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The Economic Cycle

A BUSINESS CASE FOR INVESTMENT IN CYCLING IN WESTERN AUSTRALIA


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The Economic Cycle

A Business Case for Investment in Cycling in Western Australia

The RAC commissioned an independent assessment to identify what level of investment would be required to deliver a high quality cycling network in Western Australia. The Cycling Business Case found that the economic returns of investment in cycling infrastructure are higher than or equal to those achieved by many other urban transport investments. The findings should change the way Western Australia thinks about the economics of investing in better cycling infrastructure.

Introduction

Western Australia faces significant challenges in managing a rapidly growing population and a strongly performing economy. Nowhere are these challenges more obvious than on our road network where traffic congestion is impacting on economic productivity and our quality of life.

With an estimated 400,000 additional passenger vehicles expected on our roads by the end of the decade, the race is on to find solutions to the challenge of ensuring Western Australians can move safely and efficiently around their community.

With its benefits being widely recognized, cycling has been growing in popularity as a means of commuting. In 2011-12 more than 3.5 million trips were logged on Perth Bicycle Network Principal Shared Path routes; an increase of 13.8 per cent on 2010-11 and 24.6 per cent since 2009-10[1].

But when it comes to funding, cycling infrastructure usually misses out to road or public transport projects.

All jurisdictions will continue to invest in developing local on-road and off-road cycling networks to key destinations in both urban and rural areas that are consistent with national standards, and should commit to the identification of required funds in the relevant budget processes.

Australian National Cycling Strategy 2011-2016

There is clear potential to increase the number of people who regularly ride. Western Australians own almost as many bicycles as cars, with an average of 1.58 bicycles per household, higher than the Australian average of 1.46. Nearly half (45%) of Western Australians ride a bike at least once a year, but only half this number report riding every week[2].

State of play

Investment in cycling has over many years suffered from a lack of priority and has failed to keep pace with Western Australia's rapid population growth. The original Perth Bicycle Network Plan published in 1996, or 16 years ago, called for funding support for three cycling stages – none of which have been completed.

Due to a lack of funding, too often the provision of cycling infrastructure has had to be opportunistic. As a result, the cycle networks in our cities and regional towns are variable from a design, construction and maintenance point of view.

The RAC has previously welcomed the State government's commitment of additional funds for the next two years for cycle paths but had cautioned that a long term commitment was needed if the improvements were to be delivered in a reasonable timeframe.

The proposed Western Australian Bicycle Network Plan (WABPN) is an opportunity to set an ambitious target for growth in cycling numbers and commit sufficient funds to achieve that target. This would require investing in better cycling infrastructure and support and training programs for cyclists, especially for young riders.

In 2012 the RAC commissioned an economic analysis of cycling in Western Australia, identifying what level of investment would be required to deliver an effective cycling network and what level of economic benefit would flow from this investment. The findings, which have been peer-reviewed, are summarised below.

Unfinished business

The Cycling Business Case identifies that the impact of money previously invested in the cycling network is being limited because of:

- remaining gaps in the network; and
- a lack of planning and provision for newly developed suburbs since 1996.

In other words, we will not receive full economic value for the money we have already invested unless the network is completed and expanded through new investment.

Return on investment

Despite extensive network planning, cycling infrastructure projects have traditionally not been considered a funding priority, perhaps due in part to an assumption that road or public transport projects deliver a greater cost-benefit return.

In what should force a major rethink of investment in cycling projects, the findings showed that rates of return on investment in cycling projects are higher than some of those achieved by many urban transport investments:

- Economic, social, health and environmental benefits for the community of between 3.4 and 5.4 times the costs incurred; and
- Financial returns in dollar terms are nearly twice the costs incurred because individuals who cycle more will spend less on travel costs and gains in health and fitness will result in savings on health services.

Whether we take a broad community view of the value of cycling or simply look at it as a commercial investment, the returns easily justify the cost of cycling infrastructure and associated programs.

Setting the pace

The Cycling Business Case demonstrates the need for an investment of at least $267 million over 10 years to create continuous, convenient and comprehensive cycle networks in Western Australia's cities and towns. Of this total amount, $45 million is required for cycle routes in regional Western Australia.

