

Evaluation of the Moreton Bay Rail Link Shared Pathway

Prepared for Queensland Department of Transport and Main Roads



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Executive Summary

The Department of Transport and Main Roads (TMR) commissioned CDM Research to undertake an evaluation of the Moreton Bay Rail Link Shared Pathway, which opened in September 2016. The path extends over a distance of 12 km from Petrie station to Kippa-Ring station and cost around \$14.6 m (excluding land and TMR construction management costs).

Two fieldwork activities were undertaken to obtain input data for the evaluation:

- video-based manual counts classified by mode, direction of travel and time of day over a sequential 7-day period (Saturday 8 October and Friday 14 October 2016), and
- intercept surveys with path users undertaken over three weekdays between 7 pm and 10 am and a Saturday from 7 am to 10 am and Sunday from 2 pm to 5 pm.

The counts and surveys were undertaken east of Rothwell station near Seabrae Manor. In addition, cyclist counts were obtained on Anzac Avenue between Mewes Road and Bremner Road before and after completion of the path to provide an indication of any route diversion that may have occurred. The data was input into a cost-benefit analysis to estimate the monetary project benefits. The key results of this evaluation are as follows:

- Average daily traffic between 5 am and 7 pm on the path of around 325 users, of which 269 (83%) are bicycle riders and 56 (17%) are pedestrians.
- There is evidence both from counts undertaken on Anzac Avenue before and after construction of the pathway and intercept surveys on the pathway to suggest substantial rider diversion. Counts undertaken on Anzac Avenue in Rothwell suggests bicycle rider demand has decreased by 73% on weekdays and 14% on weekends. The intercept surveys further suggest around half of bicycle riders using the pathway would have used another route prior to construction of the pathway. These results point to substantial diversion from Anzac Avenue to the pathway, which would be expected to offer safety benefits as well as providing a more comfortable riding experience.
- Most trips are for fitness or recreation; 65% of bicycle trips on weekdays and 89% on weekends were for recreation compared to 72% of weekday walking trips and 77% on weekends.
- The average recreation cycling trip took 87 minutes over 23 kilometres, compared with 42 minutes over 8 km for transport cycling trips. Recreation walking trips took on average 68 minutes over 7 km.
- Unsurprisingly, most cycling trips had their origin and destination within the adjoining suburbs of Rothwell, Petrie, Mango Hill and Kippa-Ring. Similarly, most walking trips were from Rothwell or Kippa-Ring.
- As noted above, just over half of cycling demand on the pathway was pre-existing riders who diverted from other routes. However, 19% of transport cyclists would otherwise have driven a car, with a further 6% being a passenger in a car and 12%

would have used a bus. Around 40% of recreational cycling trips would not have occurred in the absence of the pathway. These diversion rates are suggestive of beneficial public health outcomes.

- Further support for beneficial public health outcomes are is provided by the self-reported change in riding and walking activity; around 80% of bicycle riders indicated the pathway had increased the amount of time they'd spent riding over the previous month. Similarly, just over half of pedestrians indicated they had increased their walking activity.
- Around two thirds of path users travelling for transport had a car available with which they could have made their trip, and around three quarters indicated doing so would have saved them time compared to riding or walking. Around two thirds of path users travelling for transport purposes indicated they had a convenient public transport option.
- The cost-benefit analysis suggests the project represents good value for money; the BCR for the central discount rate of 7% was around 1.6. The benefits are primarily motivated by the public health benefits accrued to all-new cycling. These benefits in combination with the comparatively modest capital costs for a facility of this length and quality contribute to the favourable BCR.

1 Introduction

1.1 Background

CDM Research was commissioned by the Queensland Department of Transport and Main Roads (TMR) to undertake an evaluation of the Moreton Bay Rail Link shared pathway. The path is a 3 m wide shared path running alongside the Moreton Bay Rail Link from Petrie to Kippa-Ring over a distance of 12 km. The project was delivered as part of the Moreton Bay Rail Link, resulting in significant cost savings compared to building the project independently.

1.2 Methodology

This evaluation adopted a cost-benefit analysis (CBA) methodology as developed previously for TMR (CDM Research 2016). The CBA tool is implemented online¹. The methodology requires a number of inputs, of which the most important are:

- average daily pedestrian and cyclist counts,
- average distances walked/ridden, and
- diversion rates and induced travel proportions.

The latter refer to the proportion of demand that:

- was already walking/riding before the project, and have changed their route to use the project,
- have diverted from other transport modes (e.g. private car, public transport), and
- all-new trips that would not have otherwise occurred in the absence of the project.

To obtain these input parameters two fieldwork activities were undertaken:

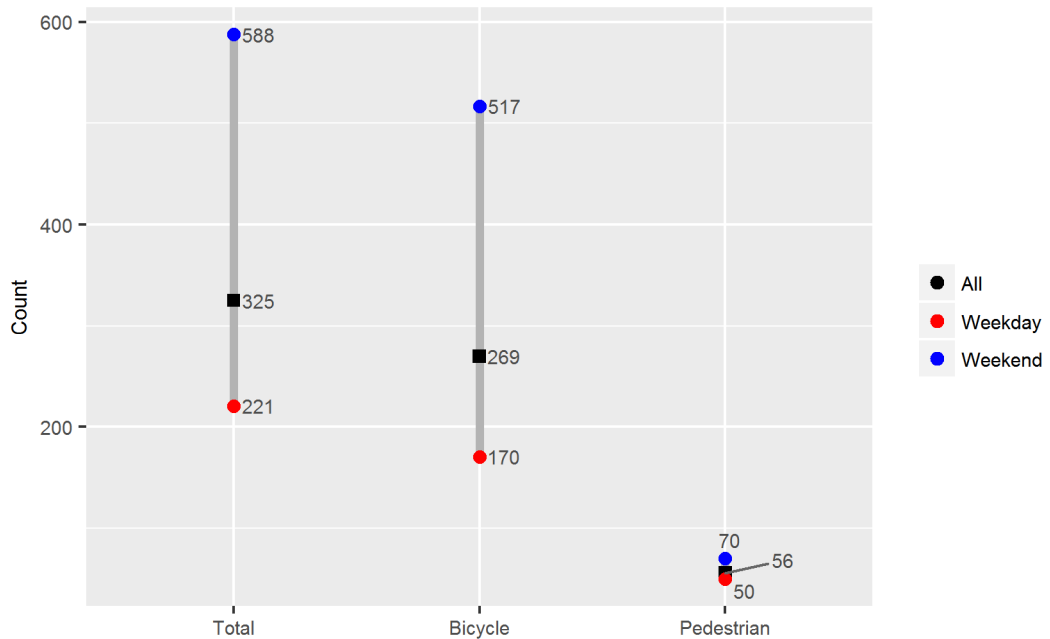
1. video-based manual counts classified by mode, direction of travel and time of day from 5 am to 7 pm between Saturday 8 October and Friday 14 October 2016, and
2. intercept surveys with path users undertaken between 7 am and 10 am on Wednesday 19 October to Friday 21 October, 8 am to 11 am on Saturday 22 October and 3 pm to 6 pm on Sunday 23 October 2016.

The counts and intercept surveys were both undertaken on the path near Seabrae Manor between Mewes Road and Bremner Road in Rothwell. In addition, counts were obtained on Anzac Avenue before and after the completion of the path to further assess what level of substitution between the facilities may have occurred. This report first presents the summary data obtained from the fieldwork activities before then providing the output of the cost-benefit analysis.

¹ <https://cdmresearch.shinyapps.io/ActiveTravelBenefits/>

2 Counts

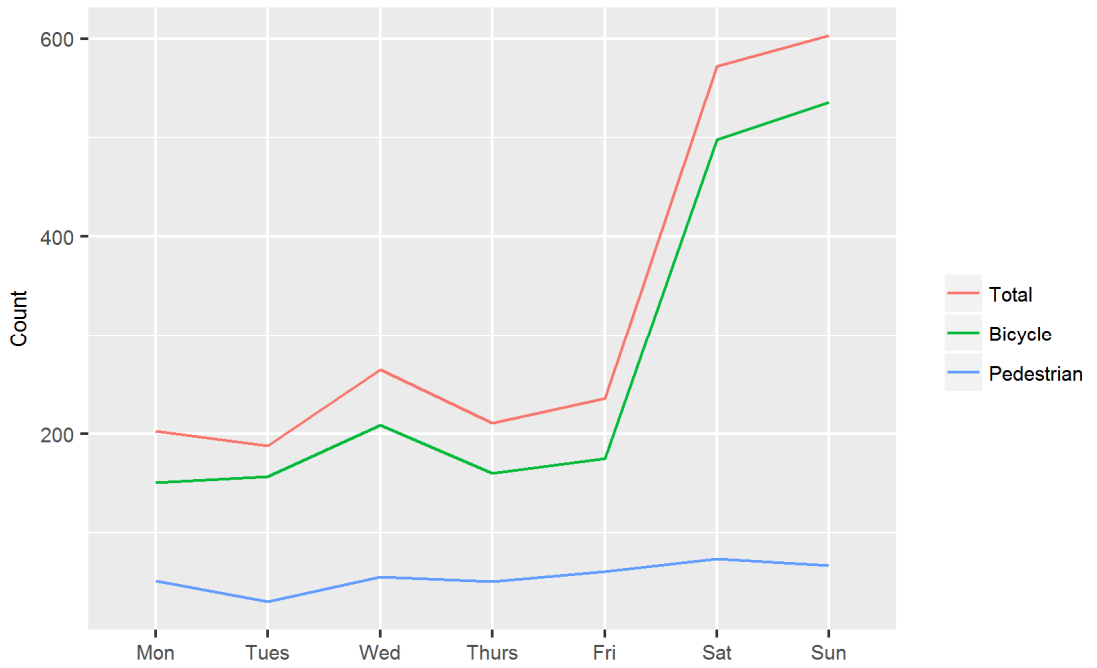
The average daily count on the path over the seven-day count period was 325 users per day², of which 83% were bicycle riders (Figure 2.1). Average cyclist demand was very substantially higher on weekends than weekdays.



