

Derby Connected Workplace Personalised Travel Planning Project: Monitoring and evaluation report



Transport for Quality of Life
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Transport for Quality of Life

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EXECUTIVE SUMMARY

The Derby Workplace Personalised Travel Planning (PTP) project was delivered by Sustrans on behalf of Derby City Council as one element of its Local Sustainable Transport Fund programme.

It offered personalised travel information to employees at businesses in the south-east quadrant of the city. Between June 2013 and March 2015, it provided detailed personal journey plans (normally sent by email) and / or free one month or one week bus tickets to nearly 1,500 employees. It assisted an additional 2,500 employees in a more limited way – for example by providing on-the-spot information and advice during an event or at an information stall.

A variety of methods were used to make contact with employees. Just over a third (37%) of employee requests for a personal journey plan resulted from completion of a baseline travel survey at employment sites that were being supported by a Travel Advice Service. Another 40% of requests resulted from workplace travel clinics, special events at workplaces, new employee induction events, or public or business events.

The personal journey plans were detailed, and were prepared for each employee on an individual basis, taking full account of their personal circumstances rather than simply providing generic journey planning advice. Evidence from post-intervention surveys and feedback by PTP recipients suggests that employees were highly appreciative of the service they received, and found it useful. Over 80% of respondents to a one-month post-intervention survey reported that their contact with the Workplace PTP service had been 'very' or 'quite' useful. Over a third (37%) of those offered free bus tickets said that their bus journeys had been better than expected, compared to only 8% who felt that their journeys had been worse than expected. The Workplace PTP service was effective at targeting car drivers (with 72% of survey respondents reporting that they had access to a car all the time); people who liked driving were just as likely as the whole survey sample to report that the service had been useful to them.

Car driver mode share fell from 69% before contact with the Workplace PTP service to 51% one month afterwards, a fall of 18%-points. The biggest shift was to bus travel, which increased from 7% to 24%. Cycle mode share also increased, from 4% to 7%. There were small reductions in car-sharing and walking. A survey at three months found that most people who had changed their travel behaviour, or intended to do so, following contact with the PTP service, had maintained their new travel patterns thereafter.

There was some evidence to suggest that the reduction in driving was the result of many people making small adjustments to their travel behaviour, such as taking the bus or cycling once or twice a week, rather than a few people giving up driving altogether.

Looking just at the 1,500 employees who were engaged by the Workplace PTP service in an intensive way (either receiving a personal journey plan, or receiving a free one month or one week bus ticket, or both), the annual reduction in car mileage as a result of the project is estimated at 755,000 miles, which is equivalent to a carbon saving of 230 tonnes CO₂e.

PART I: PROJECT ACTIVITY

1. Introduction

The Derby Workplace Personalised Travel Planning (PTP) project began in June 2013. It was delivered by Sustrans, and was one of a number of projects set up under the banner of 'Connected', following the award to Derby City Council of a Department for Transport grant of £4.9 million in Tranche 2 of the Local Sustainable Transport Fund¹.

The Workplace PTP project was designed to offer personalised travel information to employees in the south-east quadrant of Derby, which is a significant employment area with several large business parks and industrial estates, including Pride Park and Raynesway. Major employers including Rolls Royce, Interfleet and Severn Trent are based in the area. The service was also offered to a few large organisations outside the target area, including the Royal Derby Hospital. In the later stages of the project, organisations such as the university and city council were also targeted.

The project worked alongside, but largely independently of, other initiatives funded via the Local Sustainable Transport Fund. These included the Travel Advice Service (TAS), which provided one-to-one support to businesses in south-east Derby to help them to develop workplace travel plans; Bike Back Derby, which refurbished second-hand bicycles for sale at affordable prices; Cycle Derby, which provided adult cycle training; Wheels to Work, which provided subsidised mopeds and bicycles; and a series of bus service improvement initiatives and bus campaigns led by the council.

The Workplace PTP project is being independently monitored and evaluated by Transport for Quality of Life. This evaluation report covers the period between June 2013 and March 2015. The project is however continuing to March 2016, as a result of Derby City Council's success in winning a further LSTF grant for 2015/16. The evidence in this report is drawn from output monitoring data collated by the Workplace PTP team; evaluations by the Workplace PTP team of experience gained from specific activities; structured discussions with the Workplace PTP team in May 2014 and January 2015; and a rolling post-intervention survey of employees, undertaken by Transport for Quality of Life on a monthly basis during the course of the project.

The report is in two parts:

Part I describes the project activity, focussing on the *inputs* (notably staff time), and the *outputs* or activities that were delivered, including data on the scale of activity. It also summarises specific learning points about effective delivery of this type of project.

Part II presents the evidence on the outcomes of the project, both in quantitative terms (from analysis of post-intervention survey data) and qualitatively (from employee feedback), and estimates what the impact of the project may have been, in terms of car mileage and carbon savings.

¹ Monitoring and evaluation of the whole Connected programme is being undertaken separately by Derby Council with the support of Transport for Quality of Life.

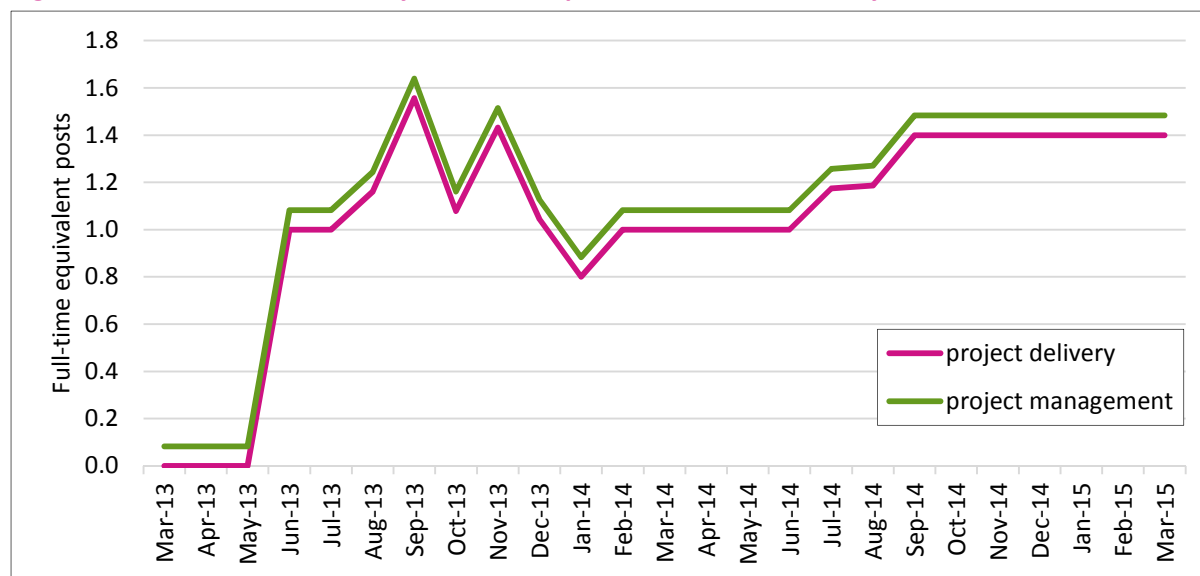
2. Inputs: staff time and materials

2.1 Overview of main inputs

Over the course of the Workplace PTP project, staff time for project delivery varied between 1 and 1.4 full-time equivalent posts, as shown in Figure 2.1.

Staff management time at Sustrans was estimated by the project team to be an additional 45 days over the two-year period from project inception (March 2013) to completion of the first phase of the project (March 2015), covering project supervision and staff support, attendance at meetings and events, and other management tasks.

Figure 2.1: Staff time for delivery of the Workplace PTP service in Derby



Note: staff time for project delivery is based on contracts of project officers and records of hours worked by temporary travel advisers. Staff time for project management is estimated, and assumed to be evenly spread across the project period.

In the initial stages, the project was delivered by one full-time project officer, with some limited additional resource during busy periods provided by two temporary travel advisers on zero-hours contracts. From February 2014 (approximately half-way through the project period), the project switched to using two part-time fixed hours project officers.

The project team used a variety of materials and resources. The main 'giveaways' to employees in addition to their personal journey plans were the Cycle Derby map; Cycle Derby cycle training leaflets; Bike Back Derby leaflets; a bus network guide; bus timetables; free bus 'taster' tickets'; Connected bags and water bottles; postcards and other promotional materials for specific campaigns; and prizes for a Sustrans Sustainable Travel Commuter Challenge. In addition, the project team gave away smaller numbers of information leaflets about other services available in Derby: for example leaflets about car-sharing and Wheels to Work.

Various other resources were used by the project team to attract attention at stalls and events. These included a smoothie bike; a bus (used as a base for distributing free bus tickets during bus promotion campaigns); a tea trolley (used as a means to engage employees while at their desks, by offering free tea and biscuits); and a Dutch-style bike for display and demonstration at events. The team also used a free tombola to attract attention at events, with small prizes typically costing about £25 in total for each event.

2.2 Lessons on resources required

The model of using temporary travel advisers was based on experience delivering household PTP projects, where Sustrans feels that it works well. However, using temporary staff for workplace PTP in Derby was less effective, and as a result of this the project switched to using two part-time fixed hours project officers from February 2014. This gave both flexibility and security, and the project team felt that it was a successful approach.

The total staff resource has been quite low overall, and the project team felt that this limited what it was feasible to do – for example, it was not possible to undertake two-week-long intensive campaigns with individual companies, which might have been an effective strategy for reaching more employees.

Many of the communications materials were supplied by Derby City Council, and this was important and appreciated by the project team because it enabled the very limited budget for materials to be stretched further than would otherwise have been possible. However, there are some difficulties in relying on the local authority to supply materials: the project team felt that materials obtained in this way were not always of good quality, were sometimes quite ‘corporate’ in their appearance, and it was not always possible to obtain them in a timely way. In contrast, they felt that the design and marketing materials for the Sustainable Travel Commuter Challenge (also supplied by Derby City Council) had been of good quality, with quirky and interesting artwork. There was a feeling that in future projects, it would be beneficial to build a greater allowance for materials into the project budget, as this would make it easier to obtain good quality, well-designed materials.

3. Outputs: engagement methods and activities

3.1 Overview of engagement methods

The Workplace PTP service used a variety of methods to make contact with employees, summarised in Table 3.1.

