked in this time. Maps, brochures and signage showing this type of information help residents and visitors to plan their commute, a recreational activity on the weekend or a visit to the shops.

It is also critical that this type of information is available via a range of forums, including online, and is easy to understand and read. Embracing new technology and social media will form part of Ipswich's approach to providing information to residents and visitors (refer to Figure 52).

#### Cycle Instead - South Australia

Website allows you to nominate your origin and destination and a cycle route is recommended. You can change preferences for route choice for gradient, low traffic, fastest route or to maximise pathways. You can download the map or print it out with step by step instructions. See image below for example output.

The website can also identify how long the trip will take based on cycling speed, the calories burned during the trip and the CO2 saved if undertaking the same route by car.

http://maps.sa.gov.au/cycleinstead/

AT Vision	AT Action Plan Objective
Comfortable	Continue to facilitate respect between road users and foster a culture of safe walking and cycling in Ipswich through educational, promotional and behavioural change programs.

Communication and education can be used to give people information on safety issues, persuade people to walk and cycle more often and to influence the views of the public on the vulnerability of pedestrians and cyclists and their needs when moving around Ipswich. The online community survey results indicated that two of the top three barriers to cycling more by 'Interested but concerned' cyclists was "concerns about being hit by a motor vehicle" and "do not feel safe while riding a bike". These two barriers can be addressed by infrastructure solutions but also via community education aiming to develop a walk and cycle friendly culture in Ipswich.

Education efforts are to concentrate on:

- educating drivers that roads cater for a diversity of users, not just motor vehicles, and therefore they need to be aware of pedestrian and cyclist rights, needs and behaviours and ensure they 'look out' and respect these users right to be on the road;
- educating pedestrians and cyclists to be more aware of vehicles and be more 'defensive' in their actions;
- educating pedestrians and cyclists regarding safety issues, particularly related to safe road crossings/ traversing intersections;

- education and promotion to schools (parents, teachers and students) on safe walking/cycling practices and the benefits of walking/cycling to school; and
- educating users of shared paths (e.g. competitive cyclist vs the slow recreational riding family vs the strolling pedestrian).

One of the main principles of encouragement is to acknowledge that walking or cycling may not be the most convenient choice for all trips and users but rather that there are a range of travel options available. The aim is to provide Ipswich residents with a choice on how and when they travel by ensuring there is a variety of convenient routes and ways of travel available and then providing information to residents to inform them of their choices. A key message to impart is that "Part way is ok" (i.e. driving your car to a nearby location and walking/cycling the last few km in to work/school or trying a new form of active travel one day a week) and still makes a difference.

Promotion/encouragement efforts should target the following key groups:

- General residents of the city;
- School students and university students as a particular user group whom have potential to walk and cycle more;
- Low income/disadvantaged residents who have reduced travel choices due to limited access to cars and low disposable income;
- Existing cyclists and walkers who cycle/walk for recreation/sport/health to cycle/walk more for transport purpose trips;
- Workplaces; and
- Families with children.



Behavioural and cultural change programs (e.g. Workplace Travel Plans) are also important tools to getting more people walking and cycling. The Ipswich Healthy Active School Travel program has been successful in reducing private vehicle trips by up to 23% (and on average 6%) and encouraging more people to walk, cycle and catch public transport. Active school travel programs are recommended to continue in Ipswich as these programs have many benefits such as reducing congestion around schools and getting kids more active. Educating parents to encourage their children to walk and cycle to school is also an important part of the program.

Table 18 below details the strategies and actions proposed to achieve this iGO policy area.

#### Table 18: Growing An Active Transport Culture

Action No.	Action	Timing
Strategy 8: Promote increased walking and cycling to encourage behavioural and cultural change, coordinating with existing marketing and community programs already delivered by Council where possible.		
8.1 (AT6 in iGO)	<ul> <li>Plan and implement in conjunction with key stakeholders events and initiatives to promote and encourage active transport (i.e. street festivals, bicycle skills and maintenance workshops, Ride to Work and Walk to Work Days).</li> <li>This could include: <ul> <li>Working with community groups to hold regular group bike rides which target different user groups such as retirees, females, teenagers, etc. This could include a 'Style over Speed' type ride to encourage making cycling trendy;</li> <li>Working with the Heart Foundation to deliver and promote their Walking Program;</li> <li>Holding events in areas of need (e.g. Ebbw Vale to Goodna Corridor) to provide bikes to those who cannot afford them such (e.g. 'Cycle Recycle Days' where old bikes are donated and then fixed and given to people who cannot afford a bike or 'Bike Swaps' where people can come and swap their bikes this is especially good for children as they grow);</li> <li>Delivering a range of activities during Bike Week each year such as Bicycle Skills and Maintenance Workshops, Group Rides, Movie Nights, Ride with a Buddy to Work;</li> <li>Working with local community groups (e.g. Cycling Ipswich) to hold regular events such as cycle races, fun runs and triathlons in the region; or</li> <li>Undertaking an annual Community Street Event to promote walking and cycling. The event could be held in a different suburb each year.</li> </ul> </li> </ul>	Medium

8.2	<ul> <li>Undertake an "Active Towns" style program (involving infrastructure and promotion) in the priority neighbourhoods of:</li> <li>Brassall and North Ipswich (coordinating with delivery of Brassall Bikeway)</li> <li>Redbank/ Redbank Plains/ Redbank Plains South/Collingwood Park/ Augustine Heights (coordinating with delivery of Goodna Creek Bikeway);</li> <li>Deebing Heights/ Yamanto/ Flinders View/One Mile and Churchill (coordinating with delivery of Deebing Creek Bikeway)</li> <li>City Centre and surrounding suburbs including North Ipswich, East Ipswich, Woodend, Coalfalls and West Ipswich</li> <li>Examples of activities that could be undertaken to encourage travel behaviour change at these locations include:</li> <li>Installing wayfinding signage on walking and cycling routes accessing the closest centre, public transport hub and End of Trip Facilities;</li> <li>Providing an End Of Trip Facility hub in a convenient and secure location for local employees to access;</li> <li>Preparing promotional material which targets various user groups, including local neighbourhood, employment generators, local businesses and provide information about the travel options available including green travel plans for major employers;</li> <li>Investigate changes to traffic signals that reduce delays for pedestrians crossing, including reducing signal cycle times and incorporating a pedestrian phase in every cycle, particularly in activity centres;</li> <li>Develop a quick win infrastructure program to upgrade walk and cycle infrastructure within and accessing the centre. This should include supporting infrastructure such as shade and seating</li> <li>Hold regular Transport Cafes/Journey Planner sessions;</li> <li>Encourage the development of a local Bicycle User Group (BUG); or</li> </ul>	Signature Project
8.3	<ul> <li>Undertake local area challenges targeting various user groups such as local employees.</li> <li>Promote the opening of new walking and cycling infrastructure through events, maps, media and other effective mechanisms to ensure they receive maximum use (e.g. Brassall Bikeway).</li> </ul>	Short
8.4	Develop a program that targets walking and cycling to the rail/bus stations in the local government area. Program should examine walk/cycle infrastructure available, ensure there is secure bike parking, provide wayfinding signage as well as undertake encouragement activities.	Medium
8.5 (AT16 in iGO)	Engage with major employment generators to develop and implement Sustainable Workplace Travel Plans to encourage and provide incentives for employees to travel to work via sustainable modes of transport. A pilot program for Ipswich City Council workers could be considered in the short term (see below).	Medium
8.6	<ul> <li>Prepare and deliver a Green Travel Plan for all of Ipswich City Council offices and utilise as a case study to deliver similar plans for other businesses. The plan could include (but is not limited to):</li> <li>Providing and promoting End of Trip Facilities at each Council office</li> <li>Providing high quality staff and customer end of trip facilities at the new Council office in the lpswich mall</li> <li>Undertaking an annual Corporate Challenge to encourage walking, cycling, catching public transport or carpooling to work</li> <li>Investigating providing a Council bike pool (and/or increased use of existing bike pool)</li> <li>Undertaking Transport Cafe/Journey Planner sessions with staff and with all new staff. This could also include provinding a link on Council's intranet to access these tools</li> <li>Preparing Park and Walk/Cycle Maps for each Council office.</li> <li>Providing regular incentives and promotional materials in Council e-newsletters</li> <li>Encouraging the development of a workplace Bicycle User Group (BUG)</li> <li>Undertaking bi-annual events to promote active travel.</li> </ul>	Short
8.7	Prepare and implement a Social Media Strategy to promote and inform the community on walking and cycling and to start community conversations on relevant issues.	Signature Project

