

Travel planning in Victoria—a new strategic approach to sustaining communities

Rachael Howlett and Tara Watson

Department of Transport, 121 Exhibition St, Melbourne, Victoria

Email for correspondence: rachael.howlett@transport.vic.gov.au

Abstract

The Victorian Department of Transport's TravelSmart approach to encourage travel behaviour change is through the process of travel planning. It is a distinctive five-step methodology that has evolved over the past nine years and differs from other TravelSmart programs in Australia including the more 'traditional' large-scale personalised marketing projects. The paper outlines the travel behaviour change principles underpinning TravelSmart in Victoria and reveals how travel planning has become a mechanism for not only sustained behaviour change, but also more sustainable communities.

The key fundamentals of travel planning in Victoria will be discussed. These include the program adopting a strategic framework or 'umbrella approach' with travel plans; promoting a structure that investigates issues rather than presenting solutions; and, employing a community development model building strong ownership and engagement.

The adoption of the travel planning process has allowed Victoria to broaden the settings and configurations of TravelSmart projects as well as test and develop new delivery pathways. With over 150 travel plans already in sites across Victoria, the TravelSmart program consists of projects varying in scope, scale and settings. Project findings will show that travel planning achieves not only travel behaviour change but also provides broader community benefits.

1. Introduction

Recent trends indicate that encouraging a shift in travel behaviour in Victoria remains a high priority. Victoria's population is expected to grow rapidly over the next three decades, increasing from five million people in 2006, to nearly seven and a half million in 2036. Melbourne's population is likely to reach five million before 2030 (DPCD, 2008), adding greater pressures to our transport networks.

During the past several decades, commuting behaviour could be described as more people in even more vehicles travelling to more places. This high and growing level of vehicle use in Victoria is a concern for the community because it brings with it a range of environmental, social economic and health issues.

As fuel prices rise, owning and running a car represents a major cost for households while the social costs of car trips are also high—with more people travelling in cars, there is a loss of connection across communities.

Currently the total cost of congestion in Melbourne is estimated to be about three billion dollars a year (BITRE, 2007); however, this figure could triple over a 20-year period unless the causes of congestion are addressed. Adding road capacity will not solve all future

congestion problems in Melbourne and in many parts of the metropolitan area, it is not a practical option. Instead we need to seek out and encourage more sustainable alternatives.

TravelSmart Victoria is a travel behaviour change program that addresses these broader sustainability issues by reducing people's dependency on cars and encouraging them to choose alternatives such as walking, cycling, carpooling, teleworking and public transport.

TravelSmart is delivered by the Department of Transport (DOT) to support supply side investments in public transport, cycling and walking networks, and at the same time helping to alleviate congestion. It seeks to encourage smarter use of the car and reduce single-occupancy vehicle trips through the process of travel planning.

Travel planning is focused on ascertaining the travel behaviour at a site and employs a range of strategies targeting different barriers and opportunities. These include actions addressing regulatory and governance, incentives, information and promotion and direct provision measures. While travel planning identifies the barriers to choosing more sustainable transport at a site, it also encourages behaviour change by building on opportunities.

This paper outlines how travel planning provides a strategic framework that not only achieves better transport outcomes for Victoria, particularly for short to medium trips, but also fosters the role of individuals, business and government in creating and encouraging, more sustainable communities.

2. Evolution of TravelSmart in Victoria

2.1. TravelSmart context

A diverse range of TravelSmart programs are being implemented by state, territory and local governments around Australia. Yet not all TravelSmart programs are the same.

The TravelSmart program was exported to Australia after being pioneered as a tool for individualised marketing to promote public transport in Germany during the late 1980s. It was first piloted by the West Australian (WA) government in a project conducted by SocialData in South Perth in 1999. SocialData applied its own individualised dialogue marketing or Indimark™ method with significant results. Following on from this, WA set-up the trade name of TravelSmart in Australia, and continued with Indimark™ as its behaviour change approach. Individualised marketing campaigns are widely associated with the TravelSmart name and have been implemented in Australia, United Kingdom, Europe and the USA under the banner of 'TravelSmart'.

Over time, the Australian states and territories adopted both the brand name and the approach; however, while Victoria assumed the name 'TravelSmart', from 2001 the Department of Transport also tested a range of approaches to travel behaviour change through the auspices of the TravelSmart program.

Apart from community-based individualised marketing projects, Victoria piloted 'travel plans'—following the United Kingdom's Department of Transport's *TravelWise* program. Auckland's Regional Transport Authority (ARTA) has also adopted travel planning as a key method under the *TravelWise* program.

A travel plan is an important tool for promoting sustainable travel and helps reduce single occupancy car use. It is a long-term management strategy for a site that seeks to deliver sustainable transport objectives through positive action and is articulated in a document that is regularly reviewed.

The Victorian travel planning methodology builds on research undertaken in 2002 to identify a behaviour change framework underpinned by the commonalities identified across various models of behaviour change theories. The Victorian TravelSmart program now uses travel planning as its cornerstone approach to achieving sustainable travel behaviour change.

2.2. TravelSmart initiatives 2001–2006

To facilitate more sustainable travel, the Victorian TravelSmart program initially focused on using sophisticated and intensive marketing, and communication, techniques to motivate people to think about their daily travel. TravelSmart provided transport information and advice to individuals, households and organisations on a voluntary basis. As further opportunities emerged, other methodologies were also tested over this period.

Operating as three separate streams—Communities, Workplaces and Education—TravelSmart trialled different approaches such as Travel Blending®, Individualised Marketing, School Curricula, School Travel Plans and Green Transport Plans, with varying degrees of success.

2.2.1. Communities

This component engaged directly with households in community settings to assist individuals identify and choose sustainable transport solutions that met their mobility and access needs for work, family, social and recreational activities.

Successive projects increased the scale of the communities that were targeted from 4,500 households in Anstey, Dandenong and Elwood in 2002 to a five million dollar project targeting 45,000 households in the Cities of Moonee Valley and Maribyrnong in 2005.

These projects focused on the trip origin, rather than the destination. A team of TravelSmart officers offered personalised information and support, tailored to (self-) identified information needs and the individual's desire to change behaviour. Participants were provided with encouragement, rewards and opportunities to trial and maintain new sustainable travel behaviour.