Table 3.1: Methods of engaging employees

MOST EFFECTIVE	SOMEWHAT EFFECTIVE	NOT EFFECTIVE
Referral from Travel Advice Service employee travel survey	Stalls at public locations e.g. rail station, Velodrome, market	Door-to-door leafleting / speaking to SMEs on London Road / Alvaston
A 'Travel Clinic' at workplaces	PTP stand / workshop at special business events organised by other parts of the council*	Cold-calling SMEs (email + phone)
Handing out free 1-month / 1-week bus tickets at businesses / business parks / bus events	Approaching employees / students in workplace canteen to complete a quick survey	
Occasional direct approaches or requests for services by a company (though usually as a result of a stand / workshop)	Car-share sign-up stall in Pride Park Starbucks / city council foyer (only promoting car-sharing, not the wider PTP service)	
Joining a pre-existing company activity, such as a Health and Safety Day	Via an on-line survey publicised on PTP leaflet	
Taking part in induction events for new employees		
Contacting employees at their desks, using a tea trolley to offer free tea and biscuits		
Running a sustainable travel commuter challenge		

Effectiveness of engagement methods is based on views of Workplace PTP project team.

* Although less effective in terms of PTP, these were very effective at raising general 'brand awareness' of Connected, and were the best way to reach SMEs.

At the start of the project, it had been anticipated that the main method of contacting employees would be by referral from the Travel Advice Service baseline employee travel survey at participating businesses, followed by a travel clinic at the business site. However, the number of employees reached by the survey was less than anticipated (in a sample of 10 businesses, 16% of those completing the baseline travel survey requested a personal journey plan). It also became clear that the employee travel survey and travel clinic were not a particularly effective means of making contact with employees at retail and manufacturing companies, since few people used email at work. Other issues were that the project team was very dependent on the company contact to publicise the travel clinic, and it was sometimes difficult to secure a highly visible location (for example, staff canteens were often only used by a small proportion of staff).

The Workplace PTP service therefore developed other ways of engaging employees, including free bus ticket promotion campaigns, special events and stalls, and an on-line survey, to supplement referrals from the Travel Advice Service.

3.2 Personalised travel planning

At the core of the Workplace PTP service was the idea of providing employees with travel advice and information that was tailored to their own circumstances. Various methods of delivering this were tried. These included:

- Pre-booked 20 minutes face-to-face meeting with advice and information given on the spot (no personal journey plan sent);
- Short on-the-spot conversation + follow-up personal journey plan by email;
- Personal journey plan by email (without face-to-face meeting);
- Ad hoc advice and information on-the-spot at travel advice stand (no personal details collected for subsequent contact).

As the project developed, and the time constraints on employees were taken into account, the emphasis moved away from pre-booked face-to-face meetings, and towards on-the-spot conversations followed up by a personal journey plan sent by email, which proved to be a more effective method of engaging employees.

In the period up to March 2015, 957 employees received a personal journey plan or had a pre-booked face-to-face meeting with a travel adviser. A further 1,553 employees received ad hoc advice and information but did not receive a personal journey plan. (In addition, people who received free bus tickets during bus promotion campaigns were given on-the-spot advice and information about services, bus tickets and bus stops – see section 3.4).

The personal journey plans supplied by the Workplace PTP service contained more detail than could be provided by an automated service (such as myPTP). This required a high level of knowledge from the travel advisers, and took longer to prepare than an automated journey plan. However, it was clear from the responses received by the Workplace PTP service that recipients appreciated the care and effort that had gone into preparing their personal journey plan:

Thanks so much for the information contained in your e-mail. The links to the websites for folding bikes and the cyclestreet route-finder are very useful and I'll certainly be making good use of these.

Thanks, I will check out the place on Canal Street for a cheap bike. Thank you for your help.

WOW what a lot of great information. Very impressive and thank you. I now need time to work through all the options. I never envisaged there being so many. A positive for me is if anything does go wrong with my current forms of transport I can still get to work on various methods. I never knew this before.

This was a huge help to me – really comprehensive and full of great alternative ideas for getting to work. So I just wanted to say a huge thank you, you're awesome and to Maria for taking the time to come to my office and help me out. You're both stars.

Many thanks for my Mango card and free no 73 bus ticket. I'm all up and running and have used it for the first time today. It was lovely switching off and plugging into my iPod.

Thanks for the info. Some useful advice in there, I hadn't heard of the liftshare website until now and will be looking into that. That 10% discount is also good to know about! Thank you for the time and effort you put into this, very much appreciated.

Wow. A lot of work in that, thanks very much.

Where appropriate, employees were also pointed towards other Connected services, such as cycle training provided by Cycle Derby, refurbished bicycles provided by Bike Back Derby, and subsidised bikes or mopeds through Wheels to Work. Some employees received a free bus ticket in addition to their personal journey plan – either as a result of one of the bus promotion campaigns described in section 3.4, or independently of the bus campaigns.

3.3 Engagement via employers

The Workplace PTP service developed relationships with employers at more than 50 employment sites in order to offer personal journey plans to their employees. A variety of ways of working with companies were developed during the course of the project, including:

- Employees requesting a PTP when completing a baseline travel survey (for companies working with the Travel Advice Service on a workplace travel plan);
- Employees attending an on-site travel clinic set up by the PTP service. In all, 76 travel clinics were held at 41 different employment sites. Most of these were 'one off' clinics, but 13 businesses had repeat travel clinics on different dates;
- A web-based survey, used at some employment sites to gather PTP requests. This enabled employees to provide information about their home and work location, working hours etc, and to request a personal journey plan to be sent to them by email;
- At three large employers (Interfleet, Royal Derby Hospital and Rolls Royce) a travel adviser took part in induction events for new employees. This is a key target audience, as new employees are especially likely to be interested in information about travel options for getting to work. Only nine new employees received a personal journey plan in this way, but on-the-spot information was given to approximately 300;
- Various other approaches, including visiting employees at their desks (with a tea trolley offering free tea and biscuits); or walking round a staff canteen with a quick survey and free tombola as a means of engaging people.

The organisations engaged in these ways included large, medium and small employers, as listed in Table 3.2.

Table 3.2: Employment sites engaged by the Workplace PTP service

Large (>250 staff)	Medium (50-250 staff)	Small (<50 staff)
Asda Sinfyn	ASG	B&M
Asda Spondon	Daher Aerospace	Boots Wyvern
Balfour Beatty	Derwent Living	BPEC
Derby City Council	East Midlands Trains	Brian Clough Business Centre (SMEs)
Derby College	EPM Technology	BSP Consulting
Derbyshire Healthcare Trust	Geldards	Costa Coffee Wyvern
Interfleet	Go Outdoors	Currys
Pennine Healthcare Trust	McDonalds Wyvern	Deda
Reckitt Benckiser	Moore Large	Derby Museums & Art Gallery
Rolls Royce	NCS	Derventio Housing
Royal Derby Hospital	Node4	DW Sports
Sainsburys Chaddesden	Signalling Solutions	Enthusiasm
Sainsburys Osmaston Park	Synergy Healthcare	Halfords Wyvern
Severn Trent Pride Park	Zibrant	Hungry Horse
Severn Trent Raynesway/Meg Lane		Kennelgate
University of Derby		Mothercare Wyvern
Webhelp		Next Wyvern
		PsycholInteractive
		RTC (business park with many SMEs)
		Subway
		Toys R Us
		Tracsis

Note: only those employment sites engaged in a strategic way are listed (for example, those where a travel clinic took place, or where there was a baseline travel survey followed by provision of personal journey plans to employees).

3.4 Bus promotion campaigns

Five bus promotion campaigns took place between November 2013 and February 2015 (Table 3.3). Four of these were focussed on specific employment sites, or on locations where the bus service was changing:

- The ‘Love Your Journey’ bus campaign in November 2013 was targeted at employees of five large businesses (Webhelp, Interfleet, Balfour Beatty, Severn Trent Pride Park and Seven Trent Raynesway);
- The Valentine’s Day bus campaign in February 2014 was targeted at employees working for companies based at Pride Park;
- The Raynesway campaign was timed to coincide with a change to the timetable for the bus serving Raynesway, which made it easier for employees to use the service;
- The London Road campaign coincided with the opening of the new London Road bridge and the return to normal bus services following a period of disruption.

One campaign (the Better Bus event) was a large bus promotion event organised by Derby City Council in the city centre.

Table 3.3: Bus promotion campaigns

Campaign	Date	Number of employees receiving free tickets	Number of free tickets issued
Love Your Journey bus campaign (5 large workplaces)	Nov / Dec 2013	417	1010
Valentine’s Day Pride Park bus campaign	Feb 2014	99	199
Better Bus event	Mar 2014	52	52
Raynesway bus campaign	Nov 2014	51	96
London Road bus campaign	Feb 2015	53	58
Total		672	1415

The bus promotion campaigns distributed various different types of bus ticket, including stored value Mango cards, Arriva weekly tickets and 10-trip carnets for certain bus routes. The first bus campaign offered up to one month of free bus travel. Subsequent campaigns offered one week of free bus travel.

The free bus tickets were only offered to employees who normally drove to work. Methods of verifying this varied: for the first campaign, employees were asked to show their car keys, while for later campaigns, employees were asked to pre-register via an online travel survey. Employees who already travelled by bus or other non-car modes were entered into a prize draw instead of receiving free bus tickets.

The free tickets were sometimes given out with a ‘goody bag’, including items such as relevant bus timetables, a bus network guide, a leaflet giving an overview of all services provided by Connected, a ‘Better by Bus’ pen and (for the Valentine’s Day campaign) love heart or chocolate heart sweets.

In all, 672 employees received free bus tickets as a result of these campaigns. Of these:

- 136 also received a personal journey plan, either as a follow-up to the free ticket, or (for campaigns where pre-registration via an online travel survey had been used) at the same time as receiving the free ticket;
- 536 did not receive a personal journey plan (but did receive detailed on-the-spot advice and information about services, tickets and bus stops).

An estimated 40 additional employees received on-the-spot advice but without a free ticket, as part of the Raynesway and London Road bus campaigns.

3.5 Special events and workshops

The Workplace PTP service ran a travel advice stand or a workshop at 15 events open to the public or to businesses. These mostly provided on-the-spot advice and information, and it was generally not feasible (or proved difficult) to collect contact details and to email a detailed personal journey plan afterwards. The number of people receiving ad hoc on-the-spot advice at these events and workshops is summarised in Table 3.4.

Table 3.4: Number of employees receiving on-the-spot advice via events and workshops

	Date	On-the-spot engagements	PTP sessions / journey plans prepared
Public / business events with travel advice stands			
Connected launch	Jun 2013	20	-
Friends of Littleover Park	Jul 2013	30	-
EMT customer services week - train station	Oct 2013	10	4
Velodrome	Oct 2013	20	10
Coaching for Support , Council event	Jan 2014		-
Workshop on Enscite, University	Apr 2014	5	-
Let's Do Business event, Enterprise Centre	May 2014	5	-
Community Action Social Enterprise, Silkmill	May 2014	30	-
DNCC Derby Market Showcase, Derby Conference Centre	Jun 2014	30	-
Low carbon procurement, Enterprise Centre	Jun 2014	10	-
DCC employee roadshow	Sep 2014	10	-
EMT customer services week - train station	Oct 2014	300	-
DCC/Marketing Derby breakfast	Nov 2014	10	-
Workshops			
Climate Change workshop, iPro stadium	Mar 2014	30	-
Derby's Working event	Mar 2014	60	-
TOTAL		570	

3.6 Sustainable Travel Commuter Challenge

Sustrans ran two sustainable travel Commuter Challenge events, over four weeks in June 2014 and March 2015. Workplaces competed to get as high a proportion as possible of their employees logging at least one journey to work by a sustainable mode on the Sustrans Commuter Challenge website (with five workplace categories of micro, small, medium, large, and very large). Individuals competed to achieve the greatest number of journeys by each sustainable mode.

