
Greater Wellington free public transport pass trial – Evaluation

Report

Prepared for Greater Wellington Regional Council by

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September 2008

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Summary of evaluation results

The interpretation of the results of the free pass trial requires a judgement of confidence that what people say they have done, are doing and will do matches their actions. Looking at the use of public transport (PT) in the past 7 days, in conjunction with the impact on driving to work and comparing 2007 and 2008 use, the responses pretty well consistently suggest that the opportunity to try PT for free has resulted in some *genuinely* new users of PT services.

- 916 people were eligible for a free bus or train pass in this trial. In the follow-up survey one month after the trial, 390 people (43% of participants) reported that they had used PT in the past 7 days. Two-thirds of the 390 users had used PT on 3 or more days – 133 had used PT on 5 or more.
- 253 people (of 381 weekday users – 66%) responded that they drove less to work as a result of using PT.
- 407 people said they would be using PT in the next four weeks. 224 or 44% of respondents said this would be for 3-5 times a week.

The primary motivator for on-going PT use was **saving money**: together the reasons 'Using the bus/train service is cheaper than driving my car' (29%) and 'Fuel prices make it expensive to drive my car' (15.2%) form 44% of the main reasons given. These were followed by the weather (it's too cold/wet/windy to walk or cycle)' (16.4%) and 'Using the bus/train service is environmentally friendly / reduces my carbon footprint' (16%).

Unlike the responses to continuing to use PT, where there was a clear cut main reason (saving money) for on-going use, people who were not intending to use PT in the next four weeks had a wide variety of reasons. The most common main reason was 'the bus/train service took too long to get to where I wanted to go / it is quicker to travel by car' (20.5%), followed by 'Other commitments stop me from using the bus/train' (17%) and 'Using the bus/train service was too expensive' (15%). In all, issues to do with bus/train service reliability, frequency, timeliness and travel time, and route combined together to form around 50% of the main reason for not using PT.

The report includes recommendations to improve the results and evaluation in future trials.

1. Introduction

1.1 Overview

Greater Wellington Regional Council (GW) invited Pinnacle Research & Policy Ltd to undertake an evaluation of a public transport trial they were in the process of delivering, whereupon people who had pre-registered at their workplace were given a free bus or train pass for the period of approximately one week. The week chosen was the last week of May 2008, i.e. the week ending Saturday 31 May. Some people received their passes as early as Thursday 22 May.

Full details of the workplaces involved and how they were selected; the process of pre-registration for potential participants; the criteria for inclusion / exclusion of possible participants for the trial; the mechanisms for delivering the free passes, etc. are available from GW directly.

In total, there were 916 pre-registered respondents eligible to participate in the free pass trial. GW disbursed the free passes to a contact person in each workplace who was responsible for ensuring that eligible participants received the passes. For various reasons, not all of the eligible participants actually received their pass prior to the end of May 2008. Others received it only a few days before the end of May and hence did not have a whole week to use it.

1.2 Evaluation approach

We were invited at the end of May to assist with the trial evaluation, with the first meeting to discuss it occurring on 3 June. At this meeting, we agreed to a two step evaluation process, involving:

1. Immediate follow-up: on 9 June, all eligible participants were invited to complete two questions. The first one asked what days they had used the free bus or train pass in the last week of May. The second question depended on the response to the first: people who had used the free pass were also asked what time of day they had used it on weekdays; while people who had not used the free pass were asked their reasons for not using it, and excused from completing the follow-up survey at the end of June.
2. Follow-up one month later: this survey asked participants about their experience of using public transport (PT), particularly during the week they had the free pass; their on-going PT use; and any reasons for continuing or not continuing to use the bus or train.

Participants were expecting to complete a survey one month after their receipt of the free PT pass. Hence, the two question 'mini-survey' (2Q survey) was extra and GW made it clear that participants did not have to complete it and that there was still to be another survey at the end of June.

People who did not complete the 2Q survey were asked questions about their free pass use in the follow-up survey.