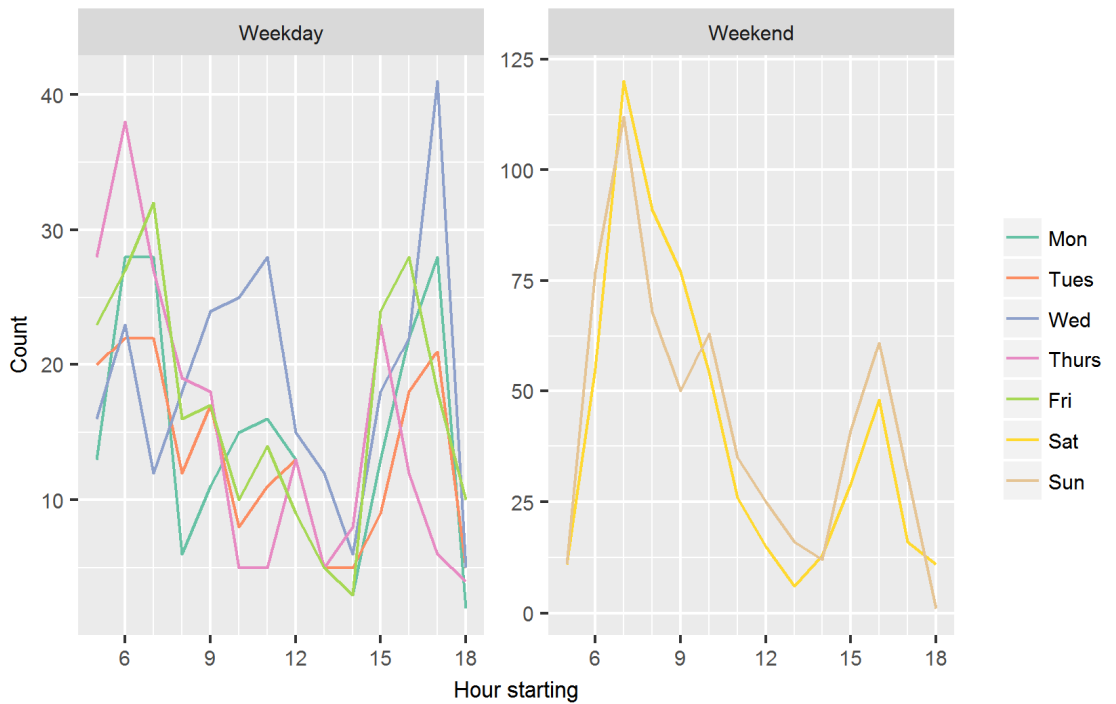
■ Figure 2.1: Average count by mode and day of week

The counts by day of week fluctuated as shown in Figure 2.2. The pedestrian count varied from a low of 31 on the Tuesday to a high of 74 on the Saturday. The bicycle rider count was lowest on the Tuesday (157 riders) and highest on the Sunday (536 riders). The time of day profile suggests demand is strongest early on weekend mornings and afternoons (Figure 2.3). Cycling demand on weekdays is consistently low across the day, suggesting a predominantly recreational use (Figure 2.4). On weekends the busiest cycling periods are during the mornings, followed by late afternoons. Pedestrian demand is lower overall, such that the time-of-day variation across days is much greater. However, the busiest periods appear to be early mornings and late afternoons.

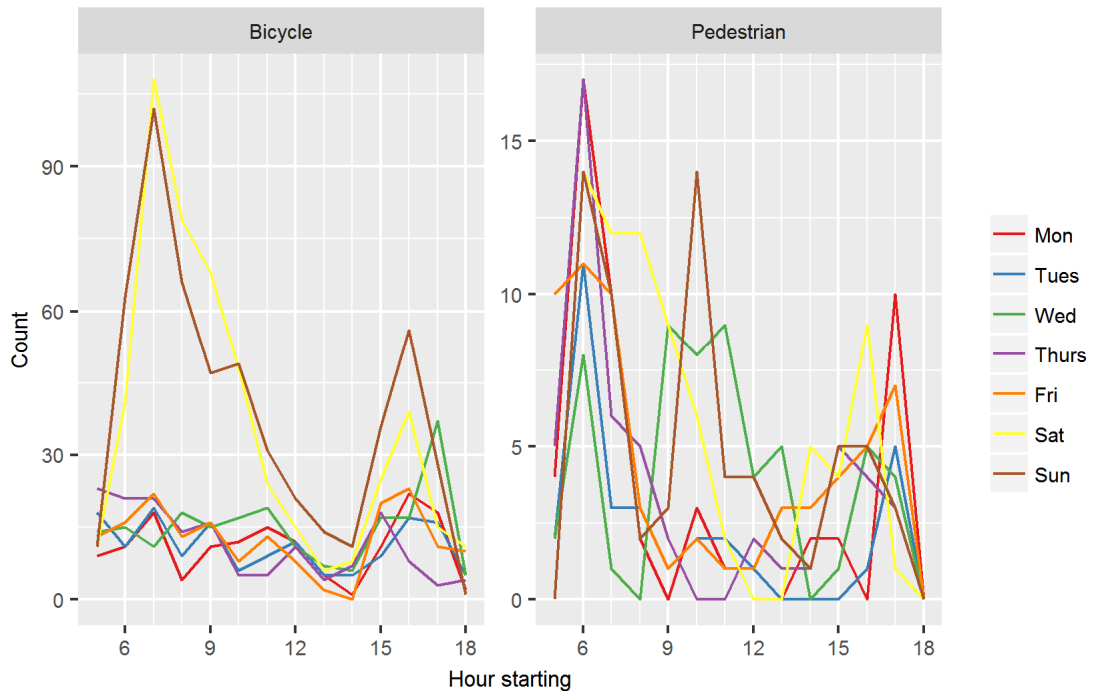
² Note the counts were from 6 am to 7 pm, or 13 hours such that they do not correspond to a 24-hour day. Full 24-hour counts may be of the order of 10% higher.



■ Figure 2.2: Day of week by mode



■ Figure 2.3: Time of day by day of week (hourly bins) for all modes

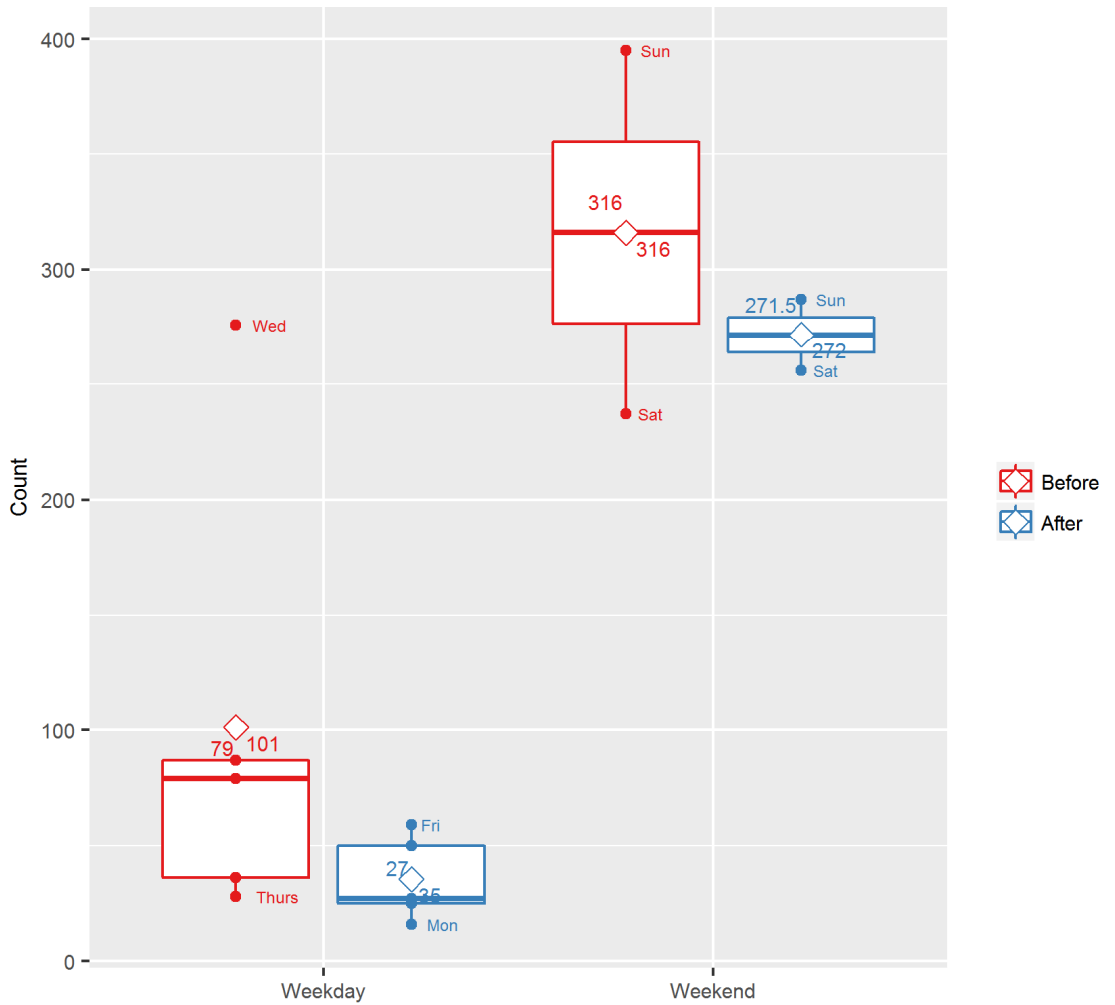


■ Figure 2.4: Time of day by day of week and mode (hourly bins)

2.1 Diversion from Anzac Avenue

The shared pathway provides an alternative for bicycle riders using Anzac Avenue. To assist in understanding what, if any, shift in riding has occurred from Anzac Avenue towards the pathway cyclist counts were obtained between Mewes Road and Bremner Road from Wednesday 7 October to Tuesday 13 October 2015 (before the pathway opened) and again from Saturday 8 October to Friday 14 October 2016 (after the pathway opened).

Based on the counts alone there is evidence to suggest the pathway has indeed diverted riders away from Anzac Avenue. As shown in Figure 2.5, the average weekday count reduced from 101 in the period prior to completion of the pathway to 27 afterwards. However, this decrease was not statistically significant at conventional levels ($t(4.26)=1.43$, $p=0.22$). We attribute the lack of significance to the small sample size (i.e. five weekdays in each of the before- and after-periods) and the large interday variability, particularly before the construction of the pathway. However, the average weekend count also decreased – from 316 prior to the pathway to 272 afterwards. It is speculated that the reduction in cyclist demand on weekdays on Anzac Avenue can be attributed to transport riders having a greater preference to using the pathway than weekend recreational riders, who may be riding farther for sport cycling and be subject to lower traffic volumes than on weekdays. Irrespective of the motivation for doing so, the data at face value would suggest that around 44% of those riding on the path on weekdays and 9% of those riding on weekends previously used Anzac Avenue.

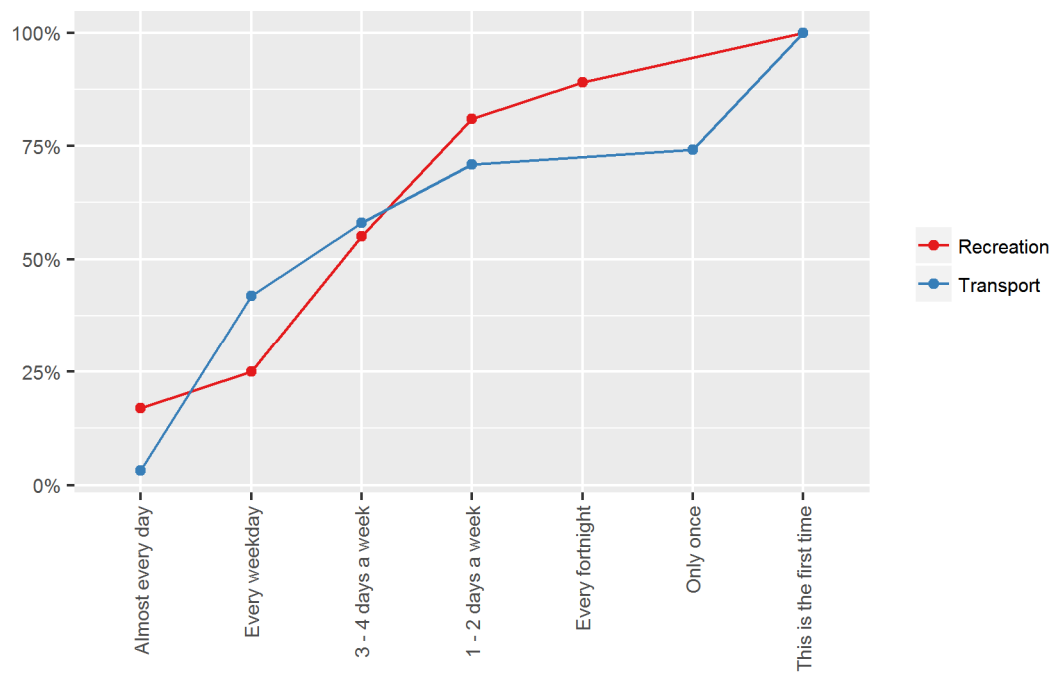


■ Figure 2.5: Anzac Avenue (Rothwell) bicycle rider counts before and after completion of the Moreton Bay Rail Link Shared Pathway (7-day counts, 6 am – 7 pm, averages are diamonds)

