

**Evaluation of the
Department of Planning and Infrastructure's
Bike to Work Breakfast 2005**

Prepared by the

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EVALUATION OF THE DEPARTMENT OF PLANNING AND INFRASTRUCTURE'S

Bike to Work Breakfast 2005

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EXECUTIVE SUMMARY

The Metropolitan Transport Strategy (1995) proposed moving from a transport system which was dominated by low occupancy car use, to a more balanced transport system of public transport and non-motorised transport options. Creating this change requires initiatives that create critical mass awareness, in work organisations and the community. The Bike to Work Breakfast is an example of such an initiative. This year it was held on Friday 11 March, 2005 and aimed to increase awareness of, and promote cycling as an alternative mode of transport to and from work. A free healthy breakfast was provided to everyone who cycled on the day.

A total of 1232 participants who attended the 2005 Bike to Work Breakfast completed questionnaires. The majority of respondents were male (69%, n=845). The age of respondents varied, with the most common age group being 31-40 years (29%, n=353) followed by 41-50 years (26%, n=324). Respondents cited a number of different reasons for cycling. The majority indicated improved fitness (84%, n=1035) and enjoyment (63%, n=777) as the main reasons for cycling. Almost half of respondents (43%, n=535) cycled on a daily basis whilst a further 42% (n=524) reported cycling 2-3 times per week.

Fifty three percent of respondents (n=5595) lived less than 13 kilometres from work and almost one quarter (24%, n=266) lived less than eight kilometres from their workplace. Respondents suggested they would ride to work more often if there were showers at work (34%, n=422), more on road facilities (29%, n=360) and lockers at work (24%, n=293). Of the 1232 participants who completed questionnaires, sixty eight percent (n=843) had attended the Bike to Work Breakfast previously.

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1.0 INTRODUCTION

Several organisations and agencies promote cycling as a viable alternative to motorised transport in Perth and throughout Western Australia. In addition to many health benefits, active transport such as cycling provides reductions in private vehicle use, road congestion, environmental pollution, and demands made on public transport systems and inner city parking. Uptake of active transport also has the potential to reduce current trends of physical inactivity in our community.

To successfully encourage the adoption of cycling as a viable form of transport, research has identified key determinants that must be considered to achieve such change. These determinants surround: the existence of a social milieu that accepts active transport as a normal and safe part of life; the development and sustainability of urban planning and the provision of facilities to support active transport; and the need for an intersectoral approach that encourages active transport. Interventions that seek to increase cycling as a viable mode of transport should consider the demographic characteristics, attitudes, knowledge, skills, physical environment and the policy environment associated with the target population.

The Department for Planning and Infrastructure's Bike to Work Breakfast is an example of an initiative that provides information on the determinants and domains influencing the behaviours and future intentions surrounding active transport in Perth, Western Australia. This year the breakfast was held on the 11 March, 2005 and aimed to increase awareness of, and promote cycling as an alternative mode of transport to and from work by encouraging all Western Australians to consider the transport, health, environmental, social and economic benefits of cycling.

2.0 LIMITATIONS

It is not known how many questionnaires were distributed, therefore the response rate cannot be calculated. The representativeness of this sample to cyclists who regularly bike to work is unknown, therefore, results from this research should be interpreted with caution and should not be generalised to the Western Australian cycling population. This sample is likely to contain cyclists who are committed to cycling and are already aware of initiatives such as the promotion of cycling as an alternate means of transport.

3.0 METHODS

3.1 Sample

Bike to Work Breakfast participants who were present in the Perth Central Business District on the morning of 11 March, 2005 were presented with a brief survey to complete. The total number of people who attended the Breakfast is not known.

3.2 Instrumentation

The questionnaire contained eleven items comprising issues related to the participant's experience of the Bike to Work Breakfast; how the participants heard about the Breakfast; the main reasons for, and frequency of cycling; distance travelled to work and what would encourage them to ride to work more often. Respondents were also asked if they had taken part in the Statewest Credit Society Bike to Work Challenge and if having a copy of the Perth Bicycle Network map had impacted on the amount of cycling they did.

3.3 Analysis

All statistical analyses were completed using the Statistical Package for Social Sciences (SPSS), Version 10 (SPSS Inc, 2001).

4.0 RESULTS

A total of 1232 questionnaires were completed by participants at the Bike to Work Breakfast on the morning of 11 March, 2005

4.1 Demographics

Table 1 outlines the demographic characteristics of the survey respondents. The majority of respondents were male (69%, n=845). There was an equal distribution of participation across age groups with the exception of respondents aged less than thirty years who were underrepresented compared to other age groups (16%, n=202).