Strategy 9: Educate the community on the walk and cycle network, how to use it safely and how to respect those who use it.			
9.1	Provide information on safe walk and cycle practices and existing walk and cycle maps via local information brochures to be made available at community information locations in the City (e.g. public libraries) and on Council's website. Incorporate education material on road rules, rules and etiquettes on sharing pathways and sharing the road. This should include existing infrastructure maps and suggestions for rides, links to community groups holding rides, etc. Incorporate a Calendar of Events on the website.	Signature Project	
9.2	Develop a smartphone and website app which enables users to choose routes to walk and cycle in the City, based on a number of varying factors (e.g grade, availability of paths, traffic volumes. Similar to ridethecity.com). It could also integrate with the Translink journey planner app and include information such as distance and time it will take, calories lost and carbon saved.	Signature Project	
9.3	Continue to support BikeEd programs to all Year 4 students in Ipswich local government area schools by providing information and encouragement to incorporate as part of school's regular curriculum.	Ongoing	
	Expand community education workshops to educate users and install confidence when walking or cycling including (but not limited to):		
9.4	<ul> <li>Bicycle Skills and Maintenance workshops; and</li> <li>Other community education workshops such as Females Cycling, Become Better Road Cyclists, Community Self Defence.</li> </ul>	Medium	
	Work with local community groups to help deliver these workshops (e.g. local bike shop to deliver a bike maintenance course.).		
	Prepare and deliver 'Share the Pathway' and 'Share the Roadway' campaigns, including (but not limited to):		
9.5	<ul> <li>Information pamphlets and bumper stickers for distribution at community events, customer service centres and libraries;</li> <li>Advertising campaign to be run annually including newspaper and bus advertisements; and</li> </ul>	Short	
	Implement 'Stay Wider of the Rider' program.		
Strategy 10: Encourage more children to walk and cycle to school in Ipswich			
	Continue to develop and grow the Ipswich Healthy Active School Travel (HAST) Program and other school based programs (i.e. walking/cycling bus) which promote children travelling to and from school via safe active transport modes. Examples of improvements could include:		
10.1 (AT7 in iGO)	<ul> <li>Increasing the annual number of schools participating in active travel events each year</li> <li>Developing and regularly updating resources for schools;</li> <li>Preparing an online school portal on Council's website which contains resources, relevant information, input surveys etc.);</li> </ul>	Ongoing	
	<ul> <li>Investigating holding competitions and challenges between participating schools to further promote the program;</li> <li>Continuing to monitor travel behaviour change at participating schools and actively evaluate results to ensure greatest travel change is occurring. Promote positive results;</li> <li>Expanding the Active and Safe Schools Mapping for schools heroord those participating.</li> </ul>		
	<ul> <li>Expanding the Active and safe schools mapping for schools beyond those participating in HAST; or</li> <li>Investigating and extending the program to high schools (specifically Year 7-8).</li> </ul>		







## 6.1 Priorities for Delivery

The iGO Active Transport Action Plan proposes a comprehensive plan to encourage more people to use active transport. However Council cannot undertake all the actions at once. As a result, a prioritisation process have been developed to assist Council in deciding what to do first.

The priority actions need to deliver value for money, as well as be the first steps towards encouraging more people to walk and cycle in Ipswich.

Separate prioritisation methods were developed for the cycle network plan, the pedestrian network plan and the strategies and actions. The methodologies for prioritisation and their outcomes are discussed below. The initial analysis occurred utilising GIS whereby the results of the prioritisation processes were ground-truthed in a workshop with Council officers and amendments made based on these changes.

#### 6.1.1 Cycle Network Plan Prioritisation

A key component of the Cycle Network, as discussed in Section 4, is the Principal Cycle Network Plan (PCNP). These links form the regional level routes in the network. The PCNP has been developed by the Department of Transport and Main Roads (DTMR) in association with Council. DTMR and Council have prioritised the PCNP links and this information has been incorporated into the prioritisation results and was not amended.

The analysis process undertaken for the Cycle Network Plan was therefore only undertaken for the secondary and local links in the plan. The assessment has been undertaken for identified routes in the network. Routes were identified aiming to connect origins and destinations, or origin to the PCNP link.

Table 19 summarises the criteria utilised for the prioritisation process for the cycle network plan.

At the workshop with Council officers, it was agreed that the PCNP links and identified PCNP very high priority routes are the most important to construct, therefore creating a base arterial cycle network for Ipswich. Based on these discussions, the key links identified as a priority over the next five years include:

- Deebing Creek Bikeway Ipswich Central to Yamanto/ Ripley (via South St, Thorn St and the Deebing Creek corridor);
- Brassall Bikeway (Stage 6) Ipswich Central to North Ipswich;
- Glebe Rd Ipswich Central to Booval;
- Bradfield Bridge Links Integration with the Ipswich Mall redevelopment and other inner city connections;
- RAAF Base Amberley Southern Amberley Rd;
- Goodna Creek Bikeway Collingwood Park to Redbank Plains;
- 'Western Ipswich Link' Ipswich Central to Leichhardt (via Roderick St, Omar St and Old Toowoomba Rd)
- Brassall Bikeway (Stage 5) Brassall to Karrabin;
- South St East St to Ellenborough St; and
- Bremer St Olga St to Ellenborough St.

The full prioritisation of the PCNP, as well as the secondary and local links for the Cycle Network, are provided in Appendix G.

Criteria	Rationale	Measure	
Comfortable		1I	
Crash Data (10% weighting)	Identifies existing potential safety issues by considering previous crash history	Number of crashes involving a bike along the link, divided by length	
Traffic Volumes along the route (15% weighting)	Traffic volumes indicate the need for dedicated safe cycle facilities due to increased likelihood of conflicts between cyclists and other vehicles.	Base year traffic volumes	
Topography (10% weighting)	Area is less attractive to cycle if grade greater than 5%	Elevation/terrain measured by % of elevation greater than 5%	
Vulnerable Users (5% weighting)	Considers if the route has a higher use by vulnerable users such as school children	% of users under 19y/old (compared to State average)	
Convenient (Demand)			
Existing and Future Population within Catchment (20% weighting)	Measures potential demand by adjacent population	Total population within adjacent catchment (500m), divided by length. (Note: current priorities based on 2015 population but informed by 2031 priorities)	
Existing and Future Jobs within Catchment (20% weighting)	Measures potential demand by employees adjacent to link	Total jobs within adjacent catchment (500m), divided by length. (Note: current priorities based on 2015 employment but informed by 2031 priorities)	
Index of Relative Social Disadvantage (5% weighting)	Measures potential demand along a route if there is disadvantaged groups in an area, indicating a need to provide affordable travel choices	% of households who are disadvantaged (SEIFA) (Compared to State Average)	
Connected			
Trip Attractors/ Generators (15% weighting)	The number of places people could cycle to along a link	Number of attractors served within 200m of a link. Public transport attractors, education facilities and employment nodes were given higher scores to emphasise iGO Priority Areas. Total number of attractors were divided by project length	
Strategic Importance and Implementation – these factors were considered at Workshop with Council officers			
Strategic Importance*	Meets Council priorities	Qualitative analysis	
Feasibility*	Considers ease in which the link could be constructed	Engineering feasibility and community impacts	
Opportunity*	Measures whether the project could be undertaken as part of another project (with committed funding)	Opportunity	

### Table 19: Multi-Criteria Analysis Methodology for Cycle Link Prioritisation (Secondary and Local Routes Only)

 $^{\star}$  No weighting as assessed during Council workshop only

#### 6.1.2 Pedestrian Network Plan Prioritisation

The prioritisation process for the pedestrian network was undertaken on an area basis, as opposed to the link basis developed for the cycle network. Separate criteria were developed for each of the major proposed pedestrian generators identified in the pedestrian network plan. The agreed prioritisation process for the three major pedestrian generator types are summarised in the tables below.

Table 20: Multi-Criteria Analysis Methodology for Pedestrian Network – Activity Centres (3km catchment for Principal, Sub-regional and District Activity Centres)

Criteria	Rationale	Measure		
Comfortable (No criteria developed)		1 1		
Convenient (Demand)		1		
Existing and Future Population within Catchment (30% weighting)	Measures potential demand by surrounding population	2015 and 2031 Population Density within adjacent catchment (persons/ha)		
Existing and Future Jobs within Catchment (30% weighting)	Measures potential demand by surrounding employees	2015 and 2031 Jobs Density within adjacent catchment (persons/ha)		
Disadvantaged Groups within Catchment (5% weighting)	Index of relative social disadvantage - Measures potential demand along a route if there is disadvantaged groups in an area	% of households who are disadvantaged (SEIFA) (Compared to State Average)		
Connected	Connected			
Trip Attractors/ Generators (30% weighting)	The number of different types of places people could walk to within an area	Number of education facilities Number of public transport nodes Number of other attractors (all other types)		
Strategic Importance and Implementation - These factors were considered at a workshop with Council officers				
Centre Hierarchy (5% weighting)	Indicates the centre's importance to Council	Type of Centre (based on hierarchy in planning scheme)		
Strategic Importance*	Meets Council priorities	Qualitative Analysis – data gathered at workshop with Council officers		
Opportunity*	Measures whether the area's work could be undertaken as part of another project (e.g. master plan exists)	Opportunity – data gathered at workshop with Council officers		

\* no weighting as assessed during Council workshop only

Table 21: Multi-Criteria Analysis Methodology for Pedestrian Network – Public Transport Nodes (800m catchment for rail and major bus stations)

