

# Let's Carpool: Wellington Region Evaluation Report 2012



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# 1. Introduction

Let's Carpool is an initiative of Greater Wellington Regional Council (GW), launched in May 2009. The main aim of the initiative is to increase vehicle occupancy for trips to and from work in the Wellington region. A website was created, which enables commuters to look for other commuters to share rides with to and from work; see [www.letscarpool.govt.nz](http://www.letscarpool.govt.nz).

One year after the launch of Let's Carpool, approximately 1,300 people were registered on the Let's Carpool website. At this time researchers at the Centre for Sustainable Cities of Otago University carried out an evaluation study, to examine its effectiveness in encouraging carpooling.<sup>1</sup>

Results from the initial evaluation indicated that Let's Carpool had encouraged the uptake of carpooling. The percentage of participants who indicated they carpoled to work as their main mode of transport increased by 12.5%.

This 2012 evaluation study aims to replicate the methodology of the previous evaluation study and provide GW with an updated picture of the effectiveness of the Let's Carpool initiative. The aim of this evaluation is to answer the following key questions:

- 1) Have participants changed how they travel to work since registering with Let's Carpool? Has vehicle occupancy increased, i.e. have participants started carpooling more often?
- 2) What are some of the factors that have helped those who registered with Let's Carpool to start carpooling? What were some of the barriers to starting carpooling?

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<sup>1</sup> Abrahamse, W.; Keall, M. (2011) Weaving a local web: Evaluating the effectiveness of Let's Carpool to encourage ridesharing to work. New Zealand Centre for Sustainable Cities: Otago University, Wellington.

## 2. Methodology

### 2.1 The survey

An online survey was used to evaluate the Let's Carpool initiative. The survey was similar to the previous evaluation survey developed by the Centre for Sustainable Cities in collaboration with GW.<sup>2</sup>

The survey collected information on past and present travel mode to work; registering with Let's Carpool and searching for matches; and reasons for (not) carpooling. The survey guided people to different questions depending on the answers they had given to previous questions. This way, appropriate questions could be asked to three distinct groups of registrants: (i) respondents who were currently carpooling, (ii) respondents who had carpooled since registering, but who were currently not carpooling and (iii) respondents who had not started carpooling since registering.

### 2.2 Recruitment of participants

In April 2012, 2160 people had registered with Let's Carpool. Of the people who were registered, those with non-working email addresses or those who had removed their profile from the website since registering were removed from the database used to recruit survey participants. An invitation to fill out the survey was sent to the remaining registrants of Let's Carpool (N = 1950). The email was addressed to the individual registrant and contained information about the purpose of the survey. It also displayed their ticket number to enter a prize draw (a chance to win one of two \$100 Prezzy cards).

The email invitation was sent at the beginning of April 2012. One week after the survey had gone online, an email was sent to all registrants thanking them for participating and reminding those who had not yet filled out the survey to do so.

### 2.3 Sample of participants

A total of 473 registrants of Let's Carpool filled out the online survey. This gave a response rate of 24%. Based on the data gathered when people registered, a comparison was made between participants who filled out the survey and all registrants with Let's Carpool (to check for response bias). Table 1 shows the travel mode choice to work when registering for all registrants and survey respondents.

**Table 1. Travel mode choice to work for all Let's Carpool registrants and the survey respondents**

Travel mode choice	Survey sample (N = 473)	All registrants (N = 2160)
Drive alone	36.2%	33.9%
Carpooling*	13.2%	11.8%
Train	27.1%	28.4%
Bus	15.2%	18.0%
Walk/run/cycle	5.0%	2.8%
Other	3.3%	5.1%

\* Carpooling includes the categories: drive with adult passenger(s) and passenger in private vehicle.

<sup>2</sup> Abrahamse, W.; Keall, M. (2011) Weaving a local web: Evaluating the effectiveness of Let's Carpool to encourage ridesharing to work. New Zealand Centre for Sustainable Cities: Otago University, Wellington.

The sample of survey respondents, shown in Table 1, is reasonably representative of the population of Let's Carpool registrants according to travel mode choice to work when registering.

## 2.4 Statistical tests

In this report all the comparisons that have been made were tested for statistical significance at the 95 percent confidence level (alpha level set at 0.05). The alpha level refers to the probability that a difference exists when in actuality it does not.