1.3 Preparation of data for analysis

We were provided with the survey response data on Excel spreadsheets which we then imported and converted for use in SPSS. We then had to do a significant amount of data cleaning as, for example, there were around 200 lines that had to be deleted from the follow-up survey data because of multiple responses from the same individuals. Two principles were used:

1. The lines with more complete data were preferred.

2. Where lines were identical with respect to completeness, the line entered later was preferred.

There was also difficulty in managing the datasets because the unique identifier used was the person's name or email address, rather than a unique 'code' as is common practice for such surveys.

Because the dataset preparation was extraordinarily time-consuming, we have had to keep some of the analysis to a higher level than was originally intended, as we did not have the time allocated to do more.

1.4 Survey response rates

Overall, response rates were very high: as Table 1 shows, 874 participants (95%) responded to either one or both surveys. 637 people (70%) responded to the 2Q survey. In addition, the trial coordinator at Greater Wellington received 14 emails directly from people advising her that they had not used their free pass. In all, 838 people were technically 'eligible' to complete the follow-up survey (916 original participants, less the 78 who completed the two question survey and had not used their free pass); of these, 675 (81%) took the opportunity to complete the second survey. There was some fall off between the first and second surveys, in that 121 people who responded to the two question survey who had used their free pass were also invited to do the follow-up survey, but did not complete it. Twenty-six of these people were identified as either being on annual leave during the period of the follow-up survey or as having left their employer.

Table 1 Response rates to 2Q survey and follow-up survey

Surveys answered	Number of responses	Percent
Two questions survey, not Follow-up, did not use pass	78	8.9
Two question survey, not follow-up, did use free pass	121	13.8
Follow-up survey only	237	27.1
Both the two questions survey & follow-up	438	50.1
Total	874	100.0

2. Evaluation: Public transport use during trial period

2.1 Non-response issue

Ninety-two people who did not complete the two question survey (2Q survey) also did not provide any information about how or when they used their free train or bus pass in the follow-up survey. For some of them at least, this may have been due to a technological error. Invitations to the follow-up survey were varied depending on whether or not the participant had (1) completed the 2Q survey and (2) used their free pass or not. People who had completed the 2Q survey did not get asked to repeat the information they had already provided about their free pass use / non-use. Conversely, people who had NOT completed the 2Q survey WERE asked about their free pass use / non-use. As it seems unlikely that a number of respondents would all skip the exact same questions, and yet choose to complete the remainder of the survey, we think there was an error in the issuing of their invitations, such that they simply did not get asked to provide their free pass use information.

2.2 Frequency of free pass use

The people responding to the 2Q survey were asked to identify the specific days they used their pass (e.g. Thursday 22 May; Saturday 31 May) while the ones responding to the follow-up survey, a month after they had used their pass, were asked 'about how many days did you use your free bus or train pass?' and 'did you use your free bus or train pass on... (weekdays only; weekends only; weekends and weekdays). We have combined the responses from the two surveys in Table 2.

Table 2 Use of free pass - 2Q survey and follow-up survey combined

	Number of people	Percent
Did not use free pass	126	14.4%
Weekday only	495	56.6%
Weekend only	11	1.3%
Weekday & weekend	145	16.6%
Sub-total	777	88.9%
Did not say	97	11.1%
Total	874	100.0%

Of the possible 916 participants in the free pass trial, 651 people (71%) reported that they used their free pass at least once. 126 people (14%) reported that they had NOT used the pass. When the 14 people who emailed the GW co-ordinator are taken into account, there are 140 (14%) people who did not use their free pass. This leaves 125 people's (15%) use unaccounted for.

Around 50% of the free pass users (273 people) used their free pass on 5 or more days during the trial period (see Table 3). A further 30% used it on 3-4 days. Note that this is how many *days* they made trips, rather than the number of *PT trips* made on each day.

Table 3 Total number of days free pass used - based on 2Q survey responses

Total number of days free pass used - 2Q survey only	Frequency	Percent
1-2 days	109	19.9
3-4 days	166	30.3
5 days	103	18.8
6 or more days	170	31.0
Total	548	100.0

Passes were used on 'weekdays only' by 420 people, and nearly one-half of these (185 people – 44%) used their pass 5 or more days during the trial period. 22% of the people who used their pass (121 people) used it on both weekdays and weekends – and Table 4 reveals that nearly three-quarters of them (73%) used it 5 or more days during the trial period.