Table 1. Demographic characteristics of survey respondents

		Number of Participants	% of Participants
Gender	Male	845	69%
	Female	348	28%
	Total a	1193	97%
Age Group	Under 30 years	202	16%
	31-40 years	353	29%
	41-50 years	324	26%
	Over 50 years	310	25%
	Total b	1189	96%

a Thirty nine people did not complete this question

b Forty three people did not complete this question

4.2 Awareness of the Bike to Work Breakfast

Sixty eight percent of respondents (n=843) had previously attended a Bike to Work Breakfast. Most participants found out about the 2005 Bike to Work Breakfast from signage on a bike path (28%, n=340) or from a friend (24%, n=292). Other ways participants found out about the Bike to Work Breakfast were from a flier (13%, n=159); in the mail (13%, n=158); or from a radio advertisement (9%, n=108). Twelve percent chose 'other', which included responses such as through bike clubs and cycling groups, and via the Department of Planning and Infrastructure's website.

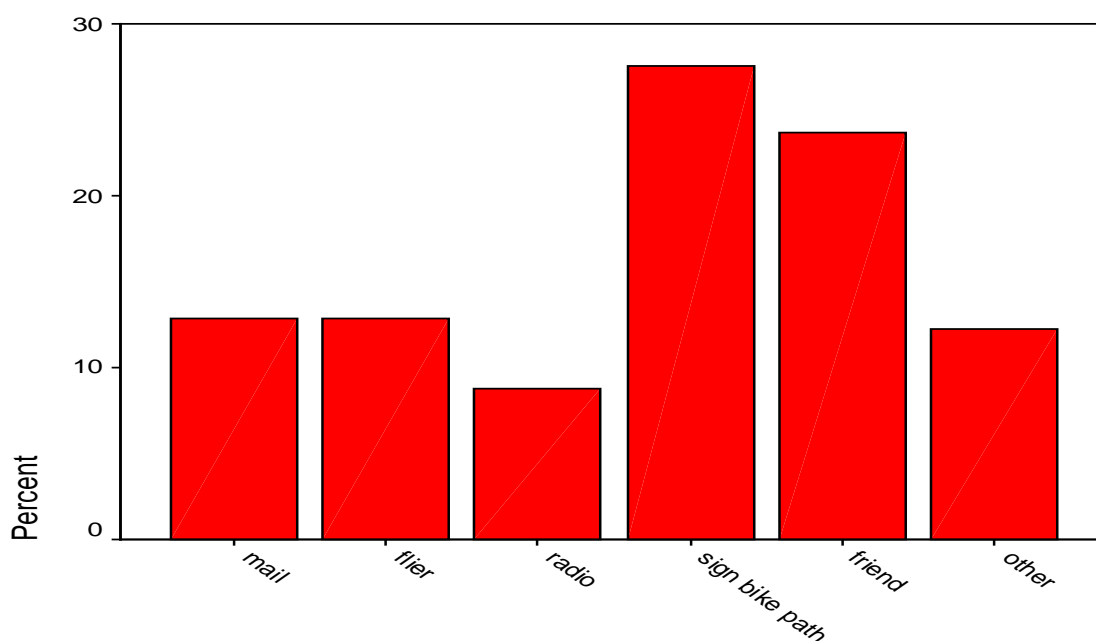


Figure 1: How respondents found out about the Bike to Work Breakfast

4.3 Reasons for, and frequency of cycling

The majority of respondents (84%, n=1035) cited improved fitness as one of the main reasons they chose to cycle. Sixty three percent (n=777) of respondents reported cycling for enjoyment, 53% (n=759) cycled as a means of transport, 42% (n=520) cycled to reduce stress and 42% (n=519) cycled because it is more cost effective than driving. Forty percent (n=494) of respondents reported cycling out of concern for the environment and 36% (n=444) cycled to avoid traffic congestion (see Table 2).

Table 2. Main reasons for cycling

Main Reason for Cycling	Number of Participants	Percentage of Participants
Improve fitness	1035	84%
Enjoyment	777	63%
Means of transport	655	53%
Reduce stress and tension	520	42%
Cheaper than driving	519	42%
Environmental concerns	494	40%
Avoid traffic congestion	444	36%
Other	80	6%

Total exceeds 100% as respondents could choose more than one response

Fifty three percent (n=595) lived within 10 kilometres of their workplace. Respondents were asked what would encourage them to ride to work more often. As shown in Table 3, the main incentives to ride to work more included showers at work (34%, n=422), secure bike parking at work (31%, n=377), more on road facilities (29%, n=360) and lockers at work (24%, n=293).

