

# **BEYOND THE NUMBERS: EXPLORING THE WIDER BENEFITS AND INDICATORS OF SUCCESSFUL PERSONALISED TRAVEL PLANNING THROUGH REAL LIFE CASE STUDIES**

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## **ABSTRACT**

Often, the initial success of Personalised Travel Planning (PTP) is measured by the number of participants recruited during the project within a community followed by the impact of the intervention on single occupancy car journeys and numbers of bus, bike or walking trips. This paper seeks to go “beyond the numbers” and explore the wider benefits observed amongst real life case studies in the implementation of phase 1 of “Go Barrhead’s” PTP project, a vital component of East Renfrewshire Council’s Smarter Choices, Smarter Places programme.

Between August and September 2009, a third of all households in Barrhead were targeted for PTP and as with similar projects the outputs have been quantified, with the focus being participation, customer satisfaction and looking for signs of modal change. However, further exploration of case studies obtained from Go Barrhead, indicates a much wider range of benefits at the personal and household level and suggests that focussing solely on numerical statistics may result in many of the most important and additional benefits that have resulted from travel behaviour change being overlooked.

Focussing on these additional benefits has led the authors to develop a set of recommendations for supplementary indicators by which the success of PTP could and possibly should be measured in the future, with wider influences and relevance of PTP to other policy areas including health, social inclusion and community development. As well as contributing to the discussion of PTP application and research, these will inform phase 2 of the implementation of PTP to the remaining households in Barrhead.

## **1. INTRODUCTION**

It is widely recognised that measuring the effects of marketing interventions on behaviour change are a considerable challenge, not least because of the many uncontrolled factors that may have an influence on people’s actions (cited by W. Brog et al (2009) and Stropher et al (2009)). Whilst it is not the aim of this paper to offer a robust and groundbreaking methodology for

Personalised Travel Planning (PTP) evaluation, it is its intention to provoke thought and recognition of some of the wider benefits and indicators which might be associated with successful Personalised Travel Planning (PTP).

Many of these wider benefits are commensurate with the Scottish Government's strategic objectives of:

- **Healthier** - Helping people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care;
- **Safer and Stronger** - Helping communities to flourish, becoming stronger, safer places to live, offering improved opportunities and a better quality of life;
- **Smarter** – Expanding opportunities to succeed from nurture through to lifelong learning ensuring higher and more widely shared achievements; and
- **Greener** - Improving Scotland's natural and built environment and the sustainable use and enjoyment of it.

Consideration of these wider benefits and current monitoring processes highlights that current indicators focus on transport behaviour change, and so do not record many of the additional changes and wider benefits that may occur as a result of the project.

As the field of Smarter Choices, and PTP in particular, continues to develop and government spending across potential stakeholders is reduced, ensuring that the benefits of PTP can be communicated to all those with a vested interest will be important to enable pooling of resources.

Through the authors' experiences in working with real-life case studies in delivering phase 1 of the PTP project in Barrhead as part of the Smarter Choices, Smarter Places (SCSP) programme, it is hoped that this paper will help understanding of the full potential for PTP in terms of the evaluation of wider impacts, which it is well acknowledged are presently not well developed (Stopher et al, 2009). This will be used to provide input into the phase 2 implementation of the PTP project in Barrhead.

## **2. BACKGROUND AND CONTEXT**

### **2.1 Smarter Choices, Smarter Places**

SCSP is a £15m Scottish Government initiative, with support from COSLA, to encourage communities to reduce their car use in favour of more sustainable modes of transport, such as walking, cycling and the use of public transport. The project was set up with following key objectives (Scottish Government, 2008):

- To achieve a sustained change in travel behaviour in the participating authorities: including increased proportions of active travel and

- public transport use and decreased proportion of car use (particularly single occupancy);
- To provide an opportunity for willing Local Authorities to undertake intense activity on sustainable travel and related physical activity interventions through match funding;
  - To test the effectiveness of the sustainable travel and other interventions against national and local outcomes as per the National Performance Framework (particularly Greener, Healthier and Safer and Stronger);
  - To share lessons learnt across disciplines and geographic boundaries; and
  - To provide practical experience over time to mainstream these activities in Scotland where they have proven effective.

