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**Paper title:** Future Directions for TravelSmart in Victoria

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**Abstract (200 words):**

Travel behaviour change methodologies have been piloted in Victoria in the settings of schools, workplaces and communities. Pilots conducted in 2003 have demonstrated strong community support for this type of approach, and preliminary results indicate that significant reductions in car use and increases in the use of environmentally friendly modes are achievable. Based on these outcomes, consideration is now being given to the application of these methodologies at a larger scale to address a range of policy objectives enunciated by the Victorian Government. Such objectives include increasing the share of travel undertaken by public transport, managing peak flows as these push critical parts of the network to capacity, reducing greenhouse emissions associated with personal mobility, and increasing physical activity levels (e.g. through active transport). Analysis of international and local evidence of the effectiveness of these programs has helped to inform their wider applications. The experience gained so far is especially valuable in indicating where the application of the various travel behaviour change methodologies has the best potential to achieve the desired outcomes. Various models for a multi-year delivery program are now being explored and will be outlined in this paper.

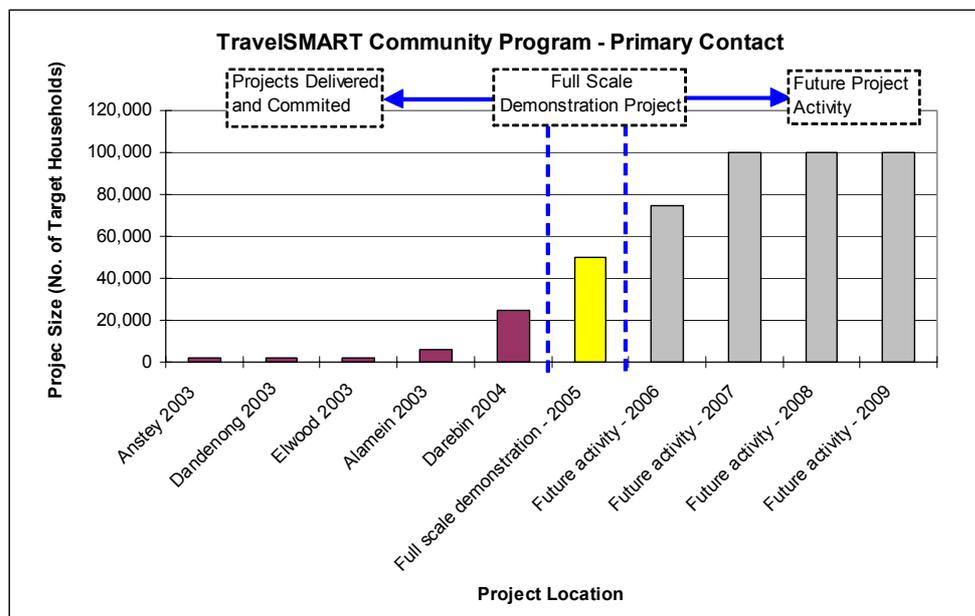
### Introduction

The Victorian TravelSmart program aims to achieve a significant and sustainable change in personal travel behaviour from single car occupant to more sustainable modes of travel (public transport, walking and cycling), smarter car use (e.g. car pooling) and, in some cases, travel substitution (e.g. teleworking). TravelSmart employs intensive, customised marketing campaigns conducted within local communities, schools, universities and workplaces, to ensure that people who might be swayed by the benefits of using alternative modes have full information about the choices available to them.

The Victorian State government has committed \$5m to the development and expansion of TravelSmart programs over the next two financial years.

This paper describes the strategic development of the Victorian TravelSmart Program, by the Department of Infrastructure (DoI), with specific emphasis on the TravelSmart Community projects undertaken in Metropolitan Melbourne. The ability to deliver these projects on a large scale has been advanced through a steady build up in project activity which has increased in scale and complexity at each stage. For the community based projects this has been as follows:

- Small scale pilot of 2,000 households in first half of 2003 in three communities (Elwood, Anstey & Dandenong)
- Medium scale pilot of 6,000 households in second half of 2003 along the Alamein train line with a launch of integrated signage conducted by Metlink
- Large scale pilot of 30,000 households in 2004 over 12 months, delivered to households in the Darebin municipality.
- Full-scale demonstration project of 50,000 households in 2005 over 12 months.
- Possible future projects of 50,000+ households per annum.



**Figure 1. Approach to delivery of Melbourne TravelSmart Community projects**

In addition to the community based programs described above, TravelSmart is also being implemented at:

*Universities:* Pilot programs have now been conducted at Monash (Clayton campus) and Latrobe (Bundoora campus) with a particular focus on first-year students as they enrol and start to form their travel patterns. In 2005, the program will be extended to include up to nine university campuses.

