



NSW

----- → *Travelsmart Schools Program*
2006 - 2007



----- ○ *Summary Report*





NSW Travelsmart Schools Program 2006 - 2007 Summary Report

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The NSW Travelsmart Program had the following collaborative partners:

Health Promotion Service, Sydney South West Area Health Service
Sydney South East and Illawarra Area Health Service
NSW Premier's Council for Active Living
The NSW Ministry of Transport
NSW Department of Environment and Climate Change
Sydney South Regional Organisation of Councils

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FOR ACTIVE LIVING
NEW SOUTH WALES



Department of Environment & Climate Change NSW





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Introduction

The NSW Travelsmart Schools Program aimed to reduce car use and to encourage active travel (walking, cycling and/or public transport) to and from school by students and their parents at 15 primary schools in the inner west and eastern suburbs of Sydney. The program took place from February 2006 to September 2007.

The NSW Travelsmart Schools Program was a collaborative project involving the Health Promotion Service of Sydney South West Area Health Service, Sydney South East and Illawarra Area Health Service, NSW Department of Infrastructure Planning and Natural Resources, the Department of Environment, the Premier's Council for Active Living and the South Sydney Regional Organisation of Councils.

The project was funded by a grant of \$100,000 from the Australian Greenhouse Office, and with in kind contributions from the collaborating organisations. The Travelsmart Schools Project Officer was based in the office of the Health Promotion Service of Sydney South West Area Health Service (SSWAHS) in Camperdown.

During the project, there were departmental reorganisations within the NSW Government. The Department of Infrastructure Planning and Natural Resources (DIPNR) was restructured and renamed the Department of Planning. The component of DIPNR responsible for travel demand management and the Travelsmart Program was transferred to the Ministry of Transport. The Department of Environment and Conservation became the Department of Environment and Climate Change.



Program background

The NSW Travelsmart Schools Program drew on the experience and findings of the Central Sydney Walk To School Research Program (implemented by the Health Promotion Service, SSWAHS), other active travel work in Sydney (Zaccari and Dirkis, 2003) and previous Travelsmart schools programs in other states of Australia.

The NSW Schools Physical Activity and Nutrition Study (SPANS) conducted in 2004 surveyed almost 5500 students in NSW primary and secondary schools. The study found that while more than 70 per cent of secondary students went to and from school by active travel (walking and/or public transport), in primary schools just over 20 per cent of Year 6 students (aged 11-12 years) walked to school every day, 20 per cent used public transport and 35 per cent travelled by car (Booth et al, 2006).

Research findings from the Central Sydney Walk To School Research Program conducted in Sydney in 2004-2007 showed that the factor most strongly associated with children being driven to school was the parent car journey to work (Wen et al, 2007). To change the student journey to school from car to active travel also requires a similar change in their parents' journey to work, from car to active travel.

The way that parents and students travel to and from school is affected by a complex interaction of many factors, including distance from home to school, involvement of one or both parents in the paid workforce, distance from home to a parent's workplace, number of cars available to the household, availability of public transport, safety and walkability of the environment around the school, and the views of parents about the safety of that environment (Cole et al, 2007).

Parents' decisions about travel to and from school are also influenced by the direction and length of trips to other destinations such as workplaces or child-care centres, and how they link those trips with the trip to school (Cairns et al, 2007).

Program goals and strategies

The goals of the NSW Travelsmart Schools Program were to:

- Reduce the number of car trips taken by students to and from primary school
- Increase the numbers of students who walk, cycle or go by public transport to and from school
- Reduce greenhouse gas emissions and air pollution caused by car trips to and from school
- Improve the safety and amenity of schools and their vicinities, so that active travel could be a practical option for more parents and students.



The program strategies used to attain these goals were in two broad categories.

1. Education and information strategies for parents, students and teachers on the health, environmental and social benefits of active travel, and the options for active travel to school and work in their local area.
2. Working with local councils to modify the physical environment around the participating schools and on identified walking routes to the schools, to make these environments more conducive to active and safe travel.