3 Intercept surveys

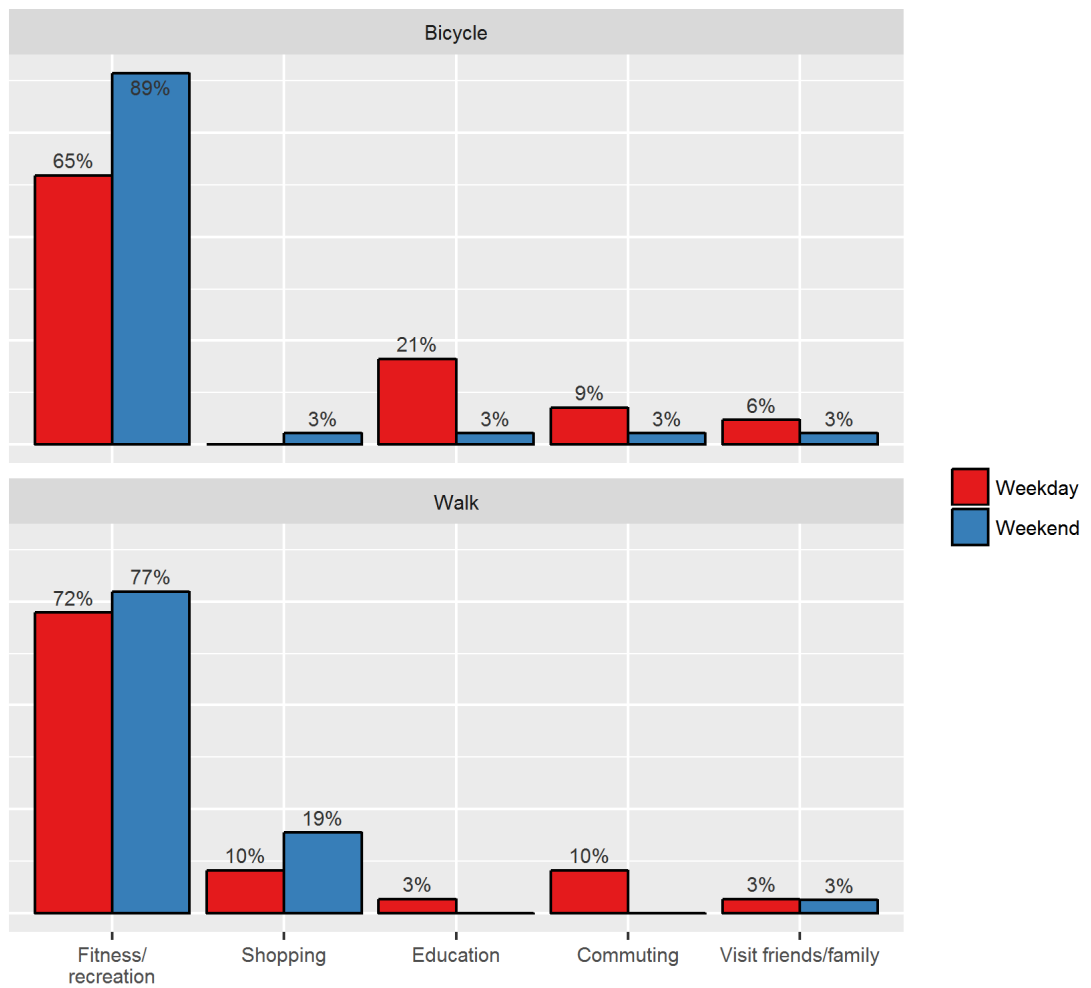
Intercept surveys were conducted with path users between Wednesday 19 October and Sunday 23 October 2016 in Rothwell near Seabrae Manor. A total of 132 complete interviews were obtained, of which 71 (54%) were bicycle riders and the remaining 61 (46%) were pedestrians.

Even though the path had only been open for about a month, path users appear to be frequent visitors (Figure 3.1). Just over 80% of bicycle riders and 77% of pedestrians use the path at least once a week.



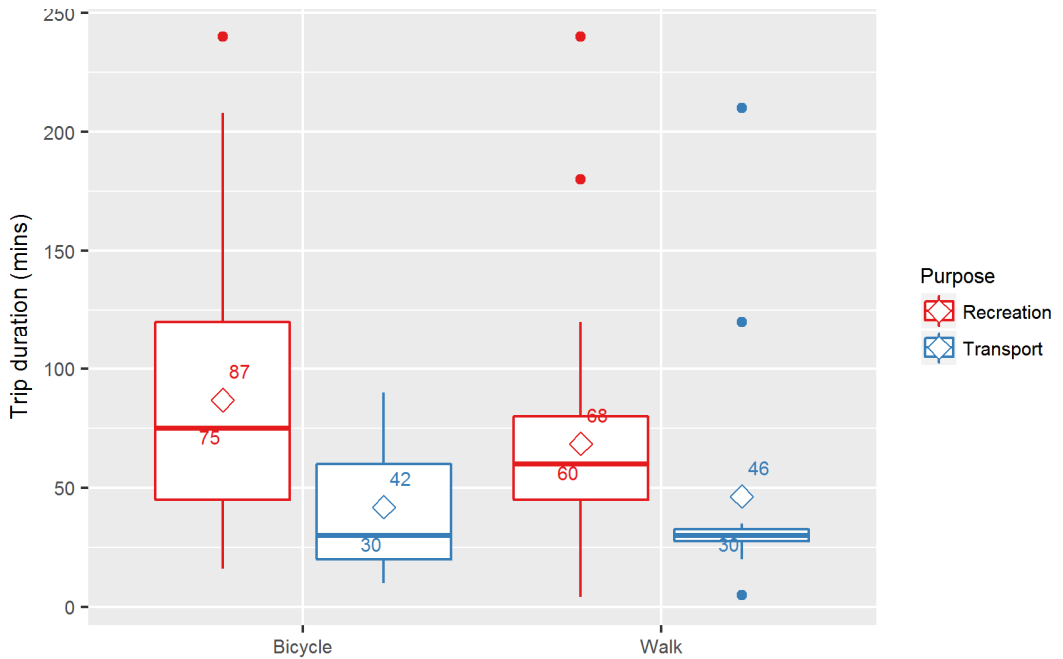
■ Figure 3.1: Frequency of use by mode

The path primarily serves recreational uses. Most bicycle riders on weekends were travelling for fitness or recreation (89%), compared with 65% of weekdays (Figure 3.2). Similarly, between 72% (weekdays) and 77% (weekends) of pedestrians were walking for recreation. It seems likely that those walking for commuting were walking to Rothwell train station for onward travel to work.

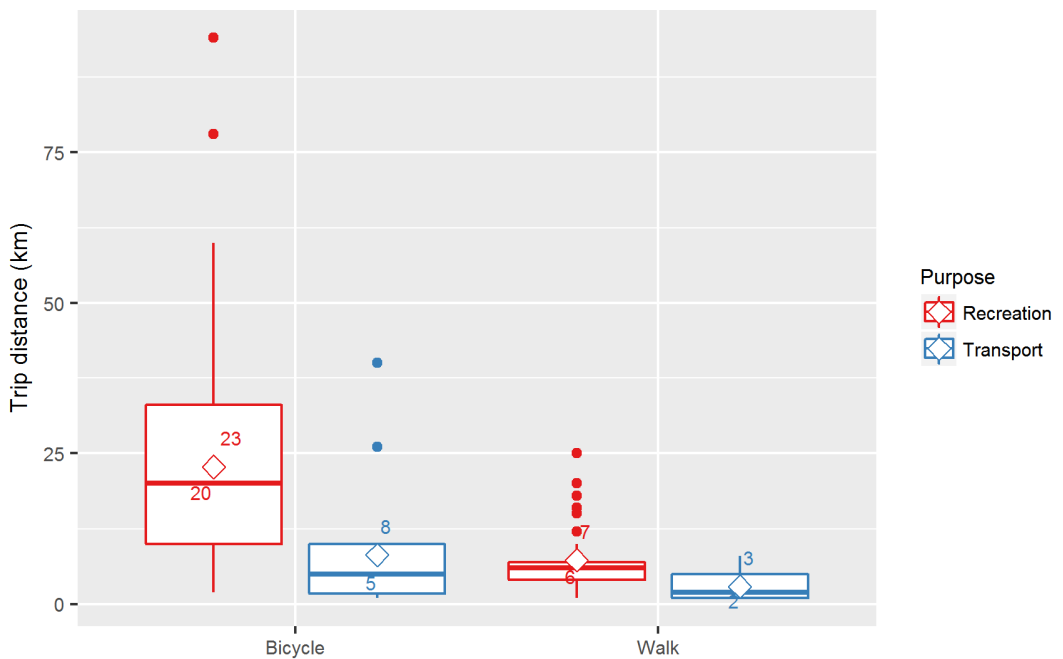


■ Figure 3.2: Trip purpose by mode and day of week

The average bicycle trip for recreation had a duration of 87 minutes (Figure 3.3) over a distance of 23 kilometres (Figure 3.4). Transport cycling trips were shorter, with an average duration of 42 minutes over 8 kilometres. Walking trips for recreation lasted on average 68 minutes over 7 kilometres.