For the first Commuter Challenge event, 412 employees across 35 different organisations took part (registering for the Challenge and subsequently logging at least one journey on the website). For the second Commuter Challenge event, 509 employees across 54 organisations took part.

The direct ‘crossover’ between the Commuter Challenge and the Workplace PTP service was fairly limited, with relatively few participants requesting a personal journey plan during or immediately after the Challenge. However, the Challenge provided an important means of raising the profile of Connected, and helped build a stronger relationship with businesses – both those with whom there was already a relationship (39 organisations in 2015) and new organisations (15 in 2015). Following the Challenge, some newly engaged organisations received travel clinics. The Challenge also helped to build peer support for sustainable travel within participating organisations.

3.7 Summary of scale of activity

The overall scale of activity as a result of the Workplace PTP project is summarised in Table 3.5. This distinguishes between the number of employees who were engaged in a more intensive way, receiving a personal journey plan, a pre-booked meeting with a travel adviser, or a free one week or one month bus ticket; and the number for whom the engagement was shallower. In all, nearly 1,500 employees were engaged in an intensive way, and nearly 2,500 in a shallow way, in the period between July 2013 and March 2015. In addition, up to 920 employees took part in the Commuter Challenges in 2014 and 2015.

Table 3.5: Scale of activity of workplace PTP project

‘INTENSIVE’ engagement: Number of employees receiving personalised travel planning and/or free bus ticket via bus campaign		1,493
<i>Of which:</i>	<i>...receiving pre-booked face-to-face meeting with travel adviser or written personal journey plan by email</i>	<i>957</i>
	<i>...receiving free bus ticket as part of bus campaign (without a written personal journey plan)</i>	<i>536</i>
‘SHALLOW’ engagement: Number of employees receiving ad hoc on-the-spot information or advice (without further contact or formal PTP)		~2,463
<i>Of which:</i>	<i>...receiving ad hoc advice as a result of contact at their workplace</i>	<i>~1,553</i>
	<i>...receiving ad hoc advice (without free ticket) during bus campaign</i>	<i>~40</i>
	<i>...receiving ad hoc advice via events and workshops</i>	<i>~570</i>
	<i>...new employees receiving information via employee induction events</i>	<i>~300</i>
Sustainable Travel Commuter Challenge: Number of participants*		920
<i>Of which:</i>	<i>...in 2014</i>	<i>412</i>
	<i>...in 2015</i>	<i>509</i>

~ Figures for ‘shallow’ engagement are estimated.

* Figure for number of participants in Commuter Challenge may be an over-estimate, as no allowance has been made for individuals who were involved in both Challenges.

Analysis by the Workplace PTP team of the source of personal journey plan requests suggests that just over a third (37%) of all personal journey plans were prepared in response to a request from an employee via the Travel Advice Service baseline travel survey. A further 40% were prepared following direct contact with an employee at a workplace travel clinic, special event at a workplace, new employee induction event, or public or business event. Just under a fifth (17%) were requested during one of the bus campaigns, while the remainder were requested via the web-based survey or were direct requests.

3.8 Lessons for effective delivery

The Workplace PTP project officers identified a number of lessons for effective delivery of a Workplace PTP service, which may be summarised as follows:

Making contact with businesses (especially SMEs)

The best way to identify the companies you can work with is by physically checking door-to-door.

The Connected project was structured so that another consultancy (ITP Ltd) was responsible for initial engagement with larger organisations (those with >50 staff), through the Travel Advice Service, while the Workplace PTP service was responsible for initial engagement with smaller organisations.

At the start of the Workplace PTP project, it was thought that Derby City Council already had reasonably good knowledge of the contact details for businesses in the Local Sustainable Transport Fund target area. However, in practice, many smaller and medium-sized businesses were missing from the database, or contact details were missing or out of date. The Workplace PTP project officers realised that physically going door to door identifying and ‘ground truthing’ the contact details for businesses was essential in order to develop an accurate database as a basis for future work. In doing this, the Workplace PTP project was also able to help other Connected projects (such as the Travel Advice Service) and even pass on contact information to the council’s regeneration team.

Building relationships with businesses

It takes time and persistence to build relationships with businesses.

It takes time to build a relationship with each business, and the PTP project officers had to be persistent in ‘warming businesses up’. One of the project officers commented that:

Someone phoned up recently from the Healthcare Trust. I had been in touch with her so many times before, perhaps 5 or 6 times, and had given up. Then finally she saw an email I sent and got in touch. It needs persistence and the luck of fitting in with what they are planning.

It is helpful to be able to offer businesses a menu of different types of activity, so that they can pick what will work best for them.

The key role that company champions played was also important. Unlike household PTP where officers can go door to door and talk to individuals, in workplaces there was rarely direct access and communication was via a company contact. While posters, fliers and emails were supplied to businesses it was not always clear how well these had been distributed. Where a business did not

have a keen champion who enthusiastically backed the service, good access to staff could not be guaranteed.

Engaging employees

The most effective ways of engaging employees are fun, simple, proactive, and offer something people want to have.

Engaging employees at workplaces is in some ways significantly more challenging than engaging people at home. This is in part because the home-to-work commute is a regular journey, and travel habits are entrenched. Employees may not feel that they need information or advice about alternatives to their regular commute – so what is on offer is not an immediately attractive ‘must have’ item.

Most importantly, most employees have very limited time at work to engage in any activity, and in some cases (e.g. call centres), all that was possible was a snatched conversation during a five minute comfort break. The project therefore developed time-efficient strategies, such as the on-line survey that people could fill out in their spare time.

Common features of the most effective engagement methods were that they broke down barriers by being slightly humorous; they were simple and did not require a lot of preparation; they provided an excuse to actively approach employees rather than waiting for them to come to you; they combined the offer of a personal journey plan with something else that people would definitely want (a cup of tea and a biscuit, or chocolates, or a free bus ticket), and people could immediately see what was involved. For example, the project officers commented that:

The tea trolley is novel, fun and slightly retro. It's not passive – you're going to people at their desks and giving them something they want. And it's a known quantity – people can see what they are letting themselves in for. It still worked, even at a company that had a lovely canteen.

Sitting by a stall in a staff canteen and waiting for employees to come up was not effective. So the project officers developed a proactive approach:

In the canteen, we would go round the tables with a tombola and some surveys. We would put a sign up saying 'free tombola', and we offered prizes like bags, bottles, bike lights, torches and chocolates. Then we would ask people how they had travelled to work today, and if they had driven, we'd say 'would you like something different – we do journey plans and it's free', and get them to fill out a 'My Journey' survey [giving details to enable a personal journey plan to be drawn up and emailed later on].

Both the tea trolley and the free tombola were based on learning and experience from other Sustrans projects.

During the second Commuter Challenge in 2015, the project officers found that the offer of doughnuts to companies that reached a certain participation rate was very successful – following emails saying how many more employees a company would need to qualify for free doughnuts, every company managed to recruit the targeted number of people. The threat of being beaten by their competitors or contractors was also effective in stimulating companies to promote the

Challenge: following an email to all their participants and their communications team, Rolls Royce Raynesway surged from near the bottom to first place in the 2015 Challenge leader board.

Personalising the service

A genuinely personalised journey plan cannot be provided by a computer – it also requires knowledgeable and interested advisers.

The highly personalised approach of the Workplace PTP service was clearly appreciated by employees, and it seems plausible that this will have made them more likely to try the alternatives that were suggested, both because of the feel-good factor associated with someone having taken so much trouble to help, and because the personal journey travel plan can take account of individual circumstances (e.g. childcare arrangements).

The project officers also felt that the quality of the information they were able to provide to employees was much better than if they had relied on an automated service (e.g. myPTP or the Connected journey planner). They commented that:

So often the [automated] journey planner missed the obvious or cheapest options. Or it didn't provide creative multi-modal options such as taking a folding bike on a train or bus, or having a bike at both ends of a train or bus journey. Sometimes the bus options identified by the automated journey planner did not include the buses we were trying to promote, and for which we had free tickets. So human involvement is crucial. It's essential to have an intimate knowledge of how you use public transport, and of walking and cycling around Derby.

Effective and targeted publicity

Repeated publicity via multiple channels is needed to get employees to turn up for travel clinics or events.

When promoting a travel clinic or bus campaign, it is worthwhile to hand-deliver publicity materials, as this provides an opportunity to chat to receptionists and key 'gatekeepers' at businesses. Physical posters / fliers are essential for non-desk-based businesses, where employees may not be using email while at work. Repeated nudges are required to get people to act – including a face-to-face reminder on the day of an event such as a bus campaign.

During the 2015 Commuter Challenge, the project officers stepped up the amount of targeted promotion compared to 2014, with more e-shots and emails to individual employees to get them to sign up more colleagues. They also called or emailed companies that had participated in the Challenge in 2014, or who had registered but not participated; and distributed postcards promoting the Challenge door-to-door in Pride Park and London Road where there were large concentrations of businesses. The team found that 'getting the numbers up requires a very personal and targeted approach', with lots of chivvying.

Multimodal approach

Bus campaigns can be used to encourage cycling too.

The Better Bus campaign was in the town centre, and mainly attracted young people who worked in retail, many of whom lived fairly close to their work. While the immediate 'offer' was a free bus ticket, the PTP project officers also gave people information about cycling options – for example, pointing out that someone lived near a good cycle route and that it would be quicker to get to work

by bike than by bus. Thus the offer of a free bus ticket provided a way to reach people who might not have been interested in a stall promoting cycling, and encouraged them to think about cycling as an option.

Targeting motorists

If offering free bus tickets, it is important to screen out non-car drivers (and offer them an alternative as a ‘thank you’ for travelling sustainably).

When offering free one week or one month bus tickets, it was important to make sure that these were targeted at employees who currently drove to work. In the first (and biggest) bus campaign, this was done by asking employees to show their car keys, and although this worked to an extent, some non-driving employees cheated the system by borrowing a colleague’s car keys. In subsequent bus campaigns, employees were asked to pre-register their interest in free bus tickets via a short on-line survey. Any employees who did not drive were entered into a prize draw (e.g. for a year’s free bus travel) instead of being offered free bus tickets. This mechanism also enabled the Workplace PTP service to prepare personal journey plans in advance, which were given to employees with their free bus tickets.