Criteria	Rationale	Measure
entena	Rationale	
Comfortable		
Park and Ride (10% weighting)	Measures car parking at the PT node – the less car parking, the greater need for access via other modes	Number of car parks (limited car parking gets a high score)
Convenient (Demand)		
Patronage (15% weighting)	Measures existing patronage per week at PT node	Total number of users at PT node in a week
Existing and Future Population within Catchment (20% weighting)	Measures potential demand by surrounding population	2015 and 2031 Population Density within adjacent catchment (persons/ha)
Existing and Future Jobs within Catchment (20% weighting)	Measures potential demand by surrounding employees	2015 and 2031 Jobs Density within adjacent catchment (persons/ha)
Vulnerable Users (5% weighting)	Considers if the route has a higher use by vulnerable users such as school children	% of users under 19y/old (compared to State average)
Disadvantaged Groups within Catchment (10% weighting)	Index of relative social disadvantage - Measures potential demand along a route if there is disadvantaged groups in an area	% of households who are disadvantaged (SEIFA) (Compared to State average)
Connected		
Trip Attractors/ Generators (20% weighting)	The number of different types of places people could walk to within an area	Number of education facilities Number of other attractors (all other types)
Strategic Importance and Implementation - These factors were considered at a workshop with Council officers		
Strategic Importance*	Meets Council priorities	Qualitative Analysis – data gathered at workshop with Council officers
Opportunity*	Measures whether the area's work could be undertaken as part of another project (e.g. master plan exists)	Opportunity – data gathered at workshop with Council officers

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\* no weighting as assessed during Council workshop only

Table 22: Multi-Criteria Analysis Methodology for Pedestrian Network – Schools (2km catchment for all schools for assessment purposes)

Criteria	Rationale	Measure	
Comfortable (No criteria developed)			
Convenient (Demand)			
Enrolments (35% weighting)	Measures enrolments at education facility	Total enrolments 2015	
Existing and Future Population within Catchment (20% weighting)	Measures potential demand by surrounding population	2015 and 2031 Population Density within adjacent catchment (persons/ha)	
Vulnerable Users (10% weighting)	Considers if the route has a higher use by vulnerable users such as school children	% of users under 19y/old (compared to State average)	
Disadvantaged Groups within Catchment (10% weighting)	Index of relative social disadvantage - Measures potential demand along a route if there is disadvantaged groups in an area	% of households who are disadvantaged (SEIFA) (Compared to State average)	
Connected			
Trip Attractors/ Generators (25% weighting)	The number of different types of places people could walk to within an area. Also measures the number of surrounding schools to identify clusters where infrastructure provision can offer value for money	Number of education facilities (cluster analysis) Number of public transport nodes (measures accessibility too)	
Strategic Importance and Implementation - These factors were considered at a workshop with Council officers			
Strategic Importance*	Meets Council priorities	Qualitative Analysis - data gathered at workshop with Council officers	
Opportunity*	Measures whether the area's work could be undertaken as part of another project (e.g. master plan exists)	Opportunity - data gathered at workshop with Council officers	

\* no weighting as assessed during Council workshop only

The following summarises the agreed very high priorities for each of the pedestrian generator types:

#### **Activity Centres**

- Ipswich Central;
- Booval; and
- Brassall.

#### Public Transport Nodes

- Ipswich Central Rail Station and Bus Station;
- Riverlink Bus Station;
- Goodna Rail Station and Bus Station; and
- Booval Rail and Bus Station.

#### Schools

- Woodcrest State College;
- Redbank Plains State High School;
- Springfield Lakes State School;
- Westside Christian School;
- Kruger State School;
- Raceview State School;
- Ipswich Grammar School;
- St Edmund's College;
- St Augustine's College; and
- Springfield Central State High School.

The above priorities encompass schools only. University and TAFEs are a major generator for pedestrians and cyclists due to their demographic characteristics (e.g generally young and able with low incomes and low car ownership). Based on the prioritisation process undertaken, these institutions were a very high priority but lower than the above schools (utilising enrolments and on-campus movement data for the campuses in 2016). Nevertheless, partnership opportunities with these institutions would be welcomed by Council.

The full prioritisation of the pedestrian network is provided in Appendix G.

#### 6.1.3 Action Plan Priorities

The actions in the *Active Transport Action Plan* have been prioritised taking into account the following:

- Assessment of the actions against the plan objectives;
- Assessment of the actions against the enablers and barriers identified in the online community survey; and
- Assessment of the actions against best practice elsewhere, considering what makes a difference for a city when starting out on its journey to encourage more people to walk and cycle.

Based on this assessment, the actions were indentified as Very High to Low priority. At the Council Workshop, signature projects were agreed to identify the highest priority actions for Council to concentrate on first. The signature projects identified for each policy area are summarised below:

#### Building Quality Active Transport Networks

- Actions 1.1-1.4 and 2.1-2.2 Planning, design and construction of the cycle and pedestrian networks as per the identified network priorities.
- Action 3.4 Trial and measure 'pop up' pedestrian and cycle infrastructure (e.g. pedestrian squares, protected bike lanes, lunch time street closure in activity centre) and tie with community events to gather feedback and interest.

#### Developing Supportive Active Transport Communities

- Action 6.1 Develop, advocate and implement a Way Finding Strategy (incorporating design standards) focused around railway stations, other key public transport hubs and activity centres.
- Action 6.2 Where possible incorporate nondeciduous shade trees along pedestrian and cycle paths. Appropriate tree species should be provided where the roots will not impact on the paving and there are no significant leaves or fruit droppings onto the pavement. Coordinate/ integrate with other Council activities (e.g. precinct planning) where possible or develop a Shadeways Program.

#### Growing An Active Transport Culture

- Action 8.2 Undertake an 'Active Towns' style program (involving infrastructure and promotion) in the priority neighbourhoods of;
  - Brassall/North Ipswich (with the Brassall Bikeway);
  - Redbank Plains, Collingwood Park and adjacent suburbs (with the Goodna Creek Bikeway);
  - Yamanto and other southern suburbs (with the Deebing Creek Bikeway); and
  - Ipswich City Centre and surrounding inner suburbs.

- Action 8.7 Prepare and implement a Social Media Strategy to promote and inform the community on walking and cycling and to start community conversations on relevant issues.
- Action 9.1 Provide information on safe walk and cycle practices and existing walk and cycle maps via local information brochures to be made available at community information locations in the City (e.g. public libraries) and on Council's website.
- Action 9.2 Develop a smartphone and website app which enables users to choose routes to walk and cycle in the City, based on a number of varying factors (e.g grade, availability of paths, traffic volumes. Similar to ridethecity.com). It could also integrate with the Translink journey planner app and include information such as distance and time it will take, calories lost and carbon saved.

## 6.2 Funding

In order to get more people walking and cycling, Council need to continue to build a network which connects people to where they want to go safely. The proposed network has not been costed as part of this project though it is acknowledged that to develop the network in a timely manner, more funding is required for active transport. Figure 53 illustrates that Council have been slowly increasing their expenditure on active transport infrastructure over the last 4 years from approx. \$8m to \$14m (refer to Figure 53).

Figure 53: Ipswich City Council Historical Expenditure on Active Transport Infrastructure\*



\* Includes funding received from grants, divisional allocation, strategic provision, rehabilitation, infrastructure as part of new roads and parks but does not include donated assets provided by new development. The 2016/17 value is a predicted spend.
#### 6.2.1 Funding Sources

There are various funding sources which provide opportunities for Council to offset their active transport expenditure and one of the main forms is via grants.

The Department of Transport and Main Roads Local Government Cycle Network Grants program is the main source of grant funding for cycling projects at present and can be utilised to deliver the PCNP routes. Applying for grants under this program gives Council the chance to receive up to 50% of the total cycling project cost from the State Government. This gives Council a significant opportunity to leverage off and potentially deliver more cycle infrastructure in Ipswich due to the money available under this program. Other grant programs which Council could apply for infrastructure funding on include (but are not limited to) the Transport Infrastructure Development Scheme (TIDS), Sport and Recreation Grants, Federal Blackspot Fund, Local Government Grants and Subsidies Program. There are also additional grant funding sources for education and promotion type actions such as the Community Road Safety Grants and the Community Benefit Fund (via community groups).

Funding and resource partnerships with other authorities/ organisations/local businesses (e.g. Bicycle Queensland, Diabetes Queensland, Local Government Association of Queensland, National Heart Foundation of Australia etc) can also be investigated.



# Monitoring and Review

#### 7.1 Benchmarking and Performance Indicators

It is important to identify active transport benchmaking and performance indicators as this can help Council gauge how successful the implementation of the *Active Transport Action Plan* has been within the Ipswich community. Specifically, the ongoing collection and analysis of travel behaviour data can:

- Demonstrate how the *Active Transport Action Plan* is delivering the desired community and Council active transport vision, objectives and targets;
- Help guide investment and enhance decision making; and
- Assist with ongoing planning for active travel.

Regular monitoring will also enable Council to fine tune the *Active Transport Action Plan* to ensure maximum results and efficiencies.

The monitoring and review framework for the Active Transport Action Plan will include the following:

- Regular data collection and analysis on active transport behaviour. A regime for monitoring and review is shown in Table 23. This is based on currently available data sources and will be reviewed when more information becomes available.
- Action Plan review to track progress against actions and targets. This will be undertaken in association with other implementation stakeholders.

#### 7.2 Data Collection

Table 23 documents the data collection requirements of the *Active Transport Action Plan* and the frequency of which it is required.

