

# **Travel Behaviour Change through School Travel Planning: Mode Shift and Community Engagement – Results from 33 Schools in Victoria**

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## **1 Introduction**

This paper examines the TravelSmart School Travel Planning Pilot project's attempt to change travel behaviour through School Travel Planning. By adopting a multifaceted approach, School Travel Planning attempts to address concerns relating to health, congestion, safety and the environment, through locally devised and implemented initiatives. An underlying 'hands on' philosophy which involves school staff and students working with parents, members of the wider community, and local government leads to customised Travel Plans that are responsive to the specific needs of the local area.

This paper begins by providing the context in which School Travel Planning began, and highlights the necessity for a mode shift in school travel. It then outlines the TravelSmart methodology for the School Travel Planning Pilot. Perceptions of the school journey are discussed in relation to survey results as well as focus group feedback. Real or perceived barriers are identified and an overall strategy developed which combines initiatives which address the specific school situation. The different ways in which initiatives combine can produce unexpected spin-offs which address access to schools indirectly by involving the community in decisions and affecting the quality of the school environment.

The challenge for future projects is to refine the travel planning process

## **2 Context**

The way children travel to school has not always been perceived as a particularly significant issue in terms of impact on the transport network or in relation to neighbourhood amenity or children's health and independence. Yet there has been a dramatic change over the past 30 years in the mode of travel to and from Victorian schools. For example, a comparison between the travel mode choices in Essendon, Victoria, shows a shift from around 25% of children being driven to school in 1974 to approximately 89% in 2005 (Consultation Planning Survey Services, 1974 & DOI 2005)

This issue appears to be replicated across the Melbourne metropolitan area where travel to school accounts for 17% of morning peak hour traffic with 39% taking a trip from home to school to home. (Morris, Wang & Lilja 2001).

Concern over the increase in obese and overweight children has led to calls for greater physical activity. Promotion of active transport, such as walking and cycling, has been shown to promote change in long-term physical habits and has been targeted through such initiatives as the Walking School Bus (Salmon et al 2004). At the same time concern for children's safety has spawned a range of education programs aimed at ensuring minimum risk to children if they do walk, cycle, or catch public transport.

The TravelSmart Education program in Victoria piloted both a Curriculum program and a School Travel Planning program from 2003 to 2005, to ascertain their effectiveness in changing travel modes to school. This paper will primarily focus on the School Travel Planning project.

The percentage of children being driven to school has risen steadily as the above example from Essendon indicates. Traffic congestion, pollution, and land use are all motivating factors for the development of programs aimed at decreasing the number of private motor vehicles travelling around the road system. The school as a major destination has therefore been targeted.

The issue of how children travel to school has clearly become an important site for study and action from a number of directions: health, safety, environment, community connectedness, as well as the contribution it makes to traffic.

The Walking School Bus has been a successful program in Victoria aimed specifically at shifting children's travel by car towards walking to and from school. Although successful in promoting an increase in the number of children walking, the program is not able to address wider issues of travel mode choice, nor the particular geography, demographics, or specific profile of each particular school community.

The reasons for the prevalence of driving as the dominant mode of travel to school can be complex. Concern for safety in all its forms, whether physical (eg safety from traffic danger) or personal (eg safety from strangers), can be both a motivation for driving and a disincentive to allow children to access other modes of travel.

The level of traffic around schools can increase parents' concern for their children's safety, and make it less likely they will opt for other modes of travel such as walking and cycling. Being unsure of neighbours' goodwill can lead to concern about both physical and personal safety, were children to walk, cycle or catch public transport, and increase the likelihood of driving.

A vicious circle is created that appears to spiral into increasing car trips to school. Because a complex system of factors adds to this spiral, it is unlikely that a simple single pronged approach could act as a circuit breaker. Concerns parents have about both the physical and personal safety of their children need to be addressed. Therefore, it is logical to tackle the problem of increased traffic around schools with an approach that can operate on a number of fronts simultaneously. School Travel Planning offers a structure that can incorporate a range of actions aimed at tackling a range of issues and concerns.