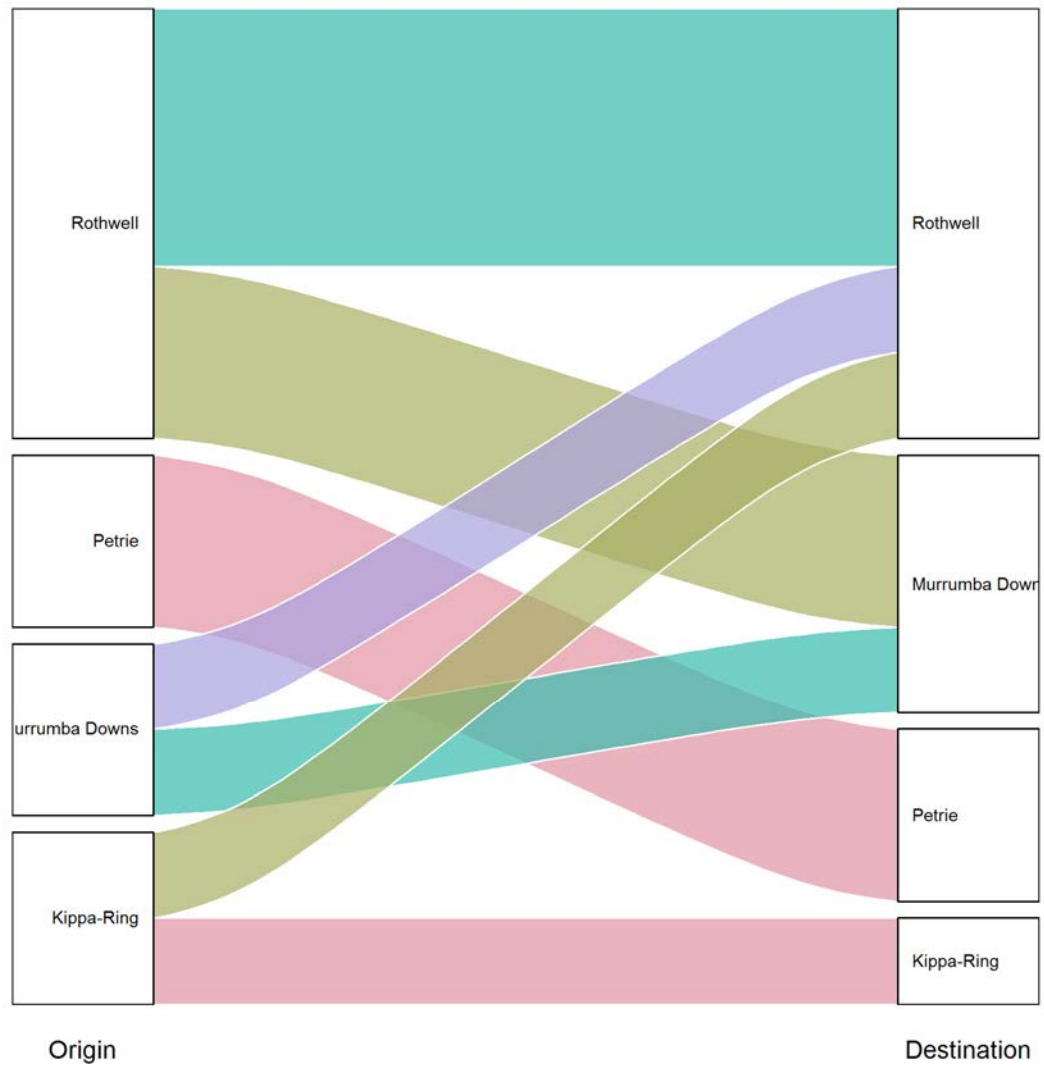
■ Figure 3.3: Trip duration by mode and purpose



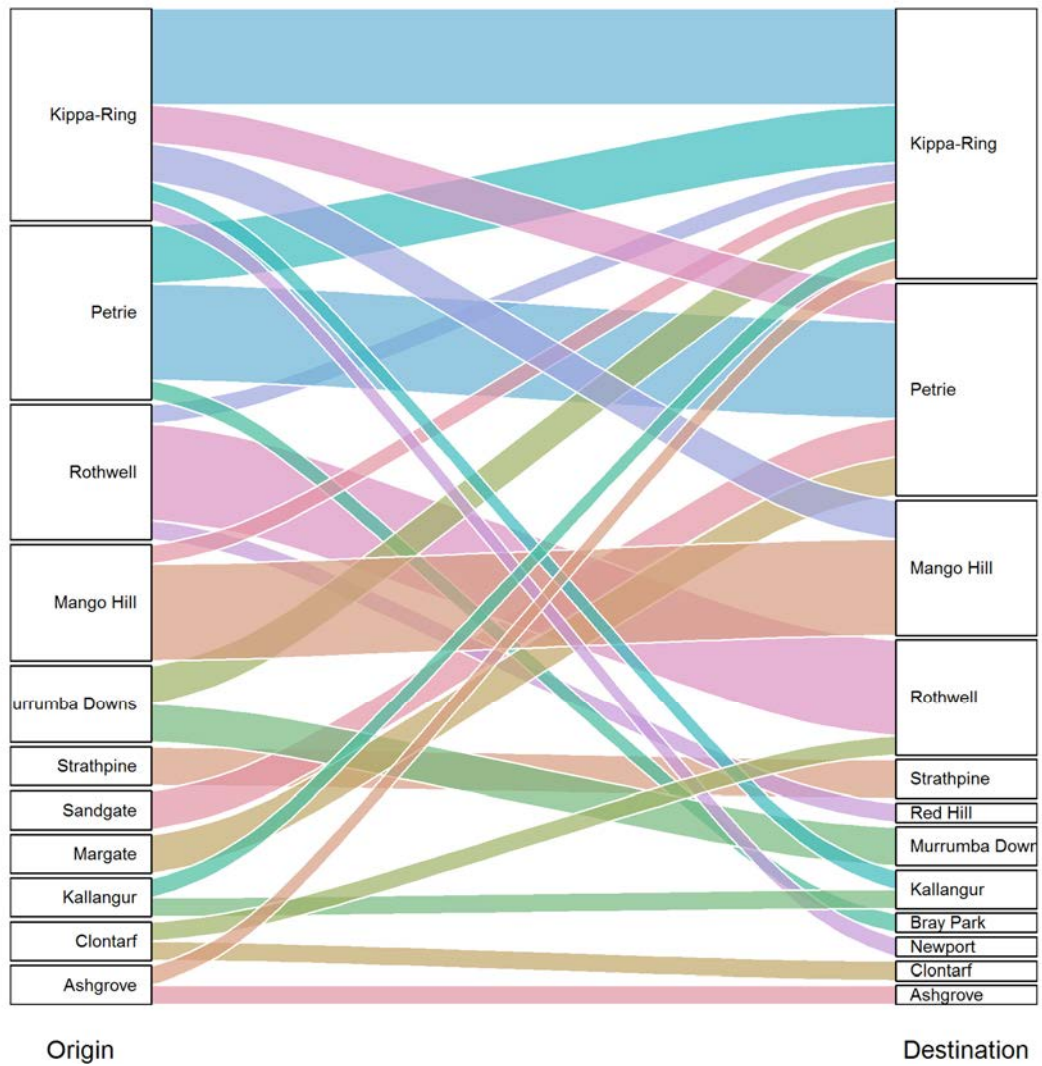
■ Figure 3.4: Trip distance by mode and purpose

The trip origin and destination suburbs by mode of travel and purpose are illustrated in Figure 3.5 and subsequent figures. The major trip flows are as follows:

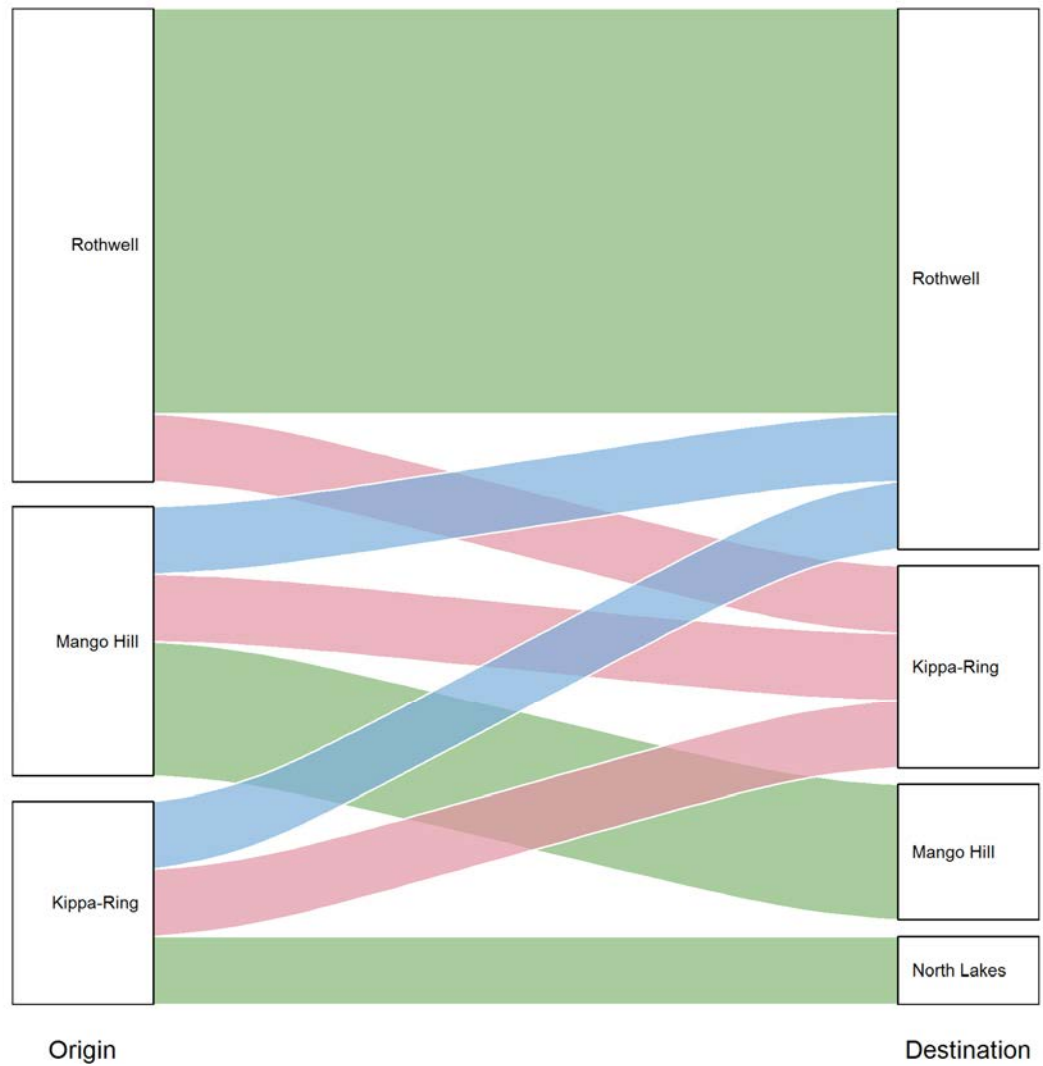
- 19% of all cycling transport trips were within Rothwell, followed by Petrie (13%) and Rothwell to Murrumba Downs (8%) (Figure 3.5).
- The most common trip origins and destinations for recreation cycling trips are Kippa-Ring, Mango Hill, Petrie and Rothwell (Figure 3.6).
- 40% of walking transport trips were entirely within Rothwell, followed by Mango Hill (13%) (Figure 3.7).
- Most recreation walking trips started and finished in Rothwell (34%) or Kippa-Ring (14%) (Figure 3.8).