From 2008/09 to 2010/11 the SCSP project will fund seven areas in Scotland: Barrhead; Dumfries; Dundee; Glasgow's East End; Kirkintilloch and Lenzie; Kirkwall; Larbert; and Stenhousemuir. The project in Barrhead has received £813,200 from the Scottish Government and this will be supplemented by match funding from East Renfrewshire Council to take the project total to £1.35m.

## **2.2 Barrhead: The Locality**

Barrhead has a population of 19,813 making up 22% of the authority total. It is a town with a strong industrial heritage and which, although suffering from social and economic problems, is the subject of significant regeneration activity. Sustainable transport plays a key role in this regeneration work.

Like many similar-sized towns, Barrhead has suffered in recent years from the closure of local industries leaving it with fewer opportunities for employment as well as the associated problems that this can bring. Barrhead is the only locality in East Renfrewshire with areas within the worst 15% data zones in Scotland. Of its total population, 6,107 (31%) live in areas that are among the 25% most deprived in Scotland and over 1,000 (>5%) live in areas that are within the worst 10% nationally.

Barrhead has been identified by the Community Planning Partnership as a priority area for regeneration through the East Renfrewshire Regeneration Plan. This is promoted by East Renfrewshire Council and its partner organisations under the banner "Better Barrhead". Regeneration proposals aim to ensure that Barrhead is a town that is attractive to investors, the existing community and potential new residents. The town is also well served by transport links to Glasgow through public transport and the road network, although there is scope for further development of internal links within the town and to other parts of East Renfrewshire.

Generally, Barrhead has levels of car ownership, which are comparable with the Scottish average of 66%, although this can be as low as 52% in some

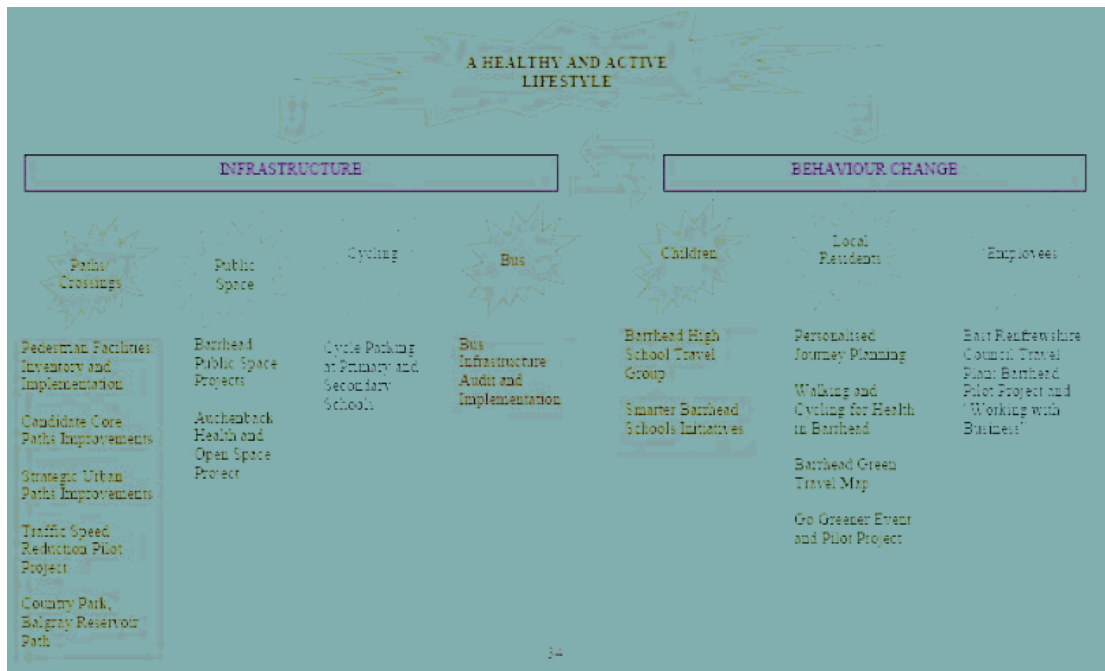
areas of the town. These levels are considerably less than the average of 80% for East Renfrewshire as a whole. Just 30% of residents work or study in East Renfrewshire with 45% travelling to Glasgow and the rest to other authority areas. 67% of residents travel to work by car, 19% by train or bus, 10% by other modes including walking and cycling, and 3% work mainly at home.

