C5 Positively influencing travel choices

Contents

Purpose

This module outlines the steps involved in changing travel mode choices and describes some successful programs that have led to increased walking activity.

Introduction

A key requirement in any program aimed at changing travel mode choices is that the targets for change are realistic and sustainable over time. Meeting this requirement requires an understanding of the concept of behaviour change theory and a recognition that mode change programs can be a lengthy process, requiring substantial council resources.

This module provides an explanation of the nature of change theory, outlines a framework for successful intervention strategies, and draws from the recent success in the individual marketing programs undertaken by Queensland Transport in the area of changing travel behaviour.

C5.1 Behaviour change theory

Intentional adoption of a more physically active lifestyle is believed to progress through five stages (Prochaska & DiClemente 1986). Figure C5-1 explains the process.

Even during successful behaviour change, many people will move back and forth between the five stages, experiencing relapse to earlier stages before progressing toward maintenance again. Successful behaviour change has occurred when the majority of a person's time is spent in the maintenance stage.

Table C5-1
Intervention objectives for each stage of change

Stages and program objectives
Precontemplation Help community members to consider walking as a transport or leisure option by increasing their: ► recognition of the benefits of walking ► concern about the problems associated with car travel and lack of physical activity ► awareness of some achievable walking goals.
Contemplation Help community members to undertake a considered evaluation of walking as a transport or leisure option, which leads to a decision to increase walking. This might be achieved through: ► providing information about how to incorporate more walking into a routine ► raising awareness of how barriers to walking can be overcome ► facilitating analysis of the pros and cons of increased walking versus the pros and cons of no change ► encouraging the setting of a date for change.
Preparation Help community members develop a plan to increase their walking by: ► providing good pedestrian facilities with minimal environmental barriers to walking ► reinforcing participation in walking ► informing the community of walking facilities in the local area.
Action and maintenance Help community members to continue their increased level of walking for a significant period of time by: ► providing new ideas or strategies for increasing walking ► providing feedback on how the change is going (at a community level).

Source: Adapted from DiClemente n.d. and Marcus & Lewis 2003

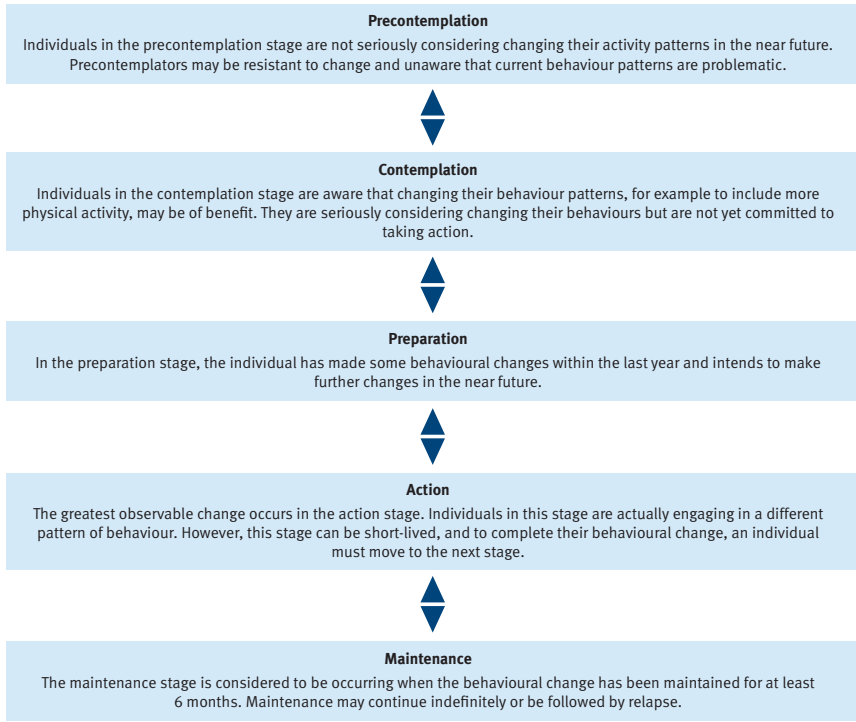


Figure C5-1
Stages of behaviour change

Stages of behaviour change

Even during successful behaviour change, many people will move back and forth between the five stages, experiencing relapse to earlier stages before progressing toward maintenance again. Successful behaviour change has occurred when the majority of a person's time is spent in the maintenance stage.

