

THE ROLE OF PERSONALISED TRAVEL PLANNING AS PART OF A SUSTAINABLE TRANSPORT STRATEGY: EVIDENCE FROM DUNDEE

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1.1 Introduction

This paper demonstrates the role that personalised travel planning can play as part of a wider strategy to successfully promote sustainable transport in Dundee.

Dundee has made a significant investment in sustainable transport in recent years, which appears to be succeeding in terms of increasing city centre activity without accompanying increases in traffic levels.

With the arrival of Smarter Choices, Smarter Places funding, Dundee quickly recognised that this represented an opportunity to further improve transport in the city, but that a different emphasis may reap bigger rewards. It was decided that Dundee's bid would focus on addressing one of the most pressing problems of the city; the poor public health of its residents.

Therefore, the primary focus of the Dundee Travel Active programme is improving health through active travel, rather than encouraging people to reduce car use for transport or environmental benefits.

This paper will show how personalised travel planning techniques have been adapted to encourage active lifestyles, and that results from the first year of interventions have shown that transport can make a significant contribution to improved health.

1.2 Setting the scene – recent transport developments in Dundee

Dundee is Scotland's fourth city with a population of approximately 145,000 people and a regional catchment of approximately 325,000. In recent years the city has evolved from an industrial and manufacturing centre into a modern city with focus on bio-science, digital media, education, retail and culture.

Much of this development has been set against a decreasing resident population with outward migration to the hinterland and increasing levels of commuting. This coupled with a resident population with low car ownership (at approximately 50%) means there is a growing potential for transportation problems.

These changing conditions were identified in the late 1990s and the Dundee Local Transport Strategy of 2000 proposed action in terms of accessibility, economy, environment, safety and integration to address the changing transport dynamics of the city.

Through the last decade, the focus has been on maximising behaviour change by encouraging the use of good quality modern facilities. Major successful funding awards from the former Scottish Executive Public Transport Fund, New Opportunities and Fresh Futures and Bus Route Development Grant, combined with investment by Travel Dundee (now National Express) and Strathtay Scottish (now Stagecoach) and others enabled considerable progress to be made towards delivering Dundee's sustainable transport vision.

The majority of the investment was undertaken between 2002 and 2006 and included the following measures:

- Bringing Confidence to Public Transport
- SmartBus Informing the Journey
- Dundee Liftshare
- Outdoor Access Strategy
- Travel planning
- Low floor/barrier free bus services
- Targeting of school children in transport behaviour change
- Travel behaviour change marketing
- Tay Estuary Rail Study development
- Multi modal journey planner, Dundee Travel Info
- Bus Route Development, x-City Direct

These significant efforts would appear to be succeeding. Monitoring undertaken as part of the Council's Traffic Reduction Act has provided evidence that in central Dundee, traffic levels peaked in 2004/2005.

In 2008, the opportunity arose to formalise Dundee as a Smarter Choices, Smarter Places city, through the Scottish Government-funded programme. Dundee identified that this funding represented an opportunity to further improve transport in the city. However, following the years of investment described above, it was recognised that Smarter Choices provided an opportunity to do more than contribute to environmental improvements.

Therefore, funds would instead provide an opportunity for Dundee to directly tackle one of the most pressing needs of the city: that of improving its population's health. Dundee's bid was successful and Dundee Travel Active was launched with the overall aim to "encourage active travel to promote healthy lifestyles for residents of and visitors to central Dundee".

Work started on implementation of a £2.2 million package of measures in autumn 2008. The package consists of ten individual project streams within three related themes:

- Improving information on active travel options (including a website and printed materials);
- Improving infrastructure (a range of small and larger scale measures to overcome barriers to active travel); and
- Promoting behavioural change (including personalised travel planning, the development of a brand, and promotional events).

1.3 How PTP is being adapted to promote active lifestyles

The personalised travel planning (PTP) project is the most significant component of the Dundee Travel Active initiative. It is the first PTP project in the UK that has been designed to promote health improvement, rather than encouraging people to use their car less for transport or environmental reasons.

The project uses 'traditional', well established PTP techniques. The project employs a team of travel advisors who engage individuals, primarily on their doorstep in a conversation about their travel habits. The travel advisor seeks to understand the individual's lifestyle, their motivations for change, and how active travel can be incorporated into their daily routine. They offer information, ideas and advice, and a pack is delivered to that household containing the information requested by the individual.