### **2.3 Go Barrhead!**

It was a priority for East Renfrewshire Council to ensure that the aims and objectives of the project met the unique characteristics of the town as described above. A package of measures was developed for Barrhead which is based around the key theme of “Promoting a Healthy and Active Lifestyle”, which:

- Reflects the aims and objectives of the Scottish Government in developing the SCSP initiative;
- Complements and supplements existing projects and on-going regeneration activity which is taking place in Barrhead, of which high quality public spaces and recreational facilities are a key component;
- Recognises the existing social, economic and geographical profile for Barrhead; and
- Will ensure a lasting legacy in Barrhead with high quality and innovative public spaces, complemented by a populous aware of the health benefits of sustainable transport and having the ability to make informed travel choices.

Branded as “Go Barrhead”, an approach was identified which combines the benefits of providing high quality infrastructure with a variety of carefully targeted behaviour change projects which will encourage “Smarter Choices”. This is articulated in the following diagram highlighting the key linkages between infrastructure-based and behaviour change approaches, in order to meet the desired outcome of “A Healthy and Active Lifestyle”:



## 2.4 Go Barrhead PTP Project

The PTP project is fundamental to the delivery of the Go Barrhead programme. Its delivery accounts for over 20% of the overall project spend in Barrhead and all 7,500 households in the town will have the opportunity to participate in the programme. Following a European procurement process carried out by East Renfrewshire Council, Steer Davies Gleave was successfully awarded the contract to deliver PTP in Barrhead.

The Go Barrhead PTP project will be delivered over two years: the implementation phase of Year 1 was undertaken between August and September 2009 and the Year 2 implementation phase is programmed to be undertaken between May and July 2010. The specific objectives of the PTP project are:

- To increase active travel amongst members of the community;
- To increase levels of physical activity;
- To increase the use of public transport;
- To reduce the number of car driver trips, particularly single occupancy;
- To improve sustainable access to employment, health care provision, recreational facilities and other essential services; and
- To provide high quality information on the range of travel options available to the community, including promotion of new and existing facilities and services, as well as the overall Smarter Choices, Smarter Places initiative.

Key elements of the PTP project included:

- **Development of a Local Community Guide:** this guide highlights the full range of services available in the town, including retailers and community groups. Local organisations were approached directly to gain support for the Go Barrhead project, from the joint perspectives of promoting local short trips on foot and by bike, promoting use of the local economy and to promote the range of healthy foods and support services on offer in the town;
- **Development of a Transport Guide:** this guide provides a one-stop resource of information on bus and train services that operate in the Barrhead area; and
- **Development of a Green Travel Map:** this leaflet highlights the health benefits of walking and cycling in the town and the regeneration work that has been delivered as part of Go Barrhead.

### 3. EVALUATING PTP

In order to assess the potential impact of PTP, many projects use a similar set of indicators. Brog et al (2009) summarise these indicators as:

- **Marketing Indicators:** which include the number and type of information requests and quantitative feedback from residents throughout the project;
- **External Indicators:** which include measured public transport patronage; and
- **Behavioural Indicators:** which are changes in mobility patterns generally obtained through pre- and post survey monitoring.