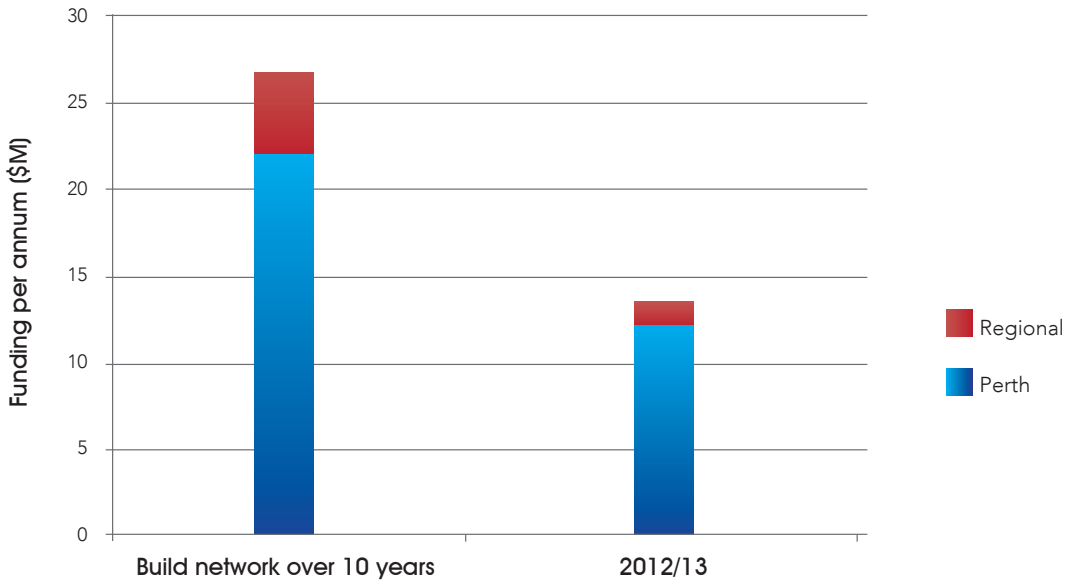
In addition to investment in infrastructure, a further $27 million is needed for related safety and encouragement programs to take advantage of them for everyday travel.

The WA Planning Commission recently increased its forecasts for population growth. With more people and a larger city, the total investment required could rise to $388 million.

Raising the bar

Currently the State government has committed an additional $25 million over the next two years (2012/13 and 2013/14 financial years) for improved cycling infrastructure but worryingly without longer term State Government commitment this looks set to drop back to 2011/12 funding levels of about $2.75 million per year.

Figure 1: Required versus committed funding



Where should the money go?

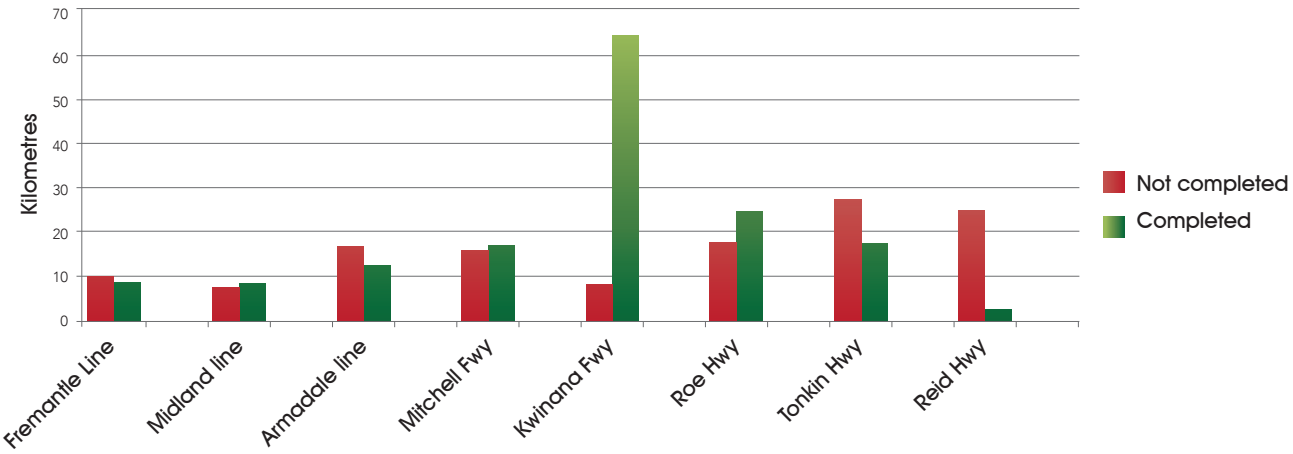
The Australian National Cycling Strategy 2011-2016 identifies six key strategies to increase participation in cycling. The Cycling Business Case deals with the first two of these key strategies, as these are the ones that require substantial public investment:

- Cycling Promotion: promote cycling as both a viable and safe mode of transport and an enjoyable recreational activity; and
- Infrastructure and Facilities: create a comprehensive and continuous network of safe and attractive routes to cycle and end-of-trip facilities.