Importance of peer support

In order to change travel behaviour, it is important to influence the social norm in a workplace as well as working with people as individuals.

It was much easier to engage employees if they worked in companies that already had a supportive culture, such as a culture of cycling. The Connected team sought to influence the cultural ‘climate’ in workplaces, for example by running engagement events in places where a Connected grant had enabled the installation of a new bike shelter. The Commuter Challenge helped to shift the social norm through internal and external competition among businesses to get the most employees involved. The Workplace PTP service also realised that it was important to reward employees who were already travelling sustainably, to encourage the growth of that cohort – so, while car drivers were rewarded for changing their behaviour by being given a free bus ticket, non-car drivers were rewarded by entry into a free prize draw.

Project duration

A substantial set-up time is required for projects of this type, so, once established, it makes sense to continue the project for as long as possible.

The short duration of the Workplace PTP project (due to the limited timescale of the LSTF grants) is a significant limiting factor. Project set-up (definition of what is required, procurement, and staff recruitment) took 12 months from the time that the LSTF grant was made, so that the first project officer started in post in June 2013. Once the time required to build relationships with businesses is also allowed for, it is clear that the Workplace PTP project was only able to work at peak intensity for about 12-18 months during the period of the initial LSTF grant. There would be benefits in securing funding for projects of this type to continue for a longer time-period, ideally about five years, in order to take full advantage of the relationships with businesses that have now been developed.

Coordination with other services

It is desirable that projects of this type work closely with other sustainable travel initiatives in the same area – ideally as a single ‘virtual team’ – but this is very hard to achieve.

The Workplace PTP service was largely delivered independently of other LSTF projects in Derby. Despite efforts to overcome this, there was a feeling that the different projects (Workplace PTP, the Travel Advice Service, Cycle Derby, Bike Back Derby etc) had to some extent operated in separate silos. This may in part be an inevitable consequence of the delivery model in which sub-projects are delivered by multiple organisations on short-term contracts. However, it meant that it was difficult to offer a holistic package, or to organise multi-partner events, and as a result the Connected service was never more than the sum of its parts, and felt somewhat disjointed. Under these circumstances, it is especially important to find ways to bring the whole project team together – for example, through regular meetings of all project partners, and sharing of news and successes via a regular project newsletter.

PART II: PROJECT OUTCOMES AND IMPACTS

4. Changes in travel attitudes and behaviour

4.1 Data sources

The main data sources to assess the effects of the Workplace PTP service were two on-line surveys, at approximately one month and three months after each person had received PTP advice and/or a free bus ticket².

One month survey: The follow-up survey at one month asked survey respondents about their travel patterns before and since receiving PTP (or a free bus ticket as part of a bus campaign); how useful they had found the PTP service; and their attitude to driving. Those who had been given free bus tickets were also asked about their impression of travelling by bus.

Three month survey: The follow-up survey at three months was only sent to those individuals who reported at one month that they had made changes in how they travelled to work, or that they were considering making such changes. Its purpose was to establish whether or not behaviour change reported at one month had been maintained.

Sample sizes and response rates are given in Table 4.1.

No survey data were gathered from individuals who had brief contact (i.e. 'shallow' engagement) with the Workplace PTP service.

Table 4.1: Sample sizes and response rates

	Number	Response rate
Individuals invited to complete on-line survey at one month	1362	-
Responses to on-line survey at one month	411	30%
Individuals invited to complete on-line survey at three months	307	-
Responses to on-line survey at three months	141	46%

Figures are for individuals receiving a personal journey plan and / or free bus ticket in period to end March 2015, and supplying a valid email address for subsequent contact.

Number invited to complete on-line survey at one month is slightly less than number of people engaged in an intensive way because not all employees provided an email address for follow-up.

The 411 responses at one month are pooled from four surveys: an in-depth 'original' survey of employees who had requested PTP following completion of a baseline workplace travel survey (N=24); a 'short' survey of employees who were offered PTP without prior completion of the baseline workplace travel survey (N=9); a 'bus survey' which was used for the first two bus campaigns (N=173); and a 'consolidated' survey which was used from January 2014 once the mode of delivery of the PTP service had stabilized (N=205).

Only individuals who reported at one month that they had changed their behaviour, or were considering doing so, were invited to complete the survey at three months.

In addition, the Sustrans Commuter Challenge was separately monitored and evaluated by the Sustrans Research and Monitoring Unit. Findings from the 2014 Challenge are available as a separate report³, and are summarised in section 4.9.

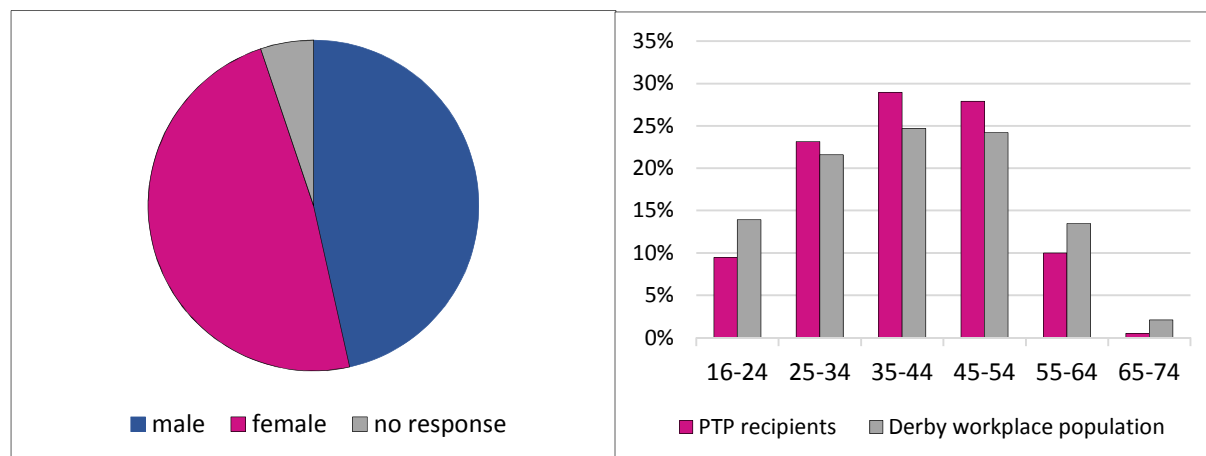
² The on-line surveys underwent some modification during the early stages of the project, in response to changes in the way that the service was delivered. In the following sections, data from separate surveys are aggregated where possible.

³ Derby's Commuter Challenge 2014: Results; available from Sustrans Workplaces team.

4.2 Demographic data

Survey respondents at one month were evenly split between male and female (Figure 4.1). People aged between 25 and 54 were slightly over-represented, compared to the workplace population of Derby as a whole, while those aged 16-24 and 55-74 were somewhat under-represented. It is not clear whether this reflects a response bias, or a tendency for the Workplace PTP service to have engaged more people in the middle age groups. Most survey respondents described their ethnic origin as 'white' (80%); with 11% listing another ethnic origin and 9% not stating their ethnic origin.

Figure 4.1: Gender and age distribution of respondents to follow-up survey



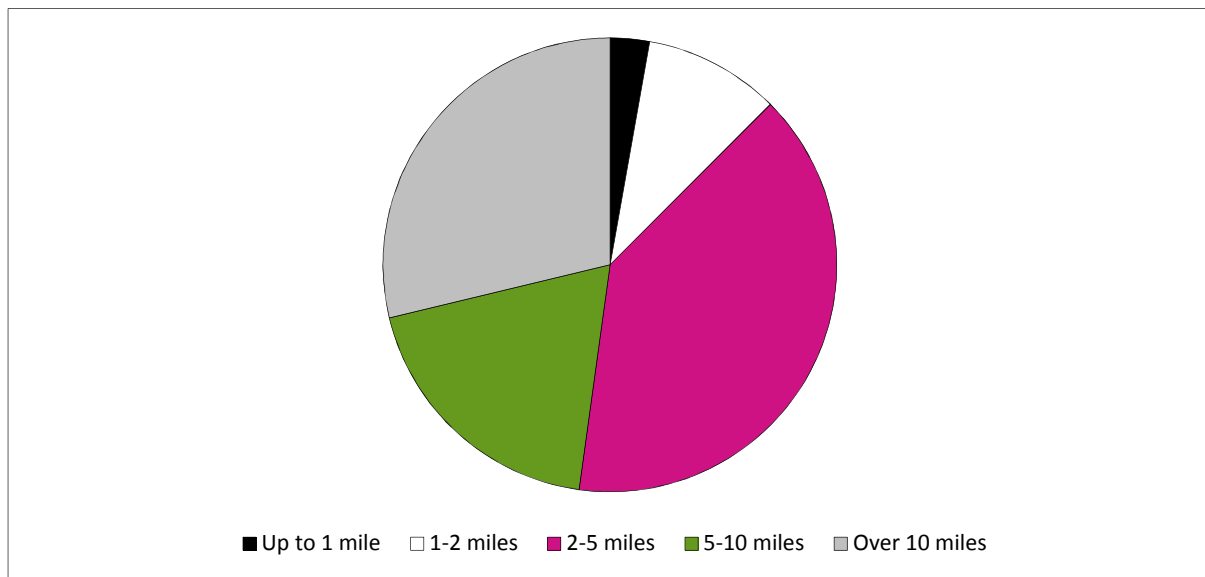
Base: respondents to follow-up survey at one month who had received a personal journey plan (N=213 for gender and N=205 for age; question not asked of all survey recipients).

4.3 Journey origins and distance travelled

Data on the home postcode of personal journey plan recipients was recorded by the Workplace PTP project officers. Slightly over half (56%) of personal journey plan recipients lived in Derby itself, in postcode areas DE1, DE3, DE21, DE22, DE23 or DE24, while 44% lived outside Derby (N=756 valid postcodes).

This is consistent with evidence from the one month survey on journey distance between home and work (Figure 4.2). Just over half (53%) of survey respondents who had received a personal journey plan or free bus ticket lived less than five miles from their workplace, and the estimated average journey to work distance for all respondents was 5.9 miles.