Program implementation

The program recruited 15 primary schools located in the local government areas of Canada Bay, Canterbury, Leichhardt, Marrickville, City of Sydney and Waverley. Ten schools were public schools within the NSW Department of Education and Training (DET) and five schools were within the Catholic Education Office.

The schools were:

- Wilkins Public School, Marrickville
- Annandale Public School
- Dulwich Hill Public School
- Clovelly Public School
- St Anthony's School, Clovelly
- St Brigid's School, Coogee
- St Paul of the Cross School, Dulwich Hill
- Marrickville West Public School
- St Margaret Mary's School, Randwick
- Ferncourt Public School, Marrickville
- Annandale North Public School
- Crown St Public School, Surry Hills
- Concord Public School
- Campsie Public School
- St Mel's School, Campsie.

The schools varied in size, socioeconomic status and cultural background of their students and parents. Some schools were located on busy streets with heavy traffic, and others had quiet leafy surrounds. While all participating schools had some kind of public transport (usually buses) fairly close by, some schools had access to more frequent bus services and more routes than others.



The level of traffic on nearby roads, and the safety of the areas immediately around the schools and their wider vicinities also varied. Some schools had road safety infrastructure, such as traffic lights, pedestrian crossings or school crossing supervisors outside their main entrances, while some did not.

The Travelsmart Schools Program strategies can be summarised as:

- Student surveys to establish a baseline on how they travel to and from school at five of the 15 schools
- Workshops and meetings with parents to identify issues affecting safety and travel, and to identify possible solutions
- Professional development days for teachers
- Funding and installation of bicycle storage facilities at schools that requested them
- Funding and organisation of bicycle proficiency training, for students and parents, at beginner and intermediate levels, for schools that requested them
- A monthly newsletter, called *The Active Traveller*, sent to schools and distributed to parents as an attachment to the school's own newsletter
- A home- to- school mapping exercise to be done in the classroom, for students to identify and mark their home to school route on a large-scale map of the school and its surrounding neighbourhood
- A safety review of each school and its vicinity, with the road safety officer and/or the traffic engineer from the local council, with the Travelsmart project officer and a parent and a teacher from the school. The purpose of the safety review was to identify possible hazards around the school and its vicinity and to find ways to fix them
- Development of a Travel Access Guide (TAG) for each participating school. The TAG has a map of the school and its vicinity with information about how to go to school and to other destinations by active travel. Information gathered from the safety reviews and the parent focus groups have been used in the development of the TAG for each school
- Resources for classroom learning were offered to teachers
- Discussion with the principal, teachers and the school's parent organisation on how best to include planning for more active travel in the school's planning processes and/or School Management Plan
- Student surveys with Year 6 students in five of the participating schools to assess any changes in travel to and from school at the end of the program.

Consultancy on complex decision-making processes

In the process of seeking to remedy the hazards identified near schools it became clear that in NSW responsibility for these issues is divided between a number of agencies and the decision-making processes are complex. As a result, the Travelsmart Schools Program Steering Committee commissioned a consultancy to find ways to improve the current complex decision-making processes to overcome barriers to active and safe travel to school.



The consultant selected conducted consultations with the Roads and Traffic Authority (RTA), the Department of Planning, the Local Government and Shires Association, the Ministry of Transport, the Department of Education and Training, and a local council and did telephone and desktop consultations with agencies in other states of Australia and other countries on their work on active and safe travel to school.

The final report from the consultancy identified a number of issues and opportunities and made a series of recommendations (P/P/M Consultants, 2007). These included:

- High-level support, funding and collaboration from the key public agencies in NSW is needed for active travel programs
- The NSW State Plan provides an opportunity for greater multi-sectoral collaboration, and specifically supports active travel via four of its goals:
 1. S3: Stopping the growth in childhood obesity
 2. S6: Increasing the share of commuter trips made on public transport to and from the Sydney CBD in peak hours from 72% to 75% by 2016
 3. S7: Continuing the decline in road fatalities
 4. E3: Cleaner air and progress on greenhouse gas reductions (NSW Government, 2006)
- Criteria used by the RTA to make decisions on road crossing infrastructure near schools should be public
- Using the planning and development processes of local councils and those required by the Department of Planning to create environments that support active travel.