The network of 289 km of Principal Shared Paths (PSP) was first proposed as part of the original Perth Bicycle Network Plan in 1996 but, 16 years later, remains incomplete. Principal Shared Paths are high standard routes alongside freeways and rail lines that have minimal interaction with traffic and which are shared with pedestrians.

The cost of the outstanding PSPs is estimated to be $168 million (in 2010 prices). Past experience shows that a gradual approach to the delivery of cycling infrastructure cannot be done cheaply. In 2011, the State awarded a contract for $5.5 million for 3.5 kilometres of cycle path alongside the Reid Highway. A more strategic and accelerated investment program would deliver significant savings by generating economies of scale and reducing tendering and start-up costs.

Figure 2: Length of uncompleted Principal Shared Path



Proven benefits

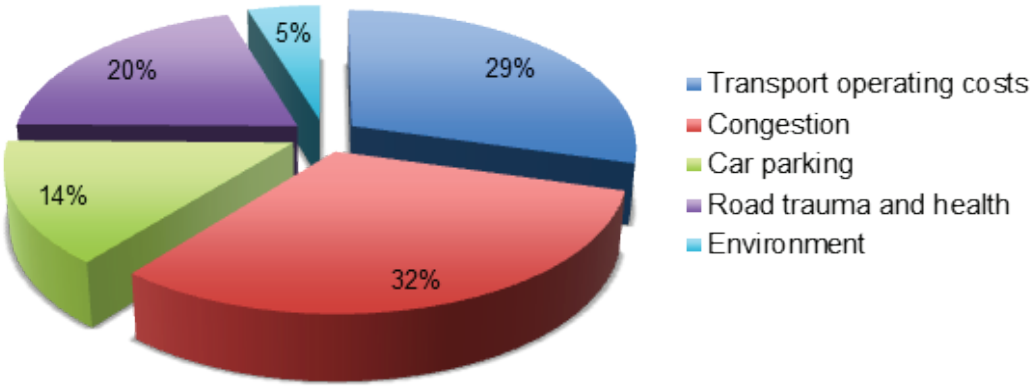
Cycling is already an important piece of the mobility landscape in Western Australia. It is a low-cost, low-impact means of independent local transport that is available to most people, including those too young to hold a driver's licence for a motor vehicle.

The benefits are widely spread across the range of economic, social and environmental areas, with two-thirds being in the key economic areas of:

- Lower transport operating costs, relating to savings in fuel, maintenance and servicing costs for every 100 kilometres a person cycles instead of driving, even if you continue to own a car for those trips for which cycling is not suitable;
- Reduced road traffic congestion will directly result in travel time savings and reduced operating costs especially at peak times ; and
- Reduced car parking provision will create savings particularly in centres of activity where car parking is at a premium due to the cost of land.

In the longer term, a comprehensive cycle infrastructure network will also help make the Western Australia's transport system more resilient to changes in the price and supply of oil-based fuels.

Figure 3: Cycling benefits by sector



The safety question

The only identified potential negative is the higher crash and injury rates for cyclists than for car use but this is more than outweighed by improvements in health and fitness. It is also expected that with more cyclists, the crash/injury rates will fall as there is 'safety in numbers'[3], more proficient cyclists and safer infrastructure.

Next steps

In response to the findings of the Cycling Business Case the RAC is seeking policy commitments to allocate a minimum of $25 million dollars per annum for the delivery of a world-class cycle network in Western Australia's cities and towns.

A credible case for cycling investment

The Cycling Business Case was prepared by Ian Ker, Principal Consultant for CATALYST (Consulting in Applied Transport, Access and Land use Systems).

The work was undertaken in partnership with the Planning and Transport Research Centre (PATREC), a collaboration between three Western Australian universities supported by three State Government departments. An independent review was carried out by the Curtin Monash Accident Research Centre (C-Marc).

The full report can be obtained by contacting the RAC at Advocacy@rac.com.au.

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[1] Department of Transport traffic counts http://www.transport.wa.gov.au/activetransport/25730.asp#25518
[2] Australian Cycling Participation, Austroads for the Australian Bicycle Council. http://www.austroads.com.au/abc/national-cycling-participation-2011
[3] Jacobsen P L (2003). 'Safety in numbers: more walkers and bicyclists, safer walking and bicycling'. Injury Prevention, 2003; 29: pp205-209.