Figure 4.2: Distance from home to work

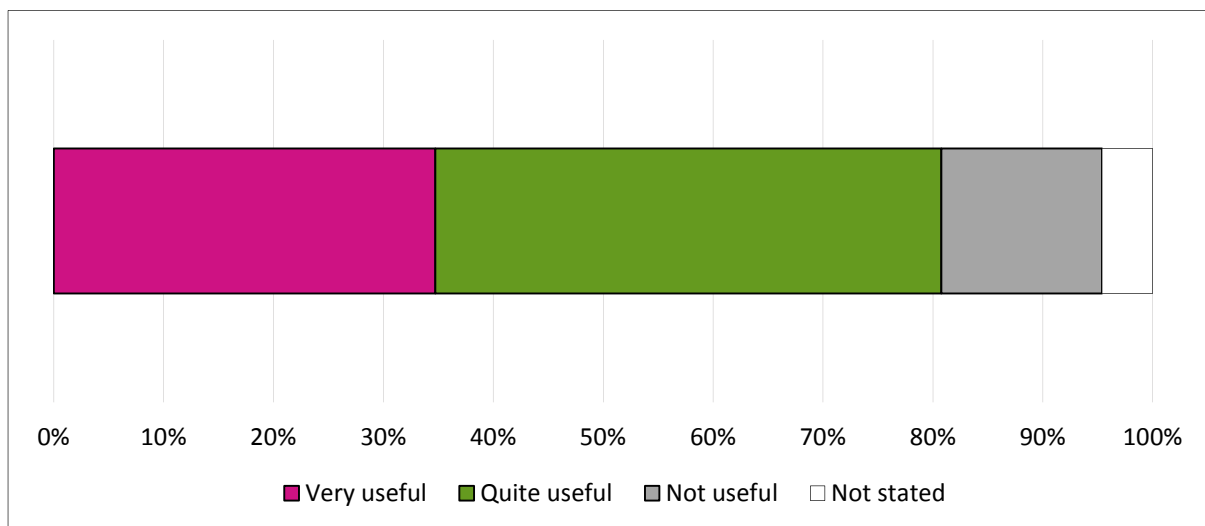


Base: respondents to follow-up survey at one month who had received a personal journey plan or free bus ticket (N=320; distance not known for 91 respondents).

4.4 Usefulness of the PTP service

Most individuals who received a personal journey plan found it useful, with 35% reporting that the information and services they received had been ‘very useful’ to them, and 46% reporting that they had been ‘quite useful’ (Figure 4.3).

Figure 4.3: Overall, how useful did you find the information and services that you received from the Connected Personal Travel Adviser?



Base: respondents to follow-up survey at one month who had received a personal journey plan (N=238). Question not asked of individuals who only received a free bus ticket (without a personal journey plan) in bus promotion campaigns.

Qualitative responses to the one month survey suggested that people had been surprised and impressed by the personalised nature of the service, and that the one-to-one contact was important. Comments included:

I think the service is really good and [the adviser] was really helpful. Well done.

Very useful service. Prompt and responsive.

Really good idea.

Excellent service, very communicative.

I was very impressed by the service and the useful travel advice I received. As a result I have changed the way I travel to and from work and I feel much better for it. So thanks and very much appreciated.

Really thrilled that this service exists as it is a great cause.

I was really satisfied with the Personalised Travel Planning service I received. [The adviser] was extremely helpful and provided me with detailed information how I can get to work and back home using Connected buses. It was really useful. Many thanks for all information!

Surprised and pleased at how personalised the advice was.

I was very impressed with the detail in my personal travel plan. It included travel options that I was not previously aware of. Excellent service.

I really appreciate the information and personal travel plan. It was really good to meet an advisor in my work place.

Great service and makes a difference.

I found the plan very useful and it inspired me to get back on my bike. The links were also useful, particularly to the Derby Bike Works. I have shared the link with colleagues and I have been down to visit. Thanks for the information.

Where survey respondents had not found the service useful, this tended to be because their personal circumstances (home location, or family commitments) meant that the Workplace PTP service had been unable to identify an acceptable alternative to driving; or because they found public transport too expensive or unreliable. For example:

The information was very useful, unfortunately due to my work times and the availability of buses it would mean my journey to work would be twice as long compared to jumping in the car and driving in. As I currently have free city centre parking the costs are very similar - this may change in the future if I have to start paying for car parking, I would then consider alternative ways to getting to work.

I tried using the buses but they are not reliable enough. I arranged my work start/finish times to fit in with the bus timetables but some of the buses were late and some missed out making me late for work. I had to catch two buses in each direction and still had a 10 min fast walk from bus stop to workplace.

It was a useful exercise, however none of the suggestions were really suitable for my circumstances. I can see that this would be a very useful tool if I lived closer to work and it would have opened up some options I may not have previously considered.

A useful service and source of information. Unfortunately I haven't really been able to act on your advice but this is due to the awkwardness of my journey rather than the quality of the service.

This demonstrates the limitations of the Workplace PTP service on its own – it cannot solve deficiencies in the transport network. A particular issue was that because of the lack of integrated bus ticketing, travel by bus was often more expensive than driving or travelling by train, even with the various saver tickets. However, it is also clear from survey returns that many people had discovered alternative travel options, and been persuaded to try them out, following contact with one of the travel advisers.

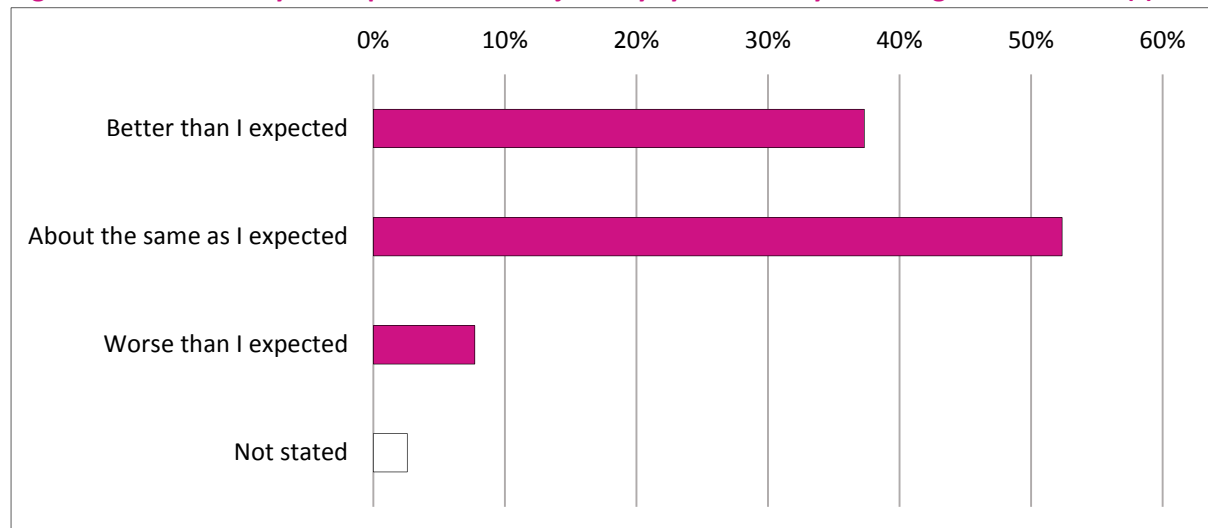
4.5 Impressions of bus travel

Some car drivers were offered a free one month or one week bus ticket, either as part of a bus promotion campaign or alongside a personal journey plan, and this resulted in a sizeable number of drivers trialling bus travel for their journey to work.

This ‘sampling behaviour’ is only likely to result in longer term behaviour change if the initial experience is a positive one, and so it is important to know what impressions people had about their free journeys.

Figure 4.4 shows the extent to which survey respondents felt that the journeys made with their free tickets matched their expectations. Over a third (37%) said that their journeys had been better than expected, while only 8% felt that their journeys had been worse than expected.

Figure 4.4: What was your impression of the journeys you made by bus using the free ticket(s)?



Base: respondents to follow-up survey at one month who had previously received and used a free bus ticket (with or without a personal journey plan) (N=233).

The pattern of around a third of respondents finding their bus journey better than expected matches evidence from previous bus ticket promotion projects in other cities⁴.

Some caution is necessary in interpreting these figures, as there may be some response bias (because people who enjoyed their free travel might be more likely to respond to a request to complete a survey). However, it is clear that some of the people engaged by the project had a more positive view of bus travel afterwards than they had had before. This highlights the important role that free ticket offers may play in dispelling negative perceptions about bus travel.

People who found their bus journey better than expected commented that:

I am impressed with the bus travel used so far and I am really pleased with the MANGO card I received. I will definitely be topping that up. Thank you. (Female, aged 41-60, access to a car all the time; previously drove / walked to work, now uses walk / bus)

From driving every day to now catching the bus both saves me money and I find this an easier way to travel. (Male, aged 25-40, access to a car all the time; previously drove to work, now drives / uses bus)

I was grateful for the free bus ticket originally but a little apprehensive towards travelling by bus, but upon using the service I was surprised at the ease and comfort of the service and it's now changed my view for using public transport to get to work. (Male, aged 25-40, access to a car all the time; previously drove to work, now drives / uses bus)

It gave me the chance to try the bus and I was pleasantly surprised [at] how quick the journey was. (Female, over 60, access to a car some of the time; previously drove / travelled as car passenger to work, now travels as car passenger or by bus)

People who found the bus journey worse than expected commented on the lack of integration between competing operators; failure of buses to run to time; grumpy drivers; and overcrowding.

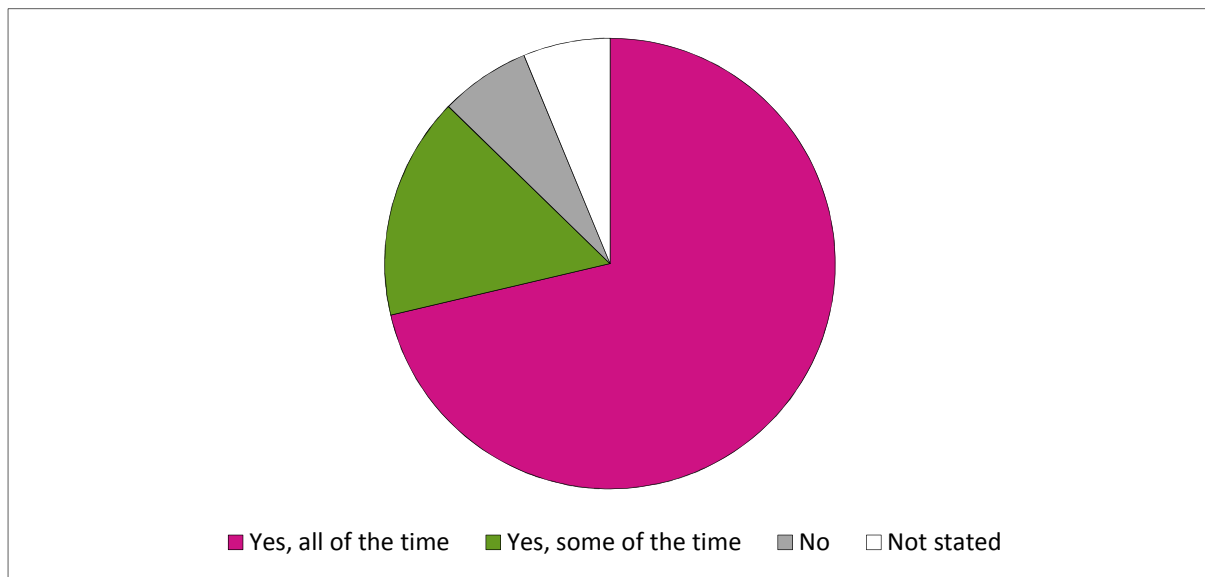
4.6 Access to a car and attitude to driving

For the Workplace PTP service to be effective in reducing carbon emissions and congestion, it needs to engage and be useful to people who are habitual car users.