*Schools:* Analysis of the Victorian Activity & Travel Survey (VATS) data indicates that children being *driven* to schools account for about 17% of all trips by all people in Melbourne in the half hour between 8:30am – 9:00am (Morris, Wang & Lilja 2001), and 39% of these school chauffeuring trips have no other associated purpose, and return directly to home. There is significant potential to reduce car travel during this peak travel demand period, by encouraging more walking and cycling to school by school-children. A number of Victorian schools are involved in efforts to achieve these objectives, including: piloting TravelSmart as part of the curriculum, developing ‘School Travel Plans’ that employ TravelSmart principles, and initiating Walking School Buses. These programs will be expanded, with an increasing focus on areas with high traffic congestion.

*Workplaces:* TravelSmart workplace access plans are being facilitated through a partnership of State government and local government. Current activity involves nearly fifty workplaces, and ten local councils. Future activity will see access plan development promoted among large employers and to employers located along corridors where there is significant peak period road congestion.

The first part of this paper introduces the concept of project lifecycle development and its application to various travel behaviour change techniques under consideration in Victoria. The second part of the paper reports on the travel behaviour change outcomes from international and Australian experience. This section also reports on Melbourne project activity from early research and development in 2003 through to large scale piloting in 2004. The third part of the paper describes in detail the full scale demonstration project committed for 2005 including the project objectives, and the basis for selection of project scale and location. The fourth part of the paper provides a brief overview of activity in workplaces and school based travel behaviour change projects. The final section of the paper opens up consideration of organisational and operational delivery options for future delivery of TravelSmart initiatives in Victoria.

## **Mobility management**

Mobility management also known as Transportation Demand Management (TDM) is a general term for various strategies that increase transportation system efficiency by influencing demand. Mobility Management emphasises the movement of people and goods, rather than motor vehicles, and so gives priority to public transit, ridesharing and non-motorised travel, particularly under congested urban conditions (VTPI 2004).

An appraisal of different mobility management techniques (Ker, I 2003a) found that initiatives such as TravelSmart programs in the community and in workplaces were ranked highest for effectiveness and feasibility.

Different mobility management techniques will be required to address different mobility management policy goals. Within the Department of Infrastructure, mobility management techniques are at various stages of development and readiness for application. Figure 2 on the

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following page presents the current stage of development of the techniques presented in this document and also flags new techniques for further development. As depicted in Figure 2 the development stage of community dialogue marketing (TravelSmart Communities) is suitable for large scale demonstration in 2004/05, while school and workplace travel planning are suitable for large scale piloting. Other travel behaviour change techniques (eg intercept dialogue marketing) are untested and require research and development to determine their suitability for further development.

#### **International and Australian experience**

Community based travel behaviour change projects have been undertaken extensively in Europe and also in Western Australia (Perth). Whilst Europe has focussed primarily on public transport patronage growth, Western Australia has focused on both reduction of car use and increase in the use of environmentally friendly modes (public transport, cycling and walking).

From the Perth projects the following range of changes has been achieved.

- Car use (trips) reduced by a minimum of 7% (outer urban area) to a maximum of 14% (inner urban area);
- Public transport (counts) increased by a minimum of 8% and a maximum of 20%;
- Cycling increased by a minimum of 61% to a maximum of 140%; and
- Walking increased by a minimum of 11% to a maximum of 57%.

The public transport outcomes from the Perth projects compare favourably with the outcomes from international projects, which achieved relative increases in public transport mode share of between 10% and 50%. (Ker, I 2003b)

#### Melbourne experience

*Research and development project:* As the first travel behaviour change community based project in Melbourne the objectives of the research and development (R&D) project included:

- How should a community project be delivered within the Victorian context?
- Who would need to be involved?
- What would the cost structure be?
- How would the evaluation be approached?
- How should the project be applied in different communities?

Three project areas – Elwood, Anstey, and Dandenong were selected. In total 2,000 households (approximately 33% of those approached) participated. While the behaviour change outcomes from the project could not be tested statistically due to insufficient sample size, the project provided a rich understanding of the key success factors for travel behaviour change community based projects. The key observations from the R&D projects included:

- A variety of approaches is required when inviting households to participate in the program including: letters, telephone and community events.
- The use of high quality materials and information provided to households is critical to their value and use by participants.