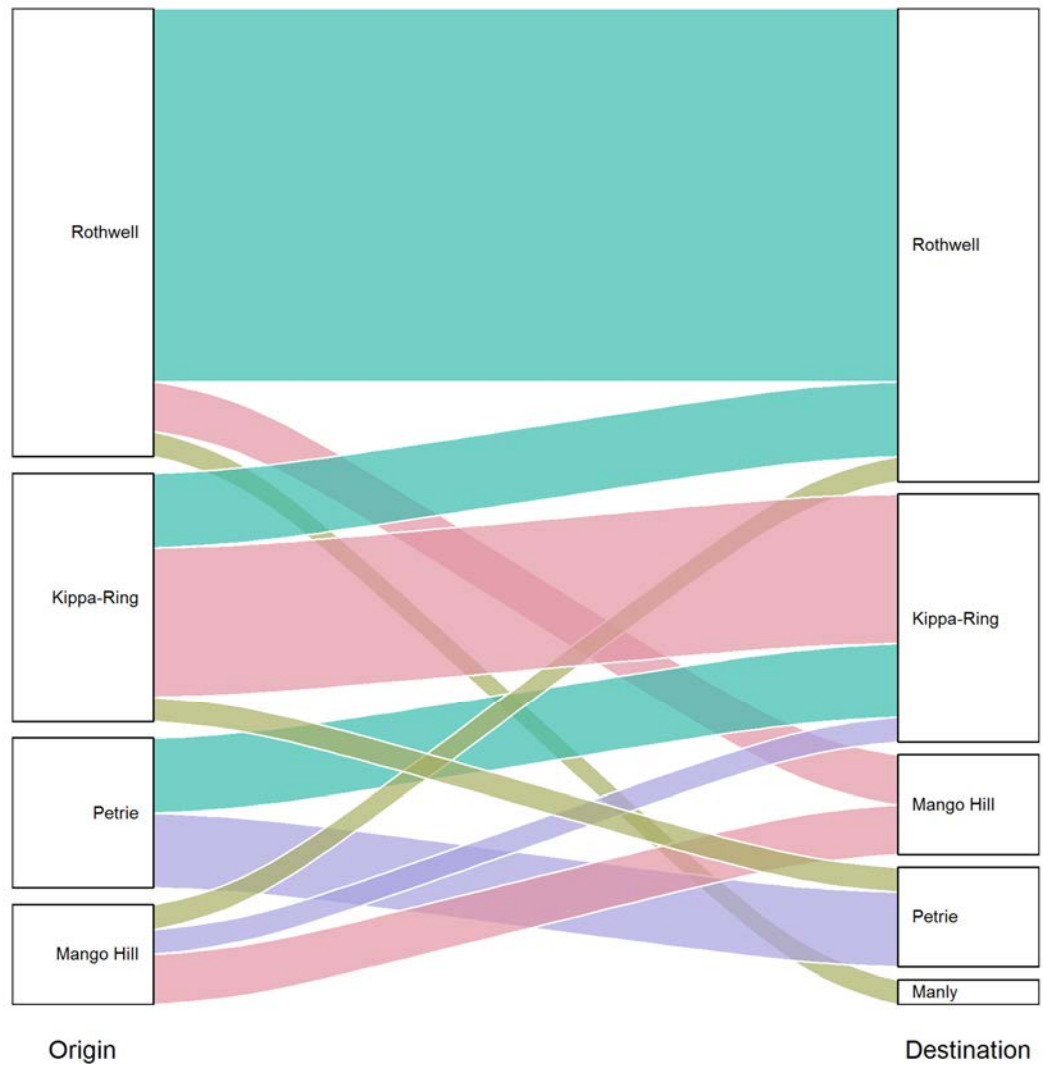
■ Figure 3.5: Origins and destinations of cycling trips for transport (n=16)



■ Figure 3.6: Origins and destinations of cycling trips for recreation (n=55)



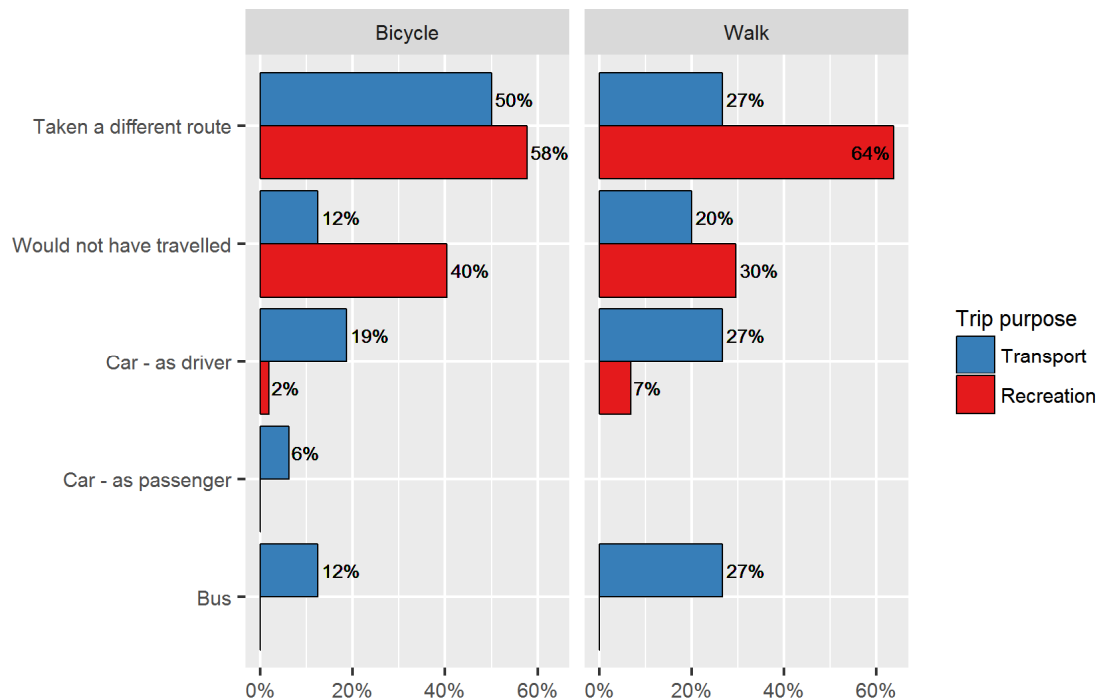
■ Figure 3.7: Origins and destinations of walking trips for transport (n=15)



■ Figure 3.8: Origins and destinations of walking trips for recreation (n=44)

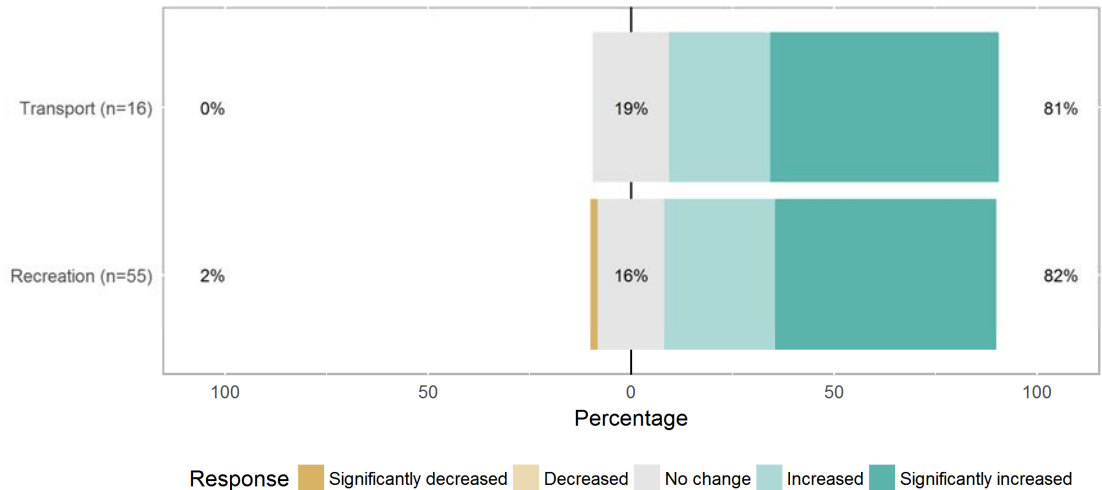
Respondents were asked what they would have done for their trip if the path was not present. In just over half of cases bicycle riders indicated they would have taken an alternate route (Figure 3.9). The most likely alternate route for bicycle riders is Anzac Avenue. This survey evidence supports the evidence from the counts undertaken along Anzac Avenue as noted in Section 2.1.

Among both cyclists and pedestrians there is some indication of shifting from car travel for transport trips; around 19% of transport bicycle riders and 27% of pedestrians walking for transport would otherwise have used private car. A further 12% of bicycle riders and 27% of pedestrians would have used a bus. There is also an indication of induced travel; 40% of recreational bicycle riders and 30% of recreational walkers would not have made their trip in the absence of the path.

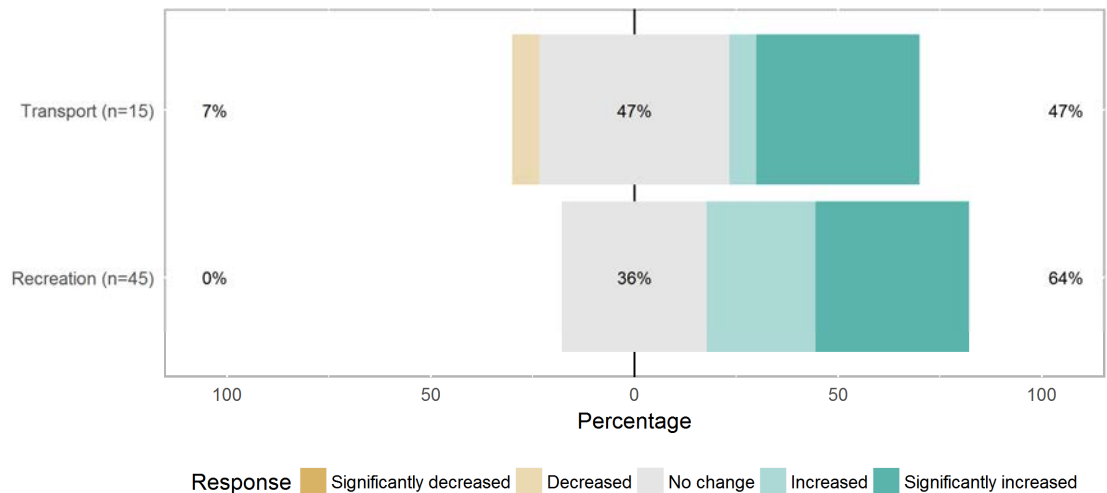


■ Figure 3.9: What would you have done if the path was not here?

There is evidence to suggest path users are undertaking more physical activity because of the construction of the path. As illustrated in Figure 3.10 around 80% of both transport and recreational riders indicated they had increased their riding over the past month because of the presence of the path. The change in walking is somewhat weaker, but still positive – just under half of those walking for transport indicated they had increased their amount of walking as had 64% of those walking for recreation (Figure 3.11).