Community projects included:

- around the Anstey railway station in the City of Moreland (2002)
- north of the Dandenong central activity district in the City of Greater Dandenong (2002)
- the Elwood Village in the City of Port Phillip (2002)
- along the Alamein train line in the City of Boroondara (2003)
- across the City of Darebin (2004)
- in the Cities of Moonee Valley and Maribyrnong (2005)
- for the Commonwealth Games (Melbourne 2006).

Subsequent evaluation has shown that while the focus on information provision and personalised marketing did produce travel behaviour change for participants in these Community projects, the behaviour change was short-term.

As part of the National Travel Behaviour Change (NTBC) Program, Victoria conducted evaluation of its household community projects in line with other states. The 2004 City of Darebin Project evaluation showed some increased travel behaviour change; however,

findings differed from other household community projects in that a marked decline occurred within six months (Richardson, 2005). The 2005 Cities of Moonee Valley and Maribyrnong project was also rigorously evaluated and the independent findings again showed that changes in travel behaviour were not as high as reported in other community projects in other states.

Further analysis of the community projects showed that the individualised approach overlooked addressing a host of other complex barriers and motivations to changing behaviour, such as personal beliefs, concerns around safety, perceptions about lack of time and collective community concerns. While the Victorian TravelSmart program recognises that information provision has a place in encouraging travel behaviour change, it is not seen to produce sustained change unless part of an all encompassing behaviour change approach such as the travel planning process.

2.2.2. Workplaces

TravelSmart worked directly with targeted workplaces to change travel behaviour and consequently deliver substantial benefits to employers through decreased transport costs, increased efficiency and employee health.

The Workplaces stream commenced with two initiatives—one focusing on individualised marketing aimed at individuals in larger organisations, which was piloted with first year students at Monash University (Clayton) and staff at the Prahran campus of the Alfred Hospital—and the other on *Better Ways to Work* (initiated by Sustainability Victoria), a project that developed ‘green transport’ or ‘green travel plans’ with employers.

The projects at Monash University and the Alfred Hospital provided information packs with a focus on public transport, walking and cycling, or driving. Those individuals who collected information packs did increase use of sustainable modes and decrease their car use—in the short-term (Cooper, B and Meiklejohn, D 2003).

The *Better Ways to Work* initiative achieved measurable travel behaviour change when TravelSmart officers attained an organisational commitment to implement a ‘green travel plan’; support for identified actions; and, ongoing maintenance or monitoring through staff travel surveys. However, the initiative was found to be less successful where the workplace community was removed from actively participating in the process. For example, if a TravelSmart officer wrote and presented a travel plan to the organisation by assuming an understanding and knowledge of the site through limited contact (based on results gained via travel surveys).

Results gained from the workplace initiatives have contributed to developing the five-step methodology now applied to the Victorian travel planning process.

2.2.3. Education

TravelSmart commenced piloting school travel plans in 2002, with a focus on increasing active transport and improving travel options at Victorian schools. Most projects were delivered directly by the Victorian TravelSmart team, and some delivered together with local government and contractors.

The first initiative tested travel plans at six schools across metropolitan Melbourne (following the lead of the *TravelWise* approach) while testing some of the different issues in Victorian schools. The pilot yielded significant results, and following on from its success, a larger pilot project was funded by the Victorian Greenhouse Strategy (VGS). This School Travel Planning Pilot, delivered across thirty-three schools, was primarily designed to increase active transport (walking and cycling) to school.

The schools led the travel planning process—investigating local concerns and addressing them with travel plan actions relevant to their own community. These included actions such as staggering finishing times for students; distributing information via newsletters; establishing a Walking School Bus; creating parent meeting places; setting-up a Travel Buddies scheme; and, purchasing sun-smart hats.

An additional project which was identified through the VGS pilot, was to develop a TravelSmart Curriculum that embedded the process of travel planning in a school's curriculum. The Curriculum Pilot targeted students in grades five and six to raise awareness, and facilitate a greater understanding (and attitude) to travel behaviour change by the school community.

The 2003–2005 School Travel Planning program (Peddie and Sommerville, 2005) identified positive spin-offs from engaging with the school community to develop travel plans. These included more community connectivity, better relationships with local government and greater (and sustained) cultural change. Results also showed more increases in sustainable transport choices than those being achieved through the large-scale individualised marketing campaigns or workplace green transport plans.

The positive consequences of incorporating a range of transport, environmental and health programs being offered in schools into an overarching travel planning framework also built broader social connections and community relationships. One parent who participated in a TravelSmart project at Elsternwick Primary School said, "It reinvigorated the school community which we hadn't expected. It was inspiring." (TravelSmart *School Travel Planning Guide*, 2009)

2.3. TravelSmart travel planning (2006–present)

The range of projects undertaken through TravelSmart in Victoria from 2001–2006 led to the recognition that engagement through travel planning was proving the most effective, flexible and strategic approach to achieving sustained travel behaviour change.

In the 2006–07 Victorian Budget, TravelSmart was allocated five and a half million dollars through *Meeting Our Transport Challenges* to further develop travel behaviour change projects over three years with a specific focus on delivering travel plans across a wide range of settings. In August 2006, a partnership grants program was launched to deliver TravelSmart in conjunction with local government and other organisations.

The partnership program has initiated travel planning projects at a range of settings, with different configurations and through a variety of delivery pathways. This has allowed for not only an increase in the reach of the TravelSmart program across Victoria (including building capacity of different organisations to deliver travel behaviour change projects) but also the adoption of a refined, five-step Victorian TravelSmart travel planning approach.

Since the first of three grant rounds commenced, the Department of Transport has partnered with twenty-one councils and seven organisations to deliver thirty-eight travel behaviour projects. Varying in size, scope and setting, TravelSmart grant projects have engaged with schools, tertiary institutions, communities, workplaces, activity centres, hospitals and precincts. From this, over 150 travel plans have been initiated and more than 180,000 Victorians directly engaged in behaviour change through the travel planning process.