Stages of change and program objectives

A program designed to increase pedestrian activity should be aimed at moving individuals through the stages of change. Table C5-1 highlights some appropriate objectives for programs aimed at moving people from each stage towards maintenance of increased levels of walking.

Many models of behaviour change can be employed to guide efforts aimed at promoting walking. An online summary of several such models (Glanz & Rimer 1995) is available at the National Cancer Institute website <http://www.cancer.gov/aboutnci/oc/theory-at-a-glance/allpages>. This webpage also highlights a number of key text references.

C5.2 Travel behaviour change

There has been increasing recognition that individual travel behaviour, including choice of mode, is often based on inadequate information or misconceptions of the level of service available through the various modes. This has led to initiatives to bring about voluntary behaviour change, with a focus on encouraging a range of options rather than promoting a single mode, such as walking. Such broad-based interventions, however, are often undertaken in conjunction with promotional activities for individual modes, such as walking.

Voluntary behaviour change may be defined as change that occurs when individuals make choices for personal reward without a 'top-down' mechanism, regulation of any sort, or a feeling of external compulsion. In other words, individuals decide to make a change so that they will improve their personal life in some way.

Voluntary travel behaviour change has the ability to achieve reductions in car driver trips (in favour of walking, cycling, public transport and, in some cases, being a car passenger) without major investment in infrastructure or services, provided that the alternatives have the capacity to accommodate additional demand without adverse impact on existing users.

Initiatives in voluntary travel behaviour change in Australia are mainly undertaken under the *TravelSmart* banner. For a comprehensive overview of *TravelSmart* in Australia, see <http://www.transport.qld.gov.au/transport>.

Household/community

Household-based initiatives attempt to influence travel behaviour for all purposes by working with individuals and households. Perth, a leader in the field, has been using individualised marketing that has resulted in households changing from car driving to walking, cycling and public transport. Pilot projects and large-scale applications in Europe, the United Kingdom and the USA have produced similar results (see Table C5-2).

The percentage reduction in car-kilometres of travel is generally greater than that in car trips, so behaviour change is not restricted to short trips. A combination of mode shift and destination shift (of car trips) results in larger reductions in car kilometres than in numbers of car trips.

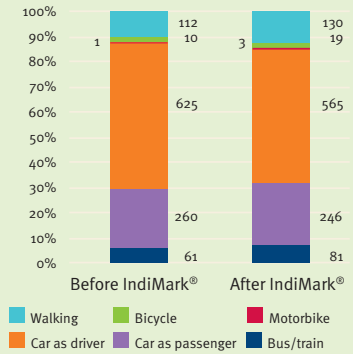
In 2001, Queensland Transport carried out a pilot project in the Brisbane suburb of The Grange. The average number of transport trips was previously 1,077 per person per year, of which 625 (58%) were car driver trips and 260 (24%) car passenger trips. As a result of the project:

- estimated total trips per person decreased from 1077 to 1044 per year
- there was a reduction of 60 car driver trips and 14 car passenger trips per person per year
- walking trips increased by 18 per person per year (see Figure C5-2).

Table C5-2
Results of individualised marketing

IndiMark®[1] project	Location	Scale	Reduction in car driver trips
South Perth	Australia	Large	14%
Goteburg	Sweden	Large	13%
Viernheim	Germany	Large	12%
Subiaco	Australia	Large	12%
Brisbane	Australia	Pilot	10%
South Perth	Australia	Pilot	10%
Gloucester	UK	Pilot	9%
Viernheim	Germany	Pilot	8%
Portland	USA	Pilot	8%
Cambridge	Australia	Large	7%
Frome	UK	Pilot	6%
Marangaroo	Australia	Large	4%

Source: Ker 2004. [1]See Figure C5-2 for explanation of IndiMark®



Note: These results are derived from the application of the IndiMark® methodology developed by Socialdata and have been confirmed by results from a series of pilot and large-scale applications in the United Kingdom, which produced reductions in car use ranging from 9% to 14% (Sustrans 2005).

Other forms of individualised marketing have also been shown to produce travel behaviour change, but they have not been as widely applied or subject to systematic evaluation (DfT 2002; Perkins and Giannakodakis 2001).

Figure C5-2
Changes in travel behaviour: The Grange, Brisbane

Workplace

Workplaces are a prime focus for travel behaviour change initiatives, focusing particularly on the journeys to and from work. Since commuting travel occurs primarily during peak periods, when congestion and air pollution are at their greatest, the benefits of reduced car use can be magnified by flow-on economic and environmental benefits.