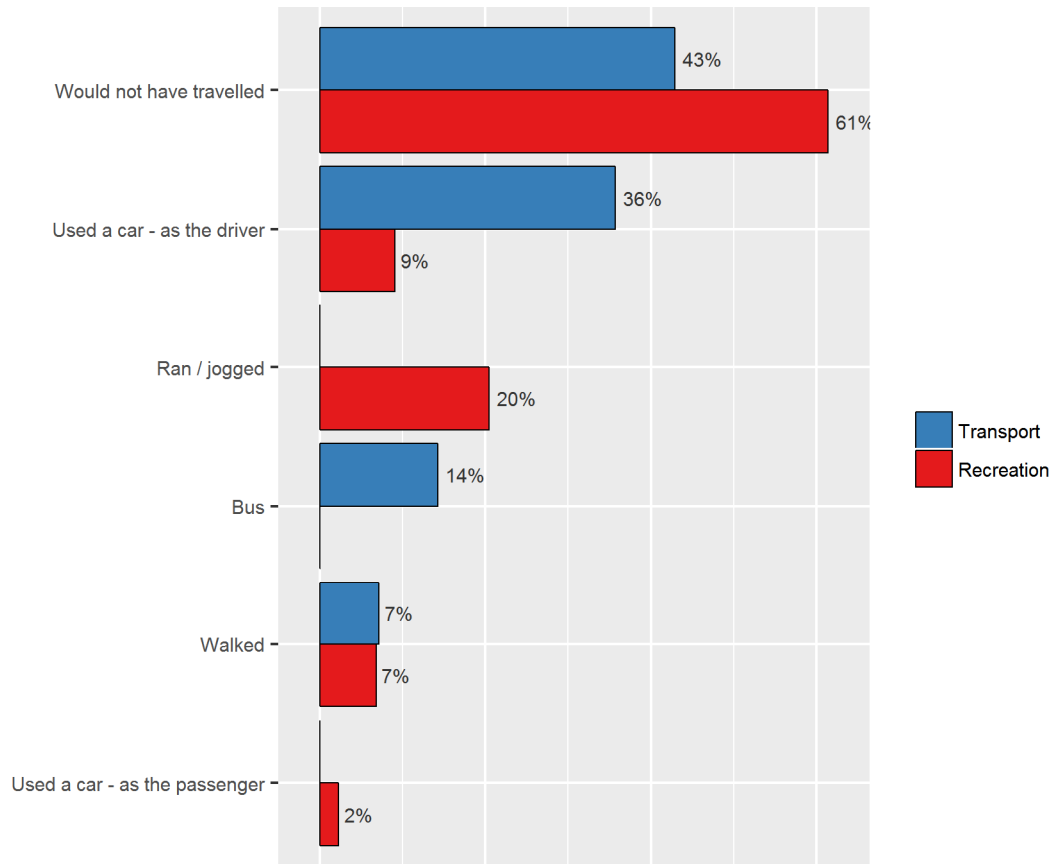


■ Figure 3.10: Has the path changed the amount of time you've spent riding over the past month?



■ Figure 3.11: Has the path changed the amount of time you've spent walking over the past month?

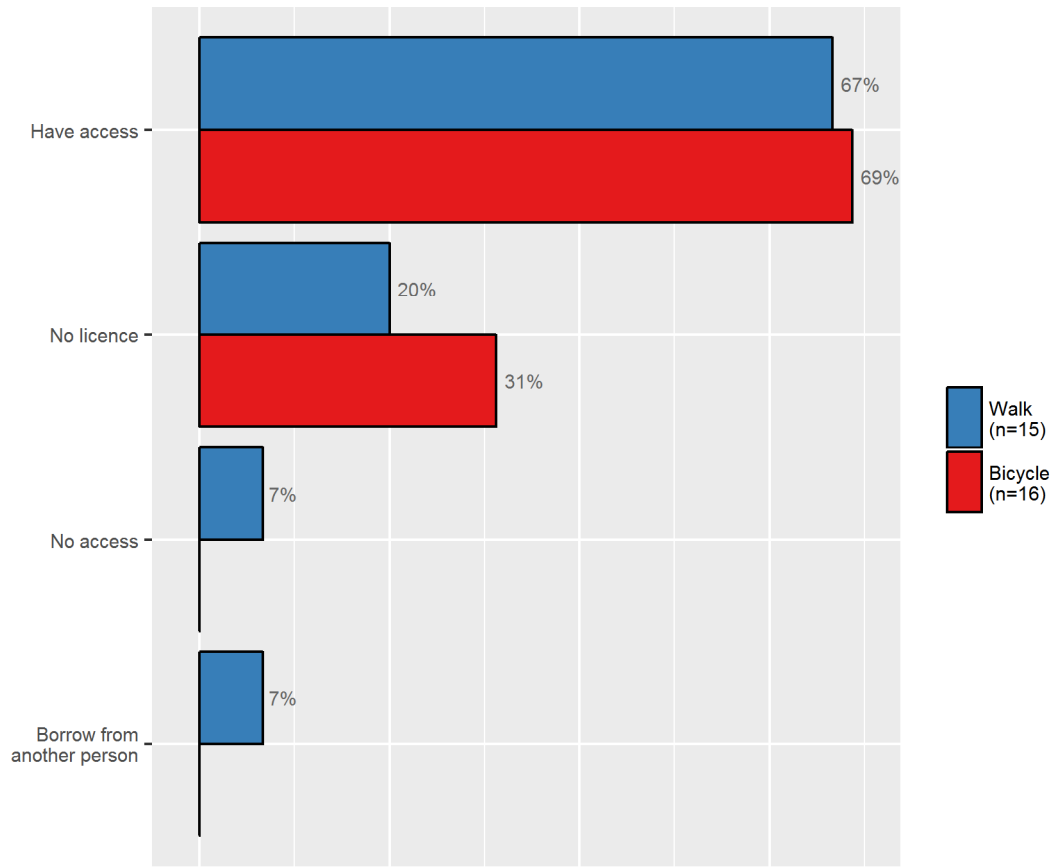
Bicycle riders were also asked what they would have done if they could not have used their bicycle for their trip. Just under half of transport cyclists and 61% of recreation cyclists indicated they would not have travelled (Figure 3.12). Around a third of transport bicycle riders would have driven a car and a further 14% would have taken a bus.



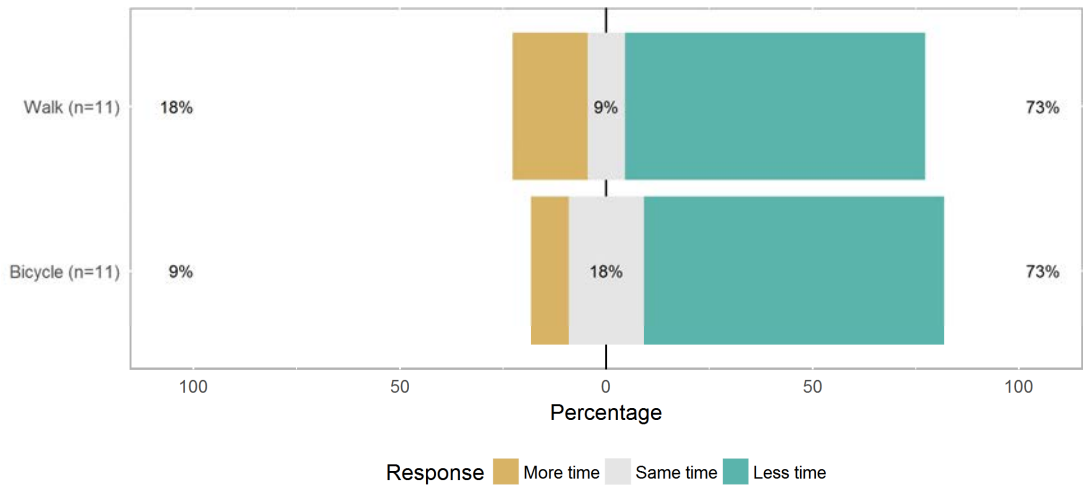
■ Figure 3.12: What would you have done if your bicycle was not available for this trip?

Respondents who were travelling for transport purposes (e.g. commuting, education, shopping) were asked whether they could have used a motor vehicle for their trip. Just over two thirds of bicycle riders and pedestrians had access to a motor vehicle (Figure 3.13). Around three quarters of respondents indicated using a car would have been quicker (Figure 3.14). This result is notable insofar as it suggests these active transport users are choosing these modes despite the longer travel times. This is contrary to the typical assumption in transport appraisal practice where it is assumed travellers want to minimise their travel time. Clearly, there are other intrinsic benefits to active travel which travellers consider to more than compensate for the additional travel time.

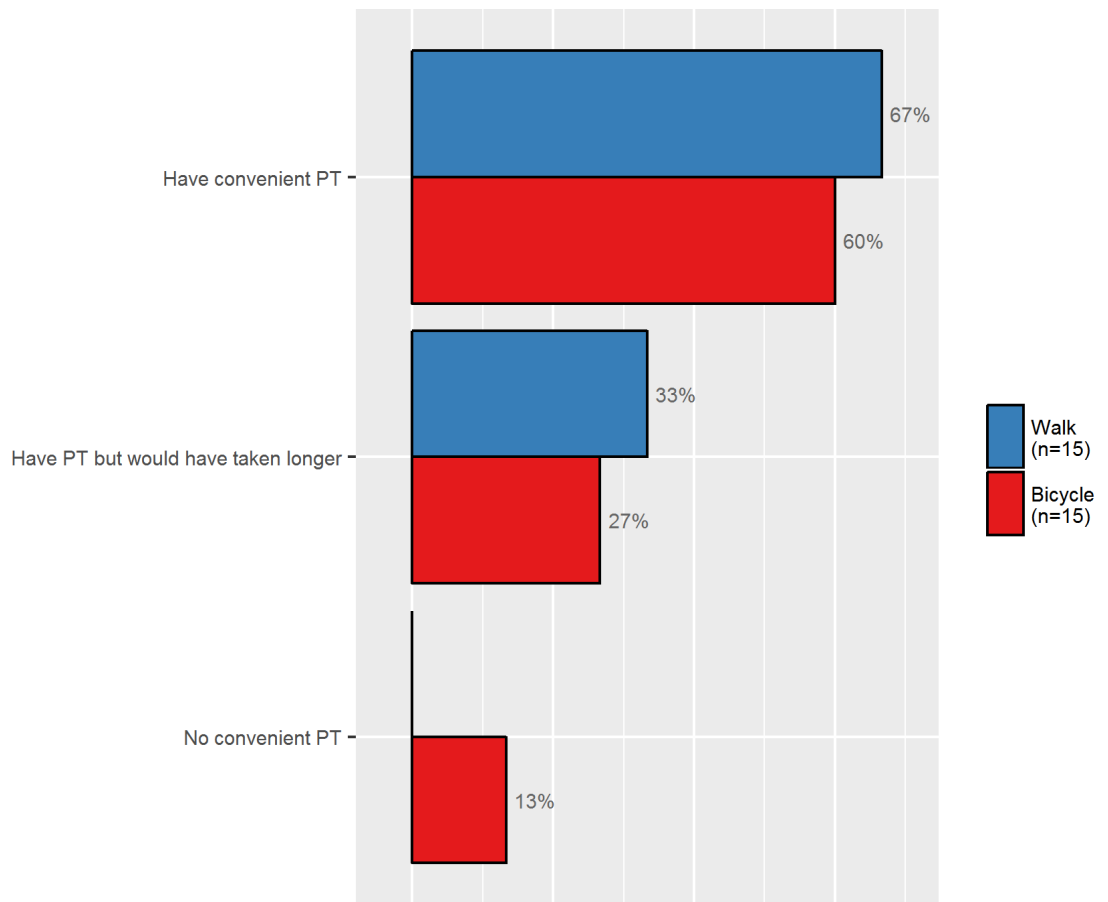
Respondents were also asked about the availability of a public transport alternative for their trip; 32% of pedestrians and 83% of bicycle riders indicated they had a viable public transport option (Figure 3.15). While the sample sizes are small, the data suggests that using public transport instead of active travel would have increased their travel time (Figure 3.16).