3. The TravelSmart Travel Planning Methodology

A travel plan can be defined as "a long-term management strategy for an organisation and its various sites...that seeks to deliver transport objectives through positive action and is articulated in a document that is regularly reviewed." (BIS, 2008, p.iv).

In the Victorian TravelSmart program, emphasis is placed on the travel planning *process*, which reveals and considers the travel behaviour at a site; identifies issues, barriers and opportunities to sustainable travel; and, then develops actions and initiatives to improve travel options. The travel planning process is regarded as a strategic framework whereas the travel plan itself is a document that is considered an output of the process.

The process provides a framework for investigating issues rather than presenting solutions and has available the full range of travel demand management tools from marketing to infrastructure—all developed and tailored to the site which has led to the success of the program.

As previously discussed, TravelSmart in Victoria has evolved from the ‘traditional’ individualised, or personalised, marketing programs to the travel planning approach. Travel planning has provided an opportunity to utilise a full range of behaviour change theories—rather than continue to employ a personalised marketing program principally based on information provision and campaigns for raising awareness. Travel planning aims to change social norms and apply the principles of persuasion across a range of community contexts such as schools, workplaces and tertiary institutions.

3.1. Behaviour Change Principles

The Victorian TravelSmart travel planning approach is underpinned by a range of behaviour change theories. It is therefore important that in order to develop effective interventions in travel behaviour, an overview and understanding of the theories of behaviour, and behaviour change, is required.

There are many models of behaviour change theory applied across a wide variety of disciplines. This paper will address how the Victorian TravelSmart travel planning process has been developed by using concepts of behaviour change as outlined by Cialdini, Rogers, and Prochaska and DiClemente.

3.1.1. Behaviour change in communities

The Victorian travel planning approach has given significant consideration to identifying how behaviour change in groups, organisations and whole communities, supports travel behaviour change. This is the first component underpinning travel planning in Victoria and is markedly different to individualised marketing programs, where the major focus has been towards an individual’s behaviour change.

By piloting a range of household projects with mass marketing campaigns based on the provision of transport information, TravelSmart in Victoria has tested this premise and found, as Seethaler notes “...*current research in the domain of public health, energy consumption, waste management, etc. have shown that information-based campaigns, including the use of incentives, are, by and large, insufficient for stimulating behavioural change of lasting effect*”. (2003, p.2)

The Victorian TravelSmart process recognises that human behaviour is complex. In addition, it has identified that behaviour change needs to take place in the context of an enabling or supporting environment. When designing programs to reach communities, an understanding is needed of how groups work, what influences their behaviour, and what are their barriers and enablers to change.

3.1.2. Behaviour change as a staged process

A second component of the Victorian travel planning framework is the recognition that behaviour change involves a *process*. Evidence shows that the process of behaviour change

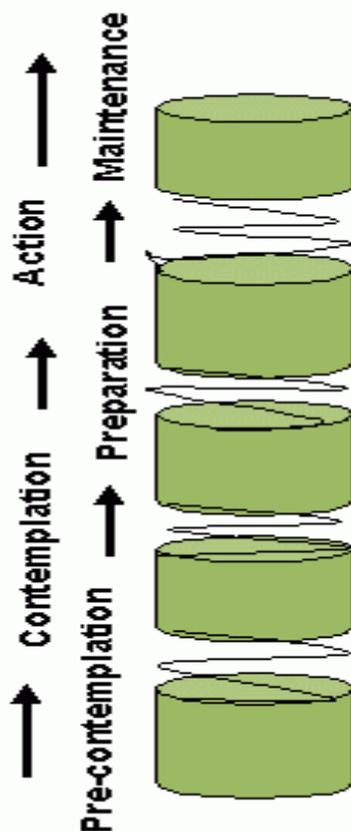
occurs in stages (or steps) and that movement through these stages occur in a cyclical pattern rather than a linear motion.

One such staged behaviour change model, as identified by Prochaska and DiClemente (1986), proposes that behaviour change occurs in five distinct stages through which people move in a cyclical or spiral pattern: pre-contemplation → contemplation → preparation → action → maintenance (See Figure 1).

Prochaska and DiClemente also indicate that the cyclical process of behavioural change involves both progress and periodic relapse. For successful behaviour change, it should be expected that relapses will inevitably occur in the earlier stages; however, people will not remain within the earlier stage to which they have regressed but rather 'spiral' upwards, reaching and spending time in the final stage (maintenance).

Rogers (1983) also developed a stage-based theory to explain how new ideas or innovations are adopted at the community (and population) levels. Rogers's five stages of the process of diffusion and 'adoption' are knowledge, persuasion, decision, implementation and confirmation. Rogers also identifies that there are important influences that *impact* on the diffusion—complexity, triability and observability. Those programs that are of low complexity, are easily observed and able to be adopted on a trial basis are associated with better 'take-up'.

Figure 1: Prochaska and DiClemente Stages of Behaviour



MAINTENANCE: practice required for the new behaviour to be consistently maintained, incorporated into the repertoire of behaviours available to a person at any one time.

ACTION: people make changes, acting on previous decisions, experience, information, new skills, and motivations for making the change.

PREPARATION: person prepares to undertake the desired change - requires gathering information, finding out how to achieve the change, ascertaining skills necessary, deciding when change should take place - may include talking with others to see how they feel about the likely change, considering impact change will have and who will be affected.

CONTEMPLATION: something happens to prompt the person to start thinking about change - perhaps hearing that someone has made changes - or something else has changed - resulting in the need for further change.

PRECONTEMPLATION: changing behaviour has not been considered; person might not realise that change is possible or that it might be of interest to them.

Source: The Behavior Change spiral from "What do they want us to do now?" AFAO 1996

3.1.3. Influencing behaviour change

In addition to the premise that behaviour change involves a process, is that the nature of people’s behaviour is complex and is motivated by a range of internal and external factors. Social psychology has over time put forward a range of strategies and reasoning with respect to persuasion, such as Robert Cialdini’s ‘Principles of Persuasion’ (2001). These six principles (outlined below) can be used as a ‘guide’ to assist people in their decision to yield or not to a request.