Table 3. What would encourage respondents to ride to work more often?

Enabler to ride more often	Number of Participants	Percentage of Participants
Showers at work	422	34%
Secure bike parking at work	377	31%
More on road facilities	360	29%
Lockers at work	293	24%
Better work facilities	233	19%
More off road facilities	197	16%
Flexible working hours	154	12%
People to ride with	95	8%

Total exceeds 100% as respondents could choose more than one response

Figure 2 illustrates the frequency of cycling among participants. Almost half (44%, n=538) of respondents reported cycling on a daily basis, a further forty two percent (n=524) cycle two to three times per week and 6% (n=77) cycled once a week.

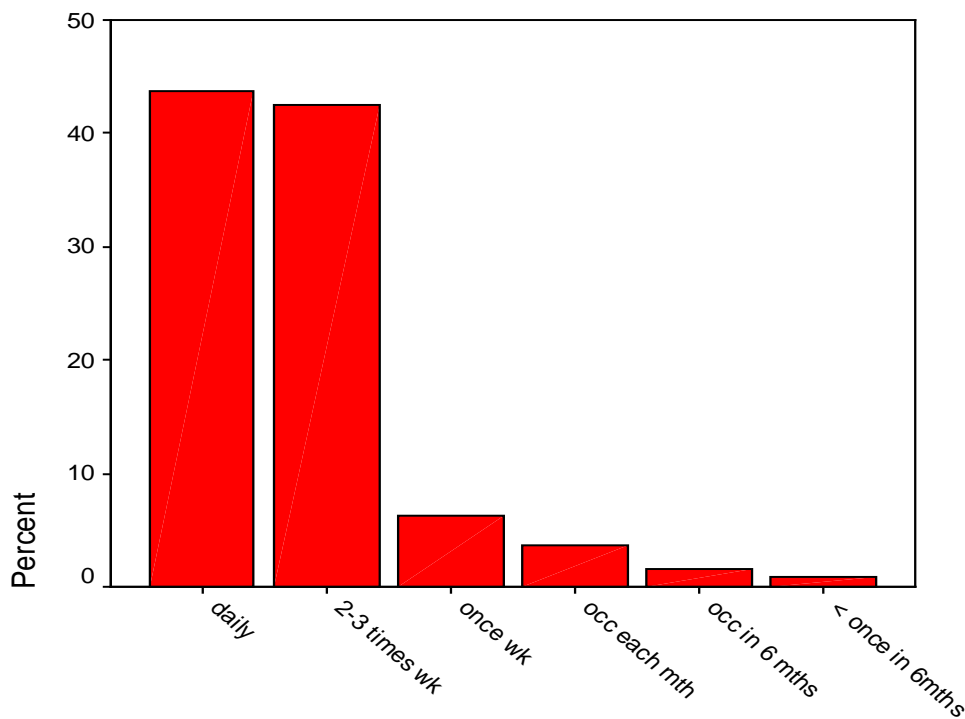


Figure 2. Frequency of cycling

Half of the respondents (52%, n=644) owned a Perth Bicycle Network map and 26% (n=321) noted this had increased their cycling. Eighteen percent (n=217) had participated in the Statewest Credit Society Bike to Work Challenge.

The weather did not impact significantly on the number of days cycled by respondents. Seventy six percent of respondents (n=951) cycled at least two days per week in warmer weather and 70% (n=866) cycled at least two days each week in cooler weather.

4.4 Predictors of frequency and distance of cycling

The impact of age and gender on frequency of cycling and number of kilometres cycled were explored. Table 4 compares each age group and their frequency of cycling. Results demonstrate similarity across age groups relating to the frequency of cycling undertaken by respondents. The majority of participants across all age groups were more likely to cycle more than once a week.

Table 4. Age and frequency of cycling (n=1182)

Frequency of cycling	Age of respondents (%)								*Total	
	< 30 years		31-40		41-50		>50 years			
Daily	79	39%	179	51%	150	46%	119	39%	527	44%
2-3 times per week	82	41%	133	38%	139	43%	156	51%	510	43%
Once a week	21	11%	16	5%	18	6%	17	5%	72	6%
Occasionally each month	11	5%	12	3%	10	3%	10	3%	43	4%
Occasionally in 6 months	6	3%	7	2%	4	1%	3	1%	20	2%
< once in 6 months	2	1%	4	1%	1	<1%	3	<1%	10	1%
Total	201	100%	351	100%	322	100%	308	100%	1182	100%

* Total number does not equal 1232 as not all participants answered these questions

Table 5 compares gender with frequency of riding. Overall there was little difference between the frequency of cycling by gender in this sample. The only significant difference being that more males (50%, n=421) than females (31%, n=107) rode on a daily basis however it should be noted that there were 2.4 times more males than females in this sample.