Almost three-quarters (72%) of survey respondents reported that they had access to a car all the time, with a further 16% having access to a car some of the time, as shown in Figure 4.5. The service thus appears to be well-targeted.

⁴ Transport for Quality of Life (2012) *Evaluation of the Greener Journeys Behaviour Change Lab*. In this free bus ticket promotion project in Sheffield, Manchester and Leicester, coordinated by social enterprise Behaviour Change on behalf of the Greener Journeys consortium of bus operators, between 32% and 49% of free bus ticket recipients found that the journeys made using their free ticket had been better than expected, compared to only 2-3% who felt that it had been worse than expected.

Figure 4.5: Do you have access to a car?



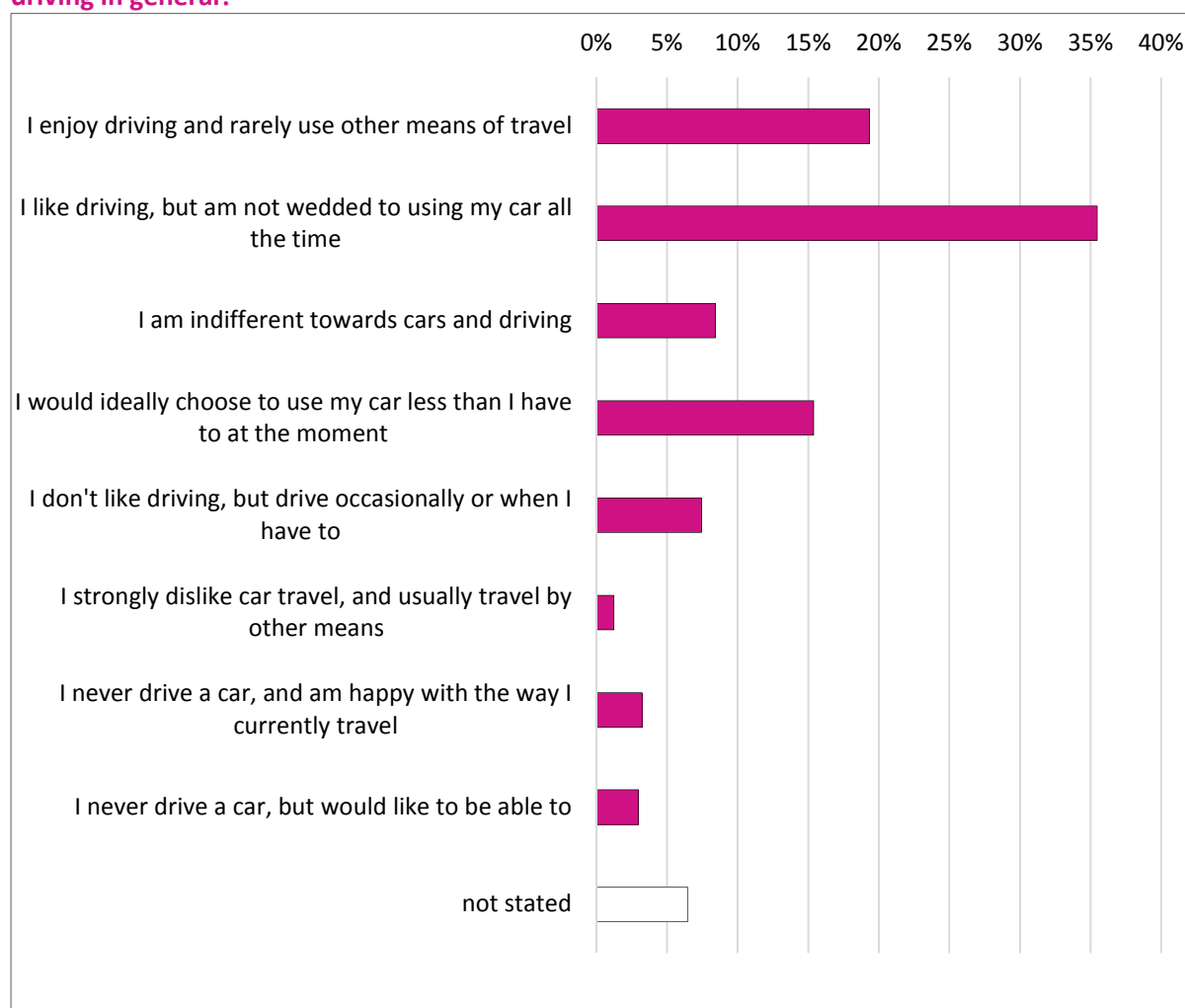
Base: respondents to follow-up survey at one month who had received a personal journey plan and / or a free bus ticket (N=402; data could not be matched to baseline workplace travel survey for 9 respondents).

To further test the effectiveness of the Workplace PTP service in reaching habitual car users, the one month follow-up survey asked respondents about their attitude to driving (Figure 4.6). Nearly eight out of ten respondents fell into an attitudinal group which suggested that it was worthwhile for the PTP service to work with them:

- Slightly over half of survey respondents had positive feelings about driving. They reported that they enjoyed driving and rarely used other means of travel (19%), or that they liked driving, but were not wedded to using a car all the time (36%).
- A quarter had neutral or somewhat negative feelings about driving. They either reported that they were indifferent to cars and driving (8%), or that they would ideally choose to use their car less than they had to at the moment (15%).

Only 15% of survey respondents never drove, or only drove occasionally.

Figure 4.6: Which one of the following statements is the closest description of how you feel about driving in general?



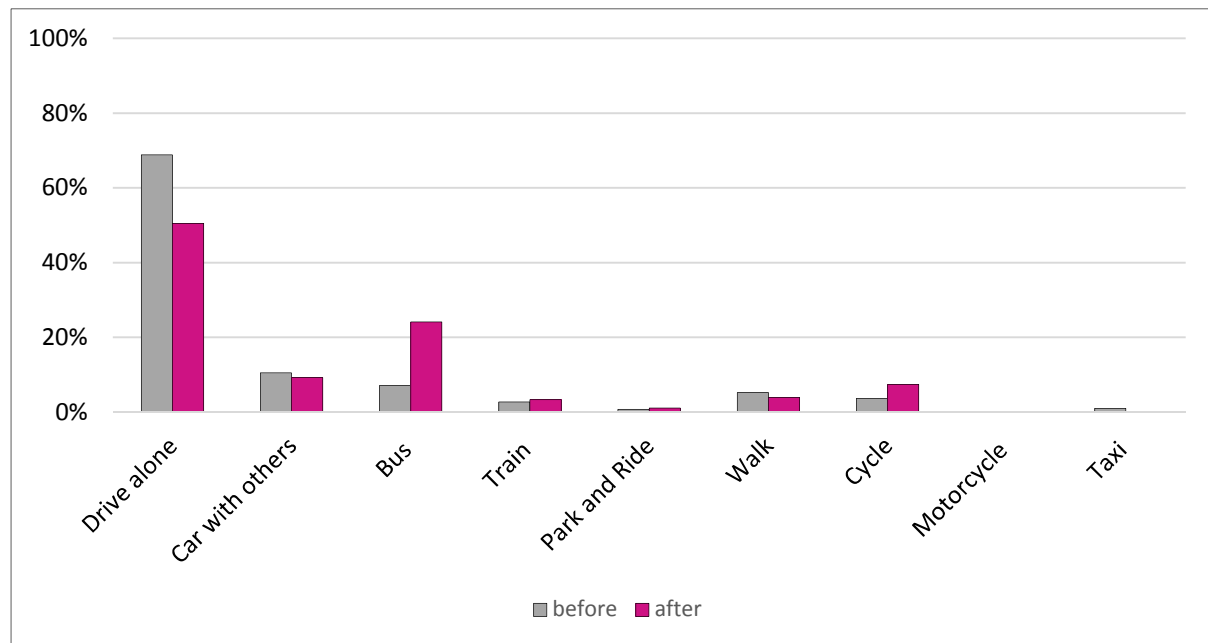
Base: respondents to follow-up survey at one month who had received a personal journey plan and / or a free bus ticket (N=402; question not asked for 9 respondents).

Looking at survey respondents who had received a personal journey plan and who reported that they enjoyed or liked driving, the proportion who found the Workplace PTP service ‘very useful’ was almost the same as reported above (section 4.4) for all respondents (36%; N=122). This is encouraging, as it suggests that this important but potentially resistant target group has been reached in an effective way.

4.7 Short term changes in travel behaviour

Taking all survey respondents together, car driver mode share fell from 69% before contact with the Workplace PTP service to 51% one month afterwards, a fall of 18%-points (Figure 4.7). The biggest shift was to bus travel, which increased from 7% to 24%. Cycle mode share also increased, from 4% to 7%. There were small reductions in car-sharing and walking.

Figure 4.7: Change in mode share before / after contact with PTP service



Base: respondents to follow-up survey at one month who had received a personal journey plan and / or a free bus ticket (N = 411 people / 1692 trips to work before intervention / 1943 trips to work one month after intervention).

Note: Due to changes in the way the PTP service was delivered, the travel mode question was modified part-way through 2013. For most survey respondents, data on pre-intervention travel patterns is based on recall in the one month follow-up survey ('Think back to how you used to travel to work or college BEFORE you received information from us. In a typical week, how many days did you travel to work/college by each of the following means?') However, 24 respondents in the initial stages of the project were asked about pre-intervention travel patterns in a baseline workplace travel survey (before receiving PTP). Responses to the two travel mode questions have been pooled.

There were quite significant variations in the way travel behaviour altered, depending upon the nature of the interaction that had taken place. These are illustrated in Figure 4.8 and Table 4.2. The biggest change in behaviour is seen amongst those people who had received *both* a personal journey plan and a free one month or one week bus ticket. The effect for this group is substantially greater than it is for those who only received a free bus ticket. In broad terms, for every 100 trips to work, the free bus ticket offer reduced car driver trips by about 20, while the addition of a personal journey plan further reduced car driver trips by about 10.

The smallest change in behaviour is seen amongst those who received a personal journey plan but no free ticket. This may be due to different baseline populations: that is, those people were not offered a free bus ticket when they received their personal journey plan may have been the ones who had no suitable bus route, and hence less opportunity to change their travel behaviour anyway.