The confidence interval for a proportion,  $\pi$ , is:

$$p \pm z\sigma_p$$

where  $p$  is the proportion in the sample,  $z$  depends on the level of confidence desired ( $z = 1.96$  for 95% confidence), and  $\sigma_p$ , the standard error of a proportion, is equal to:

$$\sigma_p = \sqrt{\frac{\pi(1-\pi)}{N}}$$

where  $\pi$  is the proportion in the population and  $N$  is the sample size.

To see whether the results of two groups that have been sampled independently of each other (e.g., the mode choice when registering and in evaluation surveys) are statistically significant their confidence intervals are compared. If the confidence intervals overlap the results of the two groups are not statistically significant.

The commentary in this report only includes findings/changes that are significant at the 95% confidence level. Whilst other trends may be apparent, these are not significant at this level with the current sample sizes in the datasets.

### 3. Results

This section discusses the main findings from the 2012 evaluation survey. Firstly, the effectiveness of Let's Carpool in terms of finding carpool matches and encouraging carpooling is examined. Then, the aspects participants like and dislike about carpooling is examined. For those who have not started carpooling the barriers to start carpooling are explored.

#### 3.1 Did Let's Carpool encourage the uptake of carpooling?

Figure 1 shows the main travel mode for commuting before and after registering with Let's Carpool for the 2012 survey respondents.<sup>3</sup> The percentage of respondents who indicated they carpoled<sup>4</sup> as their main mode of transport for getting to work significantly increased after registering with Let's Carpool. Carpooling was the main mode of transport for 13.5% of respondents before registering and 28.4% after registering. There was also a significant decrease in the percentage of respondents driving alone or catching the train to work. All other differences are not significant.

**Figure 1. Main travel mode of travel to work before and after registering with Let's Carpool**

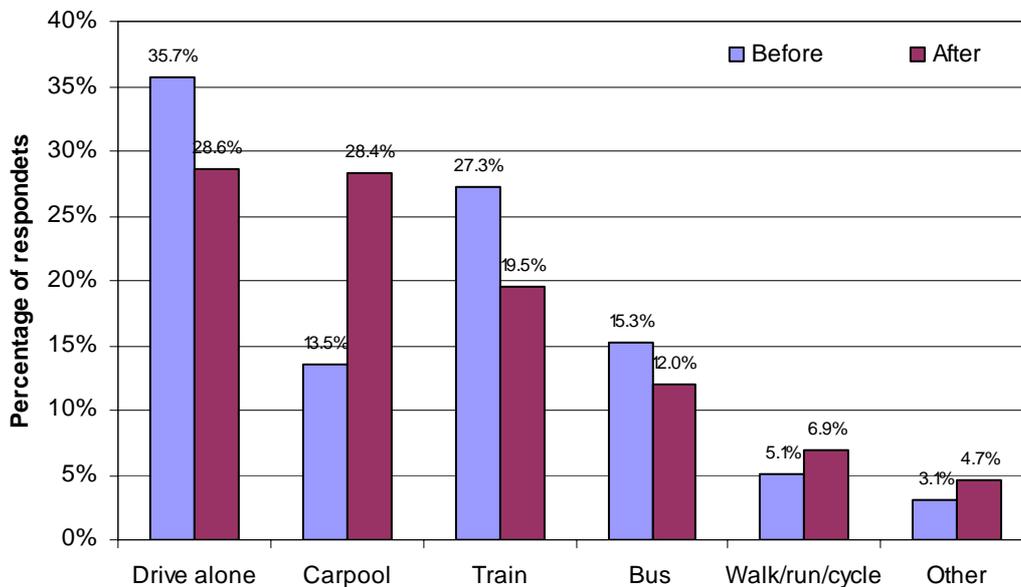
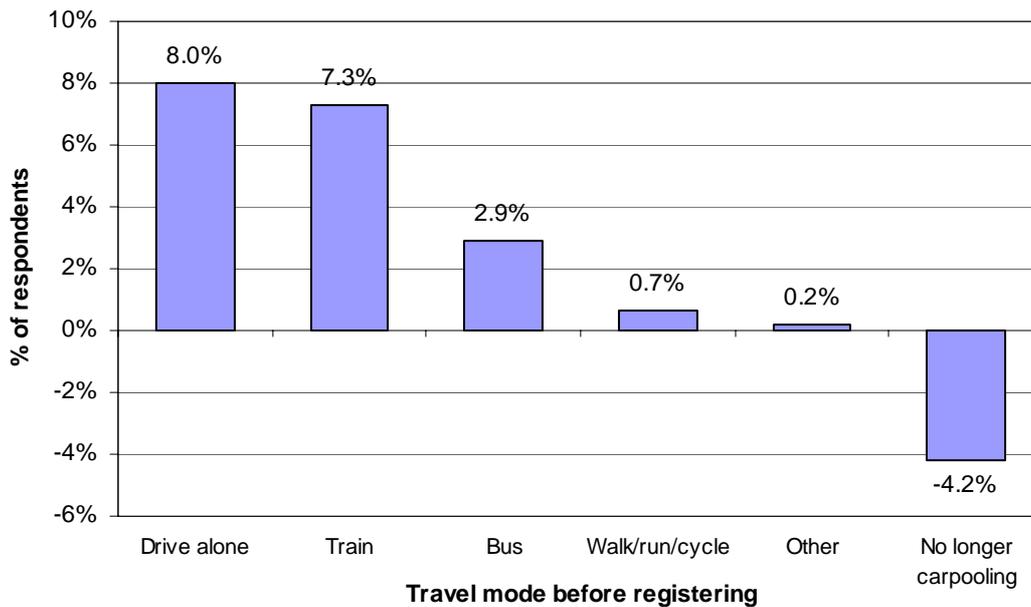