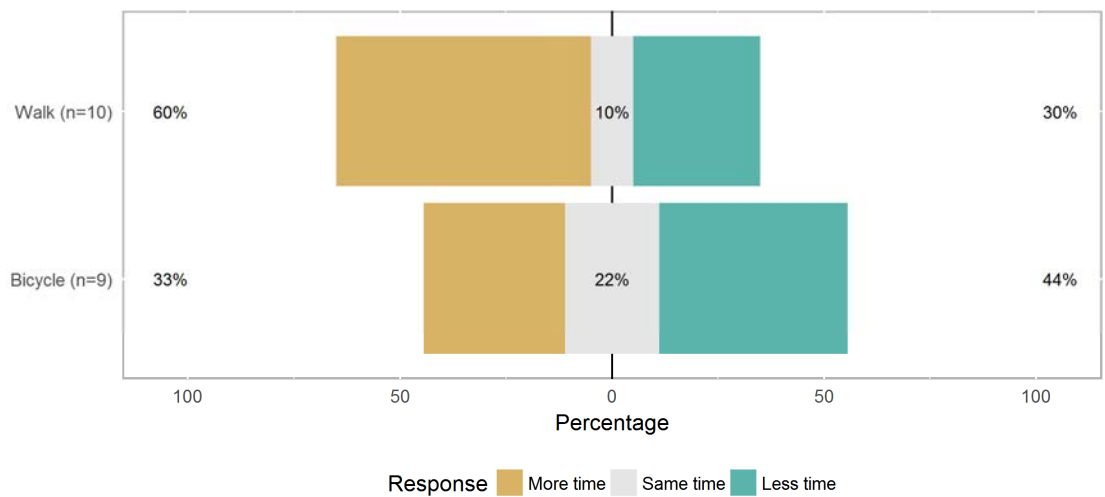
■ Figure 3.13: Car availability by mode for transport trip purposes



■ Figure 3.14: Change in travel time for those who could have used a car (transport trip purpose only)



■ Figure 3.15: Public transport availability by mode for transport trip purposes



■ Figure 3.16: Change in travel time for those who could have used public transport (transport trip purpose only, note small sample sizes)

Respondents were asked after the survey if they had any other comments about the pathway. These comments are provided verbatim in Appendix B. Most respondents indicated strong support for the path. Suggest improvements included:

- improved signage at Mango Hill (several respondents indicated there had been a bicycle rider crash at Mango Hill attributable to poor intersection design),
- more seating and bins,
- drinking fountains, and
- improved night-time security such as lighting.

4 Cost-benefit analysis

The cost-benefit analysis framework as described in CDM Research (2016) was used to estimate the monetary benefits against the costs of the project. The key elements of this framework are:

- broad consistency with the current national guidelines (Transport and Infrastructure Council 2016),
- 30-year economic life with no residual value at the end of the appraisal period,
- estimates mortality and morbidity health benefits using a willingness to pay methodology for valuing statistical life,
- no safety in numbers effect,
- 60% of bicycle travel in the area occurs on-road without provision, 10% on-road with bicycle lanes, 25% on off-road shared paths and 5% on footpaths,
- relative risks for bicycle lanes of 0.5, off-road shared paths of 0.3 and footpaths of 1.8 (all relative to on-road with no provision),
- cumulative annual demand growth of 3%,
- rule-of-half applies to the willingness-to-pay component of health costs, vehicle operating and parking costs, PT fares for all users and travel time savings for new users only,
- Monte Carlo simulation to represent parameter uncertainty,
- capital and operating cost estimates to +/-10% at 95% confidence level, and
- demand estimates to +/-20% at 95% confidence level.

The input assumptions to the cost-benefit analysis are summarised in Table 4.1, and are based wherever possible on the survey data. The project was delivered as part of the larger Moreton Bay Rail Link project. As such, it is not possible to entirely separate out the path costs from the wider project cost. Nonetheless, it was clearly cheaper to deliver the path in conjunction with the rail link than to do so later. The estimated project cost of \$14.6 m was provided by TMR and was based upon the contract tender value including design, overhead, profit and risk. This excludes TMR management costs, land resumption and bulk earthworks. It is assumed most of these costs would be incurred irrespective of the construction of the path; that is, for example, the rail easement did not need to be wider to accommodate the path than it would otherwise have been.

■ Table 4.1: Economic assumptions

Parameter	Assumption	Source
<i>General assumptions</i>		
Economic life	30 years	
Discount rate	3%, 7%, 10%	
Health benefit ramp-up period	5 years (linear)	Genter et al. (2009)
Effective average motorist speed	30 km/h	Estimate
Effective average cyclist speed	20 km/h	Estimate
Effective average walking speed	6 km/h	Estimate
Effective average PT speed	15 km/h	Estimate
<i>Bicycle riders</i>		
Opening year demand (AADT)	269	Video counts
Average trip distance	19.4 km	Intercept surveys
Diversion: car	6%	Intercept surveys
Diversion: PT	3%	Intercept surveys
Diversion: walk	0%	Intercept surveys
Diversion: reassign	56%	Intercept surveys
Diversion: induced	35%	Intercept surveys
Transport purpose split	22%	Intercept survey
Change in trip distances	0 km	Assume no change
<i>Pedestrians</i>		
Opening year demand (AADT)	56	Video counts
Average trip distance	6.1 km	Intercept surveys
Diversion: car	12%	Intercept surveys
Diversion: PT	7%	Intercept surveys
Diversion: reassign	54%	Intercept surveys
Diversion: induced	27%	Intercept surveys
Transport purpose split	26%	Intercept survey
Change in trip distances	0 km	Assume no change
<i>Facility</i>		
Length	12 km	Total length of path
Type	Off-road path	
Diverted motor vehicle travel time by period	Busy: 50%	Guesstimate

Parameter	Assumption	Source
	Medium: 30%	
	Light: 20%	
<i>Investment</i>		
Capital cost	2015: \$10 m 2016: \$4.6 m Total: \$14.6m	Estimated, excl. land and TMR costs
Operating cost	\$10,000 p.a.	Guesstimate

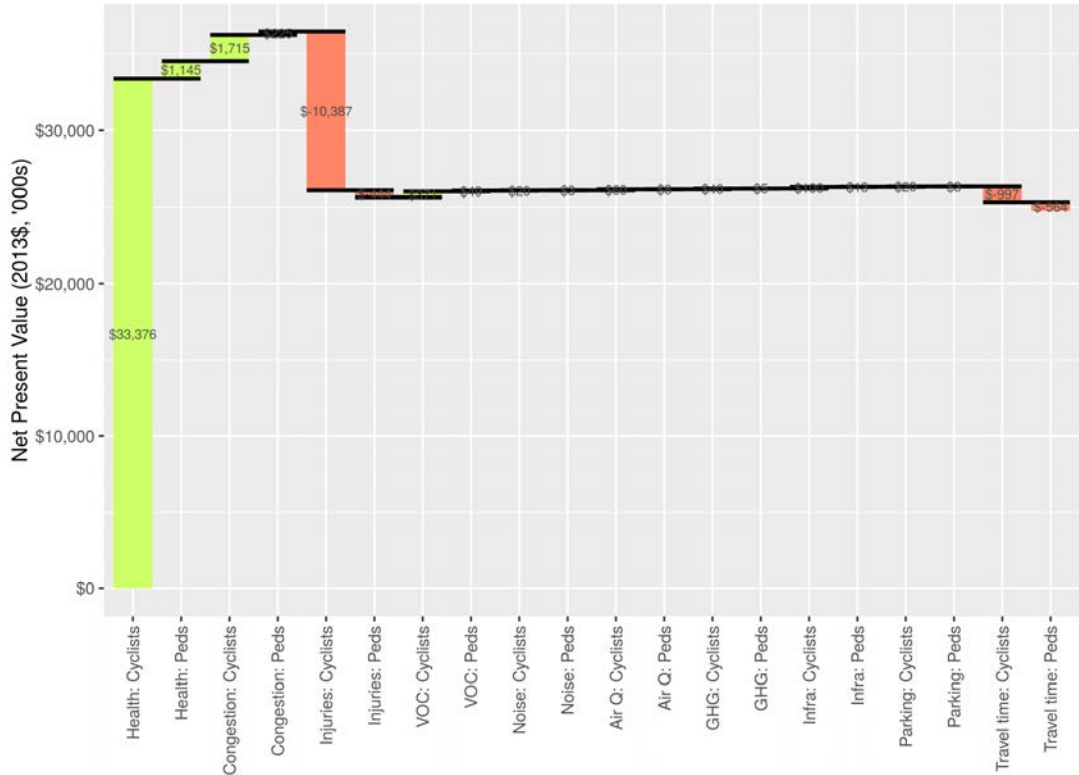
The results of the cost-benefit analysis are summarised in Table 4.2. For the central discount rate of 7% the BCR is 1.6, indicating good value for money.

■ Table 4.2: Economic assessment

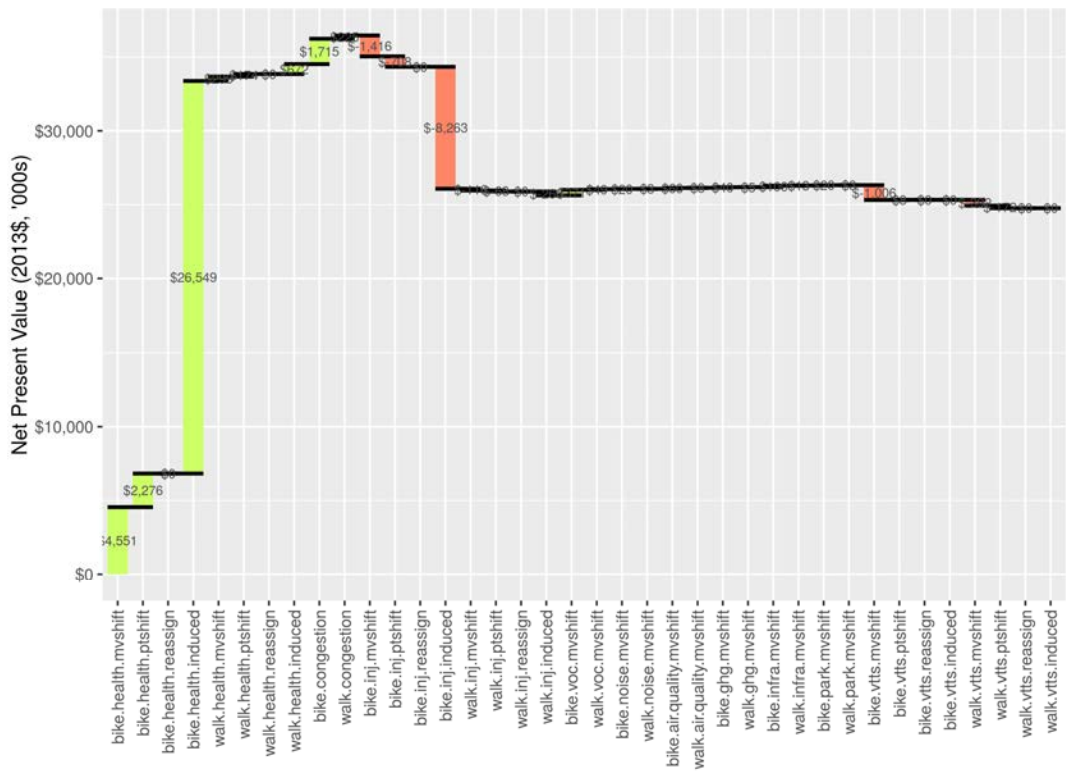
Parameter	Discount rate		
	4%	7%	10%
Benefit-Cost Ratio (BCR)	2.6	1.6	1.1
Likelihood BCR < 1.0	0%	0%	6%
Net Present Value (NPV)	\$23.99 m	\$9.57 m	\$1.51 m
Present Value of Benefits (PVB)	\$39.18 m	\$24.76 m	\$16.70 m
Present Value of Costs (PVC)	\$15.19 m	\$15.19 m	\$15.19 m

All values are 2013 prices and values.