When delivering PTP in Barrhead during 2009, consideration of the immediate impacts of the project relied on a set of marketing indicators as follows:

- Engagement rates. That is, the percentage of those households in the target area who have been spoken to by a Travel Advisor at some point during the project. In year 1 this was 73%;
- Participation rates. That is, the percentage of households who have participated in the project through receiving travel information, resources and support, originating from their discussion with a Travel Advisor. In year 1 this was 42%; and
- Customer satisfaction. That is, the percentage of those households contacted who rate the quality of the personal travel advice service as good or very good. In year 1 this was 96%. The customer service survey also identified that the majority of participants had received the project well and almost a third of participating households reported a change in their travel behaviour as a result of the Go Barrhead information or speaking with a Travel Advisor.

In addition to these, an overarching monitoring programme considering the Smarter Choices, Smarter Places programme in its entirety is also underway which seeks to identify the impacts of the seven projects overall. It is expected this monitoring programme will use a collection of external and behavioural indicators to determine the overall impact of the initiative.

#### **4. METHODOLOGY**

Where indications of behaviour change were present or suggested through the marketing indicators an attempt was made to explore in greater detail these changes through development of individual case studies. The main aim of these case studies was to use them in the project website, newsletter and promotional video as real examples of the impact of the PTP project.

Travel Advisors were trained to be aware and receptive to participants who they felt were particularly responsive to the project and its interventions, with the intention that they may pose suitable case studies. In addition, the results of the customer satisfaction survey were used to identify and refine the selection of potential participant case studies: the key criteria being those participants who had made a notable change in either their main mode of travel or lifestyle habits or patterns accounting for increased levels of sustainable modes.

Following the identification of potential participant case studies, each participant was contacted directly by telephone and the conversation that occurred was structured on the following:

- an introduction by the member of the Go Barrhead project team;
- confirmation that it was a convenient time to talk;
- an explanation of the progress of the PTP project overall; and
- a request to discuss their opinions/ feelings of the project and, where appropriate, asked if they would be interested in providing a case study for the project.

If the participant was willing, they were engaged in an in depth conversation exploring further the wider benefits they have realised and experienced through the PTP intervention.

#### **5. CONSTRAINTS AND OPPORTUNITIES**

The constraints of the adopted approach are considered as:

- Discussions with participants were undertaken around a loosely-structured framework. Whilst a formally structured discussion may have resulted in a more consistent range of responses from case studies, it was felt that due to the uniqueness of each individual and their experiences (and how these were relayed) as well as each

participant having been previously engaged in the PTP process, the customer quality survey and the evaluation element, it was considered that a fully structured questionnaire or dialogue would lead to “survey fatigue” and reduced willingness to re-engage;

- The number of obtained case-studies is considered relatively low in comparison to the overall number of participants in the PTP project. In some instances this is attributable to an element of “survey fatigue” as identified above, as well as some individuals being content to “tell their story” but not have their names or details used in any other way. The number of case studies are considered to provide a sufficient indication of the wider indicators of success;

The opportunities of the approach are considered as:

- One-to-one conversations undertaken directly with potential participant case studies are more practical than, for example, using focus groups to illicit details about the wider benefits of PTP. One-to-one conversations engender trust and are more likely to encourage individuals to open up and share their personal experiences. In a focus group setting, people may be inclined to “explore” benefits and compare scenarios, rather than directly relate their actual personal experiences; and
- Case studies provide a viable and tangible experience which can be related to by the wider public and therefore raise the profile, perception and respect attributed to the project.

## 6. RESULTS AND DISCUSSION

### 6.1 Results

In total, eleven case studies were successfully undertaken with those who had reported changes in their travel behaviour and activity habits as a result of the PTP engagement. The case studies were collated and reviewed and common words, phrases and ideas of interest were identified. For example:

Karen Ferguson	Alan Johnston
<ul style="list-style-type: none"> <li>• Karen suffers from epilepsy and has recently had an operation from which she is still recovering</li> <li>• As a result of the Go Barrhead information Karen and her dad have <b><u>now signed up to the gym and try to go regularly</u></b></li> <li>• She has also <b><u>started walking a lot more</u></b> and will take longer walks if can't manage to get to the gym</li> </ul>	<ul style="list-style-type: none"> <li>• Husband and wife previously took two cars to work in Paisley and Glasgow</li> <li>• <b><u>Now they share the car and the husband takes the train a lot more</u></b></li> <li>• <b><u>They have reduced the number of cars they have from two to one</u></b></li> <li>• Have changed from a petrol to a diesel engine</li> </ul>