Ideally, the project is looking to encourage walking or cycling as a replacement for sedentary modes wherever possible. However, the travel advisors also seek to encourage individuals to try out additional forms of physical activity such as walking for leisure, joining a local dance class or taking the children to the local park.

Whilst, from a transport perspective, the former outcome is the ideal, we have no reservations about achieving the latter: improved health is a key outcome for the Council and this demonstrates active travel's ability to contribute to a wider range of key objectives.

It is widely known that in order to maintain a good level of fitness, adults are recommended to do at least thirty minutes of moderate intensity activity on at least five days per week ('5x30'). We understand that for many of the individuals we speak to, it is incredibly difficult for them to achieve their 5x30. Evidence shows that in the Tayside region, only 41% of men and 31% of women currently achieve this level of activity, and this is only the *minimum* amount that they should be doing.

In recognition of this, the project also highlights that non travel pastimes, such as using the stairs instead of the lift, gardening, or heavy housework, can contribute to increasing activity levels. We realise that individuals will not suddenly start achieving their recommended activity level, however if we can get them from doing 'none x no minutes' to being a little more active then this is a measure of success.

The travel advisors reinforce to individuals that by making small changes to their daily routine, they can experience significant benefits.

One of the most successful ways in which the project has engaged with individuals is by encouraging them to take up an active challenge. The most crucial aspect of delivering behaviour change is to build commitment. An active

challenge encourages participants to act on the information and ideas that they have been provided.

Active challenges are 'negotiated' between the travel advisor and the individual, and are designed to suit the individual's lifestyle and fitness level. For an elderly person or someone with mobility or fitness problems, the challenge may be to walk to the local shops; and for someone who is bit more active, their challenge may be walk into town but get the bus back.

Theory and evidence shows that starting off with a small request that people think is reasonable and achievable is the best way to get individuals started and then the commitment can be scaled up.

Those participants who have completed an active challenge and are keen to do something more demanding are offered 'advanced PTP' interventions. These involve individuals completing an activity diary over a two to three week period, with the travel advisor providing ideas, support and encouragement.

1.4 Learning from the health sector

Dundee Travel Active has a strong relationship with a range of partners to help deliver the project. The most significant benefits, however, have arisen from the close co-operation of the health sector (NHS Tayside and the Community Health Partnership).

There is much that we as transport professionals can learn from the health sector about health behavioural change. The project has been fortunate to benefit from health sector expertise and is using some of the well developed skills employed by health professionals and incorporating them into PTP.

Representatives from NHS Tayside and Dundee Community Health Partnership have provided significant input into the travel advisor training programme on a number of themes.

Travel advisors have received training on the full range of physical health and mental wellbeing benefits that increased physical activity can bring. With this knowledge, the advisors are effectively equipped with information to be woven into their conversations about recommended levels of activity and associated benefits.

The benefits to mental wellbeing is one of the key areas that the travel advisors can promote in an easily digestible way, for example, by advising individuals that physical activity "helps you sleep better", "is a great de-stresser" or "makes you feel happy". This can work much more effectively than saying to individuals that they can reduce the risk of future onset of obesity or coronary heart disease, as individuals can notice the mental wellbeing benefits almost immediately.

Understanding health behavioural change theory has proven to be a very effective tool in delivering PTP. One of the theories taught during training was the stages of change model. This model was originally developed in the late 1970s to identify

how smokers could give up their habits or addiction and has been used to understand other addictive behaviours such as alcohol or diet, as well as travel choices.

Theory states that behaviour change rarely happens in one step. Instead, individuals move progressively through different stages, from being uninterested (pre-contemplation) to considering a change (contemplation) to ultimately making that change.

For those individuals that express a readiness to change, the travel advisors advise that setting short term goals is the key to making the first step. This is where the active challenges are so successful, by being woven into the conversation so well, the individual can feel that they are in control of setting, and achieving, their own goals.

One of the techniques being used by the travel advisors to negotiate behaviour change is motivational interviewing. Used extensively by health professionals, mainly in the treatment of addictions, motivational interviewing uses a number of methods to motivate an individual to change.

There are several key skills to motivational interviewing which the travel advisors incorporate into their conversations. The conversation always ends with the travel advisor summarising the key points of the discussion, in particular, any points that require action.