Annual strategic pedestrian and cycle counts will be undertaken to measure growth in active transport numbers across the City. A variety of locations will be surveyed to provide a broad understanding of growth in different circumstances based on the key target areas of the *Active Transport Action Plan*, such as counts around activity centres, public transport nodes and schools.

Permanent counters will also be installed on major bikeway infrastructure as they are constructed. Council are shortly to install permanent counters on the Brassall Bikeway, which will enable the monitoring of trends in usage across the year as well as changes annually. Permanent counters are also intended to be installed on other major infrastructure as constructed, such as the Goodna Creek Bikeway and the Deebing Creek Bikeway.

Council also intends to undertake before and after surveys on key links in the network to understand the change in use after construction of an active transport facility.

Performance Indicator	Measure	Potential Data Source	Frequency
Connected	·	· · · · · ·	
Growth in Connected Active Transport Network	<ul> <li>Kilometres of new bikeways constructed (document new kms)</li> <li>Kilometres of new footpaths constructed (document new kms)</li> <li>Benchmark against SEQ local governments</li> </ul>	Council GIS Database plus records     of new constructed pathways	Annual
Active Transport Expenditure	• Increase in proportion of Council spend per head for active transport infrastructure. Benchmark against SEQ local governments	<ul> <li>Construction in capital works program – footpaths and cycling)</li> </ul>	Annual
Travel Mode Share to Schools	• Reduction in trips to school by private car (Baseline will vary each year, depending on schools participating). Benchmark against SEQ local governments	<ul> <li>Hands Up Surveys at participating schools – mode shift</li> <li>Future: Household travel survey</li> </ul>	Every school term (one week of data collection)
Travel Mode Share to Work	<ul> <li>Reduction in trips to work by private car (Baseline – 0.3% cycling and 1.7% walking in 2011).</li> <li>Benchmark against SEQ local governments</li> </ul>	<ul><li>ABS Journey To Work</li><li>Future: Household travel survey</li></ul>	Every 5 years
Pedestrians and Cyclists Volumes	<ul> <li>Increase in On Road Cycle Volumes</li> <li>Increase in Off Road Cycle Volumes</li> <li>Increase in Pedestrian Volumes</li> </ul>	<ul> <li>Pedestrian and Bicycle Counts (permanent and video counts).</li> </ul>	Annual
Convenient			
Frequency of Cycle Trips	<ul> <li>Increase in number of residents who cycle/walk per week (Baseline - 20.3% of residents ride a bicycle in a typical week - NCPS)</li> <li>Decrease in households with 0 bikes of working order (48% of households do not have at least one working bicycle – NCPS). Benchmark against SEQ local governments</li> <li>Increase in people cycling and walking for transport trip purposes (eg. commuting, education, shopping) (Baseline - 16% commuting and other trip purposes – NCPS)</li> </ul>	<ul> <li>Online Community Survey (OCS)</li> <li>National Cycling Participation Survey (NCPS)</li> <li>Future: Household travel survey</li> </ul>	<ul> <li>OCS - Every 5 years</li> <li>NCPS - Every 2 years</li> </ul>

#### Table 23: Active Transport Benchmarking and Monitoring Regime

	Table 23: Active	Transport	Benchmarking	and Monitoring	<b>Regime Continued</b>
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Performance Indicator	Measure	Potential Data Source	Frequency
Comfortable			, , ,
Increase in Females Cycling	<ul> <li>Increase in number of females cycling (Baseline – 8% female cycling to work - ABS; 36% of women cycle for all purposes - OCS)</li> </ul>	<ul> <li>ABS Journey To Work</li> <li>Online Community Survey</li> <li>Pedestrian and Bicycle Counts (permanent and video counts).</li> </ul>	<ul> <li>ABS - Every 5 years</li> <li>OCS - Every 5 years</li> <li>Counts - Annually</li> </ul>
Safety - Crashes	<ul> <li>Reduction in number of bicycle related casualties and fatalities/ total kms travelled</li> <li>Reduction in number of pedestrian related casualties and fatalities/total kms travelled</li> </ul>	• Webcrash	Annual
Safety - Perception	<ul> <li>Increase in the perception of safety during the day</li> <li>Increase in perception of safety at night</li> </ul>	Online Community Survey	Every 5 years
Satisfaction with active Transport Environment	<ul> <li>Increases in the 'Enthused and confident' cyclist (Baseline - 57% - 'Interested but concerned')</li> <li>Increases in the 'Willing and motivated' walker (Baseline -51% - 'Willing but constrained')</li> </ul>	Online Community Survey	Every 5 years
Other - Participation			
Access to Information	<ul> <li>Increase in number of requests for maps</li> <li>Increase in the use of Council website to access information on active transport</li> </ul>	<ul> <li>Customer Service Centre requests for maps</li> <li>Website hits</li> </ul>	Annual
Event Attendance	<ul> <li>Increase in number of events, and attendance at these events, to encourage active transport (including bike skills workshops and BikeEd)</li> </ul>	• Council database	Annual
Participation in Active Travel Schools	<ul> <li>Increase in number of schools participating in travel change activities</li> <li>Number of schools involved in HAST</li> <li>Number of events attendance via HAST</li> <li>Number of schools with active transport maps</li> <li>Change in perception of safety for children walking and cycling to school in HAST schools</li> </ul>	<ul><li>Council database</li><li>Parent/Teacher Surveys</li></ul>	Annual







#### Appendix A - Online Community Survey Questions and Methodology

#### Online Community Survey Questions



Ipswich	
Community survey - Cycling and walking in Ipswich	
Cycling	
Current cycling habits	
1. Do you currently ride a bicycle?	
Yes	
O No	



#### Community survey - Cycling and walking in Ipswich

Cycling

#### **Barriers to cycling**

2. Why don't you ride a bicycle?

#### I don't own a bicycle

- I do have access to a bicycle but it is not in working condition
- I am not interested in cycling
- None of the reasons listed above

3. What factors deter you from bicycling? (Answer those that are relevant to you)					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The distance between places I would like to go is too far to bicycle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
There are no suitable paths or bicycle lanes between places I would like to go	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
The routes between places I would like to go are too hilly	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
I am concerned about being hit by a motor vehicle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
l do not feel safe while riding a bicycle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I am concerned about bicycle theft when I park my bicycle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
The weather / climate is not suitable for bicycling	$\bigcirc$	$\bigcirc$	$\odot$	$\bigcirc$	0
I need a motor vehicle before, during or after work	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
My fitness prevents me from bicycling	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I have health conditions or disabilities which prevent me from bicycling	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I have nowhere to park or store my bicycle and belongings at my destination	$\bigcirc$	0	0	$\bigcirc$	0
I have nowhere to change and shower at my destination	0	$\bigcirc$	0	$\bigcirc$	0
Other (please specify)			-		
Willingness t	o cycle				
4. Would you like to b	icycle more than	you currently do	?		
Yes – I would like to I	bicycle more				
No – I am not interes	ted in bicycling at the	moment			

<ol> <li>vvnat would encou</li> </ol>	urage you to bicycl	le in the future? I	Please choose y	our top three.	
Continuity of bicycle	e lanes/paths				
Smooth / well surface	ced paths				
Safe / bicycle friend	ly intersections				
Signage / wayfindin	g on bicycle routes				
Bicycle parking					
Showers and locker	s at your destination				
Lower traffic volume	es or speeds				
Improved motor veh	nicle driver behaviour a	round cyclists			
Minimal congestion	from other bicyclists				
No conflicts with pe	destrians				
Shading					
Lighting and visibilit	у				
Bicycle Training					
Other (please speci	fy)				
Comfort in d	<b>ifferent con</b> would you feel bicy	ditions ycling on a desig	nated "bicycle c	nly" path in the foll	owing
Comfort in d 6. How comfortable conditions? (see ima	<b>ifferent con</b> would you feel bicy ages below for exa	ditions ycling on a desig mples) Somewhat	nated "bicycle c Somewhat	nly" path in the foll	owing
Comfort in d 6. How comfortable conditions? (see ima	<b>ifferent con</b> would you feel bicy ages below for exa Very uncomfortable	ditions ycling on a desig mples) Somewhat uncomfortable	nated "bicycle c Somewhat comfortable	nly" path in the foll Very comfortable	owing Don't know
Comfort in d 6. How comfortable conditions? (see ima [A] Off-road, on a designated bicycle only path along a road	<b>ifferent con</b> would you feel bicy ages below for exa Very uncomfortable	ditions ycling on a desig mples) Somewhat uncomfortable	nated "bicycle c Somewhat comfortable	only" path in the folk Very comfortable	owing Don't know
Comfort in d 6. How comfortable conditions? (see ima [A] Off-road, on a designated bicycle only path along a road [B] Off-road, on a designated bicycle only path through parklands or along a creek /river	ifferent con would you feel bicy ages below for exa Very uncomfortable	ditions ycling on a desig mples) Somewhat uncomfortable	nated "bicycle o Somewhat comfortable	only" path in the follo Very comfortable	owing Don't know

## 7. How comfortable would you feel bicycling on a footpath (2 metres wide or less) in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] Off-road, on footpaths of quiet residential streets	0	0	$\bigcirc$	$\bigcirc$	0
[B] Off-road, on footpaths along a major roads (speeds 60kph and above)	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On quiet residential streets without any concrete footpaths	0	0	$\bigcirc$	$\bigcirc$	0