<ul style="list-style-type: none"> <li>• After her operation she had gained a lot of weight, but has never been heavy before</li> <li>• Now <b><u>she notices a real difference in her weight as a result of being more active and lots of people have commented on the change</u></b></li> <li>• Finds being out and about more and going to the gym to be <b><u>sociable and there is always company</u></b></li> <li>• Has found all the Go Barrhead information to be really helpful</li> </ul>	<ul style="list-style-type: none"> <li>• They have <b><u>noticed a big saving in the cost of transport</u></b></li> <li>• Also found the walking maps and information very useful and <b><u>didn't realise previously that there were so many walks around Barrhead and/ or their routes</u></b></li> <li>• Likes to think he is a <b><u>bit fitter</u></b> as a result of walking more and reducing their car use</li> </ul>
<p><b>Mrs McFarlane</b></p>	<p><b>Mhairi Walton</b></p>
<ul style="list-style-type: none"> <li>• Prior to the discussion with the Travel Advisor, Mrs McFarlane always used her car for the majority of trips</li> <li>• Now she <b><u>uses the train and bus much more</u></b> (only taking the car when really necessary) <b><u>and finds it more sociable</u></b></li> <li>• Finds that <b><u>she meets far more people now</u></b> and “<i>you don't do that in the car</i>” and “<b><u>it's been a great experience for me to travel this way</u></b>”</li> <li>• Mrs McFarlane <b><u>now feels very involved in her community</u></b> and reports being <b><u>far more aware of her surroundings and improvements or changes going on in her local environment</u></b>, than when she made trips in the car</li> <li>• “<b><u>...travelling by public transport you can look over at the hills, Lochs....you can see the animals,...you can see all sorts of things I wasn't even aware of</u></b>”</li> <li>• “<i>I'm much <b><u>more up to date with what is going on out there</u></b></i>”</li> </ul>	<ul style="list-style-type: none"> <li>• Mhairi suffers from liver disease and found that her lifestyle had become quite sedentary as a function of her illness and how she felt about her illness</li> <li>• As a result of the personal travel conversation and information provided, <b><u>she is now walking loads more</u></b></li> <li>• Feels that <b><u>her health has noticeably improved</u></b> as a result of walking a lot more and generally <b><u>feels much healthier</u></b> as a result of being more active</li> <li>• Mhairi doesn't drive anyway, but previously relied on family members to drive her to various places – now, the only car trip she takes is to the hospital in Kilmarnock. All her other trips are by walking or public transport</li> <li>• “<b><u>I'll be honest, this project has resulted in a massive change for me....I can't believe how quickly I am coming back to health</u></b>”</li> <li>• Mhairi describes her condition as still being painful, but is <b><u>now getting on with things is and a lot healthier, happier and independent</u></b></li> <li>• “<b><u>The travel information has been a great help – it's given me an</u></b></li> </ul>

**incentive to get off my backside!!”**

Following identification, responses were coded to establish any common themes emerging. Five overarching themes were apparent and the following table summarises the themes present in all the eleven case study examples undertaken and how they relate to key national strategic objectives.

Strategic Objectives	Topic area	Case Studies										
		1	2	3	4	5	6	7	8	9	10	11
Health	Health & Wellbeing (Increased exercise and healthy eating)	✓	✓	✓	✓	✓		✓		✓	✓	✓
Safer and Stronger	Local Facilities (Including use and awareness of local facilities and infrastructure)	✓		✓	✓	✓	✓		✓			✓
	Strengthened Community Networks (Including joining community groups)			✓	✓		✓		✓		✓	✓
	Independence of Individuals (Including going out alone, travel to school, feeling of empowerment)		✓	✓	✓				✓	✓		
Greener	Mode Shift		✓	✓			✓	✓	✓	✓	✓	

The case studies emphasise the wider impacts of PTP over and above mode shift in Barrhead but also raised the issue that in terms of monitoring these impacts in a more quantitative way, the current range of marketing indicators provided would miss these valuable benefits. It is also worth noting that where some individuals reported existing or prolonged health concerns, modal shift was not a viable indicator of the success of the intervention on the basis that they still required to be accompanied for

certain trips and/or were dependant on their cars as a function of their illness, despite reporting overall health and personal benefits/improvements.