Figure 4.8: Change in mode share according to nature of service received

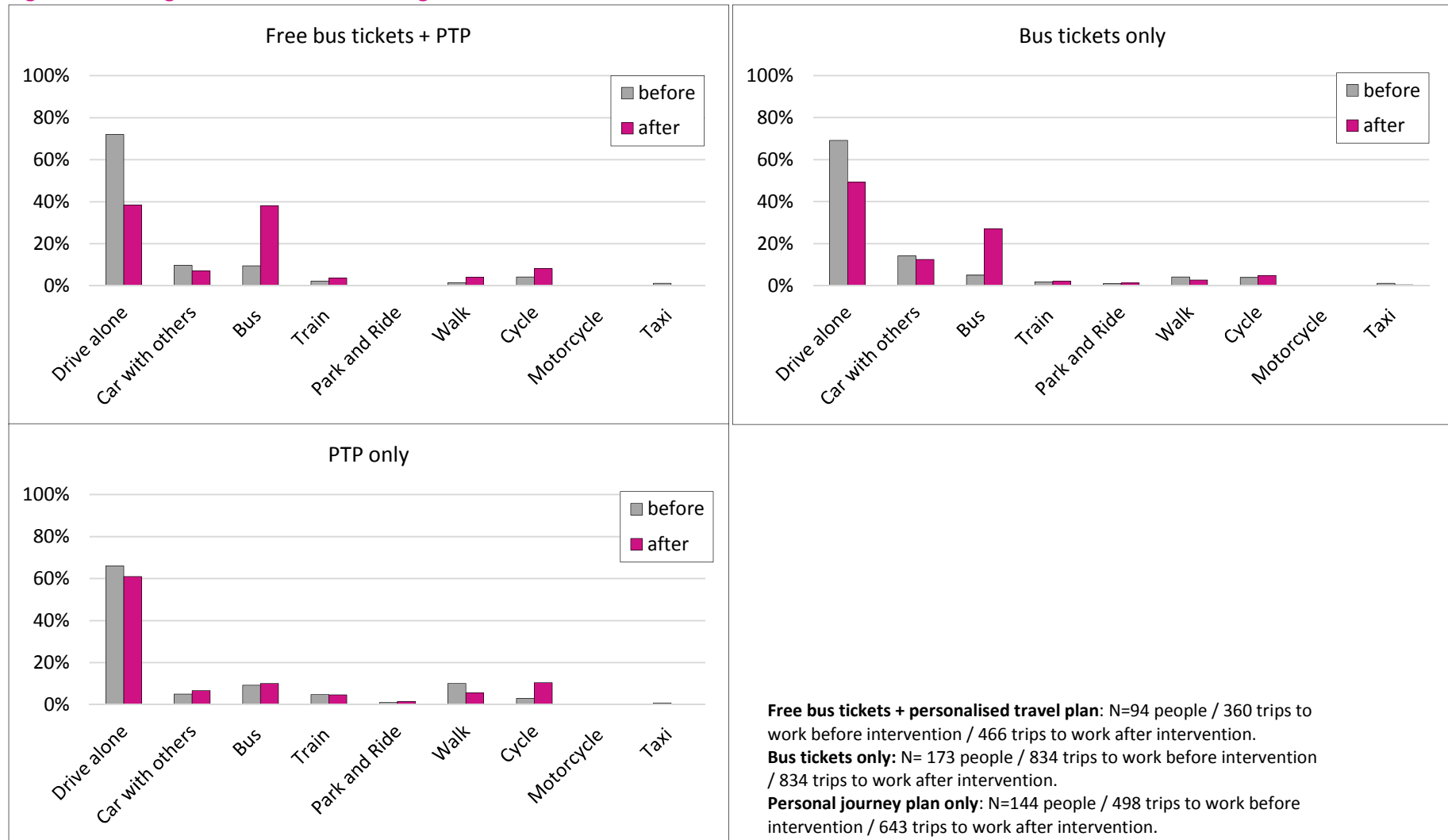


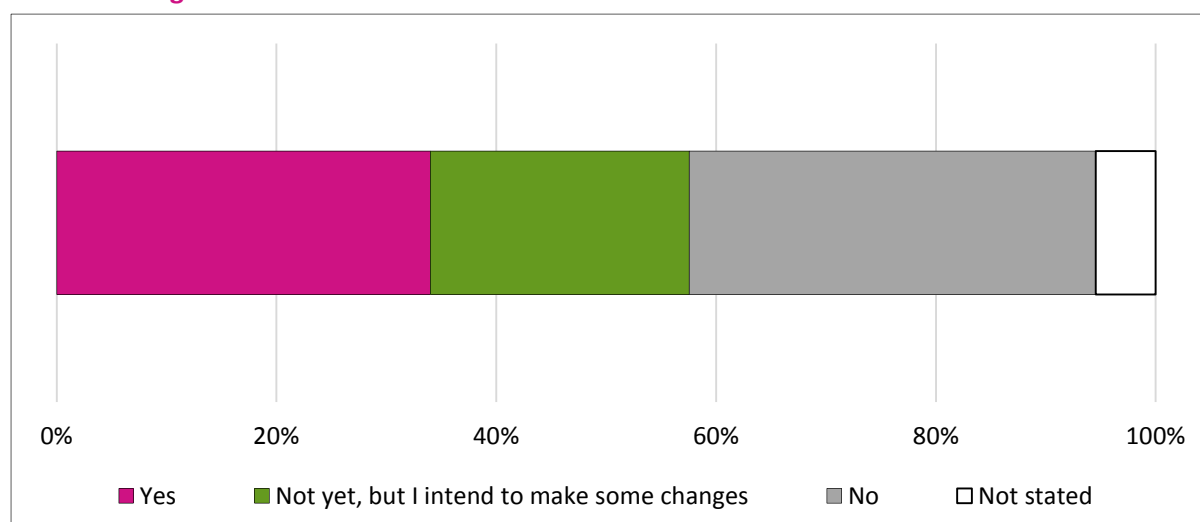
Table 4.2: Car driver mode share before and one month after intervention

Nature of intervention	Before	After	%-point change
Free bus tickets + personal journey plan	72%	38%	-34%-points
Bus tickets only	69%	49%	-20%-points
Personal journey plan only	66%	61%	-5%-points
All survey respondents	69%	51%	-18%-points

Free bus tickets + personal journey plan: N=94 people / 360 trips to work before intervention / 466 trips to work after intervention. Bus tickets only: N= 173 people / 834 trips to work before intervention / 834 trips to work after intervention. Personal journey plan only: N=144 people / 498 trips to work before intervention / 643 trips to work after intervention.

People who received a personal journey plan were also asked whether the information that they had received had helped them to make any changes in how they travelled to work (Figure 4.9). Just over a third (34%) of respondents said that they had made changes; and a quarter (24%) said that they had not yet made any changes, but intended to do so⁵.

Figure 4.9: Did the information you received help you to make any changes to how you travel to work or college?



Base: respondents to follow-up survey at one month who had received a personal journey plan (N = 238).

Note: 24 respondents to the original one month follow-up survey were asked a slightly different question (“Since meeting the travel adviser, have you made any changes to how you travel to work?”). Responses are included here.

⁵ There is the potential in this and other survey questions for results to be distorted by non-response bias (as those people who have *not* changed their behaviour may be less likely to respond to the survey). The possible extent of non-response bias was tested using this question. Responses of people who responded early to the survey (in less than 4.9 days; N=163) were compared with those of people who responded later (over 4.9 days; N=75). Some research has shown that late respondents are similar to non-respondents, and can be used as a proxy for non-respondents (e.g. Welch and Barlau (undated) *Survey Nonresponse Issues*). The late respondents showed slightly less tendency to change, but the difference appears fairly small: 59% of early respondents compared to 53% of late respondents answered either ‘Yes’ or ‘Not yet, but I intend to make some changes’. For this and all other survey questions, it has therefore been assumed that non-response bias will have had only a fairly limited effect on results.

Examples of the types of changes respondents had made included:

I now use the bus and train when the weather is dry and found the information booklets and travel advice easy to follow to enable me to do so.

The bus information was useful. But more importantly the conversation made me think about my travel to work. I started to think about other options. I now car share mostly (for personal reasons also). I've discovered that walking to work does not take as long as I thought. So, with the weather getting better I intend to walk to work more and more.

My journey to work now consists of a combination of train and bicycle.

Was not aware that there were buses that served Raynesway. As I live in the city centre and the Rolls Royce car parks are awkward to get to, it has greatly benefitted me catching the bus every day.

I have started taking the bus as the travel plan showed it was cheaper and easier.

4.8 Sustainability of changes in travel behaviour

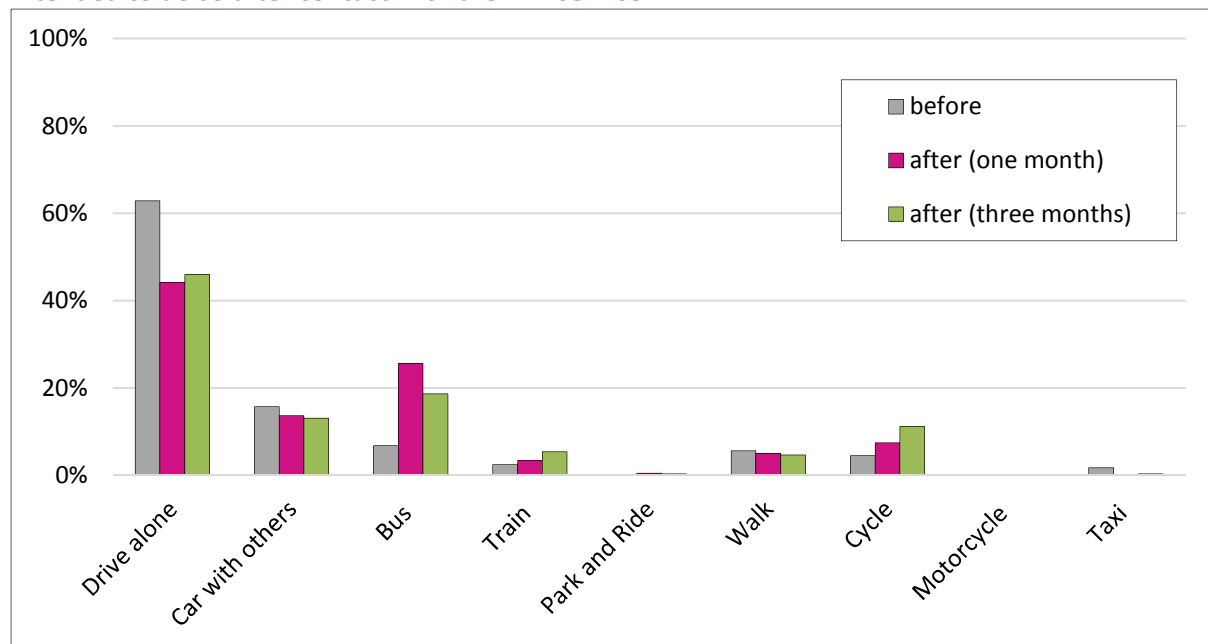
It is also of interest to know whether the short term changes in travel behaviour reported in section 4.7 were sustained over a longer time period than one month. For example, did people who changed their travel patterns immediately after contact with the Workplace PTP service subsequently slip back into their previous travel patterns? And did people who said at one month that they were intending to change their travel patterns actually go on to do this?