8. How comfortable would you feel bicycling on a shared path with pedestrians in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] Off-road, on a path shared with pedestrians through a park or along a creek /river	0	0	Ο	$\bigcirc$	$\bigcirc$
[B] Off-road, on a path shared with pedestrians along a major road (speeds 60kph and above)	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On trails in recreational areas	0	0	0	$\bigcirc$	$\bigcirc$



## 9. How comfortable would you feel bicycling on an on-road bicycle path / lane in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] On-road, on a designated bike lane on a busy main road (speeds 60kph and above)	0	0	0	0	0
[B] On road, on a designated bike lane on a quieter road (speeds 50kph or less)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On road, on a designated bike lane next to car parking	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[D] On-road, with shared lane markings (e.g. yellow bike symbol)	0	0	0	0	0
[E] On a protected bike lane (i.e. separated from traffic by a median)	0	0	0	$\circ$	0
[F] On a raised or separated cycle track (i.e. bicycle lane which has been raised to the same level as the footpath)	0	0	0	0	0
	-				



## 10. How comfortable would you feel bicycling on-road with no bicycle path or facility in the following conditions?

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] On shared streets with traffic calming (e.g. speed humps, raised paving, etc).	0	0	0	0	0
[B] On-road, with no bike lane, quiet residential street	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On-road, with no bike lane, busy main road	0	0	0	$\bigcirc$	$\bigcirc$



#### Opportunities to improve bicycling

11. What is the most important factor that would influence your decision to travel by bicycle in Ipswich?

Ipswich	CA				
Community survey	- Cycling ar	nd walking in lp	swich		
Cycling					
Distance (in metres or kilometres)			· · · ·		
Trip purposes	and attra	actors e and how often? (	please choose t	hose that are rele	evant to you)
Trip purposes	do you bicycle Every day	e and how often? ( Every weekday	please choose t 1-4 times a week	hose that are rele A few times a month	evant to you) n A few times a ye
Trip purposes	and attra	e and how often? ( Every weekday	please choose t 1-4 times a week	hose that are rele A few times a month	evant to you) n A few times a ye
Trip purposes	and attra	e and how often? ( Every weekday	please choose t 1-4 times a week	hose that are rele A few times a month	evant to you) n A few times a ye
Trip purposes 13. For what purpose/s Travel to work Travel to school Travel to tertiary education (e.g. university, TAFE)	and attra	e and how often? ( Every weekday	please choose t	hose that are rele A few times a month	evant to you) n A few times a ye
Travel to work Travel to school Travel to tertiary education (e.g. university, TAFE) Travel to shopping	and attra	e and how often? ( Every weekday	please choose t 1-4 times a week	hose that are released and the second	evant to you) n A few times a ye
Travel to work Travel to school Travel to school Travel to tertiary education (e.g. university, TAFE) Travel to shopping Travel to personal business (e.g. banking,	and attra	e and how often? ( Every weekday	please choose t	hose that are rele	evant to you)
Travel to work Travel to school Travel to school Travel to school Travel to tertiary education (e.g. university, TAFE) Travel to personal business (e.g. banking, appointments) Travel to visit family or friends	and attra	Actors e and how often? ( Every weekday	please choose t 1-4 times a week	hose that are rele	evant to you)
Trip purposes 13. For what purpose/s Travel to work Travel to school Travel to school Travel to tertiary education (e.g. university, TAFE) Travel to personal business (e.g. banking, appointments) Travel to visit family or friends Travel to public transport	and attra	Actors e and how often? ( Every weekday	I-4 times a week         I-4 times a week         I <td>hose that are rele</td> <td>evant to you)</td>	hose that are rele	evant to you)
Trip purposes 13. For what purpose/s Travel to work Travel to school Travel to school Travel to tertiary education (e.g. university, TAFE) Travel to shopping Travel to shopping (e.g. banking, appointments) Cravel to visit family or friends Travel to public transport Recreation or fitness	and attra	Actors e and how often? ( Every weekday	iplease choose t         1-4 times a week	hose that are rele	evant to you)
Trip purposes         13. For what purpose/s         Travel to work         Travel to school         Travel to school         Travel to tertiary education (e.g. university, TAFE)         Travel to shopping         Travel to shopping         Travel to personal business         (e.g. banking, appointments)         Travel to visit family or friends         Travel to public transport         Recreation or fitness         Sports training	and attra	Actors e and how often? ( Every weekday	iplease choose t         1-4 times a week	hose that are rele	evant to you)

14. For the trip purpo	ses which are applicable, where do you travel to/from b	y bicycle? Please provide				
details of street, suburb, school, workplace etc. as relevant.						
For example Moffatt Street, West Ipswich, to Ipswich CBD.						
Travel to work						
Travel to school						
Travel to tertiary education						
Travel to shopping						
Travel to personal						
business						
Travel to visit family or						
friends						
Travel to public transport						
Recreation or fitness						
Sports training						
Other						

#### Willingness to cycle

15. Are you happy with the amount of bicycling you currently do?

Yes - I am happy with the amount of bicycling I currently do

No - I would like to bicycle more than I currently do

#### **Barriers to cycling**

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The distance between places I would like to go is too far to bicycle	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
There are no suitable paths or bicycle lanes between places I would like to go	0	0	0	$\bigcirc$	0
The routes between places I would like to go are too hilly	0	0	$\bigcirc$	0	0
I am concerned about being hit by a motor vehicle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
l do not feel safe while riding a bicycle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I am concerned about bicycle theft when I park my bicycle	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
The weather / climate is not suitable for bicycling	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	0
I need a motor vehicle before, during or after work	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
My fitness prevents me from bicycling	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I have health conditions or disabilities which prevent me from bicycling	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
I have nowhere to park or store my bicycle and belongings at my destination	$\odot$	0	0	$\bigcirc$	$\bigcirc$
I have nowhere to change and shower at my destination	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
ther (please specify)					
			1		

17. What would enco	ourage you to bicy	cle more in the fu	iture?		
Continuity of bicycle	lanes/paths				
Smooth / well surfac	ed paths				
Safe / bicycle friend	y intersections				
Signage / wayfinding	g on bicycle routes				
Bicycle parking					
Showers and lockers	s at destination				
Lower traffic volume	s or speeds				
Improved motor vehi	icle driver behaviour a	round bicyclists			
Minimal congestion f	from other bicyclists				
No conflicts with ped	lestrians				
Shading					
Lighting and visibility	1				
Bicycle training					
Other (please specify)					
18. How comfortable	would you feel bid	cycling on a desi	gnated "bicycle-	only" path in the fo	llowing
18. How comfortable conditions?(see imag	would you feel bio ges below for exar	cycling on a designples)	gnated "bicycle-	only" path in the fo	llowing
18. How comfortable conditions?(see imag	would you feel bio ges below for exar Very uncomfortable	cycling on a design nples) Somewhat uncomfortable	gnated "bicycle- Somewhat comfortable	only" path in the fo Very comfortable	llowing Don't know
<ul> <li>18. How comfortable conditions?(see image</li> <li>[A] Off-road, on a designated bicycle only path along a road</li> </ul>	would you feel bio ges below for exar Very uncomfortable	cycling on a designples) Somewhat uncomfortable	gnated "bicycle- Somewhat comfortable	only" path in the fo Very comfortable	Ilowing Don't know
<ul> <li>18. How comfortable conditions?(see image ima</li></ul>	would you feel bid ges below for exar Very uncomfortable	cycling on a designples) Somewhat uncomfortable	gnated "bicycle- Somewhat comfortable	only" path in the fo	llowing Don't know

## 19. How comfortable would you feel bicycling on a footpath (2 metres wide or less) in the following conditions? (see images below for examples) Somewhat Somewhat Very uncomfortable uncomfortable Very comfortable Don't know

footpaths along a major roads (speeds 60kph and above)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
[C] On quiet residential streets without any concrete footpaths	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	
A	B		C		

20. How comfortable would you feel bicycling on a shared path with pedestrians in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] Off-road, on a path shared with pedestrians through a park or along a creek /river	0	0	$\odot$	$\bigcirc$	0
[B] Off-road, on a path shared with pedestrians along a major road (speeds 60kph and above)	0	0	$\bigcirc$	0	0
[C] On trails in recreational areas	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
A	В		c		

[A] Off-road, on footpaths of quiet residential streets[B] Off-road, on

Somewhat uncomfortable       Somewhat comfortable       Somewhat comfortable       Somewhat comfortable       Very comfortable       Don't know         [A] On-road, on a designated bike lane on a busy main road (e.g. 00kph or greater)       Image: Common and the second
[A] On-road, on a         designated bike lane on         a busy main road (e.g.         60kph or greater)         [B] On road, on a         designated bike lane on         a quieter road (e.g.         50kph or less)         [C] On road, on a         designated bike lane         next to car parking         [D] On-road, with         shared lane markings         (e.g. yellow bike         symbol)         [E] On a protected bike         lane (i.e. separated         inc.         inc.
[B] On road, on a designated bike lane on a quieter road (e.g. 50kph or less)       Image: Constant of the second seco
[C] On road, on a designated bike lane next to car parking       Image: Constraint of the
[D] On-road, with shared lane markings (e.g. yellow bike symbol)       Image: Constraint of the symbol       Image: Consthe symbol       Image: Constraint
[E] On a protected bike lane (i.e. separated from traffic by a
median)
[F] On a raised or separated cycle track (i.e. bicycle lane which has been raised to the same level as the footpath)
A B C
D GITO E + Faib