Table 4 Total number of days free pass used by the type of day it was used on – based on 2Q survey responses

Total number of days free pass used - 2Q survey only	Weekday only	Weekend only	Weekday & weekend	Total
1-2 days	95	7	7	109
3-4 days	140	0	26	166
5 days	92	0	11	103
6 or more days	93	0	77	170
Total	420	7	121	548

2.3 Time of day use of free pass

Table 5 shows that, on weekdays, people most commonly used their free pass to travel during peak periods – 72% of trips were before 9 am or between 4 pm and 6 pm.

Table 5 Time of weekday that people used free pass (2Q survey only)

On how many weekdays (Monday to Friday) did you use your free bus or train pass for journeys starting...	Percent of days
Total number of weekdays passes used	N=1139
Before 9 am	39%
Between 9 am and 4 pm	10%
Between 4 pm and 6 pm	33%
After 6 pm	17%
Total	100%

2.4 Use of free train v. free bus pass

Having a free train pass rather than a free bus pass did not affect people's propensity to use their pass (refer Table 6).

Table 6 Propensity to use free PT pass by type of pass (bus or train)

Free pass use	Bus pass	Train pass	Total
<i>Count</i>	<i>N=506</i>	<i>N=270</i>	<i>N=776</i>
Did not use free pass	16%	17%	16%
Used free pass	84%	83%	84%
Total	100%	100%	100%

2.5 Comparing characteristics of free pass users v. non-users

Of those who provided gender information, more women than men expressed an interest in participating in the trial (63% compared with 37%).

There no discernible distinctions in age or gender between users and non-users of the free PT pass. Men and women were equally likely to be a free pass non-user or a user; no particular age group showed more likelihood of being a user/non-user.

Location of residence (suburb) information was also collected at pre-registration, but we were unable to use this for analysis as respondents could type in their suburb name and the variants are numerous. Providing a drop down list would be helpful in this regard.

Age and gender information was collected on the pre-registration survey, hence the information is available for all potential participants in the free pass trial. By contrast, the information collected on the number of household vehicles kept overnight at a residence, household composition, and driver's licence holding rates was only collected in the follow-up survey. As there were only 43 non-users who responded to the follow-up survey (those not using a pass and completing the 2Q survey were not invited to do the follow-up survey), there are no conclusive findings regarding driver's licence holding rates (95% non-users compared with 96% of free pass users);

It may be worth exploring the effect of household composition on PT use in future free pass trials, as there is some indication that different household types may be more or less likely to use PT.

Table 7 Household composition and free pass use (indicative only due to small sample size of non-users)

Which best describes your current living arrangements?	Did not use free pass	Used free pass	Total
<i>Count</i>	<i>N=43</i>	<i>N=499</i>	<i>N=538</i>
Person living alone	7.0%	9.8%	9.6%
Married/de facto couple only	32.6%	35.3%	35.1%
Other adults only	20.9%	15.0%	15.5%
Couple (including extended family) with at least one child under 18 years old	25.6%	29.3%	29.0%
Single adult with at least one child under 18 years old	4.7%	4.4%	4.4%
Couple (including extended family) with all children over 18 years old	9.3%	4.8%	5.2%
Single adult with all children over 18 years old	0.0%	1.4%	1.3%
Total	100.0%	100.0%	100.0%

Vehicle ownership patterns showed a marked difference, in that nearly 75% (32 people) not using their free pass lived in households with more than one vehicle, compared with 50% (250 people) that did use their free pass. This suggests that having more than one vehicle available in a household could be a deterrent to using public transport. However, this result is only *indicative* because for 'did not use free pass', the sample size (n) is 43 respondents.