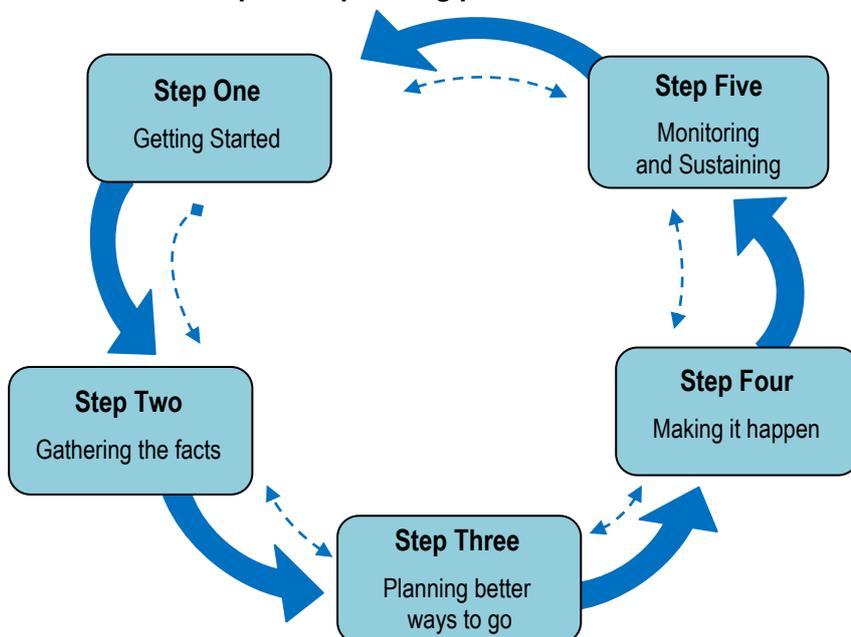
Cialdini’s Six Principles of Persuasion

- **Reciprocity:** people tend to return a favour—note the pervasiveness of free samples in marketing campaigns.
- **Commitment and Consistency:** if people commit, orally or in writing, to an idea or goal, they are more likely to honour that commitment. The principle of commitment shows an individual who has freely taken a position will usually act in accordance with that commitment, showing a desire to be consistent.
- **Social Proof:** essentially states that people will do things that they see other people are doing.
- **Authority:** the principle of authority indicates that people will tend to obey ‘authority figures’ or expert advice from acknowledged sources, when making a decision.
- **Liking:** people are more likely to follow a request, or ‘be persuaded’ by other people that they like. Cialdini cites the marketing of Tupperware as an example of the principle of liking.
- **Scarcity:** perceived scarcity will generate demand. For example, offers that are available for a ‘limited time only’ encourages sales.

3.2. Travel Planning Five Step Methodology

Travel planning harnesses complex human behaviour theories of influence and persuasion in an integrated staged model. The travel planning methodology in Victoria is a five-step approach similar to that undertaken by the United Kingdom and New Zealand governments where travel planning has been adopted as a key method for travel behaviour change. Following on from international best practice, the five steps have been adapted to suit a wide range of settings across Victoria. The Victorian approach also emphasises key elements within each of the five steps.

Figure 2: The Victorian five-step travel planning process



The five steps of the Victorian TravelSmart methodology are:

- **Step One Getting started** focuses on securing support of key decision-makers, identifying who to involve and mapping out a project plan, confirming the objectives and benefits of developing a travel plan at the site.
- **Step Two Gathering the facts** looks at assessing the situation of the site and its community. Information on current travel behaviour is gathered via means such as surveys and focus groups.
- **Step Three Planning better ways to go** identifies strategies and develops action plans initially via a strategic workshop. A plan is then developed which includes the basic requirements for behaviour change.
- **Step Four Making it happen** facilitates the implementation of the plan including promotion of achievements to the community. During this step the plan is launched, actions implemented and community interest and participation is maintained
- **Step Five Monitoring and sustaining** looks to measure the success of the planning process, to troubleshoot where necessary and make long-term plans for sustainable travel within the community

3.2.1. Key elements fundamental to successful travel planning

The Victorian TravelSmart five-step methodology has three key elements that could be seen to be different to the way travel plans are delivered in other jurisdictions. These elements are also proving to be applicable across all settings within Victoria.

The key elements underpinning the travel planning process in Victoria have been tested and applied across a range of projects within the 2006–2009 TravelSmart Grants program as well as in other current travel planning projects such as that being undertaken with the Catholic Education Office of Melbourne (CEOM).¹

The first element to successful travel planning in Victoria is the employment of a *community development model* that builds strong ownership and engagement throughout the entire travel planning process. During each stage and within each step, community involvement is encouraged, obtained and emphasised.

If, during key points in the steps, involvement of the community has waned or participants are simply not engaged, the travel planning process encourages the community to revisit the previous step, and does not recommend progressing to another step until the community is once again re-engaged. As per Prochaska and DiClemente's staged-behaviour change model (see Figure 1), the travel planning methodology caters for a community when it experiences progress and periodic relapse.

In keeping with the community development model, it is important to provide groups with the skills they need to affect change in their own communities. At the conclusion of the five-step travel planning process, the community should not simply have a document *written for* them

¹ DOT is implementing a travel planning pilot project with ten Catholic schools across Victoria (2009–2011) to demonstrate the benefits of travel planning to the Catholic education system.

but rather the community has *developed the travel plan itself* in accordance to its own direction. Furthermore, by building strong ownership and engagement, the travel planning becomes self-sustaining and requires minimal intervention by government once instituted. It is this approach that is evoked in the traditional Lao-Tzu saying, 'Give a man fish; feed him for a day. Teach a man to fish; feed him for a lifetime'.

The second element is that travel planning promotes a structure that *investigates issues rather than presenting solutions*. Throughout steps two and three, it is important that a community is not 'led' in a pre-determined direction or presented with a standard 'menu of ideas' to create a travel plan. The travel planning process involves a multi-faceted approach to gathering the facts and engaging with the community to analyse the results. This ensures that barriers and opportunities to change are identified and addressed, and the actions identified to maximise sustainable transport are developed *specific* to the *community's* needs.