## 22. How comfortable would you feel bicycling on-road with no bicycle path or facility in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] On shared streets with traffic calming (e.g. speed humps, raised paving, etc)	0	0	0	0	0
[B] On-road, with no bike lane, quiet residential street	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On-road, with no bike lane, main road	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$



#### **Opportunities to improve cycling**

23. What is the most important factor influencing your decision to travel by bicycle in Ipswich?

Ipswich		
Community surve	ey - Cycling and walking in Ipswich	
Valking		
'4. Do you walk or tr laces? Yes No	ravel by foot more than 400m on the way to work, education, recreation or othe	эг

Ipswich	
Community surv	ey - Cycling and walking in Ipswich
Walking	
Current walk	king habits
25. How long is you	r average walk trip (Distance / Time)?
Distance (in metres or kilometres)	
Time (in minutes or hours)	

	Even, dev	Even weekdev	1 4 timos o wook	A four times a month	A four times a voc
Travel to work			1-4 umes a week		
Travel to school					
Travel to tertiary education (e.g. university, TAFE)					
Travel to shopping					
Travel to personal business (e.g. banking, appointments)					
Travel to visit family or friends					
Travel to public transport					
Recreation or fitness					
Sports training					
ther (please specify) or ple	ase list why you	do not walk for any pu	rpose:	rom by foot? Plea	
27. For the trip purpose letails of street, suburt	es which are a	do not walk for any pu pplicable, where o cplace etc. as rele	rpose:	rom by foot? Plea	use provide
27. For the trip purpose letails of street, suburt	es which are a p, school, worl	do not walk for any pu pplicable, where o cplace etc. as rele	rpose: do you travel to/fr vant. CBD.	rom by foot? Plea	use provide
27. For the trip purpose details of street, suburk For example Moffatt St	es which are a o, school, worl	do not walk for any pu pplicable, where o cplace etc. as rele wich, to Ipswich C	rpose: do you travel to/fr vant. CBD.	rom by foot? Plea	use provide
27. For the trip purpose         Idetails of street, suburt         For example Moffatt St         Travel to work         Travel to school	ease list why you es which are a b, school, worl reet, West Ips	do not walk for any pu pplicable, where of cplace etc. as rele	rpose: do you travel to/fi vant. <i>CBD.</i>	rom by foot? Plea	use provide
27. For the trip purpose         details of street, suburk         For example Moffatt St         "ravel to work         "ravel to school         "ravel to tertiary         wducation	es which are a b, school, worl	do not walk for any pu pplicable, where of complete etc. as rele	rpose: do you travel to/fr vant. <i>CBD.</i>	rom by foot? Plea	ise provide
Dther (please specify) or ple         27. For the trip purpose         details of street, suburt         For example Moffatt St         Travel to work         Travel to school         Travel to tertiary         education         Travel to shopping	es which are a b, school, worl	do not walk for any pu pplicable, where o cplace etc. as rele wich, to Ipswich (	rpose: do you travel to/fi vant. <i>DBD.</i>	rom by foot? Plea	use provide
27. For the trip purpose         27. For the trip purpose         details of street, suburt         For example Moffatt St         Travel to work         Travel to school         Travel to tertiary         education         Travel to shopping         Travel to personal         usiness	ease list why you es which are a b, school, worl reet, West Ips	do not walk for any pu pplicable, where of complete etc. as rele	rpose: do you travel to/fivant. <i>CBD.</i>	rom by foot? Plea	ise provide
Dther (please specify) or ple         27. For the trip purpose         details of street, suburt         For example Moffatt St         Travel to work         Travel to school         Travel to tertiary         education         Travel to shopping         Travel to personal         pusiness         Travel to visit family or	es which are a b, school, worl	do not walk for any pu pplicable, where of complete etc. as rele	rpose:  do you travel to/fi vant. <i>CBD.</i>	rom by foot? Plea	ise provide
Dther (please specify) or please         Provide the trip purpose         Details of street, suburt         For example Moffatt St         Travel to work         Travel to school         Travel to tertiary         Education         Travel to school         Travel to personal         Travel to visit family or         Travel to public transport	es which are a b, school, worl	do not walk for any pu	rpose:  do you travel to/fi vant. <i>BD.</i>	rom by foot? Plea	ise provide
Dther (please specify) or ple         27. For the trip purpose         details of street, suburt         For example Moffatt St         Travel to work         Travel to school         Travel to tertiary         education         Travel to personal         usiness         Travel to visit family or         riends         Travel to public transport	es which are a b, school, worl	do not walk for any pu	rpose:  do you travel to/fi vant. <i>BD.</i>	rom by foot? Plea	ise provide
Dther (please specify) or ple         27. For the trip purpose         details of street, suburt         For example Moffatt St         Travel to work         Travel to school         Travel to school         Travel to tertiary         education         Travel to personal         usiness         Travel to public transport         Cravel to public transport         Sports training	es which are a b, school, worl	do not walk for any pu	rpose:  do you travel to/fi vant. <i>BD.</i>	rom by foot? Plea	ise provide

#### Willingness to walk

#### 28. Are you happy with the amount of walking you currently do?

- Yes I am happy with the amount of walking I currently do
- No I would like to walk more than I currently do

#### 29. What factors deter you from walking more frequently? (please answer those that are relevant to you)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The distance between places I would like to go is too far to walk	0	Ο	$\bigcirc$	0	$\bigcirc$
There are no suitable paths between places I would like to go	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
The routes between places I would like to go are too hilly	$\bigcirc$	$\odot$	$\odot$	0	0
l am concerned about being hit by a motor vehicle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
l do not feel safe while walking	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
The weather / climate is not suitable for walking	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I need a motor vehicle before, during or after work	0	$\bigcirc$	$\odot$	0	0
I need to carry goods or equipment	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
My fitness prevents me from walking	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
I have health conditions or disabilities which prevent me from walking	0	$\bigcirc$	0	$\bigcirc$	0
I have nowhere to store belongings at my destination	0	$\bigcirc$	0	0	0
I have nowhere to change and shower at my destination	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Other (please specify)			7		

30. What would encourage you to walk / travel by foot more in the future? Please choose your top three.
Continuity of paths
Smooth / well surfaced paths
Separation from traffic
Signage / wayfinding on walking routes
Safe road crossings
Kerb ramps
Showers and lockers at destination
Lower traffic volumes or speeds
No conflicts with bicyclists
Gentle hills or gradients
Shading
Lighting and visibility
Attractive scenery
Other (please specify)

#### **Comfort in different conditions**

31. How comfortable would you feel walking off-road, on a designated footpath (2 metres wide or less) in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] Off-road, on a designated footpath, along a major road (speeds 60kph and above)	0	•	0	0	0
[B] Off-road, on a designated footpath, through parklands or along a creek/river	$\bigcirc$	0	0	$\bigcirc$	0
[C] On footpaths of quiet, residential streets	s O	$\bigcirc$	$\odot$	$\bigcirc$	0
[D] On quiet residential streets without any concrete footpaths	0	0	0	$\bigcirc$	0



## 32. How comfortable would you feel walking off-road, on paths shared with bicyclists in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] Off-road, on a path shared with cyclists, along a major road (speeds 60 kph and above)	0	0	0	0	0
[B] Off-road, on a path shared with cyclists, through parklands or along a creek/river	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On trails in recreational areas	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$



33. How comfortable would you feel walking in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] During daylight	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[B] At night (no street lighting)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] At night (with street lighting)	$\bigcirc$	$\odot$	0	$\bigcirc$	$\bigcirc$
[D] On shared streets with traffic calming (e.g speed humps, raised paving)	0	0	$\bigcirc$	$\bigcirc$	0



#### Opportunities to improve walking

34. What is the most important factor influencing your decision to walk/travel by foot in Ipswich?



#### Community survey - Cycling and walking in Ipswich

#### Walking

35. Why don't you walk? What factors deter you from walking? (please answer those that are relevant to you)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The distance between places I would like to go is too far to walk	0	0	$\bigcirc$	0	0
There are no suitable paths between places I would like to go	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
The routes between places I would like to go are too hilly	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	0
I am concerned about being hit by a motor vehicle	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
l do not feel safe while walking	$\bigcirc$	0	$\bigcirc$	0	$\bigcirc$
The weather / climate is not suitable for walking	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I need a motor vehicle before, during or after work	0	$\bigcirc$	$\bigcirc$	0	0
My fitness prevents me from walking	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I have health conditions or disabilities which prevent me from walking	0	0	0	0	0
I have nowhere to store my belongings at my destination	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
I have nowhere to change and shower at my destination	0	$\bigcirc$	$\bigcirc$	0	0
Other (please specify)			]		