The crucial point to highlight it that the face to face engagement that PTP offers is the critical factor in encouraging people to move beyond “thinking about it” to actually “trying it out”.

The support received from the health sector has also enabled Dundee Travel Active to link to existing health promotion activities. One of the ways is by working with the Active for Life scheme, a twelve week gym-based activity programme for individuals with significant health problems who are recommended onto the scheme by their GP. The programme has a high drop-out rate, and in recognition of this Dundee Travel Active promotes more general active lifestyle messages to these individuals.

The travel advisors also work regularly with the local community nursing team to provide active travel advice for individuals receiving free health checks.

By linking in with such programmes, Dundee Travel Active can ensure that benefits are targeted at people with the greatest health needs.

1.5 Evidence of behaviour change

One year into the programme, the PTP component is on track to deliver the outcomes promised. Of the 2,000 households contacted to date, we have successfully engaged with around 1,200 households, equating to a 63% participation rate.

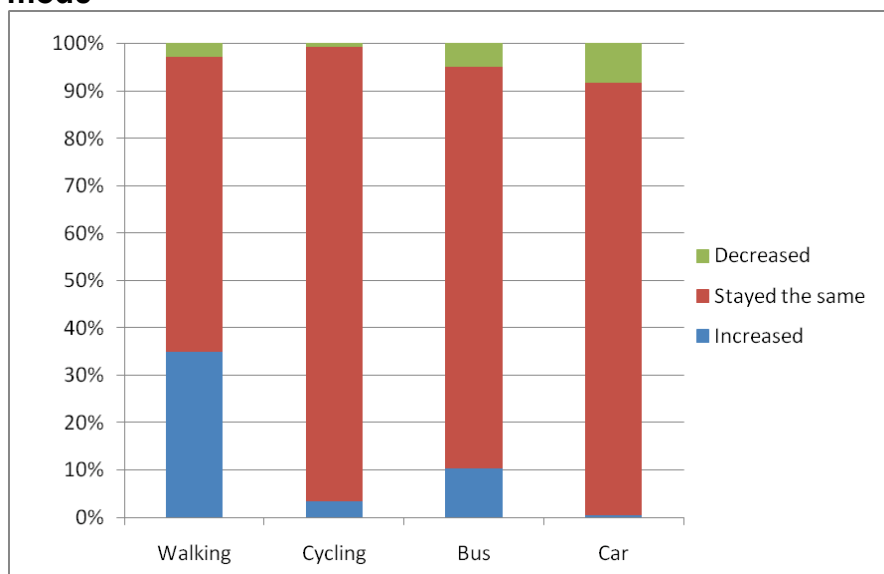
The project is demonstrating that PTP is making a good contribution to health improvement. As shown in the graph below, 35% of our project participants have reported to us that they are now doing more walking as a result of a conversation with one of our team.

The average reported increase in walking is approximately twenty minutes per day, which is a major contribution to achieving recommended activity levels.

Around one fifth of participants have reported that another member in their household has also increased their active travel.

We asked participants whether they had felt any benefits as a result of increasing their activity levels, and 65% of people reported that they had. The majority of these people advised that they had noticed benefits to their physical health and mental wellbeing, followed by 'social' benefits, such as getting out of the house and meeting new people or spending quality time with family and friends.

Figure 1 Proportion of participants reporting change in travel behaviour, by mode



At the outset of the project, it was considered a risk that the project would widen the health inequalities gap, by making the already healthy even healthier, yet making no difference to the health poor.