While relatively commonplace in the United Kingdom, School Travel Planning is a comparatively new approach in Australia. For example, the "Travelling to School Initiative" in the United Kingdom has set a target for 10,000 schools to implement travel plans by 2006 (DfES, 2003). A School Transport Bill was introduced in the UK Parliament in October 2004. The UK experience has shown that school travel plans reduce "school run traffic" by an average of 8-15% with some schools achieving more than 20% reduction. (Cairns et al 2004)

Although successful in the UK, the difference in systems of government, particularly the more direct relationship between schools and local government in the UK, plus other differences suggested the need for testing of the model for Victorian conditions.

In 2002, the Department of Infrastructure in Melbourne, Victoria, began developing what was to become the TravelSmart School Travel Planning Pilot Project.

### **3 TravelSmart**

TravelSmart Victoria has been trialling a number of approaches to bring about travel behaviour change. It currently operates in three streams: Communities, Workplaces and Education.

TravelSmart Communities has developed rapidly in Victoria. Since 2002, using an individualised marketing approach, it has progressed from a 2000 household project to delivering a 45,000 household project in 2005. Results suggest a consistent reduction in car trips and increase in public and active transport.

TravelSmart Workplaces assists employers to develop workplace travel plans. The program supports large employers such as hospitals and universities as well as businesses with a smaller number of employees.

TravelSmart's initial approach to working with schools was through a program called The Curriculum Pilot. This pilot aimed to raise awareness and facilitate a greater understanding of, and to encourage positive attitudes towards travel behaviour change by the school community. It was trialled with 6 schools in 2003. The curriculum and its materials were amended following feedback from teachers and further tested with twelve schools (plus five of the original six) in 2004. This pilot yielded significant results, but was limited mainly to grades 5 & 6 (ages 10 & 11). While parents of these students were involved through surveys and diaries, the project focussed largely within the school gate.

After canvassing other travel related programs being offered to schools in Victoria TravelSmart discovered that at least 35 different programs were being offered independently to schools. Each of these was external to schools, and competing with each other for the schools' attention.

The school travel planning approach provides a structure that is able to incorporate a range of programs refocused as strategies aimed at reducing car trips to school and increasing the share of other travel modes. The Curriculum developed for years five and six can also be included as part of a school travel plan.

In 2003 a project was initiated to test the school travel planning methodology and refine it for Victorian conditions. This "School Travel Planning Pilot" (STPP) was funded by the Victorian Greenhouse Strategy and targeted primarily at increasing active transport (walking and cycling) to school. The project recruited 34 schools initially (33 continued into the actual school travel planning phase) from metropolitan Melbourne and regional and rural Victoria.

Initial interest in the project from the majority of schools was in traffic and congestion around their school. The possibility of reducing the number of cars travelling to school, reducing parking problems and poor driver behaviour in the morning and afternoon periods provided key motivations for the schools that signed up to the project.

### **3.1 School Travel Planning Pilot**

This School Travel Planning Pilot Project followed the lead of UK school travel planning, while testing some of the different issues in Victorian schools. Initially, Schools were sent an information sheet developed by Sustrans in the UK entitled "How to Develop a School Travel Plan", which outlined a basic structure for a school travel plan. (Sustrans, 2001)

The process behind the development of school travel plans in the STPP is simple, school centred, and aimed at reducing car trips to school and increasing other modes, particularly active and public transport. It consists of 4 stages:

1. gathering data and creating a situational analysis
2. developing a structured set of strategies (school travel plan) aimed at addressing issues and capitalising on opportunities for change
3. implementing the plan
4. monitoring and reviewing measures put in place and adjusting the plan in the light of successes and failures, for continued operation

The original 34 schools (which became 33 in the STPP development stage) were recruited from the 9 regional divisions of the Victorian Department of Education and Training. There were 29 primary schools and 5 secondary schools, all of which were government schools. 15 were from non-metropolitan areas and 19 from metropolitan (a mixture of inner, middle, outer and 'interface' council areas).