Table 5. Gender and frequency of cycling (n=1186)

Frequency of cycling	Gender of respondents (%)				*Total	
	male		female			
Daily	421	50%	107	31%	528	44%
2-3 times per week	336	40%	174	50%	510	43%
Once a week	48	6%	26	8%	74	6%
Occasionally each month	23	3%	21	6%	44	4%
Occasionally in 6 months	10	1%	10	3%	20	2%
< once in 6 months	3	<1%	7	2%	10	1%
Total	841	100%	345	100%	1186	100%

* Total number does not equal 1232 as not all participants answered these questions

4.5 Comparison between place of work and residence

Comparisons were made between the proximity of the workplace of respondents and their place of residence. There was a significant correlation between respondents place of residence and workplace ($r=0.6$, p value $.000$). Fifty two percent of respondents ($n=637$) worked in Perth or the immediate surrounding suburbs (postcodes 6000-6009). Nine percent of respondents ($n=82$) who provided information on both their workplace and place of residence ($n=918$) lived and worked in Perth and immediate surrounding districts while a further 31% lived and worked outside of these suburbs.

5.0 RECOMMENDATIONS

The following recommendations have been made from this report:

FUTURE STRATEGIES

Recommendation One: New cycling facilities and initiatives should be based upon the needs of the Western Australian cycling population

It is recommended that an audit be conducted to assess the current cycling infrastructure and its relevance to the needs of regular cyclists based upon the findings of this report. Common themes in participant responses relating to the creation of a cycling friendly environment and adequate workplace facilities to shower and secure equipment (including bikes and helmets). These results should be used to guide future action that will encourage and support cycling as a safe, alternative mode of transport for Western Australian commuters. The majority of respondents worked in Perth and its immediate surrounding suburbs and lived within a 12 kilometre radius of Perth. Therefore attention should not only focus on improving workplace facilities but also on improving infrastructure in outlying areas to encourage more people to cycle to work.

Recommendation Two: New message strategies should reflect the issues raised in this report

Findings from this report may be useful in developing future initiatives to increase the number of people who cycle regularly. These findings provide practitioners with an indication of the characteristics of people who cycle regularly in Perth, factors that motivate them to cycle and differences in cycling behaviour by age and gender. Further research is required to confirm if these findings are representative of the cycling population in and around Perth. In addition, several needs assessments should be conducted to assess effective ways to increase cycling throughout Western Australia, including sub groups such as culturally and linguistically diverse (CALD) populations.

FUTURE BIKE TO WORK BREAKFAST EVALUATIONS

Recommendation Three: Involve evaluators in the development of the Bike to Work instrument

It is recommended that the survey instrument used at the breakfast be reviewed by the agency conducting the evaluation prior to its' administration. This process would ensure that the items in the survey address the project objectives and provide relevant information that will allow appropriate analysis to inform future message strategies.

Recommendation Four: Supplement findings from Bike to Work Breakfast evaluation with further qualitative data

While data collected from this survey provides insights into the participants' cycling attitudes and behaviours, greater understanding of the barriers and enablers for cycling could be obtained by conducting a larger population-based cross-sectional survey. Questions should address the different barriers and enablers to cycling within metropolitan, regional, rural and remote areas of Western Australia. There is also an opportunity to address the issues affecting the cycling behaviours of CALD sub-groups, particularly those with lower or inadequate levels of physically activity.

6.0 CONCLUSION

The annual Bike to Work Breakfast held by the Department for Planning and Infrastructure aims to increase awareness of, and promote cycling as an alternative mode of transport to and from work. Cyclists attending the event were provided with a free, healthy breakfast and asked to complete a brief survey regarding their cycling attitudes and behaviours. The total number of people attending the breakfast in 2005 was not known, however a total of 1232 people completed a survey.

From this sample, completed surveys have: provided an insight into the demographic characteristics of those who attended the Bike to Work Breakfast; the frequency and intensity of cycling undertaken by this group; and identifies enablers to increase the number of respondents who regularly cycled to work. Strategies to increase cycling among the Western Australian population should take the findings of this report into consideration when developing interventions or strategies that seek to encourage more people to cycle to and from work on a regular basis.

7.0 APPENDIX A – FREQUENCIES

APPENDIX B – CROSS TABUALTIONS