Table 8 Vehicle ownership and use of free pass (indicative only due to small sample size of non-users)

How many motor vehicles (cars, SUVs, vans, utes, motorcycles) are kept overnight at your home address?	Did not use free pass	Used free pass	Total
<i>Count</i>	<i>N=43</i>	<i>N=499</i>	<i>N=538</i>
0	0	3.6%	3.3%
1	25.6%	46.5%	44.8%
2	41.9%	34.1%	34.7%
3	20.9%	11.2%	12.0%
4 or more	11.6%	4.6%	5.2%
Total	100.0%	100.0%	100.0%

2.6 Free pass use compared with usual mode of travel to work

People who did use their free pass were less likely to 'drive alone' to work (36%) and more likely to normally use 'active transport' (walking and cycling – 17.5%) to travel to work than those who did not use their free pass (43% were 'drive alone' and 13.5% used active transport). There was no notable difference in other modes used (meaning that people were equally likely to use their pass or not use their pass if their usual mode of travel to work was motorcycle, drive with a passenger, or be a passenger in a vehicle). The categories PT, 'various modes used' and 'no response' are too small and/or meaningless to analyse.

Table 9 Free pass use compared with mode(s) usually used to travel to work

Mode(s) used to travel to work	Use of free pass		
	Did not use free pass	Used free pass	Total
<i>Count</i>	<i>N=126</i>	<i>N=651</i>	<i>N=777</i>
Drive alone	42.9%	35.8%	36.9%
Motorcycle	1.6%	2.0%	1.9%
Drive passenger	22.2%	22.1%	22.1%
Passenger	15.1%	17.4%	17.0%
Walk	10.3%	12.1%	11.8%
Cycle	3.2%	5.4%	5.0%
PT (bus, train or ferry, incl P&R)	2.4%	.6%	.9%
Various modes used	1.6%	1.2%	1.3%
No response	.8%	3.4%	3.0%
Total	100.0%	100.0%	100.0%

2.7 Perceptions of service timeliness and quality of staff

People who had used their free pass were asked, in the follow-up survey, to provide some feedback on the PT service timeliness and quality during the free trial period.

Most people (72%) reported that their train or bus service was usually on time (Table 10 refers). Of these, train pass users were more likely to report their service being on time than bus pass users (76% compared with 70.5%).

Table 10 Timeliness of the bus/train service

Was the bus/train service usually on time?	Free bus or train pass			Combined
	<i>Count</i>	Bus pass	Train pass	
Yes	434	70.5%	75.6%	72.3%
No	166	29.5%	24.4%	27.7%
Total	600	100.0%	100.0%	100.0%

People using their free passes expressed a high level of satisfaction with their experience using the train or bus during the trial period: 42% rated their experience as 'good' while 28% rated it as either 'very good' or 'excellent'. Again, train pass users were somewhat more likely to rate their experience as 'very good' or 'excellent' (31.5% compared with 26.6% of bus pass users).

Table 11 Customer satisfaction with bus / train service (during the trial period)

	Free bus or train pass			
Overall, how would you rate your experience during your week's trial using the bus or train service?	Count	Bus pass	Train pass	Combined
Poor	46	6.9%	9.0%	7.6%
Fair	134	24.0%	19.0%	22.3%
Good	252	42.6%	40.5%	41.9%
Very Good	135	20.2%	26.7%	22.4%
Excellent	35	6.4%	4.8%	5.8%
Total	602	100.0%	100.0%	100.0%

Table 12 shows that people using the free passes also gave bus/train staff high ratings for their customer service (46% rated staff customer service as 'good', while 31% rated it as 'very good' or 'excellent'). Bus pass users rated the staff's customer service as 'very good' or 'excellent' slightly more often than train pass users (32% compared with 29%)

Table 12 Bus / train staff's customer service rating (during trial period)

	Free bus or train pass			
How would you rate the staff's customer service?	Count	Bus pass	Train pass	Combined
Poor	26	5.6%	1.9%	4.3%
Fair	114	17.7%	21.2%	18.9%
Good	275	44.4%	48.1%	45.7%
Very Good	147	25.6%	22.2%	24.4%
Excellent	40	6.7%	6.6%	6.6%
Total	602	100.0%	100.0%	100.0%

3. Evaluation: Public transport use following trial period

3.1 Overview

While the trial could be said to be successful in having had 71% of eligible participants giving PT a 'go', Greater Wellington wanted to assess whether or not anyone would continue to use PT beyond the one-week trial period. Furthermore they wanted to know what impact people's PT use could have on their car use. Hence, the follow-up survey asked respondents about their PT use in the past 7 days; their possible PT use in the next month; whether or not they had reduced the amount of car trips they made.