Additional funds and programs for environmental and sustainability education in NSW primary and secondary schools may provide opportunities for these issues to be pursued (see www.sustainableschools.nsw.edu.au).

Program evaluation

To help assess the impact of the program, baseline surveys were conducted in June 2006 with Year 5 and 6 students (aged 10-12 years) in five of the participating schools.

The surveys collected data on how students travelled to and from school, for five consecutive school days. Students completed the surveys in the classroom, and were supervised by their classroom teachers. Briefing notes were produced and distributed to teachers to assist in the administration of the surveys.

Outcome surveys were conducted in July 2007 with Year 6 students (aged 12 years) in the same five schools that had participated in the baseline survey. A similar survey form and process was used in the baseline and the outcome surveys.



Results

The surveys asked students to describe how they travelled to and from school. The options for selection were walking, catching the bus or train, riding a bike or a scooter, being driven, or travelling another way. In the results and discussion that follow, active travel is defined as walking, cycling or using public transport, or a combination of these modes of travel.

The 2006 and 2007 survey results are described and compared in the table below. These results should be seen as indicative. While common survey instruments and teacher briefing instructions were used, each school conducted the surveys at their locations independently.

Analyses were based on reported trips over five days. Data on all five days of travel to and from school (Monday, Tuesday, Wednesday, Thursday and Friday) were not available from all students due to absences and non-reporting. Variability in travel patterns occurred across the five days, and also between schools. The table contains aggregated data and reports variation between trips to, and from, school.

The five schools that participated in the surveys are described in the table as Schools A, B, C, D and E in order to meet privacy requirements.

Table 1. Comparison of main modes of travel in 2007 and 2006

School	Car 2007	Car 2006	% Change	Walk 2007	Walk 2006	% Change	Bus/train 2007	Bus/train 2006	% Change
A to school	57%	53%	4	40%	42%	-2	2%	4%	-2
A fm school	43%	44%	-1	43%	51%	-8	12%	5%	7
B to school	56%	68%	-12	40%	27%	13	5%	5%	0
B fm school	44%	69%	-25	49%	28%	21	7%	3%	4
C to school	71%	58%	13	29%	35%	-6	..	6%	..
C fm school	54%	55%	-1	41%	41%	0	5%	4%	1
D to school	60%	68%	-8	38%	27%	11	..	5%	..
D fm school	51%	69%	-18	47%	28%	19	..	3%	..
E to school	55%	60%	-5	27%	26%	1	16%	11%	5
E fm school	42%	54%	-12	34%	29%	5	21%	14%	7



Main findings

Increases in active travel occurred in 2007 for three of the five schools that were surveyed.

- The data from each of the five schools showed a different pattern for mode share and for the morning and afternoon journeys. This is to be expected as each school has a different set of factors (eg. topography, safety, traffic levels, public transport options, etc) that influence travel patterns.
- Overall, there were fewer changes in the morning journey to school, and a greater shift to active travel for the afternoon journey home or to other after school activities. It is likely that there is less pressure in the afternoon (compared to the morning journey when students and parents need to be on time for school and for work), and Year 6 students (aged 12 years) are more mature and probably have more road safety skills.
- The majority of the surveyed students travelled to and from school by car in 2006 and 2007. Very few students travelled by bike, 3% was the highest rate.
- On the whole, a small percentage of surveyed students used public transport to go to and from school. The highest percentage of students travelling by public transport was 14% in 2006, and 21% in 2007.
- As a general observation, schools run by the Catholic Education Office had more students who did not live in the locality of their school, compared with students attending public schools.