The final element is the adoption of travel planning as a *strategic framework* or an *umbrella* approach. The travel planning process identifies a number of actions and initiatives that are most appropriate to the site. These initiatives can include a range of existing programs already being offered such as *Kids on the Move*, *Go For Your Life*, *Walktober*, *ResourceSmart* and *Bike Education*. However, unlike some other initiatives that set up programs in isolation, the travel planning process takes the community through a number of stages that allows any issues and barriers to be explored in-depth. Travel planning investigates and identifies a variety of initiatives the community should participate in to achieve greater benefits.

3.3. The TravelSmart travel planning framework

Travel planning in Victoria is a travel behaviour change program that is underpinned by a range of behaviour change theories. This is demonstrated in Table 1 (Appendix A) in which the behaviour change logic as outlined in section 3.1 matches with the five-step travel planning methodology of section 3.2. The table provides examples of content and processes of the travel planning methodology alongside elements of behaviour change theories including principles of persuasion.

The Victorian travel planning framework (outlined in Table 1) consists of an integrated stage-based model in which behaviour change is viewed as a cyclical process that involves five stages. It also incorporates different intervention strategies during the five stages of change. Finally, the framework is a multifaceted approach to intervention enabling individuals to potentially be influenced at all stages of 'readiness to change'.

4. Travel planning builds partnerships

The shift of TravelSmart in Victoria away from individualised marketing techniques to engagement through travel planning recognises that travel planning has created a range of broader benefits in addition to travel behaviour change—the community supporting more sustainable travel choices has environmental, economic, social, health and wellbeing outcomes.

The travel planning process provides an opportunity to engage a community on a range of issues associated with transport management such as congestion, air pollution and road safety. A travel plan is flexible and site-specific so it can incorporate any existing programs or networks, but also refocus them as actions or strategies to reduce car trips and increase the share of more sustainable travel modes. The travel planning framework also creates a partnership between the organisation delivering TravelSmart and the community undertaking the process.

The 2006–2009 TravelSmart grants program acknowledged some of the outcomes of the school travel planning pilot projects, which had highlighted the need to connect with local government when developing and implementing travel plan actions. Councils have established relationships with residents, schools, local businesses and organisations and are conscious of problems posed by car travel to local amenity, health and safety. They regularly engage with the community on a broad range of local issues.

Likewise, organisations such as community health groups and tertiary institutions bring their own established community relationships. By delivering travel planning in partnership with organisations with existing community networks, the TravelSmart grants program is able to further build on these relationships to encourage sustainable behaviour change at sites.

Expanding the Victorian TravelSmart program to deliver travel planning in partnership with twenty-eight organisations has also proven a successful outcome as engagement across the partners has cultivated new networks, strengthened stakeholder relationships and connected travel behaviour change practitioners.

5. Building travel planning resources

As part of the 2006-2009 TravelSmart Grants program, Victoria developed and refined a common guide to its five-step travel planning methodology. It was undertaken in response to the general tendency to treat the implementation of travel planning in different settings (e.g. schools, workplaces, and tertiary campuses) as completely separate processes.

The ‘single process’ that was created for travel planning across a multitude of settings has allowed Victoria the means to demonstrate the possibility of extending the application of travel planning to new settings and configurations and build a solid platform for future travel planning development. Formalising the Victorian TravelSmart travel planning methodology led to the design of a flexible and strategic five-step travel planning process underpinned by models of behaviour change theory.

The refinement of the travel planning approach also assisted in the capacity building and training of the grant partners to deliver effective behaviour change projects. The TravelSmart grants program involved working with many organisations that had previously not been exposed to the Victorian travel planning methodology. A capacity building and training program was developed to build on the skills of partners and train them to deliver travel plans as per the five-step process.

A review of all existing TravelSmart and travel planning materials was undertaken—including those produced in-house, interstate and internationally—as well as carrying out a survey of partners’ requirements. A set of travel planning tools and resources were developed to assist partners, including the production of a TravelSmart *Travel Planning Guide* which outlines the step-by-step process for delivering travel plans in any setting in Victoria.

While TravelSmart Victoria has also developed travel plan resources specific to a site (for example, a *School Travel Planning Guide* CD-Rom), the core elements within the ‘single process’ means that the tools and templates can be applied across any setting. This forms a key part of the Victorian TravelSmart approach.

The *Travel Planning Guide* is supported by the formation of a bi-monthly TravelSmart collegiate network. The collegiate provides a forum to further build the capacity of partner organisations through offering training (in the single process), presentations, networking and discussion. It has presented an opportunity to build better partnerships across TravelSmart organisations, share project expertise and knowledge, and foster stakeholder relationships across state and local government.

In response to the changing nature of travel behaviour change projects, TravelSmart Victoria adapts the supporting resources to changes in the site's environment, operating structure, travel behaviour, community values, and implementation of actions. The single five-step process is a dynamic and flexible approach that embraces and adapts to the site's needs.

6. Findings

6.1. Introduction

Since implementing the five-step travel planning approach in 2006–07, the Victorian TravelSmart program has expanded its scope, increased its scale and broadened its reach across the state. By working in partnership with twenty-one councils and seven non-government organisations, TravelSmart has expanded the capacity of organisations to deliver community-based behaviour change projects.

In three years, over 150 travel plans have been initiated. The travel plans are already achieving significant behaviour change across a range of new sites, and in a combination of traditional TravelSmart settings. Travel plans have been implemented in 'standard' settings such as workplaces, schools, tertiary institutions (universities and TAFEs) and hospitals. In addition, new settings and configurations have also emerged and travel planning has been trialled in precincts such as Activity Centres, Central Activity Districts (CADs) and neighbourhood activity centres. Travel planning is being applied in:

- Principal Activity Centre – Knox, Epping
- Regional Transit City – Bendigo
- Major Activity Centre – Victoria Gardens & Victoria Street (Richmond) and Tally Ho Business Park (Burwood)
- Neighbourhood Precinct – Talaskia Road (Upper Ferntree Gully)

A new approach for communities was trialled in the Mothers Living Well project with Knox Community Health while another delivery mechanism is being piloted for central Melbourne and the City of Frankston through the formation of Transport Management Associations (TMAs).

From schools and workplaces to tertiary institutions, precincts and activity centres, the five-step process has created an opportunity to apply a strategic and flexible process to support sustainable transport in Victorian communities.