Figure 2 shows which travel to work modes have been replaced by carpooling. Eight percent of respondents who initially indicated they drove alone to work are now carpooling. A further 7.3% and 2.9% who used train and bus respectively, switched to carpooling after registering with Let's Carpool. There were also 4.2% of respondents who were carpooling before registering with Let's Carpool that are no longer carpooling.

<sup>3</sup> Only includes data from respondents who provided a response to both their main mode of travel to work when registering with Let's Carpool and their current mode of transport (N = 451).

<sup>4</sup> In this report carpooling includes the categories: drive with adult passenger(s) or passenger in a private vehicle.

**Figure 2. Travel modes that have been replaced by carpooling**



The evaluation survey also collects data on the frequency of driving alone across a week. This can also be used to further indicate whether Let's Carpool has encouraged the uptake of carpooling. Before registering, it was found that respondents drove alone to work an average of 2.28 days per week, which decreased to an average of 2.02 days after registering.

### **3.2 What were respondents experiences with Let's Carpool?**

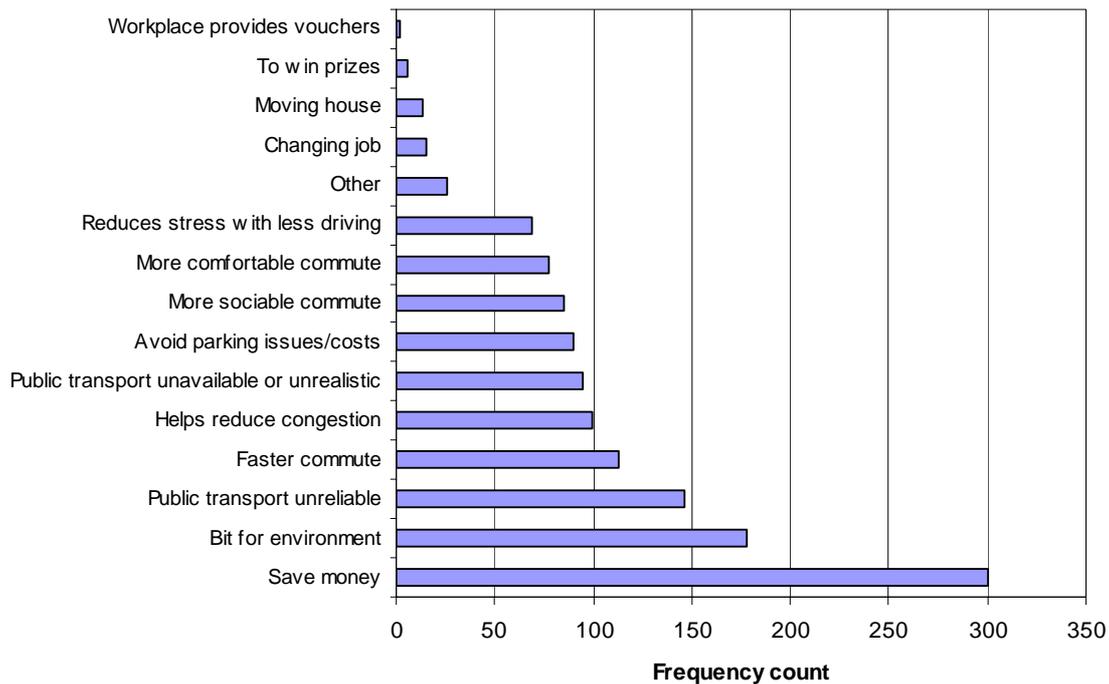
#### **3.2.1 Registering with Let's Carpool and finding a carpool match**