Overseas evidence clearly shows that reduced car use for the journey to work does not depend on how much money is spent to develop and implement initiatives; there are many examples of low-cost, highly effective workplace travel plans.

Workplace travel plans have achieved highly variable, but consistently successful, outcomes in terms of impacts on car use and use of other modes of transport.

Many UK workplace travel plans have been implemented since the mid-1990s. Twenty of these were assessed in detail (Department for Transport 2002). The assessments showed that:

- car use declined by between 2% and 37%
- public transport use increased by between 9% and 428% for 19 out of 20 firms
- cycle use increased by up to 329% for 14 of 20 firms, with six firms showing reductions
- walking increased by up to 150% for 17 of 20 firms, with three firms showing minimal reductions.

Workplace travel plans can be equally effective in both large and medium-sized organisations (i.e. those employing more than 100 people), but there is less information to show that they are effective in organisations with fewer than 100 employees.

The Australian and overseas experiences demonstrate strongly that the keys to success are, first, having integrated packages of initiatives, and second, having effective processes for developing and implementing the packages. However, the benefits do not necessarily all happen at once. Although few workplace travel plans have been assessed over several years, three UK plans have shown an increasing move away from car use; however, two UK plans had a temporary increase at one stage, indicating a need for continuing effort to ensure that positive effects are sustained.

Universities

University campuses are focal points for travel activity. They provide effective opportunities for changing travel behaviour, as they bring together a large number of people with essentially similar travel needs. The level of transport activity at campuses means that making non-car options attractive is more feasible.

A number of Australian universities have undertaken travel planning, but implementation has been patchy. In most cases, implementation has been partial, rather than based on the whole package. Experience overseas demonstrates that choice (having various options available that can be used occasionally or as required, rather than being 'locked in' to one option) and financial incentives are key factors.

Schools

Schools, like universities and workplaces, are focal points of travel activity, but to a smaller extent. However, travel is more concentrated, occurring at two distinct times of day, and catchment areas are usually smaller, although this is not necessarily the case for private schools.

A school travel plan includes measures to improve safety and reduce car use. The plan is supported by a partnership involving the school, education and transport officers from the local authority, the police and the health authority. It is based on consultation with school teachers, parents, pupils and governors, and other local people. The school travel plan concept is still relatively new, but it has generated considerable interest both in the UK and Europe.

This approach has more impact than initiatives which focus on a single issue or mode of travel, because it brings together measures that reinforce each other to create a 'virtuous circle', with improved safety leading to reduced car use (see the Department for Transport (UK) website <http://www.local-transport.dft.gov.uk/schooltravel>). School travel plans are a relatively recent initiative, but estimates of the reductions in car escort journeys range from 5% to 30%, with two examples up to 50% (<http://www.local-transport.dft.gov.uk/schooltravel>, Section 3.7).

Travel behaviour change initiatives in Queensland

Queensland, as part of the joint-government *TravelSmart* initiative, has an extensive and developing program for changing travel behaviour that promotes walking, cycling and public transport. The program operates in suburbs, schools, workplaces and other major destinations (see the *TravelSmart* home page <http://www.transport.qld.gov.au/qt/pubtrans.nsf/index/TravelSmart>). Like most *TravelSmart* programs, the Queensland one emphasises the fact that we all have a variety of

travel needs that are best met by using a variety of travel modes, depending on the circumstances:

> We all have different circumstances and sometimes it may be difficult to *TravelSmart* regularly – for example you may need to transport groceries or use your motor vehicle for work. Sometimes, too, you may find there isn't an alternative to driving, such as no direct bus service or your destination is too far away to cycle or walk. But remember: you only have to change your travel behaviour at least one day a week to have a significant impact on the environment and traffic congestion.
>
> (<http://www.transport.qld.gov.au/qt/pubtrans.nsf/index/TravelSmartWhatIs>)

TravelSmart Communities pilot projects have clearly demonstrated the value of this multimodal approach in encouraging walking. The programs and their results were as follows:

- The Grange district, Brisbane:
  - 16% increase in walking
  - 6% increase in cycling
  - 33% increase in public transport use
  - overall decrease in motor vehicle use of 10%
- Townsville region:
  - increase in walking journeys by 26%
  - increase in cycling by 15%
  - increase in public transport use by 13%
  - reduction in car driver trips by 8%.