6.2. Preliminary Results

The Department of Transport is currently undertaking an evaluation of the TravelSmart partnership grants program in 2010. This will include not only the outcomes of all projects but also the processes in delivering travel plans in partnership and across a variety of sites and settings. The results will be available in late 2011.

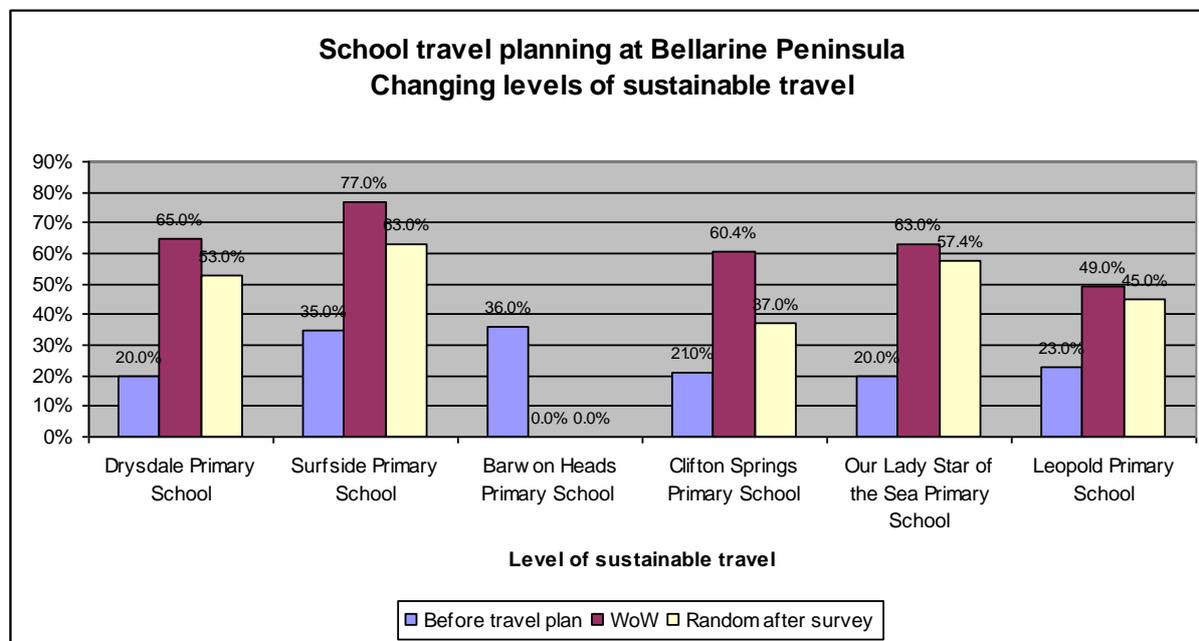
However, preliminary findings and current indicators gathered through individual project evaluation are demonstrating shifts in travel behaviour to more sustainable modes. This can be seen in the following four examples of travel planning projects.

6.2.1. City of Greater Geelong—*Hike it or bike it to school on The Bellarine*

The City of Greater Geelong project '*Hike it or bike it to school on The Bellarine*' developed travel plans at six primary schools on the Bellarine Peninsula (2007–2009) in response to issues of local traffic congestion. Results from 'Walk on Wednesday' (WoW) activities and follow-up random surveys conducted in July to September 2009 have indicated that since the TravelSmart project commenced in 2007, there has been a noticeable increase in travel to

and from school by sustainable modes (Figure 3). The shift to use of more sustainable travel modes has created many positive outcomes beyond a reduction in traffic congestion around the schools. Choosing sustainable transport modes has had clear health and environmental benefits, and increased the opportunities for social interaction for students and parent. The project concluded in 2009 but the six schools continue to exchange knowledge and ideas while promoting a sustainable transport culture within their school communities.

Figure 3: Results of changes in sustainable travel in Bellarine Peninsula schools (2009)



6.2.2. City of Boroondara— ‘Transport, Swinburne and Corporate Boroondara

The City of Boroondara project, ‘Transport, Swinburne and Corporate Boroondara’, developed travel plans with a number of businesses within the Camberwell Junction activity centre and Tooronga Road business hub (2007–2009). The aim of this project was to reduce total solo car trips by five percent within eighteen months, and concurrently increase sustainable travel by five percent within this timeframe. To date, positive travel behaviour change has occurred across the partner organisations, with the performance against objectives in excess of initial objectives.

- City of Boroondara
15% increase sustainable transport, 20% decrease solo car trips
- Coles Group
10% decrease solo car travel, 10% increase sustainable transport
- Shell Australia
6% increase sustainable transport
- Swinburne staff
8% increase sustainable travel
- Swinburne students
6% decrease solo car travel

Provision of a range of sustainable transport initiatives since the project commenced in 2007 has encouraged less people to drive alone in their cars and more to use sustainable modes of transport.

6.2.3. Deakin University–Deakin University TravelSmart Project

The Deakin University ‘Deakin University TravelSmart Project’ commenced a whole of community travel planning project at the Melbourne Campus in Burwood in 2007. The campus has around 18,000 students and 2,000 full-time and casual staff. Results from the August 2009 survey indicate that the majority of staff and students still travel by car as their main mode of transport; however, this has reduced since the implementation of the TravelSmart travel plan (Figures 4 and 5).