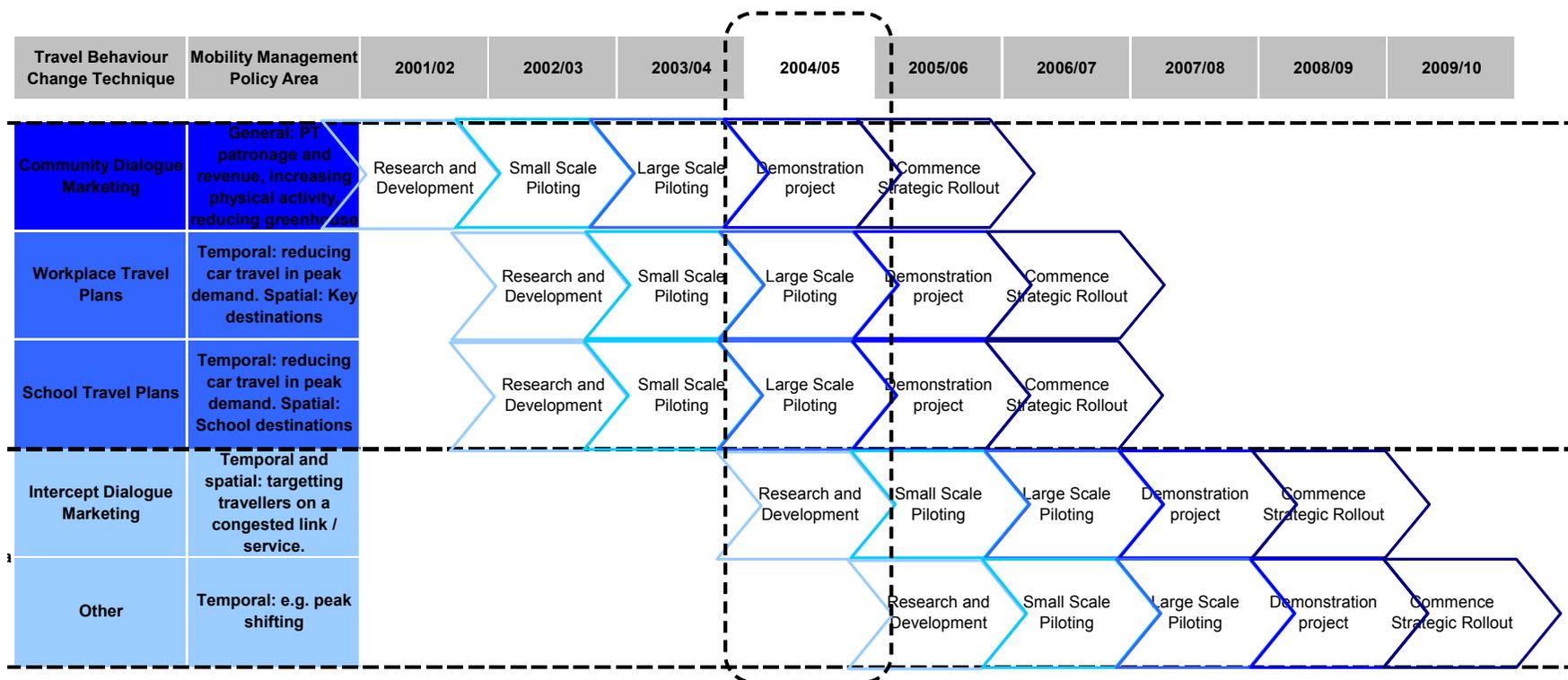


Figure 2. Travel Behaviour Change Techniques – Lifecycle Stage of Development

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- The ability to respond to households that have languages other than English as their primary language is required. This is vital given the diverse and multicultural nature of Melbourne's metropolitan communities.
- Strong partnerships with the operators of the public transport services that are within and intersect the project area, and local government are essential.

These observations were taken into consideration in the development of the subsequent TravelSmart community project (Alamein).

*Medium scale pilot - Alamein project:* The Alamein TravelSmart Project was established as a small scale pilot project, building from the previous R&D project. The project targeted over 6,000 households along the Alamein train line. The project was rolled out with improved signage for the system (Metlink) at the stations on the Alamein train line, tram route 70 and bus route 612. The project was delivered from June to September 2003.

The travel behaviour changes resulting from the project were determined through a one-day before (May 2003) and after travel survey (October 2003) of all members of a panel sample of households in both a target and a control area<sup>1</sup>.

The target group, where the TravelSmart project was conducted, showed reductions in car driver and passenger trips. Public transport, cycling and walking increased. In comparison the control group showed minor increases in car driver and passenger journeys, and decreases in trip making by walking, cycling and public transport. The travel behaviour changes achieved are reported in Table 1 below.

**Table 1. TravelSmart Alamein Travel Impacts.**

TRIPS BY Mode	Target Group % Change (530 hhlds)	Control Group % Change (413 hhlds)	Relative Change %
Public transport	11.9	-14.9 <sup>2</sup>	27
Car driver	-9.5	0.2	-10
Car passenger	-6.7	-2.1	-5
Bicycle	16.7	-6.3	23
Walking	15.6	-10.4	26

Although preliminary, these results are consistent with the range of observed outcomes for similar projects delivered nationally and internationally. Ongoing monitoring of the durability of the public transport outcomes is being undertaken through analysis of public transport ticket validation data.