The breakdown of the NPV for the central discount rate is shown in Figure 4.1. Most the benefits accrue from cyclist health benefits, with minor contributions from pedestrian health and traffic decongestion. The detailed breakdown of the benefits by user class are shown in Figure 4.2. This figure suggests that most of the cyclist health benefits are attributable to induced travel; that is, the 40% of recreation riders who indicated they would not have ridden in the absence of the path (Figure 3.9). The disbenefits accrue largely to cyclist injuries; although existing riders diverting from roads such as Anzac Avenue will, presumably, experience a safer journey on the path those that have shifted from other (safer) modes and those who are making new trips will be exposed to greater risks of injury. However, it should be noted that at least some of these risks will not occur on the path itself but instead the roads leading to or from the path.



■ Figure 4.1: Summary breakdown of net present value



■ Figure 4.2: Detailed breakdown of net present value

5 Discussion

The Moreton Bay Rail Link shared pathway provides a high quality off-road facility along a corridor where no comparable facility previously existed. Path users appear to be overwhelmingly supportive of the path and consider it a significant improvement on Anzac Avenue for both riding and walking. Moreover, the path was delivered at comparatively low cost given that it was built in conjunction with the Moreton Bay Rail Link. While it is difficult to fairly separate the costs of the pathway from the wider project, the estimated cost of around \$14.6 m appears to represent good value for money given the length (12 km) and quality of the path.

The reported BCR of around 1.6 suggests the project represents good value for money. This result is primarily attributable to four factors:

- fair bicycle rider and modest pedestrian demand,
- a significant minority of recreational cycling would not have occurred in the absence of the path,
- significant mode shift from private car to active travel, and
- comparatively low construction cost because of combining the construction with the larger Moreton Bay Rail Link project.

The latter factor is particularly significant given that most of the project benefits accrue from the health benefits attributed to active travel among those who are making all-new (induced) trips. The presence of real physical activity benefits to this group appears a reasonably robust assumption given that most respondents indicated the path had increased the amount of riding they had undertaken.

No physical activity benefits are assigned to bicycle riders or pedestrians who would have ridden or walked prior to construction of the path. While there will be safety benefits to this group, at least among those who divert from using Anzac Avenue, the assumed relative risks for the different infrastructure is insufficient to provide substantial monetary benefit. Nonetheless, it is noted that if the path were to save a single bicycle rider or pedestrian life the “saving” of around \$4 m would go a long way towards meeting the project cost of \$14.6 m.³

It is possible that demand will increase more rapidly than the 3% cumulative growth rate assumed herein, particularly in the near-term as awareness of the presence of the path increases. Moreover, as the adjoining suburbs experience further development the local population catchment may be expected to increase. An additional consideration is that the counts and surveys were undertaken at only one location along the path. It is very likely there will be walking trips occurring at other locations along the path that would not have

³ However, it should be recognised that any (hypothetical) life saved would need occur early in the project life for the benefit to be of material economic benefit given the effect of discounting.

passed the survey location. These may have the effect of improving the cost-benefit analysis.

References

- CDM Research. 2016. 'Measuring the Benefits of Active Travel'. Prepared for Queensland Department of Transport and Main Roads.
- Genter, J. A., S. Donovan, B. Petrenas, and H. Badland. 2009. 'Valuing the Health Benefits of Active Transport Modes'. Research Report 359. Wellington, N.Z.: NZ Transport Agency.
- Transport and Infrastructure Council. 2016. 'Australian Transport Assessment and Planning Guidelines: M4 Active Travel'. http://atap.gov.au/mode-specific-guidance/active-travel/files/m4_active_travel.pdf.

Appendix A: Intercept survey script

We're completing a quick survey on the path. Could you help us?

1. INTERVIEWER enter mode of travel
 - a. Bicycle rider
 - b. Pedestrian
2. In what suburb did you start your trip, and where will you finish your trip?
 - a. Start: _____
 - b. Finish: _____
3. How long will the trip take?
 - a. Hours: _____
 - b. Minutes _____
4. How far is the trip?
_____ km
5. What is the purpose of your trip?
 - a. Commuting to or from work
 - b. Fitness, recreation or sport
 - c. Shopping
 - d. School, university or other education activity
 - e. Other: _____
6. How often have you walked/ridden here in the past month?
 - a. Almost every day
 - b. Every weekday
 - c. 3 – 4 days a week
 - d. 1 – 2 days a week
 - e. Every fortnight
 - f. Only once
 - g. This is the first time
7. This path has only recently been built. Are you aware that it's new?
 - a. Yes
 - b. No
8. How would you have made this trip if this path wasn't here?
 - a. Taken a different route (incl. used the road)
 - b. Would not have travelled

- c. Car – as driver
 - d. Car – as passenger
 - e. Motorcycle
 - f. Train
 - g. Bus
 - h. Ferry
 - i. Taxi
 - j. Don't know
 - k. Other: _____
9. What change, if any, would you say the construction of the path has had on the amount of time you've spent walking/riding over the past month?
- a. Significantly decreased (by at least an hour a week)
 - b. Decreased (by less than an hour a week)
 - c. No change
 - d. Increased (by less than an hour a week)
 - e. Significantly increased (by at least an hour a week)
10. IF BICYCLE RIDER: What would you have done if you couldn't ride your bike for this trip?
- a. Would not have travelled
 - b. Used a car – as the driver
 - c. Used a car – as the passenger
 - d. Motorcycle
 - e. Train
 - f. Bus
 - g. Ferry
 - h. Taxi
 - i. Walked
 - j. Ran / jogged
 - k. Don't know
 - l. Other: _____
11. IF TRANSPORT PURPOSE: Which of the following best describe how easily you could have used a car for this trip?
- a. I had a car available and could easily have got access to it
 - b. I could have got a car from another person where I started my trip (e.g. another household member)
 - c. I did not have ready access to a car to make this trip
 - d. I do not have a drivers licence
 - e. Other: _____

12. IF COULD HAVE USED CAR: Would it have taken more or less time to reach your destination by car?
- a. More time
 - b. Same time
 - c. Less time
13. IF TRANSPORT PURPOSE: Which of the following best describes how easily you could have made this trip by public transport?
- a. I had a convenient public transport alternative
 - b. I had a public transport alternative but it would have taken longer
 - c. I did not have a viable public transport alternative
 - d. Other: _____
14. IF COULD HAVE USED PUBLIC TRANSPORT: Would it have taken more or less time to reach your destination by public transport?
- a. More time
 - b. Same time
 - c. Less time
15. INTERVIEWER enter any other comments: _____

Appendix B: Verbatim comments

Bicycle riders:

Loves the new path
 Great path
 Needs dog bags and signage to clean up dog faeces
 Loves the new path
 Bubblers, dog faeces bags
 Need more seats
 Great loves it
 Need lights as dangerous at night
 Awesome track! I love it!
 Staying healthy. Road crossings
 More signage
 Better and cheaper than the bus
 Bubblers please
 Friendly folk on the track
 Could be a park at the end near Petrie
 Near Mango Hill, didn't know where to go as there was no signage to shops
 Better signage for paths with direction
 Changed her life. Now exercises all time.
 Lights, seats, bins required, some shade.
 Great.
 Opened up her life!
 Flowers and drink bubblers
 Designated walker/rider section would be good
 Suggest better signage and seating
 Awesome, but clean up after your horses!
 Faeces bags for dogs. No bins anywhere
 Suggest bike storage at train stations
 Has seen people with horses and motorbikes suggests signage
 Nice and wide, room for people to pass
 Signage required at Mango Hill for stairs!
 Signs that there's bubblers at train stations. Other feedback, Kippa-ring car park too far from station.
 Signs to bubblers
 No lights, signs are too high so they need to be lowered. Could put physical barrier between lanes.
 Finally!
 Awesome
 Best thing the council done, should be overhead animal crossings too.
 Happy with it.
 Great will be better with shade when trees grow.

Confusing signs past last major road this path crosses to Murrumba downs, same signage fault as all bike paths, could have little yellow line all the way along track even over roads.
 Water stops or at least signs at station
 Could lower black koala stopping material to see better
 Coffee shops would be great better shade better exit signs
 Signage could be better at station. Murrumba train station south side pathway way too skinny for both bikes and walkways
 Better signage along Rothwell at roundabout and in general. Safe, no cars, people around.
 Shade required, should make more bike paths!
 Solar lighting would be good, emergency telephones.
 Unclear signage going through Kallangur
 Wish there was more bike tracks!
 Better signage at Kippa-ring end of track, must cross roads, could have put bridges, poor signage at Rothwell with bike logo/no bike signs.
 Security cameras for graffiti and accidents, rubbish bins.
 Lighting. Rothwell signage. Would like sticks and leaves blown off path as this causes accidents.
 Could be crossing at Anzac Ave roundabout to get to path safely. Could not use a car at all if there was a crossing even at the new set of lights.
 Suggests better signage on exits and end of track signs or to let you know where you are.
 Kippa-ring, extend path to lagoon for kids, could have rental bikes from end of path.
 Suggests bubblers for people and dogs.

Pedestrians:

Bike riders are a nuisance and need to ring their bells!
 It's great, nice if it was lit up at night.
 Park benches please
 Don't know to turn left towards Mango Hill, no sign there and at Rothwell. You get to the station and don't know where the path is from there.
 Great, attractive vs the industrial area
 Lights at night. Signage to slow down bike riders. Seats. Signs for animal welfare (koalas)
 Impressive. Need lights on pathway.
 Need bins and bubblers
 Need bins
 Great loves it but needs water bubblers and seats
 Love the new path however thinks seating and better signage
 It's great but no bins. Rubbish and dog faeces cover paths.
 Quicker then catching bus but no shady rest areas.
 Would suggest more signage around Kallangur train station. Also worried about early morning late afternoon safety suggests lighting
 Love it beautiful to exercise and listen to birds
 Hates the bike riders suggests speed signs for them and rules as they are not courteous.
 Would normally go to Anzac Ave. Loves it.
 Loves the path walks more
 Great but needs more security

Suggests better signage for exits and where are the toilets
She's a beaut! No toilets at Rothwell station, no dog bags
Seats would be good. Put a road in next time save traffic
Need signage at Mango Hill where it veers around into steps, someone broke their ribs there!
Track doesn't meet up to Anzac Ave, should be able to get back past Grace College
Suggests better signage and a lane for walkers and bike riders. Very dangerous for walkers
Suggests seats at exercise equipment and toilet and exit signs
Needs bins and weather covers
Great loves it
Bins for doggy doo required. Love it love it love it!
Signage for Mango Hill really bad a guy came off his bike.
Loves it first time
Train noise
No access to bush, used to go bushwalking but can't anymore.
Toilets or signage
Loves it wishes it went further
Great need more
First time user thinks it's great
Quick walk and she's at the shops. Better then walking on main road.
Good except in weather like today. No undercover areas. Require more signage for distances exits toilets bins water etc.
Lighting would be good
Loves it, better and quicker than the bus
Cold water bubblers
Loves it. Needs lights at night.
Needs lights, bins, doggy bags.
Safer for families, massive difference for family fun days. Beautiful corridor but needs lights. If someone has parked the car and not realised how long it takes to walk back they're in the dark. Could get local business sponsorships.
Midge spraying, it's really bad when walking.
Lights better signage on the main road to bike path. Dog water bowls needed
Dog faeces bag, water bowls for dog