Ni	llingness to walk
36.	Would you like to walk more than you currently do?
С	Yes – I would like to walk more than I currently do
D	No – I am not interested in walking more than I do
37.	What would encourage you to walk / travel by foot in the future? Please choose your top three.
	Continuity of paths
	Smooth / well surfaced paths
	Separation from traffic
	Signage / wayfinding on walking routes
	Safe road crossings
	Kerb ramps
	Lower traffic volumes or speeds
	No conflict with bicyclists
	Gentle hills or gradients
	Shading
	Lighting and visibility
	Attractive scenery
Dthe	r (please specify)
Co	mfort in different conditions

38. How comfortable would you feel walking off-road, on a designated footpath (2 metres wide or less) in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] Off-road, on a designated footpath, along a major road (speeds 60kph and above)	0	0	0	0	0
[B] Off-road, on a designated footpath, through parklands or along a creek/river	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On footpaths of quiet, residential street	s O	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[D] On quiet residential streets without any concrete footpaths	0	0	0	$\bigcirc$	$\bigcirc$



39. How comfortable would you feel walking off-road, on paths shared with bicyclists in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] Off-road, on a path shared with cyclists, along a major road (speeds 60 kph and above)	0	0	0	0	0
[B] Off-road, on a path shared with cyclists, through parklands or along a creek/river	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] On trails in recreational areas	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
A	B	1003	c		

40. How comfortable would you feel walking in the following conditions? (see images below for examples)

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	Don't know
[A] During daylight	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[B] At night (no street lighting)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
[C] At night (with street lighting)	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	0
[D] On shared streets with traffic calming (e.g speed humps, raised paving)	0	$\bigcirc$	0	$\bigcirc$	0



#### **Opportunities to improve walking**

41. What is the most important factor that would influence your decision to travel by walking/foot in Ipswich?

lpswich		
Community su	vey - Cycling and walking in Ipswich	
•• •		
About you		
42. What is your g	ender?	
Male		
Female		
12 Mbatia ware	an <sup>2</sup>	
	ge :	
12 - 18		
18 - 29		
○ ○ 30 - 39		
40 - 49		
50 – 59		
60 - 69		
Over 70		
44. What is your e	mployment status?	
Full-time employ	nent	
<ul> <li>Part-time employ</li> </ul>	ment	
Student		
Unemployed		
Retired		
Other (please sp	ecify)	
45. If employed - where do you work? Please provide a street, suburb and name of workplace

46. If you are a student - where do you study? Please provide a street and suburb and the name of your school/education facility

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47. Please indicate the street and suburb you live in

Thank you for taking the time to complete the survey.

## Online Community Survey Methodology

	Classifying Cyclist (Summary)	
Classification	Cycling Comfort	Cycling Interest
Strong and Fearless	Participants said they were on average very comfortable or somewhat comfortable cycling on-road with no bicycle paths or facilities.	Either
Enthused and Confident	Participants said they were on average very comfortable or somewhat comfortable cycling on-road with bicycle paths or facilities.	Either
Interested but Concerned	Participants did not meet the comfort criteria for 'Strong and fearless' or 'Enthused and confident' cyclist.	Interested in cycling more
No Way No How	Same as 'Interested but concerned' and/or participants were very uncomfortable cycling on a designated 'bicycle-only' path.	Not interested in cycling more

Classifying Cyclist (Detailed)			
Classification	Cycling Comfort	Cycling Interest	
Strong and Fearless	Scored an average of 3.5 on Questions 22A, 22B and 22C. Using a 4 point scale where 4 = very comfortable, 3 = somewhat comfortable, 2 = somewhat uncomfortable and 1 = very uncomfortable.	n/a	
Enthused and Confident	Scored an average of 3.5 on Questions 21A, 21B, 21C, 21D, 21E and 21F. Using a 4 point scale where 4 = very comfortable, 3 = somewhat comfortable, 2 = somewhat uncomfortable and 1 = very uncomfortable.	n/a	
Interested but Concerned	Participants did not meet the comfort criteria for 'Strong and fearless' or 'Enthused and confident' cyclist.	Answered 'No' to question 15	
No Way No How	Same as 'Interested and concerned' and/or participants were very uncomfortable cycling on a designated 'bicycle-only' path.	Answered 'Yes' to question 15	

NOTE: This table list question numbers for YES cyclist, No cyclist were asked the same questions however question numbers varied.

Classification of Walkers (Summary)			
Classification	Walking Comfort	Walking Interest	
Willing and Committed	Participants said they were comfortable in all walking environments.	Either	
Willing and Motivated	Participants said they were comfortable in most walking environments, however they were uncomfortable walking at night within areas with no lighting.	Either	
Willing but Constrained	Participants did not meet the comfort criteria for 'Willing and committed' or 'Willing and motivated' walking.	Interested in walking more	
Unwilling Walkers	Participants did not meet the comfort criteria for 'Willing and committed' or 'Willing and motivated' walking.	Not interested in walking more	

	Classification of Walkers (Detailed)	
Classification	Walking Comfort	Cycling Interest
Willing and Committed	Participants said they were either somewhat comfortable or very comfortable in all 11 walking questions from Q31A to Q33D.	n/a
Willing and Motivated	Participants said they were either somewhat comfortable or very comfortable on 9 out of the 11 walking questions from Q31A to Q33D. Participants also said they were very comfortable or somewhat comfortable on Q33B and somewhat uncomfortable or very uncomfortable on Q33C.	n/a
Willing but Constrained	Participants did not meet the comfort criteria for 'Willing and committed' or 'Willing and motivated' walking.	Answered 'No' to question 15
Unwilling	Participants did not meet the comfort criteria for 'Willing and committed' or 'Willing and motivated' walking.	Answered 'Yes' to question 15

NOTE: This table lists question numbers for YES walkers. NO walkers were asked the same questions however question numbers varied.

#### Classifying Cyclist into 'Utilitarian, Recreational and Occasional'

Cyclist can be further classified into three groups based on their cycling behaviour. This was done using the figure below. Participants were asked to tick the boxes that relate to them. The participants were then given a classification based on which colour zone their ticks were in (e.g. if the participant has six ticks in occasional, two in recreational and one in utilitarian, they are classified as utilitarian).

Q. 13. For what purpose/s do you cycle and how often? (please choose those that are relevant to you)

	Every day	Every weekday	1-4 times a week	A few times a month	A few times a year
Travel to Work					
Travel to School					
Travel to Tertiary Education (e.g. univerity, TAFE)					
Travel to Shopping					
Travel to Personal Business (e.g. banking, appointments)					
Travel to Visit Family or Friends					
Travel to Public Transport					
Recreation or Fitness					
Sports Training					
Uti	litarian	Recre	ational	Occasion	al 147

# Appendix B - Policy Context

Name	Summary	Relevance
State		
Queensland Cycle Strategy 2011-2021 Queensland Department of Transport and Main Roads (2011)	<ul> <li>This strategy outlines the state government's vision for 'more cycling more often' on safe, direct and connected routes. It identifies four priority areas of actions to achieve this vision, including:</li> <li>Building safe, direct and connected cycle networks;</li> <li>Growing a cycling culture;</li> <li>Creating cycle-friendly communities; and</li> <li>Developing a cycling economy.</li> </ul> The forthcoming new cycling strategy for Queensland aims to respond to the findings of statewide community consultation, which has noted key findings for infrastructure and non-infrastructure provision across the state.	Provides guidance for the design and delivery of Ipswich's active transport network. Identifies the barriers for people that cycle, particularly safety, lack of facilities, distances to travel being too far and comfort – all of which have been identified in the responses to Ipswich's community survey. Indicates the state signature projects to address the priority areas and where these will be developed in partnership with local government (e.g. Complete 5, Educated Ways and Connect To, as well as, bicycle education programs).
Connecting SEQ 2031: An Integrated Regional Transport Plan for South East Queensland Queensland Government Department of Transport and Main Roads (2011)	Identifies regional priority actions and initiatives for active transport modes in the region. Provides guidance on the types of user groups and trips to target. Specifically for Ipswich, it identifies the issues and challenges, in particular the need for more encouragement of trips by walking and cycling to Ipswich Central. iGO takes the Queensland Government's regional transport plan to the city level.	Provides guidance for the design and delivery of Ipswich's active transport network. Predicts that the number of daily transport trips made by Ipswich residents will triple from about 500,000 in 2006 to 1.5 million by 2031. Identifies the target focus for trips for work, shopping, social, recreation and educational purposes is less than five kilometres for active transport.
South East Queensland Principal Cycle Network Plan Queensland Government Department of Transport and Main Roads (2016)	The SEQ PCNP, identifies the demand for, location and function of important cycle routes and missing links to inform planning, design and construction of cycle infrastructure (see iGO Map 4). iGO states that the delivery of the active transport infrastructure is to be guided by the	Provides guidance for the design and delivery of the active transport network. It is linked to the DTMR Local Government Cycle Grants Program, so it facilitates funding partnerships for bicycle infrastructure on agreed upon links. It is relevant to Active Transport Action AT3 – to Plan, prioritise, advocate and deliver



SEQ PCNP and active transport strategies/ programs developed by Council.

strategic bikeway projects in Ipswich that form part of the Principal Cycle Network Plan.