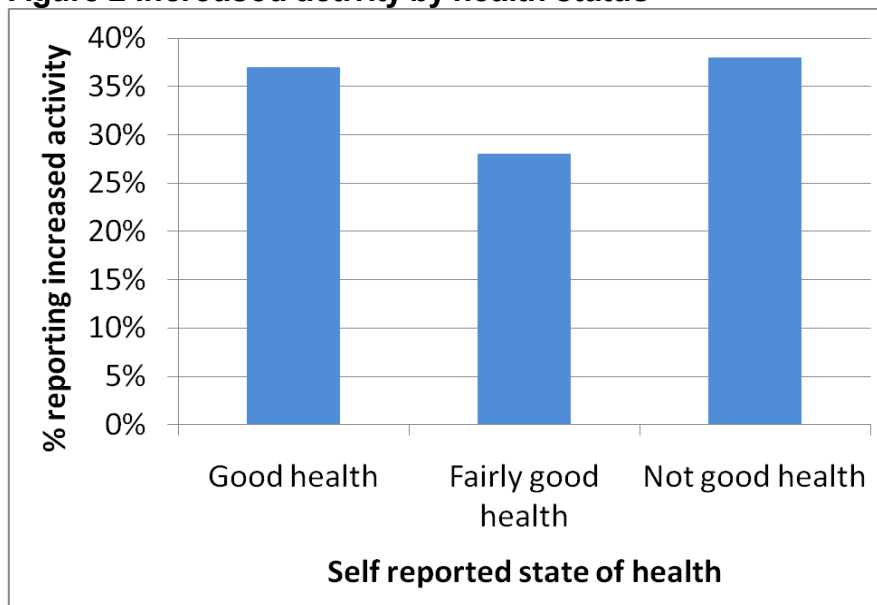
However, the results from year one have shown that people with the poorest health are reporting to be increasing activity at the same rate as those in good health. As shown in the graph below, of the individuals who rated that their health in past year as not good, 38% have said that they have increased their walking (compared with 37% of people who told us that they are in good health).

Therefore the project does not seem to be exacerbating health inequalities amongst participants.

The project has faced particular challenges in the first year in that a significant proportion of households could not be contacted, especially in the more deprived areas. There are likely to be a wide range of reasons for why this is; clearly the time of the visit is a critical factor, with many people being out at work during the day or busy in the evenings.

Anecdotal evidence does suggest that in the more deprived communities, one of the main issues is that people are fearful of opening their doors to strangers.

Figure 2 Increased activity by health status



The project conducted focus groups at the end of 2009 to obtain feedback from project participants and non-participants on suggested ways to refine the approach for year two. Feedback from the groups provided positive affirmation for how the project is being implemented, and did highlight that there does not appear to be a most suitable time for contacting households, as no two households have the same lifestyle and routine.

The project is also trying to create social norms that value active travel through talking to community groups, taking part in community events and developing case studies of individuals who have changed their behaviour. Taking an active part in community events and engaging through community groups authenticates the project as the messages are coming through trusted sources and group settings can be powerful mechanisms for garnering commitment.

Evidence from other similar projects has shown that engaging with groups not only helps to spread the word of the project, but can also influence social norms and peer approval. Significant effort is currently being made on targeting community groups, particularly in the deprived areas, as this will help the project to engage with some of the 'hard to reach' groups and individuals who were not contacted during the residential engagement.

Engaging with hard to reach groups will also enable the project to make a contribution to lessening the health inequalities gap.

1.6 Conclusion

In Dundee, the past decade has focussed on improving public transport services and facilities with associated behaviour change campaigns to encourage the use of sustainable transport. Dundee has benefitted from several successful funding awards which have delivered massive investment in the transport network.

These efforts appear to have paid off as Dundee has successfully managed to halt, and reverse the growing trend in traffic levels.

The arrival of Smarter Choices, Smarter Places has provided new emphasis for Dundee's sustainable transport vision, that of using active travel to improve the health of the local population. The PTP component of Dundee Travel Active has been successfully promoting active lifestyle advice to Dundee's residents, with highly encouraging preliminary results.

There is much that the transport profession can learn from the health sector about health behavioural change theory and how it can be incorporated into PTP engagement. From the experience in Dundee, it is evident that the health sector is enthusiastic to understand how transport behavioural change can be incorporated into health promotion activities.

It is important to highlight that there is also potential for the health sector to learn from PTP about how to implement behavioural change, both on a one to one basis with individuals and within community settings.

We need to be careful that any project that seeks to promote health improvement does not inadvertently exacerbate health inequalities. From the year one results in Dundee, this does not appear to be the case, with the health poor reporting increases in activity levels at the same rate as those in good health.

However, the project needs to continue to focus on identifying alternative mechanisms for engaging with hard to reach groups to prevent the widening of the health inequalities gap.

Evidence from Dundee is showing that PTP can make a direct contribution to health improvement. If evidence can continue to be collected, there is a strong case for PTP to address health objectives as well delivering transport, environmental and social benefits.