Questionnaires were sent to a sample of participants seeking feedback on the program. Over 400 (98%) responses were received. Key results include:

- 85% thought the TravelSmart project was a worthwhile activity;

<sup>1</sup> The control group constituted a panel sample of households (413 net) at the northern and southern end of the Alamein train line who were not approached with the TravelSmart program, but who completed before and after travel surveys.

<sup>2</sup> The estimated decrease of 14.9% in public transport trips in the control group is due to strong seasonality factors on the Alamein train line. This is consistent with Onelink ticket validation data.

- 98% used the TravelSmart materials they had requested;
- 93% of households who received a home visit found them useful; and
- 91% thought that further TravelSmart campaigns should be undertaken.

*Large scale pilot – Darebin:* During 2004, a TravelSmart campaign involving 30,000 households is currently being undertaken in the City of Darebin, which would appear to offer suitable conditions for significant behavioural change.

The TravelSmart project team will for the first time include a multi-lingual telephone team who will ask up to 30,000 households what assistance they'd like about a range of travel options, including walking, cycling and public transport. For example, households might want a timetable for a nearby bus, contact details for a bike group, or a map of Darebin's great walking paths. A bike courier will then deliver this personalised information to the house.

The Darebin project is the largest multi modal TravelSmart style travel behaviour change project to date in Australia. The project commenced in late April in the south of Darebin, gradually moving northwards throughout the year until the 30,000 household target is met, which is anticipated to be in early October 2004.

This project is part of the Australian Government's Greenhouse Gas Abatement Program and the National Travel Behaviour Change Program, funded by participating State Governments including Victoria, Queensland, South Australia and the ACT.

The evaluation of the Darebin project includes a one-day travel survey of a panel sample of households, seeking to have 900 net responding households in the after survey. The before survey was undertaken in March 2004, and the after survey will be undertaken in March 2005, thus avoiding any seasonality influences.

In addition to the travel survey, the following existing data sources will be monitored for the project area, regional and metropolitan areas, both historically, during the project and after the completion of the project:

- Onelink public transport ticket (Metcard) validation data.
- Metcard sales.
- Traffic Counts using data from VicRoads SCRAM data.
- PT Customer Satisfaction.

### **Full scale demonstration project:**

#### Objectives

Within the overarching goal of the TravelSmart program, each stream (community, school and workplaces) and each stage (pilot, demonstration, and rollout) has its own objectives. The objectives of the full scale demonstration project include:

- Strengthening the partnership with the public transport operators to further develop confidence in the ability of the projects to deliver key PT outcomes including increases in:
  - PT patronage and PT revenue; and
  - PT customer satisfaction.

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- Strengthening the partnership with local government to further develop their confidence in the ability of the projects to deliver key local government outcomes;
- To understand what economies of scale exist;
- To identify in greater depth the impacts on travel behaviour change in order to inform future project refinement, business case development and cost benefit analysis. Specific impacts include:
  - Peak and off peak car travel;
  - Walking;
  - Cycling;
  - Peak and off peak PT patronage growth;
  - PT revenue; and
  - PT customer satisfaction.
- To understand why and how participants made changes to their travel, to refine future project delivery; and
- To facilitate comparison and aggregation of project outcomes across travel behaviour projects nationally.

### Delivery options

*Project scale:* The optimal project scale will be one where the benefit / cost ratio is maximised. To determine this, an examination of the relationship between costs, benefits and project scale was undertaken.

Project costs for the community project include project establishment, delivery, and evaluation costs. The greater the proportion of the total project budget assumed by delivery costs, the greater the cost efficiency of the project.

The community project is easily scalable, with projects delivered to date ranging from a few hundred households up to more than 20,000 households. However, with smaller size projects, establishment and evaluation of the project absorb more than 50% of the total costs. With larger scale projects the share of the total project cost taken up by establishment drops to between 10% and 20%, depending on the depth of the evaluation required.

Therefore, a minimum project scale of 25,000 households is recommended to maximise the cost efficiency.

Future project delivery of the TravelSmart Community methodology would benefit from a richer understanding of the delivery and effectiveness of the projects in different urban / demographic settings. Therefore seeking different locations for project delivery is preferred at the demonstration stage, rather than a single large application.

*Project location:* Locations which have the greatest potential for cost effective travel behaviour change have the following attributes:

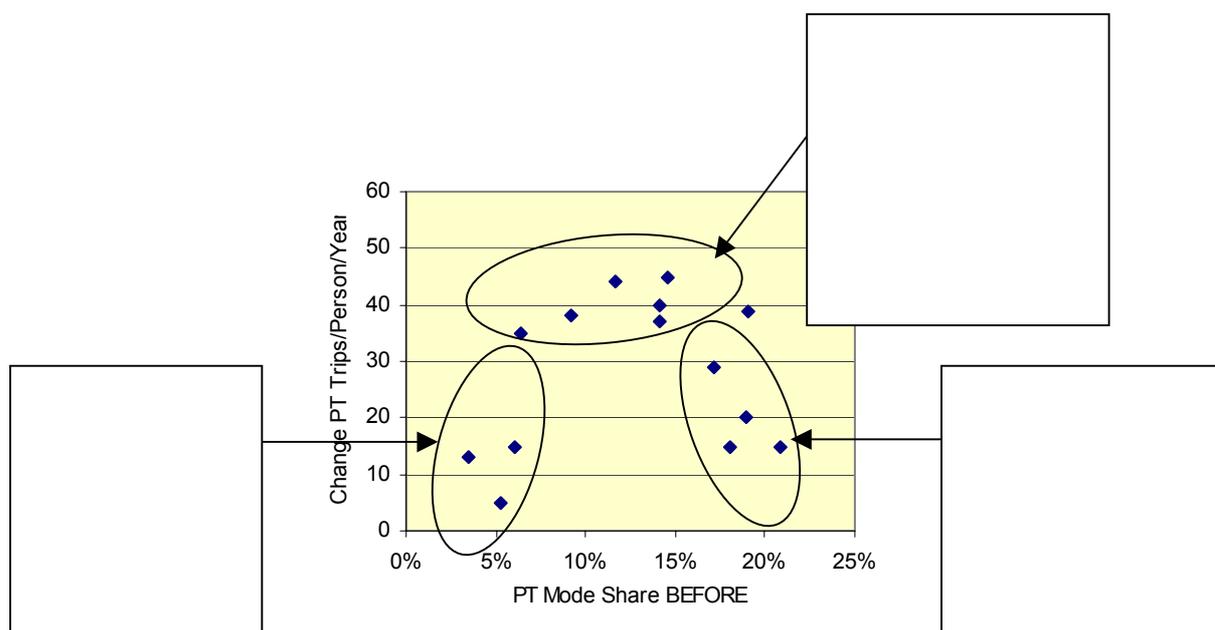
- high PT transport network coverage;
- high population density;
- good PT network connectivity;

- access to major attractions; and
- available PT system capacity.

An analysis of potential for public transport patronage gain associated with TravelSmart community based projects was conducted by Sinclair Knight Merz (SKM) based on the criteria above. This analysis indicated that in general, the potential for patronage gain in Melbourne will be lowest in the outer areas, good in the middle areas, and best in the inner areas. Other locations, such as key activity centres (including Transit Cities) and some public transport corridors, also offer good potential for travel behaviour change.

The international evidence suggests that the best public transport patronage results are obtained where the *existing* public transport mode share is in the range 7% to 15% (see Figure 3). It is hypothesised that this modal share range is indicative of ‘adequate’ public transport service levels where those persuaded to move to public transport are likely to find an attractive alternative to car.

SKM recommended “focusing on areas where public transport provision is already good and there is spare capacity in the system. Existing public transport mode share might be a good predictor of potential: if the mode share is: too low, the service provision is not likely to be good enough to sustain increased use; if too high the system may be operating too close to capacity for it to be attractive to potential new users”.



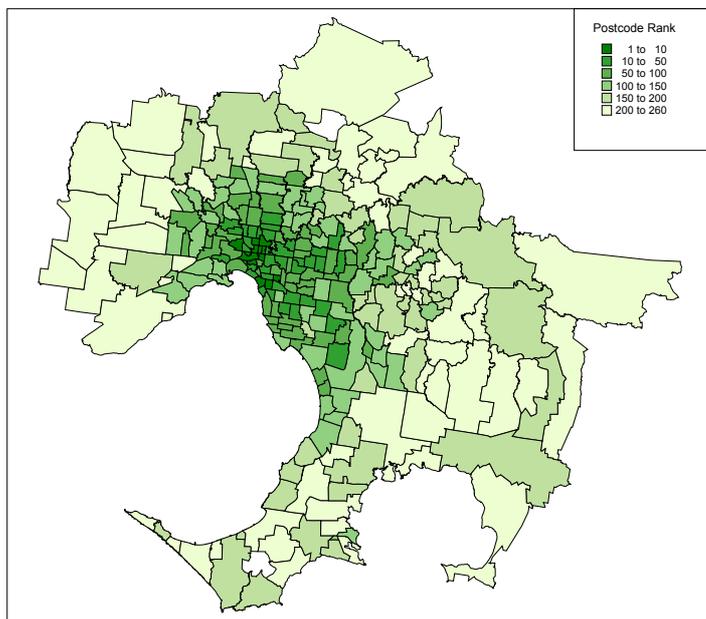
**Figure 3: TravelSmart International Public Transport Impacts**

SKM assessed the behaviour change potential for all postcodes in Melbourne, based on VATS and Census data, and mapped these (see Figure 4). The darkest areas in the map have the highest (relative) potential for public transport patronage gain from travel behaviour change. Due to small sample sizes, the results are less reliable in the

outer and fringe metropolitan areas. Clearly the priority areas for TravelSmart to maximise public transport patronage gains are the innermost suburbs.