Discussion

Following are several program design and implementation issues that require discussion and that have implications for future active travel programs.

Number of schools and intensity of interventions

Fifteen primary schools were recruited to participate in the Travelsmart Schools Program, as specified in the grant application. Implementing the full series of interventions for each of the 15 schools required a great deal of time and involvement from the project officer, beyond the level of resources in the grant.

As decisions about travel to and from school are influenced by a complex set of factors, program strategies need to be comprehensive and implemented at an intensive level. Future programs would benefit from recruiting a smaller number of schools than the number in the 2006-2007 Travelsmart Program and working with schools more intensively.



Length of the intervention period

The Travelsmart Schools Program was originally designed to run from January 2006 to September 2007. This period of about 18 months, (from Term 1 to the end of Term 3), is not an ideal period for a school-based program because:

- It does not fit in with the school year
- It has no built-in planning period. Schools plan in Term 3 for the year ahead, and generally do not add programs that were not previously considered
- Eighteen months is too short a time to implement strategies that require collaboration with local government and other government agencies, and to carry out building works to improve safety.

A longer period of at least two years is needed to work with schools and with parents, in order to achieve sustained change in active travel patterns.

High-level partnership with education agencies

The Travelsmart Schools Program recruited schools by approaching school principals and seeking the participation of individual schools. A better approach would be to seek high-level policy agreement and partnership from the organisations of which the schools are part, these being the NSW Department of Education and Training, the Catholic Education Office, and the Association of Independent Schools.

The NSW Sustainable Schools Network, launched in November 2007, provides a possible opportunity to include active travel in school environmental policies and gain high-level support from all these organisations.

Over-emphasis on School Travel Plans

To date, Travelsmart resources for school-based programs have tended to emphasise School Travel Plans as a key strategy. School Travel Plans have been used in other states of Australia and in the UK, but the evidence for their effectiveness is scant. An evaluation of the impact of UK School Travel Plans found that student travel patterns did not change at schools that had travel coordinators to implement the plans, and that parental fears were not reduced (Rowland et al, 2003).

The expectation that schools should develop School Travel Plans as a central strategy for increasing active travel is problematic, as many schools preferred to give their core responsibilities of teaching and learning priority in terms of writing policies and plans. While schools participating in the Travelsmart Program saw benefits in reducing traffic congestion around their school and increasing active travel, they were aware that parents were the key group to be influenced regarding the journey to and from school.



Need for greater parent engagement

As parents are the main decision-makers in relation to how their children travel to and from school, greater parent engagement is essential for active travel programs to be effective. The strong linkage between the parent journey to work and the student journey to school (Wen et al, 2007) reinforces the need for parents to be the main focus of active travel to school programs.

Frequently, strategies for school-based programs focus on influencing the curriculum and/or provision of classroom learning resources. For active travel to school programs, it may be more useful to conceptualise the school as a centre of social interaction and a place to engage with parents, and influence the way they travel to school and to other destinations. Engaging with parents through community education and development strategies over a longer time is likely to be more effective than simple information provision or one day events.

Looking beyond the Walking School Bus

It is often presumed that a main strategy for increasing active travel to school is the Walking School Bus (WSB). The WSB is a way of supervising children walking to and from school. Children walk in a group with an adult 'driver' at the front and a 'conductor' at the rear. The 'bus' travels along a set route and picks up passengers along the way at designated stops.

In Australia the Victorian Health Promotion Foundation (VicHealth) has funded 60 local councils in Victoria to organise WSB programs, and has committed \$4.5 million from 2001 to 2010 to the program. Recent evaluations of the WSB program commissioned by VicHealth identified a number of limitations of the program, including difficulties recruiting and retaining volunteer 'drivers' and a lengthy implementation process. The feasibility of WSBs depends on parents to volunteer to walk with the children on the routes to and from school (VicHealth, 2007a).