The SEQ PCNP sees priority given to:

- Providing links which connect centres and key attractors (i.e. via protected cycle tracks/veloways);
- Completing the active transport network within 5km of key centres to deliver a connected network to an immediate catchment;
- Ensuring safe and connected routes are provided to schools, universities and TAFEs, focusing on a 3km catchment around schools; and
- Putting active transport links in place to key public transport stations and stops.

Name	Summary	Relevance
Local		
Advance Ipswich Plan Ipswich City Council (2015)	<ul> <li>This plan provides Council's overarching vision for the City's future.</li> <li>A key action of the Advance Ipswich Plan is to develop and implement an integrated transport plan that provides a platform for enabling sustainable travel choices, including:</li> <li>More compact mixed land uses to reduce trip lengths and make travel by public transport, walking and cycling a viable option to the car.</li> </ul>	Priorities identified by the community in developing this plan included, 'delivery of infrastructure to match population growth', 'walkable, connected and serviced neighbourhoods', 'public and active (walking and cycling) transport to reduce private vehicle use', 'healthy and happy families' and 'active and healthy lifestyles'. The transport objectives for walking and cycling are aalso derived from this plan: "Ipswich urban form creates high levels of accessibility to key destinations such as employment, education, retail, healthcare and recreation".
iGO: City of Ipswich Transport Plan Ipswich City Council (2016)	The City of Ipswich Transport Plan (branded iGO) outlines the aspirations to advance Ipswich's transport system and guidance on the future investment required. The plan is citywide, long-term (15+ years) and identifies the three active transport policy focus areas for the <i>Active Transport Action Plan</i> .	<ul> <li>iGO's key active transport actions include the development and implementation of a detailed Active Transport Action Plan including pedestrian and cyclist infrastructure, hierarchy, network plan, way finding policy, end of trip facilities and investment program.</li> <li>iGO also identifies active transport actions to undertake route and corridor studies on strategic commuter bikeway corridors outlined on Map 5, including between the lpswich City Centre and Booval and the lpswich City Centre and Yamanto via Deebing Creek. It also identifies the need to identify and implement high priority pedestrian zones in areas with high pedestrian activity.</li> </ul>
Ipswich Planning Scheme Ipswich City Council (2006)	Council's statutory document to manage growth and guide how land in the region can be used and developed.	Active Transport Action ATI0 notes that the Active Transport Action Plan will guide the future revision to Council's Planning Scheme with respect to the requirements for and provision of high quality end of trip facilities Land Use and Transport integration actions LUTII notes that the next revision should focus on promoting development which supports walking, cycling and the use of public transport.
Ipswich Regional Centre Strategy Master Plan Master Plan Vol 1 City of Ipswich (2006)	The masterplan represents an 'ultimate' development scenario for the revitalisation of Ipswich's regional centre, in the context of the forecast population growth. It identifies a clear vision for the centre, underpinned by five key principles, which include of relevance to this study <i>Principle</i> 2: A Connected Centre.	Principle 2: 'A Connected Centre' acknowledges that a connected centre will realise a highly legible, permeable, easily traversed and explored centre using multiple transport modes. Additional pedestrian/cycle Bremer River crossings are identified where these are required to increase connectivity and

-

required to increase connectivity and circulation within the Ipswich Centre, including between North and East Ipswich, and between the River Heartlands and North Ipswich Parklands.

Name	Summary	Relevance
Local		
Ripley Valley Development Plan	The Ripley Valley Priority Development Area, which was declared on 8 October 2010, is located approximately 5 kilometres south-west of the Ipswich CBD and south of the Cunningham Highway. It provides the opportunity for approximately 50,000 dwellings to house a population of approximately 120,000 people.	Of the themes guiding the development of Ripley Valley, 'An accessible valley' seeks to see travelling by foot, cycle, transit (bus or rail) or car as being convenient safe, and equitable to all members of the community. It seeks to deliver walkable neighbourhood centres (400m catchments), a comprehensive walk and cycle network including integration with the linear open space such as the Bundamba/Deebing Creek networks.
Springfield Town Centre Concept Plan (Framework) Springfield Land Corporation (2015)	A masterplanned community and principal activity centre offering significant green spaces, residential, health and education precincts, various industries, servicing Ipswich's eastern suburbs and nearby areas in south west Brisbane. This plan provides the primary planning and design mechanism for implementing development within the Springfield Town Centre, having regard to the context of the Springfield Structure Plan, Springfield Town Centre Infrastructure Agreement and Springfield Infrastructure Agreement.	Being a 'greenfield' development area, the masterplan proposes an extensive network of on and off-road paths for walking and cycling. Off-road paths traverse proposed parklands and to/from the core retail facilities.
River Heart Parklands Stage 2 Concept Master Plan City of Ipswich	Stage 2 of River Heart Parklands, sees the connection of the parkland located along a section of the Bremer River to Bob Gamble Park along King Edwards Parade. It brings recreational pathways, mid-trip facilities and the opportunity for increased walk and cycle patronage to/from the river and the surrounding CBD uses.	Of relevance to the <i>Active Transport</i> <i>Action Plan</i> is ensuring the network connects with this key corridor and the city centre, as well as facilitating linkages to the park and access to/from both sides of the river.
Open Space and Recreation Strategy City of Ipswich (2014)	This strategy aims to set the direction for open space and recreation for the City. It recognises the role that open space plays in improving community health, establishing a sense of ownership and belonging to local communities.	Provides an appreciation of the activities the community currently participate in across the City and those emerging activities. Walking, jogging and running is noted as the highest participated sport, recreation and physical activity in Ipswich.
	It identifies the need to develop waterway corridor masterplans that include Ironpot Creek, Deebing Creek, Bundamba Creek and Goodna Creek corridors	a need for more supporting infrastructure, lighting, shade and seating and more defined routes and trails. Identifies a strategic trails network plan to service the City and greater regional catchment.

Name	Summary	Relevance
Local		
Waterways Health Strategy (WHS) 2009 City of Ipswich (2009)	<ul> <li>This strategy has been developed to assist Council with the management and enhancement of the natural waterways that run through the City of Ipswich. Three priority management themes are identified:</li> <li>Water Quality Improvement;</li> <li>Riparian Corridor Management; and</li> <li>Community Appreciation.</li> </ul>	Urban sub-catchments including Bundamba Creek, Deebing Creek, Six Mile and Goodna Creek, Woogaroo and Sandy Creek, Ironpot and Mihi Creek are to be targeted first.
Bundamba Creek Corridor Plan City of Ipswich (2015)	This creek corridor flows north through Ipswich to the Bremer River, bringing multiple functions together including important cultural and recreational connections (i.e. pedestrian and cycle networks). This plan presents a vision for the corridor/catchment as well as a direction for the three character zones, including where specific values/ connections need to be achieved for community use, access and enjoyment.	For walk and cycle links, it identifies a recreational trail along the creek in the middle and upper corridors linking with future residential neighbourhoods and a shared pathway network in the lower corridor that enhances the existing network. The walk and cycle network plan needs to take into account the development along the corridor over 20 to 30 years, and the integration of the walk and cycle network with the <i>'linear'</i> open space provided by the Bundamba creek corridor.
Ironpot Creek Corridor Plan City of Ipswich (2015)	This creek corridor's catchment contains a mix of rural and urban land uses and is located 6.5km north east of the City Centre. The City's vision for this corridor seeks to see people better connected with it. The Brisbane Valley Rail Trail/Brassal Bikeway are situated in the catchment providing a north-south parallel path.	Incorporation of existing and future stages of the Brassall Bikeway which crosses Ironpot Creek at a number of creek crossings. This bikeway is not only a large investment for Council but is noted as being the main active transport corridor with a 3m wide path in the City. Opportunities for accessible pedestrian links to the creek corridor from BVRT/ Brassall Bikeway are to be sought.
Upper Black Snake Creek Improvement Plan City of Ipswich (2014)	This catchment is situated 17km north west of Ipswich and is impacted by three key water issues (flooding, salinity and water quality).	Long term opportunities for walking and riding related to recreational activities.



\* This map is based off ICC GIS active transport layers and mapping which is noted as not being complete and cantaining gaps throughout the ICC local government area.







# Appendix D - Physical Constraints





LEGEND	
EXISTING	
	ICC Boundary
	SEQRP Urban Footprint Boundary
	Motorway/Highway
	Arterial Road
<u></u>	Train Station
<del>++</del>	Rail Line
	River/Creek
	Drainage Line
	Heavy Vehicle Routes
SLOPE (%)	
	0-10
	10-20
	>20

## Appendix E - Pedestrian and Cycle Network





Pedestrian Network Map

\* All route alignments and configurations shown are subject to future investigation and corridor planning.





























## Appendix G - Pedestrian and Cycle Network Prioritisation

Moving Ipswich

Forward





**Cycle Prioritisation Map 2015** 

\* All route alignments and configurations shown are subject to future investigation and corridor planning.









<sup>\*</sup> All route alignments and configurations shown are subject to future investigation and corridor planning.

























































#### CONTRIBUTORS

The following people made considerable contributions towards the development of the iGO Active Transport Action Plan, including its inception, scoping, project coordination, research, report writing and stakeholder engagement:

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#### Active Transport Action Plan

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