3.2 PT use in the past 7 days

In the follow-up survey, 390 people reported that they had used PT in the past 7 days – this is fully 43% of the 916 eligible participants for the original free pass trial. Two-thirds of the 390 users had used PT on 3 or more days – 133 had used PT on 5 or more. Table 14 shows that the vast majority of people used PT on weekdays only (82% of the 390 users).

Table 13 Number of days PT used in the past 7 days (one month after free pass)

Total number of days PT used in past 7 days	Number of people	Percent
Did not use PT in past 7 days	141	26.6
1-2 days	127	23.9
3-4 days	134	25.2
5 days	103	19.4
6-7 days	26	4.9
Total	531	100.0

Table 14 Days of the week PT used in the past 7 days (one month after free pass)

Type of days PT used on, in past 7 days	Number of people	Percent
Did not use PT in past 7 days	121	23.7
Weekdays only	318	62.2
Weekend only	9	1.8
Weekdays & weekend	63	12.3
Total	511	100.0

Women were slightly more likely than men to have used PT in the past 7 days (78% compared with 72%), and this use was more likely to be on 'weekdays only'.

3.3 Impact of PT use on travel to work

3.3.1 Usual mode of travel at time of pre-registration

While we do not know for certain that people using PT on weekdays were using it for travelling to and/or from work, we can surmise from the *timing* of their trips that this might be the case for many of them: 68% of all weekday PT use occurred during the peak period hours of before 9 am and between 4 pm and 6 pm.

Of the 381 people who used the bus or train on a weekday, in the past 7 days, 131 had indicated (on their pre-registration) that they usually 'drive alone' to work (Table 15 refers). Hence their use of the bus or train would have a direct impact on the number of vehicles on the road, fuel consumption greenhouse gas and other air pollutant emissions. A further 78 had indicated they usually 'drive with a passenger', but as we don't know what the other person (passenger or driver) is doing now (they may still be driving), we cannot assume that their vehicle trips would be removed from the transport system.

Note, too, that 74 people who used PT on a weekday indicated that they usually 'cycle' or 'walk' to work – the substitution of PT trips for active transport trips is not generally considered a desirable outcome from initiatives to encourage PT use.

Table 15 Usual mode of travel to work of people using PT on a weekday (in past 7 days)

Mode usually used to travel to work	Number of people responding	Percent
Drive alone	131	34.4%
Drive with a passenger	78	20.5%
Motorcycle	8	2.1%
Passenger	71	18.6%
Cycle	28	7.3%
Walk	46	12.1%
PT (bus, train or ferry, incl P&R)	1	.3%
Various modes	5	1.3%
No response	13	3.4%
Total	381	100.0%

3.3.2 Impact of PT use on driving to work

Respondents who had used PT on weekdays in the past 7 days were asked to estimate the impact of their PT use on the number of times they drove to work that week. 253 people (of 381 weekday users – 66%) responded that they drove less to work as a result of using PT. As can be seen in Table 16, the vast majority (182 people – 72% of those saying they drove less) said they drove between 2 and 5 days less to work.

Table 16 Impact of using PT on driving to work in last week

Did using the bus or train last week mean that you drove to work less often? (ie. less often than before getting the free bus or train pass.)	Number of people	Percent
No, I don't usually drive to work	82	21.9
No, there was no change in how much I drove to work	39	10.4
Yes, I drove 1 day less to work	62	16.6
Yes, I drove 2-3 days less to work	103	27.5
Yes, I drove 4-5 days less to work	79	21.1
Yes, I drove 6-7 days less to work	9	2.4
Total	374	100.0

3.4 Past and future use of PT

Respondents were asked to compare their PT use at the time of the follow-up survey (completed in the first few days of July 2008) with June 2007. This question was asked to check that what people were reporting in terms of their PT use one month after the trial was, in fact, a change or an increase from their use previously.