The reach of the WSB program remains small. Evaluation data show that each WSB coordinator works with 3-4 schools, and organises an average of 3.5 WSBs per school (VicHealth, 2007b). There is an average of 9.5 children walking per WSB. VicHealth has calculated that less than 6% of the student population of the participating schools take part in a WSB (VicHealth, 2007c).

In response to these limitations, VicHealth will run the Streets Ahead program in 2008, offering grants of up to \$80,000 over three years to local councils for projects that will increase children's active travel and independent mobility, including but not limited to the journey to and from school (VicHealth, 2008).



At schools participating in the NSW Travelsmart Schools Program, some parents arranged informally to share the 'walk to school' with usually one other parent or neighbour well known to them. However, in general the WSB was not a popular or feasible strategy. This was because:

- Most parents are in the paid workforce and are unable to volunteer
- Parents did not feel happy to entrust the safety of their children to someone they did not know
- WSBs require a lot of organisation and resources to deal with issues such as insurance, recruitment and retention of volunteer 'drivers', rosters, back-up when volunteers are unavailable, criminal checks, etc.

While the WSB may be a strategy used by some parents and children in some places, the above data show that it is not an effective or cost efficient strategy to change the way the majority of students and parents travel to and from school. In addition, the WSB enables parents to continue to drive to work, and so car use is not reduced.

Working with geographic clusters of schools

To optimise the benefits of reduced traffic congestion to a wider area beyond the immediate vicinity of a school, it is helpful to work with schools in a geographic cluster. Fourteen of the 15 participating schools in the Travelsmart Schools Program were located very close to other DET, Catholic Education or independent schools. It is hard to realise the benefits of reduced traffic congestion in a local area if parents and students at one school are increasing active travel but parents at neighbouring schools continue to drive to school. Working with clusters of schools would also encourage a more systematic and consistent approach by councils, the RTA and the general community.

Funds for infrastructure that supports active and safe travel

Parents from participating schools reported that the physical environment and public transport infrastructure were factors that influenced how they travelled to school and to work.

In Australia, active travel programs generally, and Travelsmart programs specifically, have not included funds for improved infrastructure in their budgets. The focus has been on individual behaviour change rather than improved infrastructure or urban planning processes to support active and safe travel.

When hazards to children's safety were identified near or in the immediate vicinity of all 15 schools in the Travelsmart Program, local councils were generally willing to fix hazards, but could not guarantee availability of funds for these works.

Other improvements to infrastructure, such as pedestrian crossings and traffic lights, are the responsibility of the NSW RTA, which has its own funds, budget priorities and decision-making processes for these programs.



In other countries, such as UK and USA, budgets for active and safe travel to school programs include funds for infrastructure improvements (Center for Health Training, 2007, Sustrans, 2007). Active travel programs in Australia need to have funds for infrastructure, or the ability to access funds that may be in other budgets, to make programs more effective.

Improved program design using a contemporary approach

To be effective, active travel programs need to use contemporary approaches to education in relation to their goals and strategies. Within the health promotion and public health literature, there is an extensive critique of behaviourally focused programs that do not address broader socio-environmental issues (Baum, 2002, WHO, 1986). There is strong evidence that health programs that change environments achieve significant health improvements in the population (WHO, 2007).

The critique of the 'slow lane of behaviour change' has also been acknowledged in the literature on active travel and on communicating the implications of climate change. Creating environments that enable and support people to make changes is a more effective and strategic approach than exhorting individuals to change their behaviour (Tribbia, 2007).

Actions by governments, organisations, social institutions and community groups set the policy context and the physical environment for active travel. Consequently goals and strategies of active travel programs need to address public policies, physical environments and public transport infrastructure, and the involvement of communities as well as the development of personal skills (Moser and Dilling, 2007).

Improving complex decision-making processes across the multiple sectors that influence active travel

In NSW, there is complex and divided jurisdiction between multiple agencies, including the RTA, councils, public transport bodies, police, health agencies, schools and others responsible for improving safety, walkability and amenity of schools and their vicinities, and for increasing active travel. This complicates the process of addressing issues that are barriers to active and safe travel.