Each school administered a survey to their total student population (and parents in the case of primary schools). This represented approximately 17,000 students plus parents. 70% of surveys were completed and focus group interviews were also conducted with parents, students and teachers to gain a more detailed understanding of what particular issues would need to be addressed at each school.

Schools then developed a response to the baseline research in the form of a school travel plan (with TravelSmart assistance) that set out a program of measures aimed at making it possible for parents and students to choose more sustainable travel modes and reduce car trips to and from school.

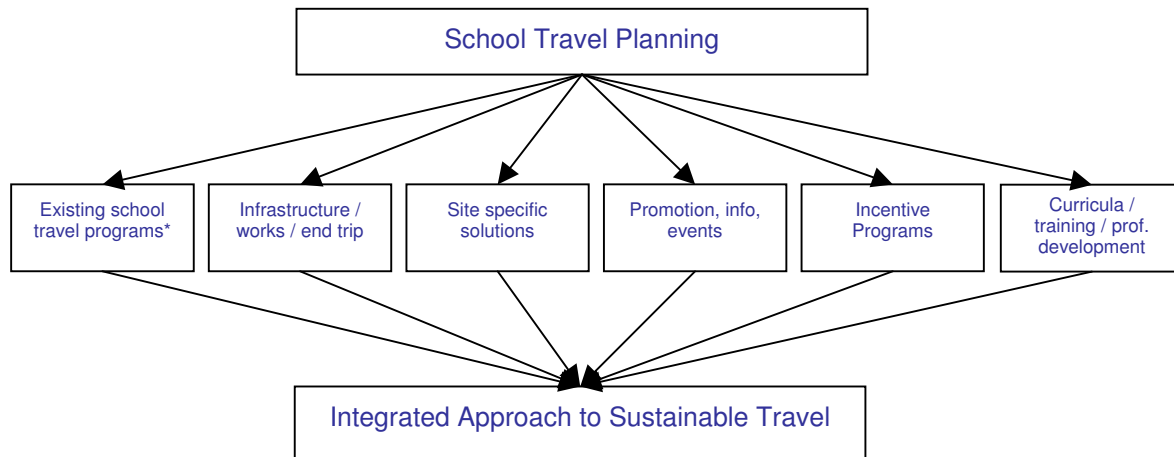
### 3.1.1 The travel plans

No formal template was supplied for the travel plans, however, guidance was provided by way of headings from which schools could develop their plans. This is in accord with the reflexive nature of travel planning and an approach necessary for addressing local concerns and issues.

- Introduction,
- Brief description of the school,
- Evidence of consultation,
- Summary of school's transport and road safety problems,
- Proposed initiatives with objectives and targets,
- Programme for implementation,
- Plans for monitoring and review. (Sustrans, 2001)

Schools were asked to lead the process and the resulting documents submitted to TravelSmart before grants were provided for materials, training or personnel. The school travel plans that were developed included a range of measures such as:

- Information, promotion & events (eg maps, brochures, newsletters, walk/ride to school days, incentive and reward programs)
- Programs (eg Walking School Bus, TravelSmart Curriculum, Bike Education, public transport programs)
- Works (eg bike shelters/parking racks, bicycle paths, minor road treatments)
- Site specific or innovative solutions (eg early bell for students who walk, cycle or catch public transport, cycle and walk clubs, meeting places for walking/cycling, car pooling parents etc). (See figure 1)



**Figure 1** School travel planning concept

## 4 Perceptions of the school journey

The initial school survey indicated that while an average of 80% of primary and 60% of secondary students in the sample live within 3 kilometres of school, 59% of primary and 51% of secondary students were driven 5 days per week. The main reasons expressed for the travel choices outlined in the survey were:

- Distance – 28% in primary schools and 34% in secondary schools
- Dangerous Roads – 29% in primary schools and 6% in secondary schools
- Personal Safety – 26% in primary schools and 3% in secondary schools
- Convenience (on the way to other destinations) – 22% in primary schools and 16% in secondary schools
- Running short of time – 10% in primary schools and 21% in secondary schools

### 4.1 Interpreting the barriers

Focus group interviews were conducted in each of the 34 schools. These were conducted primarily with parents, although in secondary schools students were also interviewed. The purpose of these focus group interviews was to find more detailed and specific examples of barriers to children walking and cycling to school. Responses in these groups fell largely into the same categories as in the survey, providing insights into further interpretation of the survey answers.

#### 4.1.1 Distance

Distance as a barrier to walking or cycling did not provide an objective measure. The actual distance children lived from school was also placed in some doubt as in at least one school, analysis of enrolment addresses showed a much higher percentage living within one kilometre than shown in the self completion questionnaire. This was borne out in the focus groups where ‘too far to walk’ or ‘too far to cycle’ became a contentious issue. As an example; in one of the focus groups a boy living 10 km from school in the Yarra Ranges regularly rode. At another, participants believed anything greater than 500m is too far to walk and anything over 1 km is too far to ride.

#### 4.1.2 Dangerous roads

Dangerous Roads showed itself to be a very important category whether the school was on a major highway, a quiet suburban street, or in a small country town. Therefore, it is important to break down this heading into specific categories that can be addressed separately. As an example, where the school is not in a particularly heavy traffic area, local congestion created by parents themselves in addition to their own poor driver behaviour can become a particular issue. While it has been said that congestion can be an incentive to take up alternatives to the car, in the school context the congestion may cause a contrary effect. For instance:

*I live 2-3 km away over in Williams Road area and I drive the kids to school every day, just about, it depends on the weather but we drive because it's safer because there's busy roads around that way. A lot of congestion everywhere.* (parent, Goulburn North East Region)

Personal Safety as an issue was repeated in focus groups, with a concern expressed that the parent needs to ensure the child arrives at school:

*"Well I have got no guarantee once they leave my front door that they have got to school."* (parent, Goulburn North East Region)

This can be expressed as an issue of trust:

*"...don't really know who or if anyone lives near us."* (Parent, Central Highlands Wimmera Region)

*"I'd trust my neighbours but you don't want to feel like you are inconveniencing people..."* (Parent, East Metropolitan Region)

*"...there is no way known I am going to let my kids walk to school with someone I don't know..."* (Parent, North Metropolitan Region)

*"...you get known because you are highly visible so if you are known and you are recognisable the benefits are that your child is known and then if something does go wrong people know who the child is and who they belong to..."* (Parent, West Metropolitan Region)

#### 4.1.3 Convenience (on the way to other destinations)

Convenience as an explanation may need to be investigated further. It may be that some parents would not see school as "on the way" if they felt there was a viable and safe alternative to driving their children to school.

*"Probably the other reason when we don't walk is just convenience. I am either going to work or I have got whatever to do on the way. I think that if they had a definite way that I knew that they would be safe like they cross up the end of our court they go through a park and up another court they have got to cross Richard Drive which just runs up the main road coming in"* (parent, Barwon South West Region)

*"I've got an 11 year and we live about .7 kilometres away and he gets a ride to school only because he is ready to go so he either comes with me or my husband drops him off on the way to work and then he walks home. I am ashamed to say that I drive everyday."* (parent, Gippsland Region)

#### 4.1.4 Running short of time

This category again can be unpacked and broken down into separate issues. These can be about having several different time objectives for different children going to different destinations plus work for the parent. Such a scenario can be simplified by separating these tasks – e.g. if one or all of the children are able to make their own way to school, the parent may not have such a difficult logistical task – therefore, not all the children have the same time imperative. Another category reflected in focus group discussions could be categorised as the ‘false time economy’:

*“I sit there for twenty-five minutes, out the front...”*

*“I sit there about forty minutes...because if you don’t you don’t get a parking spot.”* (2 parents, North Metropolitan Region)

#### 4.1.5 Safety Paradox

Where children have had little experience of independent travel, it is possible they are being exposed to other risks

*“That’s it, that’s right. Sometimes you will plonk your child at the supermarket and say “now if you were to walk home which way would you go?” They have got no idea because they are always in cars.”* (Parent, Central Highlands Wimmera)

*“We are going to go down in history as the most paranoid parents in the entire world”.* (Parent, Central Highlands Wimmera)

The survey results provided some valuable information for schools to develop travel plans, it was important as a benchmark for monitoring the effect of the implementation. The focus group interviews both elaborated and qualified the survey results and allowed participants to draw connections between the results, their own behaviour, and the way they would like the school community and environment to develop.

This process (using surveys and focus groups) was adopted in an attempt to be responsive to particular local issues, resources and attitudes. The school travel plans developed were encouraged to take account of the specific barriers to walking and cycling which characterise each school’s location and community.

## **5 The school travel plans – what schools committed to**

After analysing survey and focus group results, strategies were developed as particular responses to the barriers and opportunities identified. These fell into 4 basic categories.

### **5.1 Information, promotion and events**

Information and promotion was disseminated through brochures and newsletters. Schools committed to include regular updates on the program, and timing of walk/ride to school days in promotional material distributed via the school children. Incentive and reward programs were also utilised so that the information would be propagated by the children directly to parents. As in most cases it is the caregiver making the decision of how to travel to school and the transmission of information to the parents was vitally important.

## **5.2 Programs**

Popular programs among the pilot schools were often based on reducing the issues of personal safety. The Walking School Bus was common amongst the group, and required cooperation with local government. Southvale and Carrum Primary Schools had previously been involved in the TravelSmart Curriculum project which, continued through to 2004. A formalised approach, the curriculum offered a structure to class activities, but other schools brought the information to students in class in less formalised ways. Bike Education was also well utilised by the schools, and variations of this program also used, such as the cycle 'passport' system, where children had to have a license issued to them before they could ride.

## **5.3 Works**

With the opportunity for funding being presented minor and major works were proposed by most schools. Plans for bike shelters and bicycle parking racks were commonly submitted, with bicycle paths and minor road treatments often being funded jointly by the school and local government.

## **5.4 Site specific or innovative solutions**

Such measures were encouraged and not all of the proposals were aimed directly at students. Informal cycle and walk clubs were coordinated by schools and involved a high level of parent participation. Meeting places for parents, either those who travel in groups, or solely with their own children were trialled to encourage networking of parents.

Social meeting places are not for walkers or cyclists alone. The informal gathering of parents who drive to school could also encourage regular car pooling. Focus groups indicated that in some cases parents living in the same street were unaware that they were travelling to the same destination each morning / afternoon. Mapping exercises in the schools, for example at Elsternwick Primary School, allowed personal geography to be compared with others.

## **6 Strategies to overcome barriers**

Issues of distance, dangerous roads, personal safety, convenience and demands on time can be approached using separate strategies or, as many schools discovered was necessary, by employing a combination of strategies. Often the more successful strategies dovetailed with existing programs or had positive affects on other areas of the school community.

Although it became obvious during the focus group sessions that distance is a matter of perception, it is still the case that many students live too far away to walk or cycle. This problem is accentuated in non-metropolitan schools where public transport is less available and a higher proportion of trips are over 3 kilometres. At Benalla East Primary School, one objective in the travel plan is to increase the number of students bussing to school from 20.4% to 25% by term 4 (2004). This modal shift toward school bus was considered possible as there was spare capacity on the existing services. The challenge for the school was to identify what could be done to increase the ridership. Construction of a bus shelter to guard students from both the sun and rain began after consideration of the barriers, and prompted the school to seek further funding from VicRoads. In conjunction with this infrastructure development was a campaign to improve bus safety (alighting and loading), with instruction provided by staff and a local bus company for the whole junior school (200 pupils). With a strategy in place Benalla has liaised with the bus company to scope out safer routes, and ways to promote the service.