## 6.2 Potential Future Indicators

Considering the five key themes, it is apparent that the common marketing, external and behavioural indicators traditionally used to monitor PTP programmes would not allow indication of all impacts to be determined due to their predominantly transport-focus. In this regard, a range of additional information would be required to explore these wider impacts in more detail.

In order to explore these wider impacts, a range of additional indicators is proposed and summarised in the table below:

<b>Theme</b>	<b>Potential Indicator</b>	<b>Potential methods for measurement</b>
<b>Economic indicators</b>	Spend in local shops obtained from retailers	Feedback from retailers
	Number of customers	Feedback from retailers in target area
	Use of Community Guide special offer tokens	Self reported via survey
	Use of Community Guide special offer tokens	From retailers
<b>Health indicators</b>	Number of requests for health and active travel related resources	Marketing indicator from project records
	Pedometer counts	Feedback from participants
	Participation in walking or cycling events	Counts of attendees
	Attendance at fitness classes	Counts of attendees
	Time spent taking part in active travel	Before and after survey
<b>Community indicators</b>	Awareness of groups available	Self reported via survey
	Membership of groups in the town	Feedback from clubs in target area
	Patronage of community facilities	Figures from clubs in target area
	Enquiries to support groups	Figures from organisations in target area

## 6.3 Integrating Potential Future Indicators

Considering how best to integrate potential future indicators, presents a range of issues for the early phases of any PTP project and, most importantly, at the very early planning and preparatory stages when objectives and resources are being identified and developed. The key areas to be considered when integrating potential future indicators into the PTP process have been identified as:

- **Engagement with stakeholders:** Identification and early engagement of stakeholders at the planning phase, together with the ability to communicate the benefits of PTP clearly to these groups is important. Pilot projects have the opportunity to collect an evidence base that these impacts occur which then presents the opportunity to use this to influence stakeholders in the future. In the current financial climate, where PTP (and other Smarter Choices) initiatives are seen to be cost effective, but organisations may still struggle to fund programmes, bringing funds together from stakeholders is a potential way to fund these initiatives. Identifying a range of monitoring indicators that are not a monitoring overburden but do provide data that meets stakeholders requirements would be important; and
- **Collection of monitoring data:** Collection of a wider range of monitoring data may be a cost effective way of gaining evidence of impacts of a PTP project. For example collection of membership figures of local community groups if planned suitably far in advance is unlikely to be costly (compared with collection of travel survey information for instance). However, identification of the priority indicators must be agreed. These priority indicators would need to reflect the changes happening, as well as be practical to collect.

## CONCLUSIONS AND RECOMMENDATIONS

As PTP evolves from a travel demand management tool to something which is seen as a wider behaviour change initiative the potential for impacts of these projects across communities become increasingly important. Ensuring these benefits are captured and reported in the most relevant way is vital, if PTP is to be taken seriously by non-transport practitioners.

Exploring these case studies as part of the evaluation process of the first year of PTP delivery in Barrhead has provided an insight into a range of additional benefits and prompted consideration of where potential indicators may be available.

The recommendations from this paper are as follows:

- Ensuring that stakeholders are aware in the future of the benefits that PTP can bring, and 'champion' PTP (and smarter choices) in terms of a wider behavioural change initiative, rather than just a transport one;

- More thorough consideration of indicators for PTP, through engaging key stakeholders such as the NHS, those involved in regeneration and community development and others, to determine a simple set of indicators to measure impact within each theme; and
- Development of a range of indicators that match Scottish strategic objectives.

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