While 260 people reported that they were using PT more now than in June 2008, 39 of these also stated that they had not used PT in the past 7 days. For these people, their *perception* of PT use may not match their actual use.

Table 17 PT use in the past 7 days compared with PT use in June 2007

Total number of days PT used in past 7 days	In June 2008, did you use the bus or train...				Total
	More often than you did in June 2007	About the same as you did in June 2007	Less often than you did in June 2007	Don't know / can't really compare (e.g. living in different city)	
Did not use PT in past 7 days	39	35	27	23	124
1-2 days	61	27	17	21	126
3-4 days	79	23	20	12	134
5 days	67	18	10	7	102
6-7 days	14	3	4	5	26
Total	260	106	78	68	512

Because the follow-up survey occurred only one month after the free pass trial, we included a question which asked people to estimate their potential PT use over the next four weeks. 407 people said they would be using PT in the next four weeks.

Table 18 Predicted use of PT in next 4 weeks

Thinking ahead to the next 4 weeks, how many days per week do you think you will use the bus or train?	Number of people	Percent
I won't be using the bus or train at all in the next 4 weeks	107	20.8
1-2 days each week	169	32.9
3-5 days each week	224	43.6
6-7 days each week	14	2.7
Total	514	100.0

Again, there may be some mismatch between what people say they will be doing and what they *actually do* - Table 19 shows that 59 people said they would be using PT in the next 4 weeks, although they had not used PT at all in the past 7 days. Of course, some of these people may have been away during the 7 days asked about in the survey.

Table 19 Potential PT use in the next 4 weeks compared with actual PT use in past 7 days

Total number of days PT used in past 7 days	Thinking ahead to the next 4 weeks, how many days per week do you think you will use the bus or train?				
	I won't be using the bus or train at all in the next 4 weeks	1-2 days each week	3-5 days each week	6-7 days each week	Total
Did not use PT in past 7 days	65	40	17	2	124
1-2 days	23	80	23	1	127
3-4 days	6	35	92	1	134
5 days	11	11	77	4	103
6-7 days	2	3	15	6	26
Total	107	169	224	14	514

3.5 Reasons for continuing to use PT

In the follow-up survey, people who said they were intending to use PT in the next four weeks were asked to indicate all reasons why they would do so, and to select their main reason for continuing.

The primary motivator for on-going PT use was **saving money**: together the reasons 'Using the bus/train service is cheaper than driving my car' (29%) and 'Fuel prices make it expensive to drive my car' (15.2%) form 44% of the main reasons given. These were followed by the weather (it's too cold/wet/windy to walk or cycle)' (16.4%) and 'Using the bus/train service is environmentally friendly / reduces my carbon footprint'.

Table 20 Reasons for using PT in the next four weeks

Reason	All reasons		Main reason	
Using the bus/train service is cheaper than driving my car	255	17.1%	121	28.8%
Using the bus/train service is environmentally friendly / reduces my carbon footprint	270	18.2%	67	16.0%
Using the bus/train service is relaxing	135	9.1%	8	1.9%
Fuel prices make it expensive to drive my car	251	16.9%	64	15.2%
Using the bus/train service is convenient	184	12.4%	57	13.6%
The weather (it's too cold/wet/windy to walk or cycle)	157	10.6%	69	16.4%
Using the bus/train takes a similar amount of time as driving and parking my car	110	7.4%	11	2.6%
I enjoy using the bus/train	109	7.3%	8	1.9%
Other	16	1.1%	15	3.6%
Total	1487	100.0%	420	100%

3.6 Reasons for not continuing to use PT

In the follow-up survey, people who said they were *not* intending to use PT in the next four weeks were asked to indicate all reasons why they would not do so, and to select their main reason for not continuing.