'Dangerous roads' were identified in surveys and focus groups around all schools, metropolitan and non-metropolitan. Several strategies were available for schools to reduce the risk of accident for children. In Benalla East simple infrastructure improvements complemented the bus shelter; the school liaised with local council and police to get preferred crossing point signs erected. A more obvious sign for parents that the environment is safe for walking to school was the successful negotiation with local council to have a permanent crossing supervisor located outside the school gate.

Warrnambool East Primary School combined innovation and practicality when they introduced staggered finishing times for students. Whilst no alteration of existing infrastructure was required, effectively the strategy provided pedestrian and car separation. Students walking or cycling are released from school 5 minutes earlier than those who are driven home. The principal, Fred Clarke, believing that the initiative has 'been really successful while not costing anything, reported that 'now at the end of school by 3.40 there's no traffic, formerly at 3.50 it was still banked up'. (Clarke, 2004)

Timing of the project coincided with the Victorian rollout of 40 km speed zones outside of schools. This state-wide initiative was complemented with other strategies to make the trip safer. Personal Safety was repeatedly mentioned in focus groups, with concern expressed that parents need to ensure the child is safe from door to door. To reduce the perceived risk to children Pleasant Street Primary School employed a combined strategy of Bike Education and a Ride to School day. Their Ride to School day involved eight staff who agreed to be on duty at various meeting points and ride to school with the students. *'This ride showed some parents that it is safe to let their children ride around the lake (with others) as they can use the manned crossing to get to the school'*. (Pleasant Street Primary School, 2005). The school has planned to make this an annual event promoting the use of bikes, and to illustrate children's competency.

Albert Park Primary School, located in the City of Port Philip, also focused on increasing the number of children cycling to school. Special bike afternoons were held, with a response rate of 56 students (from a school population of approximately 320 students). A local bicycle shop volunteered its services and provided free bicycle checks. Bike activities for the children were run at the same time, and focussed on developing student's bike control and balance.

In term four 2004 Courtenay Gardens Primary School purchased sun smart hats for the entire school as a way of encouraging parents to allow children to walk to school.

Though important, the danger from cars was only one aspect of personal safety; the other was concern over what has come to be called 'stranger danger'.

'Travel Buddies' was an initiative of Albert Park's, with the objective of connecting children who were neighbours or on the same routes to school. A less formal approach than the Walking School Bus program, it aimed to increase the number of children and parents walking together.

*We spent lunch times with a large map of the school area and asked children to come to us so that we could link them up with other children. Previous to this we had mapped [the] whole area surrounding the school and had made lists of "clusters" of families - families that lived close to each other.* (Albert Park Primary School, 2005)

Albert Park also ran days focussing on sustainable methods of travel once a term which were supported by the school community. Many parents commented on the good community atmosphere at these events. Results from these days showed an increase from

72% of students travelling sustainably, improving on a normal day's result of 55%. (Albert Park Primary School, 2005)

“School Neighbours” is another Albert Park initiative to encourage the “clusters” to get together informally and build stronger community connections. 200 letters were sent to families in the school asking whether there was interest in meeting their school neighbours and helping their children find travel buddies.

The collection of daily school travel data has not only provided a means of assessing the impact of the TravelSmart program, but has doubled as motivation for children to ‘lobby’ their parents for more sustainable modes of travel. Each grade and each student’s mode of transport were recorded, and students received individual prizes based on their consistent sustainable travel results over the term.