Public transport patronage gain is only one of the effects of TravelSmart, the others being more travel as cyclists, pedestrians and car passengers. Cyclist and pedestrian networks are generally better in the inner suburbs than further out although connectivity is sometimes a problem; the grid street layout is very efficient for connectivity in this regard.

The inner areas are also generally the most affected by traffic congestion, and stand to gain more relief from congestion through implementation of behaviour change programs. All considerations point to locating TravelSmart in inner suburbs as a priority over those further out.



**Figure 4: Ranking by patronage growth potential from TravelSmart**

The selection of areas introducing TravelSmart should take into account the amount of spare capacity on the public transport services in the nominated project areas to absorb patronage growth without increases in services.

Whilst this is an important consideration, restrictions in capacity are only likely to affect patronage growth at the peak of the peak on selected routes. There is scope to avoid these routes in the selection of the project location. TravelSmart is most effective in the off peak, in most cases filling empty seats.

An assessment of capacity constraints on the rail (train and tram) network has been undertaken and taken into account with the nomination of possible project areas.

The main benefits of TravelSmart are:

- Reduced car travel and attendant effects, especially greenhouse gas emissions, airborne pollutants and congestion reduction;
- Increased public transport use with associated effects such as increased fare revenue; and

- Increased walking and cycling, with attendant health benefits to participants.

The key to capturing these benefits, without excessive associated or additional costs, is to implement TravelSmart in areas where:

- Walking and cycling networks are well-developed;
- Public transport is also well-developed, and has some spare capacity to carry more passengers (outside as well as during the peaks); and
- Road traffic networks are under pressure and suffer from significant congestion at peak periods (and other times).

In Melbourne, these basic characteristics are found primarily in inner and middle suburbs, especially those served by trams. Whilst public transport capacity may be an issue on some routes, in general there is significant spare capacity outside peak times and directions; this happens to be when TravelSmart has its greatest effects.

*Partnerships:* As the program is delivered in partnership with the Public Transport operators and Local Government, the quality of these partnerships has a bearing on the success of the project.

The Department of Infrastructure (DoI) has been engaging metropolitan local governments to raise their awareness and understanding of the TravelSmart program. As a result most councils are positively disposed towards the program. Sufficient lead time is required to facilitate a strong partnership with the local government in the selected project area. Therefore project establishment activities – specifically developing project partnerships - should commence as soon as possible after budget authorisation.

### **Workplace and School Development Project**

As noted in the DoI 2003-2006 Corporate Plan – “The management of peak demands on the road and rail networks is a key DoI priority.”

The Department has commenced development of travel behaviour change techniques for particular peak period travel markets, including travel to and from work, and travel to and from schools. The continuation of this development work is critical to the ability of these techniques to determine the contribution these approaches can make to peak period management.

*Workplaces and destinations*<sup>3</sup>: In Victoria mobility management has focused on workplaces and destinations using two approaches:

- The development of voluntary travel plans facilitated and supported through both State and Local Government. The aims of these plans are to reduce car use for travel to work and for travel on business and also to reduce the environmental impact of travel and to reduce the need to travel at all for work.
- A simplified form of social dialogue marketing for first year students at University campuses.

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<sup>3</sup> Further details on Victoria’s travel behaviour change activity in workplaces, please see [www.travelsmart.vic.gov.au](http://www.travelsmart.vic.gov.au)

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Activity in these two approaches commenced in 2002/03 and has taken an opportunistic approach, with workplaces and universities which were interested and able to participate being selected.

The next stage of activity which will be undertaken for 2004/05 – 2005/06 is to take the small scale projects, and to apply them at a larger scale. The objectives for the workplaces/destinations TravelSmart activity during this period is to:

- Increasing the number of organisations *developing* access plans;
- Increasing the proportion of organisations developing access plans, formally *adopting and committing* to the initiatives in their travel plans;
- Increasing the rate at which travel plan initiatives are *implemented* – and therefore the travel behaviour change benefits can be realised; and
- Leveraging and assessing private sector funding for the implementation of access plan initiatives, and thereby determining the total amount of money spent on facilitating more sustainable travel choices resulting from the States investment.

Furthermore a specific pilot is under development for delivery in 2005 to explore the potential role for workplace access plans in addressing peak period congestion on specific links in the road network. The objectives of this pilot, in addition to those above, are to:

- strengthen partnerships with local government through a project focussed on a specific problem;
- understand how to best engage with workplaces located along a congested road corridor;
- determine the proportion of workplaces who can be recruited in this way; and
- identify ways in which the rate of implementation can be increased.