Unlike the responses to continuing to use PT, where there was a clear cut main reason (saving money) for on-going use, people who were not intending to use PT in the next four weeks had a wide variety of reasons. The most common main reason was 'the bus/train service took too long to get to where I wanted to go / it is quicker to travel by car' (20.5%), followed by 'Other commitments stop me from using the bus/train' (17%) and 'Using the bus/train service was too expensive' (15%). In all, issues to do with bus/train service reliability, frequency, timeliness and travel time, and route combined together to form around 50% of the main reason for not using PT.

Table 21 Reasons for not using PT in the next four weeks

Reason	All reasons		Main reason	
The bus/train service did not run often enough / didn't go when I wanted to use it	45	12.5%	11	9.4%
The bus/train service was not reliable; services were late / too early / didn't show up at all	42	11.7%	12	10.3%
Using the bus/train service was too expensive	39	10.9%	18	15.4%
I often didn't get a seat on the bus or train	36	10.0%	4	3.4%
The bus/train staff were rude / unhelpful / unfriendly	15	4.2%	0	0.0%
The bus stop or train station was hard to get to from my home	19	5.3%	3	2.6%
It was hard to get to my workplace from the bus stop or train station	13	3.6%	3	2.6%
I had to use 2 or more bus/train services to get to where I wanted to go	38	10.6%	9	7.7%
The bus/train service took too long to get to where I wanted to go / it is quicker to travel by car	63	17.5%	24	20.5%
Other commitments stop me from using the bus/train	36	10.0%	20	17.1%
Other	13	3.6%	13	11.1%
Total	359	100.0%	117	100.0%

3.7 Comments from respondents

Over 650 people took the opportunity to comment on the GW promotion, and/or on various aspects of the service. What follows is a high level summary of the comments: it could be worthwhile having a more detailed examination of these for feedback on bus/train services in Wellington from people who have been non- or irregular-PT users.

In general, there was some very positive feedback about the free pass initiative, in that several people observed that it was a great opportunity and that they were now PT 'converts'. Some of their comments might be worth using in future promotions.

There were also many comments about the lack of reliability of specific services, in terms of buses (and trains) running late, being at (or over) capacity, such that they left passengers behind or did not stop a particular stops or buses and/or carriages being in need of re-furbishing. Some people questioned promotions such as this one being suitable given that some services were already at capacity at peak, suggesting that more frequent services (or more train carriages on existing services) should be in place before trying to increase the number of people using them.

People also discussed the reasons that they were not intending to continue to use PT, particularly to do with the length of time it took to travel by PT compared with by car and also the cost of PT vs the cost of driving to work.

4. Recommendations for evaluating future trials

The interpretation of the results of the free pass trial requires a judgement of confidence that what people say they have done, are doing and will do matches their actions. Looking at the use of PT in the past 7 days, in conjunction with the impact on driving to work and comparing 2007 and 2008 use, the responses pretty well consistently suggest that the opportunity to try PT for free has resulted in some *genuinely* new users of PT services.

It would be useful to consider the results in the context of the whole workplace population that was potentially eligible/available to participate in the trial; our late involvement meant we did not have this type of information.

It may be worth noting that Friday 30 May and Saturday 31 May were part of Queen's Birthday weekend, which has a statutory holiday on Monday, 2 June. Typically, many New Zealanders 'go away' from home for the long weekend. This may have had some impact on the use of the free pass, and we suggest that future trials be timed to occur away from statutory holidays, and if possible, school term holidays.

In addition, there were a reasonable number of people who did not use their free pass simply because they did not get it before the one week period was finished, or they got it a couple of days prior to its completion. Methods of ensuring that the passes are distributed in a timely manner should be explored.

It would be helpful to consider what questions are asked, and how data is to be collected, in the pre-registration survey. For example, to ensure consistent responses, it would be better to offer a 'drop down' list containing the numbers and names of all the bus/train services, so people can select the appropriate one. Similarly, a drop down list of suburb names would mean that this information could be analysed in future promotions.