*We have heard stories from parents about their children’s refusal to take the car to school, even when late or if it was raining. They did not want to use the car for one day because they would miss their travel buddies and miss out on prizes.* (Albert Park Primary School, 2005)

## **7 Building Community Connectivity – unexpected outcomes**

Whilst schools such as Albert Park have seen a growing change in student and parent attitudes toward modes of travel other than the car, other spin-offs became evident. The focus on community connections (such as travel buddies, school neighbours and stories in the school newsletter), helped to develop friendships within the school community and, in the words of the school ‘it is through this lens that positive changes can be made to children’s health and environmental health’. Southvale Primary School in Noble Park has placed the focus of their school travel planning on developing community cohesion. Not only have they encouraged face to face interaction by dedicating a room for parents to meet and carry out activities, they have taken the concept further by inviting interaction across the school and state through a travel planning forum (hosted by the Victorian State Government’s My Connected Communities Site).

Elsternwick Primary saw the chance to recruit local police into their walking school bus as not only a practical way of finding volunteers, but also for senior members of the community to meet younger ones.

Another spin-off has been the development of relationships with the local council. Elsternwick have developed one of the largest proportions of children travelling in the Walking School Bus in Australia (approximately 150 children from a school population of 500). Interest by Bayside Council has meant that an intersection on a main approach to the school has had safe crossings at all four entrances to a round-about installed. Elsternwick’s travel plan proposed to ‘identify intersections requiring roundabouts e.g. Head/ Murphy Streets with zebra signs and marked lines and islands on all four crossing points’. After an investigation of the level of latent demand in the school catchment area this proposal was approved by the state roading authority (VicRoads) after it was researched by the council.

Likewise, Albert Park was also successful when they asked the City of Port Phillip to install extra bike racks surrounding the school to encourage parents to ride with their children.

## **8 Conclusion: lessons learnt – refining the model**

The experience of the STPP indicated some deficiencies in the methodology which have been addressed in the development of the CPP. Building on the insights gathered from the

STPP, a new project, the 'Congested Precinct Schools Pilot' is working with schools in the Essendon / Moonee Valley area and also Kew / Hawthorn.

Among the gaps and deficiencies is that many of the traffic effects observed around schools must be attributed to a number of schools. The STPP worked with schools across Victoria rather than clusters of schools. Therefore, the traffic generated by one school does not only affect that school, but may criss-cross over a neighbourhood.

It was also noted that distance from school may not be measured very accurately by self completion surveys. Those schools which did accurate mapping of the student body by locating houses on street directories or maps found results did not correlate with those in the survey.

Whilst some schools found their local government was approachable and willing to help, the majority of the 33 schools encountered problems with the 26 respective LGA's. Overcoming this was made difficult through the wide spread of schools across the state, something which has been overcome in the CPP by targeting schools within only two LGAs, and making contact with the councils in the early stages of project development.

A concentration on government primary schools with their high proportion of students from the immediate neighbourhood did not test the possibilities of secondary schools (wider catchment) or private schools (even wider catchment) tackling public transport opportunities and issues.

The Congested Precinct Pilot has integrated a number of amendments to the first School Travel Planning Pilot. As mentioned above, only two local government areas are involved. The selection of two precincts for the CPP was based on examining VicRoads data concerning acute traffic congestion and overlaying this information with clusters of schools. In general, schools are reasonably evenly dispersed, particularly government schools. One aspect of the assistance offered by each of these LGAs is external measurement, specifically parking and traffic counts, prior to and after the intervention.

Other alterations to the methodology which will address the issues in the earlier pilot will be:

- Geographic Information Systems mapping of student residences to combat survey error
- A higher percentage of private schools and secondary schools to deal with a different set of issues, mostly concerning the development of public transport programs
- Refinement of survey instruments, including surveys and intervention for school staff
- Developing a strong relationship with LGAs from the beginning of the project (this is made easier by their being one LGA per cluster of schools).

The relationship between local government and schools is likely to be a key factor in success of school travel planning.

A further implementation issue which needs to be addressed is the timing of the project; this is evident on two scales:

Due to the dynamic nature of schools and the number of pressing requirements the staff face it was often impossible to plan for events such as surveys or special events with certainty. Room to manoeuvre within a school's travel planning timeline must be incorporated. The effect of this can be softened by budgeting for coordinators to ensure commitments the school makes in their plan are met.