*School Travel*<sup>4</sup>: A concerning trend in most western countries is for more school travel by car, and less by cycling, walking and public transport. Analysis of the Victorian Activity & Travel Survey (VATS) data indicates that children being *driven* to schools account for about 17% of all trips by all people in Melbourne in the half hour between 8:30am – 9:00am (Morris, Wang & Lilja 2001), and 39% of these school chauffeuring trips have no other associated purpose, and return directly to home. It is estimated<sup>5</sup> that the school trips of over two-thirds of primary school students, and over one third of secondary school students travelling to school as a car passenger are under 3km, and are therefore within walking or cycling distance.

There is significant scope to change a proportion of car based school travel to other modes, with significant congestion benefits, as well as health benefits to be gained.

There are already a range of small behaviour change initiatives underway which focus on school travel, however there is no strategic integration of these initiatives, and most are research based projects which will shortly be concluded.

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<sup>4</sup> Further details on Victoria's travel behaviour change activity in workplaces is provided in Peddie, B (2004) School Travel Planning Pilot in Victoria, *Papers of the 27th Australasian Transport Research Forum* Adelaide: ATRF

<sup>5</sup> Estimate based on data from the Victorian Activity & Travel Survey 1997-1999 data sets.

The development activity for the TravelSmart Schools project look at the development of School Travel Plans, with an emphasis on integrated delivery of the range of projects noted above. Also the role of seed funding for minor infrastructure improvements to facilitate walking, cycling and catching public transport to schools will be examined.

### **Options for Delivery of Future TravelSmart Community Activity**

The expectation is that the 2004 large-scale TravelSmart community pilot project in Darebin and the 2005 full-scale demonstration project will provide sufficient evidence that community based travel behaviour change techniques deliver reliable travel behaviour change outcomes. Further involvement in this area would then move from a development phase to an operational phase.

Refinement of the logistics of the delivery of the TravelSmart community projects has been required with each increase in scale from the R&D through to the large-scale pilot. Similarly due consideration must now be given to the refinements that will be required in moving from a development phase to an operational phase. A critical question relates to the most suitable operational organisational home and delivery model.

The following discussion represents the authors' preliminary thoughts on this issue, and do not represent positions of the Department of Infrastructure or the Victorian State Government.

#### **Operational Organisation Options**

A number of existing organisations responsible for TravelSmart community projects into can be considered as the organisational 'home' the future. Possibilities include Department of Infrastructure, Metlink, VicRoads, Local Government. Consideration is given to the strengths and weaknesses of these organisations.

*Local Government:* The strength of local governments in becoming the operational home for TravelSmart community projects is in their intimate knowledge of local conditions and closer relationships with the communities that are the focus of the TravelSmart community projects. The impacts of the projects are to a large extent realised in a local area, and therefore the community benefits are greatest for the local government area in which the project is located. Furthermore Local government is also interested in multiple outcomes across modes, including policy areas of greenhouse gas abatement, increased physical activity and decreased local traffic.

Capacity to deliver such a project – either directly or through contract to others is somewhat limited at the local government level, for projects at scale of 50,000 or more households per annum. Given the lack of continuity in delivery of the project year after year, there would be a significant learning curve associated with taking on such a project, and therefore a reasonable risk of some problems, assuming delivery.

*VicRoads:* Given VicRoads' responsibility with managing the road system, there is a logic to considering them as an operational home for a project which assists in

managing demand for the use of the road network. VicRoads also has excellent project management capability, and a growing area of capability in facilitating on-road public transport. VicRoads has no direct responsibility for growing patronage for public transport, and demand management is most likely to be of interest from the perspective of peak demand and associated capacity requirements.

*Metlink:* As the organisation collectively owned by the public transport operators and charged with the responsibility of growing public transport patronage and revenue through marketing activity (as opposed to service delivery which is the direct responsibility of the public transport operators), Metlink has a direct rationale for consideration as the operational home for the TravelSmart community projects. Many of the project materials are developed and provided by Metlink. Furthermore the operators' intimate knowledge of the public transport system is essential for locating the project where service levels are reasonable, and sufficient capacity exists. Metlink has been a key project partner since the research and development projects in early 2003 and has committed staff time, funding and materials to all TravelSmart community projects to date. Metlink through its marketing division is familiar with individualised marketing and has excellent project management capability.

There are some concerns that Metlink as a public transport organisation has limited interest in facilitating other modes such as walking, cycling, taxi or smarter car use. However, there is evidence that as Metlink matures as an organisation the synergies between these outcomes, is gaining recognition, and that an integrated approach can achieve better outcomes for all.

*Department of Infrastructure:* The development of a community based travel behaviour change program has been pursued by DoI, and as such the personnel involved so far have the best knowledge of the approach and experience in delivery through a contracting model. DoI as an organisation also has an interest in facilitating access and mobility for Victorians, as compared with single modal (e.g. public transport, car) interests of other organisations. Furthermore DoI has contractual and partnership relationships with the key project partners: Metlink and the public transport operators.