In NSW, Road Safety Officers, part funded by the RTA, are based in local councils, and part of their responsibility is to work with schools on issues of road safety. Councils have jurisdiction over local roads, and the RTA has jurisdiction over regional and state roads. The RTA makes decisions about road safety regulations such as speed limits in school zones, and road safety infrastructure such as pedestrian crossings, traffic lights, road crossing supervisors and flashing lights to alert drivers to pedestrian crossings near schools.



The NSW Police Force is responsible for enforcing the speed limits in school zones and for issuing infringement notices for breaches. The NSW Ministry of Transport, Sydney Buses, City Rail, Sydney Ferries and several private bus and light rail operators are responsible for public transport planning and services.

Local Council Traffic Committees make decisions about safety infrastructure such as pedestrian refuge islands and signage on local roads and council rangers enforce parking regulations.

The consultancy commissioned by the Travelsmart Steering Committee to examine the decision-making processes in NSW in regard to active travel to school recommended that collaboration between the key agencies be strengthened. While other states may not have the same complexity or configuration of factors as NSW, it is likely that increased opportunities for collaboration between sectors (such as road safety, transport, education, health, planning, environment) in all states could strengthen active travel policies and programs.

Conclusions

The NSW Travelsmart Schools Program was successful in establishing partnerships with 15 schools, implementing a range of program components, working with local councils and parent groups to increase active travel to and from school, and reducing car travel to school. Principals, teachers, students and parents responded enthusiastically to the concept of active travel to school and to other destinations, and they saw the wider issue of climate change as an overall framework for ongoing work on active travel.

Evaluation results from the schools surveyed showed that Year 6 students in most of these schools increased the number of active travel trips they made to and from school. There was a greater increase in active travel on the afternoon journey from school to home, in comparison with the morning journey to school.

For a majority of the schools involved, councils were able to improve to a degree the safety, walkability and amenity of the walking routes to the schools. The Travelsmart Program was also successful in encouraging City of Sydney Council to require all their Local Traffic Management Schemes to specifically identify and implement safety improvements including traffic management measures around schools and along identified walking to school routes. This is a systematic approach to improving the environments around schools, and sets a useful precedent for other councils.

However, when schools and/or parent organisations sought to make more substantial changes such as the installation of pedestrian crossings or additional traffic lights, relocation of bus stops or increased frequency of bus services, it proved more difficult – hence the consultancy commissioned by the Travelsmart Schools Program Steering Committee to explore ways to improve the complex decision-making processes.

The consultancy's findings and the broad experience of the Travelsmart Schools Program indicates that the lack of a multi-sectoral forum at NSW or regional level to discuss and



resolve these issues collaboratively is a barrier to developing environments that support active and safe travel to school.

Consultations with parents at all participating schools identified that the parent journey to work is a key factor in influencing parents' decisions on how they and their children will travel to and from school. Other research confirms this strong association (Wen et al, 2007). Generally, the goals and strategies of active travel to school programs should be extended to include active travel to parents' workplaces.

Schools planned to use their TAGs in a number of different ways, including distribution at Kindergarten orientation sessions, as information for parents of newly enrolled students, as part of their school website, and as an attachment to school documents.

The experience and outcomes of the NSW Travelsmart Schools Program provides guidance for the development of future programs on active travel to school, which is detailed in the recommendations below.