Respondent's main reasons for registering with Let's Carpool are shown in Figure 3. 'Saving money' is by far the most frequently selected reason for registering. This is followed by 'environmental considerations', 'public transport is unreliable' and 'faster commute'. These main reasons are very similar to those identified in the previous Let's Carpool evaluation.

Once registered on the Let's Carpool website it was found that 46.0% of respondents searched for a carpool match and found one or more matches, 41.3% searched but did not find any suitable matches, and 6.7% did not search for a carpool match. The percentage of respondents that searched and found one or more suitable matches has increased since the last evaluation, from 41.5% to 46%.

In terms of contacting people to carpool with, just under half of respondents (48.9%) had contacted at least one person, up from 39.3% of respondents in the last evaluation. While just over half of respondents did not contact anyone from the Let's Carpool website this has also decreased from 60.8% in the previous evaluation.

**Figure 3. Reasons for registering with Let's Carpool\***



\* Note that respondents could select more than one option

### 3.2.2 Experiences of respondents currently carpooling to work

About a third (32.4%) of survey respondents indicated that they were currently carpooling.<sup>5</sup> Of these respondents, 75.3% of them formed a carpool through the Let's Carpool website, either because they contacted someone (26.0%) or because somebody contacted them (49.3%). The remaining 24.7% formed a carpool independently of Let's Carpool. The proportion of respondents currently carpooling that used the Let's Carpool website to form their carpool has increased significantly since the last evaluation, from 40.5% to 75.3%.

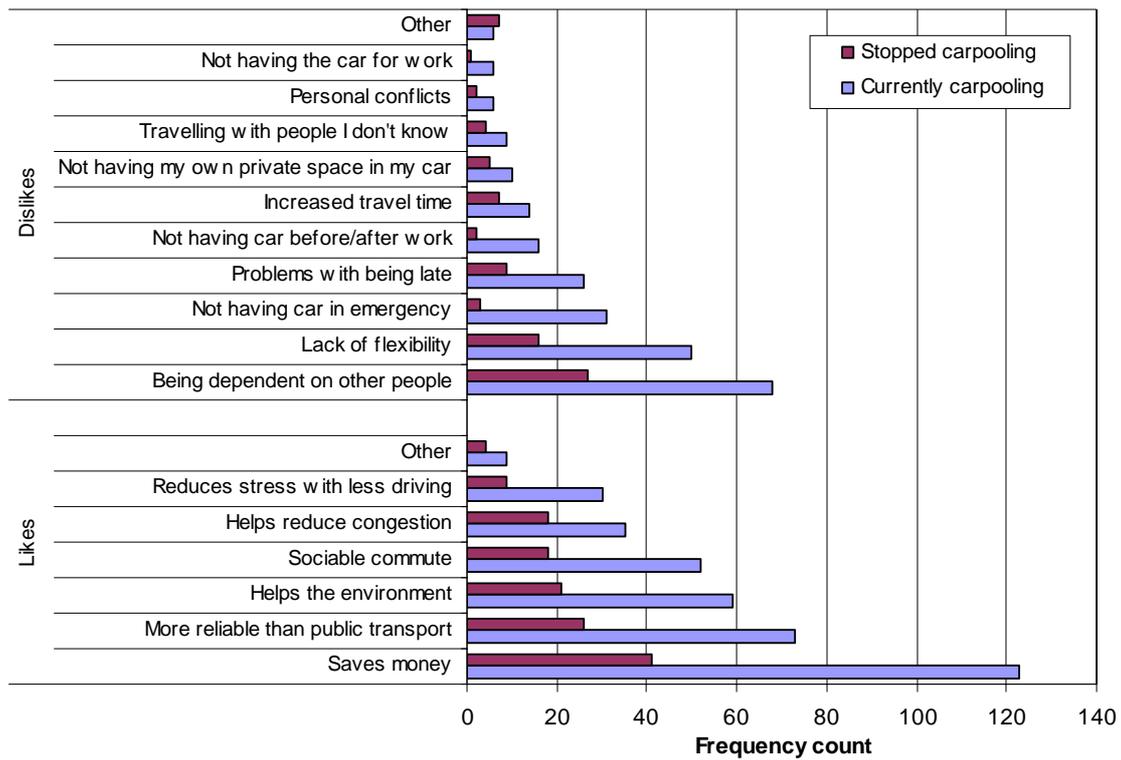
Just under half (46.9%) of the current carpools were formed in the last six months, while 14.3% of respondents had been in their current carpool between 7 months and one year, and 38.8% had been part of a carpool for more than one year. Compared to results from the previous evaluation, the percentage of respondents that had been in their carpool for more than one year has increased (from 14.1% to 38.8%), whereas those formed within the last six months decreased (from 65.9% to 46.9%). This suggests that there are now more established, long-term carpools in the Wellington region.