Figure 4: Deakin Staff Mode of Travel 2007–2009

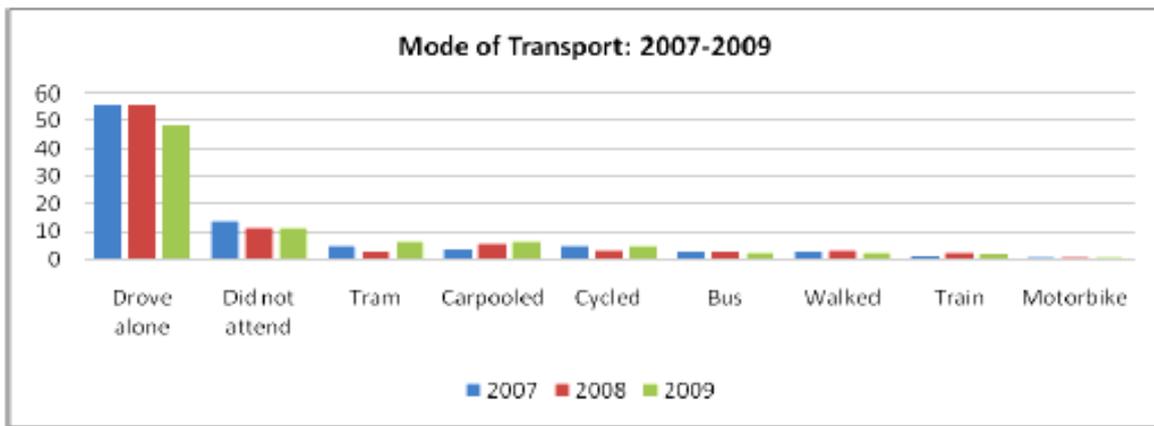
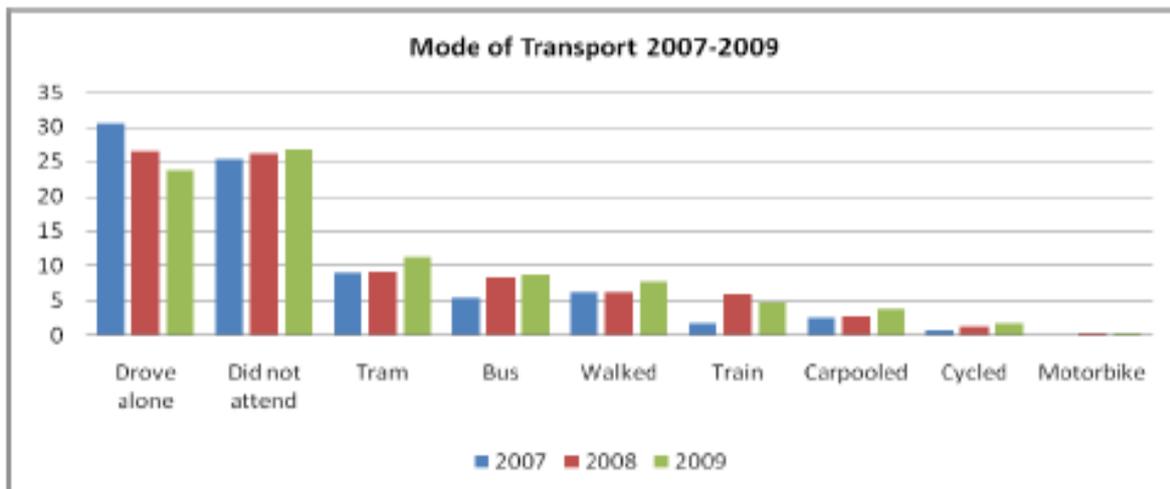


Figure 5: Deakin Students Mode of Travel 2007–2009



6.2.4. Knox Community Health – Mothers Living Well

The ‘Knox Community Health – Mothers Living Well’ project was a new approach within the TravelSmart grants program. This project trialed community travel planning where the five-step TravelSmart process was combined with community-based participatory action research (CBPR). This project aimed to increase the uptake of active transport (walking and cycling) by mothers and their children, and increase opportunities for the social connection of mothers and their children.

The project has been successful in ‘laying the foundations’ for a greater understanding of the issues of active transport and social connectedness among the Bayswater community.

Evidence of a shift in thinking towards active transport and the link to community connectedness was present in a focus group conducted in April 2010 with mothers involved in the project. One participant said, *“I knew I wanted to walk and cycle and be independent. I hadn’t thought of how it connected. That is what the project has shown me, that it does connect.”* Another said, *“People in cars don’t talk to each other, those who walk do talk. I know a lot more mums because we walk to school.”*

The Mothers Living Well project (2007-2009) has successfully helped to ‘plant the seed’ and get people thinking about active transport and social connections, improving overall awareness of the issue. *“If you feel you belong in the neighbourhood you have a sense of belonging, you feel safer as well. Then active transport is possible. You feel safe, then you walk and your children walk, and then active transport makes you feel safer, so it’s like a spiral.”* (Mother, 2010).

There are a number of TravelSmart grant projects that are currently continuing through the travel planning process, with more people expected to change their travel behaviour to more sustainable modes. Current trends also indicate that organisations that have been a part of the TravelSmart program for a longer period (three years) tend to have better results. As these projects move towards the final stages of the five-step process, results from follow-up data collection (late 2010) will add to current findings and help to inform the overall program evaluation.

7. Conclusion

The experience of the Department of Transport in delivering TravelSmart over the past nine years has led to the recognition that the five-step travel planning process is a flexible, collaborative and sustainable framework for travel behaviour change. All indications currently show that the Victorian TravelSmart approach is achieving marked changes in travel behaviour towards more sustainable communities—in travel, long-term change and active, ‘liveable’ communities.

Community-partnerships have been core to the successful implementation of travel planning. The Victorian TravelSmart approach recognises that the principles of behaviour change and engagement with a site has created more social connectedness for participants. The process has also fostered greater social cohesion, reduced local congestion, empowered a site’s community and established ongoing networks.

Travel planning is sustainable. It not only encourages sustainable transport choices but also is sustained by the ongoing commitment attained by engaging the community. By ensuring that strong community engagement is a part of the process, travel planning empowers the TravelSmart community to continue the actions of the travel plan after the initial investment.

The application of travel planning in Victoria provides an opportunity to address a broad range of topics in order to change the way people travel. The five-step process does not assume information or infrastructure provision as the only action available to a community. Rather than a prescriptive set of solutions, the process supports a robust investigation of barriers to more sustainable transport choices in order to achieve the best outcome for the site’s community.

The activities over the last three years have achieved a level of engagement that provides a strong base from which to increase the scale of delivery of TravelSmart. This is due to the networks that have been established through working in partnership with local government and other organisations. If fully supported, the travel planning framework will continue to achieve sustained travel behaviour change and more sustainable communities across Victoria.