Figure 4.10 shows change in mode share (before intervention, and at one and three months afterwards), for the sub-group of respondents who changed their behaviour immediately after contact with the Workplace PTP service, or said that they were intending to do so. For this group, the lower car mode share observed at one month after contact with the PTP service appears to have been sustained at three months – that is, respondents do not appear to have reverted to driving to work. There has been some decay in the proportion of trips by bus between one month and three months, but the proportion of trips by cycle has increased. The shift between bus and cycle may in part be related to timing of surveys⁶.

Amongst respondents who received a personal journey plan, about two-thirds (67%) of those who had changed their travel, or intended to, at the one month survey, were (still) using the new travel options at the time of the three month survey (Figure 4.11).

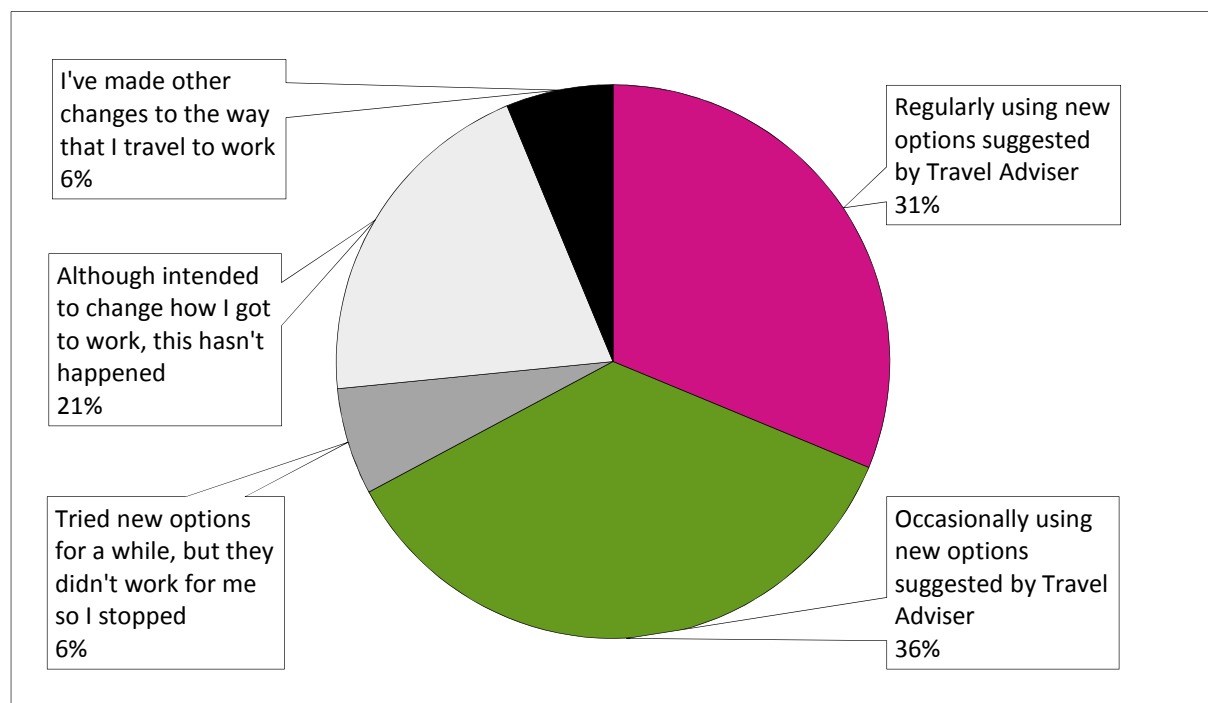
⁶ The most pronounced increase in cycling between one and three months is amongst survey respondents who received a free bus ticket during a winter bus promotion campaign, for whom the one month survey took place between January and March, and the three month survey in June.

Figure 4.10: Longer-term change in mode share, for survey respondents who changed behaviour or intended to do so after contact with the PTP service



Base: respondents to follow-up survey at three months who had previously reported in one month survey either: (a) that they had already changed their behaviour as a result of the personal journey plan they had received, or were intending to do so (N=54 people / 258-266 trips to work); or (b) that they had used some or all of the free bus tickets they were given, or were intending to do so (N=61 people / 306-319 trips to work). Total N=115.

Figure 4.11: Longer-term change in travel behaviour, for survey respondents who changed behaviour or intended to do so after contact with the PTP service



Base: respondents to follow-up survey at 3 months who had previously reported in 1 month survey that they had already changed their behaviour as a result of the personal journey plan they had received, or were intending to do so (N=64).

The data shown in Figure 4.11 combined with that in Figure 4.9 implies that about four in ten (39%) of all respondents who had received a personal journey plan had made and maintained some changes to their travel to work, three months after receiving their personal journey plan.

Amongst those who reported a change in travel behaviour at three months, slightly more were using the new travel options suggested by the Travel Adviser ‘occasionally’, rather than ‘regularly’. From inspection of individual survey returns, it appears fairly common for people to have switched from, say, driving five days a week, to driving 3-4 days a week and using the bus or cycling 1-2 days. That is, the overall change in car driver mode share seems to be due to a lot of people making fairly small changes, rather than a few people making large changes.

4.9 Sustainable Travel Commuter Challenge

During the course of the 2014 and 2015 Commuter Challenges, data collected and analysed by Sustrans shows that 21,000 journeys were made by active or sustainable modes, or replaced by home-working. Roughly a quarter of these journeys (6,339) replaced a trip by a car driver, resulting in a saving of 21 tonnes of CO₂ (Table 4.3).

A follow-up survey carried out by Sustrans six months after the 2014 Challenge found that 47% of survey respondents had reduced their car use since taking part in the Challenge, compared to only 2% who had increased their car use (N=88).

Table 4.3: Sustrans data on Commuter Challenges

	2014	2015	Total
Number of journeys made by active / sustainable modes or replaced by home-working*	8,755	12,244	20,999
Number of car trips replaced (as driver or passenger)	2,307	4,032	6,339
CO₂ saved during the Challenge (tonnes)	8	13	21

* ‘Active / sustainable modes’ included walking / running, cycling, bus, train, car-sharing, motorbike /moped / scooter and (in 2015 only) electric vehicle. Data for 2014 are from Sustrans (2014) *Derby’s Commuter Challenge 2014: Results*. Data for 2015 are extracted from Sustrans dataset.

4.10 Estimation of overall impact

Using data on the scale of the workplace PTP intervention (i.e. the number of employees engaged) and the effect size (i.e. the change in car use, from survey data), it is possible to estimate the order of magnitude of the car mileage savings and carbon savings resulting from the Workplace PTP service. The resulting figures should be considered to be indicative, rather than precise.

Table 4.4 summarises the assumptions made in order to derive this estimate. Looking just at those who were engaged in an intensive way (receiving a personal journey plan or free bus ticket) the Workplace PTP service is estimated to have reduced car mileage by 755,000 miles per year, and to have achieved carbon savings of 230 tonnes CO₂e per annum.

There is likely to have been some additional impact from behaviour change amongst employees who were engaged in a shallow way (receiving ad hoc advice and information but no personal journey

plan or free bus ticket), but it is not possible to estimate this impact because no survey data are available for this group. There is also likely to have been some additional impact from long-term behaviour change amongst employees who participated in one or both of the Commuter Challenges.

Table 4.4: Assumptions used in estimating car mileage and carbon savings from PTP service

Number of employees with intensive engagement (receiving PTP or bus ticket)	1,493
Car driver mode share before intervention	69%
Car driver mode share at one month	51%
Average distance to work (miles)	5.9
Trips to / from work per year	480
Car mileage conversion factor to CO₂ equivalent (kg CO₂e for an 'average car')	0.304858
Annual car mileage reduction (miles)	755,025
Annual carbon savings (tonnes CO₂e)	230

Car driver mode share and average distance to work figures are based on one month post intervention survey; trips to / from work assumes 48 working weeks per year; car mileage conversion factor based on 'passenger vehicles' tab of a 17.02.2015 download of the latest dataset (2014) of conversion factors from the DEFRA Greenhouse Gas Conversion Factor Repository at <http://www.ukconversionfactorscarbonsmart.co.uk/> as recommended in DEFRA's Greenhouse Gas Emissions Reporting Guidance: 0.18943 kg CO₂e per km (0.304858 kg CO₂e per mile) for an 'average car'.

5. Conclusion

The Workplace PTP service was successful in targeting drivers, with almost three-quarters of respondents to the post-intervention survey reporting that they had access to a car all the time.

From the survey evidence, a high proportion of employees who benefitted from the Workplace PTP service found it useful, and many of those who received free bus tickets reported that their bus travel had exceeded their expectations. Even amongst drivers who reported that they liked or enjoyed driving, the PTP service was perceived to be useful, suggesting that the PTP service had influenced a key target audience that might have been expected to be more resistant to change.

The service resulted in an increase in bus travel and cycling, and a decrease in driving to work. In the one month post-intervention survey, car driving mode share fell by 18%-points compared to reported pre-intervention levels of car driving. Employees who reported at one month that they had modified their travel behaviour, or were intending to do so, showed little tendency to revert to their pre-intervention travel patterns at three months, so it appears that the changes that resulted from the intervention had become established. There was some evidence to suggest that the reduction in driving was the result of many people making small adjustments to their travel behaviour, such as taking the bus or cycling once or twice a week, rather than a few people giving up driving altogether.

Looking just at the 1,500 employees who were engaged by the Workplace PTP service in an intensive way (either receiving a personal journey plan, or receiving a free one month or one week bus ticket, or both), the annual reduction in car mileage as a result of the project is estimated at 755,000 miles, which is equivalent to a carbon saving of 230 tonnes CO₂e.

A key lesson from the project was that it is challenging to engage employees (and employers) in this type of service, most likely because most employees have established travel habits and do not see any need to change, and hence are not actively seeking information to help them to change. The project explored a wide range of tactics to overcome this barrier, and these were to an extent successful. The quality of the service offered was also very high, and this may in part help explain the high proportion of employees who reported in the post-intervention surveys that it had influenced their travel behaviour. Thus, although the number of employees intensively engaged by the Workplace PTP service is small in relation to the total number of employees in south-east Derby (probably about 5%⁷), its effectiveness amongst the people that it was able to engage was very good.

⁷ The Derby Council 2015/16 bid for LSTF revenue funding states that there are 48,000 existing jobs in south Derby, but this is a somewhat larger area than was targeted by the LSTF-funded Connected programme in the period being evaluated here.