

## **Carpooling In New Zealand**

The Energy Efficiency Conservation Authority (EECA) has produced a website-based software package to put car drivers and potential passengers in touch with each other. The aim is to increase vehicle occupancy rates, thereby improving overall transport fuel efficiency and reducing transport fuel emissions, as well as providing a range of other benefits to rideshare users.

The system works by participants using an Internet site specifically designed to allow direct communication, via email, between drivers and passengers.

- Passengers enter their transport requirements into a query page that is submitted into the system where matches are made with potential drivers.
- Drivers submit the locations, times and days they will be driving to be matched with potential passengers.
- Notification of a potential match is sent through to both the Driver and the Passenger by the system.

The EECA Rideshare Software was originally developed and tested as a pilot programme at Lincoln University (Launched in February 1998). The software has been designed to be adapted for use by other organisations and in other locations. The software is ideal for organisations with large numbers of people with Internet or Intranet access, based in one or two physical locations. Such organisations include universities and polytechnics, corporate head quarters, hospitals.

## **Understanding Carpool Behaviour**

Lincoln University conducted a study to find out about rideshare participation rates resulting from the Lincoln Connection scheme. In order to facilitate EECA's marketing efforts on similar projects information was also collected on the reasons people used the Rideshare system or not.

Lincoln University has a high incidence of carpooling behaviour (numbers whom carpool at least once a week). Since Rideshare began, carpooling behaviour has increased from 25.4% in the 1997 study to 31.8% in the 1998 study. While some studies have indicated that car-pooling tends to 'poach' participants from public transport, the Lincoln study indicated public transport usage remained constant (5.2% in 1997 to 5.1% in 1998).

Factors found to facilitate carpooling behaviour included previous acquaintance with other members of the carpool; money savings; enjoying the company of others while travelling; reserved parking and 'bonus coupons'; convenience for ex public transport users; regular work hours; company size; workplace building occupied by a single tenant; and having personalised matching services.

Factors found to discourage carpooling behaviour included people not being comfortable about contacting strangers about a carpool; cash savings do not make it worth while; flexitime programmes (people choosing their work times); employee apathy; cost of administering the programme; income (as income increased cost savings become less important); time consuming; stable petrol prices; and car availability (no car no ride).

There was a strong correlation observed between promotion and take up of Rideshare. Six months after the operation began 83.1% indicated awareness of Rideshare and 17.2% had accessed or used the system. Of that group, 56.4% had registered for carpool matches, and 12.6% had subsequently begun to carpool.

## **Promoting Carpooling**

- Promotion efforts should emphasise personal benefits (to reinforce societal ones)
- Promotion should concentrate on changing the inconvenience perception
- Reinforce benefits by stressing individuals past positive experiences with carpooling
- Promotion will spur awareness and uptake

## **Policy Implications**

- Policy makers (and employers) should focus efforts on mechanisms to influence attitudes towards carpooling
- Carpooling programmes should be designed to be compatible with participants, workplace and lifestyle
- Facilitate participants perceptions of control to help remove disincentives by providing resources such as a Rideshare System
- Carpooling programmes should enable participants to try carpooling for themselves.

## **Implementing Rideshare in Wellington**

The potential for a region-wide car pooling scheme is recognised, however the software as developed by EECA and trialed at Lincoln requires adaptation for use in the Wellington Region. Also compatibility with the council's web site and supporting software needs to be addressed. The TDM Carpooling implementation project will therefore involve the following components:

- (a) Software development – this phase of the project will take the concept and format of the Lincoln based system and redesign it for the use in the Wellington Region. This will essentially involve the development of new software for the Region. This is because of two requirements, firstly that the product uses systems and platforms that are compatible with the Wellington Regional Council web site and secondly that a mapping system specific to the region of application is required.
- (b) Software testing - the software will require comprehensive testing, this will be achieved by making it available via the Councils web-site. This phase will seek feedback from users of the Rideshare product and assess operability and support issues. The application will then be piloted by Wellington Regional Council staff and other selected 3<sup>rd</sup> parties and an assessment of impacts made.

- (c) Scope launch campaign – following discussions with EECA it was considered that the focus of a campaign to launch Rideshare should be based on the Regions, particularly Auckland, Canterbury and Wellington. (ARC was due to launch Rideshare pilot projects during energy conservation week – 5<sup>th</sup> June). A marketing plan will be designed to promote the strengths of the product and package them. The identification of ‘triggers to use’ and their effective promotion will be of key importance. This should include billboards, radio, car parks and local newspapers. The identification of budgets and funding partners will be critical.
- (d) Launch the Rideshare product across the region.
- (e) Monitoring and review – as part of the Licensing agreement with EECA we are required to review the success of the scheme on an annual basis, this includes the reporting of key usage statistics. The Regional Council as part of the annual monitoring of the RLTS will also want to identify and report on it’s own measures of effectiveness for the Rideshare product.

### **Future Developments**

The development of the Rideshare application for Wellington has concentrated on trips within the region. An additional feature of the Lincoln System was that of long distance (one off) journey matching. This feature can be added to the software for Wellington if required since it could have a role in facilitating recreational travel.

## Implementing Rideshare in Wellington

Stages		Objectives	Start	Finish	Requires	Review and next step
A	Software Development	<ul style="list-style-type: none"> <li>Reconfigure the Rideshare Software for use in the Wellington Region.</li> <li>Corporatise the Rideshare Software and integrate with the WRC website.</li> </ul>	May	August	<ul style="list-style-type: none"> <li>Approval to start</li> <li>(Complete)</li> </ul>	<ul style="list-style-type: none"> <li>Review Functionality of product.</li> </ul>
B	Software Testing/Pilot	<ul style="list-style-type: none"> <li>Ensure Software performs as intended.</li> <li>Trail product in restricted 'live' environment.</li> </ul>	September	December	<ul style="list-style-type: none"> <li>Completion of A</li> </ul>	<ul style="list-style-type: none"> <li>Assess feedback and operability issues.</li> </ul>
C	Finance	<ul style="list-style-type: none"> <li>Scope launch campaign.</li> <li>Identify budget.</li> <li>Secure funding partners.</li> </ul>	October	December	<ul style="list-style-type: none"> <li>Completion of A</li> </ul>	<ul style="list-style-type: none"> <li>Assess likely launch date.</li> </ul>
D	Launch	<ul style="list-style-type: none"> <li>Launch product.</li> <li>Open public access.</li> </ul>	January		<ul style="list-style-type: none"> <li>Completion of A, B, C.</li> </ul>	
E	Monitoring and Review	<ul style="list-style-type: none"> <li>Fulfil reporting obligation.</li> <li>Monitor operation.</li> </ul>	Ongoing		<ul style="list-style-type: none"> <li>Completion of D</li> </ul>	<ul style="list-style-type: none"> <li>Yearly review.</li> </ul>

- Dates are indicative only.