The *TravelSmart Schools* program encourages school communities to consider environmentally friendly transport options as an alternative to motor vehicle use. Although the program targets journeys to and from school, all household journeys are considered. *TravelSmart Schools* also has a role for school communities dealing with local traffic congestion, road safety and health issues.

The *TravelSmart Workplace* program encourages the use of sustainable modes of transport for journeys to and from a workplace, and between workplace sites. The Queensland Transport *TravelSmart* team provides assistance to a travel coordinator at the workplace, who is nominated by the organisation to:

- provide a point of contact
- help identify travel patterns and issues
- help develop and monitor a workplace travel plan.

In 2001, a trial TravelSmart Workplace initiative at GHD Pty Ltd resulted in:

- increase in public transport use by 17%
- increase in cycling to work by 5%
- decrease in car travel by 7%
- 74% of employees who take trips during the day walking to their destination.

The GHD workplace initiative coincided with the organisation's relocation from Spring Hill to Brisbane's central business district, which further increased travel choice for employees. Change of location is often an opportune time to undertake workplace travel planning, as employees have to think about their new journey to work.

The *TravelSmart Destinations* program encourages workers and visitors to a site (which may include customers or students) to use environmentally friendly transport options as an alternative to motor vehicle use. Any popular destination can be more *TravelSmart*, including shopping centres, universities and hospitals, which attract thousands of visitors or clients each week, and generate considerable traffic.

TravelSmart Destinations was officially launched during 'O Week' (orientation week) at the Kelvin Grove campus of Queensland University of Technology in 2004, and continues to spread through a series of promotions, incentives and prize giveaways, as well as information sessions involving TransLink and Bicycle Queensland. Impacts on travel behaviour are being monitored during 2004.

What can local government do?

Encouraging walking and cycling through voluntary travel behaviour change needs to be an integral part of a local government's activities, with clear linkages to land use, infrastructure and transport system management programs, including car parking and public transport. *TravelSmart* and other travel behaviour change initiatives benefit from being applied in tandem with improvements to urban planning and design (see Module C2 *Walking and urban design*) and with more conventional traffic restraint measures.

The effectiveness of travel behaviour change programs depends on reducing the gap between perceptions of transport options and the (usually better) reality of the non-car transport system. While information is not the whole answer (see C1 *Planning to walk*), it is important. The City of Brisbane has trialled *Transport Cafes* in shopping centres to improve information and awareness. Permanent *Mobility Centres* are increasingly used in Europe and can be developed in partnership with public transport or private sector interests (<http://www.epommweb.org/twomm.phtml?sprache=en&tsite=3&ttitle=1>).

Managed travel demand in Brisbane's transport plan

Outcome: A sustainable level of travel demand where the growth in traffic is less than the growth in population

Encouraging travel behaviour changes will be an important ingredient in the success of Council's TDM initiatives. Travel behaviour change programs, such as travel blending and individualised marketing, focus on changing travel habits. These initiatives significantly contribute towards reducing congestion, air pollution, social isolation, increasing physical activity within communities and increasing the mode share of sustainable transport. Public support will be developed through:

- implementing the Clean Air Campaign for Brisbane with an emphasis on increasing sustainable modes of travel
- increasing education and awareness about TDM issues and alternative travel options
- implementing individualised marketing programs to support major public transport initiatives and target travel behaviour within the patronage catchment
- supporting Queensland Transport in implementing the *TravelSmart* program within Brisbane
- trialling a 'Walk/Ride to Work' initiative for council officers
- implementing a workplace Travel Plan for Brisbane City Council
- expanding council's commitment to Workplace Travel Plans and School Travel Plans.

Source: Brisbane City Council, *Transport plan for Brisbane 2002–2016* (<http://www.brisbane.qld.gov.au/BCC:STANDARD:1716078631:pc=PC_73>)

Local governments are often substantial employers in their own right and development of a workplace travel plan for their own staff is both an important contribution to travel behaviour change, and a clear statement of its importance, encouraging other employers and communities to follow the lead.

Local governments can work with Queensland Transport (email: pttravelsmart@transport.qld.gov.au) to develop and implement *TravelSmart* initiatives for their own area (see the box 'Managed travel demand in Brisbane's transport plan'). It is also useful for local governments to appoint their own *TravelSmart* officer on either a full-time or part-time basis. In Western Australia, neighbouring local governments sometimes share a *TravelSmart* officer. These staff members play an important role in changing the travel behaviour of residents at a local level.

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