It may not be necessary to collect data on age of respondents, given that all people in the survey will be of 'working age'; there were no discernible effects of age on the usage of the free pass; and there isn't likely to be a reason to match the study population with the more general adult population. Vehicle ownership and household composition would be more relevant information to collect, as this appears to have a strong effect on mode choice for other modes (already demonstrated for walking and cycling – see for example, Sullivan and O'Fallon, 2006).

To get a more accurate measure of the impact on driving, people could be asked, at pre-registration, how many days they drove their car to work in the past 7 days, and this question repeated in the follow-up survey. This information could then be used to calculate how many driving trips were saved. The existing question on 'usual' mode of travel could be retained to ensure that regular PT users were not included in the free pass trial or, even better, people could be asked how many days they took the bus/train to work in the past 7 days.

An approach that could generate better measurement or comparison of the 'counterfactual' (or what would have happened without the intervention) would be to have a control group as part of the trial. Assuming that there is random division into trial and control group, with people being randomly selected from the same population, having a control group would, among other things, mean that:

- Some awkward questions in the follow-up survey - designed to confirm that any difference in PT use is 'real' - such as whether people thought they used PT "More often than you did in June 2007" or "Did using the bus or train last week mean that you drove to work less often? (ie. less often than before getting the free bus or train pass.)", could be avoided. Rather than these awkward, subjective questions, both groups would be asked factual questions about their actual PT usage in the previous week, and comparisons drawn from that.

- There was automatic control for changes in external factors e.g. seasons, weather, changes in fuel price, changes in PT services, etc.

Apart from issues to do with (1) allowing people to respond multiple times to the survey (resulting in considerable data cleaning efforts) and (2) not having a 'unique identifier' (see below for discussion of these), the two stage survey process of asking people immediately after the trial period to document their use and then asking them a month later what their on-going use is, worked well as a means of identifying short term behaviour change.

In order to identify medium term behaviour change, we would recommend either:

1. A further follow-up survey after 3 months or 6 months. This could be another 2Q survey (what days in the last 7 days did you use PT; and 'Did using the bus or train last week mean that you drove to work less often?' or another similar question about impact of PT use on car driving habits).
2. Replacing the current follow-up survey after one month with one that occurs after 3 months. In this case, we'd recommend committing participants to responding to both the 2Q survey and the fuller follow-up survey, and some alterations to the questions to suit the longer time frame.

Some lessons about good practice with on-line surveys that may be relevant to future Greater Wellington's surveys involving e-mail invitations to individuals also emerged. Adhering to such good practice principles is particularly important if there is a multi-stage survey process (e.g. as with the current trial where there was an initial registration survey, then the brief 2Q survey shortly after the trial, with the main follow-up survey a month later).

First, in contrast to the usual workplace travel plan surveys where a common invitation is forwarded throughout the workplace, if invitations are sent to individual e-mail addresses then multiple responses from the same person should be prevented. It can be difficult and time-consuming to later identify which of multiple responses from the same individual probably contains their intended final answers (it is not always the response from their last login). Preventing multiple responses is easily done in the CheckBox software.

Second, using people's names as the 'Username' in the survey software is inherently risky. This is because people's names are not necessarily unique, whereas to safely merge surveys from multiple stages unique ID variables are needed.

Hence, we suggest that, for future surveys using e-mail invitations, a separate project-related code be used as the UniqueIdentifier/Username. This ensures they are unique. For example:

- TK2001, TK2002... for normal respondents (TK is a fairly arbitrary to keep projects separate, here just thinking that the project has a focus on tickets, and avoiding the letters most confusable with numbers i.e. o, l);
- TK5001 etc for a few 'spare' ids to be used if a few respondents request an entirely new chance to do to the survey (these invitations can be included in the main batch of invitations, but sent to the Greater Wellington survey coordinator so that they can forward as necessary).
- zzSam, zzCarolyn etc to clearly show testers (who can then easily be deleted from the live file by sorting on Username within CheckBox).

5. Selected References

Sullivan, C., O'Fallon, C. (2006). *Increasing cycling and walking: an analysis of readiness to change*. Wellington: Land Transport New Zealand. Available from www.landtransport.govt.nz/research/reports/294.pdf