Recommendations

1. Programs with schools need to be long-term, with a planning phase in the latter part of a year (when schools plan their work for the coming year) and an intervention phase of at least two years, in order to be effective.
2. Programs need to have sufficient resources to be able to work intensively with schools and local councils in order to identify and address issues related to the environments around schools. To improve environments around schools requires a time period of at least two years and ideally some access to funds for infrastructure and/or improvements.
3. Active travel to school programs should include ways to assist parents to go to school and then to work by active travel. Strategies could include school and workplace TAGs, improved distribution of public transport route and timetable information, travel planning with households and workplaces, working with bus and train operators to improve frequency and connectivity of services, and working with large employers to find ways their organisations can support active travel.
4. Future active travel to school programs should focus on geographic clusters of schools in a suburb or a local government area in order to have a wider impact and to realise the benefits of reduced traffic congestion in communities. A more systematic approach from local councils and the RTA to improving the safety and walkability of identified walking routes to schools in a suburb or area would benefit students and parents at several schools and the wider community.
5. In NSW a multi-sectoral forum on active and safe travel to and from school is needed to stimulate collaboration between the key agencies (transport, roads and traffic, environment, planning, health, education and local councils) with responsibility for the central policy, infrastructure and regulatory issues. This forum or body also needs to be able to access funds for improved urban and traffic works such as improved road crossing infrastructure, and paths for people walking and cycling.



References

Baum F (2002). **The New Public Health** 2nd edition Oxford University Press, Melbourne.

Booth M, Okely A D, Denney-Wilson E, Hardy L, Yang B and Dobbins T (2006). **NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004: Summary Report**. NSW Department of Health, Sydney.

Cairns S, Sloman L, Newson C, Anable J, Kirkbride A and Goodwin P (2004). **Smarter Choices – changing the way we travel**. Report to the Department for Transport, London.

Centre for Health Training (2007). **Safe Routes to School: Practice and Promise**. US National Highway Traffic Safety Administration. Available from: www.saferoutestoschool.org Accessed January 2008.

Cole R, Leslie E, Donald M, Cerin E and Owen N (2007). Residential Proximity to school and the active travel choices of parents. *Health Promotion Journal of Australia* August 2007 Vol 18 no 2.

Moser S and Dilling L (eds) (2007). **Creating a Climate for Change: Communicating climate change and facilitating social change**. Cambridge University Press, UK.

NSW Government (2006). **A New Direction for NSW - The NSW State Plan**, Sydney.

P/P/M Consultants (2007). **Active Travel to School in NSW: Issues and Opportunities**. A report commissioned by the Travelsmart Schools Program Steering Committee, Sydney.

Rowland D, DiGiuseppe C, Gross M, Afolabi E and Roberts I (2003). A randomised controlled trial of site-specific advice on school travel plans. *Archives of Disease in Childhood*. 2003 88; 8-11.

Sustrans (2007). **Active Travel Consortium**. Available from: www.sustrans.org.uk Accessed February 2008.

Tribbia J (2007). Stuck in the slow lane of behaviour change? A not-so superhuman perspective on getting out our cars, in Moser S and Dilling L (2007).

VicHealth (2007a). **It's more than just walking! The value-adding impact of the Walking School Bus program on local environments and communities**. Victorian Health Promotion Foundation, Melbourne.

VicHealth (2007b). **Walking School Bus Snapshot Data Information Sheet June 2007**. Available from: www.vichealth.vic.gov.au Accessed August 2007.

VicHealth (2007c). **Walking the walk. Evaluation of phases 1 and 2 of the Walking School Bus Program**. Victorian Health Promotion Foundation, Melbourne.

VicHealth (2008). **Streets Ahead. Supporting children to get active in their neighbourhoods. Funding Guidelines**. Victorian Health Promotion Foundation, Melbourne.

Wen L, Fry D, Rissel C, Dirkis H, Balafas A and Merom D (2007). Factors associated with children being driven to school: implications for walk to school programs. *Health Education Research*, published online 19 September 2007.

World Health Organisation (1986). **Ottawa Charter for Health Promotion**, Geneva.

World Health Organisation (2007). **Commission on Social Determinants of Health: Interim Statement**, Geneva.

Zaccari V and Dirkis H (2003). Walking to School in Inner Sydney. *Health Promotion Journal of Australia* 14 (2): 140-143.