On another level, the entire duration of the travel planning process was underestimated at the outset and in future the recommendation is to design a long-term implementation strategy staging initiatives over a realistic period.

Random (but not unexpected) events such as the transition of staff or, as demonstrated by the two schools which incurred the inconvenience of whole of school buildings works, overriding circumstances must also be accommodated by permitting flexibility.

The analysis of survey data, while not yet completed, is expected to be effected by the high percentage of schools still implementing major initiatives from their school travel plans in 2005. Some schools such as Williamstown Primary School, with a major reconstruction of the school taking place throughout 2004, had implemented almost none of their school travel plans before 2005. When the “follow up” survey was conducted in late 2004, it was intended to measure the effect (or not) of school travel plans on travel patterns.

Although unable to furnish an analysis of “before” and “after” survey data, and despite previously described shortcomings of the methodology, at the current stage of evaluation, the School Travel Planning Pilot appears to have been successful in many areas.

Schools have reported appreciable drops in traffic levels and poor driver behaviour at the beginning and end of the school day. Successful implementation of walking and cycling programs appears to have increased active transport at schools. Where successfully developed, the relationship between school and local council has yielded long term outcomes in the form of infrastructure, personnel (eg school crossing supervisors), and policy outcomes. A wider effect of the school being more engaged with its local community has also been observed.

The strong trend towards parents driving their children to and from school and their nervousness about sanctioning another mode of travel, makes the task of school travel planning a sensitive process. The barriers parents and students have identified all need somehow to be addressed. And, as these barriers are often interrelated, so must the strategies devised to tackle them reinforce each other. School travel planning therefore needs to be seen as a reliable process, rather than a fixed and formulaic solution.

The strength of the school travel planning methodology appears to be that it is a school centred process. If fully embraced by the school, the school travel plan can engage students, parents and the school’s wider community. Becoming part of school policy, overall school planning, and part of the learning environment, as it is becoming in some of the schools in the STPP, it may be that the effects could be long term cultural change. This, of course, cannot be measured in the short term. However, as one STPP school changed a 50 year anti-cycling policy, it is clear that at least small cultural change can occur.

## 9 References

- Cairns S, Sloman L, Newson C, Anable J, Kirkbride A, and Goodwin P (2004) *Smarter Choices – Changing the Way We Travel*, published by the Department of Transport, London
- Clarke, Frederick (2004) personal interview
- Consultation Planning Survey Services (1974) *Awareness Essendon: An Action-Research Programme for the City of Essendon*, in conjunction with the Western Region Council for Social Development, Melbourne
- Department of Infrastructure (2005) *TravelSmart Education - Schools Congested Precinct Pilot*, preliminary analysis of school survey data, Melbourne.
- Department for Education and Skills & Department for Transport, (UK) (2003) *Travelling to School: An Action Plan*, Nottingham
- Morris, J, Wang, F, & Lilja (2001) '*School Children's Travel Patterns – A Look Back and a Way Forward*', Melbourne
- Salmon, J, Telford, A and Crawford, D (2004) *The Children's Leisure Activities Study: Summary Report*, Centre for Physical Activity and Nutrition Research, Deakin University, Melbourne.
- Sustrans (2001) '*How to Develop a School Travel Plan*, Information Sheet 16, Bristol
- TravelSmart Education (2005) '*School Travel Planning Project (VGS funded) Implementation Report Albert Park Primary School*', Melbourne
- TravelSmart Education (2005) '*School Travel Planning Project (VGS funded) Implementation Report Pleasant Street Primary School*', Ballarat
- TravelSmart Education (2005) '*School Travel Planning Project (VGS funded) Elsternwick Primary School - School Travel Plan*, Melbourne
- Walker, M (2004) *TravelSmart @ Elsternwick Primary*, presentation at TravelSmart Forum, Melbourne, 20th October 2004