8. References

Bureau of Transport and Regional Economics (BTRE), 2007, 'Estimating urban traffic and congestion cost trends for Australian cities', Working paper 71, BTRE, Canberra, ACT.

British Standards Institution 2008, *PAS 500: 2008 Specification for Workplace Travel Plans*, British Standards BSI, United Kingdom.

Cooper, B and Meiklejohn, D 2003, 'A new approach for travel behaviour change in universities', *26th Australasian Transport Research Forum*, Wellington, New Zealand.

Department of Planning and Community Development 2008, *Victoria in Future 2008*, Melbourne.

Department of Transport 2009, *TravelSmart School Travel Planning Guide CD-Rom*.

Department of Transport 2009, *TravelSmart Survey Trend Analysis*, Melbourne.

Department of Transport, 'Theories and Models of Behaviour Change', Melbourne.

Prochaska, J.O and De Clemente, C.C 1986, 'Towards a comprehensive model of change' in W.R. Miller and N. Heather (Eds), *Treating addictive behaviours: Processes of change*, Plenum Press, New York.

Peddie, B & Sommerville, C 2005, 'Travel Behaviour Change through School Travel Planning: Mode Shift and Community Engagement – Results from 33 Schools in Victoria', *28th Australasian Transport Research Forum*, Melbourne.

Richardson, T, David, M & Harbutt, P 2005, 'Using Before and After Household Travel Surveys to Evaluate a TravelSmart Program', *28th Australasian Transport Research Forum*, Melbourne.

Rogers, E.M. 1983, *Diffusion of innovations*, Free Press, New York.

Seethaler, R & Rose, G. (2003), 'Using the Six Principles of Persuasion to Promote Travel Behaviour Change. Preliminary findings of a TravelSmart pilot test', Melbourne.

9. Appendix A

Table 1: The Victorian TravelSmart travel planning framework

Five-step travel planning methodology	Principles of persuasion	Five stages of behaviour change	Application in Victorian travel planning process
<p>Step One: Getting started</p> <ul style="list-style-type: none"> • Securing support • Who to involve • Project planning 	<p>Authority Commitment Scarcity</p>	<p>i) Awareness of the problem and a need to change ii) Motivation to make a change</p>	<p>The site and its community are at pre-contemplation stage/ contemplation stage. The travel planning process provides the community with information on sustainable transport through presentations to various groups in the community (<i>Authority</i>).</p> <p>During this stage it is important to emphasise the positive personal consequences of adopting the new activity or changing the behaviour and emphasis is placed on the negative effects of not changing the present travel behaviour (<i>Scarcity</i>).</p> <p>Use of authority to gain commitment from site to participate. For example program run by government (<i>Authority</i>) together with community; or a signed contract or memorandum of understanding (MOU) obtained prior to commencing program (<i>Commitment</i>).</p> <p>Communication begins with support from head of organisation for the program (<i>Authority</i> and <i>Commitment</i>).</p> <p>A TravelSmart Coordinator, working group and project champion is appointed to drive the project (primes the <i>Liking</i> and <i>Social Proof</i> principles for steps two and three).</p>
<p>Step Two: Gathering the facts</p> <ul style="list-style-type: none"> • Assessing the situation • About your TravelSmart site • Reporting your results 	<p>Authority Liking Social Proof</p>	<p>i) Awareness of the problem and a need to change ii) Motivation to make a change</p>	<p>Whole of community participates in survey. Survey supported by head of organisation e.g. school principal, or CEO (<i>Authority, Liking</i>). Community invited to take part further evaluation (<i>Liking</i> and <i>Social Proof</i> is activated).</p> <p>During this step, mapping of the local area to identify alternative forms of travel is undertaken; begin to explore possible strategies for sustainable travel options with families and peers.</p> <p>Evaluation report presented (<i>Authority</i> and <i>Commitment</i>).</p>

Five-step travel planning methodology	Principles of persuasion	Five stages of behaviour change	Application in Victorian travel planning process
<p>Step Three: Planning better ways to go</p> <ul style="list-style-type: none"> Identifying strategies Developing your action plan Getting feedback and support 	<p>Actions/Initiatives as part of Travel Plan:</p> <p>Reciprocity</p> <p>Social Proof</p> <p>Liking</p> <p>Scarcity</p> <p>Commitment</p> <p>Authority</p>	<p>ii) Motivation to make a change</p> <p>iii) Skill development to prepare for the change</p>	<p>The community is motivated to change and help gather information, find out how to achieve change and gain necessary skills.</p> <p>Conduct a strategic workshop to assist people to prepare to understand and undertake desired change.</p> <p>Initiatives are captured from strategic workshop and translated into actions for the travel plan and contributes to community belief of having control over their travel-related behaviour.</p> <p>Initiatives tailored to a site include a range of actions, for example <i>Walk on Wednesday</i> school program (<i>Social Proof, Liking, Reciprocity</i>) or a TravelSmart Map (<i>Reciprocity</i>).</p> <p>Completed travel plan is signed by head of organisation and others (<i>Commitment, Authority</i>) and promoted to entire community.</p>
<p>Step Four: Making it happen</p> <ul style="list-style-type: none"> Launching your plan Implementing actions Telling your story 	<p>Social proof</p> <p>Liking</p> <p>Authority</p>	<p>ii) Motivation to make a change</p> <p>iii) Skill development to prepare for the change,</p> <p>iv) Initial adoption of the new activity or behaviour</p>	<p>It is during this step that people undertake self-monitoring of newly adopted behaviours and it provides opportunities for reflections and comparisons.</p> <p>Initiatives continue to be implemented (<i>Social Proof, Liking, Reciprocity</i>) and in addition, achievements and success are communicated to the community (<i>Authority, Social Proof</i>).</p>
<p>Step Five: Monitoring and Sustaining</p> <ul style="list-style-type: none"> Measuring your success Troubleshooting Looking ahead 	<p>Social proof</p> <p>Authority</p> <p>Commitment</p>	<p>iv) Initial adoption of the new activity or behaviour,</p> <p>v) Maintenance of the new activity and integration into the lifestyle.</p>	<p>Undertake annual follow-up evaluation and review.</p> <p>Continue implementation of activities and future plans to embed travel plan in organisation culture.</p>