However, within the DoI, development activity has occurred through the Planning and Policy Division, and there is a view that this Division is not an appropriate location for operationalising this activity beyond pilot and demonstration activities. The Public Transport Division has been nominated for consideration, however it is to some extent captive to the same single interest in public transport as Metlink.

The above represents preliminary consideration of some of the possible options for an organisational home for operationalising the TravelSmart community project. Further exploration of these options will be undertaken over the following months. In addition new organisational models will be considered and similarly assessed. These options might involve innovative organisational structures. One possibility might be a new external organisation similar to the European Mobility Management centres which could be jointly overseen by a board of relevant stakeholders including representation from the above organisations.

## Operational Delivery Options

The delivery of the TravelSmart community projects to date has been through a contracting model whereby tenders are invited through a public tender submission process for organisations who have sufficient expertise and experience in the development and delivery of similar community based travel behaviour change projects. Tenders have been called at each stage of the development including R&D, small-scale pilot, large-scale pilot, and for the 2005 full-scale demonstration project.

The travel behaviour change methodology has developed rapidly over these projects and additional development is envisaged to ensure the effectiveness and efficiency of the methodology is further improved. Therefore for application of the methodology in inner and middle Melbourne it is considered that the methodology is reasonably mature, and further improvement will not involve significant change to the core methodology. In other areas, such as outer metropolitan Melbourne and regional centres, it is expected that further development work would be required due to the different contextual due to the different contextual environment: built environment, transport system, population demographics, travel behaviour, and organisational characteristics.

At this time there is burgeoning activity in this field nationally and internationally. The Department of Infrastructure has ensured that it is abreast of this activity through active participation in a National Travel Demand Management network. This burgeoning activity has placed pressure on the private sector's ability to resource the multitude of projects at sufficient scale and level of experience. While the level of activity nationally and internationally in this area is difficult to determine, there is a general expectation that there is a trend of increasing activity in the near future. It is therefore important, from a risk management perspective, that we take due consideration of the private sector's capacity to resource up to the scale of activity envisaged for Victoria.

Two basic operational delivery models can be considered. The first is a continuation of delivery through contract to the private sector, and the second is the establishment of in-house delivery capacity within an appropriate organisational home. Both have merits and shortcomings.

*Delivery through Contract.* With the travel behaviour change methodology relatively stable, consideration of multi-year delivery contracts are possible, which may realise further cost efficiencies, as project establishment activities such as staff recruitment, and training take up a lower proportion of total project budget through having a project team which would continue through multiple projects.

Further increases in the scale of projects may stretch the ability of any one organisation to manage successfully. This is particularly relevant at this point in time, where there are no private sector organisations who have had experience with delivery of projects of 50,000+ households.

Furthermore there are only a very small number of organisations who have had experience with delivery of projects over 10,000 households. To facilitate the development of a mature and competitive marketplace, and to manage risk of

delivery, multiple community based projects could be let in parallel, possibly with a mix of larger scale and smaller scale projects which could be awarded to independent contractors depending on demonstrated expertise and experience.

*In-House Delivery.* Within the context of ongoing community based travel behaviour change projects, an in-house delivery capacity may be appropriate in addition to / or instead of delivery through contracting to the private sector. There may be greater cost savings through such an approach, without the private sector's need to derive profit from such activities. It is likely that private sector expertise would be required in establishing such an in-house capacity to assist with transfer of knowledge in the areas of delivery staff skills to be recruited and training of staff, logistical procedures for delivery, and performance monitoring processes.

An in-house team would not be subject to competitive pressures, and is also less likely to be able to benefit to the same extent as the private sector from innovation and refinement of practice in this area, resulting from the private sectors broader direct exposure to different project contexts through projects with different clients, with different objectives, located in different parts of the world with different built environment, transport systems, and population characteristics.

## **Conclusion**

The development of the TravelSmart, community based travel behaviour change project, has taken a strong strategic path in first assessing how this type of approach might work here in Victoria through the R&D pilots in early 2003, then determining the likely travel behaviour change outcomes through the Alamein project in late 2003, building in scale to understand the behaviour change and methodology impacts of broadening the scale in the Darebin project in 2004, and establishing a comprehensive evidence base through the planned projects in 2005.

Further activity in this area is focussed now on moving from a development phase into an operational phase. This transition requires further careful consideration to ensure a smooth transition to an operational program with a clear rationale for delivery of this type of project, sufficient expertise in this area, strong project management skills, and strong relationships with the key delivery project partners. Furthermore there is an opportunity to consider the most appropriate delivery models such as contracting through the private sector, in house delivery or some combination.

## **Acknowledgements**

The Victorian TravelSmart Community projects are initiatives of the Victorian State Government, delivered through the Department of Infrastructure. Australian government funding through the Australian Greenhouse Office supports this project.

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