Of the respondents currently carpooling, the majority are regular carpoolers with 43.9% carpooling five or more times per week, 19.4% carpooling four times per week and 10.8% carpooling three times per week. Most carpools consist of two (55.8%) or three (25.2%) people.

Figure 4 shows the aspects that respondents who currently carpool like and dislike about carpooling. By far the most liked aspect of carpooling is that it 'saves money', whereas the main dislikes are 'being dependent on other people' and 'lack of flexibility'.

<sup>5</sup> This also includes respondents who carpooled less frequently, i.e. they did not indicate that it was their main mode of transport.

**Figure 4. Aspects respondents like and dislike about carpooling\***



\* Note that respondents could select more than one option

When asked how useful Let’s Carpool was in helping respondents start carpooling, 74.2% thought it was useful (either very useful or somewhat useful), and 25.8% thought it had not been useful (not very useful or not at all useful). The percentage of respondents finding Let’s Carpool useful in helping them start carpooling has increased from 70.9% in the previous evaluation to 74.2%.

### 3.2.3 Experiences of respondents who no longer carpool to work

A number of respondents (N = 55; 12.4%) had formed a carpool since registering with Let’s Carpool, but had since stopped carpooling. Of the respondents that remembered how they formed their carpool, 76.5% of them formed a carpool through the Let’s Carpool website, either because they contacted someone (41.2%) or because somebody contacted them (35.3%).

The majority of the respondents who no longer carpool did so regularly, with 52.7% carpooling five or more times per week, 18.2% carpooling four times per week and 16.4% carpooling three times per week. These now defunct carpools consisted of two people (47.3%), three people (45.5%), or four people (7.3%); and 63.6% of these carpools lasted less than six months, with the remaining lasting more than six months. Compared to the current carpools, the only significant difference is that these now defunct carpools were more likely to consist of three people.

Respondents who no longer carpooled to work were also asked what they liked and disliked about carpooling. Their responses are also shown in Figure 4. Responses for what they liked most about carpooling are similar to the responses from those who are currently carpooling, with ‘saves money’ the most frequently mentioned aspect they

liked about carpooling. The dislikes were also similar with ‘being dependent on other people’ and ‘lack of flexibility’ being the most frequently mentioned aspects they disliked about carpooling.

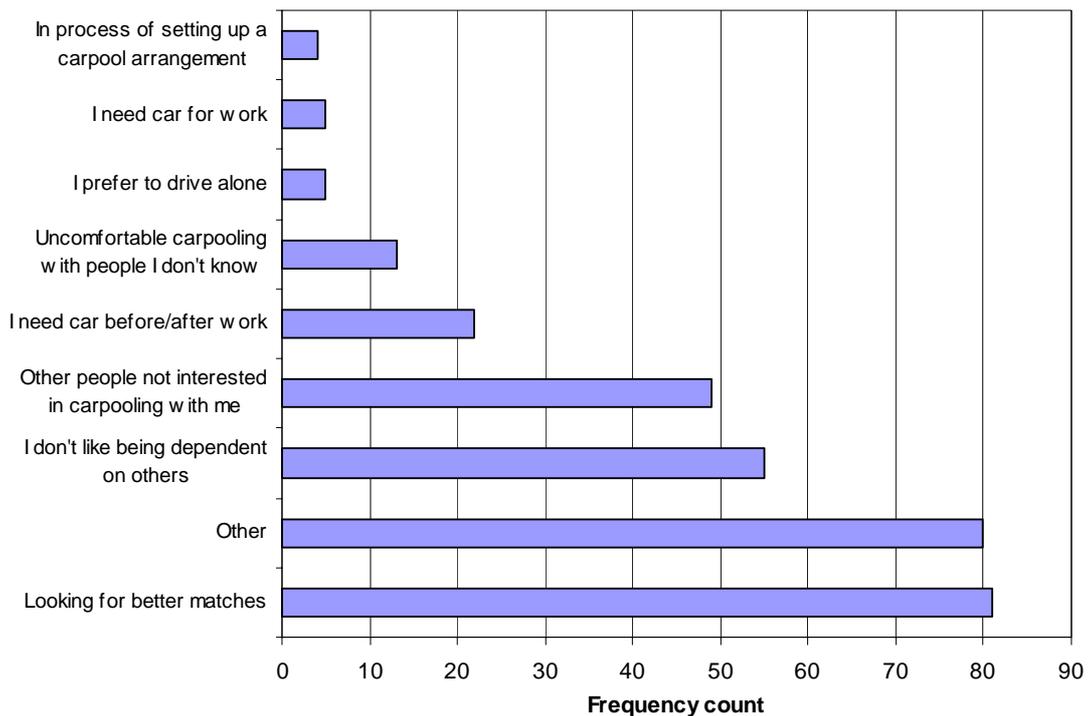
Only 7% of respondents who had stopped carpooling indicated that nothing would persuade them to start carpooling again. Of the respondents who had stopped carpooling but would start again, the main things that would persuade them were ‘if it saved me more money’ and if ‘carpool more flexible’.

When asked how useful the Let’s Carpool website had been in helping them to start a carpool, 79.2% thought it was useful (either very useful or somewhat useful), and 20.8% thought it had not been useful (not very useful or not at all useful).

### 3.2.4 Reasons for not starting to carpool

Since registering with Let’s Carpool, 52.4% (N = 248) of respondents had not yet tried carpooling. The main reasons respondents had not started carpooling are shown in Figure 5. The main reason these respondents had not started to carpool was that they were still looking for better matches. A number of respondents also did not like being dependent on others. Common reasons specified in the ‘other’ category were: no matches found, and circumstances changed (changed job, moved house).

**Figure 5. Main reasons for not carpooling\***



\* Note that respondents could select more than one option

Respondents were also asked what would persuade them to start carpooling. Increased flexibility of carpool arrangements was the main thing selected, followed by more financial savings and more information about the carpool matches. Information provided by respondents indicated that the lack of (suitable) matches was one of the main barriers.

## **4. Conclusion**

Let's Carpool continues to be successful in encouraging the uptake of carpooling in the Wellington region.

The percentage of participants who indicated they carpool to work as their main mode of transport increased significantly from 13.5% at the time of registration to 28.4%. There was also a significant decrease in the percentage of participants who drove alone to work from 35.7% to 28.6%. These results are consistent with those that were found in the evaluation research undertaken in 2010.

Of those that are currently carpooling, 75.3% found their match through the Let's Carpool service. This is a significant increase from 2010, when only 40.5% of carpoolers had found their match on the site, indicating that the usefulness of the site has increased as more members enter the database.

The aspects that people like and dislike about carpooling have not changed since 2010. Saving money is still the major driver for starting to carpool and the main barrier stopping people from carpooling continues to be the inability to find the right match.

This suggests that a continued focus on promoting the website to encourage more registrants, and thus more matching opportunities, is the